

# **Appendix A**

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

**California Water Code Division 6, Part 2.6.**

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

### **SECTION 10610-10610.4**

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

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

- (1) The waters of the state are a limited and renewable resource subject to ever-increasing demands.
- (2) The conservation and efficient use of urban water supplies are of statewide concern; however, the planning for that use and the implementation of those plans can best be accomplished at the local level.
- (3) A long-term, reliable supply of water is essential to protect the productivity of California's businesses and economic climate.
- (4) As part of its long-range planning activities, every urban water supplier should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry water years.
- (5) Public health issues have been raised over a number of contaminants that have been identified in certain local and imported water supplies.
- (6) Implementing effective water management strategies, including groundwater storage projects and recycled water projects, may require specific water quality and salinity targets for meeting groundwater basins water quality objectives and promoting beneficial use of recycled water.
- (7) Water quality regulations are becoming an increasingly important factor in water agencies' selection of raw water sources, treatment alternatives, and modifications to existing treatment facilities.

- (8) Changes in drinking water quality standards may also impact the usefulness of water supplies and may ultimately impact supply reliability.
- (9) The quality of source supplies can have a significant impact on water management strategies and supply reliability.
- (b) This part is intended to provide assistance to water agencies in carrying out their long-term resource planning responsibilities to ensure adequate water supplies to meet existing and future demands for water.

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

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

## **Chapter 2. Definitions**

### **SECTION 10611-10617**

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

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

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

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

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

10615. "Plan" means an urban water management plan prepared pursuant to this part. A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses,

reclamation and demand management activities. The components of the plan may vary according to an individual community or area's characteristics and its capabilities to efficiently use and conserve water. The plan shall address measures for residential, commercial, governmental, and industrial water demand management as set forth in Article 2 (commencing with Section 10630) of Chapter 3. In addition, a strategy and time schedule for implementation shall be included in the plan.

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

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

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

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

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

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

10620. (a) Every urban water supplier shall prepare and adopt an urban water management plan in the manner set forth in Article 3 (commencing with Section 10640).
- (b) Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.
- (c) An urban water supplier indirectly providing water shall not include planning elements in its water management plan as provided in Article 2 (commencing with Section 10630) that would be applicable to urban water suppliers or public agencies directly providing water, or to their customers, without the consent of those suppliers or public agencies.
- (d) (1) An urban water supplier may satisfy the requirements of this part by participation in areawide, regional, watershed, or basinwide urban water management planning where those plans will reduce preparation costs and contribute to the achievement of conservation and efficient water use.
- (2) Each urban water supplier shall coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that



share a common source, water management agencies, and relevant public agencies, to the extent practicable.

- (e) The urban water supplier may prepare the plan with its own staff, by contract, or in cooperation with other governmental agencies.
  - (f) An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.
10621. (a) Each urban water supplier shall update its plan at least once every five years on or before December 31, in years ending in five and zero, except as provided in subdivision (d).
- (b) Every urban water supplier required to prepare a plan pursuant to this part shall, at least 60 days before the public hearing on the plan required by Section 10642, notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision.
- (c) The amendments to, or changes in, the plan shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640).
- (d) Each urban water supplier shall update and submit its 2015 plan to the department by July 1, 2016.

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

### **SECTION 10630-10634**

10630. It is the intention of the Legislature, in enacting this part, to permit levels of water management planning commensurate with the numbers of customers served and the volume of water supplied.
10631. A plan shall be adopted in accordance with this chapter that shall do all of the following:
- (a) Describe the service area of the supplier, including current and projected population, climate, and other demographic factors affecting the supplier's water management planning. The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available.
  - (b) Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a). If groundwater is identified as an existing or planned source of

water available to the supplier, all of the following information shall be included in the plan:

- (1) A copy of any groundwater management plan adopted by the urban water supplier, including plans adopted pursuant to Part 2.75 (commencing with Section 10750), or any other specific authorization for groundwater management.
  - (2) A description of any groundwater basin or basins from which the urban water supplier pumps groundwater. For basins that a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the urban water supplier has the legal right to pump under the order or decree. For basins that have not been adjudicated, information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to eliminate the long-term overdraft condition.
  - (3) A detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.
  - (4) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.
- (c) (1) Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage, to the extent practicable, and provide data for each of the following:
- (A) An average water year.
  - (B) A single-dry water year.
  - (C) Multiple-dry water years.
- (2) For any water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climatic factors, describe plans to supplement or replace that source with alternative sources or water demand management measures, to the extent practicable.

- (d) Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.
- (e) (1) Quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, identifying the uses among water use sectors, including, but not necessarily limited to, all of the following uses:
  - (A) Single-family residential.
  - (B) Multifamily.
  - (C) Commercial.
  - (D) Industrial.
  - (E) Institutional and governmental.
  - (F) Landscape.
  - (G) Sales to other agencies.
  - (H) Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof.
  - (I) Agricultural.
  - (J) Distribution system water loss.
- (2) The water use projections shall be in the same five-year increments described in subdivision (a).
- (3) (A) For the 2015 urban water management plan update, the distribution system water loss shall be quantified for the most recent 12-month period available. For all subsequent updates, the distribution system water loss shall be quantified for each of the five years preceding the plan update.
  - (B) The distribution system water loss quantification shall be reported in accordance with a worksheet approved or developed by the department through a public process. The water loss quantification worksheet shall be based on the water system balance methodology developed by the American Water Works Association.
- (4) (A) If available and applicable to an urban water supplier, water use projections may display and account for the water savings estimated to result from adopted codes, standards, ordinances, or transportation and land use plans identified by the urban water supplier, as applicable to the service area.

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

use, as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in average, single-dry, and multiple-dry water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.

- (h) Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.
  - (i) For purposes of this part, urban water suppliers that are members of the California Urban Water Conservation Council shall be deemed in compliance with the requirements of subdivision (f) by complying with all the provisions of the "Memorandum of Understanding Regarding Urban Water Conservation in California," dated December 10, 2008, as it may be amended, and by submitting the annual reports required by Section 6.2 of that memorandum.
  - (j) An urban water supplier that relies upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier's plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision (c). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (c).
- 10631.1. (a) The water use projections required by Section 10631 shall include projected water use for single-family and multifamily residential housing needed for lower income households, as defined in Section 50079.5 of the Health and Safety Code, as identified in the housing element of any city, county, or city and county in the service area of the supplier.
- (b) It is the intent of the Legislature that the identification of projected water use for single-family and multifamily residential housing for lower income households will assist a supplier in complying with the requirement under Section 65589.7 of the Government Code to grant a priority for the provision of service to housing units affordable to lower income households.

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

- (1) An estimate of the amount of energy used to extract or divert water supplies.
  - (2) An estimate of the amount of energy used to convey water supplies to the water treatment plants or distribution systems.
  - (3) An estimate of the amount of energy used to treat water supplies.
  - (4) An estimate of the amount of energy used to distribute water supplies through its distribution systems.
  - (5) An estimate of the amount of energy used for treated water supplies in comparison to the amount used for nontreated water supplies.
  - (6) An estimate of the amount of energy used to place water into or withdraw from storage.
  - (7) Any other energy-related information the urban water supplier deems appropriate.
- (b) The department shall include in its guidance for the preparation of urban water management plans a methodology for the voluntary calculation or estimation of the energy intensity of urban water systems. The department may consider studies and calculations conducted by the Public Utilities Commission in developing the methodology.

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

- (2) For the purposes of this section, water management grants and loans include funding for programs and projects for surface water or groundwater storage, recycling, desalination, water conservation, water supply reliability, and water supply augmentation. This section does not apply to water management projects funded by the federal American Recovery and Reinvestment Act of 2009 (Public Law 111-5).
- (3) Notwithstanding paragraph (1), the department shall determine that an urban water supplier is eligible for a water management grant or loan even though the supplier is not implementing all of the water demand management measures described in Section 10631, if the urban water supplier has

submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for implementation of the water demand management measures. The supplier may request grant or loan funds to implement the water demand management measures to the extent the request is consistent with the eligibility requirements applicable to the water management funds.

- (4) (A) Notwithstanding paragraph (1), the department shall determine that an urban water supplier is eligible for a water management grant or loan even though the supplier is not implementing all of the water demand management measures described in Section 10631, if an urban water supplier submits to the department for approval documentation demonstrating that a water demand management measure is not locally cost effective. If the department determines that the documentation submitted by the urban water supplier fails to demonstrate that a water demand management measure is not locally cost effective, the department shall notify the urban water supplier and the agency administering the grant or loan program within 120 days that the documentation does not satisfy the requirements for an exemption, and include in that notification a detailed statement to support the determination.
- (B) For purposes of this paragraph, "not locally cost effective" means that the present value of the local benefits of implementing a water demand management measure is less than the present value of the local costs of implementing that measure.
- (b) (1) The department, in consultation with the state board and the California Bay-Delta Authority or its successor agency, and after soliciting public comment regarding eligibility requirements, shall develop eligibility requirements to implement the requirement of paragraph (1) of subdivision (a). In establishing these eligibility requirements, the department shall do both of the following:
  - (A) Consider the conservation measures described in the Memorandum of Understanding Regarding Urban Water Conservation in California, and alternative conservation approaches that provide equal or greater water savings.
  - (B) Recognize the different legal, technical, fiscal, and practical roles and responsibilities of wholesale water suppliers and retail water suppliers.
- (2) (A) For the purposes of this section, the department shall determine whether an urban water supplier is implementing all of the water demand management measures described in Section 10631 based on either, or a combination, of the following:

- (i) Compliance on an individual basis.
  - (ii) Compliance on a regional basis. Regional compliance shall require participation in a regional conservation program consisting of two or more urban water suppliers that achieves the level of conservation or water efficiency savings equivalent to the amount of conservation or savings achieved if each of the participating urban water suppliers implemented the water demand management measures. The urban water supplier administering the regional program shall provide participating urban water suppliers and the department with data to demonstrate that the regional program is consistent with this clause. The department shall review the data to determine whether the urban water suppliers in the regional program are meeting the eligibility requirements.
- (B) The department may require additional information for any determination pursuant to this section.
- (3) The department shall not deny eligibility to an urban water supplier in compliance with the requirements of this section that is participating in a multiagency water project, or an integrated regional water management plan, developed pursuant to Section 75026 of the Public Resources Code, solely on the basis that one or more of the agencies participating in the project or plan is not implementing all of the water demand management measures described in Section 10631.
- (c) In establishing guidelines pursuant to the specific funding authorization for any water management grant or loan program subject to this section, the agency administering the grant or loan program shall include in the guidelines the eligibility requirements developed by the department pursuant to subdivision (b).
- (d) Upon receipt of a water management grant or loan application by an agency administering a grant and loan program subject to this section, the agency shall request an eligibility determination from the department with respect to the requirements of this section. The department shall respond to the request within 60 days of the request.
- (e) The urban water supplier may submit to the department copies of its annual reports and other relevant documents to assist the department in determining whether the urban water supplier is implementing or scheduling the implementation of water demand management activities. In addition, for urban water suppliers that are signatories to the Memorandum of Understanding Regarding Urban Water Conservation in California and submit biennial reports to the California Urban Water Conservation Council in accordance with the memorandum, the department may use these reports to assist in tracking the implementation of water demand management measures.



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

10631.7. The department, in consultation with the California Urban Water Conservation Council, shall convene an independent technical panel to provide information and recommendations to the department and the Legislature on new demand management measures, technologies, and approaches. The panel shall consist of no more than seven members, who shall be selected by the department to reflect a balanced representation of experts. The panel shall have at least one, but no more than two, representatives from each of the following: retail water suppliers, environmental organizations, the business community, wholesale water suppliers, and academia. The panel shall be convened by January 1, 2009, and shall report to the Legislature no later than January 1, 2010, and every five years thereafter. The department shall review the panel report and include in the final report to the Legislature the department's recommendations and comments regarding the panel process and the panel's recommendations.

10632. (a) The plan shall provide an urban water shortage contingency analysis that includes each of the following elements that are within the authority of the urban water supplier:
- (1) Stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to a 50 percent reduction in water supply, and an outline of specific water supply conditions that are applicable to each stage.
  - (2) An estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency's water supply.
  - (3) Actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.
  - (4) Additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.
  - (5) Consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are

appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.

- (6) Penalties or charges for excessive use, where applicable.
  - (7) An analysis of the impacts of each of the actions and conditions described in paragraphs (1) to (6), inclusive, on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments.
  - (8) A draft water shortage contingency resolution or ordinance.
  - (9) A mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.
- (b) Commencing with the urban water management plan update due July 1, 2016, for purposes of developing the water shortage contingency analysis pursuant to subdivision (a), the urban water supplier shall analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas, as defined in subdivision (a) of Section 115921 of the Health and Safety Code.

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

- (a) A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.
- (b) A description of the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.
- (c) A description of the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.
- (d) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.

- (e) The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.
  - (f) A description of actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.
  - (g) A plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.
10634. The plan shall include information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability.

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

### **SECTION 10635**

10635. (a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and multiple dry water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.
- (b) The urban water supplier shall provide that portion of its urban water management plan prepared pursuant to this article to any city or county within which it provides water supplies no later than 60 days after the submission of its urban water management plan.
- (c) Nothing in this article is intended to create a right or entitlement to water service or any specific level of water service.

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

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

#### **SECTION 10640-10645**

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

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

10642. Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan. Prior to adopting a plan, the urban water supplier shall make the plan available for public inspection and shall hold a public hearing thereon. Prior to the hearing, notice of the time and place of hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to Section 6066 of the Government Code. The urban water supplier shall provide notice of the time and place of hearing to any city or county within which the supplier provides water supplies. A privately owned water supplier shall provide an equivalent notice within its service area.

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

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

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

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

- (b) (1) Notwithstanding Section 10231.5 of the Government Code, the department shall prepare and submit to the Legislature, on or before December 31, in the years ending in six and one, a report summarizing the status of the plans adopted pursuant to this part.

The report prepared by the department shall identify the exemplary elements of the individual plans. The department shall provide a copy of the report to each urban water supplier that has submitted its plan to the department. The department shall also prepare reports and provide data for any legislative hearings designed to consider the effectiveness of plans submitted pursuant to this part.

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

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

## **Chapter 4. Miscellaneous Provisions**

### **SECTION 10650-10656**

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

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

- (b) Any action or proceeding alleging that a plan, or action taken pursuant to the plan, does not comply with this part shall be commenced within 90 days after filing of the plan or amendment thereto pursuant to Section 10644 or the taking of that action.
10651. In any action or proceeding to attack, review, set aside, void, or annul a plan, or an action taken pursuant to the plan by an urban water supplier on the grounds of noncompliance with this part, the inquiry shall extend only to whether there was a prejudicial abuse of discretion. Abuse of discretion is established if the supplier has not proceeded in a manner required by law or if the action by the water supplier is not supported by substantial evidence.
10652. The California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) does not apply to the preparation and adoption of plans pursuant to this part or to the implementation of actions taken pursuant to Section 10632. Nothing in this part shall be interpreted as exempting from the California Environmental Quality Act any project that would significantly affect water supplies for fish and wildlife, or any project for implementation of the plan, other than projects implementing Section 10632, or any project for expanded or additional water supplies.
10653. The adoption of a plan shall satisfy any requirements of state law, regulation, or order, including those of the State Water Resources Control Board and the Public Utilities Commission, for the preparation of water management plans or conservation plans; provided, that if the State Water Resources Control Board or the Public Utilities Commission requires additional information concerning water conservation to implement its existing authority, nothing in this part shall be deemed to limit the board or the commission in obtaining that information. The requirements of this part shall be satisfied by any urban water demand management plan prepared to meet federal laws or regulations after the effective date of this part, and which substantially meets the requirements of this part, or by any existing urban water management plan which includes the contents of a plan required under this part.
10654. An urban water supplier may recover in its rates the costs incurred in preparing its plan and implementing the reasonable water conservation measures included in the plan. Any best water management practice that is included in the plan that is identified in the "Memorandum of Understanding Regarding Urban Water Conservation in California" is deemed to be reasonable for the purposes of this section.
10655. If any provision of this part or the application thereof to any person or circumstances is held invalid, that invalidity shall not affect other provisions or applications of this part which can be given effect without the invalid provision or application thereof, and to this end the provisions of this part are severable.
10656. An urban water supplier that does not prepare, adopt, and submit its urban water management plan to the department in accordance with this part, is ineligible to receive funding pursuant to Division 24 (commencing with Section 78500) or Division 26

(commencing with Section 79000), or receive drought assistance from the state until the urban water management plan is submitted pursuant to this article.

# **Appendix B**

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



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

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

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

### **SECTION 10608-10608.8**

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

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

- (i) Per capita water use is a valid measure of a water provider's efforts to reduce urban water use within its service area. However, per capita water use is less useful for measuring relative water use efficiency between different water providers. Differences in weather, historical patterns of urban and suburban development, and density of housing in a particular location need to be considered when assessing per capita water use as a measure of efficiency.

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

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

- 10608.8. (a) (1) Water use efficiency measures adopted and implemented pursuant to this part or Part 2.8 (commencing with Section 10800) are water conservation measures subject to the protections provided under Section 1011.
- (2) Because an urban agency is not required to meet its urban water use target until 2020 pursuant to subdivision (b) of Section 10608.24, an urban retail water supplier's failure to meet those targets shall not establish a violation of law for purposes of any state administrative or judicial proceeding prior to

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

- (3) To the extent feasible, the department and the board shall provide for the use of water conservation reports required under this part to meet the requirements of Section 1011 for water conservation reporting.
- (b) This part does not limit or otherwise affect the application of Chapter 3.5 (commencing with Section 11340), Chapter 4 (commencing with Section 11370), Chapter 4.5 (commencing with Section 11400), and Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.
- (c) This part does not require a reduction in the total water used in the agricultural or urban sectors, because other factors, including, but not limited to, changes in agricultural economics or population growth may have greater effects on water use. This part does not limit the economic productivity of California's agricultural, commercial, or industrial sectors.
- (d) The requirements of this part do not apply to an agricultural water supplier that is a party to the Quantification Settlement Agreement, as defined in subdivision (a) of Section 1 of Chapter 617 of the Statutes of 2002, during the period within which the Quantification Settlement Agreement remains in effect. After the expiration of the Quantification Settlement Agreement, to the extent conservation water projects implemented as part of the Quantification Settlement Agreement remain in effect, the conserved water created as part of those projects shall be credited against the obligations of the agricultural water supplier pursuant to this part.

## **Chapter 2 Definitions**

### **SECTION 10608.12**

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

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

- (2) For an urban retail water supplier that meets at least 10 percent of its 2008 measured retail water demand through recycled water that is delivered within the service area of an urban retail water supplier or its urban wholesale water supplier, the urban retail water supplier may extend the calculation described in paragraph (1) up to an additional five years to a maximum of a continuous 15-year period ending no earlier than December 31, 2004, and no later than December 31, 2010.
- (3) For the purposes of Section 10608.22, the urban retail water supplier's estimate of its average gross water use, reported in gallons per capita per day and calculated over a continuous five-year period ending no earlier than December 31, 2007, and no later than December 31, 2010.
- (c) "Baseline commercial, industrial, and institutional water use" means an urban retail water supplier's base daily per capita water use for commercial, industrial, and institutional users.
- (d) "Commercial water user" means a water user that provides or distributes a product or service.
- (e) "Compliance daily per capita water use" means the gross water use during the final year of the reporting period, reported in gallons per capita per day.
- (f) "Disadvantaged community" means a community with an annual median household income that is less than 80 percent of the statewide annual median household income.
- (g) "Gross water use" means the total volume of water, whether treated or untreated, entering the distribution system of an urban retail water supplier, excluding all of the following:
  - (1) Recycled water that is delivered within the service area of an urban retail water supplier or its urban wholesale water supplier.
  - (2) The net volume of water that the urban retail water supplier places into long-term storage.
  - (3) The volume of water the urban retail water supplier conveys for use by another urban water supplier.
  - (4) The volume of water delivered for agricultural use, except as otherwise provided in subdivision (f) of Section 10608.24.
- (h) "Industrial water user" means a water user that is primarily a manufacturer or processor of materials as defined by the North American Industry Classification System code sectors 31 to 33, inclusive, or an entity that is a water user primarily engaged in research and development.
- (i) "Institutional water user" means a water user dedicated to public service. This type of user includes, among other users, higher education institutions, schools, courts, churches, hospitals, government facilities, and nonprofit research institutions.

- (j) "Interim urban water use target" means the midpoint between the urban retail water supplier's base daily per capita water use and the urban retail water supplier's urban water use target for 2020.
- (k) "Locally cost effective" means that the present value of the local benefits of implementing an agricultural efficiency water management practice is greater than or equal to the present value of the local cost of implementing that measure.
- (l) "Process water" means water used for producing a product or product content or water used for research and development, including, but not limited to, continuous manufacturing processes, water used for testing and maintaining equipment used in producing a product or product content, and water used in combined heat and power facilities used in producing a product or product content. Process water does not mean incidental water uses not related to the production of a product or product content, including, but not limited to, water used for restrooms, landscaping, air conditioning, heating, kitchens, and laundry.
- (m) "Recycled water" means recycled water, as defined in subdivision (n) of Section 13050, that is used to offset potable demand, including recycled water supplied for direct use and indirect potable reuse, that meets the following requirements, where applicable:
  - (1) For groundwater recharge, including recharge through spreading basins, water supplies that are all of the following:
    - (A) Metered.
    - (B) Developed through planned investment by the urban water supplier or a wastewater treatment agency.
    - (C) Treated to a minimum tertiary level.
    - (D) Delivered within the service area of an urban retail water supplier or its urban wholesale water supplier that helps an urban retail water supplier meet its urban water use target.
  - (2) For reservoir augmentation, water supplies that meet the criteria of paragraph (1) and are conveyed through a distribution system constructed specifically for recycled water.
- (n) "Regional water resources management" means sources of supply resulting from watershed-based planning for sustainable local water reliability or any of the following alternative sources of water:
  - (1) The capture and reuse of stormwater or rainwater.
  - (2) The use of recycled water.
  - (3) The desalination of brackish groundwater.

- (4) The conjunctive use of surface water and groundwater in a manner that is consistent with the safe yield of the groundwater basin.
- (o) "Reporting period" means the years for which an urban retail water supplier reports compliance with the urban water use targets.
- (p) "Urban retail water supplier" means a water supplier, either publicly or privately owned, that directly provides potable municipal water to more than 3,000 end users or that supplies more than 3,000 acre-feet of potable water annually at retail for municipal purposes.
- (q) "Urban water use target" means the urban retail water supplier's targeted future daily per capita water use.
- (r) "Urban wholesale water supplier," means a water supplier, either publicly or privately owned, that provides more than 3,000 acre-feet of water annually at wholesale for potable municipal purposes.

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

### **SECTION 10608.16-10608.44**

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

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

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

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

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

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

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

- (A) For indoor residential water use, 55 gallons per capita daily water use as a provisional standard. Upon completion of the department's 2016 report to the Legislature pursuant to Section 10608.42, this standard may be adjusted by the Legislature by statute.
  - (B) For landscape irrigated through dedicated or residential meters or connections, water efficiency equivalent to the standards of the Model Water Efficient Landscape Ordinance set forth in Chapter 2.7 (commencing with Section 490) of Division 2 of Title 23 of the California Code of Regulations, as in effect the later of the year of the landscape's installation or 1992. An urban retail water supplier using the approach specified in this subparagraph shall use satellite imagery, site visits, or other best available technology to develop an accurate estimate of landscaped areas.
  - (C) For commercial, industrial, and institutional uses, a 10-percent reduction in water use from the baseline commercial, industrial, and institutional water use by 2020.
- (3) Ninety-five percent of the applicable state hydrologic region target, as set forth in the state's draft 20x2020 Water Conservation Plan (dated April 30, 2009). If the service area of an urban water supplier includes more than one hydrologic region, the supplier shall apportion its service area to each region based on population or area.
- (4) A method that shall be identified and developed by the department, through a public process, and reported to the Legislature no later than December 31, 2010. The method developed by the department shall identify per capita targets that cumulatively result in a statewide 20-percent reduction in urban daily per capita water use by December 31, 2020. In developing urban daily per capita water use targets, the department shall do all of the following:
- (A) Consider climatic differences within the state.
  - (B) Consider population density differences within the state.
  - (C) Provide flexibility to communities and regions in meeting the targets.
  - (D) Consider different levels of per capita water use according to plant water needs in different regions.
  - (E) Consider different levels of commercial, industrial, and institutional water use in different regions of the state.
  - (F) Avoid placing an undue hardship on communities that have implemented conservation measures or taken actions to keep per capita water use low.
- (c) If the department adopts a regulation pursuant to paragraph (4) of subdivision (b) that results in a requirement that an urban retail water supplier achieve a reduction in daily per capita water use that is greater than 20 percent by December 31, 2020, an urban retail water supplier that adopted the method

described in paragraph (4) of subdivision (b) may limit its urban water use target to a reduction of not more than 20 percent by December 31, 2020, by adopting the method described in paragraph (1) of subdivision (b).

- (d) The department shall update the method described in paragraph (4) of subdivision (b) and report to the Legislature by December 31, 2014. An urban retail water supplier that adopted the method described in paragraph (4) of subdivision (b) may adopt a new urban daily per capita water use target pursuant to this updated method.
- (e) An urban retail water supplier shall include in its urban water management plan due in 2010 pursuant to Part 2.6 (commencing with Section 10610) the baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.
- (f) When calculating per capita values for the purposes of this chapter, an urban retail water supplier shall determine population using federal, state, and local population reports and projections.
- (g) An urban retail water supplier may update its 2020 urban water use target in its 2015 urban water management plan required pursuant to Part 2.6 (commencing with Section 10610).
- (h) (1) The department, through a public process and in consultation with the California Urban Water Conservation Council, shall develop technical methodologies and criteria for the consistent implementation of this part, including, but not limited to, both of the following:
  - (A) Methodologies for calculating base daily per capita water use, baseline commercial, industrial, and institutional water use, compliance daily per capita water use, gross water use, service area population, indoor residential water use, and landscaped area water use.
  - (B) Criteria for adjustments pursuant to subdivisions (d) and (e) of Section 10608.24.
- (2) The department shall post the methodologies and criteria developed pursuant to this subdivision on its Internet Web site, and make written copies available, by October 1, 2010. An urban retail water supplier shall use the methods developed by the department in compliance with this part.
- (i) (1) The department shall adopt regulations for implementation of the provisions relating to process water in accordance with subdivision (l) of Section 10608.12, subdivision (e) of Section 10608.24, and subdivision (d) of Section 10608.26.
- (2) The initial adoption of a regulation authorized by this subdivision is deemed to address an emergency, for purposes of Sections 11346.1 and 11349.6 of the Government Code, and the department is hereby exempted for that purpose from the requirements of subdivision (b) of Section 11346.1 of the



Government Code. After the initial adoption of an emergency regulation pursuant to this subdivision, the department shall not request approval from the Office of Administrative Law to readopt the regulation as an emergency regulation pursuant to Section 11346.1 of the Government Code.

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

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

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

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

paragraph (1), it shall provide the basis for, and data supporting, the adjustment in the report required by Section 10608.40.

- (e) When developing the urban water use target pursuant to Section 10608.20, an urban retail water supplier that has a substantial percentage of industrial water use in its service area may exclude process water from the calculation of gross water use to avoid a disproportionate burden on another customer sector.
- (f) (1) An urban retail water supplier that includes agricultural water use in an urban water management plan pursuant to Part 2.6 (commencing with Section 10610) may include the agricultural water use in determining gross water use. An urban retail water supplier that includes agricultural water use in determining gross water use and develops its urban water use target pursuant to paragraph (2) of subdivision (b) of Section 10608.20 shall use a water efficient standard for agricultural irrigation of 100 percent of reference evapotranspiration multiplied by the crop coefficient for irrigated acres.
- (2) An urban retail water supplier, that is also an agricultural water supplier, is not subject to the requirements of Chapter 4 (commencing with Section 10608.48), if the agricultural water use is incorporated into its urban water use target pursuant to paragraph (1).

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

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

an ordinance or resolution adopted pursuant to a declaration of drought emergency by an urban retail water supplier.

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

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

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

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

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

10608.40. Urban water retail suppliers shall report to the department on their progress in meeting their urban water use targets as part of their urban water management plans

submitted pursuant to Section 10631. The data shall be reported using a standardized form developed pursuant to Section 10608.52.

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

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

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

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

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

## Chapter 4 Agricultural Water Suppliers

### SECTION 10608.48

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

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

(1) Measure the volume of water delivered to customers with sufficient accuracy to comply with subdivision (a) of Section 531.10 and to implement paragraph (2).

(2) Adopt a pricing structure for water customers based at least in part on quantity delivered.

(c) Agricultural water suppliers shall implement additional efficient management practices, including, but not limited to, practices to accomplish all of the following, if the measures are locally cost effective and technically feasible:

(1) Facilitate alternative land use for lands with exceptionally high water duties or whose irrigation contributes to significant problems, including drainage.

(2) Facilitate use of available recycled water that otherwise would not be used beneficially, meets all health and safety criteria, and does not harm crops or soils.

(3) Facilitate the financing of capital improvements for on-farm irrigation systems.

(4) Implement an incentive pricing structure that promotes one or more of the following goals:

(A) More efficient water use at the farm level.

(B) Conjunctive use of groundwater.

(C) Appropriate increase of groundwater recharge.

(D) Reduction in problem drainage.

(E) Improved management of environmental resources.

(F) Effective management of all water sources throughout the year by adjusting seasonal pricing structures based on current conditions.

(5) Expand line or pipe distribution systems, and construct regulatory reservoirs to increase distribution system flexibility and capacity, decrease maintenance, and reduce seepage.

- (6) Increase flexibility in water ordering by, and delivery to, water customers within operational limits.
  - (7) Construct and operate supplier spill and tailwater recovery systems.
  - (8) Increase planned conjunctive use of surface water and groundwater within the supplier service area.
  - (9) Automate canal control structures.
  - (10) Facilitate or promote customer pump testing and evaluation.
  - (11) Designate a water conservation coordinator who will develop and implement the water management plan and prepare progress reports.
  - (12) Provide for the availability of water management services to water users. These services may include, but are not limited to, all of the following:
    - (A) On-farm irrigation and drainage system evaluations.
    - (B) Normal year and real-time irrigation scheduling and crop evapotranspiration information.
    - (C) Surface water, groundwater, and drainage water quantity and quality data.
    - (D) Agricultural water management educational programs and materials for farmers, staff, and the public.
  - (13) Evaluate the policies of agencies that provide the supplier with water to identify the potential for institutional changes to allow more flexible water deliveries and storage.
  - (14) Evaluate and improve the efficiencies of the supplier's pumps.
- (d) Agricultural water suppliers shall include in the agricultural water management plans required pursuant to Part 2.8 (commencing with Section 10800) a report on which efficient water management practices have been implemented and are planned to be implemented, an estimate of the water use efficiency improvements that have occurred since the last report, and an estimate of the water use efficiency improvements estimated to occur five and 10 years in the future. If an agricultural water supplier determines that an efficient water management practice is not locally cost effective or technically feasible, the supplier shall submit information documenting that determination.
- (e) The data shall be reported using a standardized form developed pursuant to Section 10608.52.
- (f) An agricultural water supplier may meet the requirements of subdivisions (d) and (e) by submitting to the department a water conservation plan submitted to the United States Bureau of Reclamation that meets the requirements described in Section 10828.

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

## **Chapter 5 Sustainable Water Management**

### **Section 10608.50**

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

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

## **Chapter 6 Standardized Data Collection**

### **SECTION 10608.52**

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

## **Chapter 7 Funding Provisions**

### **Section 10608.56-10608.60**

- 10608.56.(a) On and after July 1, 2016, an urban retail water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.
- (b) On and after July 1, 2013, an agricultural water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.



- (c) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for achieving the per capita reductions. The supplier may request grant or loan funds to achieve the per capita reductions to the extent the request is consistent with the eligibility requirements applicable to the water funds.
  - (d) Notwithstanding subdivision (b), the department shall determine that an agricultural water supplier is eligible for a water grant or loan even though the supplier is not implementing all of the efficient water management practices described in Section 10608.48, if the agricultural water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for implementation of the efficient water management practices. The supplier may request grant or loan funds to implement the efficient water management practices to the extent the request is consistent with the eligibility requirements applicable to the water funds.
  - (e) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval documentation demonstrating that its entire service area qualifies as a disadvantaged community.
  - (f) The department shall not deny eligibility to an urban retail water supplier or agricultural water supplier in compliance with the requirements of this part and Part 2.8 (commencing with Section 10800), that is participating in a multiagency water project, or an integrated regional water management plan, developed pursuant to Section 75026 of the Public Resources Code, solely on the basis that one or more of the agencies participating in the project or plan is not implementing all of the requirements of this part or Part 2.8 (commencing with Section 10800).
- 10608.60.(a) It is the intent of the Legislature that funds made available by Section 75026 of the Public Resources Code should be expended, consistent with Division 43 (commencing with Section 75001) of the Public Resources Code and upon appropriation by the Legislature, for grants to implement this part. In the allocation of funding, it is the intent of the Legislature that the department give consideration to disadvantaged communities to assist in implementing the requirements of this part.
- (b) It is the intent of the Legislature that funds made available by Section 75041 of the Public Resources Code, should be expended, consistent with Division 43 (commencing with Section 75001) of the Public Resources Code and upon appropriation by the Legislature, for direct expenditures to implement this part.

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

### **SECTION 10608.64**

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

## **Appendix C**

### **Notice of Preparation of the City of Riverside's Public Utilities' 2015 Urban Water Management Plan**

February 29, 2016

sent via email: [LROSS@rctlma.org](mailto:LROSS@rctlma.org)

Larry Ross  
Principal Planner (West County)  
Riverside County Planning Department  
P.O. Box 1409  
Riverside, CA 92502-1409

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear Larry Ross,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

Prior to adoption of the 2015 UWMP, the Riverside Board of Public Utilities will hold a public hearing for the purpose of receiving comments. Comments can be submitted prior to or at the public hearing. A public hearing will take place at 6:30 pm on Monday May 23rd, 2015, in Art Pick Council Chamber 3900 Main Street Riverside, CA 92522.

Should you have any questions or need additional information regarding the 2015 UWMP, please do not hesitate to contact me. I can be reached at (951) 826-8912 or by e-mail at [Girish@riversideca.gov](mailto:Girish@riversideca.gov).

Sincerely,

**Girish Balachandran**  
**General Manager**

February 29, 2016

sent via email: [fcexcsec@rcflood.org](mailto:fcexcsec@rcflood.org)

Warren D. Williams  
General Manager-Chief Engineer  
Riverside County Flood Control and Water Conservation District  
1995 Market Street  
Riverside, CA 92501

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear Warren D. Williams,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

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Sincerely,

**Girish Balachandran**  
General Manager

February 29, 2016

sent via email: [TWhite@riversideca.gov](mailto:TWhite@riversideca.gov)

Ted White  
Planning Director  
City of Riverside Planning Department  
3900 Main St., 3rd floor  
Riverside, CA 92522

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear Ted White,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

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Sincerely,

**Girish Balachandran**  
**General Manager**

February 29, 2016

sent via email: [miguel.guerrero@sbmwd.org](mailto:miguel.guerrero@sbmwd.org)

Miguel J. Guerrero  
Director, Water Utility  
City of San Bernardino Municipal Water Department  
300 N. D. Street - 5th Floor  
San Bernardino, CA 92418

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear Miguel J. Guerrero,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

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Sincerely,

**Girish Balachandran**  
General Manager

February 29, 2016

sent via email: [John.Perry@veolia.com](mailto:John.Perry@veolia.com)

John Perry  
Superintendent  
City of Rialto Water and Wastewater Utilities  
150 S. Palm Avenue  
Rialto, CA 92376

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear John Perry,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

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Sincerely,

**Girish Balachandran**  
**General Manager**



February 29, 2016

sent via email: [ajakher@ci.colton.ca.us](mailto:ajakher@ci.colton.ca.us)

Amer Jakher  
Director of Public Works and Utility Services  
City of Colton  
650 N La Cadena Drive  
Colton, CA 92324

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear Amer Jakher,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

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Sincerely,

**Girish Balachandran**  
**General Manager**

February 29, 2016

sent via email: [jthaipejr@lomalinda-ca.gov](mailto:jthaipejr@lomalinda-ca.gov)

T. Jarb Thaipejr  
Public Works Director/ City Engineer  
City of Loma Linda Public Works  
25541 Barton Road  
Loma Linda, CA 92354

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear T. Jarb Thaipejr,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

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Sincerely,

**Girish Balachandran**  
**General Manager**

February 29, 2016

sent via email: [cdiggs@cityofredlands.org](mailto:cdiggs@cityofredlands.org)

Chris Diggs  
Municipal Utilities and Engineering Director  
City of Redlands Municipal Utilities and Engineering  
35 Cajon Street, Suite 15A  
Redlands, CA 92373

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear Chris Diggs,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

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Sincerely,

**Girish Balachandran**  
**General Manager**

February 29, 2016

sent via email: [Jonathan.Daly@ci.corona.ca.us](mailto:Jonathan.Daly@ci.corona.ca.us)

Jonathan Daly  
General Manager  
City of Corona Department of Water and Power  
755 Corporation Yard Way  
Corona, CA 92880

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear Jonathan Daly,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

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Sincerely,

**Girish Balachandran**  
General Manager

February 29, 2016

sent via email: [CBlais@ci.norco.ca.us](mailto:CBlais@ci.norco.ca.us)

Chad Blais  
Public Works Director  
City of Norco Public Works  
2870 Clark Avenue  
Norco, CA 92860

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear Chad Blais,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

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Sincerely,

**Girish Balachandran**  
General Manager

February 29, 2016

sent via email: [douglash@sbvmwd.com](mailto:douglash@sbvmwd.com)

Doug Headrick  
General Manager  
San Bernardino Valley Municipal Water District  
380 East Vanderbilt Way  
San Bernardino, CA 92408

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear Doug Headrick,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

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Sincerely,

**Girish Balachandran**  
General Manager

February 29, 2016

sent via email: [dcozad@sbvwcd.org](mailto:dcozad@sbvwcd.org)

Daniel Cozad  
General Manager  
San Bernardino Valley Water Conservation District  
1630 West Redlands Blvd.,  
Suite A, P.O. Box 1839  
Redlands, California 92373

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear Daniel Cozad,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

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Should you have any questions or need additional information regarding the 2015 UWMP, please do not hesitate to contact me. I can be reached at (951) 826-8912 or by e-mail at [Girish@riversideca.gov](mailto:Girish@riversideca.gov).

Sincerely,

**Girish Balachandran**  
General Manager

February 29, 2016

sent via email: [tbarr@wmwd.com](mailto:tbarr@wmwd.com)

Tim Barr  
Deputy Director of Water Resources  
Western Municipal Water District  
4205 Meridian Parkway  
Riverside, CA, 92518

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear Tim Barr,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

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Sincerely,

**Girish Balachandran**  
**General Manager**



February 29, 2016

sent via email: [Lovstede@emwd.org](mailto:Lovstede@emwd.org)

Elizabeth Lovsted  
Senior Civil Engineer  
Eastern Municipal Water District  
2270 Trumble Road  
Perris, CA 92570

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear Elizabeth Lovsted,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

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Sincerely,

**Girish Balachandran**  
**General Manager**

February 29, 2016

sent via email: [Tcrowley@wwwd.org](mailto:Tcrowley@wwwd.org)

Thomas J. Crowley  
General Manager  
West Valley Water District  
855 W. Base Line Road,  
P.O. Box 920  
Rialto, CA 92377

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear Thomas J. Crowley,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

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Sincerely,

**Girish Balachandran**  
General Manager

February 29, 2016

sent via email: [john@eastvalley.org](mailto:john@eastvalley.org)

John Mura  
General Manager  
East Valley Water District  
3654 E. Highland Ave.,  
Ste 18  
Highland, CA 92346

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear John Mura,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

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Sincerely,

**Girish Balachandran**  
**General Manager**

February 29, 2016

sent via email: [Dave@rcsd.org](mailto:Dave@rcsd.org)

David Lopez  
General Manager  
Rubidoux Community Services District  
3590 Rubidoux Blvd.  
Rubidoux, CA 92509

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear David Lopez,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

Prior to adoption of the 2015 UWMP, the Riverside Board of Public Utilities will hold a public hearing for the purpose of receiving comments. Comments can be submitted prior to or at the public hearing. A public hearing will take place at 6:30 pm on Monday May 23rd, 2015, in Art Pick Council Chamber 3900 Main Street Riverside, CA 92522.

Should you have any questions or need additional information regarding the 2015 UWMP, please do not hesitate to contact me. I can be reached at (951) 826-8912 or by e-mail at [Girish@riversideca.gov](mailto:Girish@riversideca.gov).

Sincerely,

**Girish Balachandran**  
General Manager

February 29, 2016

sent via email: [Tcorbin@icsd.us](mailto:Tcorbin@icsd.us)

Todd M. Corbin  
General Manager  
Jurupa Community Services District  
11201 Harrel Street  
Mira Loma, CA 91752

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear Todd M. Corbin,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

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Should you have any questions or need additional information regarding the 2015 UWMP, please do not hesitate to contact me. I can be reached at (951) 826-8912 or by e-mail at [Girish@riversideca.gov](mailto:Girish@riversideca.gov).

Sincerely,

**Girish Balachandran**  
General Manager

February 29, 2016

sent via email: [Hgcwd@yahoo.com](mailto:Hgcwd@yahoo.com)

David Vigil  
District Manager  
Home Gardens County Water District  
3832 North Grant Street  
Corona, CA 92879

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear David Vigil,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

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Sincerely,

**Girish Balachandran**  
**General Manager**

February 29, 2016

sent via email: [RossLewis@aol.com](mailto:RossLewis@aol.com)

Ross Lewis  
General Manager  
Gage Canal Company  
7452 Dufferin Avenue  
Riverside, CA 92504

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear Ross Lewis,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

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Should you have any questions or need additional information regarding the 2015 UWMP, please do not hesitate to contact me. I can be reached at (951) 826-8912 or by e-mail at [Girish@riversideca.gov](mailto:Girish@riversideca.gov).

Sincerely,

**Girish Balachandran**  
General Manager

February 29, 2016

sent via email: [dhough@rhwco.com](mailto:dhough@rhwco.com)

Don Hough  
General Manager  
Riverside Highland Water Company  
12374 Michigan Street  
Grand Terrace, CA 92313

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear Don Hough,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

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Sincerely,

**Girish Balachandran**  
General Manager



February 29, 2016

sent via email: [jvega@evmwd.net](mailto:jvega@evmwd.net)

John D. Vega  
General Manager  
Elsinore Valley Municipal Water District  
(Meeks & Daley Water Company)  
31315 Chaney Street  
Lake Elsinore, CA 92530

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear John D. Vega,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

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Sincerely,

**Girish Balachandran**  
General Manager

February 29, 2016

sent via email: [generalmanager@fontanawater.com](mailto:generalmanager@fontanawater.com)

John Swift  
General Manager  
Fontana Water Company  
15966 Arrow Blvd  
Fontana, CA 92335

**Subject: Notice of Preparation of the City of Riverside Public Utilities' 2015 Urban Water Management Plan**

Dear John Swift,

Notice is hereby given that the City of Riverside Public Utilities Department (RPU) is in the process of preparing its 2015 Urban Water Management Plan (UWMP), in accordance with the Urban Water Management Planning Act, sections 10610 through 10656 of the California Water Code. The RPU expects to have a draft of the 2015 UWMP completed by the second week of May 2016. The draft plan will be available for review at the RPU office located at 3750 University Avenue, 3rd Floor, Riverside, CA 92501, or as a PDF on the RPU website.

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Sincerely,

**Girish Balachandran**  
General Manager

## **Appendix D**

### **2015 Upper Santa Ana River Watershed IRWMP - Appendix G: Climate Change Vulnerability Checklist**

## **Appendix G: Climate Change Vulnerability Checklist**



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# Climate Change Vulnerability Checklist

Changes related to climate change in the IRWM guidelines made between the 2010 and 2012 versions need to be addressed. The new IRWM plan must include a list of prioritized vulnerabilities based on the vulnerability assessment checklist as well as a plan, program, or methodology for further data gathering and analysis of the prioritized vulnerabilities. Below is the vulnerability assessment checklist for the Upper Santa Ana River IRWM planning area.

## **Water Demand:**

Are there major industries that require cooling/processed water in your planning region?

- The Mountain View power plant brings power to more than 685,000 homes. This high energy output requires the plant to utilize municipal effluent as well as ground water for cooling. The facility loses 3,300 gallons of water per minute to evaporation from the cooling towers, but for every pound of water that evaporates approximately 1,000 BTUs of heat are extracted. It also has a water treatment plant on site that recovers 75-80% of water that would normally have been disposed of. This recycling process has kept Redlands waste water fees at some of the lowest levels in the state. Despite the fact that the plant uses thirty percent less energy compared to other plants, it is the highest polluting power plant in the state; producing 1.85 million metric tons of carbon dioxide per year.

Does water use vary by more than 50% seasonally in parts of your region?

- The Inland Empire climate varies greatly from summer to winter, and therefore water demand varies accordingly. There is a greater demand for irrigation needs during the hotter season that drives up the per capita water use.

Are crops in your region climate sensitive? Would shifts in daily heat patterns, such as how long heat lingers before night-time cooling, be prohibitive for some crops?

- Citrus trees are not tolerable of below freezing temperatures. Colder winters with freezing nights have the potential to cause significant damage to citrus crops. In response to higher temperatures, evapotranspiration rates of the plants may increase, requiring more water to be used on warmer days

Do groundwater supplies in your region lack resiliency after drought events?

- Typically groundwater supplies do not lack resiliency because groundwater is replenished and stored in wet years.

Are water use curtailment measures effective in your region?

- Conservation efforts in the area include The Water Conservation Education Program, Weather Based Irrigation Controllers Program, “climate appropriate” plant promotion with Home Depot stores and other stores and nurseries, and the water conservation demonstration garden at California State University San Bernardino. These programs have begun to address the conservation needs of the area without implementing direct curtailment measures. Commercial, industrial, and institutional water reduction plans are also in place.

Are some in stream flow requirements in your region either currently insufficient to support aquatic life, or occasionally unmet?

- The in stream flows are sufficient to support aquatic life because natural flows are augmented by Publically Owned Treatment Works flows that are highly treated.

### **Water Supply:**

Does a portion of the water supply in your region come from snowmelt?

- The water supply in the region does not come from snowmelt.

Does part of your region rely on water diverted from the Delta, imported from the Colorado River or imported from other climate-sensitive systems outside of your region?

- State Water Project water has been made available to East Valley. The water for the region is currently 57% ground water, 24% State Water Project water, 17% surface water, and 2% recycled water. The region does not rely on any water imported from the Colorado River.

Does part of your region rely of coastal aquifers? Has salt intrusion been a problem in the past?

- The region does not rely on coastal aquifers, but salt intrusion could affect the function of the State Water Project, which could ultimately have an impact on water supplies.

Would your region have difficulty in storing carryover supply surpluses from year to year?

- The region would only have issues storing surplus water in times when the basins are already saturated.

Has your region faced a drought in the past during which it failed to meet local water demands?

- The region has not faced a drought in which it was unable to meet local water demands.

Does your region have invasive species management issues at your facilities, along conveyance structures, or in habitat areas?

- The region has two invasive species, the Giant Reed and the Tamarisk Annual Grass. The Giant Reed was introduced in California in the 1820's in an attempt to help control erosion, but has since become an invasive plant. It has increased the fire fuel by 30% in the Santa Ana Basin area and also has the potential to cause major issues during floods. In addition to these issues, the Giant Reed uses 56,200 acre-ft per year in the Santa Ana River, decreasing the amount of water available to the population. Tamarisk was introduced as an ornamental plant, but has become invasive as it absorbs a large amount of water and creates salt deposits. Its seeds are dispersed by wind, have no dormancy requirements, and have a 24 hour germination period, allowing it to spread quickly and easily.

### **Water Quality:**

Are increased wildfires a threat in your region? If so, does your region include reservoirs with fire-susceptible vegetation nearby which could pose a water quality concern from increased erosion?

- Wildfires are a threat in the region, especially during dry summers.

Does part of your region rely on surface water bodies with current or recurrent water quality issues related to eutrophication, such as low dissolved oxygen or algal blooms? Are there other water quality constituents potentially exacerbated by climate change?

- Big Bear Lake has had issues with high nitrogen and nutrient levels that promote algal growth. Although the lake is no longer a main water supply source, its contaminant levels affect recreational activity. The Middle Santa Anna River Watershed has been found to have issues with pathogens and high coliform count.

Are seasonal low flows decreasing for some water bodies in your region? If so, are the reduced flows limiting the water bodies' assimilative capacity?

- Flow levels for the water bodies in the region have been consistent with weather conditions.

Are there beneficial uses designated for some water bodies in your region that cannot always be met due to water quality issues?

- Big Bear Lake is a popular recreational area for swimming, boating and fishing in the San Bernardino Mountains. It was originally created by Bear Valley Mutual Water Company to serve as a storage reservoir in order to provide agricultural water to the customers downstream. Big Bear Lake faces many water quality issues that have the potential to affect its recreational uses. In 1990 Big Bear Lake was added to California's list of impaired water bodies by the Santa Ana Regional Water Quality Control Board. A Total Maximum Daily Load was implemented in 2007 in order to protect the lake's beneficial uses. Various water bodies in the Middle Santa Ana River Watershed were also added to the list of impaired water bodies in 1994 because the fecal coliform objective was exceeded, ultimately affecting the water contact recreation of the area. The table below lists the pollutants affecting the Big Bear Lake Watershed and the Middle Santa Ana Watershed.

**Table 7: Pollutants Effecting Water bodies**

Santa Ana Region Pollutants	
Water Body	Pollutants
Big Bear Lake Watershed	
Big Bear Lake	Metals, Noxious aquatic plants and Nutrients, Sedimentation/Siltation, and Mercury
Grout Creek	Metals and Nutrients
Knickerbocker Creek	Metals and Pathogens
Rathbone Creek	Nutrients and Sedimentation/Siltation
Summit Creek	Nutrients
Middle Santa Ana River Watershed	
Chino Creek, Reach 1	Pathogens
Chino Creek, Reach 2	High Coliform Count
Cucamonga Creek, Valley Ranch	High Coliform Count
Mill Creek (Prado Area)	Pathogens
Santa Ana River, Reach 3	Pathogens and Nitrate
Prado Park Lake	Pathogens

Does part of your region currently observe water quality shifts during rain events that impact treatment facility operation?

- The region does not observe water quality shifts during rain events that impact water treatment facility operations.

#### **Sea Level Rise:**

Has coastal erosion already been observed in your region?

- Coastal erosion has not been observed in the region.



Are there coastal structures, such as levees or breakwaters, in your region?

- There are no coastal structures in the region.

Is there significant coastal infrastructure, such as residences, recreation, water and wastewater treatment, tourism, and transportation at less than six feet above mean sea level in your region?

- There is no infrastructure less than six feet above mean sea level.

Are there climate-sensitive low-lying coastal habitats in your region?

- There are no climate-sensitive low-lying coastal habitats in the region.

Are there areas in your region that currently flood during extreme high tides or storm surges?

- There are no areas in the region that flood during extreme high tides or storm surges do to coastal waters.

Is there land subsidence in the coastal area of your region?

- There is no land subsidence in the coastal area of the region.

Do tidal gauges along the coastal parts of your region show an increase over the past several decades?

- There are no coastal parts in the region.

**Flooding:**

Does critical infrastructure in your region lie within the 200-year floodplain?

- The 200-year floodplain is not available at this time, but infrastructure such as Crafton Elementary School lies in the 100 year floodplain provided by FEMA for The Zanja as well as many buildings along the Santa Ana.

Does part of your region lie within the Sacramento-San Joaquin Drainage District?

- The region does not lie within the Sacramento-San Joaquin Drainage District.

Does aging critical flood protection infrastructure exist in your region?

- Flood protection in the area has been in place for several decades, but improvements have been made in the last decade. The federal Santa Ana River Mainstream project includes the Seven Oaks Dam, Prado Dam, and other flood control facilities along the Santa Ana River, which provide flood protection to the residents of San Bernardino, Riverside, and Orange Counties. The Seven Oaks Dam was completed in 1999 and the construction of the SAR project began in 1989.

Have flood control facilities (such as impoundment structures) been insufficient in the past?

- Flood control facilities have failed as recently as December 2010, when several creeks and debris basins overflowed and flooded the City of Highland.

Are wildfires a concern in parts of your region?

- Wildfires have always been a concern for the region. An example would be the Old Fire in 2003, which burned 91,281 acres, destroyed 993 homes, and killed 6 people. During this incident The East Valley Water District advised residents in certain areas to boil water for drinking and eating in order to ensure that the water was safe to drink.

**Ecosystem and Habitat Vulnerability:**

Does your region include inland or coastal aquatic habitats vulnerable to erosion and sedimentation issues?

- The region does not include inland or coastal aquatic habitats vulnerable to erosion.

Does your region include estuarine habitats which rely on seasonal freshwater flow patterns?

- The region does not include estuarine habitats.

Do climate-sensitive fauna or flora populations live in your region?

- Climate sensitive plants live in the region.

Do endangered or threatened species exist in your region? Are changes in species distribution already being observed in parts of your region?

- Endangered species live in the region.

Does the region rely on aquatic or water-dependent habitats for recreation or other economic activities?

- The region does rely on aquatic habitats for recreational purposes, as is the case for Big Bear Lake and Middle Santa Ana.

Are there rivers in your region with quantified environmental flow requirements or known water quality/quantity stressors to aquatic life?

- There are rivers in the region with water quality stressors such as Middle Santa Ana.

Do estuaries, coastal dunes, wetlands, marshes, or exposed beaches exist in your region? If so, are coastal storms possible/frequent in your region?

- Exposed coastal areas do not exist in the region.

Does your region include one or more of the habitats described in the Endangered Species Coalition's Top 10 habitats vulnerable to climate change?

- The region does not include any of the habitats described in the Endangered Species Coalition's Top 10 habitats vulnerable to climate change.

Are there areas of fragmented estuarine, aquatic, or wetland wildlife habitat within your region? Are there movement corridors for species to naturally migrate? Are there infrastructure projects planned that might preclude species movement?

- The region is not aware of fragmented wildlife habitat within the region, or infrastructure projects planned that might preclude species movement.

**Hydropower:**

Is hydropower a source of electricity in your region?

- The hydropower stations located in the area include the Santa Ana No 1 & 2, Mill Creek No 2 & 3, San Geronio, and Lytle Creek. These stations are owned and operated by the Southern California Edison Company and produce 12.63 MW of electricity. Below lists the generating capacity of each location.

Hydropower Station Capacity	
Hydropower Station	Generating Capacity (MW)
Santa Ana No 1 & 2	6.3
Mill Creek No 1 & 2	3.23
San Gorgonio	2.63
Lytle Creek	0.45
Devil Canyon	276.46
Fontana Sandhill WTP Hydropower Facility	0.31

Are energy needs in your region expected to increase in the future? If so, are there future plans for hydropower generating facilities or conditions for hydropower generation in your region?

- There are currently no future plans for more hydropower generation facilities in the region.

The above checklist demonstrates the areas for which the region is most vulnerable.

# **Appendix E**

## **2014-2015 Water Audit**

# AWWA WLCC Free Water Audit Software: Reporting Worksheet

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WAS v4.2

[Back to Instructions](#)

[?](#) Click to access definition

Water Audit Report for: **Riverside Public Utilities**

Reporting Year: **2014/2015** 7/2014 - 6/2015

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the

**All volumes to be entered as: ACRE-FEET PER YEAR**

## WATER SUPPLIED

<< Enter grading in column 'E'

Volume from own sources:	<a href="#">?</a>	8	70,135.000	acre-ft/yr
Master meter error adjustment (enter positive value):	<a href="#">?</a>	9	0.000	acre-ft/yr
Water imported:	<a href="#">?</a>	10	0.000	acre-ft/yr
Water exported:	<a href="#">?</a>	9	5,279.000	acre-ft/yr
<b>WATER SUPPLIED:</b>			<b>64,856.000</b>	acre-ft/yr

## AUTHORIZED CONSUMPTION

Billed metered:	<a href="#">?</a>	10	59,265.000	acre-ft/yr
Billed unmetered:	<a href="#">?</a>	10	0.000	acre-ft/yr
Unbilled metered:	<a href="#">?</a>	8	2,785.000	acre-ft/yr
Unbilled unmetered:	<a href="#">?</a>	9	51.000	acre-ft/yr

**AUTHORIZED CONSUMPTION:** [?](#) 62,101.000 acre-ft/yr

Click here: [?](#)  
for help using option  
buttons below

Pent: ☐ Value: ☐ 51.000

Use buttons to select  
percentage of water supplied  
**OR**  
value

**WATER LOSSES (Water Supplied - Authorized Consumption)** 2,755.000 acre-ft/yr

## Apparent Losses

Unauthorized consumption:	<a href="#">?</a>	8	600.000	acre-ft/yr
Customer metering inaccuracies:	<a href="#">?</a>	9	155.514	acre-ft/yr
Systematic data handling errors:	<a href="#">?</a>	8	150.000	acre-ft/yr
<b>Apparent Losses:</b>	<a href="#">?</a>		<b>905.514</b>	

Pent: ☐ Value: ☐ 600.000

0.25% ☒ ☐

Choose this option to  
enter a percentage of  
billed metered  
consumption. This is  
NOT a default value

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

Real Losses = Water Losses - Apparent Losses:	<a href="#">?</a>		1,849.486	acre-ft/yr
<b>WATER LOSSES:</b>			<b>2,755.000</b>	acre-ft/yr

## NON-REVENUE WATER

**NON-REVENUE WATER:** [?](#) 5,591.000 acre-ft/yr

= Total Water Loss + Unbilled Metered + Unbilled Unmetered

## SYSTEM DATA

Length of mains:	<a href="#">?</a>	8	1,000.0	miles
Number of active AND inactive service connections:	<a href="#">?</a>	9	64,871	
Connection density:			65	conn./mile main
Average length of customer service line:	<a href="#">?</a>	10	0.0	ft (pipe length between curbstop and customer meter or property boundary)
Average operating pressure:	<a href="#">?</a>	7	65.0	psi

## COST DATA

Total annual cost of operating water system:	<a href="#">?</a>	10	\$15,014,894	\$/Year
Customer retail unit cost (applied to Apparent Losses):	<a href="#">?</a>	8	\$2.22	\$/100 cubic feet (ccf)
Variable production cost (applied to Real Losses):	<a href="#">?</a>	8	\$109.00	\$/acre-ft

## PERFORMANCE INDICATORS

### Financial Indicators

Non-revenue water as percent by volume of Water Supplied:	8.6%
Non-revenue water as percent by cost of operating system:	9.2%
Annual cost of Apparent Losses:	\$875,661
Annual cost of Real Losses:	\$201,594

### Operational Efficiency Indicators

Apparent Losses per service connection per day:	12.46	gallons/connection/day
Real Losses per service connection per day*:	25.45	gallons/connection/day
Real Losses per length of main per day*:	N/A	
Real Losses per service connection per day per psi pressure:	0.39	gallons/connection/day/psi
<a href="#">?</a> Unavoidable Annual Real Losses (UARL):	1,102.38	acre-feet/year
From Above, Real Losses = Current Annual Real Losses (CARL):	1,849.49	acre-feet/year
<a href="#">?</a> Infrastructure Leakage Index (ILI) [CARL/UARL]:	1.68	

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

## WATER AUDIT DATA VALIDITY SCORE:

**\*\*\* YOUR SCORE IS: 86 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: Volume from own sources

2: Unbilled metered

3: Customer retail unit cost (applied to Apparent Losses)

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

# **Appendix F**

## **RPU's SB X7-7 Tables**

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

Acre Feet

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

NOTES:

SB X7-7 Table-1: Baseline Period Ranges			
Baseline	Parameter	Value	Units
10- to 15-year baseline period	2008 total water deliveries	83,856	Acre Feet
	2008 total volume of delivered recycled water	173	Acre Feet
	2008 recycled water as a percent of total deliveries	0.21%	Percent
	Number of years in baseline period <sup>1,2</sup>	10	Years
	Year beginning baseline period range	1999	
5-year baseline period	Year ending baseline period range <sup>3</sup>	2008	
	Number of years in baseline period	5	Years
	Year beginning baseline period range	2004	
	Year ending baseline period range <sup>4</sup>	2008	
<sup>1</sup> If the 2008 recycled water percent is less than 10 percent, then the first baseline period is a continuous 10-year period. If the amount of recycled water delivered in 2008 is 10 percent or greater, the first baseline period is a continuous 10- to 15-year period.			
<sup>2</sup> The Water Code requires that the baseline period is between 10 and 15 years. However, DWR recognizes that some water suppliers may not have the minimum 10 years of baseline data.			
<sup>3</sup> The ending year must be between December 31, 2004 and December 31, 2010.			
<sup>4</sup> The ending year must be between December 31, 2007 and December 31, 2010.			
NOTES:			



**SB X7-7 Table 2: Method for Population Estimates****Method Used to Determine Population**  
(may check more than one)☐**1. Department of Finance (DOF)**  
DOF Table E-8 (1990 - 2000) and (2000-2010) and  
DOF Table E-5 (2011 - 2015) when available☐**2. Persons-per-Connection Method**☒**3. DWR Population Tool**☐**4. Other**  
DWR recommends pre-review

NOTES:

SB X7-7 Table 3: Service Area Population		
Year		Population
10 to 15 Year Baseline Population		
Year 1	1999	247,753
Year 2	2000	249,744
Year 3	2001	252,935
Year 4	2002	256,166
Year 5	2003	259,439
Year 6	2004	262,754
Year 7	2005	266,111
Year 8	2006	269,511
Year 9	2007	272,954
Year 10	2008	276,441
Year 11		
Year 12		
Year 13		
Year 14		
Year 15		
5 Year Baseline Population		
Year 1	2004	262,754
Year 2	2005	266,111
Year 3	2006	269,511
Year 4	2007	272,954
Year 5	2008	276,441
2015 Compliance Year Population		
2015		294,526
NOTES:		

SB X7-7 Table 4-A: Volume Entering the Distribution System(s)				
Complete one table for each source.				
Name of Source		Potable Groundwater		
This water source is:				
<input checked="" type="checkbox"/>	The supplier's own water source			
<input type="checkbox"/>	A purchased or imported source			
Baseline Year <i>Fm SB X7-7 Table 3</i>	Volume Entering Distribution System	Meter Error Adjustment* <i>Optional (+/-)</i>	Corrected Volume Entering Distribution System	
10 to 15 Year Baseline - Water into Distribution System				
Year 1	1999	82,605	-	82,605
Year 2	2000	82,245	-	82,245
Year 3	2001	79,891	-	79,891
Year 4	2002	85,090	-	85,090
Year 5	2003	80,264	-	80,264
Year 6	2004	87,423	-	87,423
Year 7	2005	81,688	-	81,688
Year 8	2006	86,185	-	86,185
Year 9	2007	87,085	-	87,085
Year 10	2008	83,817	-	83,817
Year 11	0			-
Year 12	0			-
Year 13	0			-
Year 14	0			-
Year 15	0			-
5 Year Baseline - Water into Distribution System				
Year 1	2004	87,423		87,423
Year 2	2005	81,688		81,688
Year 3	2006	86,185		86,185
Year 4	2007	87,085		87,085
Year 5	2008	83,817		83,817
2015 Compliance Year - Water into Distribution System				
2015	61,147	-		61,147
* Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document				
NOTES:				

SB X7-7 Table 4-A: Volume Entering the Distribution System				
Name of Source		Purchased Imported Water		
This water source is:				
<input type="checkbox"/>	The supplier's own water source			
<input checked="" type="checkbox"/>	A purchased or imported source			
Baseline Year <i>Fm SB X7-7 Table 3</i>	Volume Entering Distribution System	Meter Error Adjustment* <i>Optional (+/-)</i>	Corrected Volume Entering Distribution System	
10 to 15 Year Baseline - Water into Distribution System				
Year 1	1,999	71	0	71
Year 2	2,000	368	0	368
Year 3	2,001	979	0	979
Year 4	2,002	648	0	648
Year 5	2,003	1344	0	1,344
Year 6	2,004	3084	0	3,084
Year 7	2,005	3166	0	3,166
Year 8	2,006	2285	0	2,285
Year 9	2,007	1655	0	1,655
Year 10	2,008	39	0	39
Year 11	-			0
Year 12	-			0
Year 13	-			0
Year 14	-			0
Year 15	-			0
5 Year Baseline - Water into Distribution System				
Year 1	2,004	3084	0	3,084
Year 2	2,005	3166	0	3,166
Year 3	2,006	2285	0	2,285
Year 4	2,007	1655	0	1,655
Year 5	2,008	39	0	39
2015 Compliance Year - Water into Distribution System				
2015	0	0		0
* Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document				
NOTES:				

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

Baseline Year <i>Fm SB X7-7 Table 3</i>		Volume Into Distribution System <i>This column will remain blank until SB X7-7 Table 4-A is completed.</i>	Deductions					Annual Gross Water Use
			Exported Water	Change in Dist. System Storage (+/-)	Indirect Recycled Water <i>This column will remain blank until SB X7-7 Table 4-B is completed.</i>	Water Delivered for Agricultural Use	Process Water <i>This column will remain blank until SB X7-7 Table 4-D is completed.</i>	
10 to 15 Year Baseline - Gross Water Use								
Year 1	1999	82,676	10,066	-	-	-	-	72,610
Year 2	2000	82,613	8,148	-	-	-	-	74,465
Year 3	2001	80,870	7,556	-	-	-	-	73,314
Year 4	2002	85,738	7,601	-	-	-	-	78,137
Year 5	2003	81,608	7,803	-	-	-	-	73,805
Year 6	2004	90,507	8,422	-	-	-	-	82,085
Year 7	2005	84,854	4,740	-	-	-	-	80,114
Year 8	2006	88,470	5,736	-	-	-	-	82,734
Year 9	2007	88,740	5,178	-	-	-	-	83,562
Year 10	2008	83,856	5,619	-	-	-	-	78,237
Year 11	0	-			-		-	-
Year 12	0	-			-		-	-
Year 13	0	-			-		-	-
Year 14	0	-			-		-	-
Year 15	0	-			-		-	-
10 - 15 year baseline average gross water use								77,906
5 Year Baseline - Gross Water Use								
Year 1	2004	90,507	8,422	-	-	-	-	82,085
Year 2	2005	84,854	4,740	-	-	-	-	80,114
Year 3	2006	88,470	5,736	-	-	-	-	82,734
Year 4	2007	88,740	5,178	-	-	-	-	83,562
Year 5	2008	83,856	5,619	-	-	-	-	78,237
5 year baseline average gross water use								81,346
2015 Compliance Year - Gross Water Use								
2015		61,147	1,622	-	-	-	-	59,525
* NOTE that the units of measure must remain consistent throughout the UWMP, as reported in Table 2-3								
NOTES:								

SB X7-7 Table 5: Gallons Per Capita Per Day (GPCD)				
Baseline Year <i>Fm SB X7-7 Table 3</i>		Service Area Population <i>Fm SB X7-7 Table 3</i>	Annual Gross Water Use <i>Fm SB X7-7 Table 4</i>	Daily Per Capita Water Use (GPCD)
10 to 15 Year Baseline GPCD				
Year 1	1999	247,753	72,610	262
Year 2	2000	249,744	74,465	266
Year 3	2001	252,935	73,314	259
Year 4	2002	256,166	78,137	272
Year 5	2003	259,439	73,805	254
Year 6	2004	262,754	82,085	279
Year 7	2005	266,111	80,114	269
Year 8	2006	269,511	82,734	274
Year 9	2007	272,954	83,562	273
Year 10	2008	276,441	78,237	253
Year 11	0	-	-	
Year 12	0	-	-	
Year 13	0	-	-	
Year 14	0	-	-	
Year 15	0	-	-	
10-15 Year Average Baseline GPCD				266
5 Year Baseline GPCD				
Baseline Year <i>Fm SB X7-7 Table 3</i>		Service Area Population <i>Fm SB X7-7 Table 3</i>	Gross Water Use <i>Fm SB X7-7 Table 4</i>	Daily Per Capita Water Use
Year 1	2004	262,754	82,085	279
Year 2	2005	266,111	80,114	269
Year 3	2006	269,511	82,734	274
Year 4	2007	272,954	83,562	273
Year 5	2008	276,441	78,237	253
5 Year Average Baseline GPCD				270
2015 Compliance Year GPCD				
2015		294,526	59,525	180
NOTES:				

<b>SB X7-7 Table 6: Gallons per Capita per Day</b> <i>Summary From Table SB X7-7 Table 5</i>	
10-15 Year Baseline GPCD	266
5 Year Baseline GPCD	270
2015 Compliance Year GPCD	180
NOTES:          	

SB X7-7 Table 7: 2020 Target Method		
Select Only One		
Target Method		Supporting Documentation
<input checked="" type="checkbox"/>	Method 1	SB X7-7 Table 7A
<input type="checkbox"/>	Method 2	SB X7-7 Tables 7B, 7C, and 7D <i>Contact DWR for these tables</i>
<input type="checkbox"/>	Method 3	SB X7-7 Table 7-E
<input type="checkbox"/>	Method 4	Method 4 Calculator
NOTES:		

SB X7-7 Table 7-A: Target Method 1 20% Reduction	
10-15 Year Baseline GPCD	2020 Target GPCD
266	213
NOTES:	



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

5 Year Baseline GPCD From SB X7-7 Table 5	Maximum 2020 Target <sup>1</sup>	Calculated 2020 Target <sup>2</sup>	Confirmed 2020 Target
270	256	213	<b>213</b>
<sup>1</sup> Maximum 2020 Target is 95% of the 5 Year Baseline GPCD Target is calculated based on the selected Target Method, see SB X7-7 Table 7 and corresponding tables for agency's calculated target. <sup>2</sup> 2020			
NOTES:			

SB X7-7 Table 8: 2015 Interim Target GPCD		
Confirmed 2020 Target <i>Fm SB X7-7 Table 7-F</i>	10-15 year Baseline GPCD <i>Fm SB X7-7 Table 5</i>	<b>2015 Interim Target GPCD</b>
213	266	<b>239</b>
NOTES:		

SB X7-7 Table 9: 2015 Compliance

Actual 2015 GPCD	2015 Interim Target GPCD	Optional Adjustments <i>(in GPCD)</i>					2015 GPCD <i>(Adjusted if applicable)</i>	Did Supplier Achieve Targeted Reduction for 2015?
		Enter "0" if Adjustment Not Used			TOTAL Adjustments	Adjusted 2015 GPCD		
		Extraordinary Events	Weather Normalization	Economic Adjustment				
180	239	<i>From Methodology 8 (Optional)</i>	<i>From Methodology 8 (Optional)</i>	<i>From Methodology 8 (Optional)</i>	-	180	180	YES

NOTES:

## **Appendix G**

### **WUE Data's Population Tool for RPU**



Please print this page to a PDF and include as part of your UWMP submittal.

### Confirmation Information

<b>Generated By</b>	<b>Water Supplier Name</b>	<b>Confirmation #</b>	<b>Generated On</b>
Jeroen Olthof	Riverside City Of	4978254020	2/10/2016 9:37:19 AM

### Boundary Information

<b>Census Year</b>	<b>Boundary Filename</b>	<b>Internal Boundary ID</b>
1990	RPU.kml	678
2000	RPU.kml	678
2010	RPU.kml	678

### Baseline Period Ranges

#### 10 to 15-year baseline period

Number of years in baseline period:

Year beginning baseline period range:

Year ending baseline period range<sup>1</sup>: 2008

#### 5-year baseline period

Year beginning baseline period range:

Year ending baseline period range<sup>2</sup>: 2008

<sup>1</sup> The ending year must be between December 31, 2004 and December 31, 2010.

<sup>2</sup> The ending year must be between December 31, 2007 and December 31, 2010.

### Persons-Per-SF Connection and Persons-Per-MF/GQ Connection

Year	Census Block Group Level			Census Block Level			# SF Connections	# MF/GQ Connections	Persons per SF Connection	Persons per MF/GQ Connection
	Population in SF Housing	Total Population	% Population in SF Housing	Service Area Population	Population in SF Housing (calculated)	Population in MF/GQ Housing (calculated)				
1990	165,426	226,820	72.93%	230,536	168,136	62,400	<input type="text"/>	<input type="text"/>	3.69	59.54
1991	-	-	-	-	-	-	-	-	3.69	59.54
1992	-	-	-	-	-	-	-	-	3.69	59.54
1993	-	-	-	-	-	-	-	-	3.69	59.54
1994	-	-	-	-	-	-	-	-	3.69	59.54
1995	-	-	-	-	-	-	-	-	3.69	59.54
1996	-	-	-	-	-	-	-	-	3.69	59.54
1997	-	-	-	-	-	-	-	-	3.69	59.54
1998	-	-	-	-	-	-	-	-	3.69	59.54
1999	-	-	-	-	-	-	-	-	3.69	59.54
2000	181,246	248,745	72.86%	249,744	181,974	67,770	<input type="text"/>	<input type="text"/>	3.69	59.54
2001	-	-	-	-	-	-	-	-	3.69	59.54
2002	-	-	-	-	-	-	-	-	3.69	59.54
2003	-	-	-	-	-	-	-	-	3.69	59.54
2004	-	-	-	-	-	-	-	-	3.69	59.54
2005	-	-	-	-	-	-	-	-	3.69	59.54
2006	-	-	-	-	-	-	-	-	3.69	59.54
2007	-	-	-	-	-	-	-	-	3.69	59.54
2008	-	-	-	-	-	-	-	-	3.69	59.54
2009	-	-	-	-	-	-	-	-	3.69	59.54
2010	208,374	284,064	73.35%	283,550	207,997	75,553	56393	1269	3.69	59.54
2015	-	-	-	-	-	-	-	-	3.69	59.54

## Population Using Persons-Per-SF Connection and Persons-Per-MF/GQ Connection

Year		# SF Connections	# MF/GQ Connections	Persons per SF Connection	Persons per MF/GQ Connection	SF Population	MF/GQ Population	Total Population
<b>10 to 15 Year Baseline Population Calculations</b>								
<b>Year 1</b>	1999	<input type="text"/>	<input type="text"/>	3.69	59.54			
<b>Year 2</b>	2000	<input type="text"/>	<input type="text"/>	3.69	59.54			
<b>Year 3</b>	2001	<input type="text"/>	<input type="text"/>	3.69	59.54			
<b>Year 4</b>	2002	<input type="text"/>	<input type="text"/>	3.69	59.54			
<b>Year 5</b>	2003	<input type="text"/>	<input type="text"/>	3.69	59.54			
<b>Year 6</b>	2004	<input type="text"/>	<input type="text"/>	3.69	59.54			
<b>Year 7</b>	2005	<input type="text"/>	<input type="text"/>	3.69	59.54			
<b>Year 8</b>	2006	<input type="text"/>	<input type="text"/>	3.69	59.54			
<b>Year 9</b>	2007	<input type="text"/>	<input type="text"/>	3.69	59.54			
<b>Year 10</b>	2008	<input type="text"/>	<input type="text"/>	3.69	59.54			
<b>5 Year Baseline Population Calculations</b>								
<b>Year 1</b>	2004	<input type="text"/>	<input type="text"/>	3.69	59.54			
<b>Year 2</b>	2005	<input type="text"/>	<input type="text"/>	3.69	59.54			
<b>Year 3</b>	2006	<input type="text"/>	<input type="text"/>	3.69	59.54			
<b>Year 4</b>	2007	<input type="text"/>	<input type="text"/>	3.69	59.54			
<b>Year 5</b>	2008	<input type="text"/>	<input type="text"/>	3.69	59.54			
<b>2015 Compliance Year Population Calculations</b>								
<b>2015</b>		<input type="text" value="58578"/>	<input type="text" value="1318"/>	3.69	59.54	<b>216,056</b>	<b>78,470</b>	<b>294,526</b>

[Hide Print Confirmation](#)

QUESTIONS / ISSUES? CONTACT THE WUEdata HELP DESK

# **Appendix H**

## **RPU and WMWD Agreements**



"People Serving  
People"

**CITY OF RIVERSIDE**  
**INTEROFFICE MEMO**

**RECEIVED**  
AUG 04 2003  
OFFICE OF THE CITY CLERK

**TO:** Colleen J. Nicol  
City Clerk

**DATE:** August 4, 2003

**FROM:** Eileen M. Teichert  
Supervising Deputy City Attorney

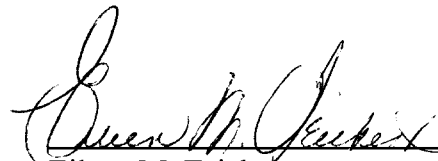
**SUBJECT:** OLD WATER AGREEMENTS; OUR FILE NO. CA 02-1923

Attached are "copies" of two agreements between the City of Riverside and Western Municipal Water District: 1) Agreement for Service Right in the Western Municipal Water District State Project Water Pipeline, dated 9/23/86; and 2) Single Project Administration Agreement dated 4/24/90. I understand that your office does not have either copies or originals of these agreements. Please create files for these and maintain them as these Agreements will be in effect for some time.

3-5-03  
EJ

Also, this is to request a search of City Council minutes around the dates of the Agreements. I would like to confirm that these have been duly authorized and executed by the City.

If you should have any questions or comments, please do not hesitate to contact me.

  
Eileen M. Teichert  
Supervising Deputy City Attorney

Enclosure: As indicated



AGREEMENT FOR SERVICE RIGHT IN THE WESTERN  
MUNICIPAL WATER DISTRICT STATE PROJECT WATER PIPELINE

THIS AGREEMENT made this 23rd day of September, 1986, is entered into by and between the WESTERN MUNICIPAL WATER DISTRICT OF RIVERSIDE COUNTY ("WMWD"), a municipal water district organized under the laws of the State of California and a member agency of the Metropolitan Water District of Southern California ("MWD") and of the Santa Ana Watershed Project Authority ("SAWPA"), and the CITY OF RIVERSIDE, a charter city ("CITY").

RECITALS

1. The Santa Ana Watershed Project Authority, a joint powers agency organized and existing pursuant to the laws of California and to a certain Joint Powers Agreement of January, 1975, exercising the powers common to its member agencies ("SAWPA"), has agreed to engineer, design, and construct an imported water conveyance system within the service area of WMWD, consisting of a gravity pipeline, a pressure pipeline, a reservoir and a pumping station ("PROJECT"), for the purpose of supplying treated water to WMWD's service area for irrigation, domestic and industrial uses. PROJECT Construction is presently estimated to be complete by 1990.

SAWPA has entered into a contract with the United States pursuant to the Small Reclamation Projects Act for a loan to construct the PROJECT entitled Contract Between the U.S. and Santa Ana Watershed Project Authority, dated February 11, 1985 and on file with SAWPA which is incorporated herein by reference. SAWPA has estimated the total project cost to be \$23,316,500. The loan, in an amount not to exceed \$14,917,000, has been approved and authorized for funding. The loan contract required the execution of a Lease-Purchase agreement between SAWPA and WMWD, which was executed on January 2, 1985 and is on file with the WMWD at its offices, which Agreement is incorporated herein by reference.

2. By the terms of the Lease-Purchase Agreement, WMWD will lease and operate the PROJECT from SAWPA during the period of time SAWPA is obligated under the loan contract with the United States, and will be solely responsible for all the financial obligations, costs and expenses of the PROJECT and the loan contract. At the time the loan obligation is repaid, SAWPA will convey its ownership interest in the PROJECT to WMWD.

3. WMWD, in turn, will make service rights in the PROJECT available to applicants within its service area, subject to certain payment requirements and terms and conditions.

4. CITY has applied for a service right of 30 cubic feet per second ("cfs"), and has agreed to pay the cost and to comply with the terms and conditions.

5. It is the purpose of this Agreement to provide the terms, conditions and payment schedule under which CITY will acquire a 30 cfs service right in the PROJECT.

#### COVENANTS

Based upon the foregoing facts, and in consideration of the mutual covenants of the parties, it is hereby agreed as follows:

6. Definitions. As used in this Agreement, these terms shall have the following meaning:

A. Service Right. A right to receive treated State Water Project water service at a specific maximum rate of flow of water at specific connections, to the extent water is available to WMWD from the Metropolitan Water District of Southern California ("MWD"), and to the extent the PROJECT facilities are capable of delivering design capacity flows. The amount of the service right shall be expressed in cubic feet per second as constant flow during a 24-hour period, and shall be equal to the maximum flow which may be required by CITY as measured at its connections on Reach A. Use of the pipeline by any project participant or participants shall not diminish CITY's service right.

B. PROJECT. The PROJECT is an imported water conveyance system intended to carry treated State Water Project water from the Henry J. Mills Filtration Plant ("Mills") on Alessandro Boulevard in western Riverside County to certain locations within the service area of WMWD. The conveyance system consists of two separate pipelines.

The first is a gravity pipeline, which begins at the Mills Filtration Plant and runs westerly approximately 65,000 feet, generally following the alignment of the Box Springs and Upper Feeder right of way belonging to MWD, to a final turnout at Eagle Valley. It includes a 10 million gallon storage facility located near the westerly end of the pipeline.

The second is a pressure pipeline, which will begin at the Mills Filtration Plant and run southerly approximately 18,300 feet, and includes a pumping station located near the Mills Filtration Plant.

C. PROJECT Participants. PROJECT Participants shall be those entities which obtain a service right in the PROJECT from WMWD and agree to abide by the terms and conditions set by WMWD for acquisition and utilization of such right.

D. Gravity Pipeline Reaches. The gravity pipeline shall consist of five reaches and a reservoir which are further defined as follows:

(1) Reach A. Reach A shall be the first reach of the gravity pipeline from the Mills Filtration Plant, running westerly approximately 31,200 feet, and consisting of a 60-inch pipeline.

(2) Reach B. Reach B shall be the second reach of the gravity pipeline from the Mills Plant, commencing at the westerly end of Reach A, running westerly approximately 14,600 feet, and consisting of a 54-inch pipeline.

(3) Reach C. Reach C shall be the third reach of the gravity pipeline, commencing at the westerly end of Reach B, running westerly approximately 3,200 feet, and consisting of a 48-inch pipeline.

(4) Reach D. Reach D shall be the fourth reach of the gravity pipeline, commencing at the end of Reach C, running westerly approximately 12,300 feet, consisting of a 48-inch pipeline.

(5) Reach E. Reach E shall be the fifth reach of the gravity pipeline, commencing at the western end of Reach D, running westerly 3,700 feet, consisting of a 36-inch pipeline, and terminating in Eagle Valley.

(6) Reservoir. Reservoir shall mean a 10 million gallon storage facility located along the gravity pipeline toward the westerly end. CITY shall have no storage rights in this facility.

A map generally showing the location and terminus of each Reach and the Reservoir of the PROJECT is attached hereto as Exhibit "A."

E. PROJECT Costs. PROJECT Costs are defined as all ordinary and usual costs relevant to creating the PROJECT for its stated purposes, including construction costs of the gravity pipeline, reservoir, pressure pipeline, pump station, design, engineering, legal and administrative costs, rights of way, Bureau of Reclamation participation, loan application reports, CEQA-EIR costs, field inspection, interest costs, escalation factors and contingencies.

7. CITY Service Right. CITY shall have the right to require and WMWD shall have the obligation to deliver at connections to be determined along or at the end of Reach A, 30 cfs of treated State Water Project water, dependent upon full payment of the purchase price therefor by CITY, and compliance with the terms and conditions set forth herein, and further dependent upon the availability of MWD water to WMWD, and the capability of the PROJECT to deliver water at its design capacity.

8. Price of Service Right. The total price of the 30 cfs service right is fixed at \$2,400,000 and is not subject to changed project requirements, cost overruns, or other increases or decreases in actual costs.

9. Payment Terms. CITY shall pay WMWD the total price of \$2,400,000 in one payment submitted no later than September 26, 1986.

10. Reach A Estimated Completion Date. SAWPA estimates completion of construction of Reach A by February 1, 1988, provided Bureau of Reclamation loan funds continue to be made available as presently expected and authorized. WMWD agrees to exercise its best efforts to cause SAWPA to use due diligence in completing construction of Reach A by February 1, 1988.

WMWD also agrees to use its best efforts to provide water service to CITY immediately after acceptance of Reach A, regardless of completion of subsequent reaches of the gravity pipeline.

11. Operation, Maintenance, Repair and Replacement Costs (Gravity Pipeline). Operation and maintenance costs which shall be those associated with the gravity section of the PROJECT shall be divided between fixed and variable costs.

A. Fixed Costs, which shall include an amount for replacement, shall be charged to PROJECT participants as an annual charge on a fiscal year basis, and divided among participants based on each participant's percent of allocated service rights, whether or not the participants take delivery of the flow. The fixed costs may also be divided among participants on a reach by reach basis.

Replacement shall mean replacement after destruction by acts of God, malicious mischief, vandalism, extraordinary major maintenance costs or similar events. If such

replacement becomes necessary when there are insufficient funds to cover the costs, WMWD shall meet with the PROJECT participants to determine how such costs shall be met.

B. Variable Costs shall be included in the rate for water, which shall be paid on a monthly basis. The water rate shall be the sum of the MWD rate for treated water, WMWD'S administrative charge, and variable costs of operation and maintenance of the gravity pipeline portion of the PROJECT. Payments shall be based on the net amount of water delivered to CITY'S connections on Reach A. The water rate shall apply to the quantity of water delivered at each connection and shall be billed monthly.

WMWD shall establish an independent cost center and an annual budget for the operation and maintenance of the gravity pipeline portion of the Project. CITY shall be provided the opportunity to review and comment upon the proposed budget prior to its adoption by WMWD'S board. Operation and maintenance cost amounts for this portion of the Project shall be based on the annual budget.

12. Point of Delivery. CITY shall be entitled to take delivery of its 30 cfs of water at a connection or connections, not to exceed 3, at such location or locations on Reach A as shall be determined by the parties. The primary water source shall be California State Water Project water, treated and delivered to WMWD at the Mills Plant. CITY shall be responsible for the costs of whatever additional



facilities required to make a connection to the PROJECT, including a structure, valves, meter, and telemetry, although the actual design and construction of such connection facility shall be completed by WMWD. Such costs shall be paid to WMWD in advance of letting any contract for the work or the purchase of any necessary equipment or facilities. Once a connection has been made, the connection facilities and meter shall belong to WMWD, and WMWD shall be responsible for their operation, maintenance, repair and replacement.

The CITY will have the right to install, maintain and inspect its own telemetry equipment and connections within the metering facilities. WMWD shall provide electrical contacts and meter characteristics as approved by the CITY for CITY's telemetry equipment and a flanged connection for the CITY's pipeline. All CITY's telemetry equipment shall belong to the CITY and CITY shall be responsible for its operation, maintenance, repair and replacement. The CITY will demonstrate the capability of flow control for its service connections.

13. Operation and Administration.

A. Scheduled outages - WMWD will provide advance notice of any scheduled pipeline outage.

B. Connection Right of Way - WMWD will assist CITY in obtaining permanent and temporary construction easements from MWD for right of way needed to connect to the metering facilities.

C. Corrosion control - The pipeline will be bonded and test leads will be brought to the surface and WMWD will monitor potential for corrosion and provide corrosion control if necessary as part of the operation and maintenance.

D. Changes in flow - WMWD will permit instantaneous changes in flow at the CITY's connection provided WMWD is permitted by MWD to make instantaneous changes in flow from the Mills treated water reservoir.

14. Title to PROJECT. After all payments on the loan obligations are made, SAWPA will convey title of the PROJECT to WMWD which shall thenceforth be the sole owner and operator of the PROJECT and of capacity in the PROJECT. Notwithstanding any provisions of this Agreement, PROJECT participants shall have no ownership rights to PROJECT facilities or capacity. Further, no right created by this Agreement may be assigned, sold, leased, or transferred.

15. Reversion of Service Right. If CITY should determine it does not need its full 30 cfs service right, it may notify WMWD and request a reversion of the surplus to WMWD. If WMWD thereafter sells that right to another participant or new party, it shall reimburse CITY the amount of CITY'S purchase price for that portion, plus 8.64% interest annually from date of purchase. WMWD, however, is under no obligation to offer such reverted rights to a purchaser in advance of offering any other then-existing capacity.

16. Agreement Subject To Terms Of Prior Agreements.

This Agreement is subject to all the terms and conditions of the Lease Payment Agreement between SAWPA and WMWD dated January 2, 1985 and between SAWPA and the United States through the Loan Contract.

17. Default. Should CITY fail to perform its obligations under this Agreement with respect to payment for the service right, or with respect to the fixed and variable costs of operation, maintenance, repair or replacement, the following shall apply:

A. Default on Service Right. If CITY shall fail to make any payment due herein of the service right within ten (10) days from the date such payment is due, or if CITY shall fail to keep any of the terms and conditions of this Agreement concerning payment for the service right, then CITY shall be deemed to be in default hereunder. If CITY should, after notice, fail to remedy any such default with all reasonable dispatch, not to exceed thirty (30) days, then WMWD shall have the right, at its option, without any further demand or notice, to terminate this Agreement and to take possession of CITY's service right in the PROJECT and to declare CITY's right forfeited, and to thereafter hold or resell such right to other applicants without reimbursement to CITY.

With respect to the payment for the service right, this shall be the exclusive and only remedy for CITY's default should WMWD elect to pursue a remedy.

B. Default on Operation, Maintenance, Repair or Replacement Costs. If CITY shall fail to make any payment due herein within thirty (30) days from the invoice date, or if CITY shall fail to keep any of the terms and conditions of this contract concerning payment of operation, maintenance, repair or replacement costs, then CITY shall be deemed to be in default hereunder and WMWD shall have the right, at its option, without any further demand or notice, to terminate water service.

These rights are not intended to constitute WMWD's exclusive remedies, and they shall be in addition to any other right or remedy that WMWD may have for damages, termination of the Agreement, injunction, or other relief allowed by law.

18. Notices. Any notices or filings required to be given or made under this Agreement shall be served or made in the following manner:

A. Upon WMWD, by serving the Secretary or General Manager of WMWD personally or by registered mail addressed to the General Manager, Western Municipal Water District, 450 Alessandro Boulevard, Riverside, California 92508, P. O. Box 5286, Riverside, California 92517-5286.

B. Upon CITY, by serving the Public Utilities Director personally or by registered mail, Public Utilities Department, 3900 Main Street, Riverside, California 92522.

19. Severability. If any section or portion of this Agreement or the application thereof to any party is for any reason held invalid, it shall be deemed severable, and the validity of the remainder of the Agreement shall not be affected thereby.

20. Attorneys' Fees. Should either party hereto commence an action to enforce the provisions of this Agreement, then such party that prevails in that action shall be entitled to reasonable attorneys' fees, costs, expert witness fees, consulting fees and testing fees.

21. Amendments. This Agreement may be amended with the mutual consent of the parties, provided that such amendment shall be in writing, signed and dated by both parties hereto.

22. Hold Harmless. WMWD agrees to hold CITY harmless from any liability for damages or claims for personal injury and property damage which do not result from the negligent acts of CITY, its officials, officers, agents or employees, and CITY agrees to hold WMWD harmless from any liability for damages or claims for personal injury or property damage resulting from the negligence of CITY.

IN WITNESS WHEREOF, WMWD has caused this Agreement to be executed by the President of its Board of Directors and attested by the Secretary thereof, and CITY has executed this by its Mayor and attested by its CITY Clerk.

APPROVED AS TO FORM:

WESTERN MUNICIPAL WATER  
FOR RIVERSIDE COUNTY

Anne T. Thomas  
Attorney for Western  
Municipal Water District  
for Riverside County

By: Stanfordrickson

ATTESTED BY:

[Signature]

CITY OF RIVERSIDE  
a municipal corporation

By: [Signature] Mayor Pro Tempore

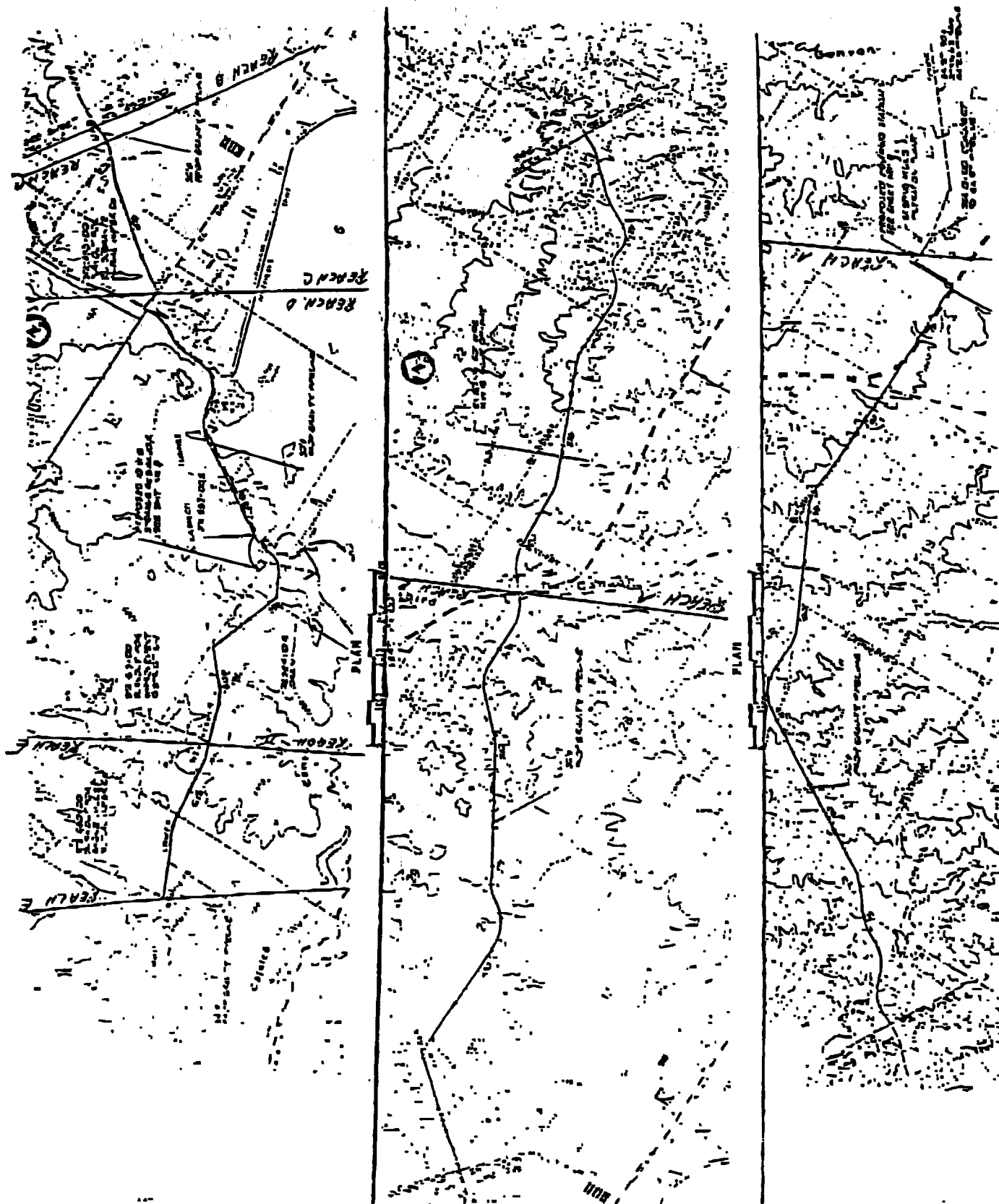
APPROVED AS TO FORM:

ATTESTED BY:

John Woodliff  
City Attorney  
City of Riverside

Alice A. Hall  
City Clerk

EXHIBIT "A"



RECEIVED

SINGLE PROJECT ADMINISTRATION AGREEMENT  
BETWEEN WESTERN MUNICIPAL WATER DISTRICT  
AND CITY OF RIVERSIDE

FEB 06 1990

CITY OF RIVERSIDE  
WATER ENGINEERING

This Single Project Administration Agreement ("Agreement") is made and entered into this 24th day of April, 1990, by and between the City of Riverside, a municipal corporation ("City") and Western Municipal Water District of Riverside County ("WMWD"), a municipal water district organized under the laws of the State of California and a member agency of the Metropolitan Water District of Southern California ("MWD") and of the Santa Ana Watershed Project Authority ("SAWPA").

Recitals

A. WHEREAS, the City and WMWD have previously entered into an agreement entitled "Agreement for Service Right in the Western Municipal Water District State Project Water Pipeline" ("Service Right Agreement") dated September 23, 1986, a copy of which is attached hereto as Exhibit "A" and herein incorporated by reference; and

B. WHEREAS, WMWD hired A. A. Webb Associates ("Webb") as an independent contractor to design the turnout metering and flow-regulating facilities associated with City's turnout for those facilities described in the Service Right Agreement; and



C. WHEREAS, WMWD gave notice to City in a letter dated December 23, 1987, of its intentions to hire Webb and thereafter WMWD did engage Webb and Webb proceeded to design turnout metering and flow-regulating facilities, which design is now acceptable to both WMWD and MWD; and

D. WHEREAS, it is City's intention to build its own pressure-regulating facilities for the project at the same time that WMWD intends to construct its metering and flow-regulating facilities; and

E. WHEREAS, the construction to be carried out by WMWD and the construction to be carried out by City are to occur on the same site; and

F. WHEREAS, City and WMWD desire to avoid, as much as possible, confusion, interference and delays, and desire to integrate their respective contracts and allow the City to administer the City's project and WMWD's project as a single project ("Combined Project").

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein, City and WMWD agree as follows:

Agreement1. City's Rights and Obligations.

(a) City shall construct the Combined Project at City's expense.

(b) City shall administer and inspect all contract work associated with the Combined Project; provided, however, that all aspects of the contract work for WMWD metering and flow regulating facilities are subject to review and approval by WMWD, which approval shall not be unreasonably withheld and shall be given timely so as to avoid project delays.

(c) City shall pay to WMWD the cost of City's share of the telemetry facilities being provided by WMWD for the operation of the metering/flow regulating facilities. Said telemetry facilities shall include, but not be limited to, cable, remote control terminals and a central control unit.

(d) City shall pay for the cost of design of the facility for the rate of flow control and metering.

(e) City shall pay for all water delivered through the turnout at a rate to be established by WMWD, such rates to include both water sold and a proportionate share of fixed costs.

2. WMWD's Rights and Obligations.

(a) WMWD shall own and operate turnout through meter and regulation of flow facility.

(b) WMWD shall have final approval of all contract work, pertaining to WMWD metering/flow regulating facilities, which approval shall not be unreasonably withheld and shall be given timely so as to avoid project delays.

3. Term. The term of this Agreement shall be until the completion of the Combined Project, namely the construction of facilities and acceptance of the construction of the facilities by the City and WMWD.

4. Notices. All notices, requests, demands, certificates and other communication hereunder shall be in writing and shall be deemed to have been duly given if personally delivered or if mailed by United States Certified or Registered mail, postage prepaid, to the appropriate parties at the following addresses. Notice shall be deemed given at the time personally delivered or, if mailed, seventy-two (72) hours after deposit in the U.S. Postal Service.

Any notices or filings required to be given or made under this Agreement shall be served or made in the following manner:

(a) Upon WMWD by serving the Secretary or General Manager of WMWD personally or by registered mail, addressed to the General Manager, Western Municipal Water District, P.O. Box 5286, Riverside, CA 92517-5286, with a copy to Anne T. Thomas, Best, Best & Krieger, 800 North Haven, Suite 120, Ontario, CA 91764.

(b) Upon City by serving the Public Utilities Director personally or by registered mail, addressed to Public Utilities Director, City of Riverside, Public Utilities Department, 3900 Main Street, Riverside, CA 92522.

5. Assignment. Neither this Agreement nor any rights of any party hereunder shall be assignable or transferable by any party, in whole or in part, directly or indirectly, by operation of law or otherwise without the prior written consent of the other party. Subject to the preceding sentence, this Agreement shall be binding upon and inure to the benefit of the successors and assigns of the parties hereto.

6. Waiver. No waiver of any provision of this Agreement shall be deemed or shall constitute a waiver of any other provision, whether or not similar, nor shall any waiver constitute a continuing waiver. No waiver shall be binding unless executed in writing by the party making the waiver.

7. Governing Law: Venue. This Agreement shall be construed in accordance with and governed by the laws of the State of California. Any lawsuit brought to enforce this Agreement shall be brought in the appropriate court in Riverside County, State of California.

8. Time is of the Essence. Time is of the essence in this Agreement and its provisions.

9. Severability. If any provision of this Agreement is held to be invalid, void or unenforceable by a court of competent jurisdiction, the remaining provisions shall nevertheless continue in full force and effect without being impaired or invalidated in any way.

10. Attorney's Fees and Costs. If any legal action or other proceeding is brought for the enforcement of this Agreement, because of any alleged dispute, breach, default or misrepresentation in connection with any provisions of this Agreement, the successful or prevailing party shall be entitled to recover reasonable attorney's fees and other costs incurred in that action or proceeding in addition to any other relief to which it may be entitled.

11. Counterparts. This Agreement may be executed in counterparts, each of which will constitute an original and which collectively will constitute one instrument.

12. Captions. The caption of the articles and sections of this Agreement are included for purposes of convenience only and the words contained in the caption shall not affect the construction or interpretation of any of the provisions.

13. Hold Harmless. WMWD agrees to hold City harmless from any liability for damages or claims for personal injury and property damage which do not result from the negligent acts of City, its officials, officers, agents or employees, and City agrees to hold WMWD harmless from liability for damages or claims for personal injury or property damage resulting from the negligence of City.

14. Effective Date. The effective date of this Agreement is the date first set forth above.

IN WITNESS WHEREOF, WMWD has caused this Agreement to be executed by the President of its Board of Directors and attested by the Secretary thereof and the City has executed by its Mayor and attested by its City Clerk.

APPROVED AS TO FORM:

\_\_\_\_\_  
Attorney for Western  
Municipal Water District  
of Riverside Co.

APPROVED AS TO FORM:

\_\_\_\_\_  
Robert A. Laine  
Attorney for the  
City of Riverside

WESTERN MUNICIPAL WATER  
DISTRICT OF RIVERSIDE CO.

By: \_\_\_\_\_

President

ATTEST:

By: \_\_\_\_\_

Secretary

CITY OF RIVERSIDE,  
A MUNICIPAL CORPORATION

By: \_\_\_\_\_

Mayor

ATTEST:

By: \_\_\_\_\_

City Clerk

**Exhibit "A"**

**Agreement for Service Right in the Western  
Municipal Water District State Project  
Water Pipeline  
dated September 23, 1986**



AGREEMENT FOR SERVICE RIGHT IN THE WESTERN  
MUNICIPAL WATER DISTRICT STATE PROJECT WATER PIPELINE

THIS AGREEMENT made this 23rd day of September, 1986, is entered into by and between the WESTERN MUNICIPAL WATER DISTRICT OF RIVERSIDE COUNTY ("WMWD"), a municipal water district organized under the laws of the State of California and a member agency of the Metropolitan Water District of Southern California ("MWD") and of the Santa Ana Watershed Project Authority ("SAWPA"), and the CITY OF RIVERSIDE, a charter city ("CITY").

RECITALS

1. The Santa Ana Watershed Project Authority, a joint powers agency organized and existing pursuant to the laws of California and to a certain Joint Powers Agreement of January, 1975, exercising the powers common to its member agencies ("SAWPA"), has agreed to engineer, design, and construct an imported water conveyance system within the service area of WMWD, consisting of a gravity pipeline, a pressure pipeline, a reservoir and a pumping station ("PROJECT"), for the purpose of supplying treated water to WMWD's service area for irrigation, domestic and industrial uses. PROJECT Construction is presently estimated to be complete by 1990.

SAWPA has entered into a contract with the United States pursuant to the Small Reclamation Projects Act for a loan to construct the PROJECT entitled Contract Between the U.S. and Santa Ana Watershed Project Authority, dated February 11, 1985 and on file with SAWPA which is incorporated herein by reference. SAWPA has estimated the total project cost to be \$23,316,500. The loan, in an amount not to exceed \$14,917,000, has been approved and authorized for funding. The loan contract required the execution of a Lease-Purchase agreement between SAWPA and WMWD, which was executed on January 2, 1985 and is on file with the WMWD at its offices, which Agreement is incorporated herein by reference.

2. By the terms of the Lease-Purchase Agreement, WMWD will lease and operate the PROJECT from SAWPA during the period of time SAWPA is obligated under the loan contract with the United States, and will be solely responsible for all the financial obligations, costs and expenses of the PROJECT and the loan contract. At the time the loan obligation is repaid, SAWPA will convey its ownership interest in the PROJECT to WMWD.

3. WMWD, in turn, will make service rights in the PROJECT available to applicants within its service area, subject to certain payment requirements and terms and conditions.

4. CITY has applied for a service right of 30 cubic feet per second ("cfs"), and has agreed to pay the cost and to comply with the terms and conditions.

5. It is the purpose of this Agreement to provide the terms, conditions and payment schedule under which CITY will acquire a 30 cfs service right in the PROJECT.

#### COVENANTS

Based upon the foregoing facts, and in consideration of the mutual covenants of the parties, it is hereby agreed as follows:

6. Definitions. As used in this Agreement, these terms shall have the following meaning:

A. Service Right. A right to receive treated State Water Project water service at a specific maximum rate of flow of water at specific connections, to the extent water is available to WMWD from the Metropolitan Water District of Southern California ("MWD"), and to the extent the PROJECT facilities are capable of delivering design capacity flows. The amount of the service right shall be expressed in cubic feet per second as constant flow during a 24-hour period, and shall be equal to the maximum flow which may be required by CITY as measured at its connections on Reach A. Use of the pipeline by any project participant or participants shall not diminish CITY's service right.

B. PROJECT. The PROJECT is an imported water conveyance system intended to carry treated State Water Project water from the Henry J. Mills Filtration Plant ("Mills") on Alessandro Boulevard in western Riverside County to certain locations within the service area of WMWD. The conveyance system consists of two separate pipelines.

The first is a gravity pipeline, which begins at the Mills Filtration Plant and runs westerly approximately 65,000 feet, generally following the alignment of the Box Springs and Upper Feeder right of way belonging to MWD, to a final turnout at Eagle Valley. It includes a 10 million gallon storage facility located near the westerly end of the pipeline.

The second is a pressure pipeline, which will begin at the Mills Filtration Plant and run southerly approximately 18,300 feet, and includes a pumping station located near the Mills Filtration Plant.

C. PROJECT Participants. PROJECT Participants shall be those entities which obtain a service right in the PROJECT from WMWD and agree to abide by the terms and conditions set by WMWD for acquisition and utilization of such right.

D. Gravity Pipeline Reaches. The gravity pipeline shall consist of five reaches and a reservoir which are further defined as follows:

(1) Reach A. Reach A shall be the first reach of the gravity pipeline from the Mills Filtration Plant, running westerly approximately 31,200 feet, and consisting of a 60-inch pipeline.

(2) Reach B. Reach B shall be the second reach of the gravity pipeline from the Mills Plant, commencing at the westerly end of Reach A, running westerly approximately 14,600 feet, and consisting of a 54-inch pipeline.

(3) Reach C. Reach C shall be the third reach of the gravity pipeline, commencing at the westerly end of Reach B, running westerly approximately 3,200 feet, and consisting of a 48-inch pipeline.

(4) Reach D. Reach D shall be the fourth reach of the gravity pipeline, commencing at the end of Reach C, running westerly approximately 12,300 feet, consisting of a 48-inch pipeline.

(5) Reach E. Reach E shall be the fifth reach of the gravity pipeline, commencing at the western end of Reach D, running westerly 3,700 feet, consisting of a 36-inch pipeline, and terminating in Eagle Valley.

(6) Reservoir. Reservoir shall mean a 10 million gallon storage facility located along the gravity pipeline toward the westerly end. CITY shall have no storage rights in this facility.

A map generally showing the location and terminus of each Reach and the Reservoir of the PROJECT is attached hereto as Exhibit "A."

E. PROJECT Costs. PROJECT Costs are defined as all ordinary and usual costs relevant to creating the PROJECT for its stated purposes, including construction costs of the gravity pipeline, reservoir, pressure pipeline, pump station, design, engineering, legal and administrative costs, rights of way, Bureau of Reclamation participation, loan application reports, CEQA-EIR costs, field inspection, interest costs, escalation factors and contingencies.

7. CITY Service Right. CITY shall have the right to require and WMWD shall have the obligation to deliver at connections to be determined along or at the end of Reach A, 30 cfs of treated State Water Project water, dependent upon full payment of the purchase price therefor by CITY, and compliance with the terms and conditions set forth herein, and further dependent upon the availability of MWD water to WMWD, and the capability of the PROJECT to deliver water at its design capacity.

8. Price of Service Right. The total price of the 30 cfs service right is fixed at \$2,400,000 and is not subject to changed project requirements, cost overruns, or other increases or decreases in actual costs.

9. Payment Terms. CITY shall pay WMWD the total price of \$2,400,000 in one payment submitted no later than September 26, 1986.

10. Reach A Estimated Completion Date. SAWPA estimates completion of construction of Reach A by February 1, 1988, provided Bureau of Reclamation loan funds continue to be made available as presently expected and authorized. WMWD agrees to exercise its best efforts to cause SAWPA to use due diligence in completing construction of Reach A by February 1, 1988.

WMWD also agrees to use its best efforts to provide water service to CITY immediately after acceptance of Reach A, regardless of completion of subsequent reaches of the gravity pipeline.

11. Operation, Maintenance, Repair and Replacement Costs (Gravity Pipeline). Operation and maintenance costs which shall be those associated with the gravity section of the PROJECT shall be divided between fixed and variable costs.

A. Fixed Costs, which shall include an amount for replacement, shall be charged to PROJECT participants as an annual charge on a fiscal year basis, and divided among participants based on each participant's percent of allocated service rights, whether or not the participants take delivery of the flow. The fixed costs may also be divided among participants on a reach by reach basis.

Replacement shall mean replacement after destruction by acts of God, malicious mischief, vandalism, extraordinary major maintenance costs or similar events. If such

replacement becomes necessary when there are insufficient funds to cover the costs, WMWD shall meet with the PROJECT participants to determine how such costs shall be met.

B. Variable Costs shall be included in the rate for water, which shall be paid on a monthly basis. The water rate shall be the sum of the MWD rate for treated water, WMWD'S administrative charge, and variable costs of operation and maintenance of the gravity pipeline portion of the PROJECT. Payments shall be based on the net amount of water delivered to CITY'S connections on Reach A. The water rate shall apply to the quantity of water delivered at each connection and shall be billed monthly.

WMWD shall establish an independent cost center and an annual budget for the operation and maintenance of the gravity pipeline portion of the Project. CITY shall be provided the opportunity to review and comment upon the proposed budget prior to its adoption by WMWD'S board. Operation and maintenance cost amounts for this portion of the Project shall be based on the annual budget.

12. Point of Delivery. CITY shall be entitled to take delivery of its 30 cfs of water at a connection or connections, not to exceed 3, at such location or locations on Reach A as shall be determined by the parties. The primary water source shall be California State Water Project water, treated and delivered to WMWD at the Mills Plant. CITY shall be responsible for the costs of whatever additional



facilities required to make a connection to the PROJECT, including a structure, valves, meter, and telemetry, although the actual design and construction of such connection facility shall be completed by WMWD. Such costs shall be paid to WMWD in advance of letting any contract for the work or the purchase of any necessary equipment or facilities. Once a connection has been made, the connection facilities and meter shall belong to WMWD, and WMWD shall be responsible for their operation, maintenance, repair and replacement.

The CITY will have the right to install, maintain and inspect its own telemetry equipment and connections within the metering facilities. WMWD shall provide electrical contacts and meter characteristics as approved by the CITY for CITY's telemetry equipment and a flanged connection for the CITY's pipeline. All CITY's telemetry equipment shall belong to the CITY and CITY shall be responsible for its operation, maintenance, repair and replacement. The CITY will demonstrate the capability of flow control for its service connections.

13. Operation and Administration.

A. Scheduled outages - WMWD will provide advance notice of any scheduled pipeline outage.

B. Connection Right of Way - WMWD will assist CITY in obtaining permanent and temporary construction easements from MWD for right of way needed to connect to the metering facilities.

C. Corrosion control - The pipeline will be bonded and test leads will be brought to the surface and WMWD will monitor potential for corrosion and provide corrosion control if necessary as part of the operation and maintenance.

D. Changes in flow - WMWD will permit instantaneous changes in flow at the CITY's connection provided WMWD is permitted by MWD to make instantaneous changes in flow from the Mills treated water reservoir.

14. Title to PROJECT. After all payments on the loan obligations are made, SAWPA will convey title of the PROJECT to WMWD which shall thenceforth be the sole owner and operator of the PROJECT and of capacity in the PROJECT. Notwithstanding any provisions of this Agreement, PROJECT participants shall have no ownership rights to PROJECT facilities or capacity. Further, no right created by this Agreement may be assigned, sold, leased, or transferred.

15. Reversion of Service Right. If CITY should determine it does not need its full 30 cfs service right, it may notify WMWD and request a reversion of the surplus to WMWD. If WMWD thereafter sells that right to another participant or new party, it shall reimburse CITY the amount of CITY'S purchase price for that portion, plus 8.64% interest annually from date of purchase. WMWD, however, is under no obligation to offer such reverted rights to a purchaser in advance of offering any other then-existing capacity.

16. Agreement Subject To Terms Of Prior Agreements.

This Agreement is subject to all the terms and conditions of the Lease Payment Agreement between SAWPA and WMWD dated January 2, 1985 and between SAWPA and the United States through the Loan Contract.

17. Default. Should CITY fail to perform its obligations under this Agreement with respect to payment for the service right, or with respect to the fixed and variable costs of operation, maintenance, repair or replacement, the following shall apply:

A. Default on Service Right. If CITY shall fail to make any payment due herein of the service right within ten (10) days from the date such payment is due, or if CITY shall fail to keep any of the terms and conditions of this Agreement concerning payment for the service right, then CITY shall be deemed to be in default hereunder. If CITY should, after notice, fail to remedy any such default with all reasonable dispatch, not to exceed thirty (30) days, then WMWD shall have the right, at its option, without any further demand or notice, to terminate this Agreement and to take possession of CITY's service right in the PROJECT and to declare CITY's right forfeited, and to thereafter hold or resell such right to other applicants without reimbursement to CITY.

With respect to the payment for the service right, this shall be the exclusive and only remedy for CITY's default should WMWD elect to pursue a remedy.

B. Default on Operation, Maintenance, Repair or Replacement Costs. If CITY shall fail to make any payment due herein within thirty (30) days from the invoice date, or if CITY shall fail to keep any of the terms and conditions of this contract concerning payment of operation, maintenance, repair or replacement costs, then CITY shall be deemed to be in default hereunder and WMWD shall have the right, at its option, without any further demand or notice, to terminate water service.

These rights are not intended to constitute WMWD's exclusive remedies, and they shall be in addition to any other right or remedy that WMWD may have for damages, termination of the Agreement, injunction, or other relief allowed by law.

18. Notices. Any notices or filings required to be given or made under this Agreement shall be served or made in the following manner:

A. Upon WMWD, by serving the Secretary or General Manager of WMWD personally or by registered mail addressed to the General Manager, Western Municipal Water District, 450 Alessandro Boulevard, Riverside, California 92508, P. O. Box 5286, Riverside, California 92517-5286.

B. Upon CITY, by serving the Public Utilities Director personally or by registered mail, Public Utilities Department, 3900 Main Street, Riverside, California 92522.

19. Severability. If any section or portion of this Agreement or the application thereof to any party is for any reason held invalid, it shall be deemed severable, and the validity of the remainder of the Agreement shall not be affected thereby.

20. Attorneys' Fees. Should either party hereto commence an action to enforce the provisions of this Agreement, then such party that prevails in that action shall be entitled to reasonable attorneys' fees, costs, expert witness fees, consulting fees and testing fees.

21. Amendments. This Agreement may be amended with the mutual consent of the parties, provided that such amendment shall be in writing, signed and dated by both parties hereto.

22. Hold Harmless. WMWD agrees to hold CITY harmless from any liability for damages or claims for personal injury and property damage which do not result from the negligent acts of CITY, its officials, officers, agents or employees, and CITY agrees to hold WMWD harmless from any liability for damages or claims for personal injury or property damage resulting from the negligence of CITY.

IN WITNESS WHEREOF, WMWD has caused this Agreement to be executed by the President of its Board of Directors and attested by the Secretary thereof, and CITY has executed this by its Mayor and attested by its CITY Clerk.

APPROVED AS TO FORM:

WESTERN MUNICIPAL WATER  
FOR RIVERSIDE COUNTY

Anne T. Thomas  
Attorney for Western  
Municipal Water District  
for Riverside County

By: David H. Anderson

ATTESTED BY:

David H. Anderson

CITY OF RIVERSIDE  
a municipal corporation

By: Ron Louver Mayor Pro Tempore

APPROVED AS TO FORM:

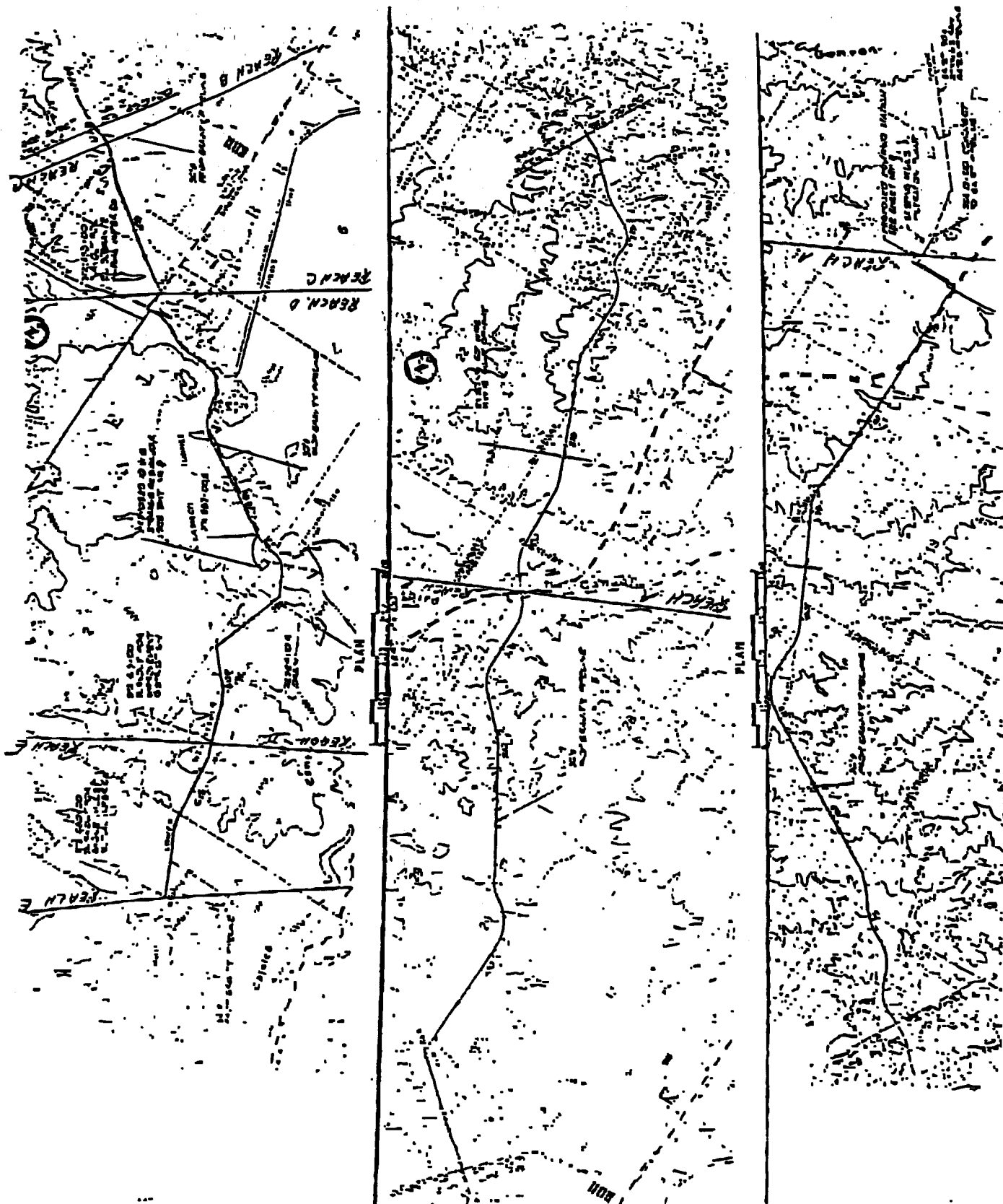
ATTESTED BY:

John Woodliff  
City Attorney  
City of Riverside

Alice A. Hare  
City Clerk

ATT0015

EXHIBIT "A"



# **Appendix I**

## **Western-San Bernardino Judgement**



APR 17 1969

DONALD O. SULLIVAN, Clerk  
By [Signature] Deputy

CLAYSON, STARK, ROTHROCK & MANN  
ATTORNEYS AT LAW  
LAW BUILDING  
601 SOUTH MAIN STREET  
P. O. BOX 670  
CORONA, CALIFORNIA 91720  
737-1910  
689-7241

SUPERIOR COURT OF THE STATE OF CALIFORNIA  
FOR THE COUNTY OF RIVERSIDE

WESTERN MUNICIPAL WATER )  
DISTRICT OF RIVERSIDE )  
COUNTY, et al., )  
  
Plaintiff, )  
  
v. )  
  
EAST SAN BERNARDINO COUNTY )  
WATER DISTRICT, et al., )  
  
Defendants. )

78426  
No. 784726

APR 17/69

STIPULATION FOR JUDGMENT

The undersigned, as counsel for the indicated parties in  
the above-entitled action, hereby stipulate and agree as  
follows:

(1) That judgment, substantially in the form  
attached hereto as Exhibit "A", may be entered by  
the Court herein.

(2) That the limitation periods specified in  
Sections 581 and 583 of the Code of Civil Procedure  
are by this stipulation extended to and including  
the date hereof.

(3) Each party to this stipulation expressly

1 waives findings of fact and conclusions of law in  
2 support of the Judgment, and specifically waives any  
3 right to appeal therefrom; provided that nothing  
4 herein contained shall be deemed to restrict or im-  
5 pair the rights of any parties in relation to any  
6 proceeding which may hereafter be undertaken in connec-  
7 tion with the exercise of the Court's reserved juris-  
8 diction or determinations of the Watermaster.

9 Dated: April 17, 1969.

11 SAN BERNARDINO VALLEY  
12 MUNICIPAL WATER DISTRICT

13 By Joseph E. Benachman  
14 President

BEST, BEST & KRIEGER

By Arthur d. Littleworth  
for Western Municipal Water  
District of Riverside County

15 and Le Roy Woodhead  
16 Secretary

JOHN WOODHEAD, City Attorney  
LELAND J. THOMPSON JR.

17 Approved Martin McDonough  
18 Attorney

By Leland J. Thompson  
for City of Riverside,  
for itself and as successor  
in interest to Gage Canal  
Company

22 CLAYSON, STARK, ROTHROCK & MANN

23 By Donald D. Stark  
24 for Agua Mansa Water Company  
25 and Meeks & Daley Water  
26 Company

27 REDWINE & SHERRILL

28 By Francis C. Sherrill  
29 for Riverside Highland Water  
30 Company

31 THOMAS J. CUNNINGHAM  
32 JOHN P. SPARROW  
ROBERT C. FIELD

By John P. Sparrow  
for The Regents of the University  
of California

# JUDGMENT

FILED  
RIV. RICE COUNTY

APR 17 1969

DONALD H. KELLY, Clerk  
By *[Signature]* Deputy

IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA  
IN AND FOR THE COUNTY OF RIVERSIDE

WESTERN MUNICIPAL WATER DISTRICT OF  
RIVERSIDE COUNTY, a municipal water  
district; CITY OF RIVERSIDE, a  
municipal corporation; THE GAGE  
CANAL COMPANY, a corporation; AGUA  
MANSA WATER COMPANY, a corporation,  
MEEKS & DALEY WATER COMPANY, a  
corporation; RIVERSIDE HIGHLAND  
WATER COMPANY, a corporation, and  
THE REGENTS OF THE UNIVERSITY OF  
CALIFORNIA,

Plaintiffs,

-vs-

(A) EAST SAN BERNARDINO COUNTY  
WATER DISTRICT, et al.,

Defendants

78426  
No. 784726

*[Signature]*  
4/17/69

JUDGMENT

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Boundaries of San Bernardino  
Valley Municipal Water  
District & Western Municipal  
Water District of Riverside  
County

APPENDIX B --

Extractions by Plaintiffs from San  
Bernardino Basin Area.

APPENDIX C --

Exports for Use on Lands not  
Tributary to Riverside Narrows

APPENDIX D --

Miscellaneous Data

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1 therefor,

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3 IT IS HEREBY ORDERED, ADJUDGED AND DECREED as follows:

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5 I

6 ACTIVE PARTIES

7  
8 (a) The parties to this Judgment are as follows:

9 (1) Plaintiff Western Municipal Water District  
10 of Riverside County, a California municipal water district,  
11 herein often called "Western", appearing and acting pursuant to  
12 Section 71751 of the Water Code;

13 (2) Plaintiff City of Riverside, a municipal  
14 corporation;

15 (3) Plaintiffs Riverside Highland Water  
16 Company, Agua Mansa Water Company and Meeks & Daley Water  
17 Company, each of which is a mutual water company and a  
18 California corporation;

19 (4) Plaintiff The Regents of the University  
20 of California, a California public corporation;

21 (5) Defendant San Bernardino Valley  
22 Municipal Water District, a California municipal water district,  
23 herein often called "San Bernardino Valley", appearing and  
24 acting pursuant to Section 71751 of the Water Code;

25 (b) This Judgment shall inure to the benefit of, and  
26 be binding upon, the successors and assigns of the parties.

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28 II

29 DISMISSED PARTIES

30 All parties other than those named in the preceding  
31 Paragraph I are dismissed without prejudice.

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III  
PRIOR JUDGMENTS

(a) The Judgment dated and entered on May 13, 1959, in that certain action filed in the Superior Court of the State of California in and for the County of San Bernardino, entitled and numbered "San Bernardino Valley Water Conservation District, a State Agency, Plaintiff v. Riverside Water Company, a corporation, et al., Defendants", No. 97031, is superseded effective January 1, 1971, and for so long as this Judgment remains in effect as to any party hereto that was a party to that action, and as to any party hereto that is a successor in interest to the rights determined in that action.

(b) The Judgment dated June 23, 1965, and entered on April 21, 1966, in that certain action filed in the Superior Court of the State of California in and for the County of San Bernardino entitled and numbered "San Bernardino Valley Water Conservation District, a State Agency, Plaintiff, v. Riverside Water Company, a corporation, et al., Defendants," No. 111614, is superseded effective January 1, 1971, and for so long as this Judgment remains in effect as to any party hereto that was a party to that action, and as to any party hereto that is a successor in interest to any rights determined in that action.

(c) As used in this Paragraph III only, "party" includes any person or entity which stipulates with the parties hereto to accept this Judgment.

IV

DEFINITIONS

The following ground water basins and tributary areas are situated within the Santa Ana River watershed upstream from Riverside Narrows and are tributary thereto, and their approximate locations and boundaries for purposes of this Judgment are shown upon the map attached hereto as Appendix "A"; San Bernardino Basin Area (the area above Bunker Hill Dike, but excluding certain mountainous regions and the Yucaipa, San Timoteo, Oak Glen and Beaumont Basins); Colton Basin Area, Riverside Basin Area within San Bernardino County, and Riverside Basin Area within Riverside County.

As used herein the following terms shall have the meanings herein set forth:

(a) Bunker Hill Dike - The San Jacinto Fault, located approximately as shown on Appendix "A", and forming the principal downstream boundary of the San Bernardino Basin Area.

(b) Riverside Narrows - That bedrock narrows in the Santa Ana River indicated on Appendix "A".

(c) Extractions - Any form of the verb or noun shall include pumping, diverting, taking or withdrawing water, either surface or subsurface, by any means whatsoever, except extractions for hydroelectric generation to the extent that such flows are returned to the stream, and except for diversions for replenishment.

(d) Natural Precipitation - Precipitation which falls naturally in the Santa Ana River watershed.

(e) Imported Water - Water brought into the Santa Ana River watershed from sources of origin outside such watershed.

1 (f) Replenishment - Artificial recharge of the  
2 ground water body achieved through the spreading or retention of  
3 water for the purpose of causing it to percolate and join the  
4 underlying ground water body, or injection of water into the  
5 ground water resources by means of wells; provided that as used  
6 with reference to any obligation of Western to replenish the  
7 Riverside Basin Area in Riverside County, the term replenishment  
8 shall include any water caused to be delivered by Western for  
9 which credit is received by San Bernardino Valley against its  
10 obligation under the Orange County Judgment to provide base  
11 flow at Riverside Narrows.

12 (g) Safe Yield - Safe yield is that maximum  
13 average annual amount of water that could be extracted from the  
14 surface and subsurface water resources of an area over a period  
15 of time sufficiently long to represent or approximate long-time  
16 mean climatological conditions, with a given areal pattern of  
17 extractions, under a particular set of physical conditions or  
18 structures as such affect the net recharge to the ground water  
19 body, and with a given amount of usable underground storage  
20 capacity, without resulting in long-term, progressive lowering  
21 of ground water levels or other undesirable result. In  
22 determining the operational criteria to avoid such adverse  
23 results, consideration shall be given to maintenance of adequate  
24 ground water quality, subsurface outflow, costs of pumping,  
25 and other relevant factors.

26 The amount of safe yield is dependent in part upon  
27 the amount of water which can be stored in and used from the  
28 ground water reservoir over a period of normal water supply  
29 under a given set of conditions. Safe yield is thus related to  
30 factors which influence or control ground water recharge, and  
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1 to the amount of storage space available to carry over recharge  
2 occurring in years of above average supply to years of  
3 deficient supply. Recharge, in turn, depends on the available  
4 surface water supply and the factors influencing the  
5 percolation of that supply to the water table.

6 Safe yield shall be determined in part through the  
7 evaluation of the average net groundwater recharge which would  
8 occur if the culture of the safe yield year had existed over  
9 a period of normal native supply.

10 (h) Natural Safe Yield - That portion of the safe  
11 yield of the San Bernardino Basin Area which could be derived  
12 solely from natural precipitation in the absence of imported  
13 water and the return flows therefrom, and without  
14 contributions from new conservation. If in the future any  
15 natural runoff tributary to the San Bernardino Basin Area is  
16 diverted away from that Basin Area so that it is not included  
17 in the calculation of natural safe yield, any replacement made  
18 thereof by San Bernardino Valley or entities within it from  
19 imported water shall be included in such calculation.

20 (i) New Conservation - Any increase in  
21 replenishment from natural precipitation which results from  
22 operation of works and facilities not now in existence, other  
23 than those works installed and operations which may be  
24 initiated to offset losses caused by increased flood control  
25 channelization.

26 (j) Year - A calendar year from January 1 through  
27 December 31. The term "annual" shall refer to the same period  
28 of time.

29 (k) Orange County Judgment - The final judgment  
30 in Orange County Water District v. City of Chino, et al.,  
31 Orange County Superior Court No. 117628, as it may from time to  
32

time be modified.

(1) Return Flow - That portion of the water applied for use in any particular ground water basin which subsequently reaches the ground water body in that basin.

(m) Five Year Period - a period of five consecutive years.

## V

### EXTRACTIONS FROM THE SAN BERNARDINO BASIN AREA

(a) For Use by Plaintiffs. The average annual extractions from the San Bernardino Basin Area delivered for use in each service area by each Plaintiff for the five year period ending with 1963 are hereby determined to be as set forth in Table B-1 of Appendix "B". The amount for each such Plaintiff delivered for use in each service area as set forth in Table B-1 shall be designated, for purposes of this Judgment, as its "base right" for such service area.

(b) For Use by Others. The total actual average annual extractions from the San Bernardino Basin Area by entities other than Plaintiffs for use within San Bernardino County for the five year period ending with 1963 are assumed to be 165,407 acre feet; the correct figure shall be determined by the Watermaster as herein provided.

## VI

### SAN BERNARDINO BASIN AREA RIGHTS AND REPLENISHMENT

(a) Determination of Natural Safe Yield. The natural safe yield of the San Bernardino Basin Area shall be computed by the Watermaster, reported to and determined initially by supplemental order of this Court, and thereafter

1 shall be subject to the continuing jurisdiction thereof.

2 (b) Annual Adjusted Rights of Plaintiffs.

3 1. The annual "adjusted right" of each  
4 Plaintiff to extract water from the San Bernardino  
5 Basin Area for use in each service area designated  
6 in Table B-1 shall be equal to the sum of the  
7 following:

8 (a) its base right for such service area, until  
9 the natural safe yield of the San Bernardino Basin  
10 Area is determined, and thereafter its percentage  
11 of such natural safe yield determined by the  
12 methods used in Table B-2; and (b) an equal  
13 percentage for each service area of any new  
14 conservation, provided the conditions of the  
15 subparagraph 2 below have been met.

16 2. In order that the annual adjusted  
17 right of each such Plaintiff shall include its  
18 same respective percentage of any new conservation,  
19 such Plaintiff shall pay its proportionate share  
20 of the costs thereof. Each Plaintiff shall have  
21 the right to participate in new conservation projects,  
22 under procedures to be determined by the Watermaster  
23 for notice to Plaintiffs of the planned construction  
24 of such projects. With respect to any new  
25 conservation brought about by Federal installations,  
26 the term "costs" as used herein shall refer to any  
27 local share required to be paid in connection with  
28 such project. Each Plaintiff shall make its  
29 payment at times satisfactory to the constructing  
30 agency, and new conservation shall be credited to  
31 any participating Plaintiff as such conservation is  
32 effected.

1                   3. In any five year period, each  
2 Plaintiff shall have the right to extract from the  
3 San Bernardino Basin Area for use in each service  
4 area designated in Table B-1 an amount of water  
5 equal to five times its adjusted right for such  
6 service area; provided, however, that extractions by  
7 each Plaintiff in any year in any service area shall  
8 not exceed such Plaintiff's adjusted right for that  
9 service area by more than 30 percent.

10                   4. If the natural safe yield of the  
11 San Bernardino Basin Area has not been determined by  
12 January 1, 1972, the initial determination thereof  
13 shall be retroactive to that date and the rights  
14 of the Plaintiffs, and the replenishment  
15 obligation of San Bernardino Valley as hereinafter  
16 set forth, shall be adjusted as of such date. Any  
17 excess extractions by Plaintiffs shall be charged  
18 against their respective adjusted rights over the  
19 next five year period, or in the alternative,  
20 Plaintiffs may pay to San Bernardino Valley the  
21 full cost of any replenishment which it has pro-  
22 vided as replenishment for such excess extractions.  
23 Any obligation upon San Bernardino Valley to pro-  
24 vide additional replenishment, by virtue of such  
25 retroactive determination of natural safe yield,  
26 may also be discharged over such next five year  
27 period.

28                   5. Plaintiffs and each of them and  
29 their agents and assigns are enjoined from extracting  
30 any more water from the San Bernardino Basin Area than  
31 is permitted under this Judgment. Changes in place  
32

1 of use of any such water from one service area to  
2 another shall not be made without the prior  
3 approval of Court upon a finding of compliance  
4 with Paragraph XV(b) of this Judgment. So long  
5 as San Bernardino Valley is in compliance with all  
6 its obligations hereunder, and Plaintiffs are  
7 allowed to extract the water provided for in this  
8 Judgment, Plaintiffs are further enjoined from  
9 bringing any action to limit the water extracted  
10 from the San Bernardino Basin Area for use within  
11 San Bernardino Valley.

12 6. Nothing in this Judgment shall  
13 prevent future agreements between San Bernardino  
14 Valley and Western under which additional  
15 extractions may be made from the San Bernardino Basin  
16 Area, subject to the availability of imported water  
17 not required by San Bernardino Valley, and subject  
18 to payment satisfactory to San Bernardino Valley  
19 for replenishment required to compensate for such  
20 additional extractions.

21  
22 (c) San Bernardino Valley Replenishment. San  
23 Bernardino Valley shall provide imported water for  
24 replenishment of the San Bernardino Basin Area at least equal  
25 to the amount by which extractions therefrom for use within  
26 San Bernardino County exceed during any five year period the  
27 sum of: (a) five times the total average annual extractions  
28 determined under Paragraph V(b) hereof, adjusted as may be  
29 required by the natural safe yield of the San Bernardino Basin  
30 Area; and (b) any new conservation to which users within San  
31 Bernardino Valley are entitled. Such replenishment shall be



1 supplied in the year following any five year period; provided  
2 that during the first five year period, San Bernardino Valley  
3 shall supply annual amounts on account of its obligations  
4 hereunder, and such amounts shall be not less than fifty  
5 percent of the gross amount of excess extractions in the  
6 previous year.

7 1. Against its replenishment obligation  
8 over any five year period San Bernardino Valley shall  
9 receive credit for that portion of such excess  
10 extractions that returns to the ground water of the  
11 San Bernardino Basin Area.

12 2. San Bernardino Valley shall also  
13 receive credit against any future replenishment  
14 obligations for all replenishment which it provides  
15 in excess of that required herein, and for any  
16 amounts which may be extracted without replenishment  
17 obligation, which in fact are not extracted.

18 (d) In this subparagraph (d), "person" and "entity"  
19 mean only those persons and entities, and their successors  
20 in interest, which have stipulated with the parties to this  
21 Judgment within six months after its entry to accept this  
22 Judgment.

23 San Bernardino Valley agrees that the base rights of  
24 persons or entities other than Plaintiffs to extract water  
25 from the San Bernardino Basin Area for use within San  
26 Bernardino Valley will be determined by the average annual  
27 quantity extracted by such person or entity during the five  
28 year period ending with 1963. After the natural safe yield  
29 of the San Bernardino Basin Area is determined hereunder, such  
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1 base rights will be adjusted to such natural safe yield; the  
2 adjusted right of each such person or entity shall be that  
3 percentage of natural safe yield as determined hereunder from  
4 time to time which the unadjusted right of such person or  
5 entity is of the amount determined under Paragraph V(b).

6 San Bernardino Valley further agrees that in the  
7 event the right to extract water of any of such persons or  
8 entities in the San Bernardino Basin Area is adjudicated and  
9 legal restrictions placed on such extractions which prevent  
10 extracting of water by said persons or entities in an amount  
11 equal to their base rights, or after natural safe yield is  
12 determined, their adjusted rights, San Bernardino Valley will  
13 furnish to such persons or entities or recharge the ground  
14 water resources in the area of extraction for their benefit  
15 with imported water, without direct charge to such persons or  
16 entities therefor, so that the base rights, or adjusted  
17 rights, as the case may be, may be taken by the person or  
18 entity.

19 Under the provisions hereof relating to furnishing  
20 of such water by San Bernardino Valley, such persons or  
21 entities shall be entitled to extract in addition to their  
22 base rights or adjusted rights any quantities of water spread  
23 for repumping in their area of extractions, which has been  
24 delivered to them by a mutual water company under base rights  
25 or adjusted base rights included by the Watermaster under the  
26 provisions of Paragraph V (b) hereof. Extractions must be  
27 made within three years of spreading to so qualify.  
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VII

WATER DISCHARGED ACROSS THE BUNKER HILL DIKE

San Bernardino Valley shall keep in force an agreement with the City of San Bernardino that the present annual quantity of municipal sewage effluent discharged across Bunker Hill Dike, assumed for all purposes herein to be 16,000 acre feet annually, shall be committed to the discharge of the downstream obligations imposed on San Bernardino Valley under this Judgment or under the Orange County Judgment, and that such effluent shall comply with the requirements of the Santa Ana River Basin Regional Water Quality Control Board in effect December 31, 1968.

VIII

EXTRACTIONS FROM COLTON BASIN AREA AND RIVERSIDE  
BASIN AREA IN SAN BERNARDINO COUNTY.

(a) The average annual extractions from the Colton Basin Area and that portion of the Riverside Basin Area within San Bernardino County, for use outside San Bernardino Valley, for the five year period ending with 1963 are assumed to be 3,349 acre feet and 20,191 acre feet, respectively; the correct figures shall be determined by the Watermaster as herein provided.

(b) Over any five year period, there may be extracted from each such Basin Area for use outside San Bernardino Valley, without replenishment obligation, an amount equal to five times such annual average for the Basin Area; provided, however, that if extractions in any year exceed such average by more than 20 percent, Western shall provide replenishment in the following year equal to the excess

1 extractions over such 20 percent peaking allowance.

2 (c). To the extent that extractions from each such  
3 Basin Area for use outside San Bernardino Valley exceed the  
4 amounts specified in the next preceding Paragraph (b), Western  
5 shall provide replenishment. Except for any extractions in  
6 excess of the 20 percent peaking allowance, such replenishment  
7 shall be supplied in the year following any five year period,  
8 and shall not be from reclaimed water produced within San  
9 Bernardino Valley. Such replenishment shall also be of a  
10 quality at least equal to the water extracted from the Basin  
11 Area being recharged; provided, that water from the State Water  
12 Project shall be deemed to be of acceptable quality.  
13 Replenishment shall be supplied to the Basin Area from which  
14 any excess extractions have occurred and in the vicinity of  
15 the place of the excess extractions to the extent required to  
16 preclude influence on the water level in the three wells below  
17 designated; provided that discharge of imported water into the  
18 Santa Ana River or Warm Creek from a connection on the State  
19 Aqueduct near the confluence thereof, if released in accordance  
20 with a schedule approved by the Watermaster to achieve  
21 compliance with the objectives of this Judgment, shall satisfy  
22 any obligation of Western to provide replenishment in the Colton  
23 Basin Area, or that portion of the Riverside Basin Area in San  
24 Bernardino County, or the Riverside Basin Area in Riverside  
25 County.

26 (d) Extractions from the Colton Basin Area and that  
27 portion of the Riverside Basin Area within San Bernardino County,  
28 for use within San Bernardino Valley, shall not be limited.  
29 However, except for any required replenishment by Western,  
30 San Bernardino Valley shall provide the water to maintain the  
31 static water levels in the area, as determined by wells numbered  
32

1 1S 4W 21 Q3, 1S 4W 29 H1, and 1S 4W 29 Q1 at an average level  
2 no lower than that which existed in the Fall season of 1963.  
3 Such 1963 average water level is hereby determined to be 822.04  
4 feet above sea level. In future years, the level shall be  
5 computed by averaging the lowest static water levels in each  
6 of the three wells occurring at or about the same time of the  
7 year, provided that no measurements will be used which reflect  
8 the undue influence of pumping in nearby wells, or in the  
9 three wells, or pumping from the Riverside Basin in Riverside  
10 County in excess of that determined pursuant to Paragraph IX(a)  
11 hereof.

12 (e) Extractions by Plaintiffs from the Colton Basin  
13 Area and the portion of the Riverside Basin Area in San  
14 Bernardino County may be transferred to the San Bernardino  
15 Basin Area if the level specified in Paragraph (d) above is  
16 not maintained, but only to the extent necessary to restore  
17 such 1963 average water level, provided that Western is not  
18 in default in any of its replenishment obligations. San  
19 Bernardino Valley shall be required to replenish the San  
20 Bernardino Basin Area in an amount equal to any extractions so  
21 transferred. San Bernardino Valley shall be relieved of  
22 responsibility toward the maintenance of such 1963 average water  
23 level to the extent that Plaintiffs have physical facilities  
24 available to accommodate such transfers of extractions, and  
25 insofar as such transfers can be legally accomplished.

26 (f) The Colton Basin Area and the portion of the  
27 Riverside Basin Area in San Bernardino County constitute a major  
28 source of water supply for lands and inhabitants in both San  
29 Bernardino Valley and Western, and the parties hereto have a  
30 mutual interest in the maintenance of water quality in these  
31 Basin Areas and in the preservation of such supply. If  
32

1 the water quality in such Areas, as monitored by the City of  
2 Riverside wells along the river, falls below the Objectives set  
3 therefor by the Santa Ana River Basin Regional Water Quality  
4 Control Board, the Court shall have jurisdiction to modify the  
5 obligations of San Bernardino Valley to include, in addition  
6 to its obligation to maintain the average 1963 water level,  
7 reasonable provisions for the maintenance of such water quality.

8 (g) The primary objectives of Paragraph VIII and  
9 related provisions are to allow maximum flexibility to San  
10 Bernardino Valley in the operation of a coordinated  
11 replenishment and management program, both above and below  
12 Bunker Hill Dike; to protect San Bernardino Valley against  
13 increased extractions in the area between Bunker Hill Dike and  
14 Riverside Narrows, which without adequate provision for  
15 replenishment might adversely affect base flow at Riverside  
16 Narrows, for which it is responsible under the Orange County  
17 Judgment; and to protect the area as a major source of ground  
18 water supply available to satisfy the historic extractions  
19 therefrom for use within Western, without regard to the method  
20 of operation which may be adopted by San Bernardino Valley for  
21 the San Bernardino Basin Area, and without regard to the effect  
22 of such operation upon the historic supply to the area below  
23 Bunker Hill Dike.

24 If these provisions should prove either inequitable or  
25 unworkable, the Court upon the application of any party hereto  
26 shall retain jurisdiction to modify this Judgment so as to  
27 regulate the area between Bunker Hill Dike and Riverside Narrows  
28 on a safe yield basis; provided that under such method of  
29 operation, (1) base rights shall be determined on the basis of  
30 total average annual extractions for use within San Bernardino  
31 Valley and Western, respectively, for the five year period ending

1 with 1963; (2) such base rights for use in both Districts shall  
2 be subject to whatever adjustment may be required by the safe  
3 yield of the area, and in the aggregate shall not be exceeded  
4 unless replenishment therefor is provided; (3) in calculating  
5 safe yield, the outflow from the area at Riverside Narrows shall  
6 be determined insofar as practical by the base flow obligations  
7 imposed on San Bernardino Valley under the Orange County  
8 Judgment; and (4) San Bernardino Valley shall be required to  
9 provide replenishment for any deficiency between the actual  
10 outflow and the outflow obligation across Bunker Hill Dike as  
11 established by safe yield analysis using the base period of  
12 1934 through 1960.

13  
14 IX

15 EXTRACTIONS FROM THE PORTION OF RIVERSIDE BASIN AREA  
16 IN RIVERSIDE COUNTY WHICH IS TRIBUTARY TO RIVERSIDE NARROWS.

17 (a) The average annual extractions from the portion  
18 of the Riverside Basin Area in Riverside County which is  
19 tributary to Riverside Narrows, for use in Riverside County,  
20 for the five year period ending with 1963 are assumed to be  
21 30,044 acre feet; the correct figures shall be determined by  
22 the Watermaster as herein provided.

23 (b) Over any five year period, there may be  
24 extracted from such Basin Area, without replenishment  
25 obligation, an amount equal to five times such annual average  
26 for the Basin Area; provided, however, that if extractions in  
27 any year exceed such average by more than 20 percent, Western  
28 shall provide replenishment in the following year equal to the  
29 excess extractions over such 20 percent peaking allowance.

30 (c) To the extent that extractions from such Basin  
31 Area exceed the amounts specified in the next preceding  
32

1 Paragraph (b), Western shall provide replenishment. Except  
2 for any extractions in excess of the 20 percent peaking  
3 allowance, such replenishment shall be supplied in the year  
4 following any five year period, and shall be provided at or  
5 above Riverside Narrows.

6 (d) Western shall also provide such replenishment  
7 to offset any reduction in return flow now contributing to the  
8 base flow at Riverside Narrows, which reduction in return  
9 flow results from the conversion of agricultural uses of water  
10 within Western to domestic or other uses connected to sewage  
11 or waste disposal systems, the effluent from which is not  
12 tributary to the rising water at Riverside Narrows.

13  
14 X

15 REPLENISHMENT TO OFFSET NEW EXPORTS OF WATER TO AREAS  
16 NOT TRIBUTARY TO RIVERSIDE NARROWS.

17 Certain average annual amounts of water extracted  
18 from the San Bernardino Basin Area and the area downstream  
19 therefrom to Riverside Narrows during the five year period  
20 ending in 1963 have been exported for use outside of the area  
21 tributary to Riverside Narrows and are assumed to be 50,667  
22 acre feet annually as set forth in Table C-1 of Appendix "C";  
23 the correct amount shall be determined by the Watermaster as  
24 herein provided. Western shall be obligated to provide  
25 replenishment at or above Riverside Narrows for any increase  
26 over such exports by Western or entities within it from such  
27 areas for use within areas not tributary to Riverside Narrows.  
28 San Bernardino Valley shall be obligated to provide  
29 replenishment for any increase over the exports from San  
30 Bernardino Valley for use in any area not within Western nor  
31 tributary to Riverside Narrows as set forth in Table C-2 of  
32



1 Appendix. "C", such amounts being subject to correction by the  
2 Watermaster, or for any exports from the San Bernardino Basin  
3 Area for use in the Yucaipa, San Timoteo, Oak Glen and  
4 Beaumont Basins.

5 XI

6 REPLENISHMENT CREDITS AND ADJUSTMENT FOR QUALITY  
7

8 (a) All replenishment provided by Western under  
9 Paragraph IX and all credits received against such  
10 replenishment obligation shall be subject to the same adjustments  
11 for water quality applicable to base flow at Riverside Narrows,  
12 as set forth in the Orange County Judgment.

13 (b) Western shall receive credit against its  
14 replenishment obligations incurred under this Judgment for the  
15 following:

16 1. As against its replenishment obligation  
17 under Paragraph VIII, any return flow to the Colton  
18 Basin Area or the portion of the Riverside Basin Area  
19 within San Bernardino County, respectively, resulting  
20 from any excess extractions therefrom; and as  
21 against its replenishment obligation under Paragraph  
22 IX, any return flow to the portion of the Riverside  
23 Basin Area in Riverside County, which contributes  
24 to the base flow at Riverside Narrows, resulting  
25 from any excess extractions therefrom, or from the  
26 Riverside Basin Area in San Bernardino County, or  
27 from the Colton Basin Area.

28 2. Subject to adjustment under  
29 Paragraph (a) hereof, any increase over the present  
30 amounts of sewage effluent discharged from  
31

1 treatment plants within Riverside County which are  
2 tributary to Riverside Narrows, and which results  
3 from the use of imported water.

4 3. Any replenishment which may be pro-  
5 vided in excess of that required; any amounts which  
6 hereunder are allowed to be extracted from the  
7 Colton and Riverside Basin Areas without  
8 replenishment obligation by Western, and which in  
9 fact are not extracted; any storm flows conserved  
10 between Bunker Hill Dike and Riverside Narrows by  
11 works financed solely by Western, or entities within  
12 it, which would not otherwise contribute to base  
13 flow at Riverside Narrows; and any return flow  
14 from imported water used in Riverside County which  
15 contributes to base flow at Riverside Narrows;  
16 provided, however, that such use of the underground  
17 storage capacity in each of the above situations  
18 does not adversely affect San Bernardino Valley  
19 in the discharge of its obligations at Riverside  
20 Narrows under the Orange County Judgment, nor  
21 interfere with the accomplishment by San Bernardino  
22 Valley of the primary objectives of Paragraph VIII,  
23 as stated in Subdivision (g).

24 (c) The replenishment obligations of Western under  
25 this Judgment shall not apply during such times as amounts of  
26 base flow at Riverside Narrows and the amounts of water stored  
27 in the ground water resources below Bunker Hill Dike and  
28 tributary to the maintenance of such flow are found by Order of  
29 the Court to be sufficient to satisfy any obligation which  
30 San Bernardino Valley may have under this Judgment, or under the  
31

1 Orange County Judgment, and if the Court further finds by Order  
2 that during such times any such increase in pumping, changes  
3 in use or exports would not adversely affect San Bernardino  
4 Valley in the future.

5 (d) The replenishment obligations of San Bernardino  
6 Valley under Paragraph X of this Judgment for increase in  
7 exports from the Colton and Riverside Basin Areas within San  
8 Bernardino Valley below the Bunker Hill Dike shall not apply  
9 during such times as the amounts of water in the ground water  
10 resources of such area are found by Order of the Court to be  
11 sufficient to satisfy the obligations which San Bernardino  
12 Valley may have to Plaintiffs under this Judgment, and if the  
13 Court further finds by Order that during such times any such  
14 increases in exports would not adversely affect Plaintiffs in  
15 the future.

16  
17 XII

18 CONVEYANCE OF WATER BY SAN BERNARDINO VALLEY  
19 TO RIVERSIDE NARROWS.

20 If San Bernardino Valley determines that it will  
21 convey reclaimed sewage effluent, or other water, to or near  
22 Riverside Narrows, to meet its obligations under this or the  
23 Orange County Judgment, the City of Riverside shall make  
24 available to San Bernardino Valley for that purpose any unused  
25 capacity in the former Riverside Water Company canal, and the  
26 Washington and Monroe Street storm drains, without cost except  
27 for any alterations or capital improvements which may be  
28 required, or any additional maintenance and operation costs which  
29 may result. The use of those facilities shall be subject to the  
30 requirements of the Santa Ana River Basin Regional Water Quality  
31 Control Board and of the State Health Department, and compliance  
32

1 therewith shall be San Bernardino Valley's responsibility.

2  
3 XIII

4 WATERMASTER

5 (a) This Judgment and the instructions and  
6 subsequent orders of this Court shall be administered and  
7 enforced by a Watermaster. The parties hereto shall make such  
8 measurements and furnish such information as the Watermaster  
9 may reasonably require, and the Watermaster may verify such  
10 measurements and information and obtain additional measurements  
11 and information as the Watermaster may deem appropriate.

12 (b) The Watermaster shall consist of a committee  
13 of two persons. San Bernardino Valley and Western shall each  
14 have the right to nominate one of such persons. Each such  
15 nomination shall be made in writing, served upon the other  
16 parties to this Judgment, and filed in Court. Such person shall  
17 be appointed by and serve at the pleasure of and until further  
18 order of this Court. If either Western or San Bernardino Valley  
19 shall at any time nominate a substitute appointee in place of  
20 the last appointee to represent it, such appointee shall be  
21 appointed by the Court in place of such last appointee.

22 (c) Appendix "D" to this Judgment contains some of  
23 the data which have been used in preparation of this Judgment,  
24 and shall be utilized by the Watermaster in connection with  
25 any questions of interpretation.

26 (d) Each and every finding and determination of the  
27 Watermaster shall be made in writing certified to be by  
28 unanimous action of both members of the Watermaster committee.  
29 In the event of failure or inability of such Watermaster  
30 Committee to reach agreement, the Watermaster committee may  
31 determine to submit the dispute to a third person to be selected  
32

1 by them, or if they are unable to agree on a selection, to be  
2 selected by the Court, in which case the decision of the third  
3 person shall be binding on the parties; otherwise the fact,  
4 issue, or determination in question shall forthwith be  
5 certified to this Court by the Watermaster, and after due notice  
6 to the parties and opportunity for hearing, said matter shall  
7 be determined by order of this Court, which may refer the  
8 matter for prior recommendation to the State Water Resources  
9 Control Board. Such order of the Court shall be a determination  
10 by the Watermaster within the meaning of this Judgment.

11 (e) The Watermaster shall report to the Court and  
12 to each party hereto in writing not more than seven (7) months  
13 after the end of each year, or within such other time as the  
14 Court may fix, on each determination made by it pursuant to this  
15 Judgment, and such other items as the parties may mutually  
16 request or the Watermaster may deem to be appropriate. All of  
17 the books and records of the Watermaster which are used in the  
18 preparation of, or are relevant to, such reported data,  
19 determinations and reports shall be open to inspection by the  
20 parties hereto. At the request of any party this Court will  
21 establish a procedure for the filing and hearing of objections  
22 to the Watermaster's report.

23 (f) The fees, compensation and expenses of each  
24 person on the Watermaster shall be borne by the District which  
25 nominated such person. All other Watermaster service costs and  
26 expenses shall be borne by San Bernardino Valley and Western  
27 equally.

28 (g) The Watermaster shall initially compute and  
29 report to the Court the natural safe yield of the San Bernardino  
30 Basin Area, said computation to be based upon the cultural  
31

1 conditions equivalent to those existing during the five  
2 calendar year period ending with 1963.

3 (h) The Watermaster shall as soon as practical  
4 determine the correct figures for Paragraphs V(b), VI(b)1,  
5 VIII(a), IX(a) and X, as the basis for an appropriate  
6 supplemental order of this Court.

#### 8 XIV

#### 9 CONTINUING JURISDICTION OF THE COURT

10 (a) The Court hereby reserves continuing  
11 jurisdiction of the subject matter and parties to this Judgment,  
12 and upon application of any party, or upon its own motion, may  
13 review and redetermine, among other things, the following  
14 matters and any matters incident thereto:

15 1. The hydrologic condition of any one or  
16 all of the separate basins described in this Judgment in order  
17 to determine from time to time the safe yield of the San  
18 Bernardino Basin Area.

19 2. The desirability of appointing a  
20 different Watermaster or a permanent neutral member of the  
21 Watermaster, or of changing or more clearly defining the duties  
22 of the Watermaster.

23 3. The desirability of providing for increases  
24 or decreases in the extraction of any particular party because  
25 of emergency requirements or in order that such party may  
26 secure its proportionate share of its rights as determined  
27 herein.

28 4. The adjusted rights of the Plaintiffs as  
29 required to comply with the provisions hereof with respect to  
30 changes in the natural safe yield of the San Bernardino Basin  
31

1 Area. If such changes occur, the Court shall adjudge that the  
2 adjusted rights and replenishment obligations of each party  
3 shall be changed proportionately to the respective base rights.

4 5. Conforming the obligations of San  
5 Bernardino Valley under this Judgment to the terms of any new  
6 judgment hereafter entered adjudicating the water rights within  
7 San Bernardino Valley, if inconsistencies of the two judgments  
8 impose hardship on San Bernardino Valley.

9 6. Adjusting the figures in Paragraphs V(b),  
10 VI(b) 1, VIII(a) IX(a), and X, to conform to determination  
11 by the Watermaster.

12 7. Credit allowed for return flow in the San  
13 Bernardino Basin Area if water levels therein drop to the point  
14 of causing undue hardship upon any party.

15 8. Other matters not herein specifically set  
16 forth which might occur in the future and which would be  
17 of benefit to the parties in the utilization of the surface and  
18 ground water supply described in this Judgment, and not  
19 inconsistent with the respective rights of the parties as herein  
20 established and determined.

21 (b) Any party may apply to the Court under its  
22 continuing jurisdiction for any appropriate modification of  
23 this Judgment if its presently available sources of imported  
24 water are exhausted and it is unable to obtain additional  
25 supplies of imported water at a reasonable cost, or if there is  
26 any substantial delay in the delivery of imported water through  
27 the State Water Project.

XV  
SAVING CLAUSES

(a) Nothing in this Judgment precludes San Bernardino Valley, Western, or any other party from exercising such rights as it may have or obtain under law to spread, store underground and recapture imported water, provided that any such use of the underground storage capacity of the San Bernardino Basin Area by Western or any entity within it shall not interfere with any replenishment program of the Basin Area.

(b) Changes in the place and kind of water use, and in the transfer of rights to the use of water, may be made in the absence of injury to others or prejudice to the obligations of either San Bernardino Valley or Western under Judgment or the Orange County Judgment.

(c) If any Plaintiff shall desire to transfer all or any of its water rights to extract water within San Bernardino Valley to a person, firm, or corporation, public or private, who or which is not then bound by this Judgment, such Plaintiff shall as a condition to being discharged as hereinafter provided cause such transferee to appear in this action and file a valid and effective express assumption of the obligations imposed upon such Plaintiff under this Judgment as to such transferred water rights. Such appearance and assumption of obligation shall include the filing of a designation of the address to which shall be mailed all notices, requests, objections, reports and other papers permitted or required by the terms of this Judgment.

If any Plaintiff shall have transferred all of its said water rights and each transferee not theretofore bound by this Judgment as a Plaintiff shall have appeared in this action



1 and filed a valid and effective express assumption of the  
2 obligations imposed upon such Plaintiff under this Judgment as  
3 to such transferred water rights, such transferring Plaintiff  
4 shall thereupon be discharged from all obligations hereunder.  
5 If any Plaintiff shall cease to own any rights in and to the water  
6 supply declared herein and shall have caused the appearance and  
7 assumption provided for in the third preceding sentence with  
8 respect to each voluntary transfer, then upon application to  
9 this Court and after notice and hearing such Plaintiff shall  
10 thereupon be relieved and discharged from all further  
11 obligations hereunder. Any such discharge of any Plaintiff  
12 hereunder shall not impair the aggregate rights of defendant  
13 San Bernardino Valley or the responsibility hereunder of the  
14 remaining Plaintiffs or any of the successors.

15 (d) Non-use of any right to take water as provided  
16 herein shall not result in any loss of the right. San  
17 Bernardino Valley does not guarantee any of the rights set out  
18 herein for Western and the other Plaintiffs as against the  
19 claims of third parties not bound hereby. If Western or the  
20 other Plaintiffs herein should be prevented by acts of third  
21 parties within San Bernardino County from extracting the  
22 amounts of water allowed them by this Judgment, they shall have  
23 the right to apply to this Court for any appropriate relief,  
24 including vacation of this Judgment, in which latter case all  
25 parties shall be restored to their status prior to this  
26 Judgment insofar as possible.

27 (e) Any replenishment obligation imposed hereunder  
28 on San Bernardino Valley may be deferred until imported water  
29 first is available to San Bernardino Valley under its contract  
30 with the California Department of Water Resources and the  
31

1 obligation so accumulated may be discharged in five  
2 approximately equal annual installments thereafter.

3 (F) No agreement has been reached concerning the  
4 method by which the cost of providing replenishment will be  
5 financed, and no provision of this Judgment, nor its failure  
6 to contain any provision, shall be construed to reflect any  
7 agreement relating to the taxation or assessment of extractions.

8  
9 XVI

10 EFFECTIVE DATE

11  
12 The provisions of Paragraphs III and V to XII of this  
13 Judgment shall be in effect from and after January 1, 1971;  
14 the remaining provisions are in effect immediately.

15 XVII

16 COSTS

17  
18 No party shall recover its costs herein as against  
19 any other party.

20  
21 THE CLERK WILL ENTER THIS JUDGMENT FORTHWITH.

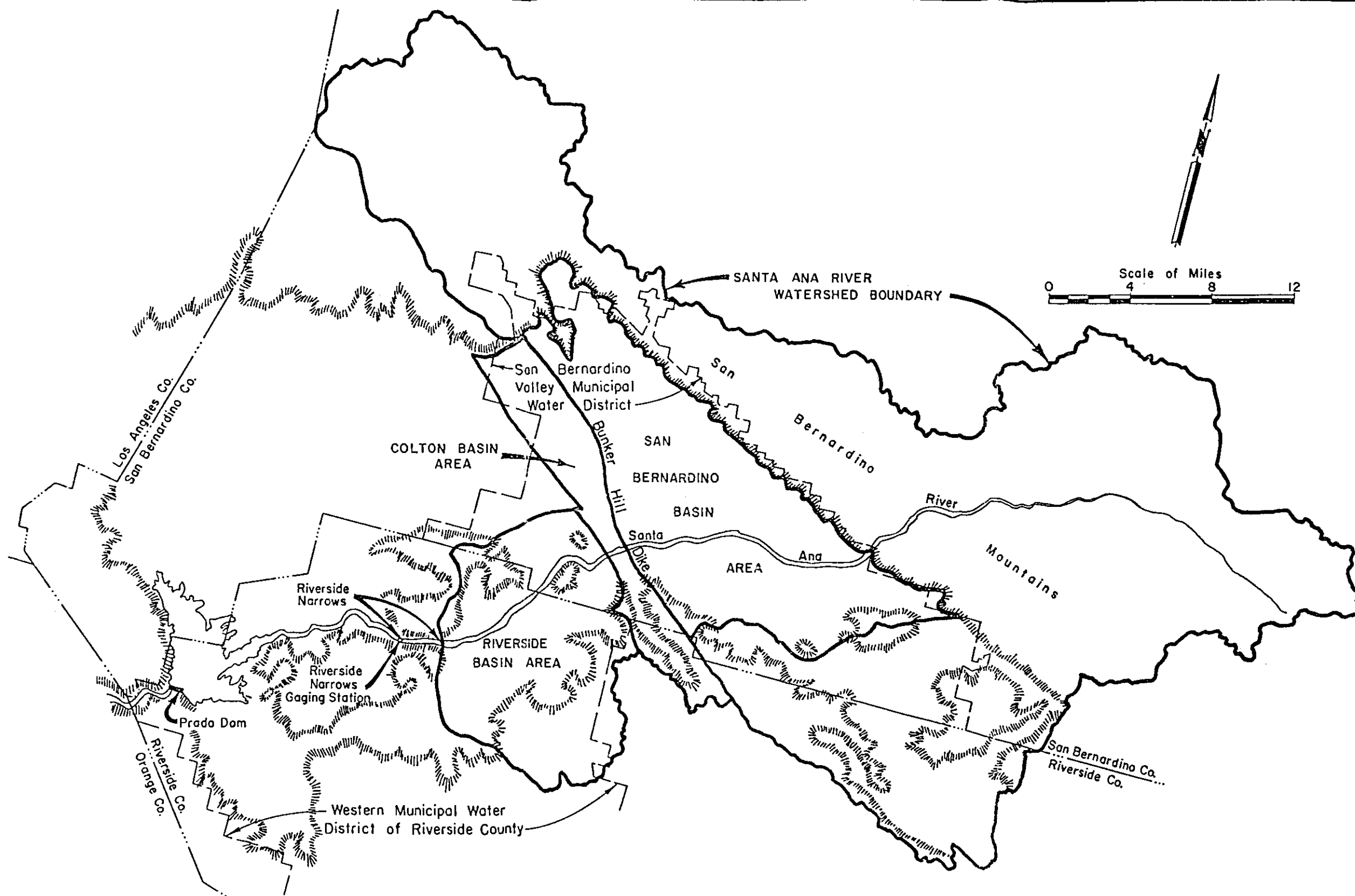
22 DATED: *April 17, 1969*

23  
24  
25 ENTERED

26 APR 17 1969

27  
28 *[Signature]*  
29 JUDGE OF THE SUPERIOR COURT

30 JUDGMENT BOOK *124* PG *42*



MAP SHOWING

SAN BERNARDINO BASIN AREA, COLTON BASIN AREA, AND  
 RIVERSIDE BASIN AREA SITUATED WITHIN SAN BERNARDINO  
 COUNTY; RIVERSIDE BASIN AREA WITHIN RIVERSIDE COUNTY;  
 BUNKER HILL DIKE; RIVERSIDE NARROWS; AND BOUNDARIES OF  
 SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT & WESTERN  
 MUNICIPAL WATER DISTRICT OF RIVERSIDE COUNTY.

APPENDIX B  
TABLE B-1

EXTRACTIONS BY PLAINTIFFS FROM THE SAN  
BERNARDINO BASIN AREA FOR AVERAGE OF 5-YEAR  
PERIOD ENDING WITH 1963

(All Values in Acre Feet)  
Classified According to Service Area

<u>Plaintiff</u>	<u>Total Extractions in San Bernardino Basin Area</u>	<u>Delivery to San Bernardino Basin Area</u>	<u>Delivery to Colton Basin Area &amp; Riverside Basin Area in San Bernardino County</u>	<u>Delivery to Areas Outside San Bernardino Valley</u>
City of Riverside (including those rights acquired as successor to the Riverside Water Company and The Gage Canal Company)	53,448	1462	1260	50,726
Riverside High- Land Water Company	4,399	0	2509	1,890
Agua Mansa Water Company, and Meeks & Daley Water Company	8,026	0	326	7,700
The Regents of the University of California	581	0	0	581
Total	66,454	1,462	4,095	60,897

APPENDIX B  
TABLE B-2

PLAINTIFFS' PERCENTAGES OF BASE RIGHT  
TO TOTAL PRODUCTION FROM SAN BERNARDINO  
VALLEY BASIN AREA,

231,861 Acre Feet Annually,  
For 5-Year Average Ending With 1963  
Classified According to Service Area

<u>Plaintiff</u>	<u>Delivery</u> <u>to San</u> <u>Bernardino</u> <u>Basin Area</u>	<u>Delivery</u> <u>to Colton</u> <u>Basin Area</u> <u>&amp; Riverside</u> <u>Basin Area</u> <u>in San</u> <u>Bernardino</u> <u>County</u>	<u>Delivery</u> <u>to Areas</u> <u>Outside San</u> <u>Bernardino</u> <u>Valley</u>
City of Riverside (including those rights acquired as successor to the Riverside Water Company and The Gage Canal Company)	.630	.543	21,878
Riverside Highland Water Company		1,082	0.815
Aqua Mansa Water Company, and Meeks & Daley Water Company		.141	3.321
The Regents of the University of California			0.250
<u>Total</u>	6.630	1.766	26.264

APPENDIX C  
TABLE C-1

EXTRACTIONS FOR USE WITHIN WESTERN  
FROM  
THE SAN BERNARDINO BASIN AREA, COLTON BASIN AREA,  
AND THE RIVERSIDE BASIN AREA  
FOR USE ON LANDS THAT ARE NOT TRIBUTARY  
TO THE RIVERSIDE NARROWS FOR  
AVERAGE OF FIVE-YEAR PERIOD ENDING IN 1963

<u>Extractor</u>	<u>Five-Year Average Ac. Ft.</u>
City of Riverside, including Irrigation Division water extracted by Gage Canal Co. and former Riverside Water Co.	30,657
Meeks & Daley Water Co., Agua Mansa Water Co., and Temescal Water Co., including water received from City of Riverside	13,731
Extractions delivered by West Riverside Canal received from Twin Buttes Water Co., La Sierra Water Co., Agua Mansa Water Co., Salazar Water Co., West Riverside 350" Water Co., and Jurupa Water Co.	5,712
Rubidoux Community Services District	531
Jurupa Hills Water Co.	36
<u>TOTAL</u>	50,667

APPENDIX C  
TABLE C-2

EXTRACTIONS FOR USE WITHIN SAN BERNARDINO COUNTY  
FROM  
SAN BERNARDINO BASIN AREA AND COLTON BASIN AREA  
FOR USE ON LANDS NOT TRIBUTARY TO  
DIVERSITY WATERS FOR AVERAGE OF  
FIVE-YEAR PERIOD ENDING WITH 1983

(ALL VALUES IN ACRE FEET)

<u>Entity</u>	<u>San Bernardino Basin Area</u>	<u>Colton Basin Area</u>	<u>Total</u>
Fontana Union Water Co.	14,272	365	14,637
West San Bernardino County Water District	2,961	947	3,908
City of Rialto			700
<u>TOTAL</u>			19,245

APPENDIX D  
TABLE D-1

EXTRACTIONS FROM SAN BERNARDINO BASIN AREA  
FOR THE AVERAGE OF FIVE-YEAR PERIOD ENDING WITH 1963  
FOR USE WITHIN SAN BERNARDINO COUNTY

(ALL VALUES IN ACRE FEET)

<u>Basin</u>	<u>Five Year Avg. 1959-63</u>
Beaumont	10,064
Big Bear	1,171
Borea Canyon	91
Bunker Hill	181,600
City Creek	337
Cook Canyon	197
Devil Canyon	3,326
Devil Creek	42
Lower Cajon	2,090
Little San Creek	15
Lytle	29,364
Mill Creek	11,084
Oak Glen	935
Plunge Creek	1,265
Santa Ana	1,790
Strawberry Creek	291
San Timoteo	2,272
Waterman Canyon	367
Yucaipa	<u>13,837</u>
Upper Basin Total	260,139
Less: Beaumont	
Oak Glen	
San Timoteo	27,107
Yucaipa	
Subtotal	<u>233,032</u>
Less Big Bear	<u>1,171</u>
Subtotal	231,861
Less extractions for use outside San Bernardino County	<u>60,897</u>
Extractions from San Bernardino for use in San Bernardino County	170,964



APPENDIX D  
TABLE D-2

EXTRACTIONS FROM  
COLTON BASIN AREA FOR AVERAGE OF  
FIVE-YEAR PERIOD ENDING WITH 1963  
BY SAN BERNARDINO AND RIVERSIDE COUNTY ENTITIES  
FOR USE WITHIN EACH COUNTY

(VALUES IN ACRE FEET)

<u>Extractor</u>	<u>Place of Use</u>		<u>Total</u>
	<u>San Bernardino Co.</u>	<u>Riverside Co.</u>	
San Bernardino County Entities	8,480	0	8,480
Riverside County Entities	<u>147</u>	<u>3,349</u>	<u>3,496</u>
<u>TOTAL EXTRACTIONS</u>	8,627	3,349	11,976

APPENDIX D  
TABLE D-3

EXTRACTIONS FROM  
RIVERSIDE BASIN AREA IN SAN BERNARDINO COUNTY  
FOR AVERAGE FIVE-YEAR PERIOD ENDING WITH 1963  
BY SAN BERNARDINO AND RIVERSIDE COUNTY ENTITIES  
FOR USE WITHIN EACH COUNTY

(VALUES IN ACRE FEET)

<u>Extractor</u>	<u>Place of Use</u>		<u>Total</u>
	<u>San Bernardino Co.</u>	<u>Riverside Co.</u>	
San Bernardino County Entities	9,582	0	9,582
Riverside County Entities	<u>3,929</u>	<u>20,191</u>	<u>24,120</u>
<u>TOTAL EXTRACTIONS</u>	13,511	20,191	33,702

APPENDIX D  
TABLE D-4

EXTRACTIONS FROM  
SAN BERNARDINO BASIN AREA, COLTON BASIN AREA  
AND RIVERSIDE BASIN AREA USED WITHIN  
RIVERSIDE COUNTY FOR THE AVERAGE  
FIVE-YEAR PERIOD ENDING WITH 1963

(ALL VALUES IN ACRE FEET)

<u>Basin</u>	<u>Five-Year Average</u>
San Bernardino Basin Area	60,897
Colton Basin Area	3,349
Riverside Basin Area in San Bernardino County	20,191
Riverside Basin Area in Riverside County	<u>30,044</u>
<u>TOTAL</u>	114,481

APPENDIX D  
TABLE D-5

IRRIGATED ACREAGE IN RIVERSIDE BASIN AREA  
IN RIVERSIDE COUNTY PRESENTLY TRIBUTARY  
TO RIVERSIDE NARROWS WHICH  
UPON CONVERSION TO URBAN USES  
REQUIRING SEWAGE DISPOSAL THROUGH  
THE RIVERSIDE TREATMENT PLANT WILL  
BE DISCHARGED TO THE RIVER BELOW  
RIVERSIDE NARROWS

<u>Entity Serving Acreage</u>	<u>Acres</u>
Gage Canal	1,752
Alta Mesa Water Co.	65
East Riverside Water Co.	926
Riverside Highland Water Company	<u>1,173</u>
<u>TOTAL</u>	3,916

## **Appendix J**

### **2015 Annual Report of the Western-San Bernardino Watermaster**

WESTERN - SAN BERNARDINO WATERMASTER  
FOR

WESTERN MUNICIPAL WATER DISTRICT et al.

vs.

EAST SAN BERNARDINO COUNTY WATER DISTRICT et al.

CASE NO. 78426 - COUNTY OF RIVERSIDE

**ANNUAL REPORT**

**OF THE**

**WESTERN-SAN BERNARDINO WATERMASTER**

FOR

CALENDAR YEAR 2015

August 1, 2015

**WESTERN - SAN BERNARDINO WATERMASTER**

FOR

WESTERN MUNICIPAL WATER DISTRICT ET AL.

vs.

EAST SAN BERNARDINO COUNTY WATER DISTRICT ET AL.

CASE NO. 78426 - COUNTY OF RIVERSIDE

**DOUGLAS D. HEADRICK, Member**

380 East Vanderbilt Way  
San Bernardino, CA 92408  
Tel (909) 387-9200  
Fax (909) 387-9247

**JOHN V. ROSSI, Member**

14205 Meridian Parkway  
Riverside, CA 92518  
Tel (951) 571-7100  
Fax (951) 571-0592

August 1, 2015

RECEIVED  
SUPERIOR COURT OF CALIFORNIA  
COUNTY OF RIVERSIDE

JUL 31 2015

TO: Clerk of Superior Court of Riverside County and All Parties

RE: Watermaster Report for Calendar Year 2015

We have the honor of submitting the Annual Report of the Western-San Bernardino Watermaster for Calendar Year 2015.

The provisions of Paragraph III and Paragraphs V through XII of the Judgment in Case No. 78426, entered April 17, 1969, became effective from and after January 1, 1971. The Judgment requires that the Watermaster report to the Court and to each Party in writing not more than seven months after the end of each year, or within such other time as the Court may fix, on each determination made by said Watermaster pursuant to the Judgment and such other items as the Parties may mutually request or the Watermaster may deem to be appropriate.

Accordingly, this report is submitted herewith under date of August 1, 2015, and presents the findings of the Watermaster for calendar year 2015 and summarizes the five-year period 2010 through 2014.

Pursuant to Judgment Paragraphs VI(b) and VI(c), Watermaster has increased the Safe Yield Adjusted Rights of Plaintiffs and San Bernardino Valley to include the New Conservation Allocation determined by Watermaster. Such determination is based on a forecast of the long term average annual new conservation expected to result from operation of the Seven Oaks Reservoir and increased recharge at the Santa Ana River spreading grounds commencing in 2013. The new Adjusted Rights are shown on Table Nos. 2 and 3A-1 through 3D-1.

Watermaster has also determined the amounts of new conservation available for extraction by Plaintiffs and users within San Bernardino Valley resulting from operation of the Seven Oaks Reservoir and increased recharge at the Santa Ana River spreading grounds for the period 1998 through 2012. Also, pursuant to Judgment Paragraph VI(b)2, Watermaster has verified that Plaintiffs have paid their proportionate share of the costs of such new conservation through June 30, 2014.

The allocation among Plaintiffs and San Bernardino Valley of forecast amounts of new conservation and amounts for prior years 1998 through 2012 are summarized in the following table.

**New Conservation Allocation**

Party	Forecast Amounts for Existing Conditions AF/yr	Amount for Prior Years 1998-2012 AF
City of Riverside	1,719	9,635
Riverside Highland Water Company	141	793
Meeks and Daley Water Company	258	1,448
The Regents of the University of California	18	98
San Bernardino Valley	<u>5,507</u>	<u>30,866</u>
<b>Total</b>	<b>7,643</b>	<b>42,840</b>

In order to make new conservation from prior years 1998 through 2012 available for extraction by Plaintiffs and users in San Bernardino Valley, Western and San Bernardino Valley entered an agreement dated July 17, 2013 titled, "2013 Agreement Regarding Additional Extractions of New Conservation Water from the San Bernardino Basin Area". Watermaster will account for such additional extractions in Table Nos. 2, 3A-2 through 3D-2 and 17B-1 through 17B-5 commencing in 2013.

During preparation of the Annual Report of the Western-San Bernardino Watermaster for Calendar Year 2011, issues were identified regarding Table Nos. 16, 17 and 18. Watermaster resolved the issues in the calendar year 2012 Annual Report and resolution of the issues has resulted in modifications of the Annual Report that are described in Chapters II, III, VII, VIII and IX. Such modifications required revision of determinations commencing in 1971 and reduced the amount of credit available to Western and San Bernardino Valley to offset future obligations. After revision there is still credit available in all years commencing in 1971. Therefore, no replenishment would have been required in any prior year had the modifications been in place since 1971.

In conclusion, Table No. 18 shows that during the five-year period 2010 through 2014, Plaintiffs did not exceed the allowable extractions and that Western and San Bernardino Valley credits exceed obligations and therefore neither district is required to provide replenishment.

We, and each of us, hereby certify that this is a true and correct Report of the Watermaster for work performed by us, and under our supervision, for calendar year 2015 pursuant to the requirements of the Judgment.

Respectfully submitted,

WESTERN-SAN BERNARDINO WATERMASTER

By

  
Douglas D. Headrick

  
John V. Rossi



RECEIVED  
SUPERIOR COURT OF CALIFORNIA  
COUNTY OF RIVERSIDE

SUPERIOR COURT OF THE STATE OF CALIFORNIA  
FOR THE COUNTY OF RIVERSIDE

Douglas D. Headrick  
Douglas D. Headrick, Member  
Western-San Bernardino  
Watermaster

WESTERN - SAN BERNARDINO WATERMASTER  
FOR

WESTERN MUNICIPAL WATER DISTRICT et al.

vs.

EAST SAN BERNARDINO COUNTY WATER DISTRICT et al.

CASE NO. 78426 - COUNTY OF RIVERSIDE

## **ANNUAL REPORT**

**OF THE**

**WESTERN-SAN BERNARDINO WATERMASTER**

FOR

CALENDAR YEAR 2015

August 1, 2015

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Volume 1A	Verified Extractions from the San Bernardino Basin Area By Plaintiffs
Volume 2	Verified Extractions from the Colton Basin Area
Volume 3	Verified Extractions from the Riverside Basin Area Within San Bernardino County
Volume 4	Verified Extractions from the Riverside Basin Area Within Riverside County
Volume 5	Distribution of Extractions
Volume 6	Verified Extractions from the San Bernardino Basin Area, Colton Basin Area, and Riverside Basin Area for Use Within Western on Lands Not Tributary to the Riverside Narrows
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**CHAPTER I**  
**INTRODUCTION**

## **CHAPTER I**

### **INTRODUCTION**

Provisions of the physical solution set forth in the Judgment in Case No. 78426, Western Municipal Water District of Riverside County et al., vs. East San Bernardino County Water District et al., entered April 17, 1969, in the Superior Court of the State of California in and for the County of Riverside, established the entitlements and obligations of the two major water districts overlying the San Bernardino, Colton, and Riverside groundwater basins, namely San Bernardino Valley Municipal Water District (San Bernardino Valley) and Western Municipal Water District of Riverside County (Western).

The Court appointed a Watermaster, composed of two persons, to administer and enforce the provisions of the Judgment and to report annually to the Court and the Parties. Douglas D. Headrick and John V. Rossi continue as the representatives from San Bernardino Valley and Western, respectively.

The provisions of the Judgment became effective January 1, 1971; however, progress reports were filed with the Court for calendar years 1969, 1970, and 1971 reporting on the progress of verifications and initial determinations required by the Judgment. This report for calendar year 2015 includes a description and summary of the work completed during 2015 and also includes the annual accounting of extractions from the San Bernardino, Colton and Riverside Basin Areas and the distribution of such extractions to the various service areas for calendar year 2014. The scope of this report for 2015 and a history of the litigation leading to the physical solution settling the case are set forth in some detail in succeeding paragraphs.

## **Scope of Report**

Paragraph XIII(e) of the Judgment requires the Watermaster to report to the Court and each Party not more than seven months after the end of each year.

The Annual Reports of the Western-San Bernardino Watermaster for calendar years 1969 through 1971 reported on the verifications and initial determinations required by the Judgment including the safe yield of the San Bernardino Basin Area and the determination of the Adjusted Rights of the Plaintiffs. Beginning with the 1972 Report, the Watermaster began the annual accounting in accordance with the Judgment provisions. This report presents the activities of the Watermaster for calendar year 2015 together with the annual accounting of extractions and deliveries for calendar year 2014.

## **History of Litigation**

Before the turn of the twentieth century, the various water service organizations diverting surface water from the Santa Ana River and pumping from the underground water basins supplied by the underflow of the Santa Ana River and its tributaries have from time to time engaged in litigation over water rights within the San Bernardino, Riverside and Orange County areas.

On October 18, 1963, the Orange County Water District (OCWD) filed suit against the City of Chino and others in the Superior Court of the State of California in and for the County of Orange (Orange County Court), seeking an adjudication of water rights against more than 2,500 water users in the Santa Ana River Watershed tributary to Prado Dam. Included among the defendants were the Chino Basin Municipal Water District (now Inland Empire Utilities Agency), Western Municipal Water District of Riverside County (Western), and San Bernardino Valley Municipal Water District (San Bernardino Valley). Thirteen cross complaints were filed in 1968, which

extended the adjudication to more than 1,500 water users in the area downstream from Prado Dam, which included OCWD. Thus, some 4,000 parties were involved in the suit, including the three upper districts and OCWD.

With a case of this magnitude, it became obvious that every effort should be made to arrive at an equitable settlement and a physical solution in order to obviate the enormous expense and unwieldy litigation which would be involved if the case were brought to trial.

Attorneys and engineers representing the four major districts and a large number of the defendants worked diligently in order to effect a settlement and some type of physical solution which would prove acceptable to all Parties.

As a result, in May of 1968, an outline of a proposal for settlement of the case was prepared and a committee, composed of attorneys and engineers for the Parties, commenced preparation of the settlement documents.

In June 1968, the Orange County Court held a hearing on the motions which it had received requesting a preliminary injunction and an order of reference. The plaintiff OCWD, however, was concerned with the necessity of bringing the case to trial within the statutory period, and therefore, on July 15, 1968, submitted a motion to set the complaint in the case for trial. On October 15, 1968, the trial was commenced and adjourned after a half day of testimony on behalf of the Plaintiff.

Shortly thereafter, the Parties filed settlement documents with the Orange County Court, including a stipulation for Judgment, and on April 17, 1969, the Court entered the stipulated Judgment, thus terminating the many years of controversy over water rights along the Santa Ana River involving the issues and Parties included in the case of Orange County Water District vs. City of Chino, et al.

During the settlement negotiations, it became apparent that the San Bernardino Valley entities would participate only in a part of the Orange County settlement, in the belief that they had no responsibility for the waters of the Santa Ana River downstream from the point of rising water at Riverside Narrows. Therefore, the settlement of the OCWD action established an obligation of San Bernardino Valley for the delivery of 15,250 acre-feet of Base Flow annually at the Riverside Narrows, subject, however, to adjustment for quality.

As a result of the Orange County settlement, it became apparent that a second settlement would be necessary between the Riverside and San Bernardino entities who diverted water from the Santa Ana River surface and groundwater sources supplied by the Santa Ana River and tributaries above the Riverside Narrows.

For some time, increasing withdrawals from groundwater resources above Bunker Hill Dike (San Jacinto Fault), which supplied in large part the water requirements of San Bernardino and Redlands as well as the Riverside exporters, had been the cause of concern to the exporters in Riverside County. As a result, on March 1, 1963, a suit was filed by Western and others, in the Superior Court of the State of California in and for the County of Riverside (Riverside Court) seeking a general adjudication of water rights within the San Bernardino Basin Area. This suit preceded the filing of the Orange County suit, and it was decided that this suit could well be used as a vehicle for a physical settlement between Riverside and San Bernardino interests.

Following extensive negotiations between Riverside and San Bernardino interests, a physical settlement was completed and documents delineating the settlement were entered in the Riverside Court on April 17, 1969, recorded as Judgment No. 78426.



On February 28, 1992 the Court approved an amendment to the Judgment that primarily addressed an issue regarding new export (Judgment Paragraph X). The amendment is referred to herein as the 1992 Amendment. A redline version of the 1969 Judgment showing the 1992 amendments is available electronically from the San Bernardino Valley or Western website.

### **Summary of Judgment No. 78426**

The physical solution as agreed upon and as set forth in the Judgment states that all instructions and orders of the Riverside Court are to be administered and enforced by a Watermaster consisting of a committee of two persons, one of whom shall be nominated by San Bernardino Valley and the other by Western and appointed by the Court.

The Judgment directed the Watermaster to make certain initial determinations and to verify the amounts of water diverted and pumped from streams and groundwater basins embraced by the Judgment where such amounts had been assumed for purposes of the Judgment. Upon completion of the verifications and initial determinations, compliance with the Judgment requires an annual accounting of groundwater and surface water flows and diversions within the various basins in order that the Watermaster may properly report to the Riverside Court the comparisons of the year-by-year operations with the verified entitlements and an accounting as to the replenishment obligations or credits indicated by such comparison. The items verified or determined initially and to be reported on annually are as follows:

	<b>Watermaster Determinations Required by Judgment</b>	<b>Verified for Five Calendar Years Ending with 1963</b>	<b>To be Determined Annually from and after 1971</b>
1.	Total actual average annual extractions from the San Bernardino Basin Area by entities other than Plaintiffs for use within San Bernardino County.	X	X
2.	The natural safe yield of the San Bernardino Basin Area based upon the cultural conditions equivalent to those existing during the five-calendar year period ending with 1963.	1	1
3.	The annual "adjusted right" of each exporter (Plaintiff) to extract water from the San Bernardino Basin Area based upon the percentage of the natural safe yield determined by the methods used in Table B-2 of the Judgment.	X	
4.	The annual production by Plaintiffs for comparison with adjusted right determined in item 3 next preceding.		X
5.	Annual discharge from the City of San Bernardino Water Quality Control Plant to the River as to quantity and quality.	2	X
6.	Average annual extractions from the Colton Basin Area for use outside San Bernardino Valley.	X	X
7.	Average annual extractions from the Riverside Basin Area within San Bernardino County for use outside San Bernardino Valley.	X	X
8.	The average static water level within the Colton Basin and Riverside Basin within San Bernardino County as determined by the three wells listed in Judgment.	3	X

	<b>Watermaster Determinations Required by Judgment</b>	<b>Verified for Five Calendar Years Ending with 1963</b>	<b>To be Determined Annually from and after 1971</b>
9.	The average annual extractions from that portion of the Riverside Basin Area in Riverside County which is tributary to the Riverside Narrows for use in Riverside County.	X	X
10.	Annual amounts of water extracted for use within Western from the San Bernardino Basin Area and the area downstream therefrom to the Riverside Narrows which have been exported for use outside the area tributary to the Riverside Narrows.	X	X
11.	Annual amount of water extracted from the San Bernardino Basin Area for use within San Bernardino County on lands which are not tributary to the Riverside Narrows and for use on lands within Colton and Riverside Basin Areas.	4	X
12.	Reduction in return flow now contributing to base flows at Riverside Narrows which results from conversion of agriculture using water within Western to domestic or other uses connected to sewage or waste disposal system, the effluent from which is not tributary to the rising water at Riverside Narrows.	5	X

1 Determined initially by supplemental order of the Court to be 232,100 acre-feet per annum. Such amount is subject to the continuing jurisdiction of the Court.

2 Assumed for purposes of Judgment to be 16,000 acre-feet annually, verification not required.

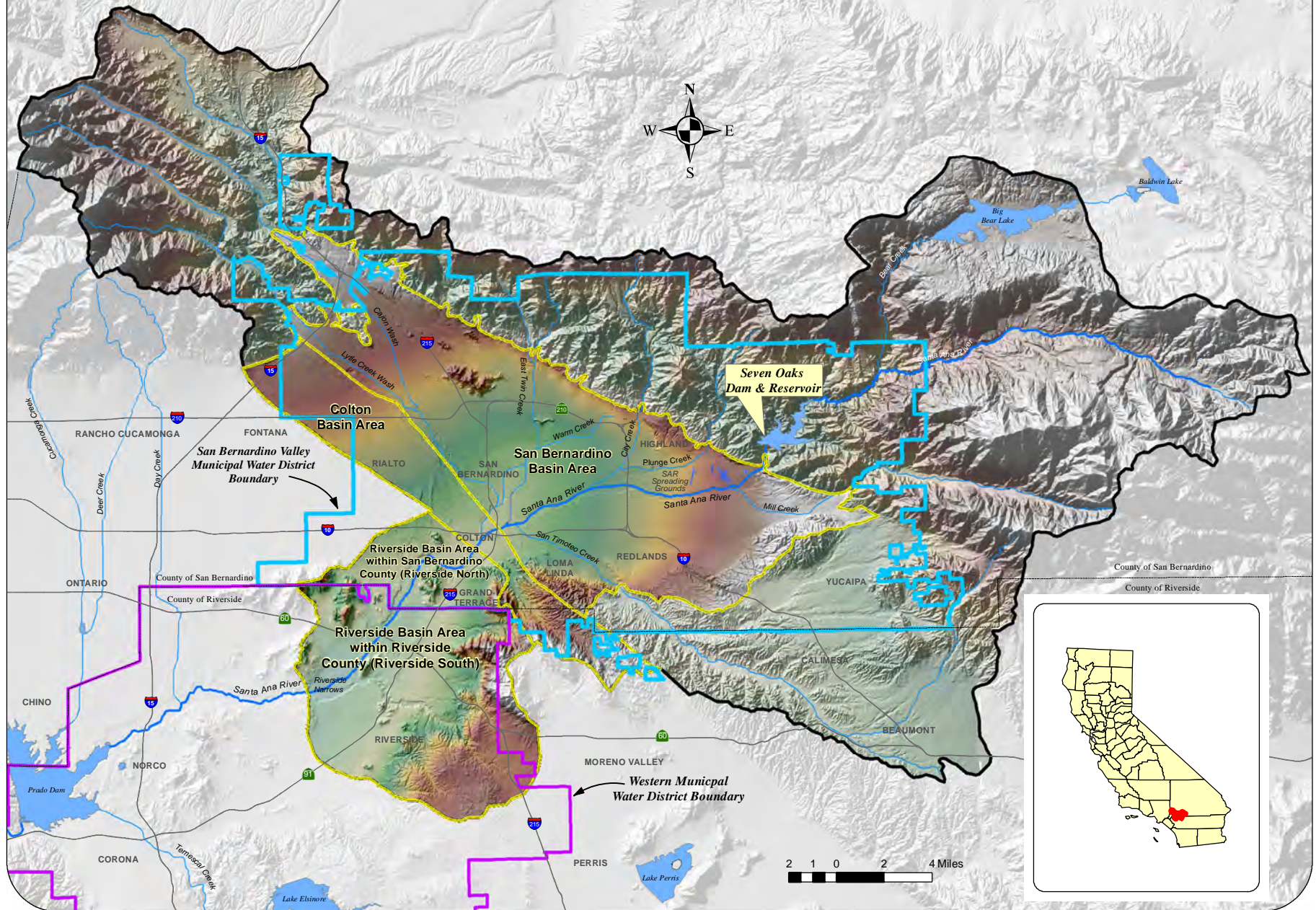
3 Established at 822.04 feet above sea level, based on fall season of 1963.

4 Revised by Watermaster during preparation of the Annual Report for calendar year 1974 then subsequently revised in 2012 in accordance with the 1992 Amendment.

5 Average for 5 years ending with 1963 established by Judgment to be 3,916 acres; verification not required.

The foregoing initial determinations and verifications required by the Judgment have been completed and were reported in the *Annual Report* of the *Western-San Bernardino Watermaster for Calendar Years 1971 and 1972* and continue to be reported in each Annual Report of the Watermaster. Map No. 1 shows the boundaries of the groundwater basins covered by the Judgment.

# Map No. 1 - Boundaries of Groundwater Basins



**CHAPTER II**  
**WATERMASTER ACTIVITIES**

## **CHAPTER II**

### **WATERMASTER ACTIVITIES**

The Watermaster activities have included principally the collection, tabulation, and analysis of data, the maintenance of records, and the preparation of the Annual Report which presents the determinations and findings of the Watermaster as required by the Judgment.

The Annual Report is comprised of this summary document, separately compiled appendices and nine separately compiled data documents identified as Report of Watermaster, Volumes 1, 1A, and 2 through 8. Appendix A is a compilation of Annual Report Table Nos. 2 through 17 for 1971 to present. Appendix B is Volume 1, Table No. 8 and numerous tables in Volume 7 for 1971 to present. All appendices are in PDF format from which the data can be copied/converted electronically. Volumes 1 through 8 are the sources of data used to construct Tables Nos. 2 through 18 in this report and include hundreds of pages of raw data and calculations.

The Organization of Annual Report (Diagram No. 1), included at the end of this chapter, identifies which of the Volumes 1 through 8 is a source of data for each of the Annual Report Table Nos. 2 through 18. The diagram shows how hundreds of pages of data and calculations are summarized in the Annual Report tables. Annual Report Table Nos. 2 through 17 are used to address the four basic questions regarding compliance with four general provisions of the Judgment in Table No. 18 highlighted in blue at the bottom of the diagram.

#### **Groundwater Extractions**

The most important data required for implementing the provisions of the Judgment are the annual tabulations of the groundwater extractions and surface water diversions made within the San Bernardino, Colton, and Riverside Basin



Areas. These extractions and diversions were initially determined and verified for the 1959-63 Base Period and were assembled and summarized in the June 1972 Report of Watermaster; Volume 1, titled *Verification of Extractions from San Bernardino Basin Area By Non-Plaintiffs*; Volume 1A, titled *Verification of Extractions from the San Bernardino Basin Area by Plaintiffs*; Volume 2, titled *Verification of Extractions from Colton Basin Area*; Volume 3, titled *Verification of Extractions from Riverside Basin Area Within San Bernardino County*; and Volume 4, titled *Verification of Extractions from Riverside Basin Area Within Riverside County*. The Watermaster has established a system for tabulating annual notices of groundwater extractions and surface diversions filed with the State Water Resources Control Board or, since calendar year 2005, with the Watermaster. The filed data are verified by the Watermaster and provide the basis for the annual accounting of extractions as required by the Judgment. Such extractions have been determined for calendar year 2014 and are summarized herein. Listings of the verified extractions by each individual owner for calendar year 2014 are assembled in Report of Watermaster, Volumes 1-2014, 1A-2014, 2-2014, 3-2014, and 4-2014.

### **Distribution of Extractions**

In addition to the annual accounting of the extractions from each basin, the Judgment also requires a determination as to the distribution of such extractions to the various service areas.

The distribution of verified extractions from the Colton and Riverside Basin Areas and the distribution of the Plaintiffs' extractions from the San Bernardino Basin Area were determined initially for the 1959-63 base period, and were reported in the June 1972 Report of Watermaster, Volume 5, titled *Distribution of Extractions*. Such distribution has been determined for calendar year 2014 and is summarized herein. Detailed work sheets are assembled in Report of Watermaster, Volume 5-2014.

The Watermaster is also required to determine the amount of water extracted from each of the various Basin Areas and delivered to areas not tributary to Riverside Narrows. Such amounts fall into two classifications, described as follows.

- 1) The extractions from the San Bernardino Basin Area, Colton Basin Area, and Riverside Basin Areas for use within Western on lands not tributary to the Riverside Narrows, as reported in Volume 6-2014, or
- 2) The extractions from the San Bernardino Basin Area for use on lands not within Western nor tributary to the Riverside Narrows, as reported in Volume 7-2014.

The amount of water extracted and delivered under Classification No. 1 was determined initially for the 1959-63 Base Period and was reported in the Report of Watermaster, Volume 6, dated June 1972. The amount determined for calendar year 2014 is summarized herein. Detailed work sheets are assembled in the Report of Watermaster, Volume 6-2014.

The amount of water extracted and delivered under Classification No. 2 was determined for the 1959-63 Base Period and the additional years 1970 and 1971 and was published in the Report of Watermaster, Volume 7, dated February 1973. The amount was revised in Report of Watermaster, Volume 7, published September 6, 2013. The amount determined for calendar year 2014 is summarized herein. Detailed work sheets are assembled in the Report of Watermaster, Volume 7-2014.

### **Groundwater Level Measurements**

Groundwater surface elevation data required for three key wells located in the Colton Basin Area and the Riverside Basin Area within San Bernardino County are currently furnished by the City of Riverside and Western.

These data are shown in both tabular and graphical form for calendar years 1963 through 2014 in Volume 8 of previous Watermaster reports. The



determination for calendar year 2015 is shown in the Report of Watermaster, Volume 8-2014.

### **Stream Flow and Water Quality Measurements**

The program of stream flow measurements conducted by the United States Geological Survey (USGS) in cooperation with the Watermaster has continued to provide basin inflow and stream diversion data.

The Western-San Bernardino Watermaster participates with the Santa Ana River Watermaster in part of the expense of the cooperative program with the USGS on surface water gages and water quality monitors at various locations. These expenses are presented in reports filed by the Santa Ana River Watermaster. The costs incurred for stream flow data collected and analyzed by the USGS on behalf of the Western-San Bernardino Watermaster are set forth in Table No. 1.

### **Field Inspections**

During the annual verification process for extractions from the San Bernardino, Colton and Riverside Basin Areas, some of the pumping facilities installed for extraction of groundwater and diversion of surface water were visited by members of the Watermaster or their representatives. Contact was made with some of the extractors to review their methods of computing extractions for the annual reports that were filed with the Watermaster.

During the initial verification program in the San Bernardino Basin Area, it was found that some groundwater producers and several diverters of surface water did not file their extractions and diversions with the State Water Resources Control Board. This condition was found to exist in some locations during the current year, which again necessitated inspection trips and contacts with various owners by the Watermaster members or their representatives.

### **Watermaster Collaborative Advisory Process**

The Watermaster is improving the ways in which it prepares and presents the information required under the Judgment to the Court, the Parties and other interested individuals. The Watermaster invited all interested persons and agencies to participate in a collaborative advisory process and on June 24, 2010 conducted the first Western-San Bernardino Watermaster Collaborative Advisory Process meeting. The Watermaster is continuing to meet with all interested parties in the collaborative process. Numerous topics have been discussed at the meetings, including: Watermaster accounting procedures, the safe yield and the natural safe yield of the San Bernardino Basin Area, water resource activities within the San Bernardino Basin Area, basin management, conjunctive use and new conservation. The participants have elected to further refine groundwater basin and surface water hydrology models to better understand the operational characteristics of the San Bernardino Basin Area and for use in calculating new conservation.

### **Annual Report Modifications**

One of the principal efforts of Watermaster and the collaborative group has been to make new conservation water resulting from operation of Seven Oaks Reservoir available for extraction and use by Plaintiffs and users within San Bernardino Valley. The determination of the amount of new conservation was the initial element of work. Developing a methodology for making the water available for extraction and accounting for its use in the Annual Report has been another major element.

As the work progressed, it quickly became apparent that Annual Report tables needed to be modified to include new conservation. However, it also

became apparent that changes unrelated to new conservation could be made to make the report more accurate, more readable and more useful as a source of water resource data.

Report sections describing modifications have been added at the end of Chapter III, Chapter VII, Chapter VIII and Chapter IX to describe changes relevant to provisions of the Judgment addressed in each of these chapters.

Chapter III includes modifications to Table Nos. 2 and 3 to accomplish the following.

- 1) To make available to Plaintiffs and San Bernardino Valley, new conservation water resulting from operation of Seven Oaks Reservoir through further adjustment of the Adjusted Right pursuant to Judgment Paragraphs VI(b) and VI(c).
- 2) To account for extraction of new conservation water, including any such water made available by agreement between Western and San Bernardino Valley pursuant to Judgment Paragraph VI(b)6.
- 3) To improve understanding and readability of the Annual Report by relocating the accounting for high groundwater mitigation program related extractions from footnotes in Table Nos. 2, 10 through 13 and 17 to columns in Table Nos. 2 and 3.

Chapter VII includes a modification to Table No. 8 to allow the calculations of export past Riverside Narrows to be better understood. The modification consists of conforming the logic used to adjust such export by users within Western, as provided for in the high groundwater mitigation agreements, to match the logic used to similarly adjust export from the San Bernardino Basin Area by users other than Plaintiffs. Such adjustment has previously been made

in Report of Watermaster, Volume 6, and therefore was reflected in Table No. 8. After modification the adjustment is made later in Table No. 14.

Chapter VIII includes modifications of Table No. 9 necessary to more accurately reflect the effect of extractions used outside the San Bernardino Basin Area on storage in the Basin and to account for deliveries to the Colton and Riverside Basin Areas in a manner consistent with the amendments to the Judgment approved by the Court in 1992. The modified Table No. 9A now shows the extractions from the San Bernardino Basin Area that are exported for use in the Chino, Yucaipa, San Timoteo, Oak Glen and Beaumont Basins. Table No. 9B shows similar extractions delivered in the Colton and Riverside Basin Areas.

Chapter IX includes modifications of Table Nos. 10 through 18 generally described as follows.

- 1) Table Nos. 10 through 13 are modified to improve readability and usefulness by relocating data that was previously in footnotes to columns in Table Nos. 3A through 3D. To improve understanding, column headings in Table Nos. 10 through 13 are also modified to create consistency with Table Nos. 3A through 3D and the text of the Annual Report. In the August 1, 2014 Annual Report, Table Nos. 10A through 13A were added in order to show the Plaintiffs allowable extractions for calendar year 2014 with and without the available imported water and new conservation water.
- 2) Table Nos. 14 and 15A are modified to provide clarity and consistent logic for applying adjustments to the total new export. The modifications include a deduction from the total new export of the amount of additional water allowed to be

extracted pursuant to the high groundwater mitigation program Judgment Paragraph VI(b)6 agreements. Such inclusion in Table No. 15A permitted high groundwater mitigation program related data to be removed from footnotes on Table No. 17. Similarly, the inclusion in Table No. 14 allowed the deduction to be deleted in Report of Watermaster, Volume 6. As a result, the logic for addressing the new export calculations associated with the high groundwater mitigation program is the same in both Table No. 16 and Table No. 17. Table No. 15B has been added to account for the loss of return flow resulting from delivery of San Bernardino Basin Area extractions to the Colton and Riverside Basin Areas. Such accounting maintains hydrologic integrity in the San Bernardino Basin Area and enables Watermaster to provide San Bernardino Valley with credit in the Colton and Riverside Basin Areas for the return flow resulting from deliveries to these Basins of San Bernardino Basin Area extractions and imported water pursuant to Judgment Paragraph X as amended in 1992.

- 3) Table Nos. 16 and 17 are summary tables and have been modified primarily to express the determinations of credit or obligation in uniformly defined terms that result in data that is more accurate and more directly useable for purposes other than determining compliance with the Judgment. The determination of the net accumulated credit or obligation for Western and San Bernardino Valley is based on a summation of all activities or water transfers that affect groundwater storage in the San Bernardino Basin Area or storage in the

Colton and Riverside Basin Areas which in turn can affect Base Flow at Riverside Narrows. The tables have been modified to show how the amount of each type of water transfer affects water in storage. This modification in Table No. 17 may prove useful in making comparisons between the calculation of change in groundwater storage based on the annual average yield associated with the natural safe yield determination by Watermaster and the storage change based on water level data. Such comparison is unnecessary for determination of compliance with the Judgment. In 2015, Table No. 17 was modified to include an accounting for Big Bear Lake in-lieu exchange water as an obligation of San Bernardino Valley, and thereby, more accurately address the effects of the in-lieu exchange program on storage in the basin. Partial accounting of such obligation was deleted from Volume 1, Table No. 8, and in addition, Volume 7, Table No. 22 was modified.

- 4) Table Nos. 17A, 17B-1 through 17B-4 and 17C are used to account for Western imported water (17A), Plaintiffs new conservation water (17B) and Riverside Basin mitigation water (17C) in the San Bernardino Basin Area. Table No. 17A was modified and Table Nos. 17B-1 through 17B-4 were added to account for Plaintiffs new conservation water in the September 6, 2013 Annual Report. Table No. 17B-5 was added to account for San Bernardino Valley's new conservation water. Table No. 17C was added in the April 1, 2014 Annual Report to account for Riverside Basin mitigation related to Seven Oaks water conserved in the San Bernardino Basin Area. In this Annual

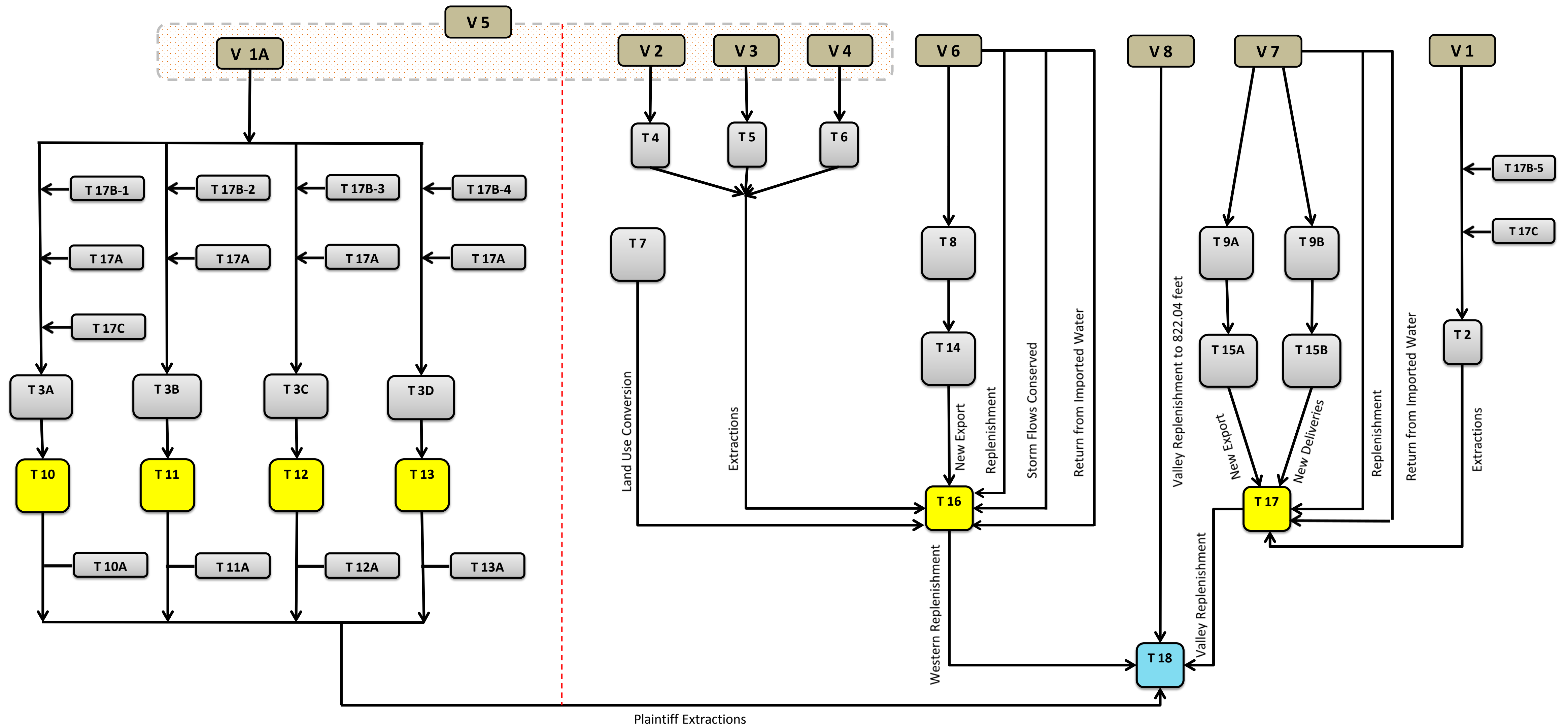
Report, Table Nos. 17A and 17B-1 through 17B-4 have been modified to include an accounting for transfers of imported water pursuant to Paragraphs 5 and 11 of Judgment Paragraph VI(b)6 agreements dated August 18, 2004 and July 17, 2013, respectively.

- 5) Table No. 18 has been modified to more clearly address the four basic questions regarding compliance with four general requirements of the Judgment. The table clearly indicates: a) if Plaintiffs are in compliance with provisions of the Judgment; b) if any replenishment is required in the San Bernardino Basin Area by San Bernardino Valley; and c) and d) if either Western or San Bernardino Valley may be required to provide replenishment between the Bunker Hill Dike and Riverside Narrows.

# DIAGRAM No. 1 ORGANIZATION OF ANNUAL REPORT

Sources of Data for Plaintiff Compliance in SBBA

Sources of Data for Determining Western and Valley Required Replenishment





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- 1 Verified Extractions from the San Bernardino Basin Area by Non-Plaintiffs for Use Within San Bernardino County
- 1A Verified Extractions from the San Bernardino Basin Area by Plaintiffs
- 2 Verified Extractions from the Colton Basin Area
- 3 Verified Extractions from the Riverside Basin Area Within San Bernardino County
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- 5 Distribution of Extractions
- 6 Verified Extractions from the San Bernardino Basin Area, Colton Basin Area, and Riverside Basin Area for Use Within Western on Lands Not Tributary to the Riverside Narrows
- 7 Verified Extractions from the San Bernardino Basin Area for Use on Lands Not Within Western Nor Tributary to the Riverside Narrows and for Use on Lands Within Colton Basin Area
- 8 Groundwater Surface Elevations of Wells Numbered 1S/4W-21Q3, 1S/4W-29H1 and 1S/4W-29Q1 Located Within the Colton Basin Area and Riverside Basin Area in San Bernardino County

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- 2 Adjusted Right to Extract and Verified Extractions of Other Than Plaintiffs From the San Bernardino Basin Area
- 3A-1 Adjusted Right of City of Riverside to Extract From the San Bernardino Basin Area For Use in Each Service Area
- 3A-2 Verified Extractions by the City of Riverside From the San Bernardino Basin Area For Delivery to Each Service Area
- 3B-1 Adjusted Right of Riverside Highland Water Company to Extract From the San Bernardino Basin Area For Use in Each Service Area
- 3B-2 Verified Extractions by Riverside Highland Water Company From the San Bernardino Basin Area For Delivery to Each Service Area
- 3C-1 Adjusted Right of Agua Mansa Water Company and Meeks & Daley Water Company to Extract From the San Bernardino Basin Area For Use in Each Service Area
- 3C-2 Verified Extractions by Agua Mansa Water Company and Meeks & Daley Water Company From the San Bernardino Basin Area For Delivery to Each Service Area
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- 3D-2 Verified Extractions by The Regents of the University of California From the San Bernardino Basin Area For Delivery to Each Service Area
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## DIAGRAM NO. 1

### INDEX

- 5 Verified Extractions from Riverside Basin Area Within San Bernardino County by San Bernardino and Riverside County Entities For Use In Each County
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- 7 Reduction in Return Flow Contributing to Base Flow at Riverside Narrows Resulting From Conversion of Agricultural Uses of Water to Domestic Uses Connected to a Sewage System Discharging to the River Below Riverside Narrows
- 8 Verified Extractions From the San Bernardino Basin Area, the Colton Basin Area, and the Riverside Basin Area For Use Within Western on Lands That Are Not Tributary to the Riverside Narrows
- 9A Verified Extractions from the San Bernardino Basin Area For Use on Lands Not Within Western Nor Tributary to Riverside Narrows
- 9B Verified Extractions from the San Bernardino Basin Area For Use on Lands Within Colton and Riverside Basin Areas
- 10 Annual Accounting of Extractions by the City of Riverside From the San Bernardino Basin Area For Delivery to Each Service Area
- 10A Allowable Extractions by the City of Riverside From the San Bernardino Basin Area For Delivery to Each Service Area
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- 11A Allowable Extractions by Riverside Highland Water Company From the San Bernardino Basin Area For Delivery to Each Service Area
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- 12A Allowable Extractions by Agua Mansa Water Company and Meeks & Daley Water Company From the San Bernardino Basin Area For Delivery to Each Service Area
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- 13A Allowable Extractions by The Regents of The University of California From the San Bernardino Basin Area For Delivery to Each Service Area
- 14 Annual Accounting for Western Municipal Water District Export of Extractions From San Bernardino Basin Area, Colton Basin Area, and Riverside Basin Area for Use Within Western on Lands That Are Not Tributary to the Riverside Narrows
- 15A Annual Accounting for San Bernardino Valley Municipal Water District Export of Extractions from San Bernardino Basin Area For Use on Lands Not Within Western Nor Tributary to the Riverside Narrows

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- 15B Annual Accounting for San Bernardino Valley Municipal Water District Delivery of Extractions from San Bernardino Basin Area For Use on Lands Within Colton and Riverside Basin Areas
- 16 Annual Accounting for Western Extractions From Colton Basin Area and Riverside Basin Area within Riverside and San Bernardino Counties for Use Outside San Bernardino Valley
- 17 Annual Accounting for San Bernardino Valley Municipal Water District Extractions From San Bernardino Basin Area
- 17A Annual Accounting for Additional Extractions of Imported Water From San Bernardino Basin Area by Western Municipal Water District
- 17B-1 Annual Accounting for Additional Extractions of New Conservation Water and Imported Water From San Bernardino Basin Area by City of Riverside
- 17B-2 Annual Accounting for Additional Extractions of New Conservation Water and Imported Water From San Bernardino Basin Area by Riverside Highland Water Company
- 17B-3 Annual Accounting for Additional Extractions of New Conservation Water and Imported Water From San Bernardino Basin Area by Aqua Mansa Water Company and Meeks & Daley Water Company
- 17B-4 Annual Accounting for Additional Extractions of New Conservation Water and Imported Water From San Bernardino Basin Area by The Regents of The University of California
- 17B-5 Annual Accounting for Additional Extractions of New Conservation Water From San Bernardino Basin Area by Entities in San Bernardino County Other Than Plaintiffs
- 17C Annual Accounting for Riverside Basin Mitigation Account Related to Seven Oaks Water Conserved in San Bernardino Basin Area
- 18 Summary of Compliance with Four Principal Provisions of the Judgment

**TABLE NO. 1**  
**COSTS TO THE PARTIES FOR USGS**  
**SURFACE WATER MEASUREMENTS USED BY**  
**WESTERN-SAN BERNARDINO WATERMASTER**

November 1, 2014 to October 31, 2015

	Parties Share <u>of Cost</u>	USGS Share <u>of Cost</u>
Santa Ana River near Mentone	\$13,700	\$6,900
Santa Ana River near Mentone Supplemental	8,200	4,150
Mill Creek near Mentone	14,700	0
Plunge Creek near Highland Streamflow	13,700	6,900
City Creek Canal near Highland	8,200	4,150
City Creek near Highland Streamflow	13,700	6,900
San Timoteo Creek near Loma Linda	0	22,800
FY 2013 Credit	(13,550)	(6,850)
East Twin Creek near Arrowhead Springs	13,700	6,900
Waterman Canyon Creek near Arrowhead Springs	13,700	6,900
Santa Ana River at E Street	14,600	0
Warm Creek near San Bernardino	13,700	6,900
<u>Lytle Creek at Fontana Union Water Company Head Gates</u>		
Infiltration Pipeline Meter	3,200	1,600
Lytle Creek near Fontana Streamflow	0	22,800
Extra Measurements	2,050	0
Weir No. 2 and No. 3 — Head Gate Diversion	13,700	0
20-ft. Weir — Forebay Spillway Return to Creek	13,700	0
<u>Southern California Edison Lower Powerhouse on Lytle Creek</u>		
20-ft. Weir — Discharge of Lower Powerhouse	13,700	0
Parshall Flume — Return to Creek from Afterbay	13,700	0
20-ft. Weir to West Fontana Union Diversion	13,700	0
Cajon Creek below Lone Pine Creek near Keenbrook	13,700	6,900
Devil Canyon Creek near San Bernardino	13,700	6,900
Lytle Creek at Colton	<u>13,700</u>	<u>6,900</u>
 SUBTOTAL FOR PARTIES	 \$229,200	
 SUBTOTAL FOR UNITED STATES GEOLOGICAL SURVEY		 <u>\$110,750</u>
 TOTAL COST FOR SURFACE WATER MEASUREMENTS		 \$339,950

## **CHAPTER III**

### **EXTRACTIONS FROM THE SAN BERNARDINO BASIN AREA**

### **CHAPTER III**

#### **EXTRACTIONS FROM THE SAN BERNARDINO BASIN AREA**

The extractions from the San Bernardino Basin Area have been classified as first, those extractions and diversions for use by other than Plaintiffs and second, those extractions and diversions for use by Plaintiffs.

The total verified extractions by other than Plaintiffs for calendar years 1971 through 2014, together with five-year totals, are shown on Table No. 2. The individual work sheets for the 2014 verifications are included in Report of Watermaster, Volume 1-2014.

The total verified extractions from the San Bernardino Basin Area by Plaintiffs for the calendar years 1971 through 2014, are shown on Table No. 3. The individual work sheets for the 2014 verifications and distribution of extractions by Plaintiffs are included in Report of Watermaster, Volume 1A-2014 and Volume 5-2014.

For reference, the Adjusted Rights of other than Plaintiffs and Plaintiffs are also shown on Table Nos. 2 and 3. Commencing in 2013, the Adjusted Rights include part of the new conservation resulting from operation of Seven Oaks Reservoir pursuant to Judgment Paragraphs VI(b) and VI(c). The part included consists of the average annual new conservation that is forecast to occur over a long term at the existing or enhanced Santa Ana River Spreading Grounds. Table Nos. 2 and 3 show the Adjusted Right as the sum of the Safe Yield Adjusted Right and the New Conservation Allocation resulting from the long term forecast commencing in 2013.

Table Nos. 2 and 3 also show that extractions are equal to the total extractions minus any additional extractions which are allowed pursuant to

Judgment Paragraph VI(b)6 agreements. Additional extractions have been allowed in the past to mitigate high groundwater conditions and to allow extraction by Plaintiffs of imported water recharged by Western pursuant to a Judgment Paragraph VI(b)6 agreement. In the future, any new conservation resulting from operation of Seven Oaks Reservoir that is not recharged at the existing or enhanced Santa Ana River Spreading Grounds may be made available to users through Judgment Paragraph VI(b)6 agreements and similarly accounted for in Table Nos. 2 and 3 as additional extractions.

Paragraph VII of the Judgment titled *Water Discharged Across Bunker Hill Dike* recites as follows:

*“San Bernardino Valley shall keep in force an agreement with the City of San Bernardino that the present annual quantity of municipal sewage effluent discharged across Bunker Hill Dike, assumed for all purposes herein to be 16,000 acre-feet annually, shall be committed to the discharge of the downstream obligations imposed on San Bernardino Valley under this Judgment or under the Orange County Judgment, and that such effluent shall comply with the requirements of the Santa Ana River Basin Regional Water Quality Control Board in effect December 31, 1968.”*

The Judgment does not charge the Watermaster with verification of the 16,000 acre-feet amount of sewage effluent discharge or the enforcement of the water quality requirements.

Watermaster receives discharge data from the City of San Bernardino for sewage effluent discharged from two locations to the Santa Ana River: Santa Ana River (Plant No. 2), and through the Rapid Infiltration and Extraction System (RIX).

Following review of the data provided by the City of San Bernardino, Watermaster makes its determination. The data is provided in the following table.

Calendar Year	Plant No. 1 (Acre-Feet)	Plant No. 2 (Acre-Feet)	Total (Acre-Feet)	RIX (Acre-Feet) San Bernardino and Colton combined flows
1971	5,705	8,925	14,630	
1972	6,784	9,963	16,747	
1973	-	17,640	17,640	
1974	-	17,070	17,070	
1975	-	16,820	16,820	
1976	-	17,530	17,530	
1977	-	17,720	17,720	
1978	-	18,690	18,690	
1979	-	19,350	19,350	
1980	-	20,670	20,670	
1981	-	21,120	21,120	
1982	-	24,493	24,493	
1983	-	23,170	23,170	
1984	-	21,759	21,759	
1985	-	23,814	23,814	
1986	-	25,442	25,442	
1987	-	27,154	27,154	
1988	-	27,290	27,290	
1989	-	28,300	28,300	
1990	-	27,770	27,770	
1991	-	26,980	26,980	
1992	-	25,510	25,510	
1993	-	24,660	24,660	
1994	-	24,790	24,790	
1995	-	26,260	26,260	
1996	-	6,610	6,610	30,880
1997	-	0	0	44,950
1998	-	0	0	48,710
1999	-	0	0	48,040
2000	-	0	0	47,230
2001	-	0	0	47,250
2002	-	0	0	43,828
2003	-	242 <sup>1</sup>	242	45,713
2004	-	286 <sup>1</sup>	286	44,501
2005	-	4,249 <sup>1</sup>	4,249	42,267 <sup>2</sup>
2006	-	1,155 <sup>1</sup>	1,155	44,979 <sup>2</sup>
2007	-	75 <sup>1,2</sup>	75	43,153
2008	-	568 <sup>1,2</sup>	568	42,140
2009	-	217 <sup>1,2</sup>	217	40,634
2010	-	755 <sup>1</sup>	755	40,157
2011	-	766 <sup>1</sup>	766	39,057
2012	-	76 <sup>1</sup>	76	37,326
2013	-	44 <sup>1</sup>	44	35,022
2014	-	145 <sup>1</sup>	145	32,809
2015	-			

<sup>1</sup> Direct discharge of treated wastewater flows to SAR when the SAR flow rate at "E" Street Gage is adequate to provide 20:1 dilution.

<sup>2</sup> Amount corrected during a subsequent year verification of extractions.



**Annual Report Modifications  
Table Nos. 2 and 3**

In 2012, Western and San Bernardino Valley contracted with GEOSCIENCE Support Services and SAIC (GEOSCIENCE/SAIC) to perform the following tasks.

- 1) Calculate the amount of new conservation resulting from the operation of Seven Oaks Reservoir from 1998 through 2012.
- 2) Forecast the long term average annual amounts of Seven Oaks related new conservation likely to occur at the downstream spreading grounds under each of the following assumed conditions.
  - a. Current delivery and recharge capability of 195 cfs
  - b. Expanded delivery and recharge capability of 300 cfs, and
  - c. Expanded delivery and recharge capability of 500 cfs.
- 3) Allocate the new conservation among the Plaintiffs and San Bernardino Valley in proportion to their respective share of the natural safe yield.

The results of the GEOSCIENCE/SAIC work is summarized as follows:

<b>Party</b>	<b>New Conservation Allocation</b>			
	Amount for Prior Years 1998-2012 AF	Forecast Amounts for 195 cfs Diversion AF/yr	Forecast Amounts for 300 cfs Diversion AF/yr	Forecast Amounts for 500 cfs Diversion AF/yr
City of Riverside	9,635	1,719	2,235	2,431
Riverside Highland Water Co.	793	141	184	200
Meeks and Daley Water Co.	1,448	258	336	365
University of California	98	18	23	25
San Bernardino Valley	30,866	5,507	7,161	7,787
<b>Total</b>	<b>42,840</b>	<b>7,643</b>	<b>9,939</b>	<b>10,807</b>

Forecasts for diversion of 300 cfs and 500 cfs are based on planned enhancement of the delivery and recharge facilities. Construction of these facilities has not been completed. Therefore, the new conservation allocations included in the Adjusted Right commencing in calendar year 2013 are the amounts forecast to result from the current diversion capacity of 195 cfs. At the time enhanced recharge facilities become operational, the Watermaster will consider increasing the new conservation allocation, thereby further increasing the Adjusted Right for users other than Plaintiffs in Table No. 2 and Plaintiffs in Table Nos. 3A-1 through 3D-1.

New conservation related to operation of Seven Oaks Reservoir will be made available for extraction by Plaintiffs and users in San Bernardino Valley through different mechanisms for each of three components of the new conservation. The component resulting from recharge at the Santa Ana River Spreading Grounds is made available through a further adjustment of the Adjusted Right as provided in Judgment Paragraphs VI(b) and VI(c). The components resulting from determination of prior years (1998-2012) new conservation and future new conservation resulting from direct use or recharge at locations other than the Santa Ana River Spreading Grounds will likely be made available through the existing and future Judgment Paragraph VI(b)6 agreements. The future VI(b)6 agreements will likely be entered following any major hydrologic event (wet year) that results in conservation at locations other than the Santa Ana River Spreading Grounds provided the capability of the Spreading Grounds was exceeded.

The specific mechanisms that will be used to account for all three components of new conservation as well as other types of additional water made available pursuant to existing or future Judgment Paragraph VI(b)6 agreements are as follows.

- 1) A mechanism to increase the Adjusted Right of Plaintiffs and San Bernardino Valley to reflect the amounts of new conservation forecast to result from long term operation of Seven Oaks Reservoir and diversion of increased amounts, relative to amounts diverted using safe yield practices, for recharge at the downstream spreading grounds. (See the second, third, and fourth data columns in the table above) This increase in Adjusted Right is pursuant to Judgment Paragraphs VI(b) and VI(c). (New Conservation)
- 2) A mechanism to make available to Plaintiffs and San Bernardino Valley, when needed to offset excess extractions, the amount of allocated new conservation determined by Watermaster to have resulted from operation of Seven Oaks Reservoir from 1998 through 2012. (See the first data column in the table above) Such amounts are made available through the 2013 additional extractions agreement entered by Western and San Bernardino Valley pursuant to Judgment Paragraph VI(b)6 and approved by the Court on November 19, 2013. (New Conservation)
- 3) A mechanism to make available to Plaintiffs and San Bernardino Valley, when needed to offset excess extractions, the amount of allocated new conservation determined by Watermaster to have resulted from a future major hydrologic event that resulted in direct use of Seven Oaks water or recharge of the San Bernardino Basin Area with Seven Oaks water in areas other than the Santa Ana River Spreading Grounds provided the capability to recharge at

the Spreading Grounds has been fully utilized. Such wet year hydrologic events are forecast to occur in the future on average in one out of five years. The long term average annual amount of new conservation that could result from such events is forecast to be about 10,000 acre-feet per year. The specific amounts of new conservation will be set forth in Judgment Paragraph VI(b)6 agreements that will allow additional extractions. (New Conservation)

- 4) A mechanism to account for the additional extractions that occurred between 1981 and 2004 for the purpose of mitigating the high groundwater condition. Such additional extractions were made pursuant to numerous Judgment Paragraph VI(b)6 agreements and were previously accounted for in footnotes on Table Nos. 2, 10 through 13 and 17. (High Groundwater Mitigation)
- 5) A mechanism to account for extractions of water pursuant to the 2004 replenishment and extraction agreement that allows Western or Plaintiffs to extract recharged imported water. (Western's Extraction of Imported Water)
- 6) A mechanism to account for Plaintiffs transfer to Western of an amount of water equal to all or a part of Plaintiffs unused water right in the San Bernardino Basin Area, subject to the provisions of Paragraph 11 of the 2013 agreement referenced in 2) above.

Paragraph 10 of the 2013 agreement referenced in the second mechanism described above provides that any amount of replenishment in the San Bernardino Basin Area resulting from the 1998 through 2012 operation of

Seven Oaks Reservoir and related diversion and spreading facilities that, in the absence of such operation, would have been replenished in the Riverside Basin, shall not be considered new conservation and shall not be allocated for use by Plaintiffs and users within San Bernardino Valley and shall instead be included in a Riverside Basin Mitigation Account. The agreement further provides that the City of Riverside may be required to increase extractions from its wells in the San Bernardino Basin Area and reduce extractions in its Flume Tract wells in the Riverside Basin by the same amount. Such change in location of extractions effectively transfers to the Riverside Basin, water that is conserved in the San Bernardino Basin Area through Seven Oaks related operations that would otherwise have been conserved in the Riverside Basin. Such transfers mitigate the adverse effects of Seven Oaks new conservation and reduce the amount in the Riverside Basin Mitigation Account. The amount in the Riverside Basin Mitigation Account may also be reduced by extraction of water from the San Bernardino Basin Area by producers other than Plaintiffs that is subsequently recharged in the Riverside Basin.

The GEOSCIENCE/SAIC work referenced previously resulted in a determination of the following amounts of conserved water that should be included in the Riverside Basin Mitigation Account.

- 1) An initial amount of 2,713 acre-feet resulting from Seven Oaks related conservation operations in prior years 1998 through 2012.
- 2) An annual amount of 483 acre-feet/year, commencing in 2013, resulting from Seven Oaks related conservation operations based on the current diversion capacity of 195 cfs.

The accounting for amounts included in the Riverside Basin Mitigation Account and the amounts extracted in exchange for Riverside Basin extractions

and for Riverside Basin recharge is shown on Table 17C. The amounts extracted are included in Table Nos. 2 and/or 3A-2 as Additional Extractions. Additional extractions are excluded from determination of Plaintiff's compliance with the Judgment and the determination of San Bernardino Valley replenishment obligations in the San Bernardino Basin Area.

The sixth mechanism described above also references the 2013 Judgment Paragraph VI(b)6 agreement. Paragraph 11 of the 2013 agreement provides that commencing in 2013 Plaintiffs may transfer to Western an amount of water equal to all or a part of Plaintiffs unused water right in the San Bernardino Basin Area provided the amount of such transfer, plus any remaining balance of such water transferred previously, may not exceed the Plaintiffs aggregate amount of previously transferred right to extract imported water pursuant to Paragraph 5 of the 2004 Judgment Paragraph VI(b)6 agreement.

Paragraph 11 was included in the 2013 agreement in partial response to an agreement dated March 20, 2007 among Western, San Bernardino Valley and the City of Riverside wherein the parties agreed to use their best efforts to implement an accounting methodology that would allow Plaintiffs to fully utilize their water rights in the San Bernardino Basin Area. Paragraph 11 essentially establishes a "buffer" for each Plaintiff equal to the amount of previously transferred right to extract imported water (see fifth mechanism above). Plaintiffs may transfer unused water right or under extractions into the "buffer" and also use the "buffer" to address excess extractions thereby making greater utilization of Plaintiffs water right than would otherwise be possible. Since the "buffer" results only from transfers of imported water, the storage of native water or safe yield is not adversely affected.

This Annual Report includes modifications to Table Nos. 17B-1 through 17B-4 and 17A to account for the transfers resulting from implementation of Paragraph 11. Tables Nos. 17B-1 through 17B-4 were originally designed to account for new conservation water allocated to each Plaintiff by Watermaster. These tables have been expanded to include an accounting for the imported water transfers associated with implementation of Paragraph 11 of the 2013 Agreement. Therefore, in addition to showing the remaining balance of new conservation water allocations, the table shows the imported water net accumulated balance or “buffer” balance at the end of each year. The table is designed to ensure that the imported water balance does not exceed the total amount of right to extract imported water transferred from Western to a Plaintiff pursuant to the 2004 Judgment Paragraph VI(b)6 agreement.

Table No. 17A was modified in this Annual Report to function as a repository for the Plaintiffs “buffer” water. So, in addition to accounting for the acquisition and extractions of imported water, the table also accounts for the sum of all “buffer” transfers by Plaintiffs and shows the Plaintiff imported water net accumulated balance at the end of each year.

In addition to changes needed to address new conservation and Plaintiff transfers of imported water, Table Nos. 2 and 3 were also modified to improve the readability of the report and improve the accuracy of the extraction data. Annual reports prior to calendar year 2012 accounted for additional extractions (mainly high groundwater) through numerous footnotes with data in Table Nos. 2, 10 through 13 and 17. By adding a column titled Additional Extractions in Table Nos. 2 and 3, the data in these footnotes were eliminated and the report is more easily read and understood.

In 2015, Table No. 17 was modified to include a San Bernardino Valley obligation entitled “In-Lieu Deliveries Obligation.” Such obligation is pursuant to a

1996 agreement between Big Bear Municipal Water District and San Bernardino Valley wherein San Bernardino Valley agreed to deliver imported water and/or pumped groundwater to Bear Valley Mutual Water Company (BVMWC) in-lieu of a like amount of stream diversion of native water not released from Big Bear Lake and retained in the lake for the benefit of the local community.

In 2013, Volume 1, Table No. 8 was modified to account for the direct delivery component of San Bernardino Valley's obligation. However, in calendar year 2014, in-lieu groundwater was also delivered. With the addition of the "In-Lieu Deliveries Obligation" to Table No. 17, the in-lieu accounting in Volume 1, Table No. 8 and Volume 7, Table No. 22, was eliminated.



ADJUSTED RIGHT TO EXTRACT AND VERIFIED EXTRACTIONS OF  
OTHER THAN PLAINTIFFS  
FROM THE SAN BERNARDINO BASIN AREA  
ANNUAL TOTALS  
(All Values in Acre-Feet)

Calendar Year	Adjusted Right			Extractions		
	Safe Yield Adjusted Right <i>1</i>	New Conservation Allocation <i>2</i>	Adjusted Right <i>3</i>	Total Extractions	Additional Extractions	Extractions
1971	171,342		171,342	163,186		163,186
1972	167,238		167,238	167,227		167,227
1973	167,238		167,238	159,781		159,781
1974	167,238		167,238	158,685		158,685
1975	167,238		167,238	151,681		151,681
1976	167,238		167,238	144,317		144,317
1977	167,238		167,238	144,811		144,811
1978	167,238		167,238	137,040		137,040
1979	167,238		167,238	154,807		154,807
1980	167,238		167,238	159,422		159,422
1981	167,238		167,238	172,639		172,639
1982	167,238		167,238	153,040		153,040
1983	167,238		167,238	146,434		146,434
1984	167,238		167,238	180,808		180,808
1985	167,238		167,238	177,919	10,681 <i>4</i>	167,238
1986	167,238		167,238	184,734		184,734
1987	167,238		167,238	172,501	5,263 <i>5</i>	167,238
1988	167,238		167,238	181,425	14,187 <i>6</i>	167,238
1989	167,238		167,238	173,530		173,530
1990	167,238		167,238	167,272		167,272
1991	167,238		167,238	166,347		166,347
1992	167,238		167,238	172,913	5,675 <i>7</i>	167,238
1993	167,238		167,238	178,372	11,134 <i>8</i>	167,238
1994	167,238		167,238	187,507	18,013 <i>9</i>	169,494
1995	167,238		167,238	182,171	14,933 <i>10</i>	167,238
1996	167,238		167,238	189,419	18,013 <i>11</i>	171,406
1997	167,238		167,238	188,504	18,013 <i>12</i>	170,491
1998	167,238		167,238	198,857	18,013 <i>13</i>	180,844
1999	167,238		167,238	197,273	30,035 <i>14</i>	167,238
2000	167,238		167,238	188,233	20,995 <i>15</i>	167,238

ADJUSTED RIGHT TO EXTRACT AND VERIFIED EXTRACTIONS OF  
OTHER THAN PLAINTIFFS  
FROM THE SAN BERNARDINO BASIN AREA  
ANNUAL TOTALS  
(All Values in Acre-Feet)

Calendar Year	Adjusted Right			Extractions		
	Safe Yield Adjusted Right <i>1</i>	New Conservation Allocation <i>2</i>	Adjusted Right <i>3</i>	Total Extractions	Additional Extractions	Extractions
2001	167,238		167,238	177,361	10,123 <i>16</i>	167,238
2002	167,238		167,238	181,543	14,305 <i>17</i>	167,238
2003	167,238		167,238	171,017		171,017
2004	167,238		167,238	178,460	11,222 <i>18</i>	167,238
2005	167,238		167,238	189,207		189,207
2006	167,238		167,238	207,323		207,323
2007	167,238		167,238	192,866		192,866
2008	167,238		167,238	191,536		191,536
2009	167,238		167,238	173,087		173,087
2010	167,238		167,238	163,795		163,795
2011	167,238		167,238	172,755		172,755
2012	167,238		167,238	172,505		172,505
2013	167,238	5,507	172,745	156,962		156,962
2014	167,238	5,507	172,745	152,260		152,260
2015	167,238	5,507	172,745			
2016	167,238	5,507	172,745			
2017	167,238	5,507	172,745			
2018	167,238	5,507	172,745			
2019	167,238	5,507	172,745			
2020	167,238	5,507	172,745			

*Note: Total Extractions - See Report of Watermaster, Volume 1, Table 8, Total Non-Plaintiff Extractions from San Bernardino Basin Area Excluding Minor Production*

*1 Adjusted Right not effective until January 1, 1972; therefore, 1971 Base Right is as verified for five-year Base Period 1959-63*

*2 New Conservation Allocation takes effect in the first year shown and continues until further adjusted by Watermaster.*

*Pursuant to Paragraph VI(c) of the Judgment, Watermaster has determined the other than Plaintiffs New Conservation Allocation to be 5,507 acre-feet per year starting in 2013. The 2013 Paragraph VI(b)6 Agreement provides that Watermaster will periodically consider changing this number based on provisions of the Agreement.*

*3 Adjusted Right equals Safe Yield Adjusted Right plus New Conservation Allocation.*

*4 Amount deducted under February 25, 1985 and August 21, 1985 Judgment Paragraph VI(b)6 Agreement. (High Groundwater Mitigation)*

ADJUSTED RIGHT TO EXTRACT AND VERIFIED EXTRACTIONS OF  
OTHER THAN PLAINTIFFS  
FROM THE SAN BERNARDINO BASIN AREA

*5 Amount deducted under May 20, 1987 2nd Amendment to December 22, 1981 Judgment VI(b)6 Agreement  
(hereinafter "December 22, 1981 Agreement"). (High Groundwater Mitigation)*

*6 Amount deducted under January 20, 1988 3rd Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*

*7 Amount deducted under May 4, 1992 5th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*

*8 Amount deducted under June 16, 1993 6th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*

*9 Amount deducted under March 3, 1994 7th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*

*10 Amount deducted under March 15, 1995 8th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*

*11 Amount deducted under March 6, 1996 9th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*

*12 Amount deducted under February 19, 1997 10th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*

*13 Amount deducted under February 18, 1998 11th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*

*14 Amount deducted under January 19, 1999 13th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*

*15 Amount deducted under August 16, 2000 15th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*

*16 Amount deducted under February 7, 2001 17th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*

*17 Amount deducted under February 6, 2002 19th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*

*18 Amount deducted under August 18, 2004 21st Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*

TABLE NO. 2

ADJUSTED RIGHT TO EXTRACT AND VERIFIED EXTRACTATIONS OF  
OTHER THAN PLAINTIFFS  
FROM THE SAN BERNARDINO BASIN AREA  
FIVE-YEAR TOTALS  
(All Values in Acre-Feet)

Five-Year Period	Five-Year Adjusted Right	Five-Year Extractions
1971-75	840,294	800,560
1972-76	836,190	781,691
1973-77	836,190	759,275
1974-78	836,190	736,534
1975-79	836,190	732,656
1976-80	836,190	740,397
1977-81	836,190	768,719
1978-82	836,190	776,948
1979-83	836,190	786,342
1980-84	836,190	812,343
1981-85	836,190	820,159
1982-86	836,190	832,254
1983-87	836,190	846,452
1984-88	836,190	867,256
1985-89	836,190	859,978
1986-90	836,190	860,012
1987-91	836,190	841,625
1988-92	836,190	841,625
1989-93	836,190	841,625
1990-94	836,190	837,589
1991-95	836,190	837,555
1992-96	836,190	842,614
1993-97	836,190	845,867
1994-98	836,190	859,473
1995-99	836,190	857,217
1996-00	836,190	857,217
1997-01	836,190	853,049
1998-02	836,190	849,796
1999-03	836,190	839,969
2000-04	836,190	839,969

TABLE NO. 2

Page 2b of 2

ADJUSTED RIGHT TO EXTRACT AND VERIFIED EXTRACTIONS OF  
OTHER THAN PLAINTIFFS  
FROM THE SAN BERNARDINO BASIN AREA  
FIVE-YEAR TOTALS  
(All Values in Acre-Feet)

Five-Year Period	Five-Year Adjusted Right	Five-Year Extractions
2001-05	836,190	861,938
2002-06	836,190	902,023
2003-07	836,190	927,651
2004-08	836,190	948,170
2005-09	836,190	954,019
2006-10	836,190	928,607
2007-11	836,190	894,039
2008-12	836,190	873,678
2009-13	841,697	839,104
2010-14	847,204	818,277
2011-15	852,711	
2012-16	858,218	
2013-17	863,725	
2014-18	863,725	
2015-19	863,725	
2016-20	863,725	

*Note: 5-year totals corrected to reflect any corrections on Table 2, Page 1a of 2 and Page 1b of 2.*

ADJUSTED RIGHT OF  
CITY OF RIVERSIDE  
TO EXTRACT FROM THE SAN BERNARDINO BASIN AREA  
FOR USE IN EACH SERVICE AREA  
(Including those rights acquired as successor to the  
Riverside Water Company and Gage Canal Company)  
(All Values in Acre-Feet)

Calendar Year	San Bernardino Basin Area Adjusted Right			For Use In San Bernardino Basin Area	For Use In Colton Basin Area and Riverside Basin Area in San Bernardino County	For Use In Areas Outside San Bernardino Valley		
	Safe Yield Adjusted Right <i>1</i>	New Conservation Allocation <i>2</i>	Adjusted Right <i>3</i>	Adjusted Right <i>4</i>	Adjusted Right <i>4</i>	Safe Yield Adjusted Right <i>1</i>	New Conservation Allocation <i>2</i>	Adjusted Right <i>3</i>
1971	53,448		53,448	1,462	1,260	50,726		50,726
1972	52,199		52,199	1,427	1,230	49,542		49,542
1973	52,199		52,199	1,427	1,230	49,542		49,542
1974	52,199		52,199	1,427	1,230	49,542		49,542
1975	52,199		52,199	1,427	1,230	49,542		49,542
1976	52,199		52,199	1,427	1,230	49,542		49,542
1977	52,199		52,199	1,427	1,230	49,542		49,542
1978	52,199		52,199	1,427	1,230	49,542		49,542
1979	52,199		52,199	1,427	1,230	49,542		49,542
1980	52,199		52,199	1,427	1,230	49,542		49,542
1981	52,199		52,199	1,427	1,230	49,542		49,542
1982	52,199		52,199	1,427	1,230	49,542		49,542
1983	52,199		52,199	1,427	1,230	49,542		49,542
1984	52,199		52,199	1,427	1,230	49,542		49,542
1985	52,199		52,199	1,427	1,230	49,542		49,542
1986	52,199		52,199	1,427	1,230	49,542		49,542
1987	52,199		52,199	1,427	1,230	49,542		49,542
1988	52,199		52,199	1,427	1,230	49,542		49,542
1989	52,199		52,199	1,427	1,230	49,542		49,542
1990	52,199		52,199	1,427	1,230	49,542		49,542
1991	52,199		52,199	1,427	1,230	49,542		49,542
1992	52,199		52,199	1,427	1,230	49,542		49,542
1993	52,199		52,199	1,427	1,230	49,542		49,542
1994	52,199		52,199	1,427	1,230	49,542		49,542
1995	52,199		52,199	1,427	1,230	49,542		49,542

ADJUSTED RIGHT OF  
CITY OF RIVERSIDE  
TO EXTRACT FROM THE SAN BERNARDINO BASIN AREA  
FOR USE IN EACH SERVICE AREA  
(Including those rights acquired as successor to the  
Riverside Water Company and Gage Canal Company)  
(All Values in Acre-Feet)

Calendar Year	San Bernardino Basin Area Adjusted Right			For Use In San Bernardino Basin Area		For Use In Colton Basin Area and Riverside Basin Area in San Bernardino County		
	San Bernardino Basin Area Adjusted Right			Adjusted Right 4	Adjusted Right 4	For Use In Areas Outside San Bernardino Valley		
	Safe Yield Adjusted Right 1	New Conservation Allocation 2	Adjusted Right 3			Safe Yield Adjusted Right 1	New Conservation Allocation 2	Adjusted Right 3
1996	52,199		52,199	1,427	1,230	49,542		49,542
1997	52,199		52,199	1,427	1,230	49,542		49,542
1998	52,199		52,199	1,427	1,230	49,542		49,542
1999	52,199		52,199	1,427	1,230	49,542		49,542
2000	52,199		52,199	1,427	1,230	49,542		49,542
2001	52,199		52,199	1,427	1,230	49,542		49,542
2002	52,199		52,199	1,427	1,230	49,542		49,542
2003	52,199		52,199	1,427	1,230	49,542		49,542
2004	52,199		52,199	1,427	1,230	49,542		49,542
2005	52,199		52,199	1,427	1,230	49,542		49,542
2006	52,199		52,199	1,427	1,230	49,542		49,542
2007	52,199		52,199	1,427	1,230	49,542		49,542
2008	52,199		52,199	1,427	1,230	49,542		49,542
2009	52,199		52,199	1,427	1,230	49,542		49,542
2010	52,199		52,199	1,427	1,230	49,542		49,542
2011	52,199		52,199	1,427	1,230	49,542		49,542
2012	52,199		52,199	1,427	1,230	49,542		49,542
2013	52,199	1,719	53,918	1,427	1,230	49,542	1,719	51,261
2014	52,199	1,719	53,918	1,427	1,230	49,542	1,719	51,261
2015	52,199	1,719	53,918	1,427	1,230	49,542	1,719	51,261
2016	52,199	1,719	53,918	1,427	1,230	49,542	1,719	51,261
2017	52,199	1,719	53,918	1,427	1,230	49,542	1,719	51,261
2018	52,199	1,719	53,918	1,427	1,230	49,542	1,719	51,261
2019	52,199	1,719	53,918	1,427	1,230	49,542	1,719	51,261
2020	52,199	1,719	53,918	1,427	1,230	49,542	1,719	51,261

ADJUSTED RIGHT OF  
CITY OF RIVERSIDE  
TO EXTRACT FROM THE SAN BERNARDINO BASIN AREA  
FOR USE IN EACH SERVICE AREA  
(Including those rights acquired as successor to the  
Riverside Water Company and Gage Canal Company)

*1 Safe Yield Adjusted Right became effective on January 1, 1972; Base Right for Calendar Year 1971 is as shown in Table B-1 of the Judgment.*

*2 New Conservation Allocation takes effect in the first year shown and continues until further adjusted by Watermaster.*

*Pursuant to Paragraph VI(b) of the Judgment, Watermaster has determined the City of Riverside New Conservation Allocation to be 1,719 acre-feet per year starting in 2013.*

*The 2013 Paragraph VI(b)6 Agreement provides that Watermaster will periodically consider changing this number based on provisions of the Agreement.*

*3 Adjusted Right equals Safe Yield Adjusted Right plus New Conservation Allocation.*

*4 New Conservation Allocation may also be used in the San Bernardino Basin Area, or the Colton Basin Area and Riverside Basin Area in San Bernardino County.*



VERIFIED EXTRACTIONS BY  
CITY OF RIVERSIDE  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
(Including those rights acquired as successor to the  
Riverside Water Company and Gage Canal Company)  
(All Values in Acre-Feet)

Calendar Year	San Bernardino Basin Area Extractions				Delivery for Use in San Bernardino Basin Area	Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County	Delivery for Use in Areas Outside San Bernardino Valley			
	Total Extractions	Additional Extractions		Extractions	Deliveries	Deliveries	Actual Deliveries	Additional Deliveries		Deliveries
1971	53,882			53,882	98	669	53,115			53,115
1972	45,694			45,694	85	547	45,062			45,062
1973	43,022			43,022	156	512	42,354			42,354
1974	43,367			43,367	0	550	42,817			42,817
1975	47,962			47,962	0	498	47,464			47,464
1976	51,374			51,374	0	523	50,851			50,851
1977	50,999			50,999	0	346	50,653			50,653
1978	45,384			45,384	646	301	44,437			44,437
1979	52,377			52,377	0	415	51,962			51,962
1980	50,756			50,756	383	0	50,373			50,373
1981	52,157	1,148	1	51,009	724	0	51,433	1,148	1	50,285
1982	49,599			49,599	162	0	49,437			49,437
1983	46,064	76	2	45,988	335	0	45,729	76	2	45,653
1984	58,906	9,332	3	49,574	32	0	58,874	9,332	3	49,542
1985	63,073	13,472	4	49,601	59	0	63,014	13,472	4	49,542
1986	59,979	10,000	5	49,979	437	0	59,542	10,000	5	49,542
1987	57,841	7,965	6	49,876	334	0	57,507	7,965	6	49,542
1988	64,512	14,201	7	50,311	815	0	63,697	14,201	7	49,496
1989	50,784			50,784	28	0	50,756			50,756
1990	47,637			47,637	19	0	47,618			47,618
1991	52,909	3,212	8	49,697	155	0	52,754	3,212	8	49,542
1992	50,239	7,177	9	43,062	203	0	50,036	7,177	9	42,859
1993	52,114	7,152	10	44,962	-108	0	52,222	9,917	10	42,305
1994	60,447	9,107	11	51,340	46	0	60,401	10,859	11	49,542
1995	55,392	5,799	12	49,593	99	0	55,293	8,357	12	46,936

VERIFIED EXTRACTIONS BY  
CITY OF RIVERSIDE  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
(Including those rights acquired as successor to the  
Riverside Water Company and Gage Canal Company)  
(All Values in Acre-Feet)

Calendar Year	San Bernardino Basin Area Extractions				Delivery for Use in San Bernardino Basin Area	Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County	Delivery for Use in Areas Outside San Bernardino Valley			
	Total Extractions	Additional Extractions		Extractions	Deliveries	Deliveries	Actual Deliveries	Additional Deliveries		Deliveries
1996	63,382	8,390	13	54,992	278	0	63,104	10,769	13	52,335
1997	59,938	7,495	14	52,443	494	0	59,444	9,658	14	49,786
1998	54,417	6,671	15	47,746	0	0	54,417	6,671	15	47,746
1999	61,142	8,943	16	52,199	181	0	60,961	11,419	16	49,542
2000	63,472	11,273	17	52,199	117	0	63,355	13,813	17	49,542
2001	59,312	7,113	18	52,199	229	0	59,083	9,541	18	49,542
2002	65,462	13,263	19	52,199	172	0	65,290	15,748	19	49,542
2003	54,514			54,514	10	0	54,504			54,504
2004	53,414	1,215	20	52,199	0	0	53,414	3,872	20	49,542
2005	44,696			44,696	13	0	44,683			44,683
2006	49,444			49,444	30	0	49,414			49,414
2007	52,018	2,459	21	49,559	39	0	51,979	2,459	21	49,520
2008	53,581			53,581	70	0	53,511			53,511
2009	43,061			43,061	121	0	42,940			42,940
2010	45,713			45,713	80	0	45,633			45,633
2011	46,488			46,488	72	0	46,416			46,416
2012	52,506			52,506	13	0	52,493			52,493
2013	50,158	(2,459)	22	52,617	11	0	50,147	(2,459)	22	52,606
2014	49,433			49,433	18	0	49,415			49,415
2015										
2016										
2017										
2018										
2019										
2020										

VERIFIED EXTRACTIONS BY  
CITY OF RIVERSIDE  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
(Including those rights acquired as successor to the  
Riverside Water Company and Gage Canal Company)

Note: See Report of Watermaster, Volume 1A, Table No. 3.

- 1 Amount deducted under December 22, 1981 Judgment Paragraph VI(b)6 Agreement (hereinafter "December 22, 1981 Agreement"). (High Groundwater Mitigation)*
- 2 Amount deducted under March 3, 1983 and April 18, 1983 Letter Agreements under December 22, 1981 Agreement. (High Groundwater Mitigation)*
- 3 Amount deducted under December 5, 1984 1st Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*
- 4 Amount deducted under February 25, 1985 and August 21, 1985 Agreements. (High Groundwater Mitigation)*
- 5 Amount deducted under January 21, 1986 letter to City of Riverside under December 22, 1981 Agreement. (High Groundwater Mitigation)*
- 6 Amount deducted under May 20, 1987 2nd Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*
- 7 Amount deducted under January 20, 1988 3rd Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*
- 8 Amount deducted under April 3, 1991 4th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*
- 9 Amount deducted under May 4, 1992 5th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*
- 10 Amount deducted under June 16, 1993 6th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*
- 11 Amount deducted under March 3, 1994 7th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*
- 12 Amount deducted under March 15, 1995 8th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*
- 13 Amount deducted under March 6, 1996 9th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*
- 14 Amount deducted under February 19, 1997 10th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*
- 15 Amount deducted under February 18, 1998 11th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*
- 16 Amount deducted under January 19, 1999 13th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*
- 17 Amount deducted under August 16, 2000 15th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*
- 18 Amount deducted under February 7, 2001 17th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*
- 19 Amount deducted under February 6, 2002 19th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*
- 20 Amount deducted under August 18, 2004 21st Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation)*
- 21 Amount deducted pursuant to Paragraph 5 of the August 18, 2004 Judgment Paragraph VI(b)6 agreement, see Table No. 17B-1, Footnotes 4, a, 8 and b and Table No. 17A, Footnotes 6 and c (Transfer of Imported Water)*
- 22 Amount added pursuant to Paragraph 11 of the July 17, 2013 Judgment Paragraph VI(b)6 agreement, see Table No. 17B-1, Footnotes 5 and d and Table No. 17A, Footnotes 3 and e (Transfer of Imported Water)*

ADJUSTED RIGHT OF  
RIVERSIDE HIGHLAND WATER COMPANY  
TO EXTRACT FROM THE SAN BERNARDINO BASIN AREA  
FOR USE IN EACH SERVICE AREA  
(All Values in Acre-Feet)

Calendar Year	San Bernardino Basin Area Adjusted Right			For Use In San Bernardino Basin Area	For Use In Colton Basin Area and Riverside Basin Area in San Bernardino County	For Use In Areas Outside San Bernardino Valley		
	Safe Yield	New	Adjusted Right <i>3</i>	Adjusted Right <i>4</i>	Adjusted Right <i>4</i>	Safe Yield	New	Adjusted Right <i>3</i>
	Adjusted Right <i>1</i>	Conservation Allocation <i>2</i>				Adjusted Right <i>1</i>	Conservation Allocation <i>2</i>	
1971	4,399		4,399	0	2,509	1,890		1,890
1972	4,294		4,294	0	2,449	1,845		1,845
1973	4,294		4,294	0	2,449	1,845		1,845
1974	4,294		4,294	0	2,449	1,845		1,845
1975	4,294		4,294	0	2,449	1,845		1,845
1976	4,294		4,294	0	2,449	1,845		1,845
1977	4,294		4,294	0	2,449	1,845		1,845
1978	4,294		4,294	0	2,449	1,845		1,845
1979	4,294		4,294	0	2,449	1,845		1,845
1980	4,294		4,294	0	2,449	1,845		1,845
1981	4,294		4,294	0	2,449	1,845		1,845
1982	4,294		4,294	0	2,449	1,845		1,845
1983	4,294		4,294	0	2,449	1,845		1,845
1984	4,294		4,294	0	2,449	1,845		1,845
1985	4,294		4,294	0	2,449	1,845		1,845
1986	4,294		4,294	0	2,449	1,845		1,845
1987	4,294		4,294	0	2,449	1,845		1,845
1988	4,294		4,294	0	2,449	1,845		1,845
1989	4,294		4,294	0	2,449	1,845		1,845
1990	4,294		4,294	0	2,449	1,845		1,845
1991	4,294		4,294	0	2,449	1,845		1,845
1992	4,294		4,294	0	2,449	1,845		1,845
1993	4,294		4,294	0	2,449	1,845		1,845
1994	4,294		4,294	0	2,449	1,845		1,845
1995	4,294		4,294	0	2,449	1,845		1,845

ADJUSTED RIGHT OF  
RIVERSIDE HIGHLAND WATER COMPANY  
TO EXTRACT FROM THE SAN BERNARDINO BASIN AREA  
FOR USE IN EACH SERVICE AREA  
(All Values in Acre-Feet)

Calendar Year	San Bernardino Basin Area Adjusted Right			For Use In San Bernardino Basin Area	For Use In Colton Basin Area and Riverside Basin Area in San Bernardino County	For Use In Areas Outside San Bernardino Valley		
	Safe Yield	New	Adjusted Right <i>3</i>	Adjusted Right <i>4</i>	Adjusted Right <i>4</i>	Safe Yield	New	Adjusted Right <i>3</i>
	Adjusted Right <i>1</i>	Conservation Allocation <i>2</i>				Adjusted Right <i>1</i>	Conservation Allocation <i>2</i>	
1996	4,294		4,294	0	2,449	1,845		1,845
1997	4,294		4,294	0	2,449	1,845		1,845
1998	4,294		4,294	0	2,449	1,845		1,845
1999	4,294		4,294	0	2,449	1,845		1,845
2000	4,294		4,294	0	2,449	1,845		1,845
2001	4,294		4,294	0	2,449	1,845		1,845
2002	4,294		4,294	0	2,449	1,845		1,845
2003	4,294		4,294	0	2,449	1,845		1,845
2004	4,294		4,294	0	2,449	1,845		1,845
2005	4,294		4,294	0	2,449	1,845		1,845
2006	4,294		4,294	0	2,449	1,845		1,845
2007	4,294		4,294	0	2,449	1,845		1,845
2008	4,294		4,294	0	2,449	1,845		1,845
2009	4,294		4,294	0	2,449	1,845		1,845
2010	4,294		4,294	0	2,449	1,845		1,845
2011	4,294		4,294	0	2,449	1,845		1,845
2012	4,294		4,294	0	2,449	1,845		1,845
2013	4,294	141	4,435	0	2,449	1,845	141	1,986
2014	4,294	141	4,435	0	2,449	1,845	141	1,986
2015	4,294	141	4,435	0	2,449	1,845	141	1,986
2016	4,294	141	4,435	0	2,449	1,845	141	1,986
2017	4,294	141	4,435	0	2,449	1,845	141	1,986
2018	4,294	141	4,435	0	2,449	1,845	141	1,986
2019	4,294	141	4,435	0	2,449	1,845	141	1,986
2020	4,294	141	4,435	0	2,449	1,845	141	1,986

ADJUSTED RIGHT OF  
RIVERSIDE HIGHLAND WATER COMPANY  
TO EXTRACT FROM THE SAN BERNARDINO BASIN AREA  
FOR USE IN EACH SERVICE AREA

- 1 Safe Yield Adjusted Right became effective on January 1, 1972; Base Right for Calendar Year 1971 is as shown in Table B-1 of the Judgment.*
- 2 New Conservation Allocation takes effect in the first year shown and continues until further adjusted by Watermaster.  
Pursuant to Paragraph VI(b) of the Judgment, Watermaster has determined the Riverside Highland Water Company New Conservation Allocation to be 141 acre-feet per year starting in 2013.  
The 2013 Paragraph VI(b)6 Agreement provides that Watermaster will periodically consider changing this number based on provisions of the Agreement.*
- 3 Adjusted Right equals Safe Yield Adjusted Right plus New Conservation Allocation*
- 4 New Conservation Allocation may also be used in the San Bernardino Basin Area, or the Colton Basin Area and Riverside Basin Area in San Bernardino County.*

**VERIFIED EXTRACTIONS BY  
RIVERSIDE HIGHLAND WATER COMPANY  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA**

(All Values in Acre-Feet)

Calendar Year	San Bernardino Basin Area Extractions		Delivery for Use in San Bernardino Basin Area		Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County		Delivery for Use in Areas Outside San Bernardino Valley	
	Total Extractions	Additional Extractions	Extractions	Deliveries	Deliveries	Actual Deliveries	Additional Deliveries	Deliveries
1971	4,012		4,012	0	2,388	1,624		1,624
1972	4,532		4,532	0	2,239	2,293		2,293
1973	3,512		3,512	0	1,751	1,761		1,761
1974	4,088		4,088	0	1,985	2,103		2,103
1975	4,709		4,709	0	2,002	2,707		2,707
1976	4,519		4,519	0	2,050	2,469		2,469
1977	3,583		3,583	0	1,820	1,763		1,763
1978	1,350		1,350	0	1,051	299		299
1979	3,369		3,369	0	1,781	1,588		1,588
1980	3,677		3,677	0	2,060	1,617		1,617
1981	3,604		3,604	0	2,151	1,453		1,453
1982	2,795		2,795	0	1,775	1,020		1,020
1983	3,161		3,161	0	2,318	843		843
1984	4,759		4,759	0	2,671	2,088		2,088
1985	3,312		3,312	0	1,978	1,334		1,334
1986	4,744		4,744	0	2,130	2,614		2,614
1987	3,919		3,919	0	2,229	1,690		1,690
1988	4,775		4,775	0	2,229	2,546		2,546
1989	4,681		4,681	0	1,968	2,713		2,713
1990	4,092		4,092	0	2,313	1,779		1,779
1991	3,021		3,021	0	1,669	1,352		1,352
1992	4,052		4,052	0	2,275	1,777		1,777
1993	3,241		3,241	0	1,777	1,464		1,464
1994	4,324		4,324	0	2,201	2,123		2,123
1995	3,955		3,955	0	2,146	1,809		1,809

VERIFIED EXTRACTIONS BY  
RIVERSIDE HIGHLAND WATER COMPANY  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA

(All Values in Acre-Feet)

Calendar Year	San Bernardino Basin Area Extractions			Delivery for Use in San Bernardino Basin Area		Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County		Delivery for Use in Areas Outside San Bernardino Valley		
	Total Extractions	Additional Extractions	Extractions	Deliveries	Deliveries	Actual Deliveries	Additional Deliveries	Deliveries	Deliveries	Deliveries
1996	5,051	463	1	4,588	0	2,756	2,295	463	1	1,832
1997	4,939	463	2	4,476	0	2,656	2,283	463	2	1,820
1998	3,250	463	3	2,787	0	1,961	1,289	463	3	826
1999	4,972	2,041	4	2,931	0	2,082	2,890	2,041	4	849
2000	3,423	567	5	2,856	0	2,811	612	567	5	45
2001	2,925	260	6	2,665	0	2,543	382	260	6	122
2002	4,310	1,910	7	2,400	0	2,272	2,038	1,910	7	128
2003	3,881	3	7	3,878	0	2,036	1,845	3	7	1,842
2004	1,754	0		1,754	0	1,301	453	0		453
2005	3,377			3,377	0	1,532	1,845			1,845
2006	4,149			4,149	0	2,304	1,845			1,845
2007	3,633			3,633	0	1,772	1,861			1,861
2008	2,730			2,730	0	2,054	676			676
2009	1,648			1,648	0	1,073	575			575
2010	1,136			1,136	0	629	507			507
2011	1,655			1,655	0	1,087	568			568
2012	2,135			2,135	0	1,523	612			612
2013	2,873			2,873	0	1,629	1,244			1,244
2014	2,077			2,077	0	1,470	607			607
2015										
2016										
2017										
2018										
2019										
2020										



VERIFIED EXTRACTIONS BY  
RIVERSIDE HIGHLAND WATER COMPANY  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA

Note: See Report of Watermaster, Volume 1A, Table No. 3.

*1 Amount deducted under March 6, 1996 9th Amendment to December 22, 1981 Judgment Paragraph VI(b)6 Agreement (hereinafter "December 22, 1981 Agreement"). (High Groundwater Mitigation,*

*2 Amount deducted under February 19, 1997 10th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation,*

*3 Amount deducted under February 18, 1998 11th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation,*

*4 Amount deducted under January 19, 1999 13th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation,*

*5 Amount deducted under August 16, 2000 15th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation,*

*6 Amount deducted under February 7, 2001 17th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation,*

*7 Amount deducted under February 6, 2002 19th Amendment to December 22, 1981 Agreement. (High Groundwater Mitigation,*

ADJUSTED RIGHT OF  
 AGUA MANSA WATER COMPANY AND MEEKS & DALEY WATER COMPANY  
 TO EXTRACT FROM THE SAN BERNARDINO BASIN AREA  
 FOR USE IN EACH SERVICE AREA  
 (All Values in Acre-Feet)

Calendar Year	San Bernardino Basin Area Adjusted Right			For Use In San Bernardino Basin Area	For Use In Colton Basin Area and Riverside Basin Area in San Bernardino County	For Use In Areas Outside San Bernardino Valley		
	Safe Yield	New	Adjusted Right <i>3</i>	Adjusted Right <i>4</i>	Adjusted Right <i>4</i>	Safe Yield	New	Adjusted Right <i>3</i>
	Adjusted Right <i>1</i>	Conservation Allocation <i>2</i>				Adjusted Right <i>1</i>	Conservation Allocation <i>2</i>	
1971	8,026		8,026	0	325	7,700		7,700
1972	7,833		7,833	0	318	7,515		7,515
1973	7,833		7,833	0	318	7,515		7,515
1974	7,833		7,833	0	318	7,515		7,515
1975	7,833		7,833	0	318	7,515		7,515
1976	7,833		7,833	0	318	7,515		7,515
1977	7,833		7,833	0	318	7,515		7,515
1978	7,833		7,833	0	318	7,515		7,515
1979	7,833		7,833	0	318	7,515		7,515
1980	7,833		7,833	0	318	7,515		7,515
1981	7,833		7,833	0	318	7,515		7,515
1982	7,833		7,833	0	318	7,515		7,515
1983	7,833		7,833	0	318	7,515		7,515
1984	7,833		7,833	0	318	7,515		7,515
1985	7,833		7,833	0	318	7,515		7,515
1986	7,833		7,833	0	318	7,515		7,515
1987	7,833		7,833	0	318	7,515		7,515
1988	7,833		7,833	0	318	7,515		7,515
1989	7,833		7,833	0	318	7,515		7,515
1990	7,833		7,833	0	318	7,515		7,515
1991	7,833		7,833	0	318	7,515		7,515
1992	7,833		7,833	0	318	7,515		7,515
1993	7,833		7,833	0	318	7,515		7,515
1994	7,833		7,833	0	318	7,515		7,515
1995	7,833		7,833	0	318	7,515		7,515

ADJUSTED RIGHT OF  
AGUA MANSA WATER COMPANY AND MEEKS & DALEY WATER COMPANY  
TO EXTRACT FROM THE SAN BERNARDINO BASIN AREA  
FOR USE IN EACH SERVICE AREA  
(All Values in Acre-Feet)

Calendar Year	San Bernardino Basin Area Adjusted Right			For Use In San Bernardino Basin Area	For Use In Colton Basin Area and Riverside Basin Area in San Bernardino County	For Use In Areas Outside San Bernardino Valley		
	Safe Yield	New	Adjusted Right 3	Adjusted Right 4	Adjusted Right 4	Safe Yield	New	Adjusted Right 3
	Adjusted Right 1	Conservation Allocation 2				Adjusted Right 1	Conservation Allocation 2	
1996	7,833		7,833	0	318	7,515		7,515
1997	7,833		7,833	0	318	7,515		7,515
1998	7,833		7,833	0	318	7,515		7,515
1999	7,833		7,833	0	318	7,515		7,515
2000	7,833		7,833	0	318	7,515		7,515
2001	7,833		7,833	0	318	7,515		7,515
2002	7,833		7,833	0	318	7,515		7,515
2003	7,833		7,833	0	318	7,515		7,515
2004	7,833		7,833	0	318	7,515		7,515
2005	7,833		7,833	0	318	7,515		7,515
2006	7,833		7,833	0	318	7,515		7,515
2007	7,833		7,833	0	318	7,515		7,515
2008	7,833		7,833	0	318	7,515		7,515
2009	7,833		7,833	0	318	7,515		7,515
2010	7,833		7,833	0	318	7,515		7,515
2011	7,833		7,833	0	318	7,515		7,515
2012	7,833		7,833	0	318	7,515		7,515
2013	7,833	258	8,091	0	318	7,515	258	7,773
2014	7,833	258	8,091	0	318	7,515	258	7,773
2015	7,833	258	8,091	0	318	7,515	258	7,773
2016	7,833	258	8,091	0	318	7,515	258	7,773
2017	7,833	258	8,091	0	318	7,515	258	7,773
2018	7,833	258	8,091	0	318	7,515	258	7,773
2019	7,833	258	8,091	0	318	7,515	258	7,773
2020	7,833	258	8,091	0	318	7,515	258	7,773

ADJUSTED RIGHT OF  
AGUA MANSA WATER COMPANY AND MEEKS & DALEY WATER COMPANY  
TO EXTRACT FROM THE SAN BERNARDINO BASIN AREA  
FOR USE IN EACH SERVICE AREA

*1 Safe Yield Adjusted Right became effective on January 1, 1972; Base Right for Calendar Year 1971 is as shown in Table B-1 of the Judgment.*

*2 New Conservation Allocation takes effect in the first year shown and continues until further adjusted by Watermaster Pursuant to Paragraph VI(b) of the Judgment, Watermaster has determined the Agua Mansa Water Company and Meeks & Daley Water Company New Conservation Allocation to be 258 acre-feet per year starting in 2013.*

*The 2013 Paragraph VI(b)6 Agreement provides that Watermaster will periodically consider changing this number based on provisions of the Agreement.*

*3 Adjusted Right equals Safe Yield Adjusted Right plus New Conservation Allocation*

*4 New Conservation Allocation may also be used in the San Bernardino Basin Area, or the Colton Basin Area and Riverside Basin Area in San Bernardino County.*

VERIFIED EXTRACTIONS BY  
 AGUA MANSA WATER COMPANY AND MEEKS & DALEY WATER COMPANY  
 FROM THE SAN BERNARDINO BASIN AREA  
 FOR DELIVERY TO EACH SERVICE AREA  
 (All Values in Acre-Feet)

Calendar Year	San Bernardino Basin Area Extractions			Delivery for Use in San Bernardino Basin Area	Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County	Delivery for Use in Areas Outside San Bernardino Valley		
	Total Extractions	Additional Extractions	Extractions	Deliveries	Deliveries	Actual Deliveries	Additional Deliveries	Deliveries
1971	2,902		2,902	0	383	2,519		2,519
1972	3,527		3,527	0	377	3,150		3,150
1973	2,979		2,979	0	250	2,729		2,729
1974	4,504		4,504	0	246	4,258		4,258
1975	3,950		3,950	0	168	3,782		3,782
1976	5,393		5,393	0	182	5,211		5,211
1977	4,220		4,220	0	146	4,074		4,074
1978	2,254		2,254	0	161	2,093		2,093
1979	3,930		3,930	0	166	3,764		3,764
1980	2,333		2,333	0	323	2,010		2,010
1981	3,092		3,092	0	358	2,734		2,734
1982	3,716		3,716	0	169	3,547		3,547
1983	2,651		2,651	0	245	2,406		2,406
1984	5,165		5,165	0	233	4,932		4,932
1985	5,385		5,385	0	210	5,175		5,175
1986	5,570		5,570	0	234	5,336		5,336
1987	4,914		4,914	0	193	4,721		4,721
1988	4,966		4,966	0	233	4,733		4,733
1989	5,392		5,392	0	240	5,152		5,152
1990	3,851		3,851	0	83	3,768		3,768
1991	4,426		4,426	0	190	4,236		4,236
1992	4,100		4,100	0	118	3,982		3,982
1993	5,013		5,013	0	276	4,737		4,737
1994	4,525		4,525	0	227	4,298		4,298
1995	3,560		3,560	0	145	3,415		3,415

VERIFIED EXTRACTIONS BY  
 AGUA MANSA WATER COMPANY AND MEEKS & DALEY WATER COMPANY  
 FROM THE SAN BERNARDINO BASIN AREA  
 FOR DELIVERY TO EACH SERVICE AREA  
 (All Values in Acre-Feet)

Calendar Year	San Bernardino Basin Area Extractions			Delivery for Use in San Bernardino Basin Area	Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County	Delivery for Use in Areas Outside San Bernardino Valley		
	Total Extractions	Additional Extractions	Extractions	Deliveries	Deliveries	Actual Deliveries	Additional Deliveries	Deliveries
1996	3,912		3,912	0	194	3,718		3,718
1997	4,165		4,165	0	137	4,028		4,028
1998	3,828		3,828	0	210	3,618		3,618
1999	6,289		6,289	0	90	6,199		6,199
2000	3,832		3,832	0	352	3,480		3,480
2001	3,671		3,671	0	192	3,479		3,479
2002	5,800		5,800	0	202	5,598		5,598
2003	7,440		7,440	0	49	7,391		7,391
2004	3,782		3,782	0	19	3,763		3,763
2005	5,891		5,891	0	4	5,887		5,887
2006	7,515		7,515	0	0	7,515		7,515
2007	7,591		7,591	0	0	7,591		7,591
2008	4,832		4,832	0	0	4,832		4,832
2009	6,345		6,345	0	0	6,345		6,345
2010	6,738		6,738	0	0	6,738		6,738
2011	7,127		7,127	0	0	7,127		7,127
2012	7,117		7,117	0	0	7,117		7,117
2013	7,732		7,732	0	0	7,732		7,732
2014	7,103		7,103	0	0	7,103		7,103
2015								
2016								
2017								
2018								
2019								
2020								

VERIFIED EXTRACTIONS BY  
AGUA MANSA WATER COMPANY AND MEEKS & DALEY WATER COMPANY  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA

Note: See Report of Watermaster, Volume 1A, Table No. 3.

ADJUSTED RIGHT OF  
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA  
TO EXTRACT FROM THE SAN BERNARDINO BASIN AREA  
FOR USE IN EACH SERVICE AREA  
(All Values in Acre-Feet)

Calendar Year	San Bernardino Basin Area Adjusted Right			For Use In San Bernardino Basin Area	For Use In Colton Basin Area and Riverside Basin Area in San Bernardino County	For Use In Areas Outside San Bernardino Valley		
	Safe Yield	New	Adjusted Right 3	Adjusted Right 4	Adjusted Right 4	Safe Yield	New	Adjusted Right 3
	Adjusted Right 1	Conservation Allocation 2				Adjusted Right 1	Conservation Allocation 2	
1971	581		581	0	0	581		581
1972	536		536	0	0	536		536
1973	536		536	0	0	536		536
1974	536		536	0	0	536		536
1975	536		536	0	0	536		536
1976	536		536	0	0	536		536
1977	536		536	0	0	536		536
1978	536		536	0	0	536		536
1979	536		536	0	0	536		536
1980	536		536	0	0	536		536
1981	536		536	0	0	536		536
1982	536		536	0	0	536		536
1983	536		536	0	0	536		536
1984	536		536	0	0	536		536
1985	536		536	0	0	536		536
1986	536		536	0	0	536		536
1987	536		536	0	0	536		536
1988	536		536	0	0	536		536
1989	536		536	0	0	536		536
1990	536		536	0	0	536		536
1991	536		536	0	0	536		536
1992	536		536	0	0	536		536
1993	536		536	0	0	536		536
1994	536		536	0	0	536		536
1995	536		536	0	0	536		536



ADJUSTED RIGHT OF  
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA  
TO EXTRACT FROM THE SAN BERNARDINO BASIN AREA  
FOR USE IN EACH SERVICE AREA  
(All Values in Acre-Feet)

Calendar Year	San Bernardino Basin Area Adjusted Right			For Use In San Bernardino Basin Area	For Use In Colton Basin Area and Riverside Basin Area in San Bernardino County	For Use In Areas Outside San Bernardino Valley		
	Safe Yield	New	Adjusted Right 3	Adjusted Right 4	Adjusted Right 4	Safe Yield	New	Adjusted Right 3
	Adjusted Right 1	Conservation Allocation 2				Adjusted Right 1	Conservation Allocation 2	
1996	536		536	0	0	536		536
1997	536		536	0	0	536		536
1998	536		536	0	0	536		536
1999	536		536	0	0	536		536
2000	536		536	0	0	536		536
2001	536		536	0	0	536		536
2002	536		536	0	0	536		536
2003	536		536	0	0	536		536
2004	536		536	0	0	536		536
2005	536		536	0	0	536		536
2006	536		536	0	0	536		536
2007	536		536	0	0	536		536
2008	536		536	0	0	536		536
2009	536		536	0	0	536		536
2010	536		536	0	0	536		536
2011	536		536	0	0	536		536
2012	536		536	0	0	536		536
2013	536	18	554	0	0	536	18	554
2014	536	18	554	0	0	536	18	554
2015	536	18	554	0	0	536	18	554
2016	536	18	554	0	0	536	18	554
2017	536	18	554	0	0	536	18	554
2018	536	18	554	0	0	536	18	554
2019	536	18	554	0	0	536	18	554
2020	536	18	554	0	0	536	18	554

ADJUSTED RIGHT OF  
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA  
TO EXTRACT FROM THE SAN BERNARDINO BASIN AREA  
FOR USE IN EACH SERVICE AREA

- 1 Safe Yield Adjusted Right became effective on January 1, 1972; Base Right for Calendar Year 1971 is as shown in Table B-1 of the Judgment.*
- 2 New Conservation Allocation takes effect in the first year shown and continues until further adjusted by Watermaster.  
Pursuant to Paragraph VI(b) of the Judgment, Watermaster has determined The Regents of the University of California New Conservation Allocation to be 18 acre-feet per year starting in 2013.  
The 2013 Paragraph VI(b)6 Agreement provides that Watermaster will periodically consider changing this number based on provisions of the Agreement.*
- 3 Adjusted Right equals Safe Yield Adjusted Right plus New Conservation Allocation*
- 4 New Conservation Allocation may also be used in the San Bernardino Basin Area, or the Colton Basin Area and Riverside Basin Area in San Bernardino County.*

VERIFIED EXTRACTIONS BY  
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
(All Values in Acre-Feet)

Calendar Year	San Bernardino Basin Area Extractions			Delivery for Use in San Bernardino Basin Area	Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County	Delivery for Use in Areas Outside San Bernardino Valley		
	Total Extractions	Additional Extractions	Extractions	Deliveries	Deliveries	Actual Deliveries	Additional Deliveries	Deliveries
1971	219		219	0	0	219		219
1972	239		239	0	0	239		239
1973	239		239	0	0	239		239
1974	267		267	0	0	267		267
1975	179		179	0	0	179		179
1976	245		245	0	0	245		245
1977	87		87	0	0	87		87
1978	183		183	0	0	183		183
1979	83		83	0	0	83		83
1980	7		7	0	0	7		7
1981	143		143	0	0	143		143
1982	48		48	0	0	48		48
1983	0		0	0	0	0		0
1984	0		0	0	0	0		0
1985	0		0	0	0	0		0
1986	48		48	0	0	48		48
1987	195		195	0	0	195		195
1988	179		179	0	0	179		179
1989	62		62	0	0	62		62
1990	95		95	0	0	95		95
1991	23		23	0	0	23		23
1992	32		32	0	0	32		32
1993	0		0	0	0	0		0
1994	0		0	0	0	0		0
1995	0		0	0	0	0		0

VERIFIED EXTRACTIONS BY  
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
(All Values in Acre-Feet)

Calendar Year	San Bernardino Basin Area Extractions			Delivery for Use in San Bernardino Basin Area	Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County	Delivery for Use in Areas Outside San Bernardino Valley			
	Total Extractions	Additional Extractions	Extractions			Actual Deliveries	Additional Deliveries	Deliveries	Deliveries
1996	445		445	0	0	445			445
1997	505	58 <i>1</i>	447	0	0	505	58 <i>1</i>		447
1998	590	54 <i>2</i>	536	0	0	590	54 <i>2</i>		536
1999	586	50 <i>3</i>	536	0	0	586	50 <i>3</i>		536
2000	624	88 <i>4</i>	536	0	0	624	88 <i>4</i>		536
2001	617	81 <i>5</i>	536	0	0	617	81 <i>5</i>		536
2002	618	82 <i>6</i>	536	0	0	618	82 <i>6</i>		536
2003	536		536	0	0	536			536
2004	618	82 <i>7</i>	536	0	0	618	82 <i>7</i>		536
2005	536		536	0	0	536			536
2006	536		536	0	0	536			536
2007	536		536	0	0	536			536
2008	536		536	0	0	536			536
2009	536		536	0	0	536			536
2010	536		536	0	0	536			536
2011	536		536	0	0	536			536
2012	536		536	0	0	536			536
2013	536		536	0	0	536			536
2014	536		536	0	0	536			536
2015									
2016									
2017									
2018									
2019									
2020									

VERIFIED EXTRACTIONS BY  
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA

Note: See Report of Watermaster, Volume 1A, Table No. 3.

- 1 Extracted or exported under February 19, 1997 10th Amendment to December 22, 1981 agreements. (High Groundwater Mitigation)*
- 2 Extracted or exported under February 18, 1998 11th Amendment to December 22, 1981 agreements. (High Groundwater Mitigation)*
- 3 Extracted or exported under January 19, 1999 13th Amendment to December 22, 1981 agreements. (High Groundwater Mitigation)*
- 4 Extracted or exported under August 16, 2000 15th Amendment to December 22, 1981 agreements. (High Groundwater Mitigation)*
- 5 Extracted or exported under February 7, 2001 17th Amendment to December 22, 1981 agreements. (High Groundwater Mitigation)*
- 6 Extracted or exported under February 6, 2002 19th Amendment to December 22, 1981 agreements. (High Groundwater Mitigation)*
- 7 Extracted or exported under August 18, 2004 21st Amendment to December 22, 1981 agreements. (High Groundwater Mitigation)*

## **CHAPTER IV**

### **NATURAL SAFE YIELD OF THE SAN BERNARDINO BASIN AREA AND ADJUSTED RIGHTS OF PLAINTIFF EXPORTERS**

# CHAPTER IV

## NATURAL SAFE YIELD OF THE SAN BERNARDINO BASIN AREA AND ADJUSTED RIGHTS OF PLAINTIFF EXPORTERS

The Watermaster has determined the natural safe yield of the water supply accruing to the San Bernardino Basin Area at 232,100 acre-feet per annum from which the Adjusted Rights of Plaintiff exporters were also determined. Such determination of safe yield and Adjusted Rights of Plaintiff exporters was set forth in detail in 1972 in Report of Watermaster, Volume 9, titled *Determination of Natural Safe Yield of the San Bernardino Basin Area and Adjusted Rights of Plaintiff Exporters*.

The Adjusted Rights of Plaintiff extractions from the San Bernardino Basin Area, classified according to service areas and based on the natural safe yield of 232,100 acre-feet per annum have been summarized on the following table.

PLAINTIFF ADJUSTED RIGHTS CLASSIFIED ACCORDING TO SERVICE AREA <sup>1</sup> (All Values in Acre-Feet)				
Plaintiffs	Total Extractions in San Bernardino Basin Area	Delivery to San Bernardino Basin Area	Delivery to Colton Basin and Riverside Basin Area in San Bernardino County	Delivery to Areas Outside San Bernardino Valley
City of Riverside	52,199 <sup>2</sup>	1,427	1,230	49,542 <sup>2</sup>
Riverside Highland Water Company	4,294	0	2,449	1,845
Agua Mansa Water Company and Meeks & Daley Water Company	7,833	0	318	7,515
Regents of The University of California	536 <sup>2</sup>	0	0	536 <sup>2</sup>
TOTAL	64,862	1,427	3,997	59,438

<sup>1</sup> Effective January 1, 1972. Therefore, the 1971 rights for both Plaintiffs and other than Plaintiffs are equal to the five-year base period average.

<sup>2</sup> The Adjusted Rights allocated to the City of Riverside and The Regents of The University of California were established at 52,169 and 566 acre-feet per annum respectively. On the basis of an amended recordation filing for the 1959-63 Base Period, the adjusted right for The Regents of The University of California was reduced to 536 acre-feet, and the City of Riverside adjusted right was increased to 52,199 acre-feet.

Paragraph VI(b)1(b) of the Judgment provides that the safe yield Adjusted Rights of Plaintiffs shown in the table above can be further adjusted to reflect new conservation. New conservation is defined in Judgment Paragraph IV(i) as, “Any increase in replenishment from natural precipitation which results from operation of works and facilities not now in existence [during the determination of safe yield] ...”. The construction of Seven Oaks Dam has resulted in new conservation.

Commencing in 2013, Adjusted Rights of Plaintiffs have been increased based on calculations of the long term average increase in yield resulting from operation of Seven Oaks Reservoir. The amounts of such increase are shown as the New Conservation Allocation on Table Nos. 3A-1 through 3D-1. Therefore, commencing in 2013 the Adjusted Rights for Plaintiffs shown on Table Nos. 3A-1 through 3D-1 are the sum of the Safe Yield Adjusted Right (shown in the table above) and the New Conservation Allocation.

The Adjusted Right of other than Plaintiffs was also based on the natural safe yield of the San Bernardino Basin Area and was determined in 1972 to be 167,238 acre-feet. The Safe Yield Adjusted Right of users other than Plaintiffs of 167,238 acre-feet has also been further adjusted pursuant to Judgment Paragraph VI(c) to reflect the New Conservation Allocation. Therefore, commencing in 2013 the Adjusted Right of users other than Plaintiffs is shown on Table No. 2, page 1, as the sum of the Safe Yield Adjusted Right and the New Conservation Allocation.

The Judgment provides for continuing jurisdiction of the Court in the following matters:

- 1) The hydrologic condition of any one or all of the separate basins described in this Judgment in order to determine from time to time the safe yield of the San Bernardino Basin Area, and



- 2) The adjusted rights of the Plaintiffs as required to comply with the provisions hereof with respect to changes in the natural safe yield of the San Bernardino Basin Area. If such changes occur, the Court shall adjudge that the Adjusted Rights and replenishment obligations of each Party shall be changed proportionately to the base rights.

In order to provide a basis for future re-determinations of safe yield, the Watermaster maintains a continuing program of collecting and analyzing current hydrologic data pertinent to the annual water supply to, and utilization of water from, the San Bernardino Basin Area.

Such data will be summarized and reported from time to time in subsequent supplemental reports of the Watermaster.

## **CHAPTER V**

### **EXTRACTIONS FROM THE COLTON BASIN AREA AND RIVERSIDE BASIN AREA WITHIN SAN BERNARDINO COUNTY**

## **CHAPTER V**

### **EXTRACTIONS FROM THE COLTON BASIN AREA AND RIVERSIDE BASIN AREA WITHIN SAN BERNARDINO COUNTY**

#### **For Use Outside San Bernardino Valley**

The extractions from the Colton Basin Area and that portion of the Riverside Basin Area within San Bernardino County for use in Riverside County during the 2014 calendar year have been verified by the Watermaster as 60 acre-feet and 9,480 acre-feet, respectively. The individual work sheets for these determinations are included in Report of Watermaster, Volume 2-2014 titled *Verified Extractions From the Colton Basin Area* in Table No. 4, Volume 3-2014 titled *Verified Extractions From Riverside Basin Area Within San Bernardino County* in Table No. 4, and Volume 5-2014 titled *Distribution of Extractions From the San Bernardino Basin Area, Colton Basin Area, and Riverside Basin Area for Use Outside the San Bernardino Valley Municipal Water District* in Table No. 57.

#### **For Use Within San Bernardino Valley**

Provided minimum groundwater surface elevations within the Colton Basin Area and that portion of Riverside Basin Area within San Bernardino County are maintained by San Bernardino Valley, extractions from the Colton Basin Area and that portion of the Riverside Basin Area within San Bernardino County for use within San Bernardino Valley are not limited and therefore verification of such amounts are not specifically required by the Judgment. However, proper allocation of the total extractions from these areas for use in areas outside San Bernardino Valley necessitates the verification of these extractions. The individual work sheets for the 2014 verification and distribution of extractions are also included in Report of Watermaster, Volumes 2-2014, 3-2014 and 5-2014.

The extractions from the Colton Basin Area and the Riverside Basin Area in San Bernardino County for calendar years 1971 through 2014 are summarized in Table Nos. 4 and 5 following.

TABLE NO. 4  
 VERIFIED EXTRACTIONS FROM COLTON BASIN AREA  
 BY SAN BERNARDINO AND RIVERSIDE COUNTY ENTITIES  
 FOR USE IN EACH COUNTY  
 ANNUAL TOTALS  
 (All Values in Acre-Feet)

Calendar Year	Total from Basin	Extracted by San Bernardino County Entities		Total	Extracted by Riverside County Entities				Base Right for Use in Riverside County	1
					Used in San Bernardino County	Used in Riverside County				
Five-Year Base Period 1959-63 Avg.	11,731	2	8,235	2	3,496	115	3,381		3,381	
1971	11,388	2	8,363	2	3,025	248	2,777		3,381	
1972	10,414		7,532		2,882	271	2,611		3,381	
1973	7,844		6,982		862	247	615		3,381	
1974	8,906		7,169		1,737	273	1,464		3,381	
1975	11,083		6,821		4,262	389	3,873		3,381	
1976	11,558	2	8,605	2	2,953	265	2,688	2	3,381	
1977	8,777		6,061		2,716	447	2,269		3,381	
1978	7,663		6,430		1,233	338	895		3,381	
1979	7,194		5,224		1,970	288	1,682		3,381	
1980	5,686	2	5,610	2	76	2	76	2	3,381	
1981	6,348		6,175		173	0	173		3,381	
1982	6,499		5,450		1,049	68	981		3,381	
1983	4,735	2	4,603	2	132	37	95		3,381	
1984	8,987		7,441		1,546	205	1,341	2	3,381	
1985	10,149		7,142		3,007	764	2,243	2	3,381	
1986	10,035		7,651		2,384	806	1,578	2	3,381	
1987	13,175		11,054		2,121	565	1,556	2	3,381	
1988	13,552		11,453		2,099	392	1,707		3,381	
1989	14,103	2	11,799	2	2,304	299	2,005		3,381	
1990	17,571	2	15,551	2	2,020	368	1,652		3,381	
1991	14,323		12,282		2,041	206	1,835		3,381	
1992	16,750		15,068		1,682	227	1,455		3,381	
1993	14,977		14,581		396	0	396		3,381	
1994	15,813	2	14,652	2	1,161	95	1,066		3,381	
1995	17,308	2	16,693	2	615	126	489		3,381	
1996	17,040	2	16,385	2	655	78	577		3,381	
1997	14,498	2	13,276	2	1,222	81	1,141		3,381	
1998	10,972	2	10,689	2	283	32	251		3,381	
1999	12,564	2	11,430	2	1,134	222	912		3,381	
2000	13,123	2	12,837	2	286	2	73	2	213	2

TABLE NO. 4  
 VERIFIED EXTRACTIONS FROM COLTON BASIN AREA  
 BY SAN BERNARDINO AND RIVERSIDE COUNTY ENTITIES  
 FOR USE IN EACH COUNTY  
 ANNUAL TOTALS  
 (All Values in Acre-Feet)

Calendar Year	Total from Basin	Extracted by				Riverside County Entities				Base Right for Use in Riverside County	1
		San Bernardino County Entities		Total	Used in San Bernardino County		Used in Riverside County				
Five-Year Base Period 1959-63 Avg.	11,731	2	8,235	2	3,496	115		3,381		3,381	
2001	16,389	2	16,056	2	333	168	2	165	2	3,381	
2002	19,161	2	17,766	2	1,395	116	2	1,279	2	3,381	
2003	25,656	2	24,576	2	1,080	18	2	1,062	2	3,381	
2004	24,346	2	24,167	2	179	7	2	172	2	3,381	
2005	18,814	2	18,727	2	87	3	2	84	2	3,381	
2006	17,566	2	17,154	2	412	0		412		3,381	
2007	20,988	2	20,246	2	742	0		742		3,381	
2008	20,658	2	19,719	2	939	0		939		3,381	
2009	23,536		23,158		378	0		378		3,381	
2010	24,455		24,378		77	0		77		3,381	
2011	20,573		20,400		173	0		173		3,381	
2012	20,136	2	20,075		61	0		61		3,381	
2013	20,983	2	20,919		64	0		64		3,381	
2014	18,485		18,425		60	0		60		3,381	
2015											
2016											
2017											
2018											
2019											
2020											

*Note: See Report of Watermaster, Volume 2, Tables 4 & 5; and Volume 5, Table 38.*

*1 Extractions for use in Riverside County are limited to the verified extractions for the five-year Base Period 1959-63*

*2 Amount corrected during a subsequent year verification of extractions.*

TABLE NO. 4  
 VERIFIED EXTRACTIONS FROM COLTON BASIN AREA  
 BY SAN BERNARDINO AND RIVERSIDE COUNTY ENTITIES  
 FOR USE IN EACH COUNTY  
 FIVE-YEAR TOTALS  
 (All Values in Acre-Feet)

Five-Year Period	Total from Basin	Extracted by San Bernardino County Entities	Extracted by Riverside County Entities				Base Right for Use in Riverside County	1
			Total	Used in San Bernardino County	Used in Riverside County			
Five-Year Base Period								
1959-63	58,655	41,175	17,480	575	16,905		16,905	
1971-75	49,635	36,867	12,768	1,428	11,340		16,905	
1972-76	49,805	37,109	12,696	1,445	11,251		16,905	
1973-77	48,168	35,638	12,530	1,621	10,909		16,905	
1974-78	47,987	35,086	12,901	1,712	11,189		16,905	
1975-79	46,275	33,141	13,134	1,727	11,407		16,905	
1976-80	40,878	31,930	8,948	1,338	7,610		16,905	
1977-81	35,668	29,500	6,168	1,073	5,095		16,905	
1978-82	33,390	28,889	4,501	694	3,807		16,905	
1979-83	30,462	27,062	3,400	393	3,007		16,905	
1980-84	32,255	29,279	2,976	310	2,666		16,905	
1981-85	36,718	30,811	5,907	1,074	4,833		16,905	
1982-86	40,405	32,287	8,118	1,880	6,238		16,905	
1983-87	47,081	37,891	9,190	2,377	6,813		16,905	
1984-88	55,898	44,741	11,157	2,732	8,425		16,905	
1985-89	61,014	49,099	11,915	2,826	9,089		16,905	
1986-90	68,436	57,508	10,928	2,430	8,498		16,905	
1987-91	72,724	62,139	10,585	1,830	8,755		16,905	
1988-92	76,299	66,153	10,146	1,492	8,654		16,905	
1989-93	77,724	69,281	8,443	1,100	7,343		16,905	
1990-94	79,434	72,134	7,300	896	6,404		16,905	
1991-95	79,171	73,276	5,895	654	5,241		16,905	
1992-96	81,888	77,379	4,509	526	3,983		16,905	
1993-97	79,636	75,587	4,049	380	3,669		16,905	
1994-98	75,631	71,695	3,936	412	3,524		16,905	
1995-99	72,382	68,473	3,909	539	3,370		16,905	

TABLE NO. 4  
 VERIFIED EXTRACTIONS FROM COLTON BASIN AREA  
 BY SAN BERNARDINO AND RIVERSIDE COUNTY ENTITIES  
 FOR USE IN EACH COUNTY  
 FIVE-YEAR TOTALS  
 (All Values in Acre-Feet)

Five-Year Period	Total from Basin	Extracted by San Bernardino County Entities	Extracted by Riverside County Entities				Base Right for Use in Riverside County	1
			Total	Used in San Bernardino County	Used in Riverside County			
Five-Year Base Period								
1959-63	58,655	41,175	17,480	575	16,905		16,905	
1996-00	68,197	64,617	3,580	486	3,094		16,905	
1997-01	67,546	64,288	3,258	576	2,682		16,905	
1998-02	72,209	68,778	3,431	611	2,820		16,905	
1999-03	86,893	82,665	4,228	597	3,631		16,905	
2000-04	98,675	95,402	3,273	382	2,891		16,905	
2001-05	104,366	101,292	3,074	312	2,762		16,905	
2002-06	105,543	102,390	3,153	144	3,009		16,905	
2003-07	107,370	104,870	2,500	28	2,472		16,905	
2004-08	102,372	100,013	2,359	10	2,349		16,905	
2005-09	101,562	99,004	2,558	3	2,555		16,905	
2006-10	107,203	104,655	2,548	0	2,548		16,905	
2007-11	110,210	107,901	2,309	0	2,309		16,905	
2008-12	109,358	107,730	1,628	0	1,628		16,905	
2009-13	109,683	108,930	753	0	753		16,905	
2010-14	104,632	104,197	435	0	435		16,905	
2011-15								
2012-16								
2013-17								
2014-18								
2015-19								
2016-20								

1 Extractions for use in Riverside County are limited to the verified extractions for the five-year Base Period 1959-63  
 Note: Five-year totals corrected to reflect any corrections on Table 4, Page 1a of 2 and Page 1b of 2.



TABLE NO. 5  
 VERIFIED EXTRACTIONS FROM RIVERSIDE BASIN AREA  
 WITHIN SAN BERNARDINO COUNTY  
 BY SAN BERNARDINO AND RIVERSIDE COUNTY ENTITIES  
 FOR USE IN EACH COUNTY  
 ANNUAL TOTALS  
 (All Values in Acre-feet)

Calendar Year	Total from Basin	Extracted by San Bernardino County Entities	Extracted by Riverside County Entities							Base Right for Use in Riverside County	1
			Total	Used in San Bernardino County	Used in Riverside County						
Five-Year Base Period 1959-63 Avg.	33,729	9,609	24,120	3,035	21,085					21,085	
1971	29,070	8,748	20,322	2,214	18,108					21,085	
1972	28,148	7,963	20,185	1,597	18,588					21,085	
1973	21,809	6,490	15,319	1,333	13,986					21,085	
1974	21,881	6,899	14,982	1,399	13,583					21,085	
1975	22,701	6,513	16,188	1,225	14,963					21,085	
1976	24,705	6,898	17,807	1,666	16,141					21,085	
1977	23,506	7,089	16,417	1,985	14,432					21,085	
1978	17,216	6,261	10,955	1,900	9,055					21,085	
1979	20,024	7,062	12,962	2,370	10,592					21,085	
1980	18,533	5,932	12,601	3,410	9,191					21,085	
1981	23,611	6,811	16,800	3,733	13,067					21,085	
1982	17,349	2 5,402	11,947	2 3,483	2 8,464					21,085	
1983	11,904	2 5,204	6,700	2 2,925	2 3,775					21,085	
1984	17,161	5,648	11,513	1,953	9,560					21,085	
1985	19,392	2 6,048	13,344	2,143	11,201					21,085	
1986	17,337	7,401	9,936	2 1,245	8,691					21,085	
1987	15,803	2 7,374	8,429	717	7,712					21,085	
1988	16,933	2 7,237	9,696	2 773	8,923					21,085	
1989	25,557	7,781	17,776	1,619	16,157					21,085	
1990	26,371	7,872	18,499	2,628	15,871					21,085	
1991	28,011	6,472	21,539	2,984	18,555					21,085	
1992	21,959	2 5,652	16,307	1,579	14,728					21,085	
1993	21,866	5,428	16,438	1,735	14,703					21,085	
1994	19,661	5,711	13,950	1,746	12,204					21,085	
1995	23,865	2 6,223	17,642	1,696	15,946					21,085	
1996	26,698	2 11,986	14,712	1,308	13,404					21,085	
1997	30,284	2 17,887	12,397	2 1,358	2 11,039					21,085	
1998	33,116	22,112	11,004	2 1,330	2 9,674					21,085	
1999	35,482	3 21,899	13,583	2 1,867	2 11,716					21,085	
2000	36,124	3,4 23,634	12,490	2 1,121	2 11,369					21,085	

TABLE NO. 5  
 VERIFIED EXTRACTIONS FROM RIVERSIDE BASIN AREA  
 WITHIN SAN BERNARDINO COUNTY  
 BY SAN BERNARDINO AND RIVERSIDE COUNTY ENTITIES  
 FOR USE IN EACH COUNTY  
 ANNUAL TOTALS  
 (All Values in Acre-feet)

Calendar Year	Total from Basin		Extracted by San Bernardino County Entities		Extracted by Riverside County Entities						
					Total	Used in San Bernardino County		Used in Riverside County		Base Right for Use in Riverside County	1
Five-Year Base Period 1959-63 Avg.	33,729		9,609		24,120		3,035		21,085		21,085
2001	31,423	2,4	21,029	2,3	10,394	2	1,281	2	9,113	2	21,085
2002	28,042	3,4	13,926	3	14,116		2,441		11,675		21,085
2003	27,648	3,4	16,713	3	10,935		1,699	2	9,236	2	21,085
2004	24,779	3,4	15,558	3	9,221		2,499		6,722		21,085
2005	29,447	3,4	18,177	3	11,270		1,870		9,400		21,085
2006	30,045	2,3	16,037	2,3	14,008		1,139		12,869		21,085
2007	27,491	3	16,963	3	10,528		1,925		8,603		21,085
2008	30,678		16,097	2	14,581	2	1,447		13,134	2	21,085
2009	34,180		15,034	2	19,146	2	2,354		16,792	2	21,085
2010	29,125		13,783	2	15,342	2	2,657		12,685	2	21,085
2011	29,590		14,104		15,486		2,210		13,276		21,085
2012	29,137		11,457		17,680		2,067		15,613		21,085
2013	23,953		9,487		14,466		1,866		12,600		21,085
2014	20,550		9,158		11,392		1,912		9,480		21,085
2015											
2016											
2017											
2018											
2019											
2020											

1 Extractions for use in Riverside County are limited to the verified extractions for five-year Base Period 1959-63.

2 Amounts corrected during a subsequent year verification of extractions.

Note: See Report of Watermaster, Volume 3, Tables 4 & 5; and Volume 5, Table 52-A.

3 Roquet, Harry V. reopened and filed 10 years of previous extractions for well recordation 3601422.

4 Arrowhead Regional Medical Center, new well 3603947, backfiled on First Notice.

TABLE NO. 5  
 VERIFIED EXTRACTIONS FROM RIVERSIDE BASIN AREA  
 WITHIN SAN BERNARDINO COUNTY  
 BY SAN BERNARDINO AND RIVERSIDE COUNTY ENTITIES  
 FOR USE IN EACH COUNTY  
 FIVE-YEAR TOTALS  
 (All Values in Acre-Feet)

Five-Year Period	Total from Basin	Extracted by San Bernardino County Entities	Extracted by Riverside County Entities				Base Right for Use in Riverside County	1
			Total	Used in San Bernardino County	Used in Riverside County			
Five-Year Base Period								
1959-63	168,645	48,045	120,600	15,175	105,425		105,425	
1971-75	123,609	36,613	86,996	7,768	79,228		105,425	
1972-76	119,244	34,763	84,481	7,220	77,261		105,425	
1973-77	114,602	33,889	80,713	7,608	73,105		105,425	
1974-78	110,009	33,660	76,349	8,175	68,174		105,425	
1975-79	108,152	33,823	74,329	9,146	65,183		105,425	
1976-80	103,984	33,242	70,742	11,331	59,411		105,425	
1977-81	102,890	33,155	69,735	13,398	56,337		105,425	
1978-82	96,733	31,468	65,265	14,896	50,369		105,425	
1979-83	91,421	30,411	61,010	15,921	45,089		105,425	
1980-84	88,558	28,997	59,561	15,504	44,057		105,425	
1981-85	89,417	29,113	60,304	14,237	46,067		105,425	
1982-86	83,143	29,703	53,440	11,749	41,691		105,425	
1983-87	81,597	31,675	49,922	8,983	40,939		105,425	
1984-88	86,626	33,708	52,918	6,831	46,087		105,425	
1985-89	95,022	35,841	59,181	6,497	52,684		105,425	
1986-90	102,001	37,665	64,336	6,982	57,354		105,425	
1987-91	112,675	36,736	75,939	8,721	67,218		105,425	
1988-92	118,831	35,014	83,817	9,583	74,234		105,425	
1989-93	123,764	33,205	90,559	10,545	80,014		105,425	
1990-94	117,868	31,135	86,733	10,672	76,061		105,425	
1991-95	115,362	29,486	85,876	9,740	76,136		105,425	
1992-96	114,049	35,000	79,049	8,064	70,985		105,425	
1993-97	122,374	47,235	75,139	7,843	67,296		105,425	
1994-98	133,624	63,919	69,705	7,438	62,267		105,425	
1995-99	149,445	80,107	69,338	7,559	61,779		105,425	

TABLE NO. 5  
 VERIFIED EXTRACTIONS FROM RIVERSIDE BASIN AREA  
 WITHIN SAN BERNARDINO COUNTY  
 BY SAN BERNARDINO AND RIVERSIDE COUNTY ENTITIES  
 FOR USE IN EACH COUNTY  
 FIVE-YEAR TOTALS  
 (All Values in Acre-Feet)

Five-Year Period	Total from Basin	Extracted by San Bernardino County Entities	Extracted by Riverside County Entities		Base Right for Use in Riverside County	1
			Total	Used in San Bernardino County	Used in Riverside County	
Five-Year Base Period 1959-63	168,645	48,045	120,600	15,175	105,425	105,425
1996-00	161,704	97,518	64,186	6,984	57,202	105,425
1997-01	166,429	106,561	59,868	6,957	52,911	105,425
1998-02	164,187	102,600	61,587	8,040	53,547	105,425
1999-03	158,719	97,201	61,518	8,409	53,109	105,425
2000-04	148,016	90,860	57,156	9,041	48,115	105,425
2001-05	141,339	85,403	55,936	9,790	46,146	105,425
2002-06	139,961	80,411	59,550	9,648	49,902	105,425
2003-07	139,410	83,448	55,962	9,132	46,830	105,425
2004-08	142,440	82,832	59,608	8,880	50,728	105,425
2005-09	151,841	82,308	69,533	8,735	60,798	105,425
2006-10	151,519	77,914	73,605	9,522	64,083	105,425
2007-11	151,064	75,981	75,083	10,593	64,490	105,425
2008-12	152,710	70,475	82,235	10,735	71,500	105,425
2009-13	145,985	63,865	82,120	11,154	70,966	105,425
2010-14	132,355	57,989	74,366	10,712	63,654	105,425
2011-15						
2012-16						
2013-17						
2014-18						
2015-19						
2016-20						

*1 Extractions for use in Riverside County are limited to the verified extractions for the five-year Base Period 1959-63  
 Note: Five-year totals corrected to reflect any corrections on Table 5, page 1 of 2*

### Minimum Groundwater Surface Elevations

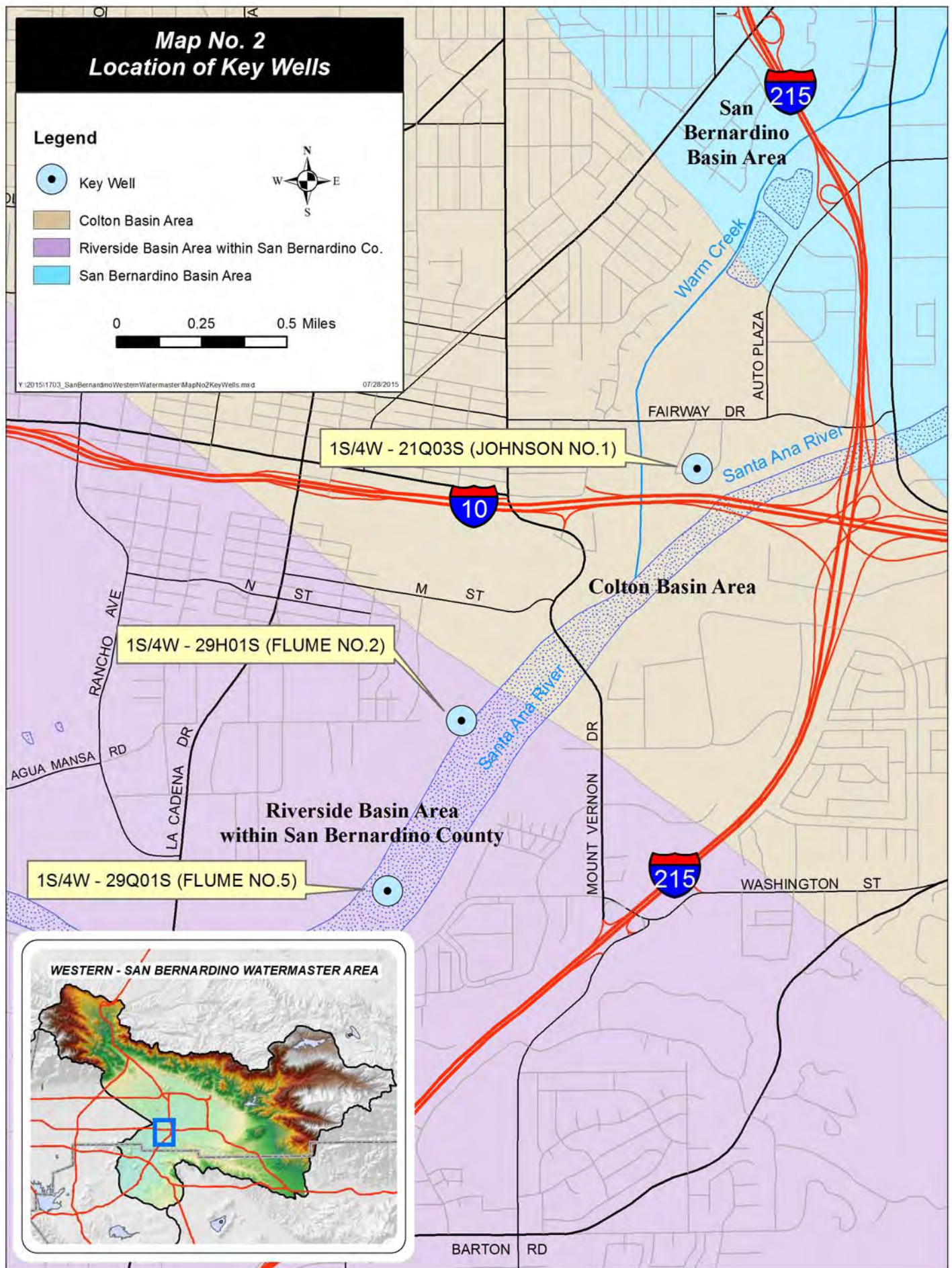
Extractions from the Colton Basin Area and that portion of the Riverside Basin Area within San Bernardino County for use in San Bernardino Valley are not limited, provided that the average static groundwater surface elevation as measured at wells numbered 1S/4W-21Q03S, 1S/4W-29H01S, and 1S/4W-29Q01S is not less than 822.04 feet, as set forth in the Judgment. This elevation is determined each year by averaging the lowest static groundwater elevation occurring in each of the three wells at or near the same time of the year.

A map showing the locations and hydrographs of the calendar year 2014 static groundwater surface elevations in the three key wells are shown on the following pages. Data pertinent to the key wells as well as the records of historic water surface measurements are included in Report of Watermaster, Volume 8-2014 titled *Groundwater Surface Elevations in Wells Numbered 1S/4W-21Q03S, 1S/4W-29H01S, and 1S/4W-29Q01S Located Within the Colton Basin Area and Riverside Basin Area in San Bernardino County through December, 2014*.

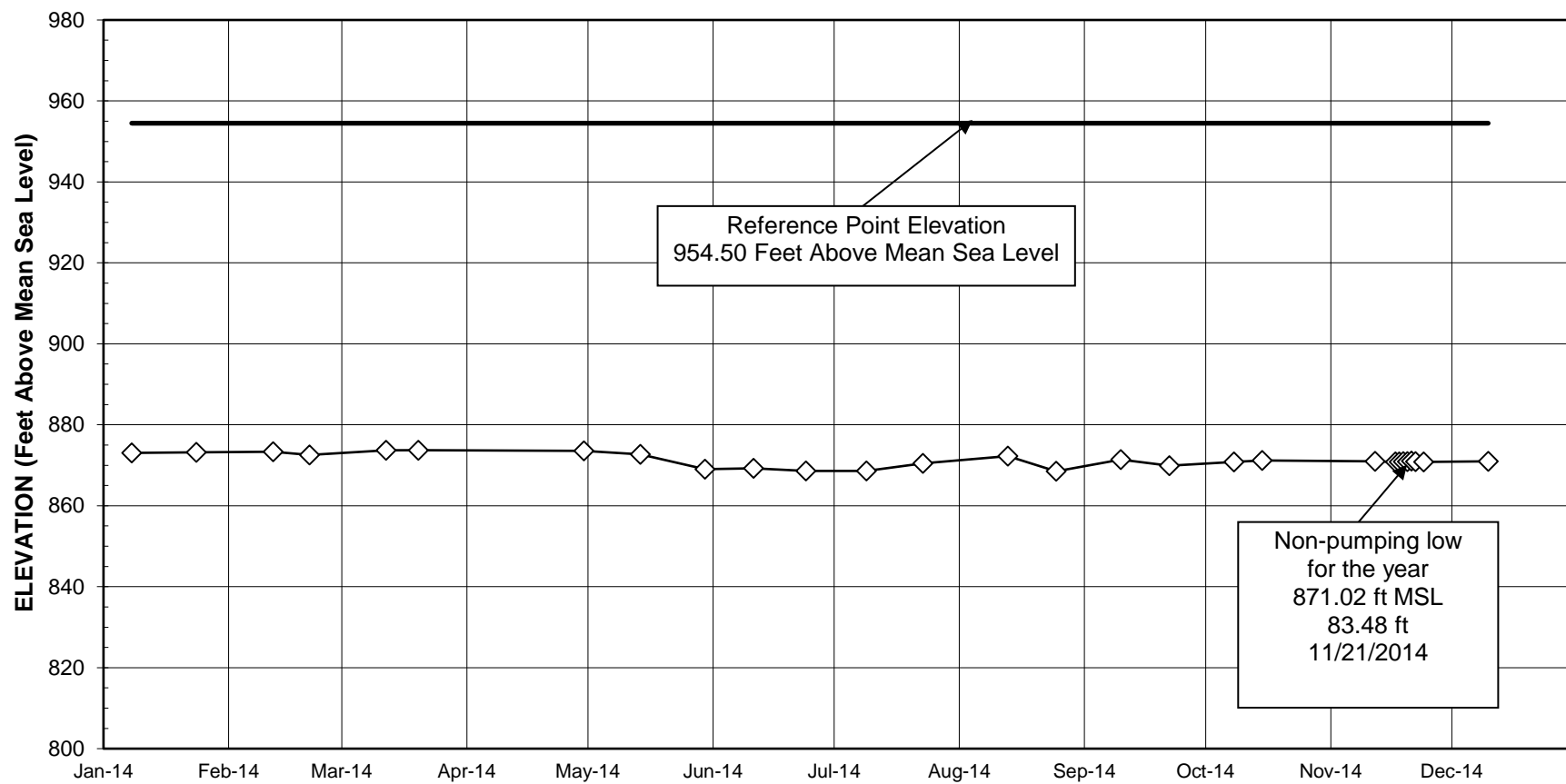
The lowest static groundwater surface elevation measured in each of the three wells during calendar year 2014 is as follows:

<u>Well Number</u>	<u>Date of Measurement</u>	<u>Elevation of Water Surface</u>
1S/4W-21Q03S (Johnson #1)	November 21, 2014	871.02
1S/4W-29H01S (Flume #2)	November 22, 2014	816.34
1S/4W-29Q01S (Flume #5)	November 22, 2014	808.00
Average		831.79

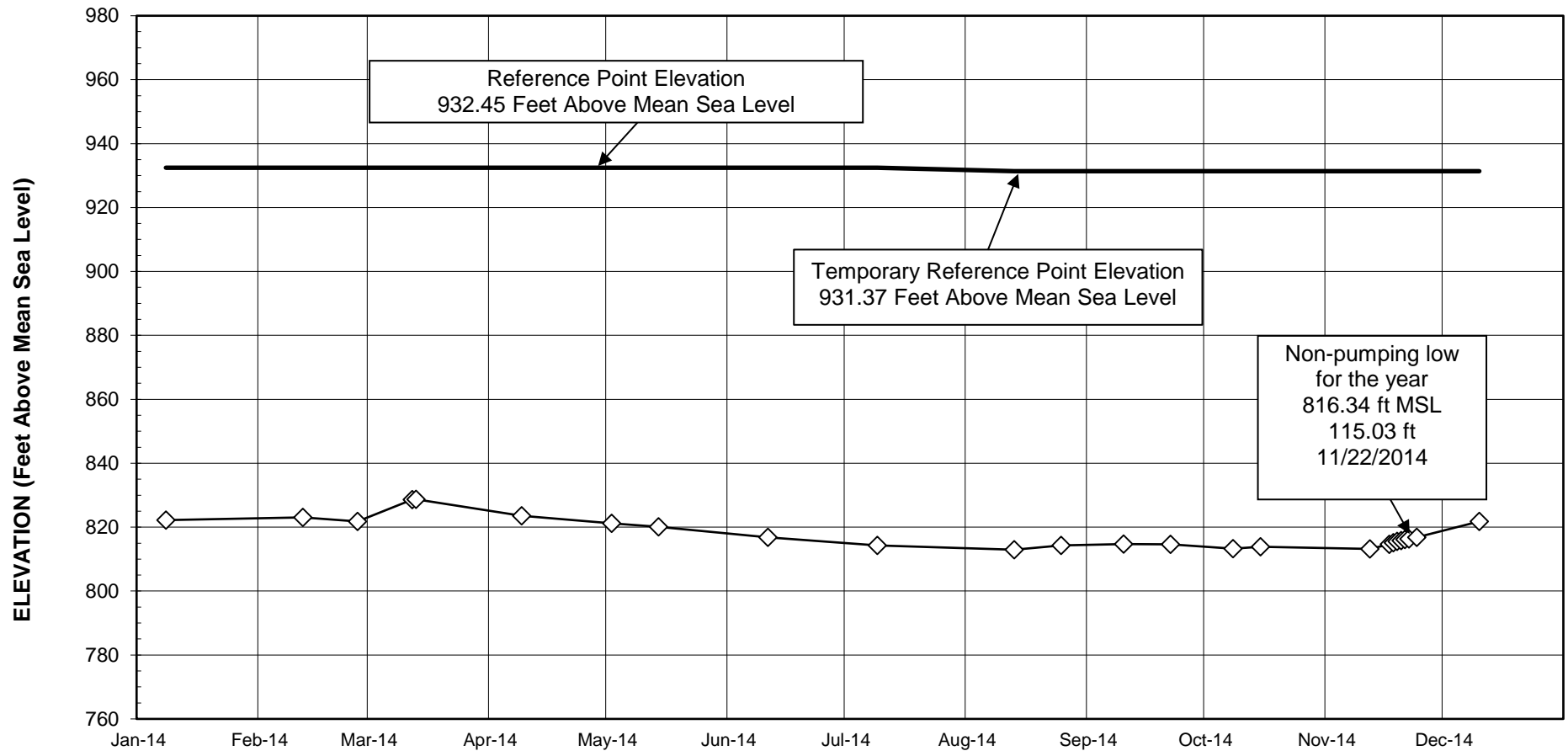
Thus, the lowest average fall water surface elevation for calendar year 2014 is 3.68 feet lower than the 2013 average of 835.47 and 9.75 feet higher than the 1963 average of 822.04.



**FIGURE 1**  
**GROUNDWATER SURFACE ELEVATIONS**  
**1S/4W-21Q03S**  
**JOHNSON NO. 1 WELL**  
**2014**

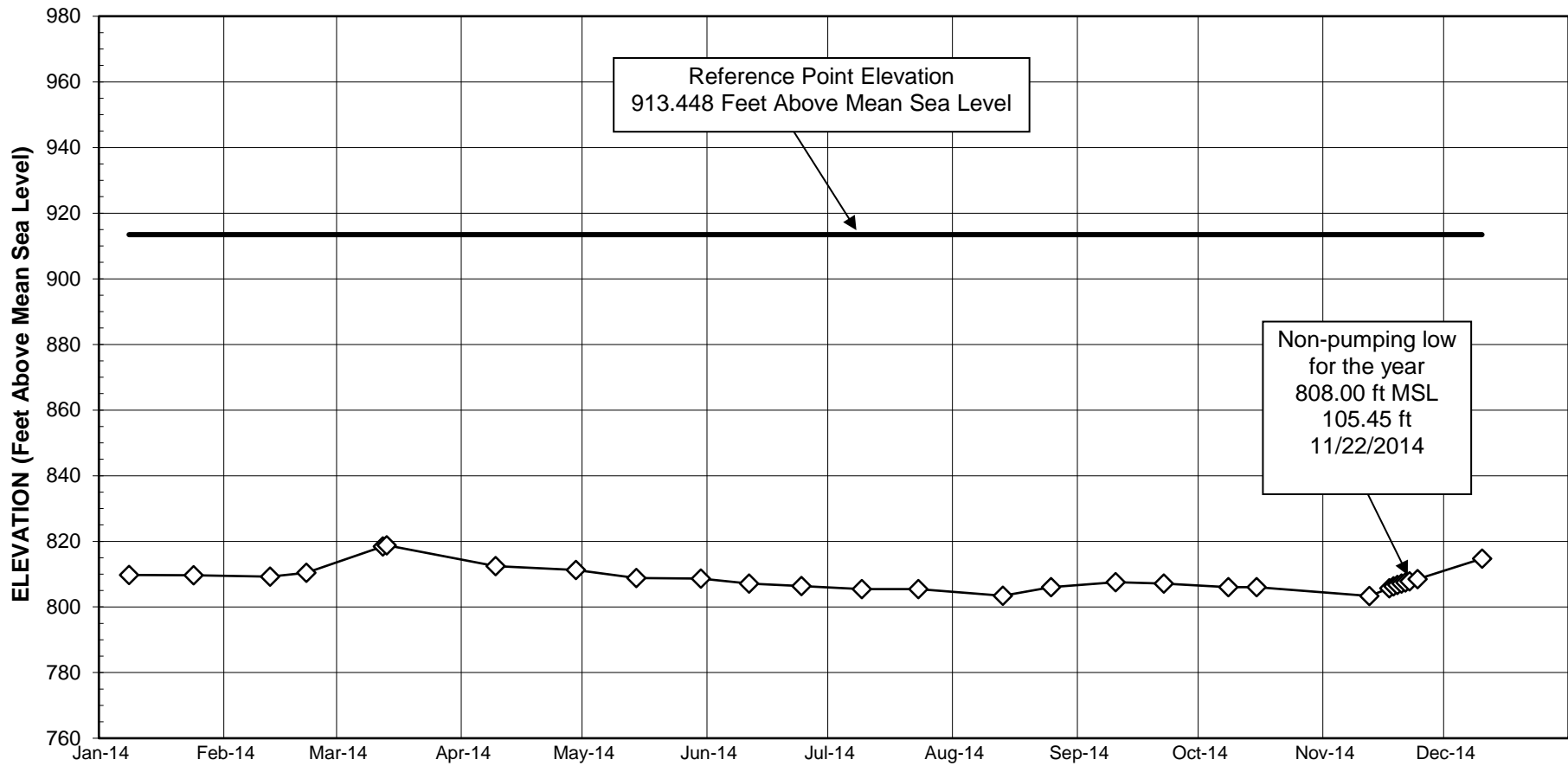


**FIGURE 2**  
**GROUNDWATER SURFACE ELEVATIONS**  
**1S/4W-29H01S**  
**FLUME NO. 2 WELL**  
**2014**





**FIGURE 3**  
**GROUNDWATER SURFACE ELEVATIONS**  
**1S/4W-29Q01S**  
**FLUME NO. 5 WELL**  
**2014**



## **CHAPTER VI**

**EXTRACTIONS FROM THE PORTION OF  
RIVERSIDE BASIN AREA WITHIN RIVERSIDE COUNTY  
WHICH IS TRIBUTARY TO THE RIVERSIDE NARROWS**

## **CHAPTER VI**

### **EXTRACTIONS FROM THE PORTION OF RIVERSIDE BASIN AREA WITHIN RIVERSIDE COUNTY WHICH IS TRIBUTARY TO THE RIVERSIDE NARROWS**

#### **Extractions**

The extractions from that portion of the Riverside Basin area in Riverside County which is tributary to the Riverside Narrows for use within Riverside County for calendar year 2014 have been verified by the Watermaster as 31,245 acre-feet. The individual work sheets are included in Report of Watermaster, Volume 4-2014 titled *Verified Extractions from Riverside Basin Area Within Riverside County* and are summarized in Table No. 6 following.

TABLE NO. 6  
 VERIFIED EXTRACTIONS FROM RIVERSIDE BASIN AREA  
 WITHIN RIVERSIDE COUNTY  
 FOR USE IN RIVERSIDE COUNTY  
 ANNUAL TOTALS  
 (All Values in Acre-Feet)

Page 1a of 2

Calendar Year	Total Extractions		Base Right for Use in Riverside County
Five-Year Base Period 1959-63 Avg.	29,633		29,633
1971	30,942	1	29,633
1972	37,804	2	29,633
1973	33,094		29,633
1974	38,304	2	29,633
1975	28,285		29,633
1976	31,565		29,633
1977	28,226		29,633
1978	24,576	3	29,633
1979	25,512		29,633
1980	30,206	3	29,633
1981	30,243	3	29,633
1982	20,365	3	29,633
1983	22,991	3	29,633
1984	32,466	3	29,633
1985	23,970	3	29,633
1986	24,549	3	29,633
1987	24,202	3	29,633
1988	24,470	3	29,633
1989	34,417	3	29,633
1990	31,760	3	29,633
1991	29,364	3	29,633
1992	26,538	3	29,633
1993	26,505		29,633
1994	28,125		29,633
1995	22,580		29,633
1996	24,906		29,633
1997	29,128		29,633
1998	28,558		29,633
1999	33,837		29,633
2000	32,263		29,633

TABLE NO. 6  
VERIFIED EXTRACTIONS FROM RIVERSIDE BASIN AREA  
WITHIN RIVERSIDE COUNTY  
FOR USE IN RIVERSIDE COUNTY  
ANNUAL TOTALS  
(All Values in Acre-Feet)

Page 1b of 2

Calendar Year	Total Extractions	Base Right for Use in Riverside County
Five-Year Base Period 1959-63 Avg.	29,633	29,633
2001	33,656	29,633
2002	31,013	29,633
2003	30,957	29,633
2004	35,530	29,633
2005	32,737	29,633
2006	31,026	29,633
2007	38,237 <sup>2,3</sup>	29,633
2008	31,205 <sup>3</sup>	29,633
2009	35,519	29,633
2010	29,077	29,633
2011	30,510 <sup>3</sup>	29,633
2012	28,049	29,633
2013	30,070	29,633
2014	31,245	29,633
2015		
2016		
2017		
2018		
2019		
2020		

*1 Amount corrected during verification of 1972 extractions.*

*2 These extractions exceeded the Base Right plus peaking allowance of 20% by 2,244 acre-feet in 1972, 2,744 acre-feet in 1974 and 2,677 acre-feet in 2007*

*3 Amount corrected during subsequent year verification of extractions*

*Note: See Report of Watermaster, Volume 4, Table 4; Volume 5, Table 56.*

TABLE NO. 6  
 VERIFIED EXTRACTIONS FROM RIVERSIDE BASIN AREA  
 WITHIN RIVERSIDE COUNTY  
 FOR USE IN RIVERSIDE COUNTY  
 FIVE-YEAR TOTALS  
 (All Values in Acre-Feet)

Page 2a of 2

Five-Year Period	Total Extractions	Base Right for Use in Riverside County
Five-Year Base Period		
1959-63	148,165	148,165
1971-75	168,429	148,165
1972-76	169,052	148,165
1973-77	159,474	148,165
1974-78	150,956	148,165
1975-79	138,164	148,165
1976-80	140,085	148,165
1977-81	138,763	148,165
1978-82	130,902	148,165
1979-83	129,317	148,165
1980-84	136,271	148,165
1981-85	130,035	148,165
1982-86	124,341	148,165
1983-87	128,178	148,165
1984-88	129,657	148,165
1985-89	131,608	148,165
1986-90	139,398	148,165
1987-91	144,213	148,165
1988-92	146,549	148,165
1989-93	148,584	148,165
1990-94	142,292	148,165
1991-95	133,112	148,165
1992-96	128,654	148,165
1993-97	131,244	148,165
1994-98	133,297	148,165
1995-99	139,009	148,165

TABLE NO. 6  
 VERIFIED EXTRACTIONS FROM RIVERSIDE BASIN AREA  
 WITHIN RIVERSIDE COUNTY  
 FOR USE IN RIVERSIDE COUNTY  
 FIVE-YEAR TOTALS  
 (All Values in Acre-Feet)

Page 2b of 2

Five-Year Period	Total Extractions	Base Right for Use in Riverside County
Five-Year Base Period		
1959-63	148,165	148,165
1996-00	148,692	148,165
1997-01	157,442	148,165
1998-02	159,327	148,165
1999-03	161,726	148,165
2000-04	163,419	148,165
2001-05	163,893	148,165
2002-06	161,263	148,165
2003-07	168,487	148,165
2004-08	168,735	148,165
2005-09	168,724	148,165
2006-10	165,064	148,165
2007-11	164,548	148,165
2008-12	154,360	148,165
2009-13	153,225	148,165
2010-14	148,951	148,165
2011-15		
2012-16		
2013-17		
2014-18		
2015-19		
2016-20		

*Note: 5-year totals corrected to reflect any corrections on Table 6, page 1 of 2*

## Return Flows

The Judgment provides for additional replenishment by Western if the urbanization of the Riverside Basin Area Within Riverside County results in a diminution of the return flow accruing from the extractions described above and which would have otherwise accrued to the rising water at Riverside Narrows. The extent of such diminution is determined by the permanent reduction in the irrigated areas within the various water service organizations delivering water to the areas as compared to the areas served at the time the Judgment was entered. To the extent that such reduction causes an increase in the urban uses requiring sewage disposal through the Riverside Treatment Plant (the effluent of which bypasses the Riverside Narrows), Western may, from time to time, be required to provide replenishment. Such irrigated acreages in the Riverside Basin Area Within Riverside County at the time the Judgment was entered, from which return flow was tributary to Riverside Narrows, are set forth in Table D-5 of Appendix "D" of the Judgment and are as follows:

IRRIGATED ACREAGE IN RIVERSIDE BASIN AREA  
IN RIVERSIDE COUNTY PRESENTLY TRIBUTARY TO  
RIVERSIDE NARROWS WHICH UPON CONVERSION  
TO URBAN USES REQUIRING SEWAGE DISPOSAL  
THROUGH THE RIVERSIDE TREATMENT PLANT WILL  
BE DISCHARGED TO THE RIVER BELOW  
RIVERSIDE NARROWS

<u>Entity Serving Acreage</u>	<u>Acres</u>
Gage Canal Company	1,752
Alta Mesa Water Company	65
East Riverside Water Company	926
Riverside Highland Water Company	<u>1,173</u>
TOTAL	3,916

The service areas of the companies listed in Table D-5 were investigated. Field investigation was not completed during calendar year 2014.



The number of dwelling units connected to the City of Riverside wastewater disposal system and a discharge unit factor of 0.22 acre-feet per year per dwelling unit was used to determine the wastewater discharged to the river from the converted lands. These data have been summarized for the years 2010 through 2014 and are shown on Table No. 7.

TABLE NO. 7  
REDUCTION IN RETURN FLOW CONTRIBUTING TO BASE FLOW  
AT RIVERSIDE NARROWS  
RESULTING FROM CONVERSION OF AGRICULTURAL USES  
OF WATER TO DOMESTIC USES CONNECTED TO A SEWAGE SYSTEM  
DISCHARGING TO THE RIVER BELOW RIVERSIDE NARROWS  
(All Values in Acre-Feet)

Calendar Year	Gage Canal	Alta Mesa	East Riverside	Riverside Highland	Total
2010	257	38	284	0	579
2011	257	38	284	0	579
2012	257	38	284	0	579
2013	257	38	284	0	579
2014	257	38	284	0	579
<b>TOTAL</b>	<b>1,285</b>	<b>190</b>	<b>1,420</b>	<b>0</b>	<b>2,895</b>

Table No. 7 shows that in 2014 the reduction in return flow contributing to Base Flow at Riverside Narrows resulting from the conversion of land from agricultural use to urban uses in the Riverside Basin Area was 579 acre-feet. Western's obligation associated with the land use conversion and resulting replenishment requirements are shown on Table No. 16.

## **CHAPTER VII**

**EXTRACTIONS FROM THE SAN BERNARDINO BASIN AREA,  
COLTON BASIN AREA, AND RIVERSIDE BASIN AREA  
FOR USE WITHIN WESTERN ON LANDS THAT ARE NOT  
TRIBUTARY TO THE RIVERSIDE NARROWS**

## **CHAPTER VII**

### **EXTRACTIONS FROM THE SAN BERNARDINO BASIN AREA, COLTON BASIN AREA, AND RIVERSIDE BASIN AREA FOR USE WITHIN WESTERN ON LANDS THAT ARE NOT TRIBUTARY TO THE RIVERSIDE NARROWS**

The extractions from the San Bernardino, Colton and Riverside Basin Areas which were delivered for use within Western on lands not tributary to the Riverside Narrows during calendar year 2014 were verified by the Watermaster to be 40,605 acre-feet. Said amount is summarized by entity on Table No. 8.

The detailed work sheets for this determination are contained in Report of Watermaster, Volume 6-2014, titled *Verified Extractions from the San Bernardino Basin Area, Colton Basin Area, and Riverside Basin Area for Use Within Western on Lands Not Tributary to the Riverside Narrows*.

#### **Annual Report Modifications Table No. 8**

During the period 1981 through 2004 agreements between Western and San Bernardino Valley were entered in all but four years to address the high groundwater problem in the San Bernardino Basin Area. It was agreed that there was an existing temporary surplus of natural groundwater supply in the Basin. Additional extractions were made available to Plaintiffs and users other than Plaintiffs in order to help mitigate the problem. The agreements also provided that the replenishment obligations in Judgment Paragraph X would not apply to such additional extractions.

Judgment Paragraph X provides that Western is obligated to provide an amount of replenishment equal to the loss of return flow from the export of water extracted by users from within Western and delivered for use on lands not

tributary to the Riverside Narrows that is in excess of the amount exported in the base period 1959 through 1963. Such excess is referred to as new export.

Table No. 8 is an accounting of the total export by entities within Western. Report of Watermaster, Volume 6 (referenced above) is the source of detailed worksheets for this determination.

In the reports for calendar years 1982 through 2011 the deduction of additional extractions from the San Bernardino Basin Area pursuant to the high groundwater mitigation agreements has been made in Column 15 of Table No. 1A in Report of Watermaster, Volume 6. In 2013, Volume 6 was modified by deleting the deduction in Table No. 1A and inserting the deduction in Annual Report Table No. 14. The new line in Table No. 14 is titled Additional New Export. This change was made to improve readability and understanding by causing Western's new export credit or obligation to be accounted for in a manner consistent with similar new export accounting for San Bernardino Valley.

In the reports for calendar years 1982 through 2011 the deduction of additional extractions pursuant to the high groundwater mitigation agreements by users other than Plaintiffs was accomplished through footnotes in Table No. 17. In order to make the table easier to read and understand, the data in the Table No. 17 footnotes were moved to Table No. 15A. The new line in Table No. 15A is also titled Additional New Export.

By eliminating the deduction of high groundwater agreement related additional extractions from Report of Watermaster, Volume 6, such extractions by Western users can now be deducted from total new export in Table No. 14 in the same way additional extractions by users other than Plaintiffs are deducted in Table No. 15A.

During the process of eliminating high groundwater related additional extractions from Report of Watermaster, Volume 6, and adding them to

Table No. 14, it was discovered that not all of the additional extractions had been deducted in Volume 6. As a result, the total additional extractions deducted in Table No. 14 are greater than the extractions deleted from Report of Watermaster, Volume 6.

In April 2014 the Report of Watermaster, Volume 6 was modified to include in Section II the determination of the amount of return flow from imported water used in Riverside County which contributes to base flow at Riverside Narrows. Western receives credit for such return flow against any future replenishment obligations pursuant to Judgment Paragraph XI(b)3. Judgment Paragraph XI(a) provides that the credit for return flow is the calculated amount of return flow adjusted upward or downward depending on the quality of the return flow, using the same quality adjustment formula used at Riverside Narrows as set forth in the Orange County Judgment.

There are currently two methods of delivering imported water in Riverside County to areas tributary to Riverside Narrows. They are as follows:

- 1) Direct delivery to Western's retail service area and to the City of Riverside from the Henry J. Mills Treatment Plant which treats State Water Project water, or
- 2) Delivery to Western or any Plaintiff party, groundwater from the San Bernardino Basin Area pursuant to the 2004 Judgment Paragraph VI(b)6 agreement that provides for 6,000 acre-feet of additional water extraction in exchange for Western's purchase of a like amount of recharge water.

From 1971 to 1978 direct deliveries, cited above as the first method, consisted of Colorado River Water and as a result, the amount of return flow was adjusted downward due to the high TDS concentration of the return flow. In 1979, low TDS State Water Project water became available to both Western and the

City of Riverside and therefore the return flow credit is greater than the actual return flow.

Using the second method cited above, in 2007 the City of Riverside extracted 2,459 acre-feet of the imported water recharge made available as additional water pursuant to the 2004 Judgment Paragraph VI(b)6 agreement referenced above. Prior to 2013, this additional water was deducted from export in Column 15, Table No. 1A of Report of Watermaster, Volume 6. In 2013, this additional extraction was also deleted from Volume 6 and inserted into Table No. 16 as a credit. The April 2014 modification causes the extraction to be a part of the determination of Return From Imported Water credit shown on Table No. 16.

In the future, Watermaster plans to further modify the Report of Watermaster, Volume 6, to include the opportunity to calculate credit for Replenishment and Storm Flow Conservation including the quality adjustment and the obligation associated with Land Use Conversion. All of these determinations are used in determining Western's Net Accumulated (Credit) or Obligation in Table No. 16.

TABLE NO. 8  
 VERIFIED EXTRACTIONS FROM  
 THE SAN BERNARDINO BASIN AREA,  
 THE COLTON BASIN AREA, AND THE RIVERSIDE BASIN AREA  
 FOR USE WITHIN WESTERN ON LANDS THAT ARE NOT TRIBUTARY  
 TO THE RIVERSIDE NARROWS  
 (All Values in Acre-Feet)

Entities Within WMWD	Annual 1959-63 Average	Calendar Years				
		2010 Verified Delivery	2011 Verified Delivery	2012 Verified Delivery	2013 Verified Delivery	2014 Verified Delivery
City of Riverside, including Irrigation Division water extracted by the Gage Canal Company and former Riverside Water Company	23,836	31,155	33,415	34,412	35,390	35,159
Meeks & Daley Water Company, Agua Mansa Water Company, and Temescal Water Company, including water received from City of Riverside	13,229	5,178	5,473	3,721	4,161	3,142
Riverside Highland Water Company	0	0	0	0	386	0
Extractions delivered by West Riverside Canal received from Twin Buttes Water Company, La Sierra Water Company, Agua Mansa Water Company, Salazar Water Company, West Riverside 350 Inch Water Company, and Jurupa Water Company	4,903	475	456	503	516	549
Jurupa Community Services District	531	0	0	0	0	0
Rubidoux Community Services District	36	1,421	1,504	1,452	1,453	1,755
TOTAL	42,535	38,229	40,848	40,088	41,906	40,605

Note: See Report of Watermaster, Volume 6, Table A.

## **CHAPTER VIII**

**EXTRACTIONS FROM THE  
SAN BERNARDINO BASIN AREA  
FOR USE ON LANDS NOT WITHIN WESTERN  
NOR TRIBUTARY TO THE RIVERSIDE NARROWS  
AND FOR USE ON LANDS WITHIN  
THE COLTON AND RIVERSIDE BASIN AREAS**



## **CHAPTER VIII**

### **EXTRACTIONS FROM THE SAN BERNARDINO BASIN AREA FOR USE ON LANDS NOT WITHIN WESTERN NOR TRIBUTARY TO THE RIVERSIDE NARROWS AND FOR USE ON LANDS WITHIN THE COLTON AND RIVERSIDE BASIN AREAS**

#### **Deliveries to Chino Basin**

Deliveries of extractions from the San Bernardino Basin Area for use on lands not within Western nor tributary to the Riverside Narrows (lands within Chino Basin) in amounts greater than deliveries in the 1959-63 base period results in a loss of return flow to the San Bernardino Basin Area. The amount delivered in the base period was 11,701 acre-feet.

The extractions from the San Bernardino Basin Area which were delivered for use on lands not within Western nor tributary to the Riverside Narrows (Chino Basin) during calendar year 2014 were verified by the Watermaster to be 11,342 acre-feet. Said amount is summarized by entity on Table No. 9A.

The detailed work sheets for this determination and for deliveries to areas other than Chino Basin and to the Colton and Riverside Basin Areas are contained in Report of Watermaster, Volume 7-2014, titled *Verified Extractions from the San Bernardino Basin Area for Use on Lands Not Within Western Nor Tributary to the Riverside Narrows and for Use on Lands Within the Colton and Riverside Basin Areas*.

#### **Deliveries to Areas Other Than Chino Basin**

The Judgment provides for replenishment by San Bernardino Valley to the extent exports are made from the San Bernardino Basin Area for use in the Yucaipa, San Timoteo, Oak Glen, and Beaumont Basins.

The results of the verification of the base period production from the San Bernardino Basin Area indicated that such exports were not made during the 1959-63 base period. The verification of production for the 2014 calendar year indicated that no water was exported to the Yucaipa, San Timoteo, Oak Glen or Beaumont Basins.

#### **Deliveries to Lands Within the Colton and Riverside Basin Areas**

Deliveries of extractions from the San Bernardino Basin Area to the Colton and Riverside Basin Areas in amounts greater than deliveries in the 1959-63 base period also result in a loss of return flow to the San Bernardino Basin Area. The amount delivered in the base period was 17,837 acre-feet.

The extractions from the San Bernardino Basin Area, which were delivered for use on lands within the Colton and Riverside Basin Areas during calendar year 2014, were verified by the Watermaster to be 22,026 acre-feet. Said amount is summarized by entity on Table No. 9B.

#### **Annual Report Modifications Table Nos. 9A and 9B and Volume 7**

In 1992 the Court approved amendments to the Judgment that primarily addressed changes in the way calculations were made for export of extractions by users in San Bernardino County to areas not tributary to Riverside Narrows. Prior to 1992, the Judgment provided for replenishment of actual extractions in excess of the Adjusted Right pursuant to Paragraph VI(c). The Judgment also provided, in Paragraph X, for replenishment equal to the amount of extractions exported from San Bernardino Valley to Chino Basin in excess of the amount exported in the base period 1959 through 1963. Such excess export is referred to as new export.

By 1990, it was apparent to Watermaster that the literal interpretation of Judgment Paragraphs VI(c) and X was resulting in a replenishment requirement greater than necessary to offset the loss of return flow to the San Bernardino Basin Area resulting from new export. This became an issue generally known as the “two-for-one” issue.

Considerable inquiry of those directly involved in the settlement was accomplished in an effort to determine if replenishment in excess of return flow loss was intentional. There was no evidence it was intentional. Nor was there any evidence anywhere else in the Judgment of a requirement to replenish amounts in excess of just the amount necessary to offset an adverse impact. In 1992, Watermaster began to refer to the necessity to offset adverse impacts with an equal amount of replenishment as maintenance of hydrologic integrity.

So, one of the 1992 amendments was to address the “two-for-one” issue. Two approaches were considered. The first consisted of amending Paragraph X to require replenishment equal to only the loss of return flow associated with the actual export (currently 36 percent). The second approach consisted of subtracting the new export from the total extractions before determining if extractions were greater than or less than the Adjusted Right. Both approaches resulted in the same determination of new export obligation and the obligation was equal to the adverse impact on groundwater storage of just the loss of return flow resulting from export. Hydrologic integrity of the basin was maintained with either approach.

The second approach referenced above consisting of subtracting new export from total extraction and treating all new export as an obligation was used to write the amendments and to correct the new export calculations. Corrections to the methodology used to calculate obligations related to new export were

made in the August 1, 1993 Annual Report. Corrections to all prior new export calculations were made back to 1971. The “two-for-one” issue was resolved.

Other amendments included in the 1992 Court order to preserve the hydrologic integrity of specific groundwater basins were as follows.

- 1) Western’s obligation to replenish to offset exports by users within Western that exceeded the export in the base period was limited to just the amount necessary to offset the loss of return flow (currently 36 percent of new export). In 1993 changes to the calculation of Western’s new export credits or obligations were also made commencing in calendar year 1971 to reflect this amendment.
- 2) San Bernardino Valley’s obligation to replenish was changed to require separate accounting for the San Bernardino Basin Area (not including Colton Basin Area) in order to ensure hydrologic integrity of the Basin. No modifications were made in 1993 to address this matter. Modifications to the 2013 Annual Report addressed this provision of the 1992 amendment.
- 3) The addition of provisions that:
  - a) require replenishment in the Colton and Riverside Basins to offset loss of return flow related to increase in exports therefrom for use in areas not within Western nor tributary to Riverside Narrows, and
  - b) reduce any replenishment required by a) above by providing credit for return flow resulting from water delivered directly in Colton and Riverside Basins that originates outside the Basins.

Modifications necessary to make these determinations were a part of the 2014 modifications. The determinations for 3) a) above are included in Volume 7,

Section IV, Chapter VII, Table K. Similarly, the determinations for 3) b) above are included in Report of Watermaster Volume 7, Section IV, Chapter VIII, Table L.

One of the purposes of this section in Chapter VIII is to describe in some detail the 2013 modifications in Report of Watermaster, Volume 7 and the resulting changes in Table Nos. 9A and 9B necessary to accomplish the following.

- 1) More accurately reflect the 1992 amendment described as amendment two above.
- 2) Preserve the hydrologic integrity of the San Bernardino Basin Area, as such integrity is affected by return flow from applied water.

Watermaster Annual Reports prior to 2013 described export of extractions for use in San Bernardino County from San Bernardino Valley as the sum of the following.

- 1) Export from San Bernardino Basin Area and Colton Basin Area combined for delivery in Chino Basin.
- 2) Export from San Bernardino Basin Area for delivery in Yucaipa, San Timoteo, Oak Glen and Beaumont Basins.

Pursuant to the amended Judgment and the objective of maintaining the hydrologic integrity of the San Bernardino Basin Area, the 2013 modified Annual Report describes delivery of extractions from the San Bernardino Basin Area for use in San Bernardino County as follows.

- 1) Export from San Bernardino Basin Area only for delivery to Chino Basin (Table No. 9A).
- 2) Export from San Bernardino Basin Area for delivery to Yucaipa, San Timoteo, Oak Glen and Beaumont Basin's, referred to as areas other than Chino Basin (Table No. 9A).

- 3) Delivery from San Bernardino Basin Area for delivery use in Colton and Riverside Basin Areas (Table No. 9B).

The improvement in hydrologic integrity resulting from the 2013 modifications is demonstrated as follows.

- 1) By deleting the export from the Colton Basin Area to the Chino Basin from the determination of credits and obligations in the San Bernardino Basin Area, the obligations in the San Bernardino Basin Area are no longer overstated.
- 2) Conversely, by accounting for the deliveries from the San Bernardino Basin Area to the Colton and Riverside Basin Areas as the resulting loss of return flow to the San Bernardino Basin Area, the obligation in the San Bernardino Basin Area is not understated.

Therefore, the determination of the effects of new export to areas not tributary to the Riverside Narrows and new deliveries to the Colton and Riverside Basin Areas on storage in the San Bernardino Basin Area is more accurate.

The 2013 methodology used to determine export for delivery to Chino Basin from the San Bernardino Basin Area consists of the following.

- 1) The continuation of prior practice of calculating the export from San Bernardino Basin Area and Colton Basin Area.
- 2) The determination of the export from San Bernardino Basin Area to Chino Basin only, using data from 1) above and other required information. The results of this calculation are now shown in the modified Table No. 9A.

The modifications to the calculation of export described in this section also included a redetermination of the annual average export during the 1959 through 1963 base period. The methodology for such redetermination was the same as

for calendar years 1971 through 2011. The base period average amount for delivery to the export areas for each entity is shown in the first column of Table No. 9A. Prior to modification the total base period average was 12,527 acre-feet. After modification, it decreased to 11,701 acre-feet, largely as a result of deleting export from Colton Basin Area and Riverside Basin Area to areas not within Western nor tributary to the Riverside Narrows.

The 2013 methodology used to determine deliveries to the Colton and Riverside Basin Areas is new. However, most of the necessary data is readily available in Report of Watermaster, Volumes 1 and 7. The results are shown in Table No. 9B.

The modifications relating to deliveries from the San Bernardino Basin Area to the Colton and Riverside Basin Areas in this section also included a determination of the annual average deliveries during the 1959 through 1963 base period. The base period average amount for delivery to the Colton and Riverside Basin Areas for each entity is shown in the first column of Table No. 9B. The total base period average is 17,837 acre-feet.

Report of Watermaster, Volume 7 was also modified to include a new section that includes the following.

- 1) Table No. 21 showing deliveries of imported water (State Water Project) for recharge in each groundwater basin and deliveries for direct use inside and outside San Bernardino Basin Area.
- 2) Table No. 22 showing State Water Project water and San Bernardino Basin Area groundwater deliveries to Bear Valley Mutual Water Company in-lieu of surface water diversions from the Santa Ana River.

The summation of these data has always been included in Table No. 17. However, the details shown in Section V of Report of Watermaster, Volume 7, were not published. Diagram No. 1, Organization of the Annual Report shows the imported water direct delivery and replenishment data flowing from Volume 7 to Table No. 17.



TABLE NO. 9A  
VERIFIED EXTRACTIONS FROM THE  
SAN BERNARDINO BASIN AREA  
FOR USE ON LANDS NOT WITHIN WESTERN  
NOR TRIBUTARY TO RIVERSIDE NARROWS

(All Values in Acre-Feet)

Entities	Annual 1959-63 Average	Calendar Years				
		2010 Verified Delivery	2011 Verified Delivery	2012 Verified Delivery	2013 Verified Delivery	2014 Verified Delivery
Fontana Union Water Company *	10,170	19,421	30,786	18,672	11,074	6,756
West Valley Water District (formerly WSBCWD)	1,314	4,508	3,001	3,374	3,406	3,616
City of Rialto	217	1,388	900	898	1,079	970
Subtotal (Delivery to Chino Basin)	11,701	25,317	34,687	22,944	15,559	11,342
San Bernardino Valley Municipal Water District <sup>1</sup>	0	0	0	0	0	0
Subtotal (Delivery to areas other than Chino Basin)	0	0	0	0	0	0
TOTAL	11,701	25,317	34,687	22,944	15,559	11,342

\* Fontana Water Company delivers water extracted from San Bernardino Basin Area and Colton Basin Area as Fontana Union Water Company. The Fontana Water Company water service area is located largely within Chino Basin. However, portions of the Fontana Water Company service area are within Colton Basin Area. Records of the deliveries within the Colton Basin Area are not available to the Watermaster.

<sup>1</sup> Water diverted from Mill Creek and delivered to Yucaipa Basin and water pumped through Central Feeder Project into Inland Feeder Project.

Note: See Report of Watermaster, Volume 7, Table Nos. C & D.

TABLE NO. 9B  
VERIFIED EXTRACTIONS FROM THE  
SAN BERNARDINO BASIN AREA  
FOR USE ON LANDS WITHIN COLTON AND RIVERSIDE BASIN AREAS  
(All Values in Acre-Feet)

Entities	Annual 1959-63 Average	Calendar Years				
		2010 Verified Delivery	2011 Verified Delivery	2012 Verified Delivery	2013 Verified Delivery	2014 Verified Delivery
Fontana Union Water Company	529 *	0	0	0	0	0
West Valley Water District (formerly WSBCWD)	11,172	5,909	6,855	6,793	7,345	6,871
City of Rialto	858	6,517	6,507	6,941	6,770	7,114
City of Colton	3,347	4,740	4,783	6,222	5,170	4,879
City of San Bernardino Elevated System	886	2,697	2,722	2,853	2,871	2,502
<u>Terrace Water Company</u>	<u>1,045</u>	<u>701</u>	<u>706</u>	<u>751</u>	<u>770</u>	<u>660</u>
TOTAL	17,837	20,564	21,573	23,560	22,926	22,026

*\* Fontana Water Company delivers water extracted from San Bernardino Basin Area and Colton Basin Area as Fontana Union Water Company. The Fontana Water Company water service area is located largely within Chino Basin. However, portions of the Fontana Water Company service area are within Colton Basin Area. Records of the deliveries within the Colton Basin Area are not available to the Watermaster.*

*Note: See Report of Watermaster, Volume 7, Table Nos. E & F.*

## **CHAPTER IX**

### **ANNUAL ACCOUNTING OF EXTRACTIONS, DELIVERIES, AND REPLENISHMENT OBLIGATIONS**

## **CHAPTER IX**

### **ANNUAL ACCOUNTING OF EXTRACTIONS, DELIVERIES, AND REPLENISHMENT OBLIGATIONS**

The Judgment requires the annual determination of extractions from the San Bernardino, Colton, and Riverside Basin Areas by Plaintiffs as well as Non-Plaintiffs, and further requires that a determination be made as to that portion of such extractions delivered to each of the service areas tributary to the Riverside Narrows as well as the deliveries to those areas not tributary to the Riverside Narrows.

#### **Plaintiff Extractions from San Bernardino Basin Area**

The Judgment specifically defines the Adjusted Right of the City of Riverside, Riverside Highland Water Company, Agua Mansa Water Company and Meeks & Daley Water Company, and The Regents of The University of California to extract water from the San Bernardino Basin Area for use in three specific service areas. Commencing in 2013, the Adjusted Rights include a part of each Plaintiff's proportionate share of new conservation. These rights, expressed in terms of the five-year total allowable extractions and deliveries and the maximum allowable extractions and deliveries in any one year for each service area, are shown on Table Nos. 10 through 13. These tables show the extractions for use by the Plaintiffs in the specific service areas and are summarized in the table on page 107.

During the period 2010 through 2014, each Plaintiff's extractions and delivery of such extractions to specific service areas did not exceed the five-year sum of the Adjusted Rights. Also, no Plaintiff exceeded the maximum allowable annual extraction for delivery to any service area in any year.

### **Allowable Plaintiff Extractions in 2015**

The Judgment limits Plaintiff's extraction in 2015 to the sum of the annual Adjusted Rights for the five year period 2011 through 2015 minus the actual extractions/deliveries in 2011 through 2014 or 1.3 times the Adjusted Right for 2015, whichever is the lessor. The Adjusted Rights include the portion of Seven Oaks related new conservation water forecast to result from increased recharge at the Santa Ana River Spreading Grounds.

The Judgment also provides in Paragraph VI(b)6 for agreements between San Bernardino Valley and Western under which additional extractions may be made from the San Bernardino Basin Area. Such agreements have been entered and approved by the Court to allow Plaintiffs the opportunity to extract water in addition to the limits cited in the paragraph above as follows.

- 1) Additional extractions resulting from recharge of imported water, including extraction of prior year under extractions in amounts equal to or less than the amount of right to extract imported water transferred from Western to Plaintiff minus any remaining balance of such amounts of under extraction.
- 2) Additional extractions resulting from Watermaster determination and allocation of specific amounts of Seven Oaks related new conservation water that resulted from increased recharge at the Santa Ana River Spreading Grounds from 1998 through 2012.

The portion of Seven Oaks related new conservation water that is not forecast to result from increased recharge at the Santa Ana River Spreading Grounds will probably be determined and allocated in the future by Watermaster as such conservation occurs through additional Court approved Judgment Paragraph VI(b)6 agreements. Such allocations will provide Plaintiffs with future

opportunities to extract more new conservation water than the amounts made available through their Adjusted Right.

Table Nos. 10A through 13A show each Plaintiffs allowable extractions for delivery to each service area for calendar year 2015. The first line of data on each table shows the allowable extractions based on Adjusted Right as described in the first paragraph of this section. The second line is the remaining balance in a Western imported water holding account (see Table Nos. 17B-1 through 17B-4) that is available for extraction as a result of Plaintiff under extractions as described in 1) above. The third line is the Plaintiffs remaining balance of any previous Watermaster allocations of new conservation water from years prior to 2013 plus any other allocation of new conservation water resulting from conservation in the San Bernardino Basin Area by means other than recharge at the Santa Ana River Spreading Grounds as described in 2) above.

#### **Non-Plaintiff Extractions from San Bernardino Basin Area**

The Judgment provides that the Non-Plaintiffs as a group can produce a specific amount of water from the San Bernardino Basin Area without causing San Bernardino Valley to replenish the Basin with imported water. During the period 2010 through 2014, the Non-Plaintiff Total Extractions did not exceed San Bernardino Valley's Adjusted Right as shown in the following table.

### **Total Extractions from the San Bernardino Basin Area**

A comparison of allowable extractions to actual extractions by Plaintiffs and Non-Plaintiffs for the period 2010 through 2014 is as follows:

	Allowable Extractions 2010-2014 (Acre-Feet)	Actual Extractions 2010-2014 (Acre-Feet)	Difference 2010-2014 (Acre-Feet)
Plaintiffs	328,582	295,130	(33,452)
Non- Plaintiffs	<u>847,204</u>	<u>818,277</u>	<u>(28,927)</u>
Total	1,175,786	1,113,407	(62,379)

### **Export to Areas Not Tributary to Riverside Narrows and Deliveries to Colton and Riverside Basin Areas**

The Judgment limits the amount of water that can be extracted from the various basins, without replenishment, for use on lands that are not tributary to the Riverside Narrows. The amounts delivered to the Colton Basin Area within San Bernardino Valley and Riverside Basin Area within San Bernardino County from the San Bernardino Basin Area, without replenishment, are also limited. Western and San Bernardino Valley are responsible for any obligation that may result from export or delivery to these areas in Riverside County and San Bernardino County, respectively.

Table Nos. 14 and 15A show the annual 1959-63 average export and actual export for use on lands in Riverside County and San Bernardino County not tributary to the Riverside Narrows. The high groundwater mitigation agreements regarding extraction of additional water provide that the Judgment Paragraph X provisions shall not apply to such additional water. Therefore, the additional water extracted by Plaintiffs and Non-Plaintiffs for export has been excluded from the determination of new export in the line titled Additional New Export on Table Nos. 14 and 15A, respectively.

Table No. 14 shows that during the period 1971 through 2014 the exports, excluding additional new export, by entities within Western was 325,616 acre-feet less than the allowable export. Table No. 15A shows that exports, excluding additional new export, from San Bernardino Basin Area exceeded the allowable export for the period 1971 through 2014 by 300,600 acre-feet. Western's credit and the obligation of San Bernardino Valley resulting from this new export are shown on Table Nos. 16 and 17, respectively.

Table No. 15B shows the annual 1959-63 average deliveries and actual deliveries for use on lands in Colton and Riverside Basin Areas. The table concludes that deliveries from the San Bernardino Basin Area to the Colton and Riverside Basin Areas during the period 1971 through 2014 exceeded the annual 1959-63 average deliveries for such period by 150,348 acre-feet. The San Bernardino Valley obligation resulting from these new deliveries is shown on Table No. 17.

### **Summary of Western Credits and Obligations**

Table No. 16 summarizes Western credits and obligations in the Colton Basin Area, Riverside Basin Area in San Bernardino County and Riverside Basin Area in Riverside County. The table shows the Base Right for extraction from each Basin Area and the extractions from each Basin Area for the period 2010 through 2014. The aggregate amount of under extractions or excess extractions resulting from such extractions are determined and included as either a credit or obligation along with other credits and obligations. The specific data inputs and logic used to determine each type of credit and obligation are described in subsection 3) on page 121 in the section titled Annual Report Modifications – Table Nos. 10 through 18.

The resulting net accumulated credit or obligation is the net accumulated credit or obligation from the period 1971 through 2009 plus the credit or



obligation for each year of the five-year period 2010 through 2014 for the Colton Basin Area, Riverside Basin Area in San Bernardino County and the Riverside Basin Area in Riverside County. The Judgment provides for such accumulation of credits and obligations. In summary, Table No. 16 shows that Western's net accumulated credit in the Colton and Riverside basins through 2014 is 466,040 acre-feet.

### **Summary of San Bernardino Valley Credits and Obligations**

Table No. 17 summarizes San Bernardino Valley credits and obligations in the San Bernardino Basin Area. The table shows the Adjusted Right for extraction and the actual extractions from the San Bernardino Basin Area by users in San Bernardino County for the period 2010 through 2014. The amount of under extractions or excess extractions resulting from such extractions are determined and included as either a credit or obligation along with other credits and obligations. The specific data inputs and logic used to determine each type of credit and obligation are described in subsection 3) on page 121 in the section titled Annual Report Modifications – Table Nos. 10 through 18.

The resulting net accumulated credit or obligation is the net accumulated credit or obligation from the period 1971 through 2009 plus the credit or obligation for each year of the five-year period 2010 through 2014 for the San Bernardino Basin Area. The Judgment provides for such accumulation of credits and obligations. In summary, Table No. 17 shows that San Bernardino Valley's net accumulated credit in the San Bernardino Basin Area through 2014 is 104,994 acre-feet.

San Bernardino Valley may also incur an obligation in the Colton and Riverside Basin Areas within San Bernardino County. Chapter V indicates that extractions in the Colton and Riverside Basin Areas for use in San Bernardino Valley are not limited provided that San Bernardino Valley maintains a specified

minimum static water surface elevation in the three key wells in these basins. During the five-year period 2010 through 2014 the actual water surface elevation remained higher than the specified minimum. Therefore, San Bernardino Valley is not obligated to provide replenishment water for maintenance of these basins.

### **Annual Accounting of Additional Extractions**

As noted previously in this Chapter, Judgment Paragraph VI(b)6 provides that agreements may be entered between Western and San Bernardino Valley under which additional extractions may be made from the San Bernardino Basin Area. Three types of such additional extraction agreements which are existing or may be entered in the future are as follows.

- 1) Additional Extractions of High Groundwater (existing) – Additional extraction of native water from the San Bernardino Basin Area declared to be a temporary surplus and made available for extraction, without replenishment, as part of the high groundwater mitigation program.
- 2) Additional Extractions of Imported Water (existing) – Additional extraction of water from the San Bernardino Basin Area by Western or any Plaintiff, after transfer, of imported water acquired by Western and recharged or extraction of prior year under extraction of Adjusted Rights in amounts not greater than the amount of right to extract imported water previously transferred from Western to Plaintiff minus any remaining balance of such amounts.
- 3) Additional Extractions of New Conservation Water – Additional extraction of Seven Oaks related new conservation water from the San Bernardino Basin Area resulting from either prior year new conservation (existing) or future hydrologic events that

yield large amounts of water that exceed the capacity to deliver and recharge water at the Santa Ana River Spreading Grounds (future). Such agreements also provide for an accounting of mitigation water set aside in the San Bernardino Basin Area to be used to mitigate the adverse effects of Seven Oaks related new conservation in the Riverside Basin Area.

Additional extractions of high groundwater were made in twenty years of the twenty-four year period 1981 through 2004. The accounting for such extractions and exports is accomplished in Table Nos. 2, 3, 14 and 15A as previously discussed.

The accounting for additional extractions of imported water, new conservation water and Riverside Basin Mitigation Account water from the San Bernardino Basin Area is accomplished in Table Nos. 17A, 17B-1 through 17B-5, and 17C respectively. These tables generally use the same format to account for additional extractions as is used in Table No. 17 to account for extractions from the San Bernardino Basin Area by users within San Bernardino County.

The significant difference between Table No. 17 and Table Nos. 17A, 17B, and 17C is that Table No. 17 is used to determine the amount of replenishment, if any, by San Bernardino Valley required to protect the rights of Plaintiffs against adverse effects of excess extractions from the San Bernardino Basin Area by other than Plaintiffs. Whereas, Table Nos. 17A, 17B and 17C are used to primarily determine, in any year, the remaining amount of any available additional extractions resulting from the replenishment of imported water or new conservation water made available pursuant to Judgment Paragraph VI(b)6 agreements or the remaining balance in the Riverside Basin Mitigation Account.

Table No. 17A, Imported Water

Additional extractions of imported water are available pursuant to Western's 2004 Paragraph VI(b)6 agreement. Western made an initial acquisition of 6,000 acre-feet of imported water in 2004. In 2007 Western transferred to City of Riverside the right to extract 2,459 acre-feet of imported water in order to address an excess extraction by Riverside. In 2009 Western acquired an additional 2,459 acre-feet of imported water from San Bernardino Valley. Therefore, in 2013, the amount of Western Net Accumulated Credit is 6,000 acre-feet.

In addition to accounting for imported water acquisitions, extractions by Western and transfers of the right to extract imported water to Plaintiffs, Table No. 17A accounts for the sum of all Plaintiff holding account transfers that result from implementation of Paragraph 11 of the 2013 Judgment Paragraph VI(b)6 agreement. Paragraph 11 provides that additional extractions of water are available to Plaintiffs in amounts not greater than Plaintiff's unused water right (under extraction) in any year after 2012 provided such amounts, plus any remaining balance of similarly acquired additional water, may not exceed Plaintiffs aggregate amount of previously transferred right to extract imported water.

Table No. 17A shows Plaintiff Transfers to Holding Accounts in 2013 in the amount of 2,459 acre-feet. This amount is the sum of the amounts in lines titled Imported Water Transfer to Holding Account in Table Nos. 17B-1 through 17B-4. The amount shown is only the amount shown in Table No. 17B-1 for City of Riverside because in 2013 only Riverside had previously acquired imported water and therefore was the only Plaintiff party with the opportunity to transfer under extractions into an imported water holding account. Table No. 17A shows in the line titled Imported Water Additional Extractions that no Plaintiff was either

capable of nor needed to withdraw water from holding accounts through additional extractions.

Table Nos. 17B-1 through 17B-5, New Conservation Water and Imported Water

Additional extractions of new conservation water resulting from new conservation in prior years are available to Plaintiffs and San Bernardino Valley pursuant to the 2013 Paragraph VI(b)6 agreement. The New Conservation Allocations shown on Table Nos. 17B-1 through 17B-5 are the amounts determined by Watermaster to have resulted from operation of Seven Oaks Reservoir during the prior years 1998 through 2012.

Any amounts of future new conservation determined by Watermaster to have resulted from the diversion of water conserved at Seven Oaks in addition to the amounts added to the Safe Yield Adjusted Rights in Table Nos. 2 (pages 1a & 1b) and 3A-1 through 3D-1 will likely be made available to Plaintiffs and San Bernardino Valley following the hydrologic event that caused such conservation and will also be included in the 17B tables as New Conservation Allocation. Extraction of any of the available New Conservation Allocation will be shown as Additional Extractions by other than Plaintiffs and Plaintiffs on Table Nos. 2 (pages 1a & 1b) and 3A-2 through 3D-2 respectively and on Table Nos. 17B-1 through 17B-5.

The amounts of additional extractions available for each Party are shown as New Conservation Net Accumulated (Credit) for 2014 on Table Nos. 17B-1 through 17B-5 and are equal to the amounts shown in the first data column of the table on page 27.

Paragraph 11 of the 2013 Judgment Paragraph VI(b)6 agreement (2013 Agreement) provides that any Plaintiff may transfer to Western an amount of water equal to its unused water right in the San Bernardino Basin Area provided the remaining balance of such transfers may not exceed Plaintiffs aggregate

amount of previously transferred right to extract imported water. In addition to accounting for new conservation water, Table Nos. 17B-1 through 17B-4 also provide accounting for the imported water transfers and additional extractions resulting from implementation of Paragraph 11 as described above. Only the City of Riverside has previously received a transfer of right to extract from Western. Therefore, only Table No. 17B-1 shows transfers to a holding account in 2013.

Table No. 17B-1 shows the transfer of an under extraction by the City of Riverside to a holding account in the amount of 2,459 acre-feet in 2013. Such amount is equal to Western's previous transfer to Riverside of the right to extract 2,459 acre-feet needed to address an excess extraction by Riverside in 2007.

If in the future the City of Riverside over extracts water again, the 2,459 acre-feet in the holding account can be used to partially or entirely address the excess extraction. The amount of the transfer out of the holding account will be accounted for as an Imported Water Additional Extraction and will equal the amount of the excess extraction provided the excess extraction is not greater than the amount in the holding account. If the excess extraction is greater than the amount in the holding account, Riverside will likely acquire an additional right to extract from Western and Table No. 17B-1 will show the additional amount as an Imported Water Transfer From Western. Table No. 17B-1 will then show the Imported Water Additional Extractions as the sum of the Western transfer and the transfer from the holding account.

#### Table No. 17C, Riverside Basin Mitigation Account

As noted in Chapter III, page 30, the 2013 Agreement provides for extraction of new conservation water resulting from operation of Seven Oaks Reservoir and the Santa Ana River Spreading Grounds from 1998 through 2012. The 2013 Agreement also requires Watermaster to establish and maintain an accounting of Seven Oaks related water conserved in the San Bernardino Basin

Area that; in the absence of the Reservoir, would have been recharged in the Riverside Basin. The account is referred to as the Riverside Basin Mitigation Account and the accounting is provided in Table No. 17C.

Additions to the account consist of equal annual amounts resulting from the long term forecast of Seven Oaks related conservation at the Santa Ana River Spreading Grounds and specific year annual amounts that periodically result from Seven Oaks related conservation by means other than recharge at the Santa Ana River Spreading Grounds.

Mitigation of the adverse impact in the Riverside Basin is accomplished by extraction of the conserved water that has been included in or added to the Mitigation Account in a manner that effectively increases recharge and storage in the Riverside Basin. One method of accomplishing such mitigation is for the City of Riverside to increase extractions in the San Bernardino Basin Area and reduce extractions in the Riverside Basin by a like amount. Any such increase in extractions is shown on Table No. 17C as Extractions by the City of Riverside. A second mitigation method consists of extractions by other than Plaintiffs and subsequent delivery and recharge of such extractions in the Riverside Basin Area. Any such extraction can also be shown on Table No. 17C as Extractions by Other Than Plaintiffs.

The last line in Table No. 17C shows the Mitigation Account Balance in any year. The balance is the difference between the amounts included in the account (additions) pursuant to the 2013 Agreement and the sum of extractions by City of Riverside and other than Plaintiffs.

## **Summary of Compliance**

Table No. 18 addresses four basic questions regarding compliance with four general provisions of the Judgment. The first two provisions relate to the rights and obligations in the San Bernardino Basin Area. The last two provisions relate to obligations in the area between Bunker Hill Dike and the Riverside Narrows. The four general provisions are as follows.

- 1) The Judgment establishes water rights for Plaintiffs in the San Bernardino Basin Area and enjoins them from extracting from the Basin amounts greater than such right. So, the first question addressed in Table No. 18 is: “Did any Plaintiff’s extractions from the San Bernardino Basin Area for delivery to any service area exceed the maximum allowable?” Table No. 18 indicates that Plaintiff extractions from the Basin for delivery to any service area are less than the maximum allowable in 2014 and for the five-year period 2010 through 2014.
- 2) The Judgment provides users other than Plaintiffs the ability to extract unlimited amounts from the San Bernardino Basin Area and the freedom to manage the basin as they choose provided San Bernardino Valley replenishes the basin to offset any accumulated obligations determined pursuant to provisions of the Judgment. So, the second question addressed in Table No. 18 is: “Is San Bernardino Valley required to replenish the San Bernardino Basin Area?” Table No. 18 indicates that such replenishment is not required and that the amount of San Bernardino Valley credit that can be used to offset future obligations is 104,994 acre-feet in 2014.



- 3) Pursuant to the Orange County Judgment, San Bernardino Valley is obligated to deliver a specified amount of Base Flow in the Santa Ana River at Riverside Narrows. Extractions by users within Western between the Bunker Hill Dike and Riverside Narrows and other water management related activities within Western can adversely affect San Bernardino Valley's ability to meet its obligation at Riverside Narrows. The Judgment requires Western to replenish between the Bunker Hill Dike and Riverside Narrows in amounts necessary to offset any accumulated obligations determined pursuant to provisions of the Judgment, to ensure that San Bernardino Valley is not adversely affected by users within Western. So, the third question addressed in Table No. 18 is: "Is Western required to provide replenishment between the Bunker Hill Dike and Riverside Narrows?" Table No. 18 indicates that replenishment is not required and that the amount of Western credit that can be used to offset future obligations is 466,040 acre-feet in 2014.
- 4) Finally the Judgment provides San Bernardino Valley users in the Colton Basin Area and Riverside Basin Area in San Bernardino County the ability to extract unlimited amounts from those basins and the freedom to manage those basins and the San Bernardino Basin Area as they choose provided San Bernardino Valley replenishes the area below the Bunker Hill Dike sufficiently to maintain a prescribed average water level in three specific wells. So, the fourth question is: "Does San Bernardino need to provide replenishment to maintain

water levels downstream of the Bunker Hill Dike?” Table No. 18 indicates that such replenishment is not required and that for 2014 the average water level was 9.75 feet above the required minimum average level of 822.04 feet.

### **Annual Report Modifications Table Nos. 10 through 18**

Tables Nos. 10 through 18 are summary tables. As a result, the prior year data in all these tables is affected by the modifications discussed in Chapter III, Chapter VII and Chapter VIII. In addition to these data changes, the logic and layout of Table Nos. 10 through 18 have been changed to improve the readability, accuracy, and usefulness of the report. The following five subsections summarize the modifications to these tables.

#### **1) Table Nos. 10 through 13**

Table Nos. 10 through 13 are used to address the first basic compliance question on Table No 18. The question is: “Did Extractions by Plaintiffs from the San Bernardino Basin Area for delivery to any service area exceed the maximum allowable?” There are thirty-two maximum allowable extraction or delivery amounts. Sixteen of them represent the maximum allowable in any year. The other sixteen represent the maximum allowable in any five-year period. (Sixteen equals four Plaintiffs times the total extraction plus three delivery areas.)

The modifications to Table Nos. 10 through 13 are relatively minor and do not affect the conclusions made in prior Annual Reports regarding Plaintiff compliance with provisions of the Judgment. However, the changes make the tables easier to read and understand.

As noted previously, any additional extractions made available pursuant to Judgment Paragraph VI(b)6 agreements need to be deducted from total extractions before determining compliance. Prior to 2013, the annual data in

Tables Nos. 10 through 13 included such additional extractions and the five-year data excluded it. The amounts of extraction included and excluded were incorporated in numerous footnotes. The tables were very confusing and difficult to understand and use.

The data related to additional extractions has been deleted from the footnotes on Table Nos. 10 through 13. Footnotes are still necessary; but, only for the purpose of documenting the specific Paragraph VI(b)6 agreement that provides for exclusion of additional extractions from the determination of compliance.

The additional extractions are now included in columns on Table Nos. 3A-2 through 3D-2 in Chapter III. In these tables the additional extractions are subtracted from total extractions and the result is shown as extractions. These extraction amounts, excluding additional extractions, are used to generate compliance Table Nos. 10 through 13.

In the August 1, 2014 Annual Report, Paragraph 11 of the 2013 Judgment Paragraph VI(b)6 agreement was implemented. In order to account for the transfer of an under extraction in the amount of 2,459 acre-feet by the City of Riverside in 2013 to a holding account in Table Nos. 17B-1 and 17A as permitted under Paragraph 11, the amount of the transfer is shown as a negative additional extraction in Table No. 3A-2 (page 2 of 3). As a result the deliveries by the City of Riverside for use outside San Bernardino Valley shown in Table No. 10 (pages 1c and 2b of 2) are greater than the actual deliveries by the amount of the 2,459 acre-feet transfer to the holding account.

In 2014, Table Nos. 10A through 13A were added to show allowable Plaintiff extractions for the year in which each annual report is published. Reference the new section of this chapter on page 105 where 2014 allowable extractions are discussed.

2) Table Nos. 14, 15A and 15B

Table Nos. 14 and 15A are used to determine new export by Western and San Bernardino Valley respectively. The determination is made by first subtracting the annual 1959-63 average export from the current year actual export. That amount is referred to as Total New Export. Then, the additional extractions made available to Plaintiffs and San Bernardino Valley pursuant to the high groundwater mitigation Paragraph VI(b)6 agreements are subtracted from Total New Export. The resulting determination of New Export is used in determining credit or obligation for Western and San Bernardino Valley in Table Nos. 16 and 17.

Prior to 2013, the additional new export now shown in Table No. 14 was subtracted from export in Table No. 1A of Report of Watermaster, Volume 6 as described in Chapter VII. The additional new export now shown in Table No. 15A was previously subtracted from new export in Table No. 17 and documented using footnotes that included the specific amounts of such additional new export.

The deduction of additional new export related to high groundwater mitigation is now more clearly shown in Table Nos. 14 and 15A. Only additional new export associated with the high groundwater mitigation program is deducted in Table Nos. 14 and 15A.

Table No. 15B is used to determine new deliveries from the San Bernardino Basin Area by users in San Bernardino County to lands within the Colton and Riverside Basin Areas. The determination is made by first subtracting the annual 1959-63 average deliveries from the current year actual deliveries to determine Total New Deliveries. Then, pursuant to the high groundwater mitigation Paragraph VI(b)6 agreements, the allowable amounts of Additional New Deliveries are subtracted from Total New Deliveries to determine

New Deliveries for ultimate use in determining credit or obligation for San Bernardino Valley in Table No. 17.

3) Table Nos. 16 and 17

Table Nos. 16 and 17 are used to address the second and third basic compliance questions. Table No. 16 addresses the question: “Is Western required to replenish the Colton and Riverside Basin Areas?” Table No. 17 addresses the same question regarding San Bernardino Valley’s obligation to replenish the San Bernardino Basin Area.

Table Nos. 16 and 17 are very important and very complex. Each table is the culmination of an extensive series of calculations that are complex largely because of the necessity to track return flow from applied natural safe yield water, imported water and new conservation water.

Diagram No. 1, Organization of Annual Report on page 19 shows that the ultimate source of data for Table No. 16 is Report of Watermaster, Volumes 1A through 6. The data inputs are as follows.

- a) Extractions from the Colton and Riverside Basin Areas by users within Western.
- b) New export resulting from delivery of extractions from all basins by Western users to areas not tributary to Riverside Narrows.
- c) Replenishment of imported water.
- d) Storm flow conservation between Bunker Hill Dike and Riverside Narrows by works financed by Western entities.
- e) Increase in return flow to Riverside Narrows from direct delivery of imported water and imported water recharged in and extracted from the San Bernardino Basin Area by Western pursuant to Judgment Paragraph VI(b)6 agreements.

- f) Return from use of new conservation water extracted by Plaintiffs.
- g) Decrease in return flow resulting from conversion of land use from agriculture to urban in a specified area within Western.

Table No. 16 shows the amount of credit or obligation resulting from each of these input activities in terms of how each transfer of water associated with each activity affects storage in the groundwater basins between Bunker Hill Dike and Riverside Narrows and thereby partially affects Base Flow at the Riverside Narrows. A credit indicates a potential increase in storage or Base Flow and an obligation indicates a potential decline in storage or Base Flow. A net accumulated obligation indicates that Western may be required to replenish the basins with imported water, subject to certain specific Judgment provisions.

The ultimate source of data inputs for Table No. 17 is Report of Watermaster, Volumes 1 and 7. The data inputs are as follows.

- a) Extractions from the San Bernardino Basin Area by users other than Plaintiffs.
- b) New export resulting from delivery of extractions from the San Bernardino Basin Area by users from within San Bernardino County to areas not tributary to the Riverside Narrows.
- c) New deliveries resulting from deliveries of extractions from the San Bernardino Basin Area by users from within San Bernardino County to the Colton Basin Area within San Bernardino Valley and Riverside Basin Areas within San Bernardino County.
- d) Replenishment of imported water.

- e) Return flow resulting from direct delivery of imported water by users in the San Bernardino Valley.
- f) Return from use of new conservation water extracted by users within San Bernardino Valley.
- g) Deliveries of imported water and pumped groundwater to Bear Valley Mutual Water Company (BVMWC) by San Bernardino Valley in-lieu of historic diversions of Santa Ana River streamflow that is retained in Big Bear Lake for the benefit of the local community.

Table No. 17 shows the amounts of credit or obligation associated with each activity similar to that described for Table No. 16. A net accumulated obligation in Table No. 17 indicates a requirement for San Bernardino Valley to provide replenishment.

The modifications to Table Nos. 16 and 17 are numerous. Because the tables are the culmination of data from many other tables, most of the modifications in other parts of the report affect amounts shown in these tables. So, the credits, obligations and net accumulated credit data may be different for years prior to 2013. These data are also different as a result in changes in the logic used to generate the tables.

During preparation of the calendar year 2011 Annual Report filed with the Court in August 2012, Watermaster became concerned about the logic used in Table Nos. 16 and 17. As a result these tables were incomplete and a commitment was made to resolve the concern. The modifications include a resolution of the concern referenced in the August 2012 report.

The logic issue stems from uncertainty regarding the definition of a credit or obligation in Table Nos. 16 and 17. A credit or obligation can be defined in two ways. First, an amount of credit or obligation may be defined as the amount

of under extraction (actual extraction less than allowable) or excess extraction (actual extraction greater than allowable). Second, a credit or obligation may be equal to the amount by which storage in the basin changes (positively or negatively) as a result of activity represented by the line of data in the table.

After thorough analysis, it has been determined that prior to the 2013 modifications some of the activities in Table Nos. 16 and 17 were based on the first definition and others on the second. The calculations related to excess extractions and under extractions were made using the first definition. All other determinations were made on the basis of the second definition.

The difference between results using the two definitions can be significant where use of the extraction is in the overlying basin and there is return flow to the basin. For example, if there is excess pumping of 15,000 acre-feet, one-third of the excess extraction or 5,000 acre-feet may return to the basin resulting in a loss of storage of only 10,000 acre-feet. Conversely, if an under extraction of the same amount occurs, the basin storage only increases by 10,000 acre-feet because failure to pump the 15,000 acre-feet results in a loss of return flow of 5,000 acre-feet.

Watermaster recognized the need for a consistent definition and chose the second definition largely because determinations based on how water transfers affect storage in the San Bernardino Basin Area would enable comparisons between Watermaster calculation of change in groundwater storage based on average hydrology (safe yield) to calculations of actual change in storage based on change in water level resulting from real hydrology. Therefore, Table Nos. 16 and 17 have been modified to cause all determinations for all water transfers or activities to be equal to the amount by which storage in the basin or Base Flow at the Riverside Narrows is affected by the activity.



Extractions from the Colton and Riverside Basin Areas by users within San Bernardino Valley are not included in Table No. 16. Such extractions also potentially affect storage or Base Flow at the Riverside Narrows. Therefore, extractions by users within Western are not the only factor affecting storage and Base Flow and are only partially responsible for any change in storage or Base Flow at Riverside Narrows.

In addition to the logic changes necessary to be consistent in defining credits and obligations, several other modifications to Table Nos. 16 and 17 were made as follows.

Table No. 16

- a) Based on the Judgment provision that allows under extractions in one basin to offset excess extractions in another basin, the Base Rights and extractions for the Colton Basin Area, Riverside Basin Area within San Bernardino County and Riverside Basin Area within Riverside County have been consolidated into Total Base Right and Total Extractions. From 1992 through 2010, accounting for each basin was separate and, as a result, there was no mechanism within the tables to address excess extractions by using under extractions in an adjacent basin.
- b) New Export is subtracted from Total Extractions before determining if there are excess extractions or under extractions pursuant to the amended Judgment Paragraph VI(c)3. This prevents the “two-for-one” issue from recurring.
- c) The full amount of new export is shown as an obligation pursuant to Judgment Paragraph X.

- d) Return from Excess Extractions and Return from Under Extractions are included as credits and obligations in order to determine the partial effect of excess extractions and under extractions on Base Flow at the Riverside Narrows.
- e) New Export credits and obligations from Table No. 14 have been added to Table No. 16 so that the net accumulated credit includes all credits available to offset excess extractions. In Annual Reports prior to 2010 it was necessary to add the credits in Table No. 14 to the credits in Table No. 16 to determine total credits.
- f) A line has been added to enter amounts of replenishment of imported water. None has been replenished to date but could be in the future.
- g) A line has been added to enter amounts of storm flow conservation in the Colton and Riverside Basin Areas through facilities constructed and operated by Western entities.
- h) A line has been added to enter return from new conservation. Like imported water, the return flow from new conservation is not a component of the natural yield and therefore is available for extraction. Adding the return component (36 percent) as a credit makes it available for use without replenishment.

Table No. 17

- a) Modifications b, c, d, and h described above for Table No. 16 were also made in Table No. 17.

- b) Table No. 17 also has additional modifications to account for new deliveries of extractions from San Bernardino Basin Area to the Colton and Riverside Basin Areas.
- c) In 2015, a new line entitled, "In-Lieu Deliveries Obligation," was added under the "OBLIGATIONS" heading. This line shows in-lieu deliveries of imported water and groundwater by San Bernardino Valley pursuant to a 1996 agreement with Big Bear Municipal Water District. Under such agreement, San Bernardino Valley is obligated to deliver imported water and/or pumped groundwater to Bear Valley Mutual Water Company (BVMWC). The obligation is the amount necessary to meet BVMWC water requirements that would have been met by stream diversions if water had not been retained in Big Bear Lake to benefit the local mountain community.

4) Table Nos. 17B-1 through 17B-5 and 17C

In 2013 Table Nos. 17B-1 through 17B-5 were added to the Annual Report to account for the new conservation water resulting from operation of Seven Oaks Reservoir and related diversion and spreading facilities.

The tables show the amounts of new conservation allocated for use by each Plaintiff and entities in San Bernardino County other than Plaintiffs, the amounts extracted and the remaining balance in the account described as (Credit).

In the April 1, 2014 Annual Report Table No. 17C was added to account for water in the Riverside Basin Mitigation Account. The table shows additions to the account in the form of annual average amounts resulting from long term forecasts of new conservation and specific year amounts resulting from single

year events that result in new conservation not accounted for in the long term forecast of annual average amounts. The table also shows extractions and the resulting account balance in any year commencing in 2013.

In the August 1, 2014 Annual Report, Table Nos. 17A and 17B-1 through 17B-4 were modified to provide a mechanism to account for transfer of imported water from Plaintiff to Western pursuant to Paragraph 11 of the Judgment Paragraph VI(b)6 agreement. Reference pages 112-114 for a description of the modified tables.

5) Table No. 18

The original intent of Table No. 18 in the Annual Report for calendar year 1976 was to accomplish the following.

- a) To show whether or not Plaintiffs had exceeded their rights to extract from the San Bernardino Basin Area.
- b) To show the amount of replenishment required by Western and/or San Bernardino Valley.

Since a Court of Appeals found the entire watershed to be in overdraft prior to filing of complaints that led to the settlement in 1969, the expectation at the time was that replenishment water would be required routinely. That has not proven to be the case. In fact, neither district has ever been required to provide replenishment. Plaintiffs have also incurred very few violations. Out of a potential for over 1,200 possible violations (42 years times 32 potential violations per year) very few have occurred.

In the years following 1976, Table No. 18 evolved into a much more detailed statement of credits and obligations for individual basins. Recently the table did not reflect the ability for under extractions to offset excess extractions by users within Western in the Colton and Riverside Basin Areas. The table implied that there could be a need for replenishment where none is required.

Hence, during preparation of the Annual Report for calendar year 2012, Watermaster concluded that Table No. 18 was no longer an effective means of summarizing compliance with the general provisions of the Judgment as it was in 1976.

After considerable experimentation and review of alternative Table No. 18 designs, Watermaster selected a new design that is very consistent with the original intent in 1976. The resulting modified Table No. 18 is designed to directly address, and only address, in a concise, accurate, and easy to understand manner, the four basic questions regarding compliance with four general provisions of the Judgment. The modified Table No. 18, showing the responses to the four basic questions for the Calendar Year 2015 Annual Report, is described in the Summary of Compliance on page 116.

TABLE NO. 10  
ANNUAL ACCOUNTING OF EXTRACTIONS BY THE CITY OF RIVERSIDE  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
(Including those rights acquired as successor to the  
Riverside Water Company and the Gage Canal Company)  
ANNUAL TOTALS  
(All Values in Acre-Feet)

Calendar Year	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Extractions <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>
1971	53,448	69,482	53,882	1,462	1,901	98	1,260	1,638	669	50,726	65,944	53,115
1972	52,199	67,859	45,694	1,427	1,855	85	1,230	1,599	547	49,542	64,405	45,062
1973	52,199	67,859	43,022	1,427	1,855	156	1,230	1,599	512	49,542	64,405	42,354
1974	52,199	67,859	43,367	1,427	1,855	0	1,230	1,599	550	49,542	64,405	42,817
1975	52,199	67,859	47,962	1,427	1,855	0	1,230	1,599	498	49,542	64,405	47,464
1976	52,199	67,859	51,374	1,427	1,855	0	1,230	1,599	523	49,542	64,405	50,851
1977	52,199	67,859	50,999	1,427	1,855	0	1,230	1,599	346	49,542	64,405	50,653
1978	52,199	67,859	45,384	1,427	1,855	646	1,230	1,599	301	49,542	64,405	44,437
1979	52,199	67,859	52,377	1,427	1,855	0	1,230	1,599	415	49,542	64,405	51,962
1980	52,199	67,859	50,756	1,427	1,855	383	1,230	1,599	0	49,542	64,405	50,373
1981	52,199	67,859	51,009	1,427	1,855	724	1,230	1,599	0	49,542	64,405	50,285
1982	52,199	67,859	49,599	1,427	1,855	162	1,230	1,599	0	49,542	64,405	49,437
1983	52,199	67,859	45,988	1,427	1,855	335	1,230	1,599	0	49,542	64,405	45,653
1984	52,199	67,859	49,574	1,427	1,855	32	1,230	1,599	0	49,542	64,405	49,542
1985	52,199	67,859	49,601	1,427	1,855	59	1,230	1,599	0	49,542	64,405	49,542
1986	52,199	67,859	49,979	1,427	1,855	437	1,230	1,599	0	49,542	64,405	49,542
1987	52,199	67,859	49,876	1,427	1,855	334	1,230	1,599	0	49,542	64,405	49,542
1988	52,199	67,859	50,311	1,427	1,855	815	1,230	1,599	0	49,542	64,405	49,496
1989	52,199	67,859	50,784	1,427	1,855	28	1,230	1,599	0	49,542	64,405	50,756
1990	52,199	67,859	47,637	1,427	1,855	19	1,230	1,599	0	49,542	64,405	47,618

TABLE NO. 10  
ANNUAL ACCOUNTING OF EXTRACTIONS BY THE CITY OF RIVERSIDE  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
(Including those rights acquired as successor to the  
Riverside Water Company and the Gage Canal Company)  
ANNUAL TOTALS  
(All Values in Acre-Feet)

Calendar Year	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Extractions <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>
1991	52,199	67,859	49,697	1,427	1,855	155	1,230	1,599	0	49,542	64,405	49,542
1992	52,199	67,859	43,062	1,427	1,855	203	1,230	1,599	0	49,542	64,405	42,859
1993	52,199	67,859	44,962	1,427	1,855	-108	1,230	1,599	0	49,542	64,405	42,305
1994	52,199	67,859	51,340	1,427	1,855	46	1,230	1,599	0	49,542	64,405	49,542
1995	52,199	67,859	49,593	1,427	1,855	99	1,230	1,599	0	49,542	64,405	46,936
1996	52,199	67,859	54,992	1,427	1,855	278	1,230	1,599	0	49,542	64,405	52,335
1997	52,199	67,859	52,443	1,427	1,855	494	1,230	1,599	0	49,542	64,405	49,786
1998	52,199	67,859	47,746	1,427	1,855	0	1,230	1,599	0	49,542	64,405	47,746
1999	52,199	67,859	52,199	1,427	1,855	181	1,230	1,599	0	49,542	64,405	49,542
2000	52,199	67,859	52,199	1,427	1,855	117	1,230	1,599	0	49,542	64,405	49,542
2001	52,199	67,859	52,199	1,427	1,855	229	1,230	1,599	0	49,542	64,405	49,542
2002	52,199	67,859	52,199	1,427	1,855	172	1,230	1,599	0	49,542	64,405	49,542
2003	52,199	67,859	54,514	1,427	1,855	10	1,230	1,599	0	49,542	64,405	54,504
2004	52,199	67,859	52,199	1,427	1,855	0	1,230	1,599	0	49,542	64,405	49,542
2005	52,199	67,859	44,696	1,427	1,855	13	1,230	1,599	0	49,542	64,405	44,683
2006	52,199	67,859	49,444	1,427	1,855	30	1,230	1,599	0	49,542	64,405	49,414
2007	52,199	67,859	49,559	1,427	1,855	39	1,230	1,599	0	49,542	64,405	49,520
2008	52,199	67,859	53,581	1,427	1,855	70	1,230	1,599	0	49,542	64,405	53,511
2009	52,199	67,859	43,061	1,427	1,855	121	1,230	1,599	0	49,542	64,405	42,940
2010	52,199	67,859	45,713	1,427	1,855	80	1,230	1,599	0	49,542	64,405	45,633

TABLE NO. 10  
ANNUAL ACCOUNTING OF EXTRACTIONS BY THE CITY OF RIVERSIDE  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
(Including those rights acquired as successor to the  
Riverside Water Company and the Gage Canal Company)  
ANNUAL TOTALS  
(All Values in Acre-Feet)

Calendar Year	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Extractions <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>
2011	52,199	67,859	46,488	1,427	1,855	72	1,230	1,599	0	49,542	64,405	46,416
2012	52,199	67,859	52,506	1,427	1,855	13	1,230	1,599	0	49,542	64,405	52,493
2013	53,918	70,093	52,617	1,427	1,855	11	1,230	1,599	0	51,261	66,639	52,606
2014	53,918	70,093	49,433	1,427	1,855	18	1,230	1,599	0	51,261	66,639	49,415
2015	53,918	70,093		1,427	1,855		1,230	1,599		51,261	66,639	
2016	53,918	70,093		1,427	1,855		1,230	1,599		51,261	66,639	
2017	53,918	70,093		1,427	1,855		1,230	1,599		51,261	66,639	
2018	53,918	70,093		1,427	1,855		1,230	1,599		51,261	66,639	
2019	53,918	70,093		1,427	1,855		1,230	1,599		51,261	66,639	
2020	53,918	70,093		1,427	1,855		1,230	1,599		51,261	66,639	

*See Report of Watermaster, Tables 3A-1 and 3A-2.*

<sup>1</sup> Adjusted Right equals Safe Yield Adjusted Right plus New Conservation Allocation.

<sup>2</sup> Maximum Allowable for any one year, not to exceed 130% of Adjusted Right.

<sup>3</sup> Extractions and Deliveries from Table No. 3A-2.

<sup>4</sup> New Conservation Allocation may also be used in the San Bernardino Basin Area, or the Colton Basin Area and Riverside Basin Area in San Bernardino County.

*Note: Annual Accounting of Extractions as required in Paragraphs V and VI of the Judgment.*



TABLE NO. 10  
ANNUAL ACCOUNTING OF EXTRACTIONS BY THE CITY OF RIVERSIDE  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
(Including those rights acquired as successor to the  
Riverside Water Company and the Gage Canal Company)  
FIVE-YEAR TOTALS  
(All Values in Acre-Feet)

Five-Year Period	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Extractions <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>
1971-75	262,244	262,244	233,927	7,170	7,170	339	6,180	6,180	2,776	248,894	248,894	230,812
1972-76	260,995	260,995	231,419	7,135	7,135	241	6,150	6,150	2,630	247,710	247,710	228,548
1973-77	260,995	260,995	236,724	7,135	7,135	156	6,150	6,150	2,429	247,710	247,710	234,139
1974-78	260,995	260,995	239,086	7,135	7,135	646	6,150	6,150	2,218	247,710	247,710	236,222
1975-79	260,995	260,995	248,096	7,135	7,135	646	6,150	6,150	2,083	247,710	247,710	245,367
1976-80	260,995	260,995	250,890	7,135	7,135	1,029	6,150	6,150	1,585	247,710	247,710	248,276
1977-81	260,995	260,995	250,525	7,135	7,135	1,753	6,150	6,150	1,062	247,710	247,710	247,710
1978-82	260,995	260,995	249,125	7,135	7,135	1,915	6,150	6,150	716	247,710	247,710	246,494
1979-83	260,995	260,995	249,729	7,135	7,135	1,604	6,150	6,150	415	247,710	247,710	247,710
1980-84	260,995	260,995	246,926	7,135	7,135	1,636	6,150	6,150	0	247,710	247,710	245,290
1981-85	260,995	260,995	245,771	7,135	7,135	1,312	6,150	6,150	0	247,710	247,710	244,459
1982-86	260,995	260,995	244,741	7,135	7,135	1,025	6,150	6,150	0	247,710	247,710	243,716
1983-87	260,995	260,995	245,018	7,135	7,135	1,197	6,150	6,150	0	247,710	247,710	243,821
1984-88	260,995	260,995	249,341	7,135	7,135	1,677	6,150	6,150	0	247,710	247,710	247,664
1985-89	260,995	260,995	250,551	7,135	7,135	1,673	6,150	6,150	0	247,710	247,710	248,878
1986-90	260,995	260,995	248,587	7,135	7,135	1,633	6,150	6,150	0	247,710	247,710	246,954
1987-91	260,995	260,995	248,305	7,135	7,135	1,351	6,150	6,150	0	247,710	247,710	246,954
1988-92	260,995	260,995	241,491	7,135	7,135	1,220	6,150	6,150	0	247,710	247,710	240,271
1989-93	260,995	260,995	236,142	7,135	7,135	297	6,150	6,150	0	247,710	247,710	233,080
1990-94	260,995	260,995	236,698	7,135	7,135	315	6,150	6,150	0	247,710	247,710	231,866

TABLE NO. 10  
ANNUAL ACCOUNTING OF EXTRACTIONS BY THE CITY OF RIVERSIDE  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
(Including those rights acquired as successor to the  
Riverside Water Company and the Gage Canal Company)  
FIVE-YEAR TOTALS  
(All Values in Acre-Feet)

Five-Year Period	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Extractions <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>
1991-95	260,995	260,995	238,654	7,135	7,135	395	6,150	6,150	0	247,710	247,710	231,184
1992-96	260,995	260,995	243,949	7,135	7,135	518	6,150	6,150	0	247,710	247,710	233,977
1993-97	260,995	260,995	253,330	7,135	7,135	809	6,150	6,150	0	247,710	247,710	240,904
1994-98	260,995	260,995	256,114	7,135	7,135	917	6,150	6,150	0	247,710	247,710	246,345
1995-99	260,995	260,995	256,973	7,135	7,135	1,052	6,150	6,150	0	247,710	247,710	246,345
1996-00	260,995	260,995	259,579	7,135	7,135	1,070	6,150	6,150	0	247,710	247,710	248,951
1997-01	260,995	260,995	256,786	7,135	7,135	1,021	6,150	6,150	0	247,710	247,710	246,158
1998-02	260,995	260,995	256,542	7,135	7,135	699	6,150	6,150	0	247,710	247,710	245,914
1999-03	260,995	260,995	263,310	7,135	7,135	709	6,150	6,150	0	247,710	247,710	252,672
2000-04	260,995	260,995	263,310	7,135	7,135	528	6,150	6,150	0	247,710	247,710	252,672
2001-05	260,995	260,995	255,807	7,135	7,135	424	6,150	6,150	0	247,710	247,710	247,813
2002-06	260,995	260,995	253,052	7,135	7,135	225	6,150	6,150	0	247,710	247,710	247,685
2003-07	260,995	260,995	250,412	7,135	7,135	92	6,150	6,150	0	247,710	247,710	247,663
2004-08	260,995	260,995	249,479	7,135	7,135	152	6,150	6,150	0	247,710	247,710	246,670
2005-09	260,995	260,995	240,341	7,135	7,135	273	6,150	6,150	0	247,710	247,710	240,068
2006-10	260,995	260,995	241,358	7,135	7,135	340	6,150	6,150	0	247,710	247,710	241,018
2007-11	260,995	260,995	238,402	7,135	7,135	382	6,150	6,150	0	247,710	247,710	238,020
2008-12	260,995	260,995	241,349	7,135	7,135	356	6,150	6,150	0	247,710	247,710	240,993
2009-13	262,714	262,714	240,385	7,135	7,135	297	6,150	6,150	0	249,429	249,429	240,088
2010-14	264,433	264,433	246,757	7,135	7,135	194	6,150	6,150	0	251,148	251,148	246,563

TABLE NO. 10  
ANNUAL ACCOUNTING OF EXTRACTIONS BY THE CITY OF RIVERSIDE  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
(Including those rights acquired as successor to the  
Riverside Water Company and the Gage Canal Company)  
FIVE-YEAR TOTALS  
(All Values in Acre-Feet)

Five-Year Period	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Extractions <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>
2011-15	266,152	266,152		7,135	7,135		6,150	6,150		252,867	252,867	
2012-16	267,871	267,871		7,135	7,135		6,150	6,150		254,586	254,586	
2013-17	269,590	269,590		7,135	7,135		6,150	6,150		256,305	256,305	
2014-18	269,590	269,590		7,135	7,135		6,150	6,150		256,305	256,305	
2015-19	269,590	269,590		7,135	7,135		6,150	6,150		256,305	256,305	
2016-20	269,590	269,590		7,135	7,135		6,150	6,150		256,305	256,305	
Excess Extractions 2010-14		(17,676) *			(6,941) *			(6,150) *			(4,585) *	

\* Parentheses indicate that Extractions and Deliveries are less than Adjusted Right.

<sup>1</sup> Adjusted Right equals Safe Yield Adjusted Right plus New Conservation Allocation.

<sup>2</sup> Maximum allowable for the five-year period is the same as the five-year-period Adjusted Right.

<sup>3</sup> Extractions and Deliveries from Table No. 3A-2.

<sup>4</sup> New Conservation Allocation may also be used in the San Bernardino Basin Area, or the Colton Basin Area and Riverside Basin Area in San Bernardino County.

TABLE NO. 10A  
ALLOWABLE EXTRACTIONS BY THE CITY OF RIVERSIDE  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
(Including those rights acquired as successor to the  
Riverside Water Company and the Gage Canal Company)

CALENDAR YEAR 2015  
(All Values in Acre-Feet)

		<u>Allowable Total Extractions from the San Bernardino Basin Area</u>	<u>Allowable Delivery for Use in San Bernardino Basin Area</u>	<u>Allowable Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County</u>	<u>Allowable Delivery for Use in Areas Outside San Bernardino Valley</u>
Allowable Extraction Based on Adjusted Right	1	55,391	1,855	1,599	51,937
Imported Water Available In Holding Account	2	2,459	See Footnote 5	See Footnote 5	2,459
New Conservation Water Available	3	<u>9,635</u>	<u>See Footnote 6</u>	<u>See Footnote 6</u>	<u>9,635</u>
Total Allowable Extraction	4	67,485	1,855	1,599	64,031

TABLE NO. 10A  
ALLOWABLE EXTRACTIONS BY THE CITY OF RIVERSIDE  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
(Including those rights acquired as successor to the  
Riverside Water Company and the Gage Canal Company)

CALENDAR YEAR 2015  
(All Values in Acre-Feet)

- 1 *Component of Total Allowable Extractions available through the adjusted right which is equal to the 1959-63 base period extractions minus an adjustment for safe yield and plus an adjustment to include new conservation water forecast to result from long term operation of Seven Oaks Reservoir and diversion of increased amounts for recharge at the Santa Ana River Spreading Grounds. The Allowable Delivery amounts are the adjusted right for the five year period ending with the subject year minus the sum of the Deliveries (Table 10, Page 1c of 2) for the previous four years or the Maximum Allowable annual delivery (1.3 times average annual allowable delivery) whichever is the lessor. Allowable Total Extractions is the sum of the allowable deliveries.*
- 2 *Component of Total Allowable Extraction available if Western has previously transferred to the City of Riverside the right to extract imported water and the City of Riverside has under extracted water in an amount equal to or less than the sum of the rights to extract that were previously transferred. The amount available for extraction by the City of Riverside is accounted for in Table No. 17B-1, and is referred to as Imported Water Net Accumulated (Credit).*
- 3 *Component of Total Allowable Extraction available as a result of Western, San Bernardino Valley and the Riverside Court approving a Judgment Paragraph VI (b) 6 agreement providing an allocation of new conservation water determined by Watermaster to have resulted from operation of Seven Oaks Reservoir from 1998 through 2012 and any future Judgment Paragraph VI (b) 6 agreement allocating new conservation water determined by Watermaster to have resulted from a future hydrologic event that resulted in direct use of Seven Oaks water or recharge of the San Bernardino Basin Area with Seven Oaks water in areas other than the Santa Ana River Spreading Grounds provided the capability to recharge at the Spreading Grounds has been fully utilized. The amount available for extraction by Riverside is accounted for in Table No. 17B-1, and is referred to as New Conservation Net Accumulated (Credit).*
- 4 *The Total Allowable Extraction is the sum of the allowable components described in Footnotes 1, 2 and 3.*
- 5 *Watermaster anticipates that the City of Riverside will not have excess extractions for delivery in the San Bernardino Basin Area or in the Colton and Riverside Basin Areas in San Bernardino County and therefore it is unlikely that Western will transfer a right to extract imported water for delivery in these areas. Therefore, it is unlikely that imported water resulting from under extractions will become available to the City of Riverside for delivery in these areas. However, if transfers of imported water and under extractions do occur, Watermaster will account for such occurrences at that time.*
- 6 *Watermaster anticipates that the City of Riverside will not have excess extractions for delivery in the San Bernardino Basin Area or in the Colton and Riverside Basin Areas in San Bernardino County and therefore the City of Riverside is unlikely to choose to use its allocation of new conservation water for deliveries in these areas. However, if excess extractions occur in these areas, the City of Riverside will likely choose to use its new conservation allocation to address the excess extraction and Watermaster will account for such use at that time.*

TABLE NO. 11  
ANNUAL ACCOUNTING OF EXTRACTIONS BY RIVERSIDE HIGHLAND WATER COMPANY  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
ANNUAL TOTALS

(All Values in Acre-Feet)

Calendar Year	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Extractions <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>
1971	4,399	5,719	4,012	0	0	0	2,509	3,262	2,388	1,890	2,457	1,624
1972	4,294	5,582	4,532	0	0	0	2,449	3,184	2,239	1,845	2,399	2,293
1973	4,294	5,582	3,512	0	0	0	2,449	3,184	1,751	1,845	2,399	1,761
1974	4,294	5,582	4,088	0	0	0	2,449	3,184	1,985	1,845	2,399	2,103
1975	4,294	5,582	4,709	0	0	0	2,449	3,184	2,002	1,845	2,399	2,707
1976	4,294	5,582	4,519	0	0	0	2,449	3,184	2,050	1,845	2,399	2,469
1977	4,294	5,582	3,583	0	0	0	2,449	3,184	1,820	1,845	2,399	1,763
1978	4,294	5,582	1,350	0	0	0	2,449	3,184	1,051	1,845	2,399	299
1979	4,294	5,582	3,369	0	0	0	2,449	3,184	1,781	1,845	2,399	1,588
1980	4,294	5,582	3,677	0	0	0	2,449	3,184	2,060	1,845	2,399	1,617
1981	4,294	5,582	3,604	0	0	0	2,449	3,184	2,151	1,845	2,399	1,453
1982	4,294	5,582	2,795	0	0	0	2,449	3,184	1,775	1,845	2,399	1,020
1983	4,294	5,582	3,161	0	0	0	2,449	3,184	2,318	1,845	2,399	843
1984	4,294	5,582	4,759	0	0	0	2,449	3,184	2,671	1,845	2,399	2,088
1985	4,294	5,582	3,312	0	0	0	2,449	3,184	1,978	1,845	2,399	1,334
1986	4,294	5,582	4,744	0	0	0	2,449	3,184	2,130	1,845	2,399	2,614
1987	4,294	5,582	3,919	0	0	0	2,449	3,184	2,229	1,845	2,399	1,690
1988	4,294	5,582	4,775	0	0	0	2,449	3,184	2,229	1,845	2,399	2,546
1989	4,294	5,582	4,681	0	0	0	2,449	3,184	1,968	1,845	2,399	2,713
1990	4,294	5,582	4,092	0	0	0	2,449	3,184	2,313	1,845	2,399	1,779

TABLE NO. 11  
ANNUAL ACCOUNTING OF EXTRACTIONS BY RIVERSIDE HIGHLAND WATER COMPANY  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
ANNUAL TOTALS

(All Values in Acre-Feet)

Calendar Year	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Extractions <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>
1991	4,294	5,582	3,021	0	0	0	2,449	3,184	1,669	1,845	2,399	1,352
1992	4,294	5,582	4,052	0	0	0	2,449	3,184	2,275	1,845	2,399	1,777
1993	4,294	5,582	3,241	0	0	0	2,449	3,184	1,777	1,845	2,399	1,464
1994	4,294	5,582	4,324	0	0	0	2,449	3,184	2,201	1,845	2,399	2,123
1995	4,294	5,582	3,955	0	0	0	2,449	3,184	2,146	1,845	2,399	1,809
1996	4,294	5,582	4,588	0	0	0	2,449	3,184	2,756	1,845	2,399	1,832
1997	4,294	5,582	4,476	0	0	0	2,449	3,184	2,656	1,845	2,399	1,820
1998	4,294	5,582	2,787	0	0	0	2,449	3,184	1,961	1,845	2,399	826
1999	4,294	5,582	2,931	0	0	0	2,449	3,184	2,082	1,845	2,399	849
2000	4,294	5,582	2,856	0	0	0	2,449	3,184	2,811	1,845	2,399	45
2001	4,294	5,582	2,665	0	0	0	2,449	3,184	2,543	1,845	2,399	122
2002	4,294	5,582	2,400	0	0	0	2,449	3,184	2,272	1,845	2,399	128
2003	4,294	5,582	3,878	0	0	0	2,449	3,184	2,036	1,845	2,399	1,842
2004	4,294	5,582	1,754	0	0	0	2,449	3,184	1,301	1,845	2,399	453
2005	4,294	5,582	3,377	0	0	0	2,449	3,184	1,532	1,845	2,399	1,845
2006	4,294	5,582	4,149	0	0	0	2,449	3,184	2,304	1,845	2,399	1,845
2007	4,294	5,582	3,633	0	0	0	2,449	3,184	1,772	1,845	2,399	1,861
2008	4,294	5,582	2,730	0	0	0	2,449	3,184	2,054	1,845	2,399	676
2009	4,294	5,582	1,648	0	0	0	2,449	3,184	1,073	1,845	2,399	575
2010	4,294	5,582	1,136	0	0	0	2,449	3,184	629	1,845	2,399	507

TABLE NO. 11  
ANNUAL ACCOUNTING OF EXTRACTIONS BY RIVERSIDE HIGHLAND WATER COMPANY  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
ANNUAL TOTALS

(All Values in Acre-Feet)

Calendar Year	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Extractions <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>
2011	4,294	5,582	1,655	0	0	0	2,449	3,184	1,087	1,845	2,399	568
2012	4,294	5,582	2,135	0	0	0	2,449	3,184	1,523	1,845	2,399	612
2013	4,435	5,766	2,873	0	0	0	2,449	3,184	1,629	1,986	2,582	1,244
2014	4,435	5,766	2,077	0	0	0	2,449	3,184	1,470	1,986	2,582	607
2015	4,435	5,766		0	0		2,449	3,184		1,986	2,582	
2016	4,435	5,766		0	0		2,449	3,184		1,986	2,582	
2017	4,435	5,766		0	0		2,449	3,184		1,986	2,582	
2018	4,435	5,766		0	0		2,449	3,184		1,986	2,582	
2019	4,435	5,766		0	0		2,449	3,184		1,986	2,582	
2020	4,435	5,766		0	0		2,449	3,184		1,986	2,582	

*See Report of Watermaster, Tables 3B-1 and 3B-2.*

*<sup>1</sup> Adjusted Right equals Safe Yield Adjusted Right plus New Conservation Allocation.*

*<sup>2</sup> Maximum Allowable for any one year, not to exceed 130% of Adjusted Right.*

*<sup>3</sup> Extractions and Deliveries from Table No. 3B-2. (Volume 1A, Table 3)*

*<sup>4</sup> New Conservation Allocation may also be used in the San Bernardino Basin Area, or the Colton Basin Area and Riverside Basin Area in San Bernardino County.*

*Note: Annual Accounting of Extractions as required in Paragraphs V and VI of the Judgment.*



TABLE NO. 11  
ANNUAL ACCOUNTING OF EXTRACTIONS BY RIVERSIDE HIGHLAND WATER COMPANY  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
FIVE-YEAR TOTALS

(All Values in Acre-Feet)

Five-Year Period	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted	Maximum	Extractions <sup>3</sup>	Adjusted	Maximum	Deliveries <sup>3</sup>	Adjusted	Maximum	Deliveries <sup>3</sup>	Adjusted	Maximum	Deliveries <sup>3</sup>
	Right <sup>1</sup>	Allowable <sup>2</sup>		Right <sup>4</sup>	Allowable <sup>2</sup>		Right <sup>4</sup>	Allowable <sup>2</sup>		Right <sup>1</sup>	Allowable <sup>2</sup>	
1971-75	21,575	21,575	20,853	0	0	0	12,305	12,305	10,365	9,270	9,270	10,488
1972-76	21,470	21,470	21,360	0	0	0	12,245	12,245	10,027	9,225	9,225	11,333
1973-77	21,470	21,470	20,411	0	0	0	12,245	12,245	9,608	9,225	9,225	10,803
1974-78	21,470	21,470	18,249	0	0	0	12,245	12,245	8,908	9,225	9,225	9,341
1975-79	21,470	21,470	17,530	0	0	0	12,245	12,245	8,704	9,225	9,225	8,826
1976-80	21,470	21,470	16,498	0	0	0	12,245	12,245	8,762	9,225	9,225	7,736
1977-81	21,470	21,470	15,583	0	0	0	12,245	12,245	8,863	9,225	9,225	6,720
1978-82	21,470	21,470	14,795	0	0	0	12,245	12,245	8,818	9,225	9,225	5,977
1979-83	21,470	21,470	16,606	0	0	0	12,245	12,245	10,085	9,225	9,225	6,521
1980-84	21,470	21,470	17,996	0	0	0	12,245	12,245	10,975	9,225	9,225	7,021
1981-85	21,470	21,470	17,631	0	0	0	12,245	12,245	10,893	9,225	9,225	6,738
1982-86	21,470	21,470	18,771	0	0	0	12,245	12,245	10,872	9,225	9,225	7,899
1983-87	21,470	21,470	19,895	0	0	0	12,245	12,245	11,326	9,225	9,225	8,569
1984-88	21,470	21,470	21,509	0	0	0	12,245	12,245	11,237	9,225	9,225	10,272
1985-89	21,470	21,470	21,431	0	0	0	12,245	12,245	10,534	9,225	9,225	10,897
						0						
1986-90	21,470	21,470	22,211	0	0	0	12,245	12,245	10,869	9,225	9,225	11,342
1987-91	21,470	21,470	20,488	0	0	0	12,245	12,245	10,408	9,225	9,225	10,080
1988-92	21,470	21,470	20,621	0	0	0	12,245	12,245	10,454	9,225	9,225	10,167
1989-93	21,470	21,470	19,087	0	0	0	12,245	12,245	10,002	9,225	9,225	9,085
1990-94	21,470	21,470	18,730	0	0	0	12,245	12,245	10,235	9,225	9,225	8,495

TABLE NO. 11  
ANNUAL ACCOUNTING OF EXTRACTIONS BY RIVERSIDE HIGHLAND WATER COMPANY  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
FIVE-YEAR TOTALS

(All Values in Acre-Feet)

Five-Year Period	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted	Maximum	Extractions <sup>3</sup>	Adjusted	Maximum	Deliveries <sup>3</sup>	Adjusted	Maximum	Deliveries <sup>3</sup>	Adjusted	Maximum	Deliveries <sup>3</sup>
	Right <sup>1</sup>	Allowable <sup>2</sup>		Right <sup>4</sup>	Allowable <sup>2</sup>		Right <sup>4</sup>	Allowable <sup>2</sup>		Right <sup>1</sup>	Allowable <sup>2</sup>	
1991-95	21,470	21,470	18,593	0	0	0	12,245	12,245	10,068	9,225	9,225	8,525
1992-96	21,470	21,470	20,160	0	0	0	12,245	12,245	11,155	9,225	9,225	9,005
1993-97	21,470	21,470	20,584	0	0	0	12,245	12,245	11,536	9,225	9,225	9,048
1994-98	21,470	21,470	20,130	0	0	0	12,245	12,245	11,720	9,225	9,225	8,410
1995-99	21,470	21,470	18,737	0	0	0	12,245	12,245	11,601	9,225	9,225	7,136
1996-00	21,470	21,470	17,638	0	0	0	12,245	12,245	12,266	9,225	9,225	5,372
1997-01	21,470	21,470	15,715	0	0	0	12,245	12,245	12,053	9,225	9,225	3,662
1998-02	21,470	21,470	13,639	0	0	0	12,245	12,245	11,669	9,225	9,225	1,970
1999-03	21,470	21,470	14,730	0	0	0	12,245	12,245	11,744	9,225	9,225	2,986
2000-04	21,470	21,470	13,553	0	0	0	12,245	12,245	10,963	9,225	9,225	2,590
2001-05	21,470	21,470	14,074	0	0	0	12,245	12,245	9,684	9,225	9,225	4,390
2002-06	21,470	21,470	15,558	0	0	0	12,245	12,245	9,445	9,225	9,225	6,113
2003-07	21,470	21,470	16,791	0	0	0	12,245	12,245	8,945	9,225	9,225	7,846
2004-08	21,470	21,470	15,643	0	0	0	12,245	12,245	8,963	9,225	9,225	6,680
2005-09	21,470	21,470	15,537	0	0	0	12,245	12,245	8,735	9,225	9,225	6,802
2006-10	21,470	21,470	13,296	0	0	0	12,245	12,245	7,832	9,225	9,225	5,464
2007-11	21,470	21,470	10,802	0	0	0	12,245	12,245	6,615	9,225	9,225	4,187
2008-12	21,470	21,470	9,304	0	0	0	12,245	12,245	6,366	9,225	9,225	2,938
2009-13	21,611	21,611	9,447	0	0	0	12,245	12,245	5,941	9,366	9,366	3,506
2010-14	21,752	21,752	9,876	0	0	0	12,245	12,245	6,338	9,507	9,507	3,538

TABLE NO. 11  
ANNUAL ACCOUNTING OF EXTRACTIONS BY RIVERSIDE HIGHLAND WATER COMPANY  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
FIVE-YEAR TOTALS

(All Values in Acre-Feet)

Five-Year Period	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Extractions <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>
2011-15	21,893	21,893		0	0		12,245	12,245		9,648	9,648	
2012-16	22,034	22,034		0	0		12,245	12,245		9,789	9,789	
2013-17	22,175	22,175		0	0		12,245	12,245		9,930	9,930	
2014-17	22,175	22,175		0	0		12,245	12,245		9,930	9,930	
2015-19	22,175	22,175		0	0		12,245	12,245		9,930	9,930	
2016-20	22,175	22,175		0	0		12,245	12,245		9,930	9,930	
Excess Extractions 2010-14		(11,876) *			0 *			(5,907) *			(5,969) *	

\* Parentheses indicate that Extractions and Deliveries are less than Adjusted Right.

<sup>1</sup> Adjusted Right equals Safe Yield Adjusted Right plus New Conservation Allocation.

<sup>2</sup> Maximum allowable for the five-year period is the same as the five-year-period Adjusted Right.

<sup>3</sup> Extractions and Deliveries from Table No. 3B-2.

<sup>4</sup> New Conservation Allocation may also be used in the San Bernardino Basin Area, or the Colton Basin Area and Riverside Basin Area in San Bernardino County.

TABLE NO. 11A  
ALLOWABLE EXTRACTIONS BY RIVERSIDE HIGHLAND WATER COMPANY  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA

CALENDAR YEAR 2015  
(All Values in Acre-Feet)

		<u>Allowable Total Extractions from the San Bernardino Basin Area</u>	<u>Allowable Delivery for Use in San Bernardino Basin Area</u>	<u>Allowable Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County</u>	<u>Allowable Delivery for Use in Areas Outside San Bernardino Valley</u>
Allowable Extraction Based on Adjusted Right	1	5,766	0	3,184	2,582
Imported Water Available In Holding Account	2	0	See Footnote 5	See Footnote 5	0 5
New Conservation Water Available	3	<u>793</u>	<u>See Footnote 6</u>	<u>See Footnote 6</u>	<u>793 6</u>
Total Allowable Extraction	4	6,559	0	3,184	3,375

TABLE NO. 11A  
ALLOWABLE EXTRACTIONS BY RIVERSIDE HIGHLAND WATER COMPANY  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA

CALENDAR YEAR 2015  
(All Values in Acre-Feet)

- 1 *Component of Total Allowable Extractions available through the adjusted right which is equal to the 1959-63 base period extractions minus an adjustment for safe yield and plus an adjustment to include new conservation water forecast to result from long term operation of Seven Oaks Reservoir and diversion of increased amounts for recharge at the Santa Ana River Spreading Grounds. The Allowable Delivery amounts are the adjusted right for the five year period ending with the subject year minus the sum of the Deliveries (Table 11, Page 1c of 2) for the previous four years or the Maximum Allowable annual delivery (1.3 times average annual allowable delivery) whichever is the lessor. Allowable Total Extractions is the sum of the allowable deliveries.*
- 2 *Component of Total Allowable Extraction available if Western has previously transferred to Riverside Highland Water Company the right to extract imported water and Riverside Highland Water Company has under extracted water in an amount equal to or less than the sum of the rights to extract that were previously transferred. The amount available for extraction by Riverside Highland Water Company is accounted for in Table No. 17B-2, and is referred to as Imported Water Net Accumulated (Credit).*
- 3 *Component of Total Allowable Extraction available as a result of Western, San Bernardino Valley and the Riverside Court approving a Judgment Paragraph VI (b) 6 agreement providing an allocation of new conservation water determined by Watermaster to have resulted from operation of Seven Oaks Reservoir from 1998 through 2012 and any future Judgment Paragraph VI (b) 6 agreement allocating new conservation water determined by Watermaster to have resulted from a future hydrologic event that resulted in direct use of Seven Oaks water or recharge of the San Bernardino Basin Area with Seven Oaks water in areas other than the Santa Ana River Spreading Grounds provided the capability to recharge at the Spreading Grounds has been fully utilized. The amount available for extraction by Riverside Highland Water Company is accounted for in Table No. 17B-2, and is referred to as New Conservation Net Accumulated (Credit).*
- 4 *The Total Allowable Extraction is the sum of the allowable components described in Footnotes 1, 2 and 3.*
- 5 *Watermaster recognizes that Riverside Highland Water Company may have excess extractions for delivery in either the Colton Basin Area in San Bernardino County or for use in areas outside San Bernardino Valley and therefore Western may transfer a right to extract imported water for delivery in either of these areas. Therefore, it is possible that imported water resulting from under extractions may become available to Riverside Highland Water Company for delivery in either of these areas. If transfers of imported water and under extractions occur, Watermaster will account for such occurrences at that time.*
- 6 *Watermaster recognizes that Riverside Highland Water Company may have excess extractions for delivery in either the Colton Basin Area in San Bernardino County or for use in areas outside San Bernardino Valley and therefore Riverside Highland Water Company may choose to use its allocation of new conservation water for deliveries in either of these areas. If excess extractions occur in either of these areas and Riverside Highland Water Company chooses to use its new conservation allocation to address the excess extraction, Watermaster will account for such use in either area as requested by Riverside Highland Water Company at that time.*

TABLE NO. 12  
ANNUAL ACCOUNTING OF EXTRACTIONS BY AGUA MANSA WATER COMPANY AND MEEKS & DALEY WATER COMPANY  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
ANNUAL TOTALS

(All Values in Acre-Feet)

Calendar Year	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Extractions <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>
1971	8,026	10,434	2,902	0	0	0	325	423	383	7,700	10,010	2,519
1972	7,833	10,183	3,527	0	0	0	318	413	377	7,515	9,770	3,150
1973	7,833	10,183	2,979	0	0	0	318	413	250	7,515	9,770	2,729
1974	7,833	10,183	4,504	0	0	0	318	413	246	7,515	9,770	4,258
1975	7,833	10,183	3,950	0	0	0	318	413	168	7,515	9,770	3,782
1976	7,833	10,183	5,393	0	0	0	318	413	182	7,515	9,770	5,211
1977	7,833	10,183	4,220	0	0	0	318	413	146	7,515	9,770	4,074
1978	7,833	10,183	2,254	0	0	0	318	413	161	7,515	9,770	2,093
1979	7,833	10,183	3,930	0	0	0	318	413	166	7,515	9,770	3,764
1980	7,833	10,183	2,333	0	0	0	318	413	323	7,515	9,770	2,010
1981	7,833	10,183	3,092	0	0	0	318	413	358	7,515	9,770	2,734
1982	7,833	10,183	3,716	0	0	0	318	413	169	7,515	9,770	3,547
1983	7,833	10,183	2,651	0	0	0	318	413	245	7,515	9,770	2,406
1984	7,833	10,183	5,165	0	0	0	318	413	233	7,515	9,770	4,932
1985	7,833	10,183	5,385	0	0	0	318	413	210	7,515	9,770	5,175
1986	7,833	10,183	5,570	0	0	0	318	413	234	7,515	9,770	5,336
1987	7,833	10,183	4,914	0	0	0	318	413	193	7,515	9,770	4,721
1988	7,833	10,183	4,966	0	0	0	318	413	233	7,515	9,770	4,733
1989	7,833	10,183	5,392	0	0	0	318	413	240	7,515	9,770	5,152
1990	7,833	10,183	3,851	0	0	0	318	413	83	7,515	9,770	3,768

TABLE NO. 12  
ANNUAL ACCOUNTING OF EXTRACTIONS BY AGUA MANSA WATER COMPANY AND MEEKS & DALEY WATER COMPANY  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
ANNUAL TOTALS

(All Values in Acre-Feet)

Calendar Year	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Extractions <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>
1991	7,833	10,183	4,426	0	0	0	318	413	190	7,515	9,770	4,236
1992	7,833	10,183	4,100	0	0	0	318	413	118	7,515	9,770	3,982
1993	7,833	10,183	5,013	0	0	0	318	413	276	7,515	9,770	4,737
1994	7,833	10,183	4,525	0	0	0	318	413	227	7,515	9,770	4,298
1995	7,833	10,183	3,560	0	0	0	318	413	145	7,515	9,770	3,415
1996	7,833	10,183	3,912	0	0	0	318	413	194	7,515	9,770	3,718
1997	7,833	10,183	4,165	0	0	0	318	413	137	7,515	9,770	4,028
1998	7,833	10,183	3,828	0	0	0	318	413	210	7,515	9,770	3,618
1999	7,833	10,183	6,289	0	0	0	318	413	90	7,515	9,770	6,199
2000	7,833	10,183	3,832	0	0	0	318	413	352	7,515	9,770	3,480
2001	7,833	10,183	3,671	0	0	0	318	413	192	7,515	9,770	3,479
2002	7,833	10,183	5,800	0	0	0	318	413	202	7,515	9,770	5,598
2003	7,833	10,183	7,440	0	0	0	318	413	49	7,515	9,770	7,391
2004	7,833	10,183	3,782	0	0	0	318	413	19	7,515	9,770	3,763
2005	7,833	10,183	5,891	0	0	0	318	413	4	7,515	9,770	5,887
2006	7,833	10,183	7,515	0	0	0	318	413	0	7,515	9,770	7,515
2007	7,833	10,183	7,591	0	0	0	318	413	0	7,515	9,770	7,591
2008	7,833	10,183	4,832	0	0	0	318	413	0	7,515	9,770	4,832
2009	7,833	10,183	6,345	0	0	0	318	413	0	7,515	9,770	6,345
2010	7,833	10,183	6,738	0	0	0	318	413	0	7,515	9,770	6,738

TABLE NO. 12  
ANNUAL ACCOUNTING OF EXTRACTIONS BY AGUA MANSA WATER COMPANY AND MEEKS & DALEY WATER COMPANY  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
ANNUAL TOTALS

(All Values in Acre-Feet)

Calendar Year	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Extractions <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>
2011	7,833	10,183	7,127	0	0	0	318	413	0	7,515	9,770	7,127
2012	7,833	10,183	7,117	0	0	0	318	413	0	7,515	9,770	7,117
2013	8,091	10,518	7,732	0	0	0	318	413	0	7,773	10,105	7,732
2014	8,091	10,518	7,103	0	0	0	318	413	0	7,773	10,105	7,103
2015	8,091	10,518		0	0		318	413		7,773	10,105	
2016	8,091	10,518		0	0		318	413		7,773	10,105	
2017	8,091	10,518		0	0		318	413		7,773	10,105	
2018	8,091	10,518		0	0		318	413		7,773	10,105	
2019	8,091	10,518		0	0		318	413		7,773	10,105	
2020	8,091	10,518		0	0		318	413		7,773	10,105	

*See Report of Watermaster, Tables 3C-1 and 3C-2.*

*1 Adjusted Right equals Safe Yield Adjusted Right plus New Conservation Allocation.*

*2 Maximum Allowable for any one year, not to exceed 130% of Adjusted Right.*

*3 Extractions and Deliveries from Table No. 3C-2. (Volume 1A, Table 3)*

*4 New Conservation Allocation may also be used in the San Bernardino Basin Area, or the Colton Basin Area and Riverside Basin Area in San Bernardino County.*

*Note: Annual Accounting of Extractions as required in Paragraphs V and VI of the Judgment.*



TABLE NO. 12  
ANNUAL ACCOUNTING OF EXTRACTIONS BY AGUA MANSA WATER COMPANY AND MEEKS & DALEY WATER COMPANY  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
FIVE-YEAR TOTALS

(All Values in Acre-Feet)

Five-Year Period	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Extractions <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>
1971-75	39,358	39,358	17,862	0	0	0	1,597	1,597	1,424	37,760	37,760	16,438
1972-76	39,165	39,165	20,353	0	0	0	1,590	1,590	1,223	37,575	37,575	19,130
1973-77	39,165	39,165	21,046	0	0	0	1,590	1,590	992	37,575	37,575	20,054
1974-78	39,165	39,165	20,321	0	0	0	1,590	1,590	903	37,575	37,575	19,418
1975-79	39,165	39,165	19,747	0	0	0	1,590	1,590	823	37,575	37,575	18,924
1976-80	39,165	39,165	18,130	0	0	0	1,590	1,590	978	37,575	37,575	17,152
1977-81	39,165	39,165	15,829	0	0	0	1,590	1,590	1,154	37,575	37,575	14,675
1978-82	39,165	39,165	15,325	0	0	0	1,590	1,590	1,177	37,575	37,575	14,148
1979-83	39,165	39,165	15,722	0	0	0	1,590	1,590	1,261	37,575	37,575	14,461
1980-84	39,165	39,165	16,957	0	0	0	1,590	1,590	1,328	37,575	37,575	15,629
1981-85	39,165	39,165	20,009	0	0	0	1,590	1,590	1,215	37,575	37,575	18,794
1982-86	39,165	39,165	22,487	0	0	0	1,590	1,590	1,091	37,575	37,575	21,396
1983-87	39,165	39,165	23,685	0	0	0	1,590	1,590	1,115	37,575	37,575	22,570
1984-88	39,165	39,165	26,000	0	0	0	1,590	1,590	1,103	37,575	37,575	24,897
1985-89	39,165	39,165	26,227	0	0	0	1,590	1,590	1,110	37,575	37,575	25,117
1986-90	39,165	39,165	24,693	0	0	0	1,590	1,590	983	37,575	37,575	23,710
1987-91	39,165	39,165	23,549	0	0	0	1,590	1,590	939	37,575	37,575	22,610
1988-92	39,165	39,165	22,735	0	0	0	1,590	1,590	864	37,575	37,575	21,871
1989-93	39,165	39,165	22,782	0	0	0	1,590	1,590	907	37,575	37,575	21,875
1990-94	39,165	39,165	21,915	0	0	0	1,590	1,590	894	37,575	37,575	21,021

TABLE NO. 12  
ANNUAL ACCOUNTING OF EXTRACTIONS BY AGUA MANSA WATER COMPANY AND MEEKS & DALEY WATER COMPANY  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
FIVE-YEAR TOTALS

(All Values in Acre-Feet)

Five-Year Period	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted	Maximum	Extractions <sup>3</sup>	Adjusted	Maximum	Deliveries <sup>3</sup>	Adjusted	Maximum	Deliveries <sup>3</sup>	Adjusted	Maximum	Deliveries <sup>3</sup>
	Right <sup>1</sup>	Allowable <sup>2</sup>		Right <sup>4</sup>	Allowable <sup>2</sup>		Right <sup>4</sup>	Allowable <sup>2</sup>		Right <sup>1</sup>	Allowable <sup>2</sup>	
1991-95	39,165	39,165	21,624	0	0	0	1,590	1,590	956	37,575	37,575	20,668
1992-96	39,165	39,165	21,110	0	0	0	1,590	1,590	960	37,575	37,575	20,150
1993-97	39,165	39,165	21,175	0	0	0	1,590	1,590	979	37,575	37,575	20,196
1994-98	39,165	39,165	19,990	0	0	0	1,590	1,590	913	37,575	37,575	19,077
1995-99	39,165	39,165	21,754	0	0	0	1,590	1,590	776	37,575	37,575	20,978
1996-00	39,165	39,165	22,026	0	0	0	1,590	1,590	983	37,575	37,575	21,043
1997-01	39,165	39,165	21,785	0	0	0	1,590	1,590	981	37,575	37,575	20,804
1998-02	39,165	39,165	23,420	0	0	0	1,590	1,590	1,046	37,575	37,575	22,374
1999-03	39,165	39,165	27,032	0	0	0	1,590	1,590	885	37,575	37,575	26,147
2000-04	39,165	39,165	24,525	0	0	0	1,590	1,590	814	37,575	37,575	23,711
2001-05	39,165	39,165	26,584	0	0	0	1,590	1,590	466	37,575	37,575	26,118
2002-06	39,165	39,165	30,428	0	0	0	1,590	1,590	274	37,575	37,575	30,154
2003-07	39,165	39,165	32,219	0	0	0	1,590	1,590	72	37,575	37,575	32,147
2004-08	39,165	39,165	29,611	0	0	0	1,590	1,590	23	37,575	37,575	29,588
2005-09	39,165	39,165	32,174	0	0	0	1,590	1,590	4	37,575	37,575	32,170
2006-10	39,165	39,165	33,021	0	0	0	1,590	1,590	0	37,575	37,575	33,021
2007-11	39,165	39,165	32,633	0	0	0	1,590	1,590	0	37,575	37,575	32,633
2008-12	39,165	39,165	32,159	0	0	0	1,590	1,590	0	37,575	37,575	32,159
2009-13	39,423	39,423	35,059	0	0	0	1,590	1,590	0	37,833	37,833	35,059
2010-14	39,681	39,681	35,817	0	0	0	1,590	1,590	0	38,091	38,091	35,817

TABLE NO. 12  
ANNUAL ACCOUNTING OF EXTRACTIONS BY AGUA MANSA WATER COMPANY AND MEEKS & DALEY WATER COMPANY  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
FIVE-YEAR TOTALS

(All Values in Acre-Feet)

Five-Year Period	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Extractions <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>
2011-15	39,939	39,939		0	0		1,590	1,590		38,349	38,349	
2012-16	40,197	40,197		0	0		1,590	1,590		38,607	38,607	
2013-17	40,455	40,455		0	0		1,590	1,590		38,865	38,865	
2014-18	40,455	40,455		0	0		1,590	1,590		38,865	38,865	
2015-19	40,455	40,455		0	0		1,590	1,590		38,865	38,865	
2016-20	40,455	40,455		0	0		1,590	1,590		38,865	38,865	
Excess Extractions												
2010-14		(3,864) *			0 *			(1,590) *			(2,274) *	

\* Parentheses indicate that Extractions and Deliveries are less than Adjusted Right.

1 Adjusted Right equals Safe Yield Adjusted Right plus New Conservation Allocation.

2 Maximum allowable for the five-year period is the same as the five-year-period Adjusted Right.

3 Extractions and Deliveries from Table No. 3C-2.

4 New Conservation Allocation may also be used in the San Bernardino Basin Area, or the Colton Basin Area and Riverside Basin Area in San Bernardino County.

TABLE NO. 12A  
ALLOWABLE EXTRACTIONS BY AGUA MANSA WATER COMPANY AND MEEKS & DALEY WATER COMPANY  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA

CALENDAR YEAR 2015  
(All Values in Acre-Feet)

		<u>Allowable Total Extractions from the San Bernardino Basin Area</u>	<u>Allowable Delivery for Use in San Bernardino Basin Area</u>	<u>Allowable Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County</u>	<u>Allowable Delivery for Use in Areas Outside San Bernardino Valley</u>
Allowable Extraction Based on Adjusted Right	<b>1</b>	9,683	0	413	9,270
Imported Water Available In Holding Account	<b>2</b>	0	See Footnote <b>5</b>	See Footnote <b>5</b>	0
New Conservation Water Available	<b>3</b>	<u>1,448</u>	<u>See Footnote <b>6</b></u>	<u>See Footnote <b>6</b></u>	<u>1,448</u>
Total Allowable Extraction	<b>4</b>	11,131	0	413	10,718

TABLE NO. 12A  
ALLOWABLE EXTRACTIONS BY AGUA MANSA WATER COMPANY AND MEEKS & DALEY WATER COMPANY  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA

CALENDAR YEAR 2015  
(All Values in Acre-Feet)

- 1 *Component of Total Allowable Extractions available through the adjusted right which is equal to the 1959-63 base period extractions minus an adjustment for safe yield and plus an adjustment to include new conservation water forecast to result from long term operation of Seven Oaks Reservoir and diversion of increased amounts for recharge at the Santa Ana River Spreading Grounds. The Allowable Delivery amounts are the adjusted right for the five year period ending with the subject year minus the sum of the Deliveries (Table 12, Page 1c of 2) for the previous four years or the Maximum Allowable annual delivery (1.3 times average annual allowable delivery) whichever is the lessor. Allowable Total Extractions is the sum of the allowable deliveries.*
- 2 *Component of Total Allowable Extraction available if Western has previously transferred to Agua Mansa Water Company and Meeks & Daley Water Company the right to extract imported water and Agua Mansa Water Company and Meeks & Daley Water Company has under extracted water in an amount equal to or less than the sum of the rights to extract that were previously transferred. The amount available for extraction by Agua Mansa Water Company and Meeks & Daley Water Company is accounted for in Table No. 17B-3, and is referred to as Imported Water Net Accumulated (Credit).*
- 3 *Component of Total Allowable Extraction available as a result of Western, San Bernardino Valley and the Riverside Court approving a Judgment Paragraph VI (b) 6 agreement providing an allocation of new conservation water determined by Watermaster to have resulted from operation of Seven Oaks Reservoir from 1998 through 2012 and any future Judgment Paragraph VI (b) 6 agreement allocating new conservation water determined by Watermaster to have resulted from a future hydrologic event that resulted in direct use of Seven Oaks water or recharge of the San Bernardino Basin Area with Seven Oaks water in areas other than the Santa Ana River Spreading Grounds provided the capability to recharge at the Spreading Grounds has been fully utilized. The amount available for extraction by Agua Mansa Water Company and Meeks & Daley Water Company is accounted for in Table No. 17B-3, and is referred to as New Conservation Net Accumulated (Credit).*
- 4 *The Total Allowable Extraction is the sum of the allowable components described in Footnotes 1, 2 and 3.*
- 5 *Watermaster anticipates that Agua Mansa Water Company and Meeks & Daley Water Company will not have excess extractions for delivery in the San Bernardino Basin Area or in the Colton and Riverside Basin Areas in San Bernardino County and therefore it is unlikely that Western will transfer a right to extract imported water for delivery in these areas. Therefore, it is unlikely that imported water resulting from under extractions will become available to Agua Mansa Water Company and Meeks & Daley Water Company for delivery in these areas. However, if transfers of imported water and under extractions do occur, Watermaster will account for such occurrences at that time.*
- 6 *Watermaster anticipates that Agua Mansa Water Company and Meeks & Daley Water Company will not have excess extractions for delivery in the San Bernardino Basin Area or in the Colton and Riverside Basin Areas in San Bernardino County and therefore Agua Mansa Water Company and Meeks & Daley Water Company is unlikely to choose to use its allocation of new conservation water for deliveries in these areas. However, if excess extractions occur in these areas, Agua Mansa Water Company and Meeks & Daley Water Company will likely choose to use its new conservation allocation to address the excess extraction and Watermaster will account for such use at that time.*

TABLE NO. 13  
ANNUAL ACCOUNTING OF EXTRACTIONS BY THE REGENTS OF THE UNIVERSITY OF CALIFORNIA  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
ANNUAL TOTALS

(All Values in Acre-Feet)

Calendar Year	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Extractions <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>
1971	581	755	219	0	0	0	0	0	0	581	755	219
1972	536	697	239	0	0	0	0	0	0	536	697	239
1973	536	697	239	0	0	0	0	0	0	536	697	239
1974	536	697	267	0	0	0	0	0	0	536	697	267
1975	536	697	179	0	0	0	0	0	0	536	697	179
1976	536	697	245	0	0	0	0	0	0	536	697	245
1977	536	697	87	0	0	0	0	0	0	536	697	87
1978	536	697	183	0	0	0	0	0	0	536	697	183
1979	536	697	83	0	0	0	0	0	0	536	697	83
1980	536	697	7	0	0	0	0	0	0	536	697	7
1981	536	697	143	0	0	0	0	0	0	536	697	143
1982	536	697	48	0	0	0	0	0	0	536	697	48
1983	536	697	0	0	0	0	0	0	0	536	697	0
1984	536	697	0	0	0	0	0	0	0	536	697	0
1985	536	697	0	0	0	0	0	0	0	536	697	0
1986	536	697	48	0	0	0	0	0	0	536	697	48
1987	536	697	195	0	0	0	0	0	0	536	697	195
1988	536	697	179	0	0	0	0	0	0	536	697	179
1989	536	697	62	0	0	0	0	0	0	536	697	62
1990	536	697	95	0	0	0	0	0	0	536	697	95

TABLE NO. 13  
ANNUAL ACCOUNTING OF EXTRACTIONS BY THE REGENTS OF THE UNIVERSITY OF CALIFORNIA  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
ANNUAL TOTALS

(All Values in Acre-Feet)

Calendar Year	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Extractions <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>
1991	536	697	23	0	0	0	0	0	0	536	697	23
1992	536	697	32	0	0	0	0	0	0	536	697	32
1993	536	697	0	0	0	0	0	0	0	536	697	0
1994	536	697	0	0	0	0	0	0	0	536	697	0
1995	536	697	0	0	0	0	0	0	0	536	697	0
1996	536	697	445	0	0	0	0	0	0	536	697	445
1997	536	697	447	0	0	0	0	0	0	536	697	447
1998	536	697	536	0	0	0	0	0	0	536	697	536
1999	536	697	536	0	0	0	0	0	0	536	697	536
2000	536	697	536	0	0	0	0	0	0	536	697	536
2001	536	697	536	0	0	0	0	0	0	536	697	536
2002	536	697	536	0	0	0	0	0	0	536	697	536
2003	536	697	536	0	0	0	0	0	0	536	697	536
2004	536	697	536	0	0	0	0	0	0	536	697	536
2005	536	697	536	0	0	0	0	0	0	536	697	536
2006	536	697	536	0	0	0	0	0	0	536	697	536
2007	536	697	536	0	0	0	0	0	0	536	697	536
2008	536	697	536	0	0	0	0	0	0	536	697	536
2009	536	697	536	0	0	0	0	0	0	536	697	536
2010	536	697	536	0	0	0	0	0	0	536	697	536

TABLE NO. 13  
ANNUAL ACCOUNTING OF EXTRACTIONS BY THE REGENTS OF THE UNIVERSITY OF CALIFORNIA  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
ANNUAL TOTALS

(All Values in Acre-Feet)

Calendar Year	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Extractions <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>
2011	536	697	536	0	0	0	0	0	0	536	697	536
2012	536	697	536	0	0	0	0	0	0	536	697	536
2013	554	720	536	0	0	0	0	0	0	554	720	536
2014	554	720	536	0	0	0	0	0	0	554	720	536
2015	554	720		0	0		0	0		554	720	
2016	554	720		0	0		0	0		554	720	
2017	554	720		0	0		0	0		554	720	
2018	554	720		0	0		0	0		554	720	
2019	554	720		0	0		0	0		554	720	
2020	554	720		0	0		0	0		554	720	

*See Report of Watermaster, Tables 3D-1 and 3D-2.*

*<sup>1</sup> Adjusted Right equals Safe Yield Adjusted Right plus New Conservation Allocation.*

*<sup>2</sup> Maximum Allowable for any one year, not to exceed 130% of Adjusted Right.*

*<sup>3</sup> Extractions and Deliveries from Table No. 3D-2. (Volume 1A, Table 3)*

*<sup>4</sup> New Conservation Allocation may also be used in the San Bernardino Basin Area, or the Colton Basin Area and Riverside Basin Area in San Bernardino County.*

*Note: Annual Accounting of Extractions as required in Paragraphs V and VI of the Judgment.*



TABLE NO. 13  
ANNUAL ACCOUNTING OF EXTRACTIONS BY THE REGENTS OF THE UNIVERSITY OF CALIFORNIA  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
FIVE-YEAR TOTALS

(All Values in Acre-Feet)

Five-Year Period	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Extractions <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>
1971-75	2,725	2,725	1,143	0	0	0	0	0	0	2,725	2,725	1,143
1972-76	2,680	2,680	1,169	0	0	0	0	0	0	2,680	2,680	1,169
1973-77	2,680	2,680	1,017	0	0	0	0	0	0	2,680	2,680	1,017
1974-78	2,680	2,680	961	0	0	0	0	0	0	2,680	2,680	961
1975-79	2,680	2,680	777	0	0	0	0	0	0	2,680	2,680	777
1976-80	2,680	2,680	605	0	0	0	0	0	0	2,680	2,680	605
1977-81	2,680	2,680	503	0	0	0	0	0	0	2,680	2,680	503
1978-82	2,680	2,680	464	0	0	0	0	0	0	2,680	2,680	464
1979-83	2,680	2,680	281	0	0	0	0	0	0	2,680	2,680	281
1980-84	2,680	2,680	198	0	0	0	0	0	0	2,680	2,680	198
1981-85	2,680	2,680	191	0	0	0	0	0	0	2,680	2,680	191
1982-86	2,680	2,680	96	0	0	0	0	0	0	2,680	2,680	96
1983-87	2,680	2,680	243	0	0	0	0	0	0	2,680	2,680	243
1984-88	2,680	2,680	422	0	0	0	0	0	0	2,680	2,680	422
1985-89	2,680	2,680	484	0	0	0	0	0	0	2,680	2,680	484
1986-90	2,680	2,680	579	0	0	0	0	0	0	2,680	2,680	579
1987-91	2,680	2,680	554	0	0	0	0	0	0	2,680	2,680	554
1988-92	2,680	2,680	391	0	0	0	0	0	0	2,680	2,680	391
1989-93	2,680	2,680	212	0	0	0	0	0	0	2,680	2,680	212
1990-94	2,680	2,680	150	0	0	0	0	0	0	2,680	2,680	150

TABLE NO. 13  
ANNUAL ACCOUNTING OF EXTRACTIONS BY THE REGENTS OF THE UNIVERSITY OF CALIFORNIA  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
FIVE-YEAR TOTALS

(All Values in Acre-Feet)

Five-Year Period	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Extractions <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>
1991-95	2,680	2,680	55	0	0	0	0	0	0	2,680	2,680	55
1992-96	2,680	2,680	477	0	0	0	0	0	0	2,680	2,680	477
1993-97	2,680	2,680	892	0	0	0	0	0	0	2,680	2,680	892
1994-98	2,680	2,680	1,428	0	0	0	0	0	0	2,680	2,680	1,428
1995-99	2,680	2,680	1,964	0	0	0	0	0	0	2,680	2,680	1,964
1996-00	2,680	2,680	2,500	0	0	0	0	0	0	2,680	2,680	2,500
1997-01	2,680	2,680	2,591	0	0	0	0	0	0	2,680	2,680	2,591
1998-02	2,680	2,680	2,680	0	0	0	0	0	0	2,680	2,680	2,680
1999-03	2,680	2,680	2,680	0	0	0	0	0	0	2,680	2,680	2,680
2000-04	2,680	2,680	2,680	0	0	0	0	0	0	2,680	2,680	2,680
2001-05	2,680	2,680	2,680	0	0	0	0	0	0	2,680	2,680	2,680
2002-06	2,680	2,680	2,680	0	0	0	0	0	0	2,680	2,680	2,680
2003-07	2,680	2,680	2,680	0	0	0	0	0	0	2,680	2,680	2,680
2004-08	2,680	2,680	2,680	0	0	0	0	0	0	2,680	2,680	2,680
2005-09	2,680	2,680	2,680	0	0	0	0	0	0	2,680	2,680	2,680
2006-10	2,680	2,680	2,680	0	0	0	0	0	0	2,680	2,680	2,680
2007-11	2,680	2,680	2,680	0	0	0	0	0	0	2,680	2,680	2,680
2008-12	2,680	2,680	2,680	0	0	0	0	0	0	2,680	2,680	2,680
2009-13	2,698	2,698	2,680	0	0	0	0	0	0	2,698	2,698	2,680
2010-14	2,716	2,716	2,680	0	0	0	0	0	0	2,716	2,716	2,680

TABLE NO. 13  
ANNUAL ACCOUNTING OF EXTRACTIONS BY THE REGENTS OF THE UNIVERSITY OF CALIFORNIA  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA  
FIVE-YEAR TOTALS

(All Values in Acre-Feet)

Five-Year Period	Verified Extractions from the San Bernardino Basin Area			Delivery for Use in San Bernardino Basin Area			Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County			Delivery for Use in Areas Outside San Bernardino Valley		
	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Extractions <sup>3</sup>	Adjusted Right <sup>4</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>4</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>	Adjusted Right <sup>1</sup>	Maximum Allowable <sup>2</sup>	Deliveries <sup>3</sup>
2011-15	2,734	2,734		0	0		0	0		2,734	2,734	
2012-16	2,752	2,752		0	0		0	0		2,752	2,752	
2013-17	2,770	2,770		0	0		0	0		2,770	2,770	
2014-18	2,770	2,770		0	0		0	0		2,770	2,770	
2015-19	2,770	2,770		0	0		0	0		2,770	2,770	
2016-20	2,770	2,770		0	0		0	0		2,770	2,770	
Excess Extractions 2010-14		(36) *			0 *			0 *			(36) *	

\* Parentheses indicate that Extractions and Deliveries are less than Adjusted Right.

<sup>1</sup> Adjusted Right equals Safe Yield Adjusted Right plus New Conservation Allocation.

<sup>2</sup> Maximum allowable for the five-year period is the same as the five-year-period Adjusted Right.

<sup>3</sup> Extractions and Deliveries from Table No. 3D-2. (Volume 1A, Table 3)

<sup>4</sup> New Conservation Allocation may also be used in the San Bernardino Basin Area, or the Colton Basin Area and Riverside Basin Area in San Bernardino County.

TABLE NO. 13A  
ALLOWABLE EXTRACTIONS BY THE REGENTS OF THE UNIVERSITY OF CALIFORNIA  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA

CALENDAR YEAR 2015  
(All Values in Acre-Feet)

		<u>Allowable Total Extractions from the San Bernardino Basin Area</u>	<u>Allowable Delivery for Use in San Bernardino Basin Area</u>	<u>Allowable Delivery for Use in Colton Basin Area and Riverside Basin Area in San Bernardino County</u>	<u>Allowable Delivery for Use in Areas Outside San Bernardino Valley</u>
Allowable Extraction Based on Adjusted Right	1	590	0	0	590
Imported Water Available In Holding Account	2	0	See Footnote 5	See Footnote 5	0
New Conservation Water Available	3	<u>98</u>	<u>See Footnote 6</u>	<u>See Footnote 6</u>	<u>98</u>
Total Allowable Extraction	4	688	0	0	688

TABLE NO. 13A  
ALLOWABLE EXTRACTIONS BY THE REGENTS OF THE UNIVERSITY OF CALIFORNIA  
FROM THE SAN BERNARDINO BASIN AREA  
FOR DELIVERY TO EACH SERVICE AREA

CALENDAR YEAR 2015  
(All Values in Acre-Feet)

- 1 Component of Total Allowable Extractions available through the adjusted right which is equal to the 1959-63 base period extractions minus an adjustment for safe yield and plus an adjustment to include new conservation water forecast to result from long term operation of Seven Oaks Reservoir and diversion of increased amounts for recharge at the Santa Ana River Spreading Grounds. The Allowable Delivery amounts are the adjusted right for the five year period ending with the subject year minus the sum of the Deliveries (Table 13, Page 1c of 2) for the previous four years or the Maximum Allowable annual delivery (1.3 times average annual allowable delivery) whichever is the lessor. Allowable Total Extractions is the sum of the allowable deliveries.*
- 2 Component of Total Allowable Extraction available if Western has previously transferred to The Regents of the University of California the right to extract imported water and the Regents of the University of California has under extracted water in an amount equal to or less than the sum of the rights to extract that were previously transferred. The amount available for extraction by The Regents of the University of California is accounted for in Table No. 17B-4, and is referred to as Imported Water Net Accumulated (Credit).*
- 3 Component of Total Allowable Extraction available as a result of Western, San Bernardino Valley and the Riverside Court approving a Judgment Paragraph VI (b) 6 agreement providing an allocation of new conservation water determined by Watermaster to have resulted from operation of Seven Oaks Reservoir from 1998 through 2012 and any future Judgment Paragraph VI (b) 6 agreement allocating new conservation water determined by Watermaster to have resulted from a future hydrologic event that resulted in direct use of Seven Oaks water or recharge of the San Bernardino Basin Area with Seven Oaks water in areas other than the Santa Ana River Spreading Grounds provided the capability to recharge at the Spreading Grounds has been fully utilized. The amount available for extraction by The Regents of the University of California is accounted for in Table No. 17B-4, and is referred to as New Conservation Net Accumulated (Credit).*
- 4 The Total Allowable Extraction is the sum of the allowable components described in Footnotes 1, 2 and 3.*
- 5 Watermaster anticipates that The Regents of the University of California will not have excess extractions for delivery in the San Bernardino Basin Area or in the Colton and Riverside Basin Areas in San Bernardino County and therefore it is unlikely that Western will transfer a right to extract imported water for delivery in these areas. Therefore, it is unlikely that imported water resulting from under extractions will become available to The Regents of the University of California for delivery in these areas. However, if transfers of imported water and under extractions do occur, Watermaster will account for such occurrences at that time.*
- 6 Watermaster anticipates that The Regents of the University of California will not have excess extractions for delivery in the San Bernardino Basin Area or in the Colton and Riverside Basin Areas in San Bernardino County and therefore The Regents of the University of California is unlikely to choose to use its allocation of new conservation water for deliveries in these areas. However, if excess extractions occur in these areas, The Regents of the University of California will likely choose to use its new conservation allocation to address the excess extraction and Watermaster will account for such use at that time.*

TABLE NO. 14

ANNUAL ACCOUNTING FOR  
WESTERN MUNICIPAL WATER DISTRICT  
EXPORT OF EXTRACTIONS FROM SAN BERNARDINO BASIN AREA,  
COLTON BASIN AREA, AND RIVERSIDE BASIN AREA  
FOR USE WITHIN WESTERN ON LANDS THAT ARE NOT TRIBUTARY  
TO THE RIVERSIDE NARROWS  
(All Values in Acre-Feet)

		Calendar Years				
		2010	2011	2012	2013	2014
<b>EXPORTS</b>						
Annual 1959-63 Average		42,535	42,535	42,535	42,535	42,535
Actual Export	<i>1</i>	38,229	40,848	40,088	41,906	40,605
<b>ACCUMULATED EXPORT</b>	<i>2</i>	1,559,684	1,600,532	1,640,620	1,682,526	1,723,131
<b>OBLIGATIONS</b>						
Total New Export	<i>3</i>	(4,306)	(1,687)	(2,447)	(629)	(1,930)
Additional New Export	<i>4</i>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
New Export	<i>5</i>	(4,306)	(1,687)	(2,447)	(629)	(1,930)
<b>ACCUMULATED NEW EXPORT</b>	<i>2</i>	(318,923)	(320,610)	(323,057)	(323,686)	(325,616)

*1 See Table 8 of Watermaster Report. (Data from Volume 6, Table A.)*

*2 Accumulated values include amounts accumulated prior to current 5-year period.*

*3 Actual Export minus Annual 1959-63 Average. (Parentheses indicate that Actual Export is less than Annual 1959-63 Average.)*

*4 New Export which was allowed under High Groundwater Mitigation agreements without replenishment obligation.*

*5 Total New Export minus Additional New Export.*

TABLE NO. 15A

ANNUAL ACCOUNTING FOR  
SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT  
EXPORT OF EXTRACTIONS FROM SAN BERNARDINO BASIN AREA  
FOR USE ON LANDS  
NOT WITHIN WESTERN NOR TRIBUTARY  
TO THE RIVERSIDE NARROWS

		(All Values in Acre-Feet) Calendar Years				
		2010	2011	2012	2013	2014
<b>EXPORTS</b>						
Annual 1959-63 Average	1	11,701	11,701	11,701	11,701	11,701
Actual Export	1	25,317	34,687	22,944	15,559	11,342
<b>ACCUMULATED EXPORT</b>	2	919,230	953,917	976,861	992,420	1,003,762
<b>OBLIGATIONS</b>						
Total New Export	3	13,616	22,986	11,243	3,858	(359)
Additional New Export	4					
New Export	5	13,616	22,986	11,243	3,858	(359)
<b>ACCUMULATED NEW EXPORT</b>	2	262,872	285,858	297,101	300,959	300,600

1 See Table No. 9A. (Data from Volume 7, Tables C and D)

2 Accumulated values include amounts accumulated prior to current 5-year period.

3 Actual Export minus Annual 1959-63 Average. (Parentheses indicate that Actual Export is less than Annual 1959-63 Average)

4 New Export which was allowed under High Groundwater Mitigation agreements without replenishment obligation.

5 Total New Export minus Additional New Export.

TABLE NO. 15B

ANNUAL ACCOUNTING FOR  
SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT  
DELIVERY OF EXTRACTIONS FROM SAN BERNARDINO BASIN AREA  
FOR USE ON LANDS  
WITHIN COLTON AND RIVERSIDE BASIN AREAS

		(All Values in Acre-Feet) Calendar Years				
		2010	2011	2012	2013	2014
<b>DELIVERIES</b>						
Annual 1959-63 Average	1	17,837	17,837	17,837	17,837	17,837
Actual Deliveries	1	20,564	21,573	23,560	22,926	22,026
<b>ACCUMULATED DELIVERIES</b>	2	892,933	914,506	938,066	960,992	983,018
<b>OBLIGATIONS</b>						
Total New Deliveries	3	2,727	3,736	5,723	5,089	4,189
Additional New Deliveries	4	0	0	0	0	0
New Deliveries	5	2,727	3,736	5,723	5,089	4,189
<b>ACCUMULATED NEW DELIVERIES</b>	2	131,611	135,347	141,070	146,159	150,348

1 See Table No. 9B. (Data from Volume 7, Tables E and F)

2 Accumulated values include amounts accumulated prior to current 5-year period.

3 Actual Deliveries minus Annual 1959-63 Average. (Parentheses indicate that Actual Deliveries are less than Annual 1959-63 Average)

4 New Deliveries which were allowed under High Groundwater Mitigation agreements without replenishment obligation.

5 Total New Deliveries minus Additional New Deliveries.



ANNUAL ACCOUNTING FOR  
WESTERN MUNICIPAL WATER DISTRICT  
EXTRACTIONS FROM COLTON BASIN AREA AND  
RIVERSIDE BASIN AREA  
WITHIN RIVERSIDE AND SAN BERNARDINO COUNTIES  
FOR USE OUTSIDE SAN BERNARDINO VALLEY  
(All Values in Acre-Feet)

		Calendar Years				
		2010	2011	2012	2013	2014
<b>EXTRACTIONS</b>						
<b>Base Period 1959-1963</b>						
Colton Basin Area	1	3,381	3,381	3,381	3,381	3,381
Riverside Basin Area Within San Bernardino County	2	21,085	21,085	21,085	21,085	21,085
Riverside Basin Area Within Riverside County	3	29,633	29,633	29,633	29,633	29,633
Total Extractions 1959-1963		54,099	54,099	54,099	54,099	54,099
<b>Current Period 2010-2014</b>						
Colton Basin Area	1	77	173	61	64	60
Riverside Basin Area Within San Bernardino County	2	12,685	13,276	15,613	12,600	9,480
Riverside Basin Area Within Riverside County	3	29,077	30,510	28,049	30,070	31,245
Total Extractions 2010-2014		41,839	43,959	43,723	42,734	40,785
New Export	4	(4,306)	(1,687)	(2,447)	(629)	(1,930)
Total Extractions Excluding New Export	5	46,145	45,646	46,170	43,363	42,715
Under Extractions Excluding New Export	6	7,954	8,453	7,929	10,736	11,384
Excess Extractions Excluding New Export	7	0	0	0	0	0
<b>CREDITS</b>						
Extraction Credit	8	7,954	8,453	7,929	10,736	11,384
Return From Excess Extractions	9	0	0	0	0	0
New Export Credit	10	4,306	1,687	2,447	629	1,930
Replenishment	11	0	0	0	0	0
Storm Flow Conservation	12	0	0	0	0	0
Return from Imported Water	13	2,182	2,484	2,356	2,215	2,227
Return from New Conservation	14	0	0	0	769	769
Total Credits		14,442	12,624	12,732	14,349	16,310
ACCUMULATED CREDITS	15	559,862	572,486	585,218	599,567	615,877
<b>OBLIGATIONS</b>						
Extraction Obligation	16	0	0	0	0	0
Return from Under Extractions	17	2,863	3,043	2,854	3,865	4,098
New Export Obligation	18	0	0	0	0	0
Land Use Conversion	19	579	579	579	579	579
Total Obligations		3,442	3,622	3,433	4,444	4,677
ACCUMULATED OBLIGATIONS	15	133,661	137,283	140,716	145,160	149,837
(CREDIT) OR OBLIGATION	20	(11,000)	(9,002)	(9,299)	(9,905)	(11,633)
<b>NET ACCUMULATED (CREDIT) OR OBLIGATION</b>	15	(426,201)	(435,203)	(444,502)	(454,407)	(466,040)

ANNUAL ACCOUNTING FOR  
WESTERN MUNICIPAL WATER DISTRICT  
EXTRACTIONS FROM COLTON BASIN AREA AND  
RIVERSIDE BASIN AREA  
WITHIN RIVERSIDE AND SAN BERNARDINO COUNTIES  
FOR USE OUTSIDE SAN BERNARDINO VALLEY

- 1 See Table 4 of Watermaster Report
- 2 See Table 5 of Watermaster Report
- 3 See Table 6 of Watermaster Report
- 4 See Table 14 of Watermaster Report
- 5 Equals Total Extractions 2010-2014 minus New Export
- 6 Total Extractions 1959-1963 minus Total Extractions 2010-2014 excluding New Export, if positive
- 7 Total Extractions 2010-2014 excluding New Export minus Total Extractions 1959-1963, if positive
- 8 Amounts which may be extracted without replenishment obligation, which in fact are not extracted. Equals Under Extractions excluding New Export.
- 9 Return from Excess Extractions equals 36% of Extraction Obligation
- 10 New Export Credit equals New Export, if negative
- 11 Imported water recharged in Colton Basin Area, Riverside Basin Area Within San Bernardino County, or Riverside Basin Area Within Riverside County
- 12 Credit for storm flows conserved between Bunker Hill Dike and Riverside Narrows, by Western entities, which would not otherwise contribute to base flow at Riverside Narrows, pursuant to Paragraph XI(b)3 of Judgment.
- 13 Return from Imported Water equals 36% of the quality adjusted amount of the imported water delivered directly to users and/or extracted from the San Bernardino Basin Area for use within Western pursuant to the August 18, 2004 Agreement and any other Judgment Paragraph VI(b)6 agreement that allows Western to extract additional water from the Basin as a result of purchasing imported water for recharge of the Basin. See Report of Watermaster, Volume 6, Table No. 11.
- 14 Return from New Conservation equals 36% of New Conservation. See Tables 3A-1, 3A-2, 3B-1, 3B-2, 3C-1, 3C-2, 3D-1 and 3D-2 of Watermaster Report.
- 15 Accumulated values include amounts accumulated prior to current 5-year period
- 16 Equals Excess Extractions excluding New Export
- 17 Return from Under Extractions equals 36% of Extraction Credit
- 18 New Export Obligation equals New Export, if positive
- 19 See Table 7 of Watermaster Report
- 20 Net Credit or Obligation for this calendar year.

ANNUAL ACCOUNTING FOR  
SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT  
EXTRACTIONS FROM SAN BERNARDINO BASIN AREA

(All Values in Acre-Feet)

		Calendar Years				
		2010	2011	2012	2013	2014
<b>EXTRACTIONS</b>						
Adjusted Right	1	167,238	167,238	167,238	172,745	172,745
Extractions	1	163,795	172,755	172,505	156,962	152,260
New Export	2	13,616	22,986	11,243	3,858	(359)
New Deliveries to Colton Basin Area within San Bernardino Valley and Riverside Basin Area within San Bernardino County	3	2,727	3,736	5,723	5,089	4,189
Extractions Excluding New Export and New Deliveries	4	147,452	146,033	155,539	148,015	148,430
Under Extractions Excluding New Export and New Deliveries	5	19,786	21,205	11,699	24,730	24,315
Excess Extractions Excluding New Export and New Deliveries	6	0	0	0	0	0
<b>CREDITS</b>						
Extraction Credit	7	19,786	21,205	11,699	24,730	24,315
Return From Excess Extractions	8	0	0	0	0	0
New Export Credit	9	0	0	0	0	359
New Deliveries Credit	10	0	0	0	0	0
Replenishment	11	18,717	18,999	24,220	12,453	1,691
Return from Imported Water	12	856	422	2,063	3,444	843
Return from New Conservation	13	0	0	0	1,983	1,983
Total Credits		39,359	40,626	37,982	42,610	29,191
ACCUMULATED CREDITS	14	778,667	819,293	857,275	899,885	929,076
<b>OBLIGATIONS</b>						
Extraction Obligation	15	0	0	0	0	0
Return From Under Extractions	16	7,123	7,634	4,212	8,903	8,753
New Export Obligation	17	13,616	22,986	11,243	3,858	0
New Deliveries Obligation	18	2,727	3,736	5,723	5,089	4,189
In-Lieu Deliveries Obligation	19	2,379	789	4,696	6,454	6,408
Total Obligations		25,845	35,145	25,874	24,304	19,350
ACCUMULATED OBLIGATIONS	14	719,409	754,554	780,428	804,732	824,082
(CREDIT) OR OBLIGATION	20	(13,514)	(5,481)	(12,108)	(18,306)	(9,841)
<b>NET ACCUMULATED (CREDIT) OR OBLIGATION</b>	14	(59,258)	(64,739)	(76,847)	(95,153)	(104,994)

ANNUAL ACCOUNTING FOR  
SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT  
EXTRACTIONS FROM SAN BERNARDINO BASIN AREA

- 1 See Table No. 2 of Watermaster Report.*
- 2 See Table No. 15A of Watermaster Report.*
- 3 See Table No. 15B of Watermaster Report.*
- 4 Extractions minus New Export minus New Deliveries.*
- 5 Adjusted Right minus Extractions excluding New Export and New Deliveries, if positive.*
- 6 Extractions excluding New Export and New Deliveries minus Adjusted Right, if positive.*
- 7 Amounts which may be extracted without replenishment obligation, which in fact are not extracted.  
Equals Under Extractions excluding New Export and New Deliveries.*
- 8 Return from Excess Extractions equals 36% of Extraction Obligation.*
- 9 New Export Credit equals New Export, if negative.*
- 10 New Deliveries Credit equals New Deliveries, if negative.*
- 11 See Report of Watermaster, Volume 7, Table No. 21, imported water recharged in SBBA.*
- 12 Return from Imported Water equals 36% of direct delivered imported water.  
See Report of Watermaster, Volume 7, Table No. 22.*
- 13 Return from New Conservation equals 36% of New Conservation. See Table No. 2 of Watermaster Report.*
- 14 Accumulated values include amounts accumulated prior to current 5-year period.*
- 15 Equals Excess Extractions excluding New Export and New Deliveries.*
- 16 Return from Under Extractions equals 36% of Extraction Credit.*
- 17 New Export Obligation equals New Export, if positive.*
- 18 New Deliveries Obligation equals New Deliveries, if positive.*
- 19 Obligation resulting from the reduction in flow of the Santa Ana River of an amount assumed to be  
equal to the sum of imported water and pumped groundwater delivered to Bear Valley Mutual Water  
Company in-lieu of surface water diversions, pursuant to a 1996 agreement between San Bernardino  
Valley and Big Bear Municipal Water District. See Volume 7, Table No. 22.*
- 20 Net Credit or Obligation for this calendar year.*

ANNUAL ACCOUNTING FOR  
ADDITIONAL EXTRACTIONS OF IMPORTED WATER  
FROM SAN BERNARDINO BASIN AREA  
BY WESTERN MUNICIPAL WATER DISTRICT

(All Values in Acre-Feet)

		Calendar Years				
		2010	2011	2012	2013	2014
<b>ADDITIONAL EXTRACTIONS</b>						
Imported Water Acquired By Western	1	0	0	0	0	0
Additional Extractions	2	0	0	0	0	0
<b>CREDITS</b>						
Imported Water Acquired By Western	1	0	0	0	0	0
Plaintiff Transfers To Holding Account	3	0	0	0	2,459 <sup>e</sup>	0
Total Credits		0	0	0	2,459	0
<b>ACCUMULATED CREDITS</b>	4	8,459	8,459	8,459	10,918	10,918
<b>OBLIGATIONS</b>						
Western Additional Extractions	5	0	0	0	0	0
Western Transfers To Plaintiffs	6	0	0	0	0	0
Holding Account Transfers To Plaintiffs	7	0	0	0	0	0
Total Obligations		0	0	0	0	0
<b>ACCUMULATED OBLIGATIONS</b>	8	2,459	2,459	2,459	2,459	2,459
<b>(CREDIT) OR OBLIGATION</b>	9	0	0	0	(2,459)	0
<b>WESTERN NET ACCUMULATED (CREDIT) OR OBLIGATION</b>	10	(6,000)	(6,000)	(6,000)	(6,000)	(6,000)
<b>PLAINTIFF NET ACCUMULATED (CREDIT)</b>	11	0	0	0	(2,459)	(2,459)
<b>TOTAL NET ACCUMULATED (CREDIT) OR OBLIGATION</b>	12	(6,000)	(6,000)	(6,000)	(8,459)	(8,459)

ANNUAL ACCOUNTING FOR  
ADDITIONAL EXTRACTIONS OF IMPORTED WATER  
FROM SAN BERNARDINO BASIN AREA  
BY WESTERN MUNICIPAL WATER DISTRICT

- 1 *Amount of imported water acquired from San Bernardino Valley or MWDSC by Western, that is spread and stored in the San Bernardino Basin Area pursuant to Judgment Paragraph XV (a) and is available for extraction (recapture) by Western and Plaintiffs pursuant to Judgment Paragraph VI(b)6 agreements.*
  - 2 *Amount of extractions by Western and/or extractions by Plaintiffs of imported water acquired and stored in the San Bernardino Basin Area by Western and transferred to Plaintiffs.*
  - 3 *Sum of all Plaintiffs transfers to Western of amounts of water equal to Plaintiffs unused water right provided the amount transferred plus the remaining balance of any previous such transfers does not exceed the aggregate amount of imported water previously transferred by Western to the Plaintiffs (see Footnote 5 on Table Nos. 17 B-1 through 17 B-4).*
  - 4 *Accumulated Credits include amounts of credit accumulated prior to the current five year period.*
  - 5 *Amount of extractions made by Western of Imported Water Acquired By Western (see Footnote 1).*
  - 6 *Sum of the amounts of Imported Water Acquired By Western transferred to Plaintiffs for the purpose of allowing additional extractions by Plaintiffs (see Footnote 4 on Table Nos. 17 B-1 through 17 B-4).*
  - 7 *Sum of the amounts of water in the Western holding accounts for each Plaintiff that can be transferred to Plaintiffs for the purpose of allowing additional extractions by Plaintiff (see Footnote 8 on Table Nos. 17 B-1 through 17 B-4).*
  - 8 *Accumulated Obligations include extraction and transfer of right to extract related obligations accumulated for the current five year period and for prior years.*
  - 9 *(Credit) or Obligation equals Total Obligations minus Total Credits for the calendar year.*
  - 10 *Western Net Accumulated (Credit) or Obligation equals the sum of all annual Western Additional Extractions (see Footnote 5) plus all annual Western Transfers to Plaintiffs (see Footnote 6) minus the sum of all annual amounts of Imported Water Acquired by Western (see Footnote 1). Such credit allows extraction by Western and/or allows transfer of an additional right to extract to Plaintiffs. To the extent permitted by agreement with San Bernardino Valley, if extractions have been made prior to replenishment, the Western Net Accumulated Obligation reflects the amount of future replenishment that must be made.*
  - 11 *Plaintiff Net Accumulated (Credit) equals the sum of all Holding Account Transfers to Plaintiffs (see Footnote 7) minus the sum of all annual Plaintiff Transfers to Holding Accounts (see Footnote 3).*
  - 12 *Total Net Accumulated (Credit) or Obligation is the sum of the Western Net Accumulated (Credit) or Obligation and the Plaintiff Net Accumulated (Credit).*
- 
- a *In 2004 Western acquired 6,000 acre-feet of imported water from MWDSC and the Riverside Court approved a Judgment Paragraph VI(b)6 agreement granting the right for Western to extract 6,000 acre-feet of water and the right to transfer such right to Plaintiffs. 3,500 acre-feet of the imported water was stored in the San Bernardino Basin Area.*
  - b *In 2005 the remainder (2,500 acre-feet) of imported water was stored in the Basin.*
  - c *In 2007 Western transferred the right to extract 2,459 acre-feet of imported water to City of Riverside.*
  - d *In 2009 Western acquired 2,459 acre-feet of imported water from San Bernardino Valley and it was stored in the Basin.*
  - e *In 2013 City of Riverside transferred 2,459 acre-feet of water to a Western imported water holding account.*

ANNUAL ACCOUNTING FOR  
ADDITIONAL EXTRACTIONS OF NEW CONSERVATION WATER AND IMPORTED WATER  
FROM SAN BERNARDINO BASIN AREA  
BY CITY OF RIVERSIDE

(All Values in Acre-Feet)

		Calendar Years				
		2010	2011	2012	2013	2014
ADDITIONAL EXTRACTIONS						
New Conservation Allocation	1	0	0	0	9,635 <i>c</i>	0
Imported Water Assigned By Western	2	0	0	0	0	0
Additional Extractions	3	0	0	0	0	0
CREDITS						
New Conservation Allocation	1	0	0	0	9,635 <i>c</i>	0
Imported Water Transfer From Western	4	0	0	0	0	0
Imported Water Transfer To Holding Account	5	0	0	0	2,459 <i>d</i>	0
Total Credits		0	0	0	12,094	0
ACCUMULATED CREDITS	6	2,459	2,459	2,459	14,553	14,553
OBLIGATIONS						
New Conservation Additional Extractions	7	0	0	0	0	0
Imported Water Additional Extractions	8	0	0	0	0	0
Total Obligations		0	0	0	0	0
ACCUMULATED OBLIGATIONS	9	2,459	2,459	2,459	2,459	2,459
(CREDIT)	10	0	0	0	(12,094)	0
NEW CONSERVATION						
NET ACCUMULATED (CREDIT)	11	0	0	0	(9,635)	(9,635)
IMPORTED WATER						
NET ACCUMULATED (CREDIT)	12	0	0	0	(2,459)	(2,459)
TOTAL						
NET ACCUMULATED (CREDIT)	13	0	0	0	(12,094)	(12,094)

ANNUAL ACCOUNTING FOR  
ADDITIONAL EXTRACTIONS OF NEW CONSERVATION WATER AND IMPORTED WATER  
FROM SAN BERNARDINO BASIN AREA  
BY CITY OF RIVERSIDE

- 1 Amount of new conservation water that is in addition to the amount included in the Plaintiffs Adjusted Right, that is provided for in Judgment Paragraph VI(b)6 agreements.
  - 2 Amount of Western's right to extract that is imported water assigned and transferred by Western to a Plaintiff pursuant to Paragraph 5 of the 2004 Judgment Paragraph VI(b)6 agreement.
  - 3 Total amount of new conservation and/or imported water extracted by Plaintiff.
  - 4 Amount of right to extract imported water acquired from Western and transferred to Plaintiff pursuant to Paragraph 5 of the 2004 Judgment Paragraph VI(b)6 agreement. Amount equals imported water acquired by Plaintiff (see Footnote 2).
  - 5 Amount of water transferred from Plaintiff to a Western imported water holding account equal to Plaintiffs unused water right in any five year period (under extraction) provided the amount transferred, plus the remaining balance of any previous such transfers, does not exceed the aggregate amount of imported water acquired by Plaintiff and the right to extract such amount transferred to Plaintiff (see Footnotes 2 and 4) pursuant to the 2004 Judgment Paragraph VI(b)6 agreement. Such holding account transfers are pursuant to Paragraph 11 of the 2013 Judgment Paragraph VI(b)6 agreement.
  - 6 Accumulated Credits include amounts of credit accumulated prior to the current five year period.
  - 7 Amount of new conservation water extracted by the City of Riverside that is in addition to the new conservation water included in the Adjusted Right. Such amount is included in Additional Deliveries in Table No. 3A-2.
  - 8 Amount of imported water extracted by City of Riverside that is transferred by Western to the City of Riverside (see Footnote 4) and previously transferred into the Western holding account (see Footnote 5). Such amount is included in Additional Deliveries in Table No. 3A-2.
  - 9 Accumulated Obligations include extraction related obligations accumulated for the current five year period and prior years.
  - 10 Credit equals Total Obligation minus Total Credits for the calendar year.
  - 11 New Conservation Net Accumulated (Credit) equals the sum of all annual amounts of New Conservation Additional Extractions (see Footnote 7) minus the sum of all annual amounts of New Conservation Allocation (see Footnote 1), including such amounts accumulated prior to the current five year period. Such credit amount is the remaining balance in the City of Riverside new conservation water account.
  - 12 Imported Water Net Accumulated (Credit) equals the sum of all annual amounts of Imported Water Additional Extractions (see Footnote 8) minus the sum of all annual amounts of Imported Water Transfer From Western (see Footnote 4) minus Imported Water Transfer To Holding Account (see Footnote 5), including such amounts accumulated prior to the current five year period. Such credit amount is the remaining balance of water in the Western imported water holding account that is available for extraction by City of Riverside.
  - 13 Total Net Accumulated (Credit) is the sum of the new conservation credit remaining balance and the imported water credit remaining balance.
- 
- a In 2007 Western assigned and transferred the right to extract 2,459 acre-feet of imported water to City of Riverside.
  - b In 2007 City of Riverside extracted 2,459 acre-feet more than its Adjusted Right. See Table No. 3A-2.
  - c In 2013 Watermaster determined that operation of Seven Oaks Reservoir and downstream spreading grounds resulted in new conservation in the San Bernardino Basin Area during the period 1998 through 2012. The amount shown is the amount of such new conservation water allocated to City of Riverside pursuant to Paragraph 3(a) of the 2013 Agreement Regarding Additional Extractions of New Conservation Water From The San Bernardino Basin Area.
  - d In 2013 City of Riverside extracted less than its Adjusted Right and opted to transfer to Western previously transferred right to extract imported water of the amount shown pursuant to Paragraph 11 of the agreement cited in Footnote c above.



ANNUAL ACCOUNTING FOR  
ADDITIONAL EXTRACTIONS OF NEW CONSERVATION WATER AND IMPORTED WATER  
FROM SAN BERNARDINO BASIN AREA  
BY RIVERSIDE HIGHLAND WATER COMPANY

(All Values in Acre-Feet)

		Calendar Years				
		2010	2010	2012	2013	2014
<b>ADDITIONAL EXTRACTIONS</b>						
New Conservation Allocation	1	0	0	0	793 <i>a</i>	0
Imported Water Assigned By Western	2	0	0	0	0	0
Additional Extractions	3	0	0	0	0	0
<b>CREDITS</b>						
New Conservation Allocation	1	0	0	0	793 <i>a</i>	0
Imported Water Transfer From Western	4	0	0	0	0	0
Imported Water Transfer To Holding Account	5	0	0	0	0	0
<b>Total Credits</b>		0	0	0	793	0
<b>ACCUMULATED CREDITS</b>	6	0	0	0	793	793
<b>OBLIGATIONS</b>						
New Conservation Additional Extractions	7	0	0	0	0	0
Imported Water Additional Extractions	8	0	0	0	0	0
<b>Total Obligations</b>		0	0	0	0	0
<b>ACCUMULATED OBLIGATIONS</b>	9	0	0	0	0	0
<b>(CREDIT)</b>	10	0	0	0	(793)	0
<b>NEW CONSERVATION</b>						
<b>NET ACCUMULATED (CREDIT)</b>	11	0	0	0	(793)	(793)
<b>IMPORTED WATER</b>						
<b>NET ACCUMULATED (CREDIT)</b>	12	0	0	0	0	0
<b>TOTAL</b>						
<b>NET ACCUMULATED (CREDIT)</b>	13	0	0	0	(793)	(793)

ANNUAL ACCOUNTING FOR  
ADDITIONAL EXTRACTIONS OF NEW CONSERVATION WATER AND IMPORTED WATER  
FROM SAN BERNARDINO BASIN AREA  
BY RIVERSIDE HIGHLAND WATER COMPANY

- 1 Amount of new conservation water that is in addition to the amount included in the Plaintiffs Adjusted Right, that is provided for in Judgment Paragraph VI(b)6 agreements.
- 2 Amount of Western's right to extract that is imported water assigned and transferred by Western to a Plaintiff pursuant to Paragraph 5 of the 2004 Judgment Paragraph VI(b)6 agreement.
- 3 Total amount of new conservation and/or imported water extracted by Plaintiff.
- 4 Amount of right to extract imported water acquired from Western and transferred to Plaintiff pursuant to Paragraph 5 of the 2004 Judgment Paragraph VI(b)6 agreement. Amount equals imported water acquired by Plaintiff (see Footnote 2).
- 5 Amount of water transferred from Plaintiff to a Western imported water holding account equal to Plaintiffs unused water right in any five year period (under extraction) provided the amount transferred, plus the remaining balance of any previous such transfers, does not exceed the aggregate amount of imported water acquired by Plaintiff and the right to extract such amount transferred to Plaintiff (see Footnotes 2 and 4) pursuant to the 2004 Judgment Paragraph VI(b)6 agreement. Such holding account transfers are pursuant to Paragraph 11 of the 2013 Judgment Paragraph VI(b)6 agreement.
- 6 Accumulated Credits include amounts of credit accumulated prior to the current five year period.
- 7 Amount of new conservation water extracted by the Riverside Highland Water Company that is in addition to the new conservation water included in the Adjusted Right. Such amount is included in Additional Deliveries in Table No. 3B-2.
- 8 Amount of imported water extracted by Riverside Highland Water Company that is transferred by Western to the Riverside Highland Water Company (see Footnote 4) and previously transferred into the Western holding account (see Footnote 5). Such amount is included in Additional Deliveries in Table No. 3B-2.
- 9 Accumulated Obligations include extraction related obligations accumulated for the current five year period and prior years.
- 10 Credit equals Total Obligation minus Total Credits for the calendar year.
- 11 New Conservation Net Accumulated (Credit) equals the sum of all annual amounts of New Conservation Additional Extractions (see Footnote 7) minus the sum of all annual amounts of New Conservation Allocation (see Footnote 1), including such amounts accumulated prior to the current five year period. Such credit amount is the remaining balance in the Riverside Highland Water Company new conservation water account.
- 12 Imported Water Net Accumulated (Credit) equals the sum of all annual amounts of Imported Water Additional Extractions (see Footnote 8) minus the sum of all annual amounts of Imported Water Transfer From Western (see Footnote 5) minus Imported Water Transfer To Holding (see Footnote 5), including such amounts accumulated prior to the current five year period. Such credit amount is the remaining balance of water in the Western imported water holding account that is available for extraction by Riverside Highland Water Company.
- 13 Total Net Accumulated (Credit) is the sum of the new conservation credit remaining balance and the imported water credit remaining balance.

a In 2013 Watermaster determined that operation of the Seven Oaks Reservoir and downstream spreading grounds resulted in new conservation in the San Bernardino Basin Area during the period 1998 through 2012. The amount shown is the amount of such new conservation water allocated to Riverside Highland Water Company pursuant to Paragraph 3(c) of the 2013 Agreement Regarding Additional Extractions of New Conservation Water From the San Bernardino Basin Area.

ANNUAL ACCOUNTING FOR  
ADDITIONAL EXTRACTIONS OF NEW CONSERVATION WATER AND IMPORTED WATER  
FROM SAN BERNARDINO BASIN AREA  
BY AGUA MANSA WATER COMPANY AND MEEKS & DALEY WATER COMPANY

(All Values in Acre-Feet)

		Calendar Years				
		2010	2011	2012	2013	2014
<b>ADDITIONAL EXTRACTIONS</b>						
New Conservation Allocation	1	0	0	0	1,448 <i>a</i>	0
Imported Water Assigned By Western	2	0	0	0	0	0
Additional Extractions	3	0	0	0	0	0
<b>CREDITS</b>						
New Conservation Allocation	1	0	0	0	1,448 <i>a</i>	0
Imported Water Transfer From Western	4	0	0	0	0	0
Imported Water Transfer To Holding Account	5	0	0	0	0	0
<b>Total Credits</b>		0	0	0	1,448	0
<b>ACCUMULATED CREDITS</b>	6	0	0	0	1,448	1,448
<b>OBLIGATIONS</b>						
New Conservation Additional Extractions	7	0	0	0	0	0
Imported Water Additional Extractions	8	0	0	0	0	0
<b>Total Obligations</b>		0	0	0	0	0
<b>ACCUMULATED OBLIGATIONS</b>	9	0	0	0	0	0
<b>(CREDIT)</b>	10	0	0	0	(1,448)	0
<b>NEW CONSERVATION</b>						
<b>NET ACCUMULATED (CREDIT)</b>	11	0	0	0	(1,448)	(1,448)
<b>IMPORTED WATER</b>						
<b>NET ACCUMULATED (CREDIT)</b>	12	0	0	0	0	0
<b>TOTAL</b>						
<b>NET ACCUMULATED (CREDIT)</b>	13	0	0	0	(1,448)	(1,448)

ANNUAL ACCOUNTING FOR  
ADDITIONAL EXTRACTIONS OF NEW CONSERVATION WATER AND IMPORTED WATER  
FROM SAN BERNARDINO BASIN AREA  
BY AGUA MANSA WATER COMPANY AND MEEKS & DALEY WATER COMPANY

- 1 Amount of new conservation water that is in addition to the amount included in the Plaintiffs Adjusted Right, that is provided for in Judgment Paragraph VI(b)6 agreements.*
  - 2 Amount of Western's right to extract that is imported water assigned and transferred by Western to a Plaintiff pursuant to Paragraph 5 of the 2004 Judgment Paragraph VI(b)6 agreement.*
  - 3 Total amount of new conservation and/or imported water extracted by Plaintiff.*
  - 4 Amount of right to extract imported water acquired from Western and transferred to Plaintiff pursuant to Paragraph 5 of the 2004 Judgment Paragraph VI(b)6 agreement. Amount equals imported water acquired by Plaintiff (see Footnote 2).*
  - 5 Amount of water transferred from Plaintiff to a Western imported water holding account equal to Plaintiffs unused water right in any five year period (under extraction) provided the amount transferred, plus the remaining balance of any previous such transfers, does not exceed the aggregate amount of imported water acquired by Plaintiff and the right to extract such amount transferred to Plaintiff (see Footnotes 2 and 4) pursuant to the 2004 Judgment Paragraph VI(b)6 agreement. Such holding account transfers are pursuant to Paragraph 11 of the 2013 Judgment Paragraph VI(b)6 agreement.*
  - 6 Accumulated Credits include amounts of credit accumulated prior to the current five year period.*
  - 7 Amount of new conservation water extracted by the Agua Mansa Water Company and Meeks & Daley Water Company that is in addition to the new conservation water included in the Adjusted Right. Such amount is included in Additional Deliveries in Table No. 3C-2.*
  - 8 Amount of imported water extracted by Agua Mansa Water Company and Meeks & Daley Water Company that is transferred by Western to the Agua Mansa Water Company and Meeks & Daley Water Company (see Footnote 4) and previously transferred into the Western holding account (see Footnote 5). Such amount is included in Additional Deliveries in Table No. 3C-2.*
  - 9 Accumulated Obligations include extraction related obligations accumulated for the current five year period and prior years.*
  - 10 Credit equals Total Obligation minus Total Credits for the calendar year.*
  - 11 New Conservation Net Accumulated (Credit) equals the sum of all annual amounts of New Conservation Additional Extractions (see Footnote 7) minus the sum of all annual amounts of New Conservation Allocation (see Footnote 1), including such amounts accumulated prior to the current five year period. Such credit amount is the remaining balance in the Agua Mansa Water Company and Meeks & Daley Water Company new conservation water account.*
  - 12 Imported Water Net Accumulated (Credit) equals the sum of all annual amounts of Imported Water Additional Extractions (see Footnote 8) minus the sum of all annual amounts of Imported Water Transfer From Western (see Footnote 4) minus Imported Water Transfer To Holding Account (see Footnote 5), including such amounts accumulated prior to the current five year period. Such credit amount is the remaining balance of water in the Western imported water holding account that is available for extraction by Agua Mansa Water Company and Meeks & Daley Water Company.*
  - 13 Total Net Accumulated (Credit) is the sum of the new conservation credit remaining balance and the imported water credit remaining balance.*
- a In 2013 Watermaster determined that operation of the Seven Oaks Reservoir and downstream spreading grounds resulted in new conservation in the San Bernardino Basin Area during the period 1998 through 2012. The amount shown is the amount of such new conservation water allocated to Agua Mansa Water Company and Meeks & Daley Water Company pursuant to Paragraph 3(b) of the 2013 Agreement Regarding Additional Extractions of New Conservation Water From the San Bernardino Basin Area.*

ANNUAL ACCOUNTING FOR  
ADDITIONAL EXTRACTIONS OF NEW CONSERVATION WATER AND IMPORTED WATER  
FROM SAN BERNARDINO BASIN AREA  
BY THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

(All Values in Acre-Feet)

		Calendar Years				
		2010	2011	2012	2013	2014
<b>ADDITIONAL EXTRACTIONS</b>						
New Conservation Allocation	1	0	0	0	98 <i>a</i>	0
Imported Water Assigned By Western	2	0	0	0	0	0
Additional Extractions	3	0	0	0	0	0
<b>CREDITS</b>						
New Conservation Allocation	1	0	0	0	98 <i>a</i>	0
Imported Water Transfer From Western	4	0	0	0	0	0
Imported Water Transfer To Holding Account	5	0	0	0	0	0
<b>Total Credits</b>		0	0	0	98	0
<b>ACCUMULATED CREDITS</b>	6	0	0	0	98	98
<b>OBLIGATIONS</b>						
New Conservation Additional Extractions	7	0	0	0	0	0
Imported Water Additional Extractions	8	0	0	0	0	0
<b>Total Obligations</b>		0	0	0	0	0
<b>ACCUMULATED OBLIGATIONS</b>	9	0	0	0	0	0
<b>(CREDIT)</b>	10	0	0	0	(98)	0
<b>NEW CONSERVATION</b>						
<b>NET ACCUMULATED (CREDIT)</b>	11	0	0	0	(98)	(98)
<b>IMPORTED WATER</b>						
<b>NET ACCUMULATED (CREDIT)</b>	12	0	0	0	0	0
<b>TOTAL</b>						
<b>NET ACCUMULATED (CREDIT)</b>	13	0	0	0	(98)	(98)

ANNUAL ACCOUNTING FOR  
ADDITIONAL EXTRACTIONS OF NEW CONSERVATION WATER AND IMPORTED WATER  
FROM SAN BERNARDINO BASIN AREA  
BY THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

- 1 Amount of new conservation water that is in addition to the amount included in the Plaintiffs Adjusted Right, that is provided for in Judgment Paragraph VI(b)6 agreements.*
  - 2 Amount of Western's right to extract that is imported water assigned and transferred by Western to a Plaintiff pursuant to Paragraph 5 of the 2004 Judgment Paragraph VI(b)6 agreement.*
  - 3 Total amount of new conservation and/or imported water extracted by Plaintiff.*
  - 4 Amount of right to extract imported water acquired from Western and transferred to Plaintiff pursuant to Paragraph 5 of the 2004 Judgment Paragraph VI(b)6 agreement. Amount equals imported water acquired by Plaintiff (see Footnote 2).*
  - 5 Amount of water transferred from Plaintiff to a Western imported water holding account equal to Plaintiffs unused water right in any five year period (under extraction) provided the amount transferred, plus the remaining balance of any previous such transfers, does not exceed the aggregate amount of imported water acquired by Plaintiff and the right to extract such amount transferred to Plaintiff (see Footnotes 2 and 4) pursuant to the 2004 Judgment Paragraph VI(b)6 agreement. Such holding account transfers are pursuant to Paragraph 11 of the 2013 Judgment Paragraph VI(b)6 agreement.*
  - 6 Accumulated Credits include amounts of credit accumulated prior to the current five year period.*
  - 7 Amount of new conservation water extracted by The Regents of the University of California that is in addition to the new conservation water included in the Adjusted Right. Such amount is included in Additional Deliveries in Table No. 3D-2.*
  - 8 Amount of imported water extracted by The Regents of the University of California that is transferred by Western to The Regents of the University of California (see Footnote 4) and previously transferred into the Western holding account (see Footnote 5). Such amount is included in Additional Deliveries in Table No. 3D-2.*
  - 9 Accumulated Obligations include extraction related obligations accumulated for the current five year period and prior years.*
  - 10 Credit equals Total Obligation minus Total Credits for the calendar year.*
  - 11 New Conservation Net Accumulated (Credit) equals the sum of all annual amounts of New Conservation Additional Extractions (see Footnote 7) minus the sum of all annual amounts of New Conservation Allocation (see Footnote 1), including such amounts accumulated prior to the current five year period. Such credit amount is the remaining balance in the The Regents of the University of California new conservation water account.*
  - 12 Imported Water Net Accumulated (Credit) equals the sum of all annual amounts of Imported Water Additional Extractions (see Footnote 8) minus the sum of all annual amounts of Imported Water Transfer From Western (see Footnote 4) minus Imported Water Transfer To Holding Account (see Footnote 5), including such amounts accumulated prior to the current five year period. Such credit amount is the remaining balance of water in the Western imported water holding account that is available for extraction by The Regents of the University of California.*
  - 13 Total Net Accumulated (Credit) is the sum of the new conservation credit remaining balance and the imported water credit remaining balance.*
- a In 2013 Watermaster determined that operation of the Seven Oaks Reservoir and downstream spreading grounds resulted in new conservation in the San Bernardino Basin Area during the period 1998 through 2012. The amount shown is the amount of such new conservation water allocated to The Regents of the University of California pursuant to Paragraph 3(d) of the 2013 Agreement Regarding Additional Extractions of New Conservation Water From the San Bernardino Basin Area.*

ANNUAL ACCOUNTING FOR  
ADDITIONAL EXTRACTIONS OF NEW CONSERVATION WATER  
FROM SAN BERNARDINO BASIN AREA  
BY ENTITIES IN SAN BERNARDINO COUNTY OTHER THAN PLAINTIFFS

(All Values in Acre-Feet)

		Calendar Years				
		2010	2011	2012	2013	2014
ADDITIONAL EXTRACTIONS						
New Conservation Allocation	1	0	0	0	30,866 <i>a</i>	0
Additional Extractions	2	0	0	0	0	0
CREDITS						
New Conservation Allocation	1	0	0	0	30,866 <i>a</i>	0
Transfer	3	0	0	0	0	0
Total Credits		0	0	0	30,866	0
ACCUMULATED CREDITS	4	0	0	0	30,866	30,866
OBLIGATIONS						
New Conservation Additional Extractions	2	0	0	0	0	0
Transfer	5	0	0	0	0	0
Total Obligations		0	0	0	0	0
ACCUMULATED OBLIGATIONS	4	0	0	0	0	0
(CREDIT)	6	0	0	0	(30,866)	0
NEW CONSERVATION NET ACCUMULATED (CREDIT)		7	0	0	(30,866)	(30,866)

ANNUAL ACCOUNTING FOR  
 ADDITIONAL EXTRACTIONS OF NEW CONSERVATION WATER  
 FROM SAN BERNARDINO BASIN AREA  
 BY ENTITIES IN SAN BERNARDINO COUNTY OTHER THAN PLAINTIFFS

- 1 Amount of new conservation water that is in addition to the amount included in San Bernardino Valley's Adjusted Right, that is provided for in Judgment Paragraph VI(b)6 agreements.*
  - 2 Amount of new conservation water extracted by users in San Bernardino County.*
  - 3 Amount of new conservation water transferred to San Bernardino Valley's new conservation account.*
  - 4 Accumulated Credit and Accumulated Obligations include amounts accumulated prior to the current five-year period.*
  - 5 Amount of new conservation water transferred from San Bernardino Valley's new conservation account.*
  - 6 Credit equals Total Obligations minus Total Credits for the calendar year.*
  - 7 New Conservation Net Accumulated (Credit) equals the sum of all annual amounts of New Conservation Additional Extractions and Transfers from San Bernardino Valley (see Footnotes 2 and 5) minus the sum of all amounts of New Conservation Allocation and Transfers to San Bernardino Valley (see Footnotes 1 and 3), including such amounts accumulated prior to the current five-year period. Such credit amount is the remaining balance in the San Bernardino Valley new conservation account.*
- a In 2013 Watermaster determined that operation of the Seven Oaks Reservoir and downstream spreading grounds resulted in new conservation in the San Bernardino Basin Area during the period 1998 through 2012. The amount shown is the amount of such new conservation water allocated to entities in San Bernardino County other than Plaintiffs pursuant to Paragraph 4 of the 2013 Agreement Regarding Additional Extractions of New Conservation Water From the San Bernardino Basin Area.*



ANNUAL ACCOUNTING FOR  
RIVERSIDE BASIN MITIGATION ACCOUNT  
RELATED TO SEVEN OAKS WATER CONSERVED  
IN SAN BERNARDINO BASIN AREA

(All Values in Acre-Feet)

		Calendar Years				
		2010	2011	2012	2013	2014
<b>MITIGATION ACCOUNT ADDITIONS</b>	<b>1</b>					
Long Term Forecast Annual Average Amounts Included Pursuant to Footnote	2	0	0	0	483 12	483
Specific Year Amounts Included Pursuant to Footnote	3	0	0	0	2,713 13	0
<b>Total Mitigation Account Additions</b>	<b>4</b>	0	0	0	3,196	483
<b>ACCUMULATED MITIGATION ACCOUNT ADDITIONS</b>	<b>5</b>	0	0	0	3,196	3,679
<b>MITIGATION ACCOUNT EXTRACTIONS</b>	<b>6</b>					
Extractions by City of Riverside	7	0	0	0	0	0
Extractions by Other Than Plaintiffs	8	0	0	0	0	0
<b>Total Mitigation Account Extractions</b>	<b>9</b>	0	0	0	0	0
<b>ACCUMULATED MITIGATION ACCOUNT EXTRACTIONS</b>	<b>10</b>	0	0	0	0	0
<b>MITIGATION ACCOUNT BALANCE</b>	<b>11</b>	0	0	0	3,196	3,679

ANNUAL ACCOUNTING FOR  
RIVERSIDE BASIN MITIGATION ACCOUNT  
RELATED TO SEVEN OAKS WATER CONSERVED  
IN SAN BERNARDINO BASIN AREA

- 1 Pursuant to the 2013 Agreement Regarding Additional Extractions of New Conservation Water From the San Bernardino Basin Area (Basin) (2013 Agreement), any amount of replenishment in the Basin resulting from operation of Seven Oaks Dam and related diversion and spreading facilities that, in the absence of such operation, would have been replenished in the Riverside Basin, shall be included in a Riverside Basin Mitigation Account. Such water is referred to herein as Mitigation Water.
- 2 Equal annual average amounts of Mitigation Water determined on the basis of a long term forecast of Seven Oaks related conservation at the Santa Ana River Spreading Grounds. Pursuant to the 2013 Agreement, such forecasts are subject to periodic change and hence the otherwise equal annual amounts may change periodically.
- 3 Specific amounts of Mitigation Water resulting from a determination of prior years (1998-2012) new conservation and any determination of new conservation resulting from conservation through direct use, recharge in the Basin in areas other than the Santa Ana River Spreading Grounds and/or export from the Basin and subsequent return for direct use or recharge.
- 4 Long Term Forecast Annual Average Amounts plus Specific Year Amounts.
- 5 Accumulated amount of Mitigation Account Additions includes amounts accumulated prior to the current five-year period.
- 6 Pursuant to the 2013 Agreement, the City of Riverside may be required to extract San Bernardino Basin Area water that is included in the Mitigation Account and reduce extractions in its Flume Tract wells in the Riverside Basin by the same amount. Similarly, San Bernardino Valley may choose to extract water that is included in the Mitigation Account and deliver it for recharge in the Riverside Basin.
- 7 Amounts of Mitigation Water extracted by City of Riverside pursuant to the 2013 Agreement.
- 8 Amounts of Mitigation Water extracted by any producer other than Plaintiffs for delivery and recharge in the Riverside Basin.
- 9 Extractions by City of Riverside plus Extractions by Other Than Plaintiffs.
- 10 Accumulated amount of Mitigation Account Extractions includes amounts accumulated prior to the current five-year period.
- 11 The amount of Mitigation Water Additions to the Mitigation Account minus the amount of Mitigation Water Extractions from the Mitigation Account by City of Riverside and by Other Than Plaintiffs in San Bernardino County.
- 12 Based on calculations by GEOSCIENCE/SAIC in an August 1, 2013 Technical Memorandum to Western and San Bernardino Valley, Watermaster determined that 483 acre-feet/year of Mitigation Water should be included in the Riverside Basin Mitigation Account based on the current maximum spreading grounds diversion rate of 195 cfs. Inclusion of such annual average amount of Mitigation Water continues annually until another long term forecast results in a change.
- 13 Based on calculations by GEOSCIENCE/SAIC in an August 1, 2013 Technical Memorandum to Western and San Bernardino Valley, Watermaster determined that during prior years 1998-2012, 2,713 acre-feet of Mitigation Water should be included in the Riverside Basin Mitigation Account.

SUMMARY OF COMPLIANCE WITH FOUR  
PRINCIPAL PROVISIONS OF THE JUDGMENT

**COMPLIANCE IN THE SAN BERNARDINO BASIN AREA**

■ PLAINTIFF EXTRACTIONS ARE LESS THAN THE  
MAXIMUM ALLOWABLE EXTRACTIONS

During the five-year period 2010 through 2014 extractions by Plaintiffs did not exceed the five-year maximum allowable. (See page 2b of 2 of Table Nos. 10 through 13) Also, in calendar year 2014 extractions by each Plaintiff did not exceed the annual maximum allowable, which is 1.3 times the 2014 Adjusted Right. (See page 1b of 2 of Table Nos. 10 through 13)

■ SAN BERNARDINO VALLEY IS NOT REQUIRED TO  
PROVIDE REPLENISHMENT

For the period 1971 through 2014, San Bernardino Valley credits exceed obligation by 104,994 AF. (See Table No. 17)

**COMPLIANCE IN THE COLTON AND RIVERSIDE BASIN AREAS**

■ WESTERN IS NOT REQUIRED TO PROVIDE  
REPLENISHMENT

For the period 1971 through 2014, Western credits exceed obligations by 466,040 AF. (See Table No. 16)

■ SAN BERNARDINO VALLEY IS NOT REQUIRED TO  
PROVIDE REPLENISHMENT FOR MAINTAINING  
GROUNDWATER LEVEL

The average lowest water level in the three key wells for calendar year 2014 is 9.75 feet higher than the required minimum average level of 822.04 feet. (See Chapter V)

## **Appendix K**

### **Riverside Municipal Code 14.28 - Mandatory Use of Recycled Water**

**Chapter 14.28****MANDATORY USE OF RECYCLED WATER****Sections:**

<b>14.28.010</b>	<b>Findings.</b>
<b>14.28.020</b>	<b>Water Recycling Policy.</b>
<b>14.28.030</b>	<b>Definitions.</b>
<b>14.28.040</b>	<b>Water Recycling Master Plan.</b>
<b>14.28.050</b>	<b>Procedures.</b>
<b>14.28.060</b>	<b>Sanctions.</b>
<b>14.28.070</b>	<b>Validity.</b>

**Section 14.28.010 Findings.**

The people of the State of California have a primary interest in the development of facilities to recycle water containing waste to supplement existing surface and underground water supplies and to assist in meeting the future water requirements of the State (California Water Code, Section 13510). This policy is in the best interest of the City. This ordinance is necessary to protect the common water supply of the region which is vital to public health and safety, and to prevent endangerment of public and private property. The City is highly dependent on limited groundwater for domestic, agricultural and industrial uses. The reliability of the supply of imported water is uncertain. By developing and utilizing recycled water, the need for additional imported water can be reduced. In light of these circumstances, certain uses of potable water may be considered unreasonable where recycled water is available. Recycled water should be more readily available in seasons of drought when the supply of potable water for nonessential uses may be uncertain. (Ord. 7002 § 2, 2008)

**Section 14.28.020 Water Recycling Policy.**

It is the policy of the City that recycled water determined to be available pursuant to Section 13550 of the California Water Code shall be used for nonpotable uses within the designated Recycled Water Use Areas, as set forth within this Chapter wherever there is not an alternative higher or better use for the recycled water, its use is economically justified, financially and technically feasible, and consistent with legal requirements, preservation of public health, safety and welfare, and the environment. (Ord. 7002 § 2, 2008)

**Section 14.28.030 Definitions.**

The words used in this chapter shall have the meanings as set forth below:

A. "Agricultural purposes" includes the growing of field and nursery crops, row crops, trees, and vines and the feeding of fowl and livestock.

B. "Artificial lake" means a human-made lake, pond, lagoon, or other body of water that is used wholly or partly for landscape, scenic or noncontact recreational purposes.

C. "Commercial office building" means any building for office or commercial uses with water requirements which include, but are not limited to, landscape irrigation, toilets, urinals and/or decorative fountains.

D. "Recycled water distribution system" means a piping system intended for the delivery of recycled water only and which is separate from any potable water distribution system.

E. "Greenbelt areas" includes, but is not limited to, golf courses, cemeteries, parks and landscaping.

F. "Industrial process water" means water used by any industrial facility with process water requirements which include, but are not limited to, rinsing, washing, cooling and circulation, or construction, including any facility regulated by the requirements of Chapter 14.12.

G. "Off-site facilities" means water facilities from the source of supply to the point of connection with the on-site facilities, including the water meter.

H. "On-Site Facilities" means water facilities under the control of the owner, downstream from but not including the water meter.

I. "Potable Water" means water which conforms to the federal, state, and local standards for human consumption.

J. "Recycled water" means water which, as a result of treatment of wastewater, is suitable for a direct beneficial use or a controlled use that would not otherwise occur, as defined by California Water Code Section 13050(n).

K. "Master Plan" shall mean the Water Recycling Master Plan referenced in this Chapter. (Ord. 7002 § 2, 2008)

#### **Section 14.28.040 Water Recycling Master Plan.**

A. General.

Upon adoption of this ordinance, the City's Public Utilities Department shall prepare and adopt a Water Recycling Master Plan to define, encourage, and develop the use of recycled water within its boundaries. The Master Plan shall be updated not less often than every five years.

B. Contents of Master Plan. The Master Plan shall include, but not be limited to, the following:

1. Plants and Facilities.

Evaluation of the location and size of present and future reclamation treatment plants, distribution pipelines, pump stations, reservoirs, and other facilities related to recycled water, including cost estimates and potential financing methods.

2. Recycled Water Service Areas.

A. Designation, based on the criteria set forth in Section 14.24.020 and the information derived from Section 14.24.040(B)(1) and this section, of the areas within the boundaries of City that can or may in the future use recycled water in lieu of potable water. Recycled water uses may include, but are not limited to, the irrigation of greenbelt and agricultural areas, filling of artificial lakes, and appropriate industrial and commercial uses.

3. Mandatory Recycled Water Use.

For each recycled water service area:

a. An evaluation of whether greenbelt irrigation, agricultural irrigation, commercial office buildings landscape irrigation, the filling of artificial lakes, or industrial processes shall be limited to the use of recycled water.

b. As appropriate, a review of whether to mandate construction of recycled water distribution systems or other facilities in new and existing developments for current or future recycled water use as a condition of any development approval or continued water service if future water recycling facilities are proposed in the Master Plan that could adequately serve the development, in accordance with the procedures described in Section 12.24.050.

c. The identification of resources and adoption of measures to assist water users in the financing of necessary conversions.

4. Rules and Regulations.

The establishment of general rules and regulations governing the use and distribution of recycled water. (Ord. 7002 § 2, 2008)

**Section 14.28.050 Procedures.****A. Development and Water Service Approvals.****1. Conditions.**

Upon application by a developer, owner or water customer for a new industrial, commercial, or residential subdivisions located within the designated Recycled Water Use Areas for which a tentative map or parcel map is required pursuant to Government Code Section 66426, or for new or altered water service, the Public Utilities Department shall review the Master Plan and make a preliminary determination whether the current or proposed use of the subject property is required to be served with recycled water or should include facilities designed to accommodate the use of recycled water in the future. Based upon such determination, use of recycled water and/or provision of recycled water distribution systems or other facilities for the future use of recycled water, and application for a permit for such use may be required as a condition of approval of any such application, in addition to any other conditions of approval.

**2. Notice of Determination.**

A notice of the basis for the preliminary determination, proposed conditions of approval and schedule for compliance shall be provided to the applicant prior to approval of the development application.

**3. Requested Service.**

On a case by case basis, upon application for a permit to use recycled water on a property not covered by Sections 14.24.050(B)(1) and (2), above, the Public Utilities Department shall review the Master Plan and make a determination whether the subject property shall be served with recycled water. Based upon such determination, the application for the permit shall be accepted and processed subject to Section 14.24.050(C).

**B. Recycled Water Permit Process.**

Upon a final determination by the Public Utilities Department that a property shall be served with recycled water, or adoption of a condition of development approval requiring use or accommodation of the use of recycled water, the water customer, owner or applicant shall obtain a recycled water permit.

**1. Permit Conditions.**

The permit shall specify the design and operational requirements for the applicant's water distribution facilities and schedule for compliance, based on the rules and regulations adopted pursuant to Section 14.24.040, and shall require compliance with both the California Department of Health Services Wastewater Recycling Criteria (see California Code of Administrative Regulations, Title 22), requirements of the Regional Water Quality Control Board and the Public Utilities Department Water Rules.

**2. Plan Approval.**

Plans for the recycled and non-recycled water distribution systems for the parcel shall be reviewed by the Public Utilities Department and a field inspection conducted before the permit is granted.

**3. Permit Issuance.**

Upon approval of plans the permit shall be issued. Recycled water shall not be supplied to a property until inspection and determination by the Public Utilities Department that the applicant is in compliance with the permit conditions. Recycled water service shall not commence within the designated Recycled Water Use Area in any service area of a private utility, as defined in Section 1502 of the Public Utilities Code, or to any service area of another public agency retail water supplier, except in accordance with a written agreement between the recycled water producer and the private utility or public agency retail water supplier.

**C. Temporary Use of Potable Water.**

At the discretion of the Public Utilities Department, and in accord with its Water Rules, potable water may be made available to the subject property on a temporary basis, until

recycled water is available. Before the applicant receives temporary potable water, a water recycling permit, as described in Section 14.24.050(C), must be obtained for new on-site distribution facilities. Prior to commencement of recycled water service, an inspection of the on-site facilities will be conducted to verify that the facilities have been maintained and are in compliance with the recycled water permit and current requirements for service. Upon verification of compliance, recycled water shall be served to the parcel for the intended use. If the facilities are not in compliance, the applicant shall be notified of the corrective actions necessary and shall have at least thirty (30) days to take such actions prior to initiation of enforcement proceedings.

D. Recycled Water Rate.

The rate charged for recycled water shall be established by the Board of Public Utilities and approved by the City Council, in accord with Section 1202(E) of the City Charter. (Ord. 7002 § 2, 2008)

**Section 14.28.060 Sanctions.**

A. Public Nuisance.

Discharge of wastes or the use of recycled water in any manner in violation of this ordinance or of any permit issued hereunder is hereby declared a public nuisance and shall be corrected or abated in accord with Chapter 6.15 of this code.

B. Injunction.

Whenever a discharge of wastes or use of recycled water is in violation of this ordinance or otherwise causes or threatens to cause a condition of nuisance, the City may seek injunctive relief as may be appropriate to enjoin such discharge or use.

C. Permit Revocation.

In addition to any other statute or rule authorizing termination of water service, the City may revoke a permit issued hereunder if a violation of any provision of this ordinance is found to exist or if a discharge of wastes or use of recycled water causes or threatens to cause a nuisance.

D. Penalty.

Any owner and/or operator who violates this ordinance shall, for each day of violation, or portion thereof, be subject to a fine not exceeding \$1,000. In addition, water service to the property may be discontinued. (Ord. 7002 § 2, 2008)

**Section 14.28.070 Validity.**

If any provision of this ordinance or the application thereof to any person or circumstance is held invalid, the remainder of the ordinance and the application of such provisions to other persons or circumstances shall not be affected thereby. (Ord. 7002 § 2, 2008)



## **Appendix L**

### **RPU's 2014 Water Quality Annual Report**



# Water Quality Report 2014

## An important message about drinking water sources from the USEPA

*The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals, and in some cases radioactive materials, and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include: **Microbial Contaminants**, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. **Inorganic Contaminants**, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming. **Pesticides and Herbicides**, which may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses. **Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems. **Radioactive Contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.*

**Regulations:** In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

**Important Health Information:** Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people, and infants, can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hot Line. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at 1(800) 426-4791.

**Water Sources:** Riverside obtains its water supply from groundwater stored in the Bunker Hill and Riverside groundwater basins. An assessment of these drinking water sources for the City of Riverside was completed in May 2013. These sources are considered most vulnerable to historical contamination from industrial and agricultural operations.

A copy of the complete assessment is available at State Board District Office, 1350 Front Street, Room 2050, San Diego, CA 92101 or at Riverside Public Utilities (RPU) offices at 3750 University Ave. 3rd Floor, Riverside, CA 92501. You may request a summary of the assessment be sent to you by contacting the State Board district engineer or a RPU water system representative at (951) 351-6370.

This report contains important information about your drinking water. Translate it or speak with someone who understands it.

### SPANISH

Este reporte contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien. Para más información por favor llame (951) 782-0330.

### CHINESE

此份有关你的食水报告, 内有重要资料和讯息, 请找他人为你翻译及解释清楚。

### JAPANESE

この情報は重要です。  
翻訳を依頼してください。

### TAGALOG

Mahalaga ang Impormasyong Ito.  
Mangyaring ipasalin ito.

### VIETNAMESE

Chi tiết này thật quan trọng.  
Xin nhờ người dịch cho quý vị.

### KOREAN

이 안내는 매우 중요합니다.  
본인을 위해 번역인을 사용하십시오.

# SECONDARY STANDARDS

## AESTHETIC STANDARDS

	STATE MCL	RIVERSIDE AVERAGE	PUBLIC UTILITIES RANGE	SOURCES IN DRINKING WATER
Odor Threshold	3 Units	1 Units	<1 - 3 Units	Naturally present in environment
Chloride	500 ppm	33 ppm	32 - 34 ppm	Naturally present in environment
Sulfate	500 ppm	73 ppm	69 - 82 ppm	Naturally present in environment
Total Dissolved Solids "TDS"	1,000 ppm	385 ppm	330 - 510 ppm	Naturally present in environment
Specific Conductance	1,600 µmho	617 µmho	580 - 650 µmho	Substances form ions in water
Color	15 Units	3.0 Units	3.0 Units	Naturally-occurring organic materials
pH Units	NS	7.6 Units	6.9 - 8.4 Units	Naturally present in environment
Hardness (CaCO <sub>3</sub> )	NS	208 ppm	200 - 220 ppm	Naturally present in environment
Alkalinity (CaCO <sub>3</sub> )	NS	(12 gpg) 152 ppm	140 - 160 ppm	Naturally present in environment
Sodium	NS	43 ppm	38 - 45 ppm	Naturally present in environment
Calcium	NS	68 ppm	66 - 70 ppm	Naturally present in environment
Potassium	NS	3.0 ppm	3.0 - 3.4 ppm	Naturally present in environment
Magnesium	NS	10 ppm	10 - 12 ppm	Naturally present in environment
Turbidity	5.0 NTU	<0.1 NTU	<0.1 - 0.38 NTU	Naturally present in environment

## Monitoring Report 2014

Riverside Public Utilities tests for more than 200 possible contaminants in our water system. This report provides data from sampling conducted in calendar year 2014. Only those contaminants detected in our water system are listed here. For a listing of additional chemical tests, please contact our Water Quality Division at (951) 351-6370.

## Water Resources

RPU met all of its water supply needs in 2014 by utilizing groundwater sources located in the San Bernardino Bunker Hill Basin and the Riverside Basin. RPU treats some of its wells and all water sources are blended at a central location before entering into distribution. All data provided are from samples collected in the distribution system or at the entry point to the system.

## Water Compliance & Monitoring Program

In 2014, we collected more than 18,600 water samples to test for a variety of potential contaminants. Samples were collected at water sources, along transmission pipelines, throughout the distribution system, including reservoirs and booster stations, and treatment plants to ensure water quality from its source to your meter.

The Utility uses state certified independent laboratories to perform water tests. This ensures that an independent set of experts test your water from the source to your meter. Last year, we spent more than \$600,000 on compliance laboratory costs.

## Riverside Public Utilities 2014 Water Sampling Data

6,530 - Samples collected to test for bacteria.

6,902 - Samples collected for source and system compliance and monitoring.

5,183 - Samples collected for treatment plant compliance and monitoring.

18,615 - Total samples collected.

**We are pleased to report that our water met or surpassed all state and federal drinking water quality standards in 2014. We welcome you to attend our Board of Public Utilities meetings in the Art Pick Council Chamber at 3900 Main Street, Riverside, held at 8:30 a.m. on the first and third Fridays of each month. You can also visit our website at [BlueRiverside.com](http://BlueRiverside.com) for more information.**

Riverside Public Utilities 2014 Water Quality Report					
Primary Standards: Mandatory Health-Related Standards					
Contaminant	State MCL	State PHG	Riverside Public Utilities Average	Riverside Public Utilities Range	Sources in Drinking Water
<b>Microbiological</b> Total Coliform (P/A) (a)	>5%	0 (MCLG)	0%	0 - 1%	Naturally present in environment
<b>Clarity</b> Turbidity	TT	NS	0.23 NTU (Highest)	99% Meeting turbidity limits	Soil runoff
<b>Regulated Organic</b> Total Trihalomethanes “TTHMs”	80 ppb	NS	7.3 ppb	1.7 - 9.9 ppb	By-product of drinking water disinfection
Chlorine	4.0 ppm (MRDL)	4 ppm (MRDLG)	0.6 ppm	0.11 - 2.2 ppm	Drinking water disinfectant added for treatment
<b>Regulated Inorganic</b> Arsenic	10 ppb	4 ppt	2.0 ppb	ND - 3.5 ppb	Erosion of natural deposits
Fluoride	2 ppm	1.0 ppm	0.5 ppm	0.5 - 0.6 ppm	Naturally present in environment
Nitrate (NO <sub>3</sub> )	45 ppm	45 ppm	25 ppm	22 - 30 ppm	Naturally present in environment
Perchlorate	6 ppb	6 ppb	ND	ND	Inorganic chemical used in variety of industrial operatives
Hexavalent Chromium	10 ppb	0.02 ppb	2.1 ppb	1.8 - 2.4 ppb	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
<b>Radiological</b> Gross Alpha	15 pCi/L	0 (MCLG)	7.6 pCi/L	<3 - 5 pCi/L	Erosion of natural deposits
Uranium	20 pCi/L	0.43 pCi/L	7.7 pCi/L	4.2 - 13 pCi/L	Erosion of natural deposits
<b>Lead/Copper (AL)</b> (90% Household Tap)					
Copper (b)	1,300 ppb	300 ppb	580 ppb	<50 - 940 ppb	Internal corrosion of home plumbing
Regulated Contaminants with No MCLs	Notification Level	State PHG or MCLG	Riverside Average	Riverside Range	
Vanadium	50 ppb	NS	6.2 ppb	5.6 - 7.9 ppb	
Boron	1000 ppb	NS	134 ppb	120 - 190 ppb	
Chlorate	800 ppb	NS	61 ppb	56 - 66 ppb	
Molybdenum	NS	NS	4.1 ppb	4.0 - 4.2 ppb	
N-Nitroso-di-n-butylamine	NS		<2 ppt	<2 - 2.5 ppt	
Strontium	NS		495 ppb	490 - 500 ppb	

# Definitions

**Maximum Contaminant Level (MCL)** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

**Maximum Contaminant Level Goal (MCLG)** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the US Environmental Protection Agency (USEPA).

**Public Health Goal (PHG)** The level of a contaminant in drinking water below which there is no known or expected health risk. PHGs are set by the California EPA.

**Regulatory Action Level (AL)** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**Primary Drinking Water Standard (PDWS)** MCLs and MRDL's for contaminants that affect health, along with their monitoring and reporting requirements, and water treatment requirements.

**Maximum Residual Disinfectant Level (MRDL)** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG)** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Millirem (mrem)** is a unit used to account for various radiations that have an effect on humans.

**Parts Per Million (ppm)** One part per million corresponds to one minute in two years or one penny in \$10,000.

**Treatment Technique (TT)** A required process intended to reduce the level of a contaminant in drinking water.

**Parts Per Billion (ppb)** One part per billion corresponds to one minute in 2,000 years or one penny in \$10,000,000.

**Parts Per Trillion (ppt)** One part per trillion corresponds to one minute in two million years or one penny in \$10,000,000,000.

**Picocuries Per Liter (pCi/L)** A measure of the radioactivity in water.

**Nephelometric Turbidity Units (NTU)** A measure of suspended material in water.

**Micromhos (µMHOS)** A measure of conductivity (electric current) in water.

<b>NL</b>	Notification level.
<b>ND</b>	Not detected at the detection limit for reporting.
<b>NS</b>	No standard.
<b>GPG</b>	Grains per gallon of hardness (1 gpg = 17.1 ppm).
<b>&lt;</b>	Less than the detectable levels.

(a) Results of all samples collected from the distribution system during any month shall be free of total coliforms in 95% or more of the monthly samples.

(b) The Lead and Copper Rule requires that 90 percent of samples taken from drinking water taps in the program homes must be below the action levels. Monitoring is required every 3 years. In 2013, 61 homes participated in the monitoring program. No lead was detected in the 90th percentile samples. The average value listed for copper is the 90th

percentile result. No home exceeded the action level. The next monitoring program is scheduled for 2016.

## Additional Regulatory Information

**Boron** - The babies of some pregnant women who drink water containing boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.

**Fluoride** - The State Water Resources Control Board (State Board) has established an "optimal" fluoride level for water at 1 ppm. Riverside has naturally occurring fluoride levels at 0.5 ppm and is not planning to add fluoride to its water by artificial means.

**Lead** - If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Riverside Public Utilities is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to take minimize exposure is available from the Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

**Nitrate** - In drinking water at levels above 45 ppm is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of an infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 ppm may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant or you are pregnant, you should ask advice about nitrate levels from your health care provider.

Riverside provides drinking water that on average is at 24 ppm and has a range from 22 ppm to 28 ppm during the year. The State Board has set the MCL for nitrate at 45 ppm. Riverside has 53 wells that are blended to comply with drinking water standards. The city conducts extensive monitoring of the blend operations. Seasonal variation in demand and flow, in addition to system maintenance and repair, impact the nitrate levels during the year.

**Perchlorate** - Perchlorate is a regulated drinking water contaminant in California. The maximum contaminant level for perchlorate is 6 parts per billion. Perchlorate salts were used in solid rocket propellants and other industrial applications.

**Vanadium** - The babies of some pregnant women who drink water containing vanadium in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.

### Monitoring Unregulated Contaminants

This monitoring helps USEPA to determine where certain contaminants occur and whether the contaminants need to be regulated. Data is available at [www.epa.gov/ogwdw](http://www.epa.gov/ogwdw).

## **Appendix M    h    °**

**#        Riverside Municipal Code 14.22 – Water Conservation**

## Chapter 14.22

### WATER CONSERVATION

#### Sections:

- 14.22.010**     **Unreasonable uses of water.**
- 14.22.020**     **Water Conservation Program.**
- 14.22.030**     **Stage One - Normal water supply.**
- 14.22.040**     **Stage Two - Minimum water shortage.**
- 14.22.050**     **Stage Three - Moderate water shortage.**
- 14.22.060**     **Stage Four - Severe water shortage.**
- 14.22.070**     **Water shortage emergency.**
- 14.22.080**     **Enforcement and severability.**

#### **Section 14.22.010     Unreasonable uses of water.**

(A) No person shall use or permit the use of water for residential, commercial, industrial, agricultural, or any other purpose, contrary to any provision of this ordinance.

(B) No person shall waste water or use it unreasonably. Unreasonable use of water includes, but is not limited to, the following:

- (1) Allowing water to leave the Person's property by drainage onto adjacent properties or public or private roadways or streets due to excessive irrigation and/or uncorrected leaks
- (2) Failing to timely repair a water leak;
- (3) Using water to wash down sidewalks, driveways, parking areas, tennis courts, patios or other paved areas, except to alleviate immediate safety or sanitation hazards;
- (4) Watering outdoor landscaped areas on rainy days and two days thereafter;
- (5) Failing to adjust sprinklers and irrigation systems to eliminate overspray and avoid run-off into streets, sidewalks, parking lots, alleys or other paved surfaces;
- (6) Operating a water fountain or other decorative water feature that does not use re-circulated water;
- (7) Installing single pass cooling systems in buildings requesting new water service;
- (8) Installing non-re-circulating water systems in new commercial conveyor car wash and new commercial laundry systems; and
- (9) Failing to install operational re-circulating water systems for commercial conveyor car wash systems and commercial laundry systems. (Ord. 7136 § 4, 2011)

#### **Section 14.22.020     Water Conservation Program.**

(A) This Chapter establishes a Water Conservation Program which uses four stages to address conditions and needs. The Water Conservation Stage shall be set by City Council action. All normal water efficiency programs and water conservation regulations shall remain in force during any stage, unless the City Council directs otherwise.

(B) Stage One represents normal conditions; Stages Two, Three and Four represent potential and actual shortages. Stages Two, Three and Four may be triggered by a local or regional water supply shortage; production, treatment, transmission, or delivery infrastructure problems; limited or unavailable alternative water supplies are; or other circumstances.

(C) Stage One conservation measures are voluntary, and will be enforced through public outreach, education, and awareness measures by the City.

(D) Stages Two, Three, and Four conservation measures are mandatory, and

violations may be subject to criminal, civil, and administrative enforcement. (Ord. 7288 § 1, 2015; Ord. 7254 § 1, 2014; Ord. 7136 § 4, 2011)

**Section 14.22.030 Stage One - Normal Water Supply.**

(A) Stage One applies when the City can meet all of its water demands, but declares, by resolution, that it has determined that certain conservation methods are warranted to preserve existing water supply in the event that the City will be unable to meet future water demands.

(B) Upon declaration of Stage One by the City Council, the following water conservation measures shall apply:

(1) Watering lawns and/or ground cover and irrigating landscaping is prohibited from 10:00 a.m. to 6:00 p.m. Pop-up spray-type sprinklers are limited to 15 minute total run-time. Impact and rotor sprinklers are limited to 30 minutes total run-time. Irrigation water cannot leave the landscaped area.

(2) All open hoses shall be equipped with automatic, positive shut-off nozzles.

(3) Washing of automobiles, trucks, trailers, boats, airplanes and other types of mobile equipment, is permitted at any time with a hand-held bucket or a hand-held hose equipped with an automatic, positive shut-off nozzle for quick rinses. Washing may be done at any time at a commercial car wash or commercial service station, or by a mobile car wash or on-site car wash using high pressure washing equipment. Washings necessary for the health, safety, and welfare of the public, such as garbage trucks or vehicles used for food and perishables, are exempt from this section.

(4) Construction operations shall not use water unnecessarily. Newly installed landscaping at construction sites requiring watering are subject to (1) and (2) above. (Ord. 7288 § 1, 2015; Ord. 7254 § 1, 2014; Ord. 7136 § 4, 2011)

**Section 14.22.040 Stage Two – Minimum Water Shortage.**

(A) Stage Two applies when the City Council declares, by resolution, a reasonable probability exists that the City will not be able to meet all of its water demands, other regional or statewide conditions warrant implementation, or the State of California orders implementation.

(B) Upon declaration of Stage Two by the City Council, and the following measures shall apply:

(1) Except as otherwise provided in this Section, all Stage One measures remain in effect.

(2) Customers will be asked to reduce their monthly water consumption up to 15 percent.

(3) Non-agricultural irrigation, including construction meter irrigation, is limited as follows:

(a) Properties may be irrigated only between the hours of 6:00 p.m. to 10:00 a.m.

(b) Properties may not be irrigated more than four (4) times per week.

(c) All automatic irrigation timers shall be adjusted according to changing weather patterns and shall completely eliminate run-off.

(d) Irrigation of landscaping is prohibited on any day of the week from 10:00 a.m. to 6:00 p.m.

(e) All irrigation timers shall be adjusted to comply with the above.

(f) Use of graywater, as that term is defined in the California Health & Safety Code, and recycled water for irrigation is permitted on any day and at any time, subject only to any permits issued by the City.

(4) All plumbing leaks, improperly adjusted sprinklers, or other water



appurtenances requiring repair or adjustment shall be corrected to the satisfaction of the City within 72 hours of notification by the City. The City will attempt to contact customers by phone, mail or printed "door-hanger" notice. All customers shall ensure that the City has current telephone contact information.

(5) Eating or drinking establishments, or other public places where food or drinks are sold, served, or offered for sale, may only provide drinking water upon specific request.

(6) Hotels, motels and other commercial lodging establishments shall provide customers the option of not having towels and linen laundered daily. Commercial lodging establishments shall prominently display notice of this option in each bathroom using clear and easily understood language.

(7) Construction operations receiving water from a construction meter or water truck shall not use water unnecessarily for any purpose, other than those required by regulatory agencies. Construction projects requiring watering for new landscaping materials shall adhere to the designated non-agricultural irrigation requirements set forth above. (Ord. 7288 § 1, 2015; Ord. 7254 § 1, 2014; Ord. 7136 § 4, 2011)

#### **Section 14.22.050 Stage Three - Moderate Water Shortage.**

(A) Stage Three applies when the City Council declares, by resolution, a reasonable probability exists that the City will not be able to meet all of its water demands, other regional or statewide conditions warrant implementation, or the State of California orders implementation.

(B) Upon declaration of Stage Three by the City Council, the following measures shall apply:

(1) Except as otherwise provided in this Section, all Stage One and Two measures remain in effect.

(2) Water customers will be asked to reduce their monthly water consumption by 15 to 20 percent for the duration of Stage Three.

(3) Non-agricultural irrigation is limited as follows:

(a) Properties may be irrigated only between the hours of 6:00 p.m. to 10:00 a.m.

(b) Properties may not be irrigated more than three (3) times per week during the months of April through October and no more than two (2) times per week during the months of November through March. Landscaped area of properties that are irrigated by drip irrigation or microspray irrigation shall be exempt from these irrigation restrictions.

(c) Pop-up spray-type sprinklers shall be limited to a maximum 15 minute total run-time on the allowed days of irrigation. Impact and rotor sprinklers shall be limited to a maximum 30 minute total run-time on the allowed days of irrigation. All automatic irrigation timers shall be adjusted according to changing weather patterns and to completely eliminate run-off.

(4) Use of graywater, as that term is defined in the California Health & Safety Code, or recycled water for irrigation is permitted on any day and at any time, subject only to any permits issued by the City. (Ord. 7288 § 1, 2015; Ord. 7254 § 1, 2014; Ord. 7136 § 4, 2011)

#### **Section 14.22.060 Stage Four - Severe Water Shortage.**

(A) Stage Four applies when the City Council declares, by resolution, that the City's ability to meet its water demands is seriously impaired.

(B) Upon declaration of Stage Four by the City Council, the following water conservation measures shall apply:

(1) Except as otherwise provided in this Section, all Stage One, Two, and

Three conservation measures shall be in full force and effect during Stage Four.

(2) Water customers will reduce their monthly water consumption by twenty to fifty percent (20 – 50 %) for the duration of Water Conservation Stage Four.

(3) Non-agricultural irrigation shall be limited to supporting minimal survival of trees and shrubs. Trees and shrubs may be irrigated, only during the following designated hours and designated days:

(a) Properties with odd number street addresses, parks, and public right of ways may irrigate only on Saturdays between the hours of 8:00 p.m. and 8:00 a.m.

(b) Properties with even number street addresses may irrigate only on Sundays between the hours of 8:00 p.m. and 8:00 a.m.

(c) Irrigation is prohibited on Mondays, Tuesdays, Wednesdays, Thursdays, and Fridays and on any day of the week from 8:00 a.m. to 8:00 p.m.

(4) Use of recycled water for irrigation is permitted on any day and at any time notwithstanding (3)(a) - (2)(e) above.

(5) All outdoor watering and irrigation of lawns and similar ground covers is prohibited with the exception of plant materials determined by the General Manager to be rare, exceptionally valuable, or essential to the well being of the public or threatened or endangered animals.

(6) Washing of automobiles, trucks, trailers, boats, airplanes and other types of mobile equipment is prohibited except at a commercial car wash. Commercial car washes shall only use wholly- or partially-recycled water for washing automobiles, trucks, trailers, boats, airplanes and other types of mobile equipment. Washings necessary for the health, safety, and welfare of the public, such as garbage trucks or vehicles used for food and perishables, are exempt from this section.

(7) Filling, refilling, or replenishing swimming pools, spas, ponds, streams, and artificial lakes is prohibited.

(8) Operation of any ornamental fountain, pond, or similar structure is prohibited.

(9) Use of water for cooling mists is prohibited.

(10) Water used for commercial, manufacturing, or processing purposes shall be reduced as determined by the City Council. (Ord. 7136 § 4, 2011)

#### **Section 14.22.070 Water Shortage Emergency.**

(A) If the City Council has declared either Stage Three or Stage Four conservation, it may also, by resolution, declare a Water Shortage Emergency. A Water Shortage Emergency may be an immediate emergency, or a threatened future water shortage, or both; and

(B) Upon declaration of a Water Shortage Emergency:

(1) No new construction meters will be issued.

(2) No construction water may be used for earth work such as road construction purposes, dust control, compaction, or trench jetting.

(3) No new building permit(s) shall be issued, except:

(a) Projects found by the City Council to be necessary for public health, safety.

(b) Projects using recycled water for construction.

(c) Projects which will not result in a net increase in non-recycled water use.

(d) Projects with adequate Conservation Offsets, if available. The City, in its sole discretion, may choose to make Conservation Offsets available. Conservation Offset costs shall be based on the cost of conserving the water elsewhere to provide the water needed for a project, the cost of providing an alternative water supply deemed acceptable by the City, or other measures as may be found in the City's Water Use Efficiency Master Plan. Conservation Offset fees will be set forth in the Water Rules and Rate Schedules. (Ord. 7136 § 4, 2011)

**Section 14.22.080 Enforcement and Severability.**

(A) Any violation of this article shall be subject to enforcement by issuance of an administrative citation pursuant to Chapter 1.17 of this Code. Prior to issuance of an administrative citation, the City shall give one courtesy notice requesting voluntary correction of the violation. The City Manager, or his or her designee, may enter into a written agreement with a customer to resolve any violation provided that such agreement is consistent with the purpose and intent of this Chapter.

(B) If any phrase, section, sentence, or word of this Ordinance is held invalid by a court of competent jurisdiction, such invalidity shall not affect any other phrase, section, sentence, or word of the Ordinance that can be given effect without the invalid phrase, section, sentence, or word, and to this end each phrase, section, sentence, or word of this Ordinance is declared to be severable. (Ord. 7136 § 4, 2011)

## **Appendix M (Part B)**

**Proposed Riverside Municipal Code 14.22 – Water Conservation**

**(To be Presented to City Council on June 28, 2016)**

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ORDINANCE NO.

AN URGENCY ORDINANCE OF THE CITY OF RIVERSIDE, CALIFORNIA,  
AMENDING RIVERSIDE MUNICIPAL CODE CHAPTER 14.22, "WATER  
CONSERVATION", IN ACCORDANCE WITH STATE WATER  
CONSERVATION REGULATIONS

WHEREAS, the City of Riverside ("City") owns and operates a water utility providing its residents with potable and non-potable water taken from local groundwater supplies, and has done so since 1913; and

WHEREAS, California endured six years of significant drought and severe impacts to California's water supplies and its ability to meet all of the demands for water in the State; and

WHEREAS, on July 26, 2011, the City adopted Riverside Municipal Code Chapter 14.22, entitled "Water Conservation", which declared certain uses of water to be unreasonable and set forth a four stage water conservation plan, with each particular stage to be implemented by the City Council by resolution depending upon the severity of a water shortage or drought; and

WHEREAS, on April 1, 2015, Governor Brown issued Executive Order B-29-15, directing the Water Board to adopt emergency regulations "to achieve a statewide 25% reduction in potable urban water usage"; and

WHEREAS, State Water Resources Control Board ("SWRCB") Resolution 2016-0007, adopted February 2, 2016, imposed statewide conservation for the period March 2016 through October 2016; and

WHEREAS, despite its adequate water supply and progressive water conservation policies, the City earnestly conserved water in accordance with the Governor's and SWRCB's directives; and

WHEREAS, following a winter of improved water supply and conditions, on May 9, 2016, Governor Brown issued Executive Order B-37-16 calling on the SWRCB to adjust emergency water conservation regulations through the end of January 2017 in recognition of differing water supply conditions across the state; and

WHEREAS, pursuant to Executive Order B-37-16 and in order to prevent the waste and

1 unreasonable use of water and to promote water conservation, on or about May 31, 2016, the  
2 SWRCB reaffirmed certain emergency regulations which prohibit, except where necessary to  
3 address an immediate health and safety need or to comply with a term or condition in a permit  
4 issued by a state or federal agency, certain uses of water (California Code of Regulations, Title  
5 23, Section 864); and

6 WHEREAS, to comply with the above-noted Executive Orders, SWRCB regulation, and  
7 the City's long-standing commitment to its water resources, staff recommends that the City  
8 revise Section 14.22.010 "Unreasonable Uses of Water" and model it on Section 864 of the  
9 SWRCB emergency regulations (California Code of Regulations, Title 23, Section 864); and

10 WHEREAS, staff noted that certain inconsistencies in the language of the ordinance  
11 regarding voluntary compliance with Stage 1 measures, use of drip and microspray irrigation,  
12 and allowing the use of "gray water" or recycled water during all stages, which should be  
13 clarified

14 THE CITY COUNCIL OF THE CITY OF RIVERSIDE DOES ORDAIN AS  
15 FOLLOWS:

16 Section 1. Riverside Municipal Code Chapter 14.22, "Water Conservation", is  
17 amended to read as follows:

18 **Section 14.22.010 Unreasonable uses of water.**

19 (A) No person shall use or permit the use of water for residential, commercial,  
20 industrial, agricultural, or any other purpose, contrary to any provision of this ordinance.

21 (B) No person shall waste water or use it unreasonably. To prevent the waste and  
22 unreasonable use of water and to promote water conservation, each of the following actions is  
23 prohibited as an unreasonable use of water, except where necessary to address an immediate  
24 health and safety need or to comply with a term or condition in a permit issued by a state or  
25 federal agency:

26 (1) The application of potable water to outdoor landscapes in a manner that  
27 causes runoff such that water flows onto adjacent property, non-irrigated areas, private and  
28 public walkways, roadways, parking lots, or structures;

1           (2)     The use of a hose that dispenses potable water to wash a motor vehicle,  
2 except where the hose is fitted with a shut-off nozzle or device attached to it that causes it to  
3 cease dispensing water immediately when not in use;

4           (3)     The application of potable water to driveways and sidewalks;

5           (4)     The use of potable water in a fountain or other decorative water feature,  
6 except where the water is part of a recirculating system;

7           (5)     The application of potable water to outdoor landscapes during and within  
8 48 hours after measurable rainfall;

9           (6)     The serving of drinking water other than upon request in eating or  
10 drinking establishments, including but not limited to restaurants, hotels, cafes, cafeterias, bars, or  
11 other public places where food or drink are served and/or purchased;

12          (7)     The irrigation with potable water of ornamental turf on public street  
13 medians; and;

14          (8)     The irrigation with potable water of landscapes outside of newly  
15 constructed homes and buildings in a manner inconsistent with regulations or other requirements  
16 established by the California Building Standards Commission and the Department of Housing  
17 and Community Development.

18          (C)     To promote water conservation, operators of hotels and motels shall provide  
19 guests with the option of choosing not to have towels and linens laundered daily. The hotel or  
20 motel shall prominently display notice of this option in each guestroom using clear and easily  
21 understood language.

22          (D)     A splash pad shall be defined as a recreational feature and includes any pavement  
23 or sidewalk area that is part of the splash pad. Operation of a splash pad is not prohibited by this  
24 ordinance as an unreasonable use of water.

25 **Section 14.22.020 Water Conservation Program.**

26          (A)     This Chapter establishes a Water Conservation Program which uses four stages to  
27 address conditions and needs. The Water Conservation Stage shall be set by City Council action.  
28 All normal water efficiency programs and water conservation regulations shall remain in force

during any stage, unless the City Council directs otherwise.

(B) Stage One represents normal conditions; Stages Two, Three and Four represent potential and actual shortages. Stages Two, Three and Four may be triggered by a local or regional water supply shortage; production, treatment, transmission, or delivery infrastructure problems; limited or unavailable alternative water supplies are; or other circumstances.

(C) Stage One conservation measures are voluntary, and will be encouraged through public outreach, education, and awareness measures by the City.

(D) Stages Two, Three, and Four conservation measures are mandatory, and violations may be subject to criminal, civil, and administrative enforcement.

**Section 14.22.030 Stage One - Normal Water Supply.**

(A) Stage One applies when the City can meet all of its water demands, but declares, by resolution, that it has determined that certain conservation methods are warranted to preserve existing water supply in the event that the City will be unable to meet future water demands.

(B) Upon declaration of Stage One by the City Council, the following water conservation measures shall apply:

(1) Non-agricultural irrigation should be done from 6:00 p.m. to 10:00 a.m. Pop-up spray-type sprinklers are limited to 15 minute total run-time. Impact and rotor sprinklers are limited to 30 minutes total run-time. Irrigation water cannot leave the landscaped area. Landscaped area of properties that are irrigated by drip irrigation or microspray irrigation shall be exempt from these irrigation restrictions.

(2) Use of graywater, as that term is defined in the California Health & Safety Code, and recycled water for irrigation is permitted on any day and at any time, subject only to any permits issued by the City.

**Section 14.22.040 Stage Two - Minimum Water Shortage.**

(A) Stage Two applies when the City Council declares, by resolution, a reasonable probability exists that the City will not be able to meet all of its water demands, other regional or statewide conditions warrant implementation, or the State of California orders implementation.

(B) Upon declaration of Stage Two by the City Council, and the following measures



1 shall apply:

2 (1) Except as otherwise provided in this Section, all Stage One measures  
3 remain in effect but shall be mandatory, not voluntary.

4 (2) Customers will be asked to reduce their monthly water consumption up to  
5 15 percent.

6 (3) Non-agricultural irrigation is limited as follows:

7 (a) Properties may be irrigated only between the hours of 6:00 p.m. to  
8 10:00 a.m. Irrigation of landscaping is prohibited on any day of the week from 10:00 a.m. to  
9 6:00 p.m.

10 (b) Properties may not be irrigated more than four times per week.

11 (c) All automatic irrigation timers shall be adjusted according to  
12 irrigation time restrictions and changing weather patterns, and shall completely eliminate run-off.

13 (d) Use of graywater, as that term is defined in the California Health &  
14 Safety Code, and recycled water for irrigation is permitted on any day and at any time, subject  
15 only to any permits issued by the City.

16 (e) Landscaped area of properties that are irrigated by drip irrigation  
17 or microspray irrigation shall be exempt from these irrigation restrictions.

18 (4) All plumbing leaks, improperly adjusted sprinklers, or other water  
19 appurtenances requiring repair or adjustment shall be corrected to the satisfaction of the City  
20 within 72 hours of notification by the City. The City will attempt to contact customers by phone,  
21 mail or printed "door-hanger" notice. All customers shall ensure that the City has current  
22 telephone contact information.

23 (5) Construction operations receiving water from a construction meter or  
24 water truck shall not use water unnecessarily for any purpose, other than those required by  
25 regulatory agencies. Construction projects requiring watering for new landscaping materials shall  
26 adhere to the designated non-agricultural irrigation requirements set forth above.

27 **Section 14.22.050 Stage Three - Moderate Water Shortage.**

28 (A) Stage Three applies when the City Council declares, by resolution, a reasonable

1 probability exists that the City will not be able to meet all of its water demands, other regional or  
2 statewide conditions warrant implementation, or the State of California orders implementation.

3 (B) Upon declaration of Stage Three by the City Council, the following measures  
4 shall apply:

5 (1) Except as otherwise provided in this Section, all Stage One and Two  
6 measures remain in effect, and Stage One measures shall be mandatory, not voluntary.

7 (2) Water customers will be asked to reduce their monthly water consumption  
8 by 15 to 20 percent for the duration of Stage Three.

9 (3) Non-agricultural irrigation is limited as follows:

10 (a) Properties may be irrigated only between the hours of 6:00 p.m. to  
11 10:00 a.m.

12 (b) Properties may not be irrigated more than three (3) times per week  
13 during the months of April through October and no more than two (2) times per week during the  
14 months of November through March.

15 (c) Landscaped area of properties that are irrigated by drip irrigation  
16 or microspray irrigation shall be exempt from these irrigation restrictions.

17 (d) Pop-up spray-type sprinklers shall be limited to a maximum 15  
18 minute total run-time on the allowed days of irrigation. Impact and rotor sprinklers shall be  
19 limited to a maximum 30 minute total run-time on the allowed days of irrigation. All automatic  
20 irrigation timers shall be adjusted according to changing weather patterns and to completely  
21 eliminate run-off.

22 (e) Use of graywater, as that term is defined in the California Health &  
23 Safety Code, or recycled water for irrigation is permitted on any day and at any time, subject  
24 only to any permits issued by the City.

25 **Section 14.22.060 Stage Four - Severe Water Shortage.**

26 (A) Stage Four applies when the City Council declares, by resolution, that the City's  
27 ability to meet its water demands is seriously impaired.

1 (B) Upon declaration of Stage Four by the City Council, the following water  
2 conservation measures shall apply:

3 (1) Except as otherwise provided in this Section, all Stage One, Two, and Three  
4 conservation measures shall be in full force and effect during Stage Four, and Stage One  
5 measures shall be mandatory, not voluntary.

6 (2) Water customers will reduce their monthly water consumption by 20 to 50 percent  
7 for the duration of Water Conservation Stage Four.

8 (3) Non-agricultural irrigation shall be limited to supporting minimal survival of trees  
9 and shrubs. Trees and shrubs may be irrigated, only during the following designated hours and  
10 designated days:

11 (a) Properties with odd number street addresses, parks, and public right of ways may  
12 irrigate only on Saturdays between the hours of 8:00 p.m. and 8:00 a.m.

13 (b) Properties with even number street addresses may irrigate only on Sundays  
14 between the hours of 8:00 p.m. and 8:00 a.m.

15 (c) Irrigation is prohibited on Mondays, Tuesdays, Wednesdays, Thursdays, and  
16 Fridays and on any day of the week from 8:00 a.m. to 8:00 p.m.

17 (d) Use of graywater, as that term is identified in the California Health & Safety  
18 Code, or recycled water for irrigation is permitted on any day and at any time, subject only to  
19 any permits issued by the City.

20 (5) All outdoor watering and irrigation of lawns and similar ground covers is  
21 prohibited with the exception of plant materials determined by the City Manager to be rare,  
22 exceptionally valuable, or essential to the well-being of the public or threatened or endangered  
23 animals.

24 (6) Washing of automobiles, trucks, trailers, boats, airplanes and other types of  
25 mobile equipment is prohibited except at a commercial car wash. Commercial car washes shall  
26 only use wholly- or partially-recycled water for washing automobiles, trucks, trailers, boats,  
27 airplanes and other types of mobile equipment. Washings necessary for the health, safety, and  
28

welfare of the public, such as garbage trucks or vehicles used for food and perishables, are exempt from this section.

(7) Filling, refilling, or replenishing swimming pools, spas, ponds, streams, and artificial lakes is prohibited.

(8) Operation of any ornamental fountain, pond, or similar structure is prohibited.

(9) Use of water for cooling mists is prohibited.

(10) Water used for commercial, manufacturing, or processing purposes shall be reduced as determined by the City Council.

**Section 14.22.070 Water Shortage Emergency.**

(A) If the City Council has declared either Stage Three or Stage Four conservation, it may also, by resolution, declare a Water Shortage Emergency. A Water Shortage Emergency may be an immediate emergency, or a threatened future water shortage, or both; and

(B) Upon declaration of a Water Shortage Emergency:

(1) No new construction meters will be issued.

(2) No construction water may be used for earth work such as road construction purposes, dust control, compaction, or trench jetting.

(3) No new building permit(s) shall be issued, except:

(a) Projects found by the City Council to be necessary for public health, safety.

(b) Projects using recycled water for construction.

(c) Projects which will not result in a net increase in non-recycled water use.

(d) Projects with adequate conservation offsets, if available. The City, in its sole discretion, may choose to make conservation offsets available. Conservation offset costs shall be based on the cost of conserving the water elsewhere to provide the water needed for a project, the cost of providing an alternative water supply deemed acceptable by the City, or other measures as may be found in the City's water use efficiency master plan. Conservation offset fees will be set forth in the Water Rules and Rate Schedules.

1     **Section 14.22.080 Enforcement and Severability.**

2             (A)     Any violation of this article may be subject to enforcement by issuance of an  
3 administrative citation pursuant to Chapter 1.17 of this Code. Prior to issuance of an  
4 administrative citation, the City shall give one courtesy notice requesting voluntary correction of  
5 the violation. The City Manager, or his or her designee, may enter into a written agreement with  
6 a customer to resolve any violation provided that such agreement is consistent with the purpose  
7 and intent of this Chapter.

8             (B)     If any phrase, section, sentence, or word of this Ordinance is held invalid by a  
9 court of competent jurisdiction, such invalidity shall not affect any other phrase, section,  
10 sentence, or word of the Ordinance that can be given effect without the invalid phrase, section,  
11 sentence, or word, and to this end each phrase, section, sentence, or word of this Ordinance is  
12 declared to be severable.

13             Section 3.     This ordinance and all related approvals and actions, is not subject to or  
14 exempt from the California Environmental Quality Act (“CEQA”) for the following reasons:  
15 The SWRCB, at the direction of the Governor, has issued emergency regulations directing the  
16 City to enact the matters in this Ordinance. It is not a discretionary project. According to section  
17 15002(i) of Title 14 of the California Code of Regulations (the “State CEQA Guidelines”),  
18 “[w]here the law requires a governmental agency to act on a project in a set way without  
19 allowing the agency to use its own judgment, the project is called ‘ministerial,’ and CEQA does  
20 not apply.” State CEQA Guidelines section 15369 “describes a governmental decision involving  
21 little or no personal judgment by the public official as to the wisdom or manner of carrying out  
22 the project” as not being discretionary. This ordinance, and all related approvals and actions, is  
23 exempt as an emergency. Public Resources Code section 21080(b)(4) exempts from CEQA  
24 “[s]pecific actions necessary to prevent or mitigate an emergency.” This ordinance is exempt as  
25 a necessary act following the Governor’s Executive Order B-37-16, and prior Executive Orders  
26 and Proclamations, which suspended CEQA’s application to the SWRCB’s adoption of  
27 emergency regulations pursuant to Water Code section 1058.5 to prevent the waste, unreasonable  
28 use, unreasonable method of use, or unreasonable method of diversion of water, to promote

1 water recycling or water conservation.

2 Section 4. This ordinance is adopted as an urgency measure pursuant to Section 413  
3 of the Riverside City Charter. This ordinance is necessary as an emergency measure for  
4 preserving the public peace, health, and safety of the City and its residents.

5 Section 5. Pursuant to Section 416 of the Riverside City Charter, this urgency  
6 ordinance shall become effective immediately upon adoption.

7 Section 6. The City Clerk shall certify to the adoption of this ordinance and cause  
8 publication once in a newspaper of general circulation in accordance with Section 414 of the  
9 Charter of the City of Riverside.

10 ADOPTED by the City Council this \_\_\_\_ day of \_\_\_\_\_, 2016.

11  
12 \_\_\_\_\_  
13 WILLIAM R. BAILEY, III  
Mayor of the City of Riverside

14 Attest:

15  
16 \_\_\_\_\_  
17 COLLEEN J. NICOL  
City Clerk of the City of Riverside

18 I, Colleen J. Nicol, City Clerk of the City of Riverside, California, hereby certify that the  
19 foregoing ordinance was duly and regularly adopted at a meeting of the City Council on the  
20 \_\_\_\_ day of \_\_\_\_\_, 2016, by the following vote, to wit:

21 Ayes:

22 Noes:

23 Absent:

24 Abstain:

25 IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of  
26 the City of Riverside, California, this \_\_\_\_ day of \_\_\_\_\_, 2016.

27  
28 \_\_\_\_\_  
COLLEEN J. NICOL

City Clerk of the City of Riverside

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# **Appendix N**

## **DMM Implementation**





# **Appendix O**

## **Resolution of Adoption**

**<<To be included following adoption>>**

# **Appendix P**

## **DWR Checklist**

# Appendix P

## UWMP Checklist

### Checklist Arranged by Subject

CWC Section	UWMP Requirement	Subject	Guidebook Location	UWMP Location <i>(Optional Column for Agency Use)</i>
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	11.3
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 2.5.2	3.4.1
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.	Plan Preparation	Section 2.5.2	3.4.2
10631(a)	Describe the water supplier service area.	System Description	Section 3.1	4.2
10631(a)	Describe the climate of the service area of the supplier.	System Description	Section 3.3	4.3
10631(a)	Provide population projections for 2020, 2025, 2030, and 2035.	System Description	Section 3.4	4.4
10631(a)	Describe other demographic factors affecting the supplier's water management planning.	System Description	Section 3.4	5.4
10631(a)	Indicate the current population of the service area.	System Description and Baselines and Targets	Sections 3.4 and 5.4	4.4
10631(e)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	System Water Use	Section 4.2	5.1
10631(e)(3)(A)	Report the distribution system water loss for the most recent 12-month period available.	System Water Use	Section 4.3	5.2

<b>CWC Section</b>	<b>UWMP Requirement</b>	<b>Subject</b>	<b>Guidebook Location</b>	<b>UWMP Location (Optional Column for Agency Use)</b>
<b>10631.1(a)</b>	Include projected water use needed for lower income housing projected in the service area of the supplier.	System Water Use	Section 4.5	5.4
<b>10608.20(b)</b>	Retail suppliers shall adopt a 2020 water use target using one of four methods.	Baselines and Targets	Section 5.7 and App E	6.6
<b>10608.20(e)</b>	Retail suppliers shall provide baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.	Baselines and Targets	Chapter 5 and App E	6.4, 6.5, 6.6, 6.7
<b>10608.22</b>	Retail suppliers' per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use of the 5 year baseline. This does not apply if the suppliers base GPCD is at or below 100.	Baselines and Targets	Section 5.7.2	6.6
<b>10608.24(a)</b>	Retail suppliers shall meet their interim target by December 31, 2015.	Baselines and Targets	Section 5.8 and App E	6.7
<b>10608.24(d)(2)</b>	If the retail supplier adjusts its compliance GPCD using weather normalization, economic adjustment, or extraordinary events, it shall provide the basis for, and data supporting the adjustment.	Baselines and Targets	Section 5.8.2	6.7
<b>10608.36</b>	Wholesale suppliers shall include an assessment of present and proposed future measures, programs, and policies to help their retail water suppliers achieve targeted water use reductions.	Baselines and Targets	Section 5.1	10.1, 10.2, 10.3
<b>10608.40</b>	Retail suppliers shall report on their progress in meeting their water use targets. The data shall be reported using a standardized form.	Baselines and Targets	Section 5.8 and App E	6.6, 6.7, Appendix F
<b>10631(b)</b>	Identify and quantify the existing and planned sources of water available for 2015, 2020, 2025, 2030, and 2035.	System Supplies	Chapter 6	7.9
<b>10631(b)</b>	Indicate whether groundwater is an existing or planned source of water available to the supplier.	System Supplies	Section 6.2	7.2
<b>10631(b)(1)</b>	Indicate whether a groundwater management plan has been adopted by the water supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	System Supplies	Section 6.2.2	7.2.3
<b>10631(b)(2)</b>	Describe the groundwater basin.	System Supplies	Section 6.2.1	7.2.2

<b>CWC Section</b>	<b>UWMP Requirement</b>	<b>Subject</b>	<b>Guidebook Location</b>	<b>UWMP Location (Optional Column for Agency Use)</b>
<b>10631(b)(2)</b>	Indicate if the basin has been adjudicated and include a copy of the court order or decree and a description of the amount of water the supplier has the legal right to pump.	System Supplies	Section 6.2.2	7.2.1
<b>10631(b)(2)</b>	For unadjudicated basins, indicate whether or not the department has identified the basin as overdrafted, or projected to become overdrafted. Describe efforts by the supplier to eliminate the long-term overdraft condition.	System Supplies	Section 6.2.3	7.2.4
<b>10631(b)(3)</b>	Provide a detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years	System Supplies	Section 6.2.4	7.2.2, 7.2.3, 7.2.5
<b>10631(b)(4)</b>	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	System Supplies	Sections 6.2 and 6.9	7.8, 7.9
<b>10631(d)</b>	Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.	System Supplies	Section 6.7	7.7
<b>10631(g)</b>	Describe the expected future water supply projects and programs that may be undertaken by the water supplier to address water supply reliability in average, single-dry, and multiple-dry years.	System Supplies	Section 6.8	8.2
<b>10631(h)</b>	Describe desalinated water project opportunities for long-term supply.	System Supplies	Section 6.6	7.6
<b>10631(j)</b>	Retail suppliers will include documentation that they have provided their wholesale supplier(s) – if any - with water use projections from that source.	System Supplies	Section 2.5.1	7.1
<b>10631(j)</b>	Wholesale suppliers will include documentation that they have provided their urban water suppliers with identification and quantification of the existing and planned sources of water available from the wholesale to the urban supplier during various water year types.	System Supplies	Section 2.5.1	N/A
<b>10633</b>	For wastewater and recycled water, coordinate with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.1	7.5

<b>CWC Section</b>	<b>UWMP Requirement</b>	<b>Subject</b>	<b>Guidebook Location</b>	<b>UWMP Location (Optional Column for Agency Use)</b>
<b>10633(a)</b>	Describe the wastewater collection and treatment systems in the supplier's service area. Include quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.	System Supplies (Recycled Water)	Section 6.5.2	7.5.2
<b>10633(b)</b>	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	System Supplies (Recycled Water)	Section 6.5.2.2	7.5.2
<b>10633(c)</b>	Describe the recycled water currently being used in the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.3 and 6.5.4	7.5.3
<b>10633(d)</b>	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 6.5.4	7.5.5
<b>10633(e)</b>	Describe the projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected.	System Supplies (Recycled Water)	Section 6.5.4	7.5.4
<b>10633(f)</b>	Describe the actions which may be taken to encourage the use of recycled water and the projected results of these actions in terms of acre-feet of recycled water used per year.	System Supplies (Recycled Water)	Section 6.5.5	7.5.5
<b>10633(g)</b>	Provide a plan for optimizing the use of recycled water in the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.5	7.5.5
<b>10620(f)</b>	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	Water Supply Reliability Assessment	Section 7.4	7.8, 7.9, 8.4
<b>10631(c)(1)</b>	Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage.	Water Supply Reliability Assessment	Section 7.1	8.3
<b>10631(c)(1)</b>	Provide data for an average water year, a single dry water year, and multiple dry water years	Water Supply Reliability Assessment	Section 7.2	8.3
<b>10631(c)(2)</b>	For any water source that may not be available at a consistent level of use, describe plans to supplement or replace that source.	Water Supply Reliability Assessment	Section 7.1	8.1.2, 8.1.4

<b>CWC Section</b>	<b>UWMP Requirement</b>	<b>Subject</b>	<b>Guidebook Location</b>	<b>UWMP Location (Optional Column for Agency Use)</b>
<b>10634</b>	Provide information on the quality of existing sources of water available to the supplier and the manner in which water quality affects water management strategies and supply reliability	Water Supply Reliability Assessment	Section 7.1	8.1
<b>10635(a)</b>	Assess the water supply reliability during normal, dry, and multiple dry water years by comparing the total water supply sources available to the water supplier with the total projected water use over the next 20 years.	Water Supply Reliability Assessment	Section 7.3	8.3
<b>10632(a) and 10632(a)(1)</b>	Provide an urban water shortage contingency analysis that specifies stages of action and an outline of specific water supply conditions at each stage.	Water Shortage Contingency Planning	Section 8.1	9.1
<b>10632(a)(2)</b>	Provide an estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency.	Water Shortage Contingency Planning	Section 8.9	9.9
<b>10632(a)(3)</b>	Identify actions to be undertaken by the urban water supplier in case of a catastrophic interruption of water supplies.	Water Shortage Contingency Planning	Section 8.8	9.8
<b>10632(a)(4)</b>	Identify mandatory prohibitions against specific water use practices during water shortages.	Water Shortage Contingency Planning	Section 8.2	9.2
<b>10632(a)(5)</b>	Specify consumption reduction methods in the most restrictive stages.	Water Shortage Contingency Planning	Section 8.4	9.4
<b>10632(a)(6)</b>	Indicated penalties or charges for excessive use, where applicable.	Water Shortage Contingency Planning	Section 8.3	9.3
<b>10632(a)(7)</b>	Provide an analysis of the impacts of each of the actions and conditions in the water shortage contingency analysis on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts.	Water Shortage Contingency Planning	Section 8.6	9.6
<b>10632(a)(8)</b>	Provide a draft water shortage contingency resolution or ordinance.	Water Shortage Contingency Planning	Section 8.7	9.7
<b>10632(a)(9)</b>	Indicate a mechanism for determining actual reductions in water use pursuant to the water shortage contingency analysis.	Water Shortage Contingency Planning	Section 8.5	9.5



<b>CWC Section</b>	<b>UWMP Requirement</b>	<b>Subject</b>	<b>Guidebook Location</b>	<b>UWMP Location (Optional Column for Agency Use)</b>
<b>10631(f)(1)</b>	Retail suppliers shall provide a description of the nature and extent of each demand management measure implemented over the past five years. The description will address specific measures listed in code.	Demand Management Measures	Sections 9.2 and 9.3	10.1
<b>10631(f)(2)</b>	Wholesale suppliers shall describe specific demand management measures listed in code, their distribution system asset management program, and supplier assistance program.	Demand Management Measures	Sections 9.1 and 9.3	10.1
<b>10631(i)</b>	CUWCC members may submit their 2013-2014 CUWCC BMP annual reports in lieu of, or in addition to, describing the DMM implementation in their UWMPs. This option is only allowable if the supplier has been found to be in full compliance with the CUWCC MOU.	Demand Management Measures	Section 9.5	10.4
<b>10608.26(a)</b>	Retail suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets.	Plan Adoption, Submittal, and Implementation	Section 10.3	11.3
<b>10621(b)</b>	Notify, at least 60 days prior to the public hearing, any city or county within which the supplier provides water that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan.	Plan Adoption, Submittal, and Implementation	Section 10.2.1	11.2
<b>10621(d)</b>	Each urban water supplier shall update and submit its 2015 plan to the department by July 1, 2016.	Plan Adoption, Submittal, and Implementation	Sections 10.3.1 and 10.4	11.4
<b>10635(b)</b>	Provide supporting documentation that Water Shortage Contingency Plan has been, or will be, provided to any city or county within which it provides water, no later than 60 days after the submission of the plan to DWR.	Plan Adoption, Submittal, and Implementation	Section 10.4.4	Appendix M
<b>10642</b>	Provide supporting documentation that the urban water supplier made the plan available for public inspection, published notice of the public hearing, and held a public hearing about the plan.	Plan Adoption, Submittal, and Implementation	Sections 10.2.2, 10.3, and 10.5	11.5
<b>10642</b>	The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water.	Plan Adoption, Submittal, and Implementation	Sections 10.2.1	11.2
<b>10642</b>	Provide supporting documentation that the plan has been adopted as prepared or modified.	Plan Adoption, Submittal, and Implementation	Section 10.3.1	Appendix O

<b>CWC Section</b>	<b>UWMP Requirement</b>	<b>Subject</b>	<b>Guidebook Location</b>	<b>UWMP Location (Optional Column for Agency Use)</b>
<b>10644(a)</b>	Provide supporting documentation that the urban water supplier has submitted this UWMP to the California State Library.	Plan Adoption, Submittal, and Implementation	Section 10.4.3	11.4
<b>10644(a)(1)</b>	Provide supporting documentation that the urban water supplier has submitted this UWMP to any city or county within which the supplier provides water no later than 30 days after adoption.	Plan Adoption, Submittal, and Implementation	Section 10.4.4	11.4
<b>10644(a)(2)</b>	The plan, or amendments to the plan, submitted to the department shall be submitted electronically.	Plan Adoption, Submittal, and Implementation	Sections 10.4.1 and 10.4.2	11.4
<b>10645</b>	Provide supporting documentation that, not later than 30 days after filing a copy of its plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Plan Adoption, Submittal, and Implementation	Section 10.5	11.5