California Regional Water Quality Control Board
Santa Ana Region

RESOLUTION NO. R8-2010-0039

Resolution Amending the Water Quality Control Plan for the Santa Ana River Basin to Incorporate "Maximum Benefit" Total Dissolved Solids (TDS) and Nitrogen Objectives and a Maximum Benefit Salt Management Plan for the San Jacinto Upper Pressure Management Zone

WHEREAS, the California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Board), finds that:

1. An updated Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) was adopted by the Regional Board on March 11, 1994, approved by the State Water Resources Control Board (SWRCB) on July 21, 1994, and approved by the Office of Administrative Law (OAL) on January 24, 1995.

2. Amendments to the Basin Plan to incorporate a revised Total Dissolved Solids and Nitrogen Management Plan into the Basin Plan were approved by the Regional Board on January 22, 2004, by the SWRCB on October 1, 2004 and by OAL on December 23, 2004. The surface water standards provisions of the amendments were approved by the U.S. Environmental Protection Agency on January 20, 2007.

3. The Total Dissolved Solids and Nitrogen Management Plan addresses total dissolved solids (TDS) and nitrogen in both surface waters and groundwaters throughout the Santa Ana River basin.

4. The Basin Plan specifies the following beneficial uses for the San Jacinto Upper Pressure Management Zone: municipal water supply (MUN); agricultural water supply (AGR); industrial process supply (PROC); and industrial service supply (IND).

5. The Basin Plan specifies TDS and nitrate-nitrogen water quality objectives for the San Jacinto Upper Pressure Management Zone. These water quality objectives are based on historical water quality ("antidegradation objectives").[1]

6. The Basin Plan includes Maximum Benefit Implementation Plans for Salt Management in the Chino North, Beaumont, San Timoteo and Yucaipa Management Zones (hereinafter, Maximum Benefit Implementation Plans). The Maximum Benefit Implementation Plans identify the actions necessary to implement "maximum benefit" water quality objectives for TDS and nitrate-nitrogen that apply to these Management Zones. These objectives apply provided that the responsible agencies implement specific plans and projects identified in the Implementation Plans. If these commitments are not met, then the "antidegradation"

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[1] TDS and nitrate-nitrogen concentrations in each groundwater management zone for the period 1954-1973 were evaluated to establish historic ambient quality for each zone. This period brackets 1968, when the SWRCB adopted the state's antidegradation policy (Resolution No. 68-16). The antidegradation policy established a benchmark for assessing and considering authorization of future degradation of water quality. The historic ambient TDS and nitrate-nitrogen concentrations for each management zone were established by the Regional Board as the "antidegradation" objectives for each zone (Resolution No. R8-2004-0001).

TDS and nitrate-nitrogen objectives also specified for these Management Zones apply for regulatory purposes[2]

7. Eastern Municipal Water District (EMWD) is the principal agency in the 542-square mile San Jacinto River watershed responsible for managing potable water supplies, including groundwater resources and imported water supplies. EMWD also oversees wastewater collection and treatment at four water reclamation facilities, treating approximately 46 million gallons of wastewater daily. Approximately 80% of the wastewater produced is reused throughout the watershed.

8. EMWD has developed a comprehensive maximum benefit proposal for the San Jacinto Upper Pressure Management Zone, including the addition of TDS and nitrate-nitrogen "maximum benefit" objectives to accommodate the implementation of the Hemet/San Jacinto Water Management Plan. The proposed "maximum benefit" TDS and nitrate-nitrogen objectives are less stringent than the existing "antidegradation" objectives.

9. The Hemet/San Jacinto Water Management Plan (Management Plan), which encompasses the Canyon Management Zone, the Hemet South Management Zone, the San Jacinto Upper Pressure Management Zone and the northern portion of the Lakeview-Hemet North Management Zone, guides and supports responsible water resource management into the future and includes the use of recycled water in the San Jacinto Upper Pressure Management Zone and other water management activities. The Management Plan was developed through a coordinated effort with Eastern Municipal Water District (EMWD), Lake Hemet Municipal Water District, the city of Hemet, the city of San Jacinto, and two of the area's largest farming operations. The primary benefits of this plan are to reduce local overdraft in the San Jacinto Upper Pressure Management Zone and increase the sustainability and reliability of the local groundwater resources, to maximize use of recycled water produced from local water reclamation plants, and to maximize the reasonable and beneficial use of all waters available to the area. All of these activities will be managed by a local Watermaster.

10. In support of the "maximum benefit" TDS and nitrate-nitrogen water quality objectives, EMWD's "maximum benefit" proposal includes commitments by EMWD to implement certain projects and management actions in EMWD's service area. These projects/actions are part of the Hemet/San Jacinto Water Management Plan.

11. Adding less stringent "maximum benefit" TDS and nitrate-nitrogen objectives for the San Jacinto Upper Pressure Management Zone would allow a lowering of water quality. This

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[2] For certain management zones (Beaumont, Chino North, San Timoteo and Yucaipa), Resolution No. R8-2004-0001 also established alternative, less stringent TDS and nitrate-nitrogen objectives. These objectives, which would allow a lowering of water quality, were based on consideration of the requirements of the antidegradation policy. Specifically, the Regional Board found that (1) the objectives would protect beneficial uses, (2) that discharges to these management zones were and would be required to meet waste discharge requirements that would result in the best practicable treatment or control of the discharges, and (3) that the highest water quality consistent with maximum benefit to the people of the state would be maintained. These alternative, less stringent objectives are termed "maximum benefit" objectives. As specified in the Basin Plan, the "maximum benefit" objectives established for these management zones apply for regulatory purposes provided that certain, specified water and wastewater management agencies fulfill commitments to implement management activities that are also delineated in the Basin Plan.

lowering of water quality would be consistent with the State's Antidegradation Policy (SWRCB Resolution No. 68-16), as explained in findings 12 -14.

12. In support of the "maximum benefit" TDS and nitrate-nitrogen water quality objectives, EMWD has committed to implement certain projects and management actions in their service area. As a part of this program, waste discharges will be required (as they have been to date) to meet waste discharge requirements that will result in the best practicable treatment or control of the discharges.

13. The proposed "maximum benefit" TDS and nitrate-nitrogen water quality objectives would be protective of beneficial uses in the San Jacinto Upper Pressure Management Zone. Implementation of these objectives would not result in the lowering of water quality or adversely impact the beneficial uses of adjacent management zones or surface waters.

14. Implementation of the projects/management actions proposed by EMWD, as part of EMWD's "maximum benefit" proposal and the Hemet/San Jacinto Water Management Plan, would reduce local overdraft in the San Jacinto Upper Pressure Management Zone and increase the sustainability and reliability of the local groundwater resources, maximize the use of recycled water produced from local water reclamation plants, and maximize the reasonable and beneficial use of all waters available to the area. Therefore, implementation of these projects/management actions in concert with the proposed "maximum benefit" TDS and nitrate-nitrogen objectives would assure that water quality consistent with maximum benefit to the people of the state will be maintained. This finding is contingent upon EMWD's timely and successful implementation of these specific projects/management actions, which are delineated in the proposed Basin Plan amendment set forth in Attachment A to this Resolution.

15. The proposed amendment to the Basin Plan was developed in accordance with the California Water Code, section 13240 *et seq*. This includes consideration of the factors identified in section 13241, summarized as follows:

    a. The proposed "maximum benefit" water quality objectives are protective of the beneficial uses of the San Jacinto Upper Pressure Management Zone beneficial uses and other potentially affected receiving waters.
    b. The proposed "maximum benefit" TDS and nitrate-nitrogen objectives were developed specifically to take into account the environmental/hydrological characteristics of the hydrographic unit, including the nature of the aquifers, patterns of recharge, groundwater pumping and replenishment, and interrelationships of the groundwater management zones.
    c. The "maximum benefit" objectives are proposed as part of the Management Plan, which was developed based on an evaluation of the water quality conditions that could reasonably be achieved in all the San Jacinto Upper Pressure Management Zone and other management zones.
    d. The economic implications of adopting the proposed "maximum benefit" objectives were carefully considered. Adopting the proposed "maximum benefit" TDS and nitrate-nitrogen objectives will lower the cost of implementing the Management Plan, avoid unreasonable expenditures for treatment of waste discharges, maximize the reasonable and beneficial use of all waters available in this area, and optimize the use of State Water Project supplies at a time when those supplies are plentiful, which provides state wide economic and environmental benefits.

e. The adoption of the proposed "maximum benefit" objectives will address the reliability, and quality of water supplies in the area necessary to meet projected increases in population and the associated need for housing in the area.
f. The adoption of the proposed "maximum benefit" objectives will promote the use of recycled water by 8,540 AFY.

16. The Regional Board has considered the costs associated with implementation of this amendment and finds the costs to be reasonable.

17. Revision of the TDS and nitrate-nitrogen water quality objectives is necessary in order to accommodate recycled water reuse in the San Jacinto Upper Pressure Management Zone. The proposed amendment meets the "Necessity" standard of the Administrative Procedure Act, Government Code, section 11349.

18. The modeling procedures that were used to develop the proposed amendment are the same as those used in the 2004 Basin Plan Amendment. These modeling procedures were subjected to external scientific peer review during the development and consideration of the 2004 Basin Plan Amendment.

19. The proposed amendment will result in revisions to Basin Plan Chapter 4 "Water Quality Objectives, and Chapter 5 "Implementation".

20. The Regional Board prepared and distributed a written report (staff report) regarding adoption of the Basin Plan amendment in accordance with applicable state and federal regulations (California Code of Regulations, Section 3775, Title 23, and 40 CFR Parts 25 and 131).

21. The process of basin planning has been certified by the Secretary for Resources as exempt from the requirement of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) to prepare an Environmental Impact Report (EIR) or Negative Declaration (ND). In lieu of an EIR or ND, the Regional Board must comply with applicable regulations on exempt regulatory programs. These regulations require the preparation of a substitute environmental document (SED) to take the place of an EIR or ND. Consistent with this requirement, the Regional Board prepared an SED dated November 2009. The Regional Board distributed the draft SED for public review in compliance with CEQA though a CEQA scoping meeting on August 10, 2009. The SED complies with applicable CEQA requirements to describe the proposed project, assess the potential adverse environmental effects of implementation of reasonably foreseeable methods of compliance, identify mitigation measures and evaluate alternatives.

22. The SED comprises a First Tier environmental document as called for by Public Resources Code section 21159 and the California Code of Regulations, Title 14, section 15187. When and if specific projects are proposed to implement these proposed "maximum benefit" objectives, these projects shall be reviewed, as required in conformance with applicable CEQA regulations, on a project-specific basis.

23. The adoption of the Basin Plan amendment has no direct effects on the environment and therefore has no potential for direct adverse effects, either individually or cumulatively, on fish and/or wildlife species. The implementation of projects that may be conducted to

implement the Basin Plan Amendment, including "maximum benefit" objectives, is expected to have less than significant environmental impacts.

24. On October 29, 2010, the Regional Board held a Public Hearing to consider the Basin Plan amendment. Notice of the Public Hearing was given to all interested persons and published in accordance with Water Code Section 13244.

25. The Basin Plan amendment must be submitted for review and approval by the SWRCB, and OAL. Once approved by the SWRCB, the amendment is submitted to OAL. The Basin Plan amendment will become effective upon approval by OAL. A Notice of Decision will be filed.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. Pursuant to Sections 13240 *et seq.* of the California Water Code, the Regional Board, after considering the entire record, including oral testimony provided at the public hearing, adopts the amendment to the Water Quality Control Plan for the Santa Ana River Basin as set forth in Attachment A.

2. The Executive Officer is directed to forward copies of the Basin Plan amendment to the SWRCB in accordance with the requirements of section 13245 of the California Water Code.

3. The Regional Board requests that the SWRCB approve the Basin Plan amendment in accordance with the requirements of sections 13245 and 13246 of the California Water Code and forward it to the OAL for approval.

4. If during the approval process the Regional Board staff, SWRCB or OAL determines that minor, non-substantive corrections to the language of the amendment are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the Regional Board of any such changes.

5. The Executive Officer is directed, at the time of filing and posting the Notice of Decision, to take steps to ensure prompt payment of $850 to the Department of Fish and Game for its review of the SED or to file a Certificate of Fee Exemption, whichever is appropriate.

I, Kurt V. Berchtold, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Santa Ana Region, on October 29, 2010.

Kurt V. Berchtold
Executive Officer

Attachment A to Resolution No. R8-2010-0039

Chapter 4, page 4-27, 4-28

"MAXIMUM BENEFIT" WATER QUALITY OBJECTIVES

As part of the 2004 update of the TDS/Nitrogen Management plan in the Basin Plan, several agencies proposed that alternative, less stringent TDS and/or nitrate-nitrogen water quality objectives be adopted for specific groundwater management zones and surface waters. These proposals were based on additional consideration of the factors specified in Water Code Section 13241 and the requirements of the State's antidegradation policy (State Board Resolution No. 68-16). Since the less stringent objectives would allow a lowering of water quality, the agencies were required to demonstrate that their proposed objectives would protect beneficial uses, and that water quality consistent with maximum benefit to the people of the state would be maintained (thus, the use of the term "maximum benefit" water quality objectives). In 2010, the Regional Board considered and approved a proposal by Eastern Municipal Water District to incorporate "maximum benefit" objectives for TDS and nitrate-nitrogen for the San Jacinto Upper Pressure Management Zone.

Appropriate beneficial use protection/maximum benefit demonstrations were made by the Chino Basin Watermaster/Inland Empire Utilities Agency, the Yucaipa Valley Water District, the City of Beaumont/San Timoteo Watershed Management Authority, and Eastern Municipal Water District to justify alternative "maximum benefit" objectives for the Chino North, Cucamonga, Yucaipa, Beaumont, San Timoteo, and the San Jacinto Upper Pressure groundwater management zones. These "maximum benefit" proposals, which are described in detail in Chapter 5 – Implementation, entail commitments by the agencies to implement specific projects and programs. While these agencies' efforts to develop these proposals indicate their strong interest to proceed with these commitments, unforeseen circumstances may impede or preclude it. To address this possibility, this Plan includes both the "antidegradation" and "maximum benefit" objectives for the subject waters (See Table 4-1). Chapter 5 specifies the requirements for implementation of these objectives. Provided that these agencies' commitments are met, then the agencies have demonstrated maximum benefit, and the "maximum benefit" objectives included in Table 4-1 for these waters apply for regulatory purposes. However, if the Regional Board finds that these commitments are not being met and that "maximum benefit" is thus not demonstrated, then the "antidegradation" objectives for these waters will apply. Chapter 5 also describes the mitigation requirements that will apply should discharges based on "maximum benefit" objectives occur unsupported by the demonstration of "maximum benefit".

Chapter 4, Page 4-51

Table 4-1 WATER QUALITY OBJECTIVES - Continued

GROUNDWATER MANAGEMENT ZONES	WATER QUALITY OBJECTIVES (mg/l)						Hydrologic Unit	
	Total Dissolved Solids	**Hardness**	**Sodium**	**Chloride**	**Nitrate as Nitrogen**	**Sulfate**	Primary	Secondary
Menifee	1020	---	---	---	2.8	---	802.13	
Perris North	570	---	---	---	5.2	---	802.11	
Perris South	1260	---	---	---	2.5	---	802.11	802.12, 802.13
San Jacinto – Lower	520	---	---	---	1.0	---	802.21	
San Jacinto – Upper "antidegradation" ++	320	---	---	---	1.4	---	802.21	802.23
San Jacinto – Upper "maximum benefit " ++	500	---	--	--	7.0	--	802.21	802.23
LOWER SANTA ANA RIVER BASIN								
La Habra**	---	---	---	---	---	---	845.62	
Santiago**	---	---	---	---	---	---	801.12	
Orange	580	---	---	---	3.4	---	801.11	801.13, 845.61, 801.14
Irvine	910	---	---	---	5.9	---	801.11	

** Numeric objectives not established; narrative objectives apply

++ "Maximum benefit" objectives apply unless Regional Board determines that lowering of water quality is not of maximum benefit to the people of the state; in that case, "antidegradation" objectives would apply (see discussion in Chapter 5).

Chapter 5 – Implementation

Page 5-80ff:

C. Salt Management - San Jacinto Upper Pressure Management Zone

As shown in Chapter 4, both "antidegradation" and "maximum benefit" objectives for TDS and nitrate-nitrogen are specified for the San Jacinto Upper Pressure Management Zone. The application of the "maximum benefit" objectives for these Management Zones is contingent on the implementation of a specific water and wastewater resources management program by Eastern Municipal Water District (EMWD) [Ref. 1]. This program is an integral part of the Hemet/San Jacinto Water Management Plan (Management Plan). The "maximum benefit" objectives would allow the Management Plan to be implemented. The Management Plan guides and supports responsible water management into the future. It includes recharge of high quality imported water, use of recycled water for agricultural purposes, and import of high quality water into EMWD's water filtration plant to provide water for potable use in the San Jacinto Upper Pressure Management Zone. Recycled water from the San Jacinto Valley Regional Water Reclamation Facility will be provided for agricultural irrigation in lieu of pumping native groundwater for agricultural operations that overlie the San Jacinto Upper Pressure Management Zone. The Management Plan was developed through a coordinated effort among EMWD, Lake Hemet Municipal Water District, the cities of Hemet and San Jacinto, and two of the areas largest farming operations. The primary benefits of the Management Plan are to reduce local overdraft and increase the sustainability and reliability of the local groundwater resources, to maximize use of recycled water produced from local water reclamation plants, and to maximize the reasonable and beneficial use of all waters available in the area. All of these activities will be managed by a local Watermaster.

In addition to its water supply responsibilities, EMWD also provides sewage collection and treatment services within its service area. EMWD operates four (4) wastewater treatment facilities. For the most part, EMWD provides the recycled water to local agencies and farmers for irrigation purposes. During winter months, when the demand for recycled water is reduced, EMWD discharges excess recycled water to the Santa Ana River via Temescal Creek.

Table 5-11 identifies the actions and requirements that must be implemented to demonstrate that water quality consistent with maximum benefit to the people of the state will be maintained. An implementation schedule is also specified. It is assumed that the maximum benefit demonstration is made, and that the "maximum benefit" TDS and nitrate-nitrogen objectives apply to the San Jacinto Upper Pressure Management Zone, as long as the schedule and commitments are being met. If the Regional Board determines that the maximum benefit program is not being implemented effectively in accordance with the schedule shown in Table 5-11, then the maximum benefit demonstration is not made, and the "antidegradation" TDS and nitrate-nitrogen objectives would apply for the San Jacinto Upper Pressure Management Zone. In this situation, the Regional Board will require mitigation for TDS and nitrate-nitrogen discharges to these management zones that took place in excess of limits based on the "antidegradation" objectives.

Table 5-11

Eastern Municipal Water District Maximum Benefit Commitments and Schedule for the San Jacinto Upper Pressure Management Zone

Description of Commitment	**Compliance Date – as soon as possible, but no later than**
1. Groundwater Monitoring Program a. Submit Draft Monitoring Program to Regional Board b. Implement Monitoring Program c. Annual data report submittal	 a. May 23, 2012 b. Within 30 days from Regional Board approval of monitoring plan c. August 15th
2. Ambient Groundwater Quality Determination For all the groundwater management zones within EMWD's service area in the San Jacinto watershed, EMWD shall develop: a. Estimates of ambient TDS and nitrate b. Ambient TDS projection	 a. July 1, 2012 and every 3 years thereafter b. July 18, 2014 and every 6 years thereafter
3. TDS and Nitrogen Wasteload Allocation (WLA) Submit necessary studies and/or modeling to support update of the TDS and Nitrogen WLA for the Upper Santa Ana River watershed.	Within 1 year after notification from Regional Board that WLA needs to be reviewed/revised
4. Salinity Management Plan a. Submit Draft Salinity Management Plan for control of TDS in source water and in recycled water. b. Implement the Plan and schedule c. Triennial Report submittal	 a. April 23, 2013 b. Within 30 days of Regional Board approval c. August 15, 2012 and every 3 years thereafter

Table 5-11

Eastern Municipal Water District Maximum Benefit Commitments and Schedule for the San Jacinto Upper Pressure Management Zone

Description of Commitment	**Compliance Date – as soon as possible, but no later than**
5. Desalter(s) and Brine Disposal Facilities (or Equivalent Technologies)	
a. Submit plan and schedule for construction of desalter(s) and brine disposal facilities.	a. Within 6 months of either of the following: i. When the 5-year running average TDS of the San Jacinto Valley Regional Water Reclamation Facility effluent exceeds 640 mg/L; and/or ii. When the volume weighted, ambient, average concentration in the San Jacinto Upper Pressure MZ of TDS exceeds 490 mg/L
b. Implement the plan and schedule	b. Within 30 days from Regional Board approval of plan/schedule
c. Desalter(s)/Brine Disposal Facilities operational	c. Within 7 years from date of Regional Board approval of plan/schedule.
6. Recycled water reuse The use of recycled water in the San Jacinto Upper Pressure Management Zone shall be limited to agricultural and landscape irrigation uses only. Recycled water shall not be used for direct, intentional recharge of the San Jacinto Upper Pressure Management Zone, unless authorization has been provided by the Regional Board and Department of Public Health.	
Submit documentation of amount, TDS and nitrogen quality of recycled water provided to agricultural operations and/or landscape irrigation, the amount of groundwater pumped for agricultural and all other uses and amount of State Project Water recharged in the San Jacinto Upper Pressure Management Zone.	Annually, by April 15th, after initiation of construction of facilities/implementation of programs to support recycled water reuse program.
7. EMWD recycled water quality improvement plan and schedule	
a. Submit plan and schedule	a. 60 days after the TDS 5-year running average effluent quality at the San Jacinto Valley Regional Water Reclamation Facility equals or exceeds 640 mg/L
b. Implement plan and schedule	b. Upon approval by Regional Board

Description of Eastern Municipal Water District's (EMWD's) Commitments

1. Groundwater Monitoring Program (Table 5-11, No. 1)

For the Canyon Management Zone, the Hemet South Management Zone, the San Jacinto Upper Pressure Management Zone and Lakeview-Hemet North Management Zone, EMWD shall conduct and/or fund monitoring activities to determine ambient TDS and nitrate concentrations. EMWD already implements comprehensive monitoring and reporting programs associated with the use of the groundwater for potable water supply and the use of recycled water for agricultural and landscape irrigation purposes. EMWD periodically reports the data to several regulatory agencies for the State and US EPA and will provide these data as needed to the Regional Board. These monitoring and reporting programs will continue and the data will be analyzed and used to evaluate water quality in the area. For purposes of this maximum benefit program, the groundwater monitoring program data will be used to assess the water quality of the San Jacinto Upper Pressure Management Zone and the management zones addressed in the Management Plan.

By May 23, 2012 and prior to the discharge of recycled water to the San Jacinto Upper Pressure Management Zone, EMWD shall submit to the Regional Board for approval a proposed groundwater monitoring program to determine ambient water quality and to evaluate the water quality effects of implementation of the maximum benefit program, including the "maximum benefit" nitrate-nitrogen and TDS objectives. The proposed monitoring program shall include an appropriate quality control/quality assurance component. Within 30 days of Regional Board approval of the monitoring plan, the groundwater monitoring program must be implemented.

An annual report, including all raw data, quality assurance/quality control data and a summary of the results of the approved groundwater monitoring program, shall be submitted to the Regional Board by August 15th of each year.

2. Ambient Groundwater Quality Determinations (Table 5-11, No. 2)

a. Develop estimates of ambient TDS and nitrate

By July 1, 2012 and every three years thereafter, EMWD shall submit a determination of ambient TDS and nitrate-nitrogen quality in all of the San Jacinto Basin management zones within the EMWD service area. This determination shall be accomplished using methodology consistent with the calculation of ambient quality as conducted by the Basin Monitoring Program Task Force.[1] To conduct the ambient quality determinations, EMWD can either contribute financially to efforts by the Basin Monitoring Program Task Force to estimate the ambient TDS and nitrate concentrations for the management zones in EMWD's service area or assume sole responsibility for the preparation of these estimates.

[1] The Basin Monitoring Program Task Force, was formed after the N/TDS Task Force completed its work and the 2004 N/TDS Basin Plan amendments were adopted. The Basin Monitoring Program Task Force has assumed the responsibility to conduct analyses needed to implement certain Basin Plan requirements, including the triennial determination of ambient groundwater quality and revisions to the TDS and TIN wasteload allocations.

b. Develop ambient TDS projection

By July 18, 2014 and every six years thereafter, EMWD shall submit a projection of TDS quality in all of the San Jacinto Basin management zones. This projection shall be developed using methodology developed by the Imported Water Recharge Workgroup [2] and approved by the Regional Board. The projections will be compared to prior projections and to estimates of the historical ambient TDS concentrations. This analysis must be submitted in a report to the Regional Board. The methodology employed to date provides a 20-year TDS projection. Changes to this time period may be made if justified to the satisfaction of the Executive Officer.

3. TDS and Nitrogen Wasteload Allocations (WLAs) (Table 5-11, No. 3)

Within 1 year after notification from the Regional Board of the need to review/revise the TDS and nitrogen WLAs, EMWD shall submit documents including, but not limited to, modeling analysis, data compilation or data analysis in support of a revised TDS and nitrogen WLA for the Santa Ana River and its tributaries. EMWD may contribute financially in regional efforts, such as those of the Basin Monitoring Program Task Force, to review and recommend updates to the wasteload allocations, or EMWD may conduct the analyses individually.

4. Salinity Management Plan (Table 5-11, No. 4)

By April 23, 2013, EMWD shall submit a proposed Salinity Management Plan to minimize the TDS concentration in water supplied in the EMWD service area and in recycled water. The Plan shall include efforts to supply water with the lowest reasonable TDS concentration for municipal uses. The Plan shall also include efforts to reduce the TDS waste increment through use (defined herein as the average TDS increase that occurs through indoor uses, which is numerically equal to the average TDS concentration in recycled water minus the average TDS concentration in the source water supply) and salt added through treatment at recycled water facilities. The waste increment includes salt added by water conditioning and self regenerative water softeners, industrial sources, and other sources. EMWD will use its best efforts to enact ordinances, incentive programs, and development requirements that minimize the TDS waste increment.

Within 30 days of Regional Board approval, the Salinity Management Plan must be implemented.

Beginning August 15, 2012 and every three years thereafter, EMWD shall submit a Salinity Management Report that describes past, current and planned salinity management actions and evaluates the efficacy of these actions.

5. Desalters and Brine Disposal (Table 5-11, No. 5)

EMWD shall submit a plan and schedule for the construction and operation of desalting facilities and brine disposal facilities (or equivalent technologies) when:

a. The 5-year running average TDS concentration in recycled water produced at the San Jacinto Valley Regional Reclamation Facility exceeds 640 mg/L, or

[2] The Imported Water Recharge Workgroup was established by agencies that recharge water to assure that water quality (TDS and Nitrogen) in groundwater as a result of recharge operations is protected. The Workgroup developed a cooperative agreement to prepare a report at six-year intervals that provides a 20-year projection of ambient water quality in each groundwater management zone,

b. The volume-weighted ambient average TDS concentration in the San Jacinto Upper Pressure Management Zone equals or exceeds 490 mg/L.

Within 30 days of Regional Board approval, the Plan/schedule must be implemented.

The construction of these facilities will be in accordance with a plan and schedule submitted by EMWD and approved by the Regional Board. The schedule shall assure that these facilities are in place within 7 years of Regional Board approval. These facilities shall be designed to stabilize or reverse the degradation trend evidenced by effluent and/or management zone quality.

6. Recycled Water Use (Table 5-11, No. 6)

The use of recycled water for agricultural and landscape irrigation in-lieu of potable water within the San Jacinto Upper Pressure Management Zone is a critical component of the implementation of the Hemet/San Jacinto Water Management Plan and is necessary to maximize the use of the water resources of the area. Recycled water use in the San Jacinto Upper Pressure Management Zone is contingent upon EMWD providing recycled water quality of 5-year annual average (running average) concentrations of 640 mg/L or less TDS, and 13 mg/L or less nitrate-nitrogen. The use of recycled water in the San Jacinto Upper Pressure Management Zone shall be limited to agricultural and landscape uses. Recycled water shall not be directly recharged in the San Jacinto Upper Pressure Management Zone, unless prior authorization has been provided by the Regional Board and California Department of Public Health.

An annual report shall be submitted to the Regional Board by April 15th of each year that documents (1) the TDS and nitrogen quality and amount of recycled water provided to agricultural operations, including the in-lieu program, and/or used for landscape irrigation and (2) the amount of groundwater pumped for agricultural and all other uses.

7. Recycled Water Quality Improvement (Table 5-11, No. 7)

Within 60 days after the TDS 5 year running average effluent quality at the San Jacinto Valley Regional Water Reclamation Facility equals or exceeds 640 mg/L, EMWD shall submit a plan and schedule for the improvement of recycled water quality

Upon Regional Board approval, the recycled water quality plan and schedule must be implemented.

Implementation by Regional Board

No later than January 2014, and every three years thereafter, the Regional Board intends to review the status of the activities planned and executed by the EMWD to demonstrate maximum benefit and justify continued implementation of the "maximum benefit" water quality objectives. This review is intended to determine whether the commitments described above and summarized in Table 5-11 are being or have been met. As indicated above, if, as a result of this review, the Regional Board finds that the EMWD commitments are not being met, then the lowering of water quality that would be allowed by the "maximum benefit" objectives is not of maximum benefit to the people of the state. Under these circumstances, the "antidegradation" objectives for the San Jacinto Upper Pressure Management Zone (320 mg/L TDS and 1.4 mg/L

nitrate-nitrogen; see Chapter 4) would apply for regulatory purposes. Further, the Regional Board will require that the EMWD mitigate TDS and nitrogen discharges that occurred in excess of those allowed pursuant to the "antidegradation" objectives. Consistent with the requirements for the other agencies implementing maximum benefit programs, discharges in excess of the "antidegradation" objectives that must be considered for mitigation include both recycled water and imported water at TDS and/or nitrogen concentrations in excess of the antidegradation objectives. Mitigation by groundwater extraction and desalting must be adjusted to address concentrations of salt and nitrogen in the basin, not simply salt load.

Add to Chapter 5 References

1. Eastern Municipal Water District, Letter to Gerard Thibeault, "Eastern Municipal Water District Proposal for New Total Dissolved Solids (TDS) and Total Inorganic Nitrogen (TIN) Water Quality Objectives for the San Jacinto Upper Pressure Management Zone Based on Maximum Beneficial Use," July 3, 2007