California Regional Water Quality Control Board
Santa Ana Region

April 25, 2014

ITEM: 14

SUBJECT: CONSIDERATION OF ADOPTION BASIN PLAN AMENDMENTS TO INCORPORATE UPDATES RELATED TO THE SALT MANAGEMENT PLAN FOR THE SANTA ANA REGION, RESOLUTION NO. R8-2014-0005

Background:

On January 31, 2014, the Regional Board conducted a public hearing to receive evidence and testimony related to proposed amendments to the Basin Plan to incorporate the statewide Onsite Wastewater Treatment Systems Policy and to update the Salt Management Plan. The proposed revisions were discussed in a staff report, dated January 31, 2014 that was distributed for public review on December 17, 2013.

The updates to the Salt Management Plan presented on January 31, 2014 included: recognition of the hydrogeological boundary for the Yucaipa and Beaumont Plains groundwater management zones; update and revision of information concerning nitrogen and TDS assimilative capacity and wastewater reclamation; deletion of the total dissolved solids (TDS) and nitrogen wasteload allocations the for the Publicly Owned Treatment Works of Yucaipa Valley Water District (YVWD) and the City of Beaumont; incorporation of a nitrogen loss coefficient for the San Jacinto area groundwater management zones; and update of the "maximum benefit" programs for the Yucaipa, Beaumont and San Timoteo groundwater management zones.

Comments on the proposed Basin Plan Amendments were received from Orange County Water District, the City of Beaumont and the US Environmental Protection Agency (USEPA). These comments were summarized and discussed at the January 31, 2014 public hearing.

Yucaipa, San Timoteo, Beaumont Management Zones Maximum Benefit Programs

The comments submitted by the City Beaumont raised several issues with the proposed revisions to the Beaumont Management Zone Maximum Benefit Program. To resolve the City's comments and concerns, Board staff held a series of meetings with all of the maximum benefit partners (Beaumont Cherry Valley Water District, YVWD, San Gorgonio Pass Agency, the City of Banning and the City of Beaumont). At these meetings, revisions to the Beaumont Maximum Benefit Program were proposed. In response to these proposed revisions, the City of Banning and the YVWD submitted comments and the City of Beaumont provided responses to the comments raised by YVWD and the City of Banning. YVWD also provided additional recommended edits to the proposed Basin Plan amendments.

Based on these stakeholder meetings and discussions, staff propose to make changes to the amendments presented in January 31, 2014, as shown in Attachment B to this staff report. The intent is to clarify and refine the "Maximum Benefit" programs for the Yucaipa, San Timoteo and

Beaumont Management Zones. Additional changes are proposed based on the comments received from USEPA. These changes are summarized below.

For the Yucaipa, San Timoteo and Beaumont Management Zones:

- Defining what would constitute "new" storm water (available for dilution of recycled water direct and indirect use) and requiring the submittal of a methodology for calculating "new" storm water along with locations for and the quality of the "new" storm water recharge;
- Recognizing that reverse osmosis diluent could also be used for the blending of recycled water (along with storm water and imported water recharge);
- Clarifying expectations regarding the groundwater monitoring program; and,
- Including a requirement for the development of a conceptual salt mitigation plan that would guide the agencies should the Regional Board find that the "maximum benefit" objectives are not being met and mitigation for the excess salt loading above the anti-degradation objectives is required.

For the Beaumont Management Zone:

- Providing flexibility to the City of Beaumont in meeting the deadlines for implementing a desalter; and,
- Deleting the desalter requirement for the City of Banning (given the small volume of recycled water use planned by the City) and instead specifying that the City submit a salt mitigation plan upon initiation of the use of recycled water.

Nitrogen and TDS Wasteload Allocations

As discussed in the January 31, 2014 staff report and at the January 31, 2014 hearing, Board staff had proposed to delete the total dissolved solids (TDS) and nitrogen waste load allocations for discharges from the City of Beaumont and YVWD from the Wasteload Allocation Table (Table 5-5) based on evidence that these discharges do not reach or affect the Santa Ana River, i.e., these discharges are not a significant source of TDS and nitrogen to the River. The wasteload allocations are intended to protect Santa Ana River water quality. Based in part on concerns raised by USEPA (see Attachment C), staff do not propose to delete these waste load allocations at this time. Consequently, since the original Basin Plan text regarding wasteload allocations is being reinserted (see that reinsertion in Attachment B), the underline/strikeout version of the Basin Plan language presented in Attachment A shows no change to the wasteload allocation language. Work is currently underway to reconsider both the nitrogen and TDS wasteload allocations in their entirety, and a separate set of Basin Plan Amendments are expected in the near future to address needed waste load allocation modifications. It should be noted that while the allocations for YVWD and Beaumont will thus remain in place until these modifications are proposed and approved in the future, it is staff's intent to recommend TDS and nitrogen effluent limits for these agencies that are based on affected groundwater management zone quality. This permitting approach will properly recognize the receiving waters affected by these discharges and assure their protection. The management zone TDS and nitrate water quality objectives are more stringent than the limits based on the TDS and nitrogen waste load allocations.

Finally, as shown in Attachment B, based on comments received from YVWD, a description of the Brine Line extension to Yucaipa is proposed.

Attachment C to this staff report contains staff responses to comments received; Attachment D contains all comment letters received.

California Environmental Quality Act (CEQA) Requirements

As discussed in the January 31, 2014 staff report (Section 10.0), the basin planning process has been certified by the Secretary of Resources as functionally equivalent to the requirement for the preparation of an Environmental Impact Report or Negative Declaration. The Regional Board is required to complete an environmental assessment of any changes the Board proposes to make to the Basin Plan. Staff prepared an Environmental Checklist (Attachment E to the January 31, 2014 Staff Report), determining that there would be no significant adverse environmental impacts from the proposed Basin Plan Amendments. Staff have reviewed the environmental checklist in light of the proposed changes to the Basin Plan Amendments discussed above. No changes to the environmental checklist are warranted; the staff determination that there would be no adverse environmental impacts from the proposed amendments remains valid.

Staff Recommendation

Board staff recommend adoption of Resolution No. R8-2014-0005, adopting the amendments to the Basin Plan shown in the Attachment to the Resolution to amend Chapters 2 (Plans and Policies), Chapter 3 (Beneficial Uses) and Chapter 5 (Implementation Plan – Salt Management Plan).

Attachments:

Attachment A	Tentative Resolution No. R8-2014-0005, including the final proposed Basin Plan Amendments
Attachment B	Underline/Strikeout Version Showing Changes Proposed to the January 31, 2014 Basin Plan Amendments Language
Attachment C	Response to Comments Received
Attachment D	Comment Letters
Attachment E	Environmental Checklist

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ATTACHMENT A

Resolution No. R8-2014-0005

California Regional Water Quality Control Board
Santa Ana Region

RESOLUTION NO. R8-2014-0005

Resolution Amending the Water Quality Control Plan for the Santa Ana River Basin to Incorporate Updates Related to the Salt Management Plan for the Santa Ana Region

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. The Basin Plan identifies the Region's ground and surface waters, designates beneficial uses for those waters, establishes water quality objectives for the protection of those uses, prescribes implementation plans and establishes monitoring and surveillance programs to assess implementation efforts.

3. Section 303(c) of the federal Clean Water Act requires that water quality standards be reviewed on a triennial basis and revised, if appropriate. California Water Code section 13240 provides that Basin Plans must be periodically reviewed and may be revised. The intent of this review is to ensure consideration of the best available science and new data and information.

4. California Water Code section 13140 provides that the State Water Resources Control Board (State Water Board) shall formulate and adopt state policy for water quality control that has statewide applicability.

5. On June 19, 2012, the State Water Board adopted the Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems (OWTS Policy). The OWTS Policy includes a conditional waiver of the requirements to submit a report of waste discharge, obtain waste discharge requirements, and pay fees for discharges from onsite wastewater systems covered by the OWTS Policy. The OWTS Policy was approved by the Office of Administrative Law on November 13, 2012, and became effective on May 13, 2013. The OWTS Policy is applicable statewide.

6. Amendments to the Basin Plan to incorporate a revised Total Dissolved Solids and Nitrogen Management Plan (Salt Management Plan) into the 1995 Basin Plan were approved by the Regional Board on January 22, 2004, by the State Water Resources Control Board on October 1, 2004 and by the Office of Administrative Law 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.

7. The Basin Plan needs to be amended to incorporate the OWTS Policy by reference and to revise the minimum lot size criteria applicable to on-site wastewater treatment systems consistent with the OWTS Policy.

8. A Substitute Environmental Document (SED) was prepared by the State Water Board for the OWTS Policy in accordance with the Water Board's certified regulatory program (Cal.

Tentative

Code Regs., tit. 23 §§3777-3781). The State Water Board approved the OWTS Policy and the SED on June 19, 2012. The proposed amendment to the Santa Ana Region Basin Plan removes existing Basin Plan provisions regulating onsite systems and incorporates the OWTS Policy. No substantive changes or modifications to the previously approved OWTS Policy are proposed, no substantial changes with respect to circumstances under which the OWTS Policy will be undertaken have occurred and no new information triggers the need for supplemental or subsequent CEQA analysis.

9. This amendment to incorporate the OWTS Policy is completely within the scope of the OWTS Policy as analyzed by the State Water Board in the SED. As such, the recommended actions do not require further environmental review pursuant to the certified regulatory program or CEQA (Pub. Res. Code §21166; Cal. Code Regs. tit. 14, §§15161, 15163).

10. The Salt Management Plan is also amended to recognize the hydrogeological boundary for Yucaipa/Beaumont Plains Management Zones that differs from the legal boundary; to update the Basin Plan language related to the groundwater management zone ambient TDS and nitrate-nitrogen determination; to incorporate a nitrogen loss coefficient for the San Jacinto area groundwater management zones; to update the descriptive language relating to wastewater reclamation; and, to revise the Yucaipa, Beaumont and San Timoteo Management Zones “Maximum Benefit” Programs.

11. Extensive analysis of the Salt Management Plan pursuant to the California Environmental Quality Act (CEQA) was conducted as part of the consideration of that Plan in 2004. This analyses was reviewed for the proposed amendments. An Environmental Checklist was prepared. The proposed changes to the Salt Management Plan would not modify the findings of the prior CEQA analyses, *i.e.,* that potential environmental effects would be less than significant.

12. The proposed amendments do not revise or adopt water quality objectives and, therefore, the Regional Board is not required to consider the factors set forth in Water Code section 13241.

13. The proposed amendments do not contain new scientific elements requiring an independent, external scientific peer review pursuant to Health and Safety Code 57004. Such separate scientific reviews were conducted previously for the OWTS Policy and for the Salt Management Plan provisions.

14. The proposed amendments are consistent with the State’s antidegradation policy, State Water Board Resolution No. 68-16, “Statement of Policy with Respect to Maintaining High Quality of Waters in California”. None of the proposed amendments is expected to result in the lowering of water quality. Thus, the proposed amendments conform to the antidegradation policy requirements.

15. The proposed amendments meet the "Necessity" standard of the Administrative Procedure Act, Government Code, Section 11352, subdivision (b). The proposed amendments are required to fulfill the Regional Board’s obligation pursuant to the California Water Code to exercise its full power and jurisdiction to protect the quality of waters in the state, including the duties to establish water quality objectives for the reasonable protection of beneficial uses and to identify a program of implementation, including monitoring, needed to achieve those objectives.

16. The Regional Board prepared and distributed a written report (staff report) describing the proposed Basin Plan amendments and the rationale supporting each amendment in accordance with applicable state environmental regulations (Calif. Code of Regulations, Title 23, Section 3775 et seq.,).

17. On January 31, 2014, the Regional Board held a Public Hearing to consider the proposed Basin Plan amendments. The Public Hearing was continued to the April 25, 2014 Regional Board meeting. Notice of the Public Hearing was sent to all interested persons and published in accordance with Section 13244 of the California Water Code. The Regional Board considered all testimony offered at the hearing and other written comments submitted by the public before taking any final action.

18. The Basin Plan amendments must be submitted for review and approval by the State Water Resources Control Board (SWRCB), and the Office of Administrative Law (OAL). The surface water components must be approved by USEPA. Once approved by the SWRCB, the amendments are submitted to OAL. The Basin Plan amendments will generally become effective upon approval by OAL; the surface water components become effective upon approval by USEPA. 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 all testimony provided at the public hearing, adopts the amendments to the Water Quality Control Plan for the Santa Ana River Basin as set forth in the Attachment to this Resolution.

2. The Executive Officer is directed to forward copies of the Basin Plan amendments 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 amendments in accordance with the requirements of Sections 13245 and 13246 of the California Water Code and, thereafter, forward the amendments to the OAL and the USEPA for their approval.

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

5. The Executive Officer is authorized to transmit payment of the applicable fee as required by the California Department of Fish and Wildlife.

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 April 25, 2014.

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Kurt V. Berchtold
Executive Officer

ATTACHMENT TO RESOLUTION NO. R8-2014-0005

(Proposed Basin Plan amendments changes are shown as ~~strikeout~~ for deletions and underline for additions

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Chapter 2, Plans and Policies

Page 2-4, Insert under "State Board Policies":

- New and/or revised Statewide Plans and Policies are posted on the State Water Resources Control Board's website at the following link:

  http://www.waterboards.ca.gov/plans_policies/

- **Policy on Onsite Wastewater Treatment Systems (Resolution No. 2012-0032, adopted by the State Water Resources Control Board on June 19, 2012)**

  This Policy (OWTS Policy) regulates the siting, design, operation, and maintenance of onsite wastewater treatment systems. The Policy implements the California Water Code, Chapter 4.5, Division 7, § 13290-13291.7 by establishing statewide regulations and standards for permitting onsite wastewater systems. The OWTS Policy specifies criteria for existing, new and replacement onsite systems and establishes a conditional waiver of waste discharge requirements for onsite systems that comply with the Policy.

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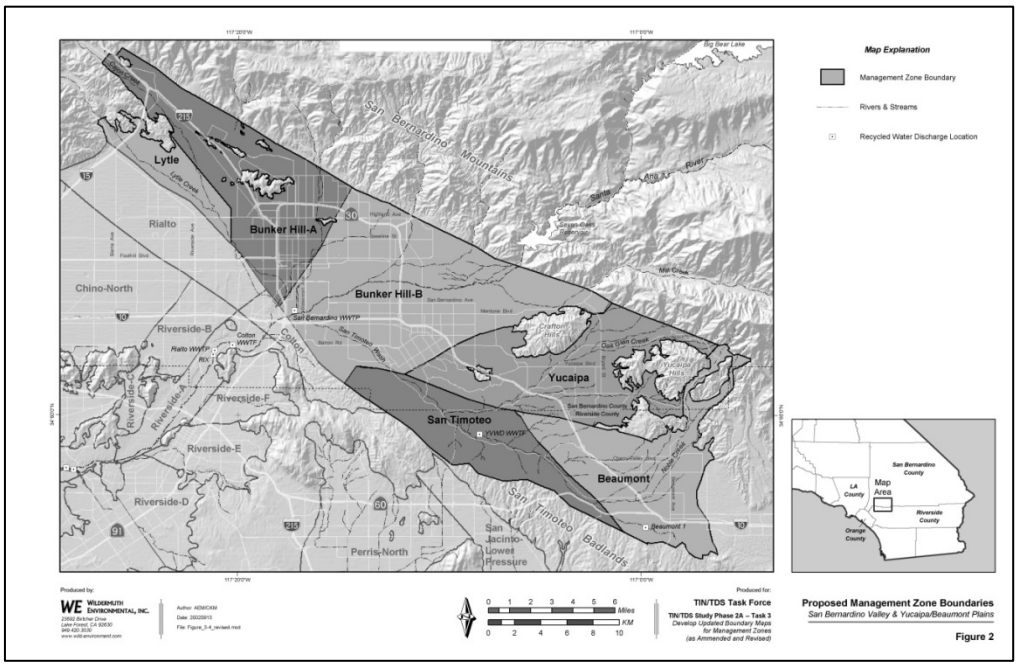
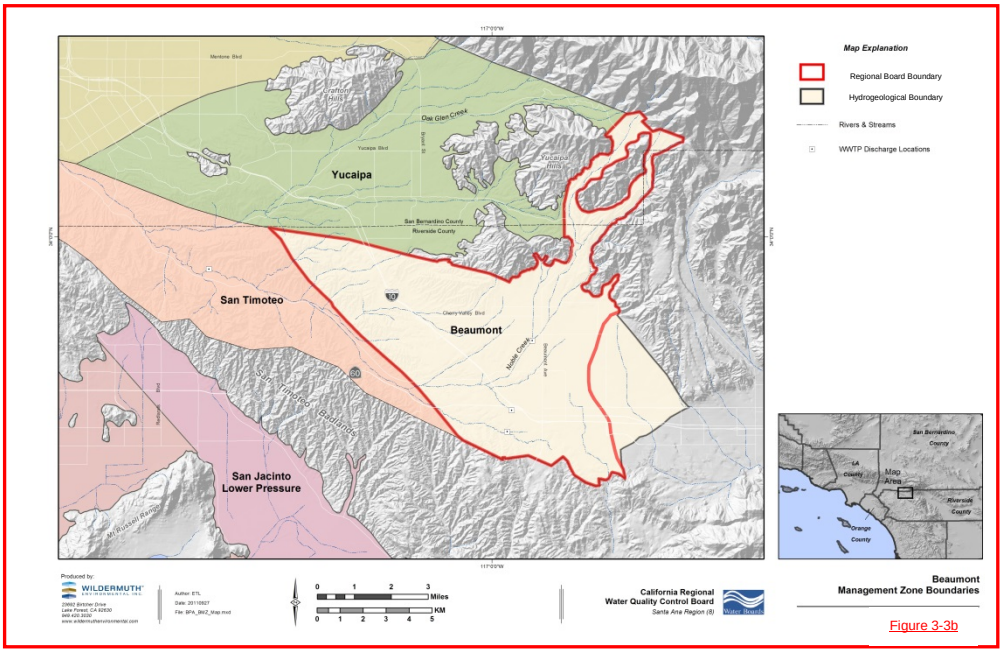
Chapter 3, "Beneficial Uses"

Page 3-12, Figure 3-3; Management Zone Boundaries – San Bernardino Valley and Yucaipa/Beaumont Plains

- Re- number Figure as Figure 3-3a – Legal Boundary



- Number new map as Figure 3-3b – Beaumont Management Zone



- Add the following footnote to the map

  The eastern-most boundary of the Beaumont Management Zone is defined by the jurisdictional boundary, established in the California Water Code, between the Santa Ana Regional Water Board (Santa Ana Water Board) and the Colorado River Regional Water Board (Colorado Water Board). This legal boundary separates the two regions based on topography and surface water drainage. However, with respect to groundwater flow and quality, hydrogeological and water quality data indicate that the Beaumont groundwater management zone actually extends to the east of the current legal boundary, into the jurisdictional domain of the Colorado Water Board. The Santa Ana and Colorado Water Boards will work together to coordinate regulatory actions for discharges that occur in this area of the management zone.

Chapter 5, "Implementation"

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II.B.1. Salt Assimilative Capacity

Some waters in the Region have assimilative capacity for additions of TDS and/or nitrogen; that is, wastewaters with higher TDS/nitrogen concentrations than the receiving waters are diluted sufficiently by natural processes, including rainfall or recharge, such that the TDS and nitrogen objectives of the receiving waters are met. The amount of assimilative capacity, if any, varies depending on the individual characteristics of the waterbody in question and must be reevaluated over time.

The 2004 adoption of new groundwater management zone boundaries (Chapter 3) and new TDS and nitrate-nitrogen objectives for these management zones (Chapter 4), pursuant to the work of the Nitrogen/TDS Task Force, necessitated the re-evaluation of the assimilative capacity findings initially incorporated in the 1995 Basin Plan. To conduct this assessment, the Nitrogen-TDS study consultant calculated current ambient TDS and nitrate-nitrogen water quality using the same methods and protocols as were used in the calculation of historical ambient quality (see Chapter 4). The analysis focused on representing current water quality as a 20-year average for the period from 1978 through 1997. [Ref. 1]. For each management zone, current TDS and nitrate-nitrogen water quality were compared to water quality objectives (historical water quality)[1]. Assimilative capacity was also assessed relative to the "maximum benefit" objectives established for certain management zones. If the current quality of a management zone is the same as or poorer than the specified water quality objectives, then that management zone does not have assimilative capacity. If the current quality is better than the specified water quality objectives, then that management zone has assimilative capacity. The difference between the objectives and current quality is the amount of assimilative capacity available.

Since adoption of the 2004 Basin Plan amendment and per Basin Plan requirements, ambient quality and assimilative capacity findings have been, and will continue to be, updated every three years. The updated findings of ambient quality and assimilative capacity will be posted on the Regional Board's web-site and will be used for regulatory purposes.

~~Tables 5-3 and 5-4 show the water quality objectives and ambient quality for TDS and nitrate-nitrogen, respectively, for each management zone. These tables also list the TDS and nitrate-nitrogen assimilative capacity of the management zones, if any. Of the thirty-seven (37) management zones, twenty-seven (27) lack assimilative capacity for TDS, and thirty (30) lack assimilative capacity for nitrate-nitrogen (this assumes the "maximum benefit" objectives are in effect). five (5) management zones for which there were insufficient data to calculate TDS and/or nitrate-nitrogen water quality objectives and, therefore, assimilative capacity. For regulatory purposes, these 5 management zones are assumed to have no assimilative capacity. Dischargers to these management zones may demonstrate that assimilative capacity for TDS and/or nitrate-nitrogen is available. If the Regional Board approves this demonstration, then the discharger would be regulated accordingly.~~

~~As indicated in Table 5-3, it will be assumed for most regulatory purposes that there is no assimilative capacity for TDS in the Orange County groundwater management zone. The 20 mg/L of management zone-wide TDS assimilative capacity calculated for this zone will be~~

[1] As noted in Chapter 4, ammonia-nitrogen and nitrite-nitrogen data were also included in the analysis, where available. This occurred for a very limited number of cases and ammonia-nitrogen and nitrite-nitrogen concentrations were insignificant.

~~allocated to discharges resulting from groundwater remediation and other legacy contaminant removal projects implemented within the Orange County Management Zone.~~

[section discussion continues with no further revisions]

~~Table 5-3~~

~~Total Dissolved Solids (TDS) Assimilative Capacity Findings~~

~~Management Zone~~	~~Water Quality Objective (mg/L)~~	~~Current Ambient (mg/L)~~	~~Assimilative Capacity (mg/L)~~
~~UPPER SANTA ANA RIVER BASIN~~			
~~Beaumont – "max benefit"~~ [3]	~~330~~	~~290~~	~~40~~
~~Beaumont – "antideg"~~	~~230~~	~~290~~	~~None~~
~~Bunker Hill A~~	~~310~~	~~350~~	~~None~~
~~Bunker Hill B~~	~~330~~	~~260~~	~~70~~
~~Colton~~	~~410~~	~~430~~	~~None~~
~~Chino North – "max benefit"~~	~~420~~	~~300~~	~~120~~
~~Chino 1 – "antideg"~~	~~280~~	~~310~~	~~None~~
~~Chino 2 – "antideg"~~	~~250~~	~~300~~	~~None~~
~~Chino 3 – "antideg"~~	~~260~~	~~280~~	~~None~~
~~Chino South~~	~~680~~	~~720~~	~~None~~
~~Chino East~~	~~730~~	~~760~~	~~None~~
~~Cucamonga – "max benefit"~~ [3]	~~380~~	~~260~~	~~120~~
~~Cucamonga – "anti-deg"~~	~~210~~	~~260~~	~~None~~
~~Lytle~~	~~260~~	~~240~~	~~20~~
~~Rialto~~	~~230~~	~~230~~	~~None~~
~~San Timoteo – "max benefit"~~ [3]	~~400~~	~~300~~	~~100~~
~~San Timoteo – "anti-deg"~~	~~300~~	~~300~~	~~None~~
~~Yucaipa – "max benefit"~~ [3]	~~370~~	~~330~~	~~40~~
~~Yucaipa – "antideg"~~	~~320~~	~~330~~	~~None~~
~~MIDDLE SANTA ANA RIVER BASIN~~			
~~Arlington~~	~~980~~	~~--~~ [1]	~~None~~
~~Bedford~~	~~--~~ [1]	~~--~~ [1]	~~None~~
~~Coldwater~~	~~380~~	~~380~~	~~None~~
~~Elsinore~~	~~480~~	~~480~~	~~None~~
~~Lee Lake~~	~~--~~ [1]	~~--~~ [1]	~~None~~
~~Riverside A~~	~~560~~	~~440~~	~~120~~
~~Riverside B~~	~~290~~	~~320~~	~~None~~
~~Riverside C~~	~~680~~	~~760~~	~~None~~
~~Riverside D~~	~~810~~	~~--~~ [1]	~~None~~
~~Riverside E~~	~~720~~	~~720~~	~~None~~
~~Riverside F~~	~~660~~	~~580~~	~~80~~
~~Temescal~~	~~770~~	~~780~~	~~None~~
~~Warm Springs~~	~~--~~ [1]	~~--~~ [1]	~~None~~
~~SAN JACINTO RIVER BASINS~~			
~~Canyon~~	~~230~~	~~220~~	~~10~~
~~Hemet South~~	~~730~~	~~1030~~	~~None~~
~~Lakeview – Hemet North~~	~~520~~	~~830~~	~~None~~
~~Menifee~~	~~1020~~	~~3360~~	~~None~~
~~Perris North~~	~~570~~	~~750~~	~~None~~
~~Perris South~~	~~1260~~	~~3190~~	~~None~~
~~San Jacinto Lower~~	~~520~~	~~730~~	~~None~~
~~San Jacinto Upper~~	~~320~~	~~370~~	~~None~~
~~LOWER SANTA ANA RIVER BASINS~~			
~~Irvine~~	~~910~~	~~910~~	~~None~~
~~La Habra~~	~~--~~ [1]	~~--~~ [1]	~~None~~
~~Orange County~~ [2]	~~580~~	~~560~~	~~None~~ [2]
~~Santiago~~	~~--~~ [1]	~~--~~ [1]	~~None~~

~~[1] Not enough data to estimate TDS concentrations; management zone is presumed to have no assimilative capacity. If assimilative capacity is demonstrated by an existing or proposed discharger, that discharge would be regulated accordingly.~~

~~[2] For the purposes of regulating discharges other than those associated with projects implemented within the Orange County Management Zone to facilitate remediation projects and/or to address legacy contamination, no assimilative capacity is assumed to exist~~

~~[3] Assimilative capacity created by "maximum benefit" objectives is allocated solely to agency(ies) responsible for "maximum benefit" implementation (see Section VI.).~~

~~Table 5-4~~

~~Nitrate Nitrogen (NO_3-N) Assimilative Capacity Findings~~

~~Management Zone~~	~~Water Quality Objective (mg/L)~~	~~Current Ambient (mg/L)~~	~~Assimilative Capacity (mg/L)~~
~~***UPPER SANTA ANA RIVER BASINS***~~			
~~Beaumont – "max benefit"~~ [3]	~~5.0~~	~~2.6~~	~~2.4~~
~~**Beaumont – "antideg"**~~	~~1.5~~	~~2.6~~	~~None~~
~~Bunker Hill A~~	~~2.7~~	~~4.5~~	~~None~~
~~Bunker Hill B~~	~~7.3~~	~~5.5~~	~~1.8~~
~~Colton~~	~~2.7~~	~~2.9~~	~~None~~
~~Chino North – "max benefit"~~ [3]	~~5.0~~	~~7.4~~	~~None~~
~~Chino 1 – "antideg"~~	~~5.0~~	~~8.4~~	~~None~~
~~Chino 2 – "antideg"~~	~~2.9~~	~~7.2~~	~~None~~
~~Chino 3 – "antideg"~~	~~3.5~~	~~6.3~~	~~None~~
~~Chino South~~	~~4.2~~	~~8.8~~	~~None~~
~~Chino East~~	~~10~~	~~29.1~~	~~None~~
~~Cucamonga – "max benefit"~~ [3]	~~5.0~~	~~4.4~~	~~0.6~~
~~Cucamonga – "anti-deg"~~	~~2.4~~	~~4.4~~	~~None~~
~~Lytle~~	~~1.5~~	~~2.8~~	~~None~~
~~Rialto~~	~~2.0~~	~~2.7~~	~~None~~
~~San Timoteo – "max benefit"~~ [3]	~~5.0~~	~~2.9~~	~~2.1~~
~~San Timoteo – "anti-deg"~~	~~2.7~~	~~2.9~~	~~None~~
~~Yucaipa – "max benefit"~~ [3]	~~5.0~~	~~5.2~~	~~None~~
~~Yucaipa – "antideg"~~	~~4.2~~	~~5.2~~	~~None~~
~~***MIDDLE SANTA ANA RIVER BASINS***~~			
~~Arlington~~	~~10.0~~	~~--~~ [1]	~~None~~
~~Bedford~~	~~--~~ [1]	~~--~~ [1]	~~None~~
~~Coldwater~~	~~1.5~~	~~2.6~~	~~None~~
~~Elsinore~~	~~1.0~~	~~2.6~~	~~None~~
~~Lee Lake~~	~~--~~ [1]	~~--~~ [1]	~~None~~
~~Riverside A~~	~~6.2~~	~~4.4~~	~~1.8~~
~~Riverside B~~	~~7.6~~	~~8.0~~	~~None~~
~~Riverside C~~	~~8.3~~	~~15.5~~	~~None~~
~~Riverside D~~	~~10.0~~	~~--~~ [1]	~~None~~
~~Riverside E~~	~~10.0~~	~~14.8~~	~~None~~
~~Riverside F~~	~~9.5~~	~~9.5~~	~~None~~
~~Temescal~~	~~10.0~~	~~13.2~~	~~None~~
~~Warm Springs~~	~~--~~ [1]	~~--~~ [1]	~~None~~
~~***SAN JACINTO RIVER BASINS***~~			
~~Canyon~~	~~2.5~~	~~1.6~~	~~0.9~~
~~Hemet South~~	~~4.1~~	~~5.2~~	~~None~~
~~Lakeview – Hemet North~~	~~1.8~~	~~2.7~~	~~None~~
~~Menifee~~	~~2.8~~	~~5.4~~	~~None~~
~~Perris North~~	~~5.2~~	~~4.7~~	~~0.5~~
~~Perris South~~	~~2.5~~	~~4.9~~	~~None~~
~~San Jacinto Lower~~	~~1.0~~	~~1.9~~	~~None~~
~~San Jacinto Upper~~	~~1.4~~	~~1.9~~	~~None~~
~~***LOWER SANTA ANA RIVER BASINS***~~			
~~Irvine~~	~~5.9~~	~~7.4~~	~~None~~
~~La Habra~~	~~--~~ [1]	~~--~~ [1]	~~None~~
~~Orange County~~	~~3.4~~	~~3.4~~	~~None~~
~~Santiago~~	~~--~~ [1]	~~--~~ [1]	~~None~~

~~[1] Not enough data to estimate nitrate nitrogen concentrations~~

~~[2] Assimilative capacity created by "maximum benefit" objectives is allocated solely to agency(ies) responsible for "maximum benefit" implementation (see Section VI.).~~

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3. Nitrogen Loss Coefficient

The City of Riverside ~~also~~ presented data to the Task Force regarding nitrogen transformation and losses associated with wetlands. These data support a nitrogen loss coefficient of 50%, rather than 25%, for the lower portions of Reach 3 of the Santa Ana River that overlie the Chino South groundwater management zone. [Ref. 9]. In fact, the data indicate that nitrogen losses from wetlands in this part of Reach 3 can be greater than 90%. However, given the limited database, the Task Force again recommended a conservative approach, i.e., 50% in this area, with confirmatory monitoring.

Eastern Municipal Water District also presented data that support a 60% nitrogen loss coefficient in the San Jacinto Basin [Ref 10F]. This 60% nitrogen loss is only applicable to discharges to the following management zones that overlie the San Jacinto Basin: Perris North, Perris South, San Jacinto Lower Pressure, San Jacinto Upper Pressure, Lakeview-Hemet North, Menifee, Canyon and Hemet South.

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5. Wastewater Reclamation

Wastewater is presently being reclaimed in the Santa Ana Watershed in a number of different ways:

3. Groundwater Recharge by Percolation

This type of reclamation is common throughout the Region. Most wastewater treatment plants that do not discharge directly to the River discharge their effluent to percolation ponds. All of the treated wastewater in the upper Santa Ana Basin that is not directly reclaimed for commercial agricultural and landscape irrigation purposes, or discharged directly to the Santa Ana River, is returned to local or downstream groundwater management zones by percolation. In Orange County, reclaimed water is used for greenbelt and landscape irrigation, and injected into coastal aquifers to control sea water intrusion.

Significant additional reclamation activities are planned in the Region, as reflected in Table 5-7. The Chino Basin Watermaster, Inland Empire Utilities Agency, Yucaipa Valley Water District, the City of Beaumont and the San Timoteo Watershed Management Authority propose to implement extensive groundwater recharge projects using recycled water. To accommodate these projects and other water and wastewater management strategies, these agencies have made the requisite demonstrations necessary to support the "maximum benefit" TDS and nitrate-nitrogen water quality objectives specified in this Plan for certain groundwater management zones (see Chapter 4). The recharge projects will provide reliable sources of additional water supply needed to support expected development within the agencies' areas of jurisdiction. These agencies' "maximum benefit" programs are described in detail in Section VI. of this Chapter.

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The Yucaipa Valley Regional Brine line and a reverse osmosis facility at the Water Purification Facility at the Water Purification Facility located at the Wochholz Regional Water Recycling Facility will facilitate groundwater replenishment reuse in the upper groundwater management zones of the Santa Ana Watershed. Treated wastewater will receive extensive advanced treatment, including microfiltration, reverse osmosis and disinfection using ultraviolet light. The recharge of recycled water will enhance both the quality of and quantity of groundwater resources, the major source of water supply in the area.

draft

In Orange County, significant reclamation activities include the implementation of the Groundwater Replenishment System, a joint effort of the Orange County Water District and Orange County Sanitation District. Treated wastewater provided by the Sanitation District ~~will~~ receive extensive advanced treatment, including microfiltration, reverse osmosis, and disinfection using ultraviolet light and hydrogen peroxide. In the first phase of the project, approximately 70, 000 acre-feet per ear of highly treated recycled water will be produced and distributed to groundwater recharge facilities and to injection wells used to maintain a seawater intrusion barrier. The System will enhance both the quality and quantity of groundwater resources, the major source of water supply in the area. It will reduce the need for imported water and prevent, or at least delay, the need for an additional ocean outfall for disposal of the wastewater treated by the Sanitation District. Implementation of the GWR System ~~will be phased.~~ Operation of Phase 1 ~~will begin~~ began in 200~~7~~8. Future phases to expand the capacity of the GWR System are ~~possible~~ planned.

~~**Table 5-7**~~
~~Wastewater Reclamation~~

~~Subbasin (Management Zone) Receiving Reclaimed Water~~	~~Source~~	~~Amount AF/Y 2010-A[1]~~	~~Amount AF/Y 2010-B[2]~~
~~Beaumont MZ~~	~~Beaumont, City of~~	~~250~~	~~1,500~~
~~Yucaipa MZ~~	~~Yucaipa Valley Water District~~	~~--~~	~~6,400~~
~~Bunker Hill B MZ~~	~~San Bernardino, City of and Colton, City of~~	~~117~~	~~26,200~~
~~Colton MZ~~	~~Rialto, City of~~	~~200~~	
~~Chino North MZ~~	~~IEUA RP-1~~	~~1,200~~	~~48,000~~
~~Chino North MZ~~	~~IEUA RP-2A~~	~~2,470~~	
~~Chino North MZ~~	~~IEUA RP-4~~	~~3,300~~	
~~Chino North MZ~~	~~California Institute for Men~~	~~650~~	~~650~~
~~Chino North MZ~~	~~Upland Golf Course~~	~~31~~	~~31~~
~~Temescal MZ~~	~~Corona, City of~~	~~1,000~~	~~3,100~~
	~~**TOTAL**~~	~~**9,218**~~	~~**86,000**~~

~~[1] wastewater reclamation assumed in 2010-A is the same as that assumed in the 1995 Basin Plan when approved in 1994/1995 (also known as Table 5-7)~~
~~[2] wastewater reclamation assumed in 2010-B as identified by POTWs (see Ref. 3, 5).~~

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V. Other Projects and Programs

In addition to the regulatory efforts of the Regional Board described in the preceding section, water and wastewater purveyors and other parties in the watershed have implemented, and propose to implement, facilities and programs designed to address salt problems in the groundwater of the Region. These include the construction of brine lines, ~~and~~ groundwater desalters, recycled water demineralization systems, implementation of programs to enhance the recharge of high quality storm water and imported water, where available, and re-injection of recycled water to maintain salt water intrusion barriers in coastal areas. These projects and programs are motivated by the need to protect and augment water supplies, as well as to facilitate compliance with waste discharge requirements.

A. Brine Lines

There are two brine line systems in the Region, the Inland Empire Brine Line, formerly known as the Santa Ana Regional Interceptor (SARI), and the older Chino Basin Non-Reclaimable Line (NRL). These lines are used to transport brine wastes out of the basin for treatment and disposal to the ocean. They are a significant part of industrial waste management and essential for operation of desalters in the upper watersheds.

1. Inland Empire Brine Line

The ~~SARI~~ Inland Empire Brine Line (Brine Line) was constructed and is owned by SAWPA. It is approximately 93 miles of 16 inch to 84 inch pipeline connected to the Orange County Sanitation District treatment facilities. SAWPA owns capacity rights in SARI downstream of Prado Dam. The line extends from the Orange County Line near Prado Dam northeast to the San Bernardino area. The Brine Line has been extended southerly to serve the San Jacinto Watershed. ~~SARI~~ Brine Line Reach 5 extends up the Temescal Canyon from the City of Corona to the Eastern Municipal Water District (EMWD) brine line terminus in the Lake Elsinore area. EMWD's Menifee Desalter and other high salinity discharges from EMWD and Western Municipal Water District now have access to the brine line.

The Brine Line, Reach IVE has been extended to the east about 15 miles from the City of San Bernardino to Yucaipa Water District's Wochholz Regional Water Recycling Facility. The Brine Line will be utilized by Yucaipa Valley Water District and the Mountainview Power Plant for brine disposal.

2. Chino Basin Non-Reclaimable Waste Line

The Chino Basin Non-Reclaimable Waste Line (NRWL) is connected to the Los Angeles County Sanitation District sewer system in the Pomona area. The NRWL, which is owned and operated by Inland Empire Utilities Agency, exports non-reclaimable industrial wastes and brine from the Chino Basin. It extends eastward from the Los Angeles County Line to the City of Fontana. It was originally built to serve industries including the Kaiser Steel Company and Southern California Edison Power Plants.

B. Groundwater Desalters

The studies leading to the development of the TDS/Nitrogen management plan included in this Basin Plan when it was approved in 1995 demonstrated that it was not realistic to achieve compliance with all the nitrogen and TDS objectives for the groundwater subbasins then identified within the Region. Long-term historic land use practices, particularly agriculture, have left an enormous legacy of salts that are now in the unsaturated soils overlying the groundwater subbasins (now, newly defined groundwater management zones). A significant amount of these salts will, over time, degrade groundwater quality. The programs of groundwater extraction, treatment, and replenishment needed to completely address these historic salt loads were shown to far exceed the resources available to implement them.

While the boundaries of the groundwater management zones have been revised and new TDS and nitrate-nitrogen water quality objectives established, the salt legacy problem remains. The construction and operation of groundwater desalters to extract and treat poor quality groundwater continues to be an essential component of salt management in the Region. Such projects will be increasingly important to protect local water supplies and to provide supplemental, reliable sources of potable supplies.

A number of groundwater desalters have already been constructed, and more are planned. These facilities are described below.

1. Upper Santa Ana Basin

In the Upper Santa Ana Basin, the Santa Ana Watershed Project Authority constructed ~~and operates~~ the Arlington desalter, which is now owned and operated by Western Municipal Water District. This desalter, with a capacity of about 7 MGD, treats water extracted from the Arlington Management Zone, which was heavily impacted by historic agricultural activities.

In the Chino Basin, the Chino Desalter Authority operates the Chino 1 desalter, which is planned for expansion from 8 MGD to 13 MGD capacity. Additional desalters and desalter capacity will be constructed as part of a “maximum benefit” proposal by the Chino Basin Watermaster and the Inland Empire Utilities Agency (see Section VI., Maximum Benefit Implementation Plans for Salt Management).

The City of Corona began operation of the Temescal desalter in late 2001 with product water~~.~~ ~~The desalter has a~~ capacity of 10 MGD. In 2004, t~~T~~he City ~~is currently expanding~~ expanded the desalter plant capacity by adding a fourth train to increase the product water capacity by 5 MGD for a current total of 15 MGD. ~~It is expected to be operational in early 2004.~~ The product water is used to supplement ~~current~~ other municipal supplies as a blending source. The improved TDS quality of these supplies is an important part of the City’s efforts to assure compliance with waste discharge requirements.

In the San Timoteo Watershed areas, desalters will be implemented as necessary for the Yucaipa and Beaumont areas, as discussed in detail in Section VI., Maximum Benefit San Timoteo Watershed Salt Management Plan.

2. San Jacinto Watershed

EMWD operates the Menifee desalter, which has a capacity of about 3 MGD. Product water is

added to the EMWD municipal supply system, and the waste brine is discharged to a non-reclaimable waste disposal system that is ultimately connected to the SAWPA SARI system. The desalter extracts groundwater from the Perris South and Menifee Management Zones, both of which are adversely affected by historic salt loads contributed largely by agricultural activities.

EMWD plans to construct a desalter with capacity of about 4.5 MGD to treat poor quality water extracted from the Perris South and Lakeview/Hemet North Management Zones. The purpose of this facility is to stop subsurface migration of poor quality groundwater from the Perris South Management Zone into the Lakeview/Hemet North Management Zone.

3. Orange County

The Tustin Seventeenth Street Desalter ~~Nitrate Removal project,~~ which began operation in 1996 reduces high nitrate and TDS concentrations from groundwater pumped by Tustin's Seventeenth Street wells, adding approximately 3,000 acre-feet of water annually to Tustin's domestic water supply. A second facility, Tustin's Main Street Treatment Plant, began operating in 1989 with a yield of 2,000 acre-feet per year. The plant reduces nitrate levels from groundwater produced by Tustin's Main Street wells, ~~Treatment systems~~ employs~~ing~~ reverse osmosis and ion exchange. ~~are operating at two wells that had been shut down because of excessive nitrate concentrations~~. The Orange County Water District and Irvine Ranch Water District (IRWD) ~~are moving forward with~~ cooperated to build the Irvine Desalter, a dual-purpose regional groundwater remediation and water supply project located in the City of Irvine and its sphere of influence. The project consists of an extensive seven-well groundwater extraction and collection system, a treatment system, a five-mile brine disposal pipeline, a finished water delivery system, and ancillary facilities. While providing approximately ~~6,700~~ 8,000 acre-feet per year to IRWD for potable and non-potable supply, the desalter ~~will~~ extracts and treats brackish groundwater and captures an overlapping regional plume of TCE-contaminated groundwater demonstrated to have originated from the former U.S. Marine Corps Air Station-El Toro.

C. Recharge of ~~Stormwater~~ Storm Water and/or Imported Water

The Orange County Water District, San Bernardino Valley Water Conservation District and other agencies in the Region operate extensive facilities designed to enhance the capture and recharge of high quality ~~stormwater~~ storm water. More such facilities are planned as part of "maximum benefit" proposals by the Chino Basin Watermaster/Inland Empire Utilities Agency, ~~Yucaipa Valley Water District, San Timoteo Watershed Management Authority and the City of Beaumont~~ and agencies implementing the maximum benefit programs in the San Timoteo watershed (Section VI., Maximum Benefit Implementation Plans for Salt Management). These proposals also include efforts to import and recharge high quality State Water Project water, when it is available. These activities increase both the quantity and quality of available groundwater resources.

D. Sea Water Intrusion Barriers

The Orange County Water District operates advanced facilities designed to provide significantly enhanced tertiary treatment of secondary treated municipal wastewater from the Orange County Sanitation District's (Sanitation District) Fountain Valley Reclamation Plant No. 1. The recycled water is injected into a series of wells located along Ellis Avenue in the City of Fountain Valley to maintain the Talbert Gap Seawater Intrusion Barrier. The

treatment facility, ~~currently known as Water Factory 21, will be supplanted by~~ the Groundwater Replenishment System (GWRS) ~~being~~ was constructed jointly by Orange County Water District and the Sanitation District (see preceding section on wastewater reclamation).

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V. Salt Management Plan – Monitoring Program Requirements
(insert at end of section)

Subsequent to the approval of the Region's Salt and Nutrient Management Plan in 2004, a new task force, the "Basin Monitoring Program Task Force" (BMPTF) was formed to implement the requisite nitrogen/TDS monitoring and analyses programs described previously. SAWPA serves as the administrator for the BMPTF.

The Task Force includes the following agencies:

- Eastern Municipal Water District
- Inland Empire Utilities Agency
- Orange County Water District
- City of Riverside
- Lee Lake Water District
- Elsinore Valley Municipal Water District
- Irvine Ranch Water District
- Colton/San Bernardino Regional Tertiary Treatment and Wastewater Reclamation Authority
- Chino Basin Watermaster
- Yucaipa Valley Water District
- City of Beaumont
- City of Corona
- City of Redlands
- City of Rialto
- Jurupa Community Services District
- Western Riverside Co Regional Wastewater Authority

The Santa Ana Regional Water Quality Control Board and SAWPA are also signatories to the BMPTF agreement.

As indicated above (Section V.A and V.B), the task force agencies are required to conduct the following investigations:

1. Recomputation of the Ambient Water Quality – every three years
2. Preparation of a Water Quality Report for the Santa Ana River – annually

Declaration of Conformance

Another major activity that the BMPTF completed in March 2010 was the development of a "Declaration of Conformance" for approval by the Regional Board and the State Water Resources Control Board. With the Declaration, the Task Force and Regional Board declared conformance with the then-new State Board Recycled Water Policy requirements for the completion of a salt and nutrient management plan for the Santa Ana Region, and other requirements of this Policy. This finding of conformance was based on the work of the Nitrogen/TDS Task Force. That work resulted in the 2004 adoption of Basin Plan amendments to incorporate a revised salt and nutrient management plan for the Region

(Resolution No. R8-2004-0001). Further, the Declaration documented conformance with the emerging constituents monitoring requirements in the Policy through the "Emerging Constituents Sampling and Investigation Program", submitted to the Regional Board on an annual basis by the Emerging Constituents Program Task Force. The Sampling and Investigation Program will be reviewed annually and revised as necessary and will integrate the State Board's recommendations when they become available. Finally, the Declaration of Conformance documents the analyses and procedures that will be used to streamline the permitting process for recycled water projects, as required by the Policy.

The Declaration of Conformance was formally adopted by resolution of the Regional Board on March 18, 2010 (Resolution No. R8-2010-0012) and formally submitted to the State Board on April 12, 2010.

Salt Monitoring Cooperative Agreement

In January, 2008 the Regional Board entered into a Cooperative Agreement with several water and wastewater agencies in the Santa Ana River Watershed to analyze and report the amount of salt and nitrates entering local groundwater aquifers as a consequence of recharging imported water in the region. The "Cooperative Agreement to Protect Water Quality and Encourage the Conjunctive Use of Imported Water in the Santa Ana River Basin" is Attachment A to Resolution No. R8-2008-0019.

As with the BMPTF effort underwritten by local stakeholders, the Cooperative Agreement obligates signatories to assess current groundwater quality every three years. In addition, the signatories have agreed to estimate every six years the changes that are likely to occur in groundwater quality as a result of on-going and expected projects that recharge imported water. By emphasizing the use of "real-time" monitoring, rather than complex fate and transport models, the Regional Board is better able to evaluate the effects of these recharge projects.

The parties of the Cooperative Agreement execute the terms of the agreement through a workgroup that meets regularly under the administration of SAWPA. As the informal administrator, SAWPA assists in coordination among the signatories of the necessary basin salinity monitoring and modeling reports, along with final compilation and submittal of the reports to the Regional Board by the deadlines defined in the agreement.

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~~VI. Maximum Benefit Implementation Plans for Salt Management~~

~~B. Salt Management – San Timoteo Watershed~~

~~1. San Timoteo and Yucaipa Management Zone - Yucaipa Valley Water District~~

~~Two sets of objectives have been adopted for the San Timoteo and Yucaipa Management Zones; the "maximum benefit" objectives and objectives based on historic ambient quality ("antidegradation" objectives) (see Chapter 4). The application of the "maximum benefit" objectives relies on the implementation by the Yucaipa Valley Water District (YVWD) (and in the case of the San Timoteo Management Zone, by the City of Beaumont/STWMA (see discussion below)) of a specific program of projects and requirements [Ref. 10D]. This program is a part of a watershed-scale water resources management plan designed by YVWD and other members of the San Timoteo Watershed Management Authority (STWMA) (the City of Beaumont, the Beaumont-Cherry Valley Water District and the South Mesa Water Company) to assure reliable supplies to meet present and anticipated demands. The projected water demands for the Yucaipa area for the year 2030 require approximately an additional 10,000 AF/Y of supplemental water, including State Water Project water, water imported from local sources, recharged storm water and recycled water. YVWD is in the process of implementing the water resources management plan, which includes enhanced recharge of stormwater and recycled water, optimizing direct use of recycled and imported water, and conjunctive use.~~

~~In addition to its water supply responsibilities, YVWD provides sewage collection and treatment services within its service area. YVWD operates a wastewater treatment facility that currently discharges tertiary treated wastewater to San Timoteo Creek, Reach 3. This unlined reach of the Creek overlies and recharges the San Timoteo groundwater management zone.~~

~~Table 5-9a identifies the projects and requirements that must be implemented by YVWD to demonstrate that water quality consistent with maximum benefit to the people of the state will be maintained. An implementation schedule is also specified. The Regional Board will revise YVWD's waste discharge requirements to require that these commitments be met. It is assumed that maximum benefit is demonstrated, and that the "maximum benefit" water quality TDS and nitrate-nitrogen objectives apply to the Yucaipa and San Timoteo Management Zones, as long as the schedule is being met[2]. If the Regional Board determines that the maximum benefit program is not being implemented effectively in accordance with the schedule shown in Table 5-9a (and in the case of the San Timoteo Management Zone, the commitments and schedule shown in Table 5-10a (see next section)), then maximum benefit is not demonstrated and the "antidegradation" TDS and nitrate-nitrogen objectives apply. In this situation, the Regional Board will require mitigation for TDS and nitrate-nitrogen discharges affecting these management zones that took place in excess of limits based on the "antidegradation" objectives. As for Chino Basin Watermaster and Inland Empire Utilities Agency, discharges in excess of the antidegradation objectives that must be considered for mitigation include both recycled water and imported water, at TDS 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.~~

~~[2] Application of "maximum benefit" objectives for the San Timoteo Management Zone is also contingent on the timely implementation of the commitments by the City of Beaumont and the San Timoteo Watershed Management Authority which are discussed in the next section.~~

~~Table 5-9a~~

~~Yucaipa Valley Water District Maximum Benefit Commitments~~

~~**Description of Commitment**~~	~~**Compliance Date – as soon as possible, but no later than**~~
~~1. Surface Water Monitoring Program~~ ~~a. Submit Draft Monitoring Program to Regional Board~~ ~~b. Implement Monitoring Program~~ ~~c. Quarterly data report submittal~~ ~~d. Annual data report submittal~~	 ~~a. January 23, 2005~~ ~~**b. Within 30 days from Regional Board approval of monitoring plan**~~ ~~**c. April 15, July 15, October 15, January 15**~~ ~~d. February 15th~~
~~2. Groundwater Monitoring Program~~ ~~a. Submit Draft Monitoring Program to Regional Board~~ ~~b. Implement Monitoring Program~~ ~~c. Annual data report submittal~~	 ~~a. January 23, 2005~~ ~~b. Within 30 days from Regional Board approval of monitoring plan~~ ~~c. February 15th~~
~~3. Desalter(s) and Brine Disposal Facilities~~ ~~a. Submit plan and schedule for construction of desalter(s) and brine disposal facilities. Facilities are to operational as soon as possible but no later than 7 years from date of Regional Board approval of plan/schedule.~~ ~~b. Implement the plan and schedule~~	 ~~a. Within 6 months of either of the following:~~ ~~i. When YVWD's effluent 5-year running average TDS exceeds 530 mg/L; and/or~~ ~~ii.. When volume weighted average concentration in the Yucaipa MZ of TDS exceeds 360 mg/L~~ ~~b. Within 30 days from Regional Board approval of monitoring plan~~
~~4. Non-potable water supply~~ ~~Implement non-potable water supply system to serve water for irrigation purposes. The non-potable supply shall comply with a 10-year running average TDS concentration of 415 mg/L or less~~	 ~~December 23, 2014~~

~~**Description of Commitment**~~	~~**Compliance Date – as soon as possible, but no later than**~~
~~5. Recycled water recharge~~ ~~The recharge of recycled water in the Yucaipa or San Timoteo Management Zones shall be limited to the amount that can be blended with other recharge sources to achieve a 5-year running average equal to or less than the "maximum benefit" objectives for TDS and nitrate-nitrogen for the relevant Management Zone(s).~~ ~~a. Submit baseline report of amount, locations, and TDS and nitrogen quality of stormwater/imported water recharge.~~ ~~b. Submit documentation of amount, TDS and nitrogen quality of all sources of recharge and recharge locations. For stormwater recharge used for blending, submit documentation that the recharge is the result of YVWD enhanced recharge facilities/programs~~	~~Compliance must be achieved by end of 5th year after initiation of recycled water use/recharge operations.~~ ~~a. Prior to initiation of construction of basins/other facilities to support enhanced stormwater/imported water recharge.~~ ~~b. Annually, by January 15th, after initiation construction of facilities/implementation of programs to support enhanced recharge.~~
~~6. Ambient groundwater quality determination~~	~~July 1, 2005 and every 3 years thereafter~~
~~7. Replace denitrification facilities (necessary to comply with TIN wasteload allocation specified in Table 5-5)~~	~~New facilities shall be operational no later than December 23, 2007~~
~~8. YVWD recycled water quality improvement plan and schedule~~ ~~a. Submit plan and schedule~~ ~~b. Implement plan and schedule~~	~~a. 60 days after the TDS 12-month running average effluent quality equals or exceeds 530 mg/L for 3 consecutive months and/or the 12-month running average TIN concentration equals or exceeds 6 mg/L in any month (once replacement denitrification facilities are in place)~~ ~~b. Upon approval by Regional Board~~
~~9. Remove/reduce the discharge of YVWD effluent from the unlined portion of San Timoteo~~	

~~**Description of Commitment**~~	~~**Compliance Date – as soon as possible, but no later than**~~
~~Creek~~ ~~a. Submit proposed plan/schedule~~ ~~b. Implement plan/schedule~~	 ~~a. June 23, 2005~~ ~~b. Upon Regional Board approval~~
~~10. Construct the Western Regional Interceptor for Dunlap Acres~~ ~~a. Submit proposed construction plan and schedule. The schedule shall assure the completion of construction as soon as possible but no later than January 1, 2010.~~ ~~b. Implement plan and schedule~~	 ~~a. June 23, 2005~~ ~~b. Upon Regional Board approval~~

~~A. Description of Yucaipa Valley Water District Commitments~~

~~1. Surface Water Monitoring Program (Table 5-9a, # 1)~~

~~The YVWD shall develop and submit for Regional Board approval a surface water monitoring program for San Timoteo Creek and the Santa Ana River Reaches 4 and 5. The monitoring program must be implemented within 30 days of Regional Board approval of the monitoring plan, and six months of data must be generated prior to the implementation of any changes made to the effluent discharge points and before any recycled water is used in the Yucaipa or San Timoteo Management Zones.~~

~~At a minimum, the surface water monitoring program shall include the collection of monthly measurements of TDS and nitrogen components in San Timoteo Creek and Santa Ana River, Reaches 4 and 5 (see Table 5-9b). Data reports shall be submitted to the Regional Board's Executive Officer by April 15, July 15, October 15 and January 15 each year. An annual report summarizing all data collected for the year and evaluating compliance with relevant surface water objectives shall be submitted by February 15th of each year.~~

~~2. Groundwater Monitoring Program (Table 5-9a, #2)~~

~~The purpose of the Groundwater Monitoring Program is to identify the effects of the implementation of the San Timoteo and Yucaipa Management Zones maximum benefit water quality objectives on water levels and water quality within the San Timoteo and Yucaipa Management Zones. Prior to discharge of recycled water to the San Timoteo and/or Yucaipa Management Zones, YVWD shall submit to the Regional Board for approval a groundwater monitoring program to determine ambient water quality in the San Timoteo and Yucaipa Management Zones. The groundwater monitoring program must be implemented within 30 days of approval by the Regional Board.~~

~~An annual report, including all raw data and summarizing the results of the approved groundwater monitoring program, shall be submitted to the Regional Board by February 15th of each year.~~

~~3. Desalters and Brine Disposal (Table 5-9a, #3)~~

~~YVWD anticipates that demineralization of groundwater or recycled water will be necessary in the future. YVWD is committed to construct and operate desalting and brine disposal facilities when:~~

1) ~~The 5-year running average TDS concentration in recycled water produced at the YVWD wastewater treatment plant exceeds 530 mg/L; or~~

2) ~~The volume-weighted TDS concentration in the Yucaipa Management Zone reaches or exceeds 360 mg/L~~

~~The construction of these facilities will be in accordance with a plan and schedule submitted by YVWD 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.~~

~~4. Non-potable water supply distribution system (Table 5-9a, # 4)~~

~~A key element of the YVWD's water resources management plan is the construction of a non-potable supply system to serve a mix of recycled water and un-treated imported water for irrigation uses. The intent of blending these sources is to minimize the impact of recycled water use on the Yucaipa and San Timoteo Management Zones.~~

~~Parts of this system are under design and construction. A higher proportion of State Project water will be used in wet, surplus years, while larger amounts of recycled water will be used in dry, deficit years. YVWD will produce a non-potable supply with a running ten-year average TDS concentration for the Yucaipa Management Zone of 415 mg/L.~~

~~Table 5 – 9b~~

~~Surface Water Monitoring Sites for Monitoring Water Quality and Quantity~~
~~Yucaipa Valley Water District~~

~~Site Name~~	~~Discharge~~	~~Owner~~	~~Type~~	~~Discharge Monitoring~~		~~Water Quality Monitoring~~		
				~~Frequency~~	~~Period~~	~~Frequency~~	~~Period~~	~~Analyses~~
~~11057500, Gage~~	~~San Timoteo Creek~~	~~USGS~~	~~Total Discharge~~	~~Bi-weekly~~	~~Jan-Dec~~	~~Bi-weekly~~	~~Jan-Dec~~	~~TDS, TIN, Physical~~
~~At Barton Rd.~~	~~San Timoteo Creek~~	~~YVWD~~	~~Total Discharge~~	~~Bi-weekly~~	~~Jan-Dec~~	~~Bi-weekly~~	~~Jan-Dec~~	~~TDS, TIN, Physical~~
~~At San Timoteo Canyon Rd.~~	~~San Timoteo Creek~~	~~YVWD~~	~~Total Discharge~~	~~Bi-weekly~~	~~Jan-Dec~~	~~Bi-weekly~~	~~Jan-Dec~~	~~TDS, TIN, Physical~~
~~Above confluence Yucaipa Creek~~	~~San Timoteo Creek~~	~~YVWD~~	~~Total Discharge~~	~~Bi-weekly~~	~~Jan-Dec~~	~~Bi-weekly~~	~~Jan-Dec~~	~~TDS, TIN, Physical~~
~~Above YVWD Discharge~~	~~San Timoteo Creek~~	~~YVWD~~	~~Total Discharge~~	~~Bi-weekly~~	~~Jan-Dec~~	~~Bi-weekly~~	~~Jan-Dec~~	~~TDS, TIN, Physical~~
~~11059300 Gage~~	~~Santa Ana River~~	~~USGS~~	~~Total Discharge~~	~~Bi-weekly~~	~~Jan-Dec~~	~~Bi-weekly~~	~~Jan-Dec~~	~~TDS, TIN, Physical~~
~~At Waterman Ave~~	~~Santa Ana River~~	~~YVWD~~	~~Total Discharge~~	~~Bi-weekly~~	~~Jan-Dec~~	~~Bi-weekly~~	~~Jan-Dec~~	~~TDS, TIN, Physical~~
~~Recharged to Yucaipa MZ~~	~~State Water Project~~	~~YVWD~~	~~Total Discharge~~	~~Monthly~~	~~Jan-Dec~~	~~Monthly~~	~~Jan-Dec~~	~~TDS, Nitrate-N~~
~~Recharged to Yucaipa MZ~~	~~Storm water~~	~~YVWD~~	~~Total Discharge~~	~~Monthly~~	~~Jan-Dec~~	~~Monthly~~	~~Jan-Dec~~	~~TDS, Nitrate-N~~

~~5. Recycled Water Use (Table 5-9a, # 5)~~

~~The use and recharge of recycled water within the Yucaipa Management Zone is a critical component of the YVWD water management plan and is necessary to maximize the use of the water resources of the Yucaipa area. The demonstration of "maximum benefit" and the continued application of the "maximum benefit" objectives depends on the combined recharge (recycled water, imported water, storm water) to the Yucaipa Management Zone of a 5-year annual average (running average) TDS concentration of 370 mg/L and nitrate-nitrogen concentration of 5 mg/L. If recycled water recharge in the proposed San Timoteo Management Zone is pursued, then the application of the "maximum benefit" objectives will depend on the combined recharge to that Zone of 5-year annual average (running average) concentrations of 400 mg/L or~~

~~less TDS, and 5 mg/L or less nitrate-nitrogen.~~

~~To meet this requirement, YVWD will establish a fund to purchase imported water from local sources and/or the State Water Project and will recharge water with a TDS concentration less than 300 mg/L (recent long term historical average of water delivered from the State Project). YVWD will also pursue implementation, with the City of Yucaipa and the San Bernardino County Flood Control District, of the *Yucaipa Water Capture and Resource Management Complex* by December 31, 2010.~~

~~Accordingly, the use of recycled water for groundwater recharge in the Yucaipa or San Timoteo Management Zone shall be limited to the amount that can be blended in the management zone on a volume-weighted basis with other sources of recharge to achieve 5-year running average concentrations less than or equal to the "maximum benefit" objectives for the affected groundwater management zone. The 25% nitrogen loss coefficient will be applied in determining the amount of recharge of other water sources that must be achieved to meet the 5-year running average nitrogen concentrations.~~

~~6. Ambient Groundwater Quality Determination (Table 5-9a, # 6)~~

~~By July 1, 2005, and every three years thereafter, YVWD shall submit a determination of ambient TDS and nitrate-nitrogen quality in the San Timoteo and Yucaipa Management Zones. This determination shall be accomplished using methodology consistent with the calculation (20-year running averages) used by the Nitrogen/TDS Task Force to develop the TDS and nitrate-nitrogen "antidegradation" water quality objectives for groundwater management zones within the region. [Ref. 1].~~

~~7. Replacement of Denitrification Facilities (Table 5-9a, #7)~~

~~YVWD shall replace existing denitrification facilities to provide effluent total inorganic nitrogen quality (6 mg/L) needed to assure compliance with the "maximum benefit" nitrate-nitrogen objective of the San Timoteo and Yucaipa Management Zones (see Wasteload Allocation section of this Chapter). A maximum three year schedule for completion of these facilities will be required. This schedule will be specified in a revised NPDES permit for YVWD's discharges to San Timoteo Creek.~~

~~8. YVWD Recycled Water Management (Table 5-9a, #8)~~

~~YVWD expects to limit the TDS concentration in its effluent to less than or equal to 540 mg/L by using a low TDS source water supply for potable uses, selective desalting of either source water and/or recycled waters, and minimizing the TDS waste increment. YVWD is currently constructing a 12-MGD treatment plant to treat and serve State Project Water. The plant will also be able to treat low TDS Mill Creek and Santa Ana River water. When necessary, YVWD will construct desalters to reduce either the TDS concentration in water supplied to customers or the TDS concentration in the effluent. YVWD will also use best efforts to enact ordinances and other requirements to minimize the TDS use increment.~~

~~Within 60 days after the YVWD 12-month running average concentration for TDS equals or exceeds 530 mg/L for 3 consecutive months, or the 12-month running average TIN concentration equals or exceeds 6 mg/L in any month (once replacement denitrification facilities are in place), YVWD shall submit to the Regional Board a plan and time schedule for implementation of measures to insure that the average agency wastewater effluent quality does not exceed 540 mg/L and 6 mg/L for TDS and TIN, respectively. The plan and schedule are to be implemented upon approval by the Regional Board.~~

~~9. Relocation of San Timoteo Creek Discharge (Table 5-9a, #9)~~

~~YVWD has established the goal of eliminating its discharge to the unlined reach of San Timoteo Creek by 2008. First priority will be given to the direct reuse and limited recharge of this recycled water in the YVWD service area (principally the area overlying the Yucaipa Management Zone). The District may construct a pipeline to convey the recycled water to the San Jacinto watershed for reuse. The District is also planning the construction of a pipeline to convey recycled water downstream to the lined reach of the Creek (Reach 1A) to minimize recycled water effects on the San Timoteo Management Zone. In the long-term, discharges~~

~~to this area of the Creek are likely to be infrequent and limited to the wintertime, when the recycled water cannot be used in the YVWD (or potentially, the San Jacinto) service areas. However, YVWD is obligated to maintain flows in the Creek to support existing riparian habitat (State Board Order No. WW-26) and may need to continue recycled water discharges at some level. Groundwater and imported State Project water may also be used as alternative water sources.~~

~~Whole or partial removal of the discharge from the unlined reach of San Timoteo Creek would improve the quality of groundwater in the San Timoteo Management Zone and supplement recycled water supplies available for reuse elsewhere in the service area.~~

~~By June 23, 2005, YVWD shall submit a proposed plan and schedule to remove/reduce the discharge of recycled water to the unlined reach of San Timoteo Creek. The plan and schedule shall be implemented upon Regional Board approval.~~

~~10. Construction of Western Regional Interceptor (Table 5-9a, # 10)~~

~~YVWD will construct the Western Regional Interceptor to provide wastewater collection and treatment services to Dunlap Acres in order to mitigate what has been identified as a poor quality groundwater area due to prior agricultural use and existing septic systems. The Dunlap Acres area was inadvertently omitted from the Yucaipa-Calimesa septic tank subsurface disposal system prohibition established by the Regional Board in 1973. The interceptor includes the construction of a major wastewater interceptor pipeline, a force main and pump station. YVWD committed to complete construction of these facilities prior to 2010. Regional Board action may be necessary to require connection of properties to the wastewater collection system, when it is completed.~~

~~By June 23, 2005, YVWD shall submit a plan and schedule for construction of the Interceptor. The Interceptor is to be complete no later than January 1, 2010. YVWD shall implement the plan and schedule upon Regional Board approval.~~

~~B. Implementation by Regional Board~~

~~1. Revision to Yucaipa Valley Water District NPDES Permit~~

~~To implement the "maximum benefit" objectives, the Regional Board will revise the NPDES permit for YVWD wastewater discharges to reflect the commitments described above, as appropriate. This includes the following.~~

~~The discharge limits for TDS and TIN will be specified as an annual volume-weighted average not to exceed 540 mg/L TDS and 6 mg/L TIN. These limits are based on the "maximum benefit" wasteload allocations shown in Table 5-5. A schedule not to exceed December 23, 2007 for compliance with this TIN limit shall be included in the permit. This schedule will enable YVWD to replace its existing denitrification facilities. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified and will apply should the Regional Board find that maximum benefit is not demonstrated. These alternative limits are also specified in Table 5-5. Compliance schedules for these alternative limits will be specified in YVWD's waste discharge requirements, as necessary.~~

~~YVWD will be required to implement measures to improve effluent quality when the 12-month running average effluent TDS quality equals or exceeds 530 mg/L for 3 consecutive months, and/or when the 12-month running average TIN concentration equals or exceeds 6 mg/L in any month (once replacement denitrification facilities are in place).~~

~~YVWD's waste discharge requirements will require that recycled water used for recharge shall be limited to the amount that can be blended with other water sources, such as stormwater or imported water, to achieve 5-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the affected management zone (Yucaipa or San Timoteo). Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified for recycled water~~

~~recharge in these management zones.~~

~~The effluent limits for YVWD, which establish an upper limit on TDS and TIN concentrations of recycled water discharged in the Yucaipa and/or San Timoteo Management Zones, are a cornerstone of the maximum benefit demonstration. The cap on effluent TDS and TIN concentrations provides a controlling point for management of TDS and nitrogen water quality. YVWD will be required to initiate the building of a desalter and brine disposal line when the 5-year running average TDS in YVWD's effluent reaches 530 mg/L, or when the volume weighted-average TDS concentration in the Yucaipa Management Zone reaches 360 mg/L. YVWD will immediately implement a salt management program to reduce the salts entering the District's wastewater treatment plant. This salt management program will include: 1) provision of incentives for the removal of on-site regenerative water softeners and the use of off-site regenerative systems; and 2) percolation of State Water Project water into the Yucaipa Management Zone when State Water Project water has low TDS. Implementing these measures will assure that the groundwater quality remains at or below the Yucaipa Management Zone objective of 360 mg/L TDS. Maintenance of this ambient groundwater quality is necessary, in turn, to assure that YVWD's wastewater treatment facility is able to meet the effluent TDS limits. Yucaipa Management Zone groundwater is a significant component of the water supplied in YVWD's service area, and its quality thus has an important effect on effluent quality. Poor ambient quality will preclude YVWD from meeting effluent limits without desalting.~~

~~YVWD will be required to submit proposed plans and schedules for the removal/reduction of its wastewater discharges from the unlined reach of San Timoteo Creek and for the construction of the Western Regional Interceptor. YVWD's revised permit will also reflect the surface and groundwater monitoring program requirements described above. This includes the determination of ambient quality in the San Timoteo and Yucaipa Management Zones.~~

~~2. Review of Project Status~~

~~No later than 2005, and every three years thereafter (to coincide with the Regional Board's triennial review process), the Regional Board intends to review the status of the activities planned and executed by the YVWD to demonstrate maximum benefit and justify continued implementation of the "maximum benefit" water quality objectives. This review is intended to determine whether the commitments specified above and summarized in Table 5-9a are met. As indicated above, if, as a result of this review, the Regional Board finds that the YVWD commitments are not met and after consideration at a duly noticed Public Hearing, the Regional Board will make a finding that the lowering of water quality associated with TDS and nitrate-nitrogen water quality objectives that are higher than historical water quality (the "antidegradation" objectives) is not of maximum benefit to the people of the state. By default, the scientifically derived "antidegradation" objectives for the San Timoteo (300 mg/L for TDS, 2.7 mg/L for nitrate-nitrogen) and Yucaipa (320 mg/L for TDS and 4.2 mg/L for nitrate-nitrogen Management Zones would become effective (see Chapter 4).~~

~~Furthermore, in the event that the projects and actions specified in Table 5-9a are not implemented, the Regional Board will require that the YVWD mitigate the adverse water quality effects, both on the immediate and downstream waters, that resulted from the recycled water discharges based on the "maximum benefit" objectives.~~

~~2. San Timoteo and Beaumont Management Zones – City of Beaumont and San Timoteo Watershed Management Authority (STWMA)~~

~~As shown in Chapter 4, two sets of TDS and nitrate-nitrogen objectives have been adopted for both the San Timoteo and Beaumont Management Zones: the "maximum benefit" objectives and objectives based on historic ambient quality (the "antidegradation" objectives). The application of the "maximum benefit" objectives for these Management Zones is contingent on the implementation of commitments by the City of Beaumont/STWMA (and, in the case of the San Timoteo Management Zone, by the Yucaipa Valley Water District (YVWD; see preceding discussion)) to implement a specific water and wastewater resources management program [Ref. 10E]. This program is part of a coordinated effort by the member agencies of STWMA to develop and implement projects that will assure reliable water supplies to meet rapidly increasing demands in this area. The San Timoteo Watershed Management Program (STWMP) developed by STWMA entails enhanced recharge of native and recycled water, maximizing the direct use of recycled water, optimizing the direct use of imported water, recharge and conjunctive use.~~

~~Wastewater collection and treatment services in the STWMA service area are provided by the City of Beaumont, as well as YVWD. Beaumont discharges tertiary treated wastewater to Coopers Creek, a tributary of San Timoteo Creek, Reach 3. This unlined reach of the Creek overlies and recharges the San Timoteo groundwater management zone.~~

~~Table 5-10a identifies the projects and requirements that must be implemented by Beaumont/STWMA to demonstrate that water quality consistent with maximum benefit to the people of the state will be maintained. STWMA, acting for all its member agencies, has committed to conduct the regional planning and monitoring activities necessary to implement these "maximum benefit" commitments, and the San Timoteo Watershed Management Program as a whole. Table 5-10a also specifies an implementation schedule. The Regional Board will revise the City of Beaumont's waste discharge requirements and take other actions as necessary to require that these commitments be met. It is assumed that maximum benefit is demonstrated, and that the "maximum benefit" water quality TDS and nitrate-nitrogen objectives apply to the Beaumont and San Timoteo Management Zones, as long as the schedule is being met[3]. If the Regional Board determines that the maximum benefit program is not being implemented effectively in accordance with the schedule shown in Table 5-10a (and in the case of the San Timoteo Management Zone, the commitments and schedule shown in Table 5-9a (see preceding section)), then maximum benefit is not demonstrated, and the "antidegradation" TDS and nitrate-nitrogen objectives apply. In this situation, the Regional Board will require mitigation for TDS and nitrate-nitrogen discharges affecting these management zones that took place in excess of limits based on the "antidegradation" objectives~~.

~~[3] Application of "maximum benefit" objectives for the San Timoteo Management Zone is also contingent on the timely implementation of the commitments by the Yucaipa Valley Water District which are discussed in the preceding section.~~

~~Table 5-10a~~

~~City of Beaumont and San Timoteo Watershed Management Authority~~
~~Maximum Benefit Commitments~~

~~**Description of Commitment**~~	~~**Compliance Date – as soon as possible, but no later than**~~
~~1. Surface Water Monitoring Program~~	
~~a. Submit Draft Monitoring Program to Regional Board~~	~~a. January 23, 2005~~
~~b. Implement Monitoring Program~~	~~**b. Within 30 days from Regional Board approval of monitoring plan**~~
	~~**c. April 15, July 15, October 15, January 15**~~
~~c. Quarterly data report submittal~~	~~d. February 15th~~
~~d. Annual data report submittal~~	
~~2. Groundwater Monitoring Program~~	
~~a. Submit Draft Monitoring Program to Regional Board~~	~~a. January 23, 2005~~
~~b. Implement Monitoring Program~~	~~b. Within 30 days from Regional Board approval of monitoring plan~~
~~c. Annual data report submittal~~	~~c. February 15th~~
~~3. Desalter(s) and Brine Disposal Facilities~~	
~~a. Submit plan and schedule for construction of desalter(s) and brine disposal facilities. Facilities are to be operational as soon as possible but no later than 7 years from date of Regional Board approval of plan/schedule.~~	~~a. Within 6 months of either of the following:~~ ~~i. When Beaumont's effluent 5-year running average TDS exceeds 480 mg/L; and/or~~ ~~ii. When volume weighted average concentration in the Yucaipa MZ of TDS exceeds 320 mg/L~~
~~b. Implement the plan and schedule~~	~~b. Within 30 days from Regional Board approval of monitoring plan~~

~~**Description of Commitment**~~	~~**Compliance Date – as soon as possible, but no later than**~~
~~4. Non-potable water supply~~ ~~Implement non-potable water supply system to serve water for irrigation purposes. The non-potable supply shall comply with a 10-year running average TDS concentration of 390 mg/L or less~~	~~December 23, 2014~~
~~5. Recycled water recharge~~ ~~The recharge of recycled water in the Beaumont or San Timoteo Management Zones shall be limited to the amount that can be blended with other recharge sources to achieve a 5-year running average equal to or less than the "maximum benefit" objectives for TDS and nitrate-nitrogen for the relevant Management Zone(s).~~ ~~a. Submit baseline report of amount, locations, and TDS and nitrogen quality of stormwater/imported water recharge.~~ ~~b. Submit documentation of amount, TDS and nitrogen quality of all sources of recharge and recharge locations. For stormwater recharge used for blending, submit documentation that the recharge is the result of City of Beaumont/STWMA enhanced recharge facilities/programs~~	~~Compliance must be achieved by end of 5th year after initiation of recycled water use/recharge operations.~~ ~~a. Prior to initiation of construction of basins/other facilities to support enhanced stormwater/imported water recharge.~~ ~~b. Annually, by January 15th, after initiation construction of facilities/implementation of programs to support enhanced recharge.~~
~~6. Ambient groundwater quality determination~~	~~July 1, 2005 and every 3 years thereafter~~
~~7. Replace denitrification facilities (if necessary to comply with TIN wasteload allocation specified in Table 5-5)~~	~~Compliance with 6 mg/L TIN limitation to be achieved by December 23, 2007~~
~~8. City of Beaumont recycled water quality improvement plan and schedule~~ ~~a. Submit plan and schedule~~	~~a. 60 days after the TDS 12-month running average effluent quality equals or exceeds 480 mg/L for 3 consecutive months and/or the 12-month running average TIN concentration equals or exceeds 6 mg/L in any month (once facility/operational changes needed to achieve 6 mg/L TIN are in place)~~

~~**Description of Commitment**~~	~~**Compliance Date – as soon as possible, but no later than**~~
~~b. Implement plan and schedule~~	~~b. Upon approval by Regional Board~~
~~9. Remove/reduce the discharge of Beaumont's effluent from the unlined portion of San Timoteo Creek~~ ~~a. Submit proposed plan/schedule~~ ~~b. Implement plan/schedule~~	~~a. June 23, 2005~~ ~~b. Upon Regional Board approval~~

~~A. Description of City of Beaumont, San Timoteo Watershed Authority Commitments~~

~~1. Surface Water Monitoring Program (Table 5-10a, #1)~~

~~The City of Beaumont and the STWMA shall develop and submit for Regional Board approval a surface water monitoring program for San Timoteo, Little San Gorgonio and Noble Creeks at the locations listed in Table 5-10b. The monitoring program must be implemented within 30 days of Regional Board approval of the monitoring plan, and six months of data must be generated prior to the implementation of any changes to the effluent discharge points and before any recycled water is used in the Beaumont or San Timoteo Management Zones.~~

~~At a minimum, the surface water monitoring program shall include the collection of monthly measurements of TDS and nitrogen components at locations in San Timoteo, Little San Gorgonio and Noble Creeks (see Table 5-10b). Data reports shall be submitted to the Regional Board's Executive Officer by April 15, July 15, October 15 and January 15 each year. An annual report summarizing all data collected for the year and evaluating compliance with relevant surface water objectives shall be submitted February 15th of each year.~~

~~2. Groundwater Monitoring Program (Table 5-10a. #2)~~

~~The purpose of the groundwater monitoring program is to identify the effects of the implementation of the Beaumont and San Timoteo Management Zone maximum benefit TDS and nitrate-nitrogen water quality objectives on water levels and water quality within the Beaumont and San Timoteo Management Zones. Prior to discharge of recycled water to the Beaumont and/or San Timoteo Management Zone, the City of Beaumont and the STWMA shall submit to Regional Board for approval a groundwater monitoring program to determine ambient water quality in the Beaumont and San Timoteo Management Zones. The groundwater monitoring program must be implemented within 30 days of approval by the Regional Board.~~

~~An annual report, including all raw data and summarizing the results of the approved groundwater~~

~~monitoring program, shall be submitted to the Regional Board by February 15th of each year.~~

~~3. Desalters and Brine Disposal (Table 5-10a. #3)~~

~~The City of Beaumont and the STWMA shall construct and operate desalting facilities and brine disposal facilities when:~~

~~a. The 5-year running average TDS concentration in recycled water produced at the City of Beaumont wastewater treatment plant exceeds 480 mg/L, or~~

~~b. The volume-weighted TDS concentration in the Beaumont Management Zone equals or exceeds 320 mg/L.~~

~~The construction of these facilities will be in accordance with a plan and schedule submitted by Beaumont/STWMA 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.~~

~~Table 5 – 10b~~

~~Surface Water Monitoring Sites for Monitoring Water Quality and Quantity~~
~~City of Beaumont & San Timoteo Watershed Management Authority~~

~~Site Name~~	~~Discharge~~	~~Owner~~	~~Type~~	~~Discharge~~	~~Monitoring~~		~~Water Quality Monitoring~~		~~Analyses~~
				~~Frequency~~	~~Period~~	~~Frequency~~	~~Period~~		
~~Above confluence With Coopers Cr.~~	~~San Timoteo Creek~~	~~Beaumont & STWMA~~	~~Total Discharge~~	~~Bi-weekly~~	~~Jan-Dec~~	~~Bi-weekly~~	~~Jan-Dec~~	~~TDS, TIN, Physical~~	
~~Near Hinda Sec.35 T2S,R2W~~	~~San Timoteo Creek~~	~~Beaumont & STWMA~~	~~Total Discharge~~	~~Bi-weekly~~	~~Jan-Dec~~	~~Bi-weekly~~	~~Jan-Dec~~	~~TDS, TIN, Physical~~	
~~Above confluence With San Timoteo Creek~~	~~Coopers Creek~~	~~Beaumont & STWMA~~	~~Total Discharge~~	~~Bi-weekly~~	~~Jan-Dec~~	~~Bi-weekly~~	~~Jan-Dec~~	~~TDS, TIN, Physical~~	
~~At Freeway 10~~	~~Little San Gorgonio Cr.~~	~~Beaumont & STWMA~~	~~Total Discharge~~	~~Bi-weekly~~	~~Jan-Dec~~	~~Bi-weekly~~	~~Jan-Dec~~	~~TDS, TIN, Physical~~	
~~At Freeway 10~~	~~Noble Creek~~	~~Beaumont & STWMA~~	~~Total Discharge~~	~~Bi-weekly~~	~~Jan-Dec~~	~~Bi-weekly~~	~~Jan-Dec~~	~~TDS, TIN, Physical~~	
~~Recharged to Beaumont MZ~~	~~State Water Project~~	~~Beaumont & STWMA~~	~~Total Discharge~~	~~Bi-weekly~~	~~Jan-Dec~~	~~Monthly~~	~~Jan-Dec~~	~~TDS, Nitrate-N~~	
~~Recharged to Beaumont MZ~~	~~Storm water~~	~~Beaumont & STWMA~~	~~Total Discharge~~	~~Bi-weekly~~	~~Jan-Dec~~	~~Monthly~~	~~Jan-Dec~~	~~TDS, Nitrate-N~~	

~~4. Non-potable water supply distribution system (Table 5-10a, #4)~~

~~Like YVWD, the City of Beaumont is constructing a non-potable water system that will convey untreated State Project water and recycled water for irrigation within its service area. The intent of blending these sources is to minimize the impact of recycled water use on groundwater quality in the proposed Beaumont and San Timoteo Management Zones. A higher proportion of State Project water will be used in wet, surplus years, while larger amounts of recycled water will be used in dry, deficit years.~~

~~5. Recycled Water Use (Table 5-10a, #5)~~
~~The use of recycled water within the Beaumont Management Zone is a critical component of the City of Beaumont and STWMA water management plan and is necessary to maximize the use of the water resources of the Beaumont area.~~

~~The demonstration of "maximum benefit" and the continued application of the "maximum benefit" objectives depends on the combined recharge (recycled water, imported water, storm water) to the Beaumont Management Zone of a 5-year annual average (running average) TDS concentration of 330 mg/L and a nitrate-nitrogen concentration of 5 mg/L. If recycled water recharge in the San Timoteo Management Zone is pursued, then the application of the "maximum benefit" objectives will depend on the combined recharge to that Zone of 5-year annual average (running average) concentrations of 400 mg/L or less TDS, and 5 mg/L or less nitrate-nitrogen.~~

~~To comply with this requirement, the STWMA member agencies are developing plans to recharge and store State Project water in the proposed Beaumont Management Zone. The Beaumont-Cherry Valley Water District (BCVWD) is developing a new 80-acre groundwater recharge project that will increase storm water recharge in the Beaumont Basin by 4,100 acre-ft/yr. This facility will also be used to recharge State Water project water. The City of Beaumont is also developing storm water recharge in facilities in newly developing areas, which is expected to result in the recharge of an additional 2,400 acre-ft/yr of stormwater runoff.~~

~~Accordingly, the use of recycled water for use or recharge in the Beaumont or San Timoteo Management Zone shall be limited to the amount that can be blended on a volume-weighted basis with other sources of recharge to achieve 5-year running average concentrations less than or equal to the "maximum benefit" objectives for the affected groundwater management zone. The 25% nitrogen loss coefficient will be applied in determining the amount of recharge of other water sources that must be achieved to meet the 5-year running average nitrogen concentrations.~~

~~6. Ambient Groundwater Quality Determination (Table 5-10a, # 6)~~

~~By July 1, 2005, and every three years thereafter, the City of Beaumont and STWMA shall submit a determination of ambient TDS and nitrate-nitrogen quality in the Beaumont and San Timoteo Management Zones. This determination shall be accomplished using methodology consistent with the calculation (20-year running averages) used by the Nitrogen /TDS Task Force to develop the TDS and nitrate-nitrogen "antidegradation" water quality objectives for groundwater management zones within the region [Ref. 1].~~

~~7. Replacement/modification of denitrification facilities (Table 5-10a, #7)~~

~~The City of Beaumont has committed to produce recycled water with a 12-month average TIN concentration of 6 mg/L or less by 2008. This may be accomplished via operational changes, or may require the installation/modification of facilities. This TIN effluent quality is specified in the TIN wasteload allocation (see Table 5-5) and is necessary to assure compliance with the proposed "maximum benefit" nitrate-nitrogen objective for the Beaumont and San Timoteo Management Zones (5 mg/L). An appropriate schedule, not to exceed December 23, 2007 for compliance with this effluent limit will be specified in a revised NPDES permit for the City.~~

~~8. City of Beaumont Wastewater Management (Table 5-10a, #8)~~

~~Beaumont expects to limit the TDS concentration in its effluent to less than or equal to 490 mg/L by using a low TDS source water supply for potable uses, selective desalting of either source water and/or recycled waters, and minimizing the TDS waste increment.~~

~~Within 60 days after the Beaumont 12-month running average concentration for TDS equals or exceeds 480 mg/L for 3 consecutive months, or the 12-month running average TIN concentration equals or exceeds 6 mg/L in any month (once facility/operational changes needed to achieve 6 mg/L TIN are in place), the City of Beaumont shall submit to the Regional Board a plan and time schedule for implementation of measures to insure that the average agency wastewater effluent quality does not exceed 490 mg/L and 6 mg/L for TDS and TIN, respectively. The plan and schedule are to be implemented upon approval by the Regional Board.~~

~~9. Relocation of San Timoteo Creek Discharge (Table 5-10a, #9)~~

~~Like YVWD, Beaumont has established the goal of eliminating its discharge to the unlined reach of San Timoteo Creek by 2008 to minimize the impacts of these discharges on the San Timoteo Management Zone. The STWMP anticipates that Beaumont's recycled water will be almost completely reused within the Beaumont area for landscape irrigation, habitat enhancement, and potentially for groundwater recharge. Like YVWD, Beaumont and STWMA are also considering the export of a portion of Beaumont's surplus recycled water to the San Jacinto basin, where the TDS objectives are higher than those for the Beaumont Management Zone and recycled water demands are greater than supplies. Some limited recycled water discharge to Coopers Creek and thence /San Timoteo Creek may need to be continued to support existing riparian habitat.~~

~~Whole or partial removal of the discharge from the unlined reach of San Timoteo Creek would improve the quality of groundwater in the San Timoteo Management Zone and supplement recycled water supplies available for reuse elsewhere in the service area.~~

~~By June 23, 2005, Beaumont/STWMA shall submit a proposed plan and schedule to remove/reduce the discharge of recycled water to the unlined reach of San Timoteo Creek. The plan and schedule shall be implemented upon Regional Board approval.~~

~~B. Implementation by Regional Board~~

~~1. Revision of City of Beaumont NPDES Permit~~

~~To implement the "maximum benefit" objectives, the Regional Board will revise the NPDES permit for the City of Beaumont wastewater discharge to reflect the commitments described above, as appropriate. This includes the following.~~

~~The discharge limits for TDS and TIN will be specified as an annual volume-weighted average not to exceed 490 mg/L TDS and 6 mg/L TIN. These limits are based on the wasteload allocation shown in Table 5-5. A schedule not to exceed December 23, 2007 for compliance with this TIN limit shall be included in the permit. This schedule will enable Beaumont to make the necessary facility/operational changes. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified and will apply should the Regional Board find that maximum benefit is not demonstrated. These alternative limits are also specified in Table 5-5. Compliance schedules for these alternative limits will be specified in Beaumont's waste discharge requirements, as necessary.~~

~~Beaumont will be required to implement measures to improve effluent quality when the 12-month running average effluent TDS quality equals or exceeds 480 mg/L for 3 consecutive months, and/or when the 12-month running average TIN concentration equals or exceeds 6 mg/L in any month (once the facility/operational changes necessary to assure compliance with the 6 mg/L limit are in place).~~

~~Beaumont's waste discharge requirements will require that recycled water used for recharge shall be limited to the amount that can be blended with other water sources, such as stormwater or imported water, to achieve 5-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the affected management zone (Beaumont or San Timoteo).~~

~~The effluent limits for the City of Beaumont, which establish an upper limit on TDS and TIN concentrations of recycled water discharged in the management zones, are a key part of the maximum benefit demonstration. The cap on effluent TDS and TIN concentrations provides a controlling point for management of TDS and nitrogen water quality. The City of Beaumont has committed to initiate the building of a groundwater desalter and brine disposal line when the TDS in the City's effluent reaches 480 mg/L. Further, the City will immediately implement a salt management program to reduce the salts entering the City's wastewater treatment plant. This salt management program will include: 1) provision of incentives for the removal of on-site regenerative water softeners and the use of off-site regenerative systems; and 2) percolation of State Water Project water into the Beaumont Management Zone when State Water Project water has low TDS. Implementing these measures will assure that the groundwater quality remains at or below the Beaumont management zone objective of 330 mg/L TDS. Maintenance of this ambient groundwater quality is necessary, in turn, to assure that the City's wastewater treatment facility is able to meet the effluent TDS limits. Beaumont Management Zone groundwater is a component of the water supplied to the City and its quality thus has an important effect on the effluent quality. Poor ambient quality will preclude the City from meeting effluent limits without desalting.~~

~~Beaumont will be required to submit a proposed plan and schedule for the removal/reduction of its wastewater discharges from the unlined reach of San Timoteo Creek. Beaumont's revised permit will also reflect the surface and groundwater monitoring program requirements described above. This includes the determination of ambient quality in the San Timoteo and Beaumont Management Zones.~~

~~2. Review of Project Status~~

~~No later than 2005, and every three years thereafter (to coincide with the Regional Board's triennial review process), the Regional Board intends to review the status of the activities planned and executed by the City of Beaumont and STWMA to demonstrate maximum benefit and justify continued implementation of the "maximum benefit" water quality objectives. This review is intended to determine whether the commitments specified above and summarized in Table 5-10a are met. As indicated above, if, as a result of this review, the Regional Board finds that the City of Beaumont and STWMA commitments are not met and after consideration at a duly noticed Public Hearing, the Regional Board will make a finding that the lowering of water quality associated with TDS and nitrate-nitrogen water quality objectives that are higher than historical water quality (the "antidegradation" objectives) is not of maximum benefit to the people of the state. By default, the scientifically derived "antidegradation" objectives for the Beaumont and San Timoteo Management Zones would become effective (230 mg/L TDS and 1.5 mg/L nitrate-nitrogen for the Beaumont Management Zone; 300 mg/L TDS and 2.7 mg/L nitrate-nitrogen for the San Timoteo Management Zone (see Chapter 4).~~

~~Furthermore, in the event that the projects and actions specified in Table 5-10a are not implemented, the Regional Board will require that the City of Beaumont and STWMA mitigate the adverse water quality effects, both on the immediate and downstream waters, that resulted from the recycled water discharges based on the "maximum benefit' objectives. As for CBW/IEUA and YVWD, discharges in excess of the antidegradation objectives that must be considered for mitigation include both recycled water and imported water, at TDS 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.~~

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B. Salt Management – San Timoteo Watershed

The 2004 amendments to the Basin Plan established both "antidegradation" and "maximum benefit" nitrogen and TDS objectives for the Yucaipa, San Timoteo and Beaumont Groundwater Management Zones (see Chapter 4). These Groundwater Management Zones are within the San Timoteo Watershed. The agencies that proposed the "maximum benefit" objectives committed to implement specific programs of projects and actions that were also identified in the 2004 Salt Management Plan incorporated in the Basin Plan. These programs were intended to assure that water quality consistent with the maximum benefit to the people of the state would be maintained with the application of the "maximum benefit" objectives. These commitments included the implementation of surface and groundwater monitoring programs, use of recycled water supplies for non-potable uses and construction and operation of desalting facilities to manage recycled water quality.

In 2014 amendments to the Salt Management Plan, changes to these "maximum benefit" commitments and the parties responsible for them were made based on a regional strategy for the San Timoteo Watershed [Ref 10D] developed and proposed by the Yucaipa Valley Water District, the City of Beaumont, the City of Banning, Beaumont-Cherry Valley Water District and the San Gorgonio Pass Agency. The Regional Strategy initially addressed the Maximum Benefit program in the Beaumont Groundwater Management Zone; however, in order to have a consistent approach throughout the San Timoteo Watershed, the Regional Strategy approach was expanded to the San Timoteo and Yucaipa Groundwater Management Zones. The goal of this strategy is to assure reliable water supplies to meet present and anticipated demands. The "maximum benefit" commitments of each responsible agency are described below and shown in Tables 5-9a (Yucaipa Groundwater Management Zone), 5-9b (San Timoteo Groundwater Management Zone) and 5-9c (Beaumont Groundwater Management Zone). These commitments must be implemented by the responsible agencies in accordance with the prescribed schedule in order to assure that water quality consistent with maximum benefit to the people of the state will be maintained.

The Regional Board will revise waste discharge requirements as appropriate to require implementation of these commitments. For each groundwater management zone, it is assumed that maximum benefit is demonstrated, and that the "maximum benefit" water quality TDS and nitrate-nitrogen objectives apply as long as the commitments and schedule applicable to that groundwater management zone are satisfied. If the Regional Board determines that any or all of the maximum benefit programs are not being implemented effectively in accordance with the schedule(s) shown in Tables 5-9a through 5-9c, then maximum benefit is not demonstrated and the "antidegradation" TDS and nitrate-nitrogen objectives apply. In this situation, the Regional Board will require mitigation for TDS and nitrate-nitrogen discharges to the affected groundwater management zone that took place in excess of limits based on the "antidegradation" objectives for that Groundwater Management Zone. As specified for Chino Basin Watermaster and Inland Empire Utilities Agency (see Section VI.A, above), discharges in excess of the antidegradation objectives that must be considered for mitigation include both recycled water and imported water at TDS 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.

1. Yucaipa Groundwater Management Zone - Yucaipa Valley Water District

The application of the "maximum benefit" objectives established for the Yucaipa Groundwater Management Zone relies on the implementation by the Yucaipa Valley Water District (YVWD) of the specific program of projects and requirements shown in Table 5-9a. These "maximum benefit" commitments were updated and revised in 2014 based on YVWD's ongoing activities to implement the 2004 program and the regional strategy YVWD helped to develop. The projected water demands for the Yucaipa area for the year 2030 require approximately an additional 10,000 AF/Y of supplemental water, which may include State Water Project water, water imported from local sources, recharged storm water and recycled water. The goal is to meet these demands through implementation of the "maximum benefit" commitments, which include enhanced recharge of storm water and recycled water, optimizing direct use of recycled and imported water, desalting of wastewater and/or groundwater and conjunctive use.

In addition to its water supply responsibilities, YVWD provides sewage collection and treatment services within its service area. YVWD operates a wastewater treatment facility that currently discharges tertiary treated wastewater to San Timoteo Creek, Reach 3. This unlined reach of the Creek overlies and recharges the San Timoteo Groundwater Groundwater Management Zone (see 2. San Timoteo Groundwater Management Zone – Yucaipa Valley Water District and the City of Beaumont). In response to commitments in the 2004 Salt Management Plan, YVWD has taken steps to improve recycled water quality, including the installation of new denitrification facilities and the design and construction of the Yucaipa Valley Regional Brineline and reverse osmosis treatment systems at the Wochholz Regional Water Recycling Facility. The desalting facilities are expected to be complete by June 30, 2015.

Dilution of recycled water with water to meet the 370 mg/L TDS concentration and the 5 mg/L nitrate-N concentration recycled water recharge and direct use requirements will be limited to new water recharge such as reverse osmosis permeate (diluent), imported water or new storm water. New storm water recharge is defined as storm water recharged in quantities greater than historical amounts (net increase) over the groundwater management zone since January 1, 2004. January 2004 corresponds to the month and year when the Regional Board authorized the original maximum benefit objectives and compliance commitments by adopting Resolution No. R8-2004-0001.

Table 5-9a

Yucaipa Groundwater Management Zone
Maximum Benefit Commitments

Responsible Agency – Yucaipa Valley Water District

Description of Commitment	Compliance Date – as soon as possible, but no later than
1. Surface Water Monitoring Program a. Submit Draft Revised Monitoring Program to Regional Board b. Implement Revised Monitoring Program c. Submit Draft Revised Monitoring Program(s) (subsequent to that required in "a", above) to Regional Board d. Implement Revised Monitoring Program (s) e. Annual data report submittal	a. *(**30 days from Regional Board approval of BPA)* b. Upon Executive Officer approval c. Every three years, in coordination with ambient water quality determination (#6, below) or more frequently upon notification of the need to do so from the Executive Officer and in accordance with the schedule prescribed by the Executive Officer d. Upon Executive Officer approval e. April 15th
2. Groundwater Monitoring Program a. Submit Draft Revised Monitoring Program(s) b. Implement revised monitoring plan(s) c. Annual data report submittal	a. Every three years, in coordination with ambient water quality determination (#6, below) or more frequently upon notification of the need to do so from the Executive Officer and in accordance with the schedule prescribed by the Executive Officer b. Upon Executive Officer approval c. April 15th
3. YVWD Wastewater and/or Groundwater Desalter(s) and Brine Disposal Facilities Complete construction of Desalter and Brine Disposal Facilities	June 30, 2015 (or as provided by the Executive Officer - see text below)
4. Non-potable water supply Implement non-potable water supply system to serve water for irrigation purposes and/or direct non-potable reuse. The non-potable supply used in the Yucaipa Groundwater Management Zone shall comply with a 10-year running average TDS concentration of 370 mg/L or less, and in addition, for any non-irrigation reuse that has the potential to affect groundwater quality, the nitrate-nitrogen shall be	June 30, 2015

Table 5-9a

Yucaipa Groundwater Management Zone
Maximum Benefit Commitments

Responsible Agency – Yucaipa Valley Water District

Description of Commitment	Compliance Date – as soon as possible, but no later than
less than or equal to the 5 mg/L nitrate-nitrogen "maximum benefit" objective (taking the nitrogen loss coefficient into consideration).	
5. Recycled water recharge The recharge of recycled water in the Yucaipa Groundwater Management Zone shall be limited to the amount that can be blended with other recharge sources or reverse osmosis diluent to achieve a 10-year running average equal to or less than the 370 mg/L "maximum benefit" TDS objective and less than or equal to the 5 mg/L nitrate-nitrogen "maximum benefit" objective (taking the nitrogen loss coefficient into consideration). c. Submit for Executive Officer approval, a proposed methodology for computing baseline and "new" storm water recharge. The methodology will be posted for public comment for 30 days. If there are significant comments received, the Executive Officer will present the report to the Regional Board for its consideration at a regularly scheduled meeting. b.Submit baseline report of amount, locations, and TDS and nitrogen quality of water/imported water recharge per the approved methodology (#5a). c.Submit documentation of amount, TDS and nitrogen quality of all sources of recharge and recharge locations. For storm water recharge used for blending, submit documentation that the recharge is the result of YVWD enhanced recharge facilities/programs	Compliance must be achieved by end of 10th year after initiation of recycled water use/recharge operations. b. 6 months prior to initiation of construction of any basin/other facility to support enhanced storm water/imported water recharge. c. 1 year from Executive Officer approval of methodology. c. Annually, by April 15th, after construction of facilities/implementation of programs to support enhanced recharge.
6. Antidegradation Objectives Salt Mitigation Plan a. Submit a proposed Salt Mitigation Plan and Implementation Schedule b. Implement Salt Mitigation Plan	a. Within *(**1 year from OAL approval of BPA)* b. Within 30 days of Regional Board finding that maximum benefit no longer being achieved
7. Ambient groundwater quality determination	July 1, 2014 and every 3 years thereafter

A. Description of Yucaipa Valley Water District Commitments for the Yucaipa Management Zone

1. Surface Water Monitoring Program (Table 5-9a, # 1)

A surface water monitoring program was developed, approved and implemented in response to the maximum benefit commitments initially incorporated in the Basin Plan in 2004 (Resolution No. R8-2004-0001). The Regional Board approved the Surface Water Monitoring Program in 2005 (Resolution No. R8-2005-0065). Subsequently, the need to revise the monitoring program was recognized and appropriate amendments were adopted in 2014 (Resolution No. R8-2014-0005). These include the requirement that *by (**30 days from Regional Board approval of the BPA**)*, YVWD shall submit a revised surface water monitoring program to the Regional Board for approval. The monitoring program must be implemented upon Executive Officer approval.

It is expected that the monitoring program will be reviewed as it is implemented over time, and that further updates may be necessary. YVWD committed to review the surface water monitoring program (and the groundwater monitoring program, see #2, below) as part of the determination of ambient groundwater quality, which occurs every three years pursuant to Basin Plan requirements (see #6, below). Though considered unlikely, it is possible that more frequent review and revision of these monitoring programs may be necessary. Accordingly, the Basin Plan requires review of the surface water monitoring program in coordination with the ambient quality determination and, further, that draft revised monitoring programs be submitted upon notification by the Regional Board's Executive Officer of the need to do so. The schedule for the submittal will be prescribed by the Executive Officer. Any such revision to the monitoring is to be implemented upon Executive Officer approval.

An annual report summarizing all data collected for the year and evaluating compliance with relevant surface water objectives shall be submitted by April 15th of each year.

2. Groundwater Monitoring Program (Table 5-9a, #2)

In response to the maximum benefit program requirements established in 2004 (Resolution No. R8- 2004-0001), in 2005, YVWD submitted a proposed groundwater monitoring program. The Regional Board approved a groundwater monitoring program to determine ambient water quality in the Yucaipa Groundwater Management Zone (Resolution No. R8-2005-0065). The purpose of the groundwater monitoring program is to identify the effects of the implementation of the Yucaipa Groundwater Management Zone maximum benefit water quality objectives on water levels and water quality within the Yucaipa Groundwater Management Zone. The groundwater monitoring program has been implemented since 2005 and must continue to be implemented.

The existing groundwater monitoring implemented by YVWD to comply with the Maximum Benefit program authorized by the 2004 amendments to the salt management plan shall be continued into the future until a new monitoring plan is approved by the Executive Officer. Any new monitoring plan developed by YVWD shall preserve the geospatial distribution of groundwater wells and the sampling of those wells utilized in the existing Regional Board-approved maximum benefit monitoring program.

As noted above, the groundwater monitoring program will be reviewed as part of regular ambient groundwater quality determinations and may be revised. Once again, more frequent review and revision may be necessary as the monitoring program is implemented over time.

Accordingly, the Basin Plan requires that draft revised monitoring programs be submitted upon notification by the Regional Board's Executive Officer of the need to do so. The schedule for the submittal will be prescribed by the Executive Officer. Any such revision to the monitoring program is to be implemented upon Executive Officer approval.

An annual report, including all raw data and summarizing the results of the approved groundwater monitoring program, shall be submitted to the Regional Board by April 15th of each year.

3. YVWD Wastewater and/or Groundwater Desalter(s) and Brine Disposal (Table 5-9a, #3)

YVWD anticipated that demineralization of groundwater or recycled water would be necessary in the future to protect the Yucaipa Groundwater Management Zone and has constructed desalting and associated brine disposal facilities. YVWD shall ensure that the planned demineralization system is operational by June 30, 2015. The Executive Officer may extend this compliance date upon submittal of compelling evidence that the extension is warranted and would not compromise timely implementation of the other maximum benefit program commitments identified in Table 5-9a.

4. Non-potable Water Supply Distribution System (Table 5-9a, # 4)

A key element of YVWD's water resources management plan is the construction of a non-potable supply system to serve a mix of recycled water, diluent from the Wochholz Regional Water Recycling Facility and un-treated imported water, treated backwash water from the Yucaipa Valley Regional Water Filtration Facility and/or storm water for irrigation uses and other direct non-potable reuse. The intent is to minimize the use of potable water for non-potable uses. For use in the Yucaipa Groundwater Management Zone, YVWD will produce a non-potable supply with a running 10-year average TDS concentration equal to or less than 370 mg/L and, in addition, for any non-irrigation reuse that has the potential to affect groundwater quality, the 10-year running average nitrate-nitrogen concentration shall comply with 6.7 mg/L (taking the 25% nitrogen loss coefficient into account to assure that the "maximum benefit" objective of 5 mg/L will be met). To meet this "maximum benefit" objective, YVWD will blend the recycled water with other water sources or desalt the recycled water.

Compliance with the non-potable water supply TDS and/or nitrate-nitrogen objective shall be measured in the non-potable water system as a weighted 10-year average of all water sources added to that system and used within the Yucaipa Groundwater Management Zone.

As part of the Maximum Benefit Annual Report, YVWD shall report on the TDS and nitrogen quality and quantity of all sources of non-potable water and summarize the annual and 10-year annual weighted TDS and nitrogen average concentrations utilized in the Yucaipa Groundwater Management Zone.

5. Recycled Water Recharge (Table 5-9a, # 5)

The use and recharge of recycled water within the Yucaipa Groundwater Management Zone are necessary to maximize the use of the water resources in the Yucaipa area. The demonstration of "maximum benefit" and the continued application of the "maximum benefit" objectives are contingent on the recharge of recycled water to the Yucaipa Groundwater Management Zone of a 10-year annual average (running average) TDS concentration of 370 mg/L and nitrate-nitrogen concentration of 6.7 mg/L (taking the 25% nitrogen loss coefficient into account to

assure that the "maximum benefit" objective of 5 mg/L will be met). These concentrations may be achieved by desalting or other treatment of the recycled water, and/or by blending the recycled water with other sources, such as imported water, storm water and reverse osmosis permeate diluent.

Compliance with these concentrations shall be measured at the point of discharge(s) to the recharge facility as a weighted average concentration of the recycled water and other sources, if any, used for blending.

As part of the Maximum Benefit Annual Report, YVWD shall report on the TDS and nitrogen quality and quantity of all sources of recharged water and summarize the annual and 10-year running annual weighted TDS and nitrogen average concentrations recharged to the Yucaipa Groundwater Management Zone.

6. Antidegradation Salt Mitigation Plan (Table 5-9a, #6)

Within *(**1 year of approval by OAL of the BPA**)*, YVWD shall submit a Salt Mitigation Plan to mitigate excess salt loading above the antidegradation water quality objectives. The Salt Mitigation Plan shall provide a conceptual framework for mitigation projects should the Regional Board make a finding that the lowering of water quality associated with the "maximum benefit" TDS and nitrate-nitrogen water quality objectives that are higher than historical water quality (the "antidegradation" objectives) is not of maximum benefit to the people of the state. The Salt Mitigation Plan must be implemented within 30 days of a Regional Board finding that maximum benefit is no longer being achieved.

7. Ambient Groundwater Quality Determination (Table 5-9a, # 6)

By July 1, 2014, and every three years thereafter, YVWD shall submit a determination of ambient TDS and nitrate-nitrogen quality in the Yucaipa Groundwater Management Zone. This determination shall be accomplished using methodology consistent with the calculation (20-year running averages) used by the Nitrogen/TDS Task Force to develop the TDS and nitrate-nitrogen "antidegradation" water quality objectives for groundwater Management Zones within the region. [Ref. 1].

B. Implementation by Regional Board

1. Revision to Yucaipa Valley Water District NPDES Permit

To implement the "maximum benefit" objectives, the Regional Board will revise the waste discharge and producer/user reclamation requirements permit for YVWD wastewater discharges to reflect the commitments described above, as appropriate. This includes the following:

For surface water discharges that affect the Yucaipa Groundwater Management Zone discharge limits for TDS and TIN will be specified as an annual volume-weighted average not to exceed 370 mg/L TDS and 6.7 mg/L TIN. These limits are based on the "maximum benefit" objectives of the Yucaipa Groundwater Management Zone shown in Table 4-1 and take the nitrogen loss coefficient into account. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified and will apply should the Regional Board find that maximum benefit is not demonstrated. These alternative objectives are also specified in Table 4-1. Compliance schedules for these alternative limits will be specified in YVWD's waste discharge requirements, as necessary and appropriate.

YVWD's waste discharge and producer/user reclamation requirements will require that the recharge of recycled water shall be limited to the amount that can be blended with other water sources, such as storm water,imported water or reverse osmosis diluent, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Yucaipa Groundwater Management Zone. The use of recycled water for irrigation and other direct re-use purposes in the Yucaipa Groundwater Management Zone shall be limited to the amount that can be blended with other water sources, such as storm water, imported water or reverse osmosis diluent, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Yucaipa Groundwater Management Zone. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified for recycled water recharge and re-use in the Yucaipa Groundwater Management Zone and will apply if the Regional Board finds that the maximum benefit commitments are not met.

2. Review of Project Status

The Regional Board intends to review periodically YVWD's implementation of the maximum benefit program commitments described above and summarized in Table 5-9a. This review is intended to determine whether the commitments are met, and whether the application of the "maximum benefit" objectives continues to be justified. As indicated above, if, as a result of this review, the Regional Board finds that the YVWD commitments are not met, then the Regional Board may make the finding that the "maximum benefit" objectives are not consistent with the maintenance of water quality that is of maximum benefit to the people of the state, and that the more stringent "antidegradation" objectives for the Yucaipa Management Zone (320 mg/L for TDS and 4.2 mg/L for nitrate-nitrogen; see Chapter 4) must apply instead for regulatory purposes. In the event that the Regional Board makes these determinations, the Regional Board will require that the YVWD implement the Salt Mitigation Plan (see commitment # 6) and mitigate the adverse water quality effects, both on the immediate and downstream waters, which resulted from recycled water discharges based on the "maximum benefit" objectives.

2. San Timoteo Groundwater Management Zone – Yucaipa Valley Water District and the City of Beaumont

The application of the "maximum benefit" objectives established for the San Timoteo Groundwater Management Zone relies on the implementation by both the Yucaipa Valley Water District (YVWD) and the City of Beaumont of the specific program of projects and requirements shown in Table 5-9b [Ref. 10D]. Since the Salt Management Plan was amended in 2004 to incorporate "maximum benefit" commitments applicable to the San Timoteo Management Zone, both YVWD and the City of Beaumont have been engaged in implementing those commitments.

As discussed above, YVWD operates a wastewater treatment facility that discharges a portion of its treated effluent to San Timoteo Creek, Reach 3, which overlies and recharges the San Timoteo Groundwater Management Zone. Similarly, the City of Beaumont provides sewage collection and treatment services within its service area, and a portion of the treated wastewater discharged to Reach 3 of San Timoteo Creek, also recharges the San Timoteo Groundwater Management Zone. Surface water discharges by both YVWD and the City affect groundwater quality in the San Timoteo Groundwater Management Zone. Consistent with the 2004 "maximum benefit" commitments, both the District and the City must identify and implement an acceptable plan to address the adverse water quality impacts of their wastewater discharges.

Dilution of recycled water with water to meet the 400 mg/L TDS concentration and the 5 mg/L nitrate-N concentration recycled water recharge and direct use requirements will be limited to new recharge such as reverse osmosis permeate (diluent), imported water or new storm water. New storm water recharge is defined as storm water recharged in quantities greater than historical amounts (net increase) over the groundwater management zone since January 1, 2004. January 2004 corresponds to the month and year when the Regional Board authorized the original maximum benefit objectives and compliance commitments by adopting Resolution No. R8-2004-0001.

Table 5-9b

San Timoteo Groundwater Management Zone
Maximum Benefit Commitments

Responsible Agencies – Yucaipa Valley Water District and the City of Beaumont

Description of Commitment	**Compliance Date – as soon as possible, but no later than**
1. Surface Water Monitoring Program	
a. Submit Draft Revised Monitoring Program to Regional Board	a. *(**30 days from Regional Board approval of BPA)*
b. Implement Revised Monitoring Program	b. Upon Executive Officer approval
c. Submit Draft Revised Monitoring Program(s) (subsequent to that required in "a", above) to Regional Board	c. Every three years, in coordination with ambient water quality determination (#6, below) or more frequently upon notification of the need to do so from the Regional Board Executive Officer and in accordance with the schedule prescribed by the Executive Officer
d. Implement Revised Monitoring Program(s)	d. Upon Executive Officer approval
e. Annual data report submittal	e. April 15th
2. Groundwater Monitoring Program	
a. Submit Draft Revised Monitoring Program(s)	a. Every three years, in coordination with ambient water quality determination (#6, below) or more frequently upon notification of the need to do so from the Regional Board Executive Officer and in accordance with the schedule prescribed by the Executive Officer
b. Implement revised monitoring plan(s)	b. Upon Executive Officer approval
c. Annual data report submittal	c. April 15th
3. YVWD Wastewater and/or Groundwater Desalter(s) and Brine Disposal Facilities	
Complete construction of Desalter and Brine Disposal Facilities	June 30, 2015 (or as provided by the Executive Officer - see text below)

Table 5-9b

San Timoteo Groundwater Management Zone
Maximum Benefit Commitments

Responsible Agencies – Yucaipa Valley Water District and the City of Beaumont

Description of Commitment	Compliance Date – as soon as possible, but no later than
4. City of Beaumont, Wastewater and/or Groundwater Desalter(s) and Brine Disposal Facilities a. Submit detailed plan and schedule for construction of desalter(s) and brine disposal facilities. Facilities are to operational as soon as possible but no later than 5 years from date of Executive Officer approval of plan/schedule or as provided by the Executive Officer (see text below). b. Implement the plan and schedule	a. January 30, 2015 b. Upon Executive Officer approval
5. YVWD, City of Beaumont Non-potable water supply Implement non-potable water supply system to serve water for irrigation purposes and direct non-potable reuse. The non-potable supply used in the San Timoteo Groundwater Management Zone shall comply with a 10-year running average TDS concentration of 400 mg/L or less, and in addition, for any non-irrigation reuse that has the potential to affect groundwater quality, the nitrate-nitrogen shall be less than or equal to the 5 mg/L nitrate-nitrogen "maximum benefit" objective (taking the nitrogen loss coefficient into consideration).	December 31, 2015
6. Recycled water recharge/habitat maintenance discharge The recharge of recycled water in the San Timoteo Groundwater Management Zone or discharge to San Timoteo Creek to maintain the riparian habitat shall be limited to the amount that can be blended with other recharge sources or reverse osmosis diluent to achieve a 10-year running average equal to or less than the 400 mg/L "maximum benefit" TDS objective and less than or equal to the 5 mg/L nitrate-nitrogen "maximum benefit" objective (taking the nitrogen loss coefficient into consideration). a. Submit for Executive Officer approval, a proposed methodology for computing baseline and new storm water recharge. The methodology will be posted for public comment for 30 days. If there are significant comments received, the Executive Officer will present the report to the Regional Board for its consideration at a regularly scheduled meeting. b. Submit baseline report of amount, locations, and TDS and	Compliance must be achieved by end of 10th year after initiation of recycled water use/recharge operations. a. 6 months prior to initiation of construction of anybasin/other facility to support enhanced storm water/imported water recharge. b. 1 year from Executive Officer approval of methodology.

Table 5-9b

San Timoteo Groundwater Management Zone
Maximum Benefit Commitments

Responsible Agencies – Yucaipa Valley Water District and the City of Beaumont

Description of Commitment	Compliance Date – as soon as possible, but no later than
nitrogen quality of "new" storm water/imported water recharge per the approved methodology (#6a). c. Submit documentation of amount, TDS and nitrogen quality of all sources of recharge and recharge locations. For storm water recharge used for blending, submit documentation that the recharge is the result of YVWD and/or City of Beaumont enhanced recharge facilities/programs.	c. Annually, by April 15th, after construction of facilities/implementation of programs to support enhanced recharge.
7. Improve quality of surface water discharges to the San Timoteo Groundwater Management Zone a. Submit plan and schedule to comply with underlying San Timoteo Groundwater Management Zone Maximum Benefit TDS and nitrate-nitrogen water quality objectives b. Implement upon approval	a. *(*30 days from Regional Board approval of BPA*)* b. Upon Executive Officer approval
8. Antidegradation Objectives Salt Mitigation Plan a. Submit a proposed Salt Mitigation Plan and Implementation Schedule b. Implement Salt Mitigation Plan	a. Within *(**1 year from OAL approval of BPA)* b. Within 30 days of Regional Board finding that maximum benefit no longer being achieved
9. Ambient groundwater quality determination	July 1, 2014 and every 3 years thereafter

A. Description of Yucaipa Valley Water District (YVWD), City of Beaumont Commitments for the San Timoteo Management Zone

1. Surface Water Monitoring Program (Table 5-9b, # 1)

A surface water monitoring program was developed, approved and implemented in response to the maximum benefit commitments initially incorporated in the Basin Plan in 2004 (Resolution No. R8-2004-0001). The Regional Board approved the Surface Water Monitoring Program in 2005 (Resolutions No. R8-2005-0065 and R8-2005-0066). Subsequently, the need to revise the monitoring program was recognized and appropriate amendments were adopted in 2014 (Resolution No. R8-2014-0005). These include the requirement that *by (**30 days from*

*Regional Board approval of the BPA***), YVWD and the City of Beaumont shall submit a revised surface water monitoring program to the Regional Board for approval. The monitoring program must be implemented upon Executive Officer approval.

It is expected that the monitoring program will be reviewed as it is implemented over time, and that further updates may be necessary. YVWD and the City of Beaumont committed to review the surface water monitoring program (and the groundwater monitoring program, see #2, below) as part of the determination of ambient groundwater quality, which occurs every three years pursuant to Basin Plan requirements (see #6, below). Though considered unlikely, it is possible that more frequent review and revision of these monitoring programs may be necessary. Accordingly, the Basin Plan requires review of the surface water monitoring program in coordination with the ambient quality determination and, further, that draft revised monitoring programs be submitted upon notification by the Regional Board's Executive Officer of the need to do so. The schedule for the submittal will be prescribed by the Executive Officer. Any such revision to the monitoring is to be implemented upon Executive Officer approval.

An annual report summarizing all data collected for the year and evaluating compliance with relevant surface water objectives shall be submitted by April 15th of each year.

2. Groundwater Monitoring Program (Table 5-9a, #2)

In response to the maximum benefit program requirements established in 2004 (Resolution No. R8- 2004-0001), in 2005, YVWD and the City of Beaumont submitted a proposed groundwater monitoring program. The Regional Board approved a groundwater monitoring program to determine ambient water quality in the Yucaipa and San Timoteo Groundwater Management Zones (Resolutions No. R8-2005-0065 and R8-2005-0066). The purpose of the groundwater monitoring program is to identify the effects of the implementation of the San Timoteo Groundwater Management Zone "maximum benefit" water quality objectives on water levels and water quality within the San Timoteo Groundwater Management Zone. The groundwater monitoring program has been implemented since 2005. YVWD and the City of Beaumont have since installed additional wells as part of revised groundwater monitoring workplans to ensure adequate data are collected for ambient quality determination. The workplans were approved in 2009 (Resolution No. R8-2009-0034 for YVWD and R8-2009-0035 for the City of Beaumont).

The existing groundwater monitoring implemented by the City of Beaumont and YVWD to comply with the Maximum Benefit program authorized by the 2004 amendments to the salt management plan shall be continued into the future on a cooperative basis until a new monitoring plan is approved by the Executive Officer. Any new monitoring plan developed by the City of Beaumont and/or YVWD shall preserve the geospatial distribution of groundwater wells and the sampling of those wells utilized in the existing Regional Board-approved maximum benefit monitoring program.

As noted above, the groundwater monitoring program will be reviewed as part of regular ambient groundwater quality determinations and may be revised. Once again, more frequent review and revision may be necessary as the monitoring program is implemented over time. Accordingly, the Basin Plan requires that draft revised monitoring programs be submitted upon notification by the Regional Board's Executive Officer of the need to do so. The schedule for the submittal will be prescribed by the Executive Officer. Any such revision to the monitoring program is to be implemented upon Executive Officer approval.

An annual report, including all raw data and summarizing the results of the approved

groundwater monitoring program, shall be submitted to the Regional Board by April 15th of each year.

3. YVWD Wastewater and/or Groundwater Desalter(s) and Brine Disposal (Table 5-9b, #3)

YVWD anticipated that demineralization of groundwater or recycled water would be necessary in the future to protect the San Timoteo Groundwater Management Zone and has planned and designed desalting and associated brine disposal facilities. YVWD shall ensure that the planned desalter system is operational by June 30, 2015. The Executive Officer may extend this compliance date upon submittal of compelling evidence that the extension is warranted and would not compromise timely implementation of the other maximum benefit program commitments identified in Table 5-9b.

4. City of Beaumont Wastewater and/or Groundwater Desalter(s) and Brine Disposal (Table 5-9b, #4)

The City of Beaumont shall construct and operate desalting facilities and brine disposal facilities to improve recycled water quality and/or other sources of non-potable supply. A detailed desalter/brine line plan and schedule shall be submitted by January 30, 2015. The schedule shall assure that these facilities are in place within 5 years of Executive Officer approval. The Executive Officer may extend this compliance date upon submittal of compelling evidence that the extension is warranted and would not compromise timely implementation of the other maximum benefit program commitments identified in Table 5-9b.

5. YVWD/City of Beaumont Non-potable Water Supply Distribution System (Table 5-9b, # 5)

Both YVWD and the City of Beaumont are planning for the construction of a non-potable supply system to serve a mix of recycled water, un-treated imported water, reverse osmosis permeate (diluent) and/or storm water for irrigation uses and direct non-potable reuse. The intent is to minimize the use of potable water for non-potable uses. Both YVWD and/or the City of Beaumont will produce a non-potable supply for use within the San Timoteo Groundwater Management Zone with a running ten-year average TDS concentration of 400 mg/L. and, in addition, for any non-irrigation reuse that has the potential to affect groundwater quality, the 10-year running average nitrate-nitrogen concentration shall comply with 6.7 mg/L (taking the 25% nitrogen loss coefficient into account to assure that the “maximum benefit” objective of 5 mg/L will be met). To meet this “maximum benefit” objective, YVWD/City of Beaumont will blend the recycled water with other water sources or desalt the recycled water.

Compliance with the non-potable water supply TDS and/or nitrate-nitrogen objective shall be measured in the non-potable water system as a weighted 10-year average of all water sources added to that system and used within the San Timoteo Groundwater Management Zone.

As part of the Maximum Benefit Annual Report, YVWD and the City of Beaumont shall report on the TDS and nitrogen quality and quantity of all sources of non-potable water and summarize the annual and 10-year annual weighted TDS and nitrogen average concentrations utilized in the San Timoteo Groundwater Management Zone.

6. Recycled Water Recharge/ Riparian Habitat Maintenance Discharge (Table 5-9b, #6)

The use and recharge of recycled water within the San Timoteo Groundwater Management Zone or the discharge of recycled water to San Timoteo Creek to maintain the riparian habitat

and the demonstration of "maximum benefit" are contingent on the recharge/discharge of recycled water as a 10-year annual average (running average) TDS concentration of 400 mg/L and nitrate-nitrogen concentration of 6.7 mg/L (taking the 25% nitrogen loss coefficient into account to assure that the "maximum benefit" objective of 5 mg/L will be met). These concentrations may be achieved by desalting or other treatment of the recycled water, and/or by blending the recycled water with other sources, such as imported water, reverse osmosis permeate (diluent) and/or storm water.

Compliance with these concentrations shall be measured at the point of discharge(s) to the recharge facility or at the end of pipe for a recycled water discharge as a weighted average concentration of the recycled water and other sources, if any, used for blending.

As part of the Maximum Benefit Annual Report, YVWD and/or the City of Beaumont shall report on the TDS and nitrogen quality and quantity of all sources of recharged water and summarize the annual and 10-year annual weighted TDS and nitrogen average concentrations recharged to the San Timoteo Groundwater Management Zone.

7. Improve Surface Water Discharge Quality to the San Timoteo Groundwater Management Zone (Table 5-9b, #7)

YVWD and the City of Beaumont wastewater discharges to the unlined reach of San Timoteo Creek impact the quality of the San Timoteo Groundwater Management Zone. In order to protect underlying groundwater Management Zone quality, by *(*30 days from Regional Board approval of this Basin Plan amendment),* the City of Beaumont and YVWD shall submit a proposed plan and schedule to improve the quality of wastewater discharged to the portion of San Timoteo Creek overlying the San Timoteo Groundwater Management Zone in order to assure compliance with the Groundwater Management Zone "maximum benefit" objectives. A contingency plan and schedule to meet the "antidegradation" objectives for the Groundwater Management Zone shall also be identified and implemented upon a finding by the Regional Board that "maximum benefit" is not demonstrated and that the "antidegradation" objectives apply. The plan must be implemented upon Executive Officer approval.

8. Antidegradation Objectives Salt Mitigation Plan (Table 5-9b, #8)

Within *(**1 year of approval by OAL of the BPA**)*, YVWD and the City of Beaumont shall submit a Salt Mitigation Plan to mitigate excess salt loading above the antidegradation water quality objectives. The Salt Mitigation Plan shall provide a conceptual framework for mitigation projects should the Regional Board make a finding that the lowering of water quality associated with the "maximum benefit" TDS and nitrate-nitrogen water quality objectives that are higher than historical water quality (the "antidegradation" objectives) is not of maximum benefit to the people of the state. The Salt Mitigation Plan must be implemented within 30 days of a Regional Board finding that maximum benefit is no longer being achieved.

9. Ambient Groundwater Quality Determination (Table 5-9b, # 8)

By July 1, 2014, and every three years thereafter, YVWD and the City of Beaumont shall submit a determination of ambient TDS and nitrate-nitrogen quality in the San Timoteo Groundwater Management Zone. This determination shall be accomplished using methodology consistent with the calculation (20-year running averages) used by the Nitrogen/TDS Task Force to develop the TDS and nitrate-nitrogen "antidegradation" water quality objectives for groundwater Management Zones within the region. [Ref. 1].

B. Implementation by Regional Board

1. Revision to Yucaipa Valley Water District NPDES Permit

To implement the "maximum benefit" objectives, the Regional Board will revise the waste discharge requirements and producer/user reclamation requirements for the YVWD wastewater discharges to reflect the commitments described above, as appropriate. This includes the following:

For surface water discharges that affect the San Timoteo Groundwater Management Zone, discharge limits for TDS and TIN will be specified as an annual volume-weighted average at the end of pipe not to exceed 400 mg/L TDS and 6.7 mg/L TIN. These limits are based on the "maximum benefit" objectives of the San Timoteo Groundwater Management Zone shown in Table 4-1 and take the nitrogen loss coefficient into account. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified and will apply should the Regional Board find that maximum benefit is not demonstrated. These alternative objectives are also specified in Table 4-1. Compliance schedules for these alternative limits will be specified in the YVWD's waste discharge requirements, as necessary and appropriate.

YVWD's waste discharge requirements will require that any planned recharge of recycled water shall be limited to the amount that can be blended with other water sources, such as storm water, reverse osmosis permeate (diluent) or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the San Timoteo Groundwater Management Zone. The use of recycled water for irrigation and other direct re-use shall be limited to the amount that can be blended with other water sources, such as storm water, reverse osmosis permeate (diluent), or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the San Timoteo Groundwater Management Zone.

Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified for recycled water recharge and re-use in the San Timoteo Groundwater Management Zone and will apply if the Regional Board finds that the maximum benefit commitments are not met.

2. Revision to the City of Beaumont NPDES Permit

To implement the "maximum benefit" objectives, the Regional Board will revise the waste discharge requirements for the City of Beaumont's wastewater discharges to reflect the commitments described above, as appropriate. This includes the following:

For discharges to the San Timoteo Groundwater Management Zone, discharge limits for TDS and TIN will be specified as an annual volume-weighted average not to exceed 400 mg/L TDS and 6.7 mg/L TIN to be determined at the end of pipe. These limits are based on the "maximum benefit" objectives of the San Timoteo Groundwater Management Zone shown in Table 4-1 and take the nitrogen loss coefficient into account. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified and will apply should the Regional Board find that maximum benefit is not demonstrated. These alternative limits are also specified in Table 4-1. Compliance schedules for these alternative limits will be specified in the City's waste discharge requirements, as necessary and appropriate.

The City of Beaumont's waste discharge requirements will require that any planned recharge of recycled water shall be limited to the amount that can be blended with other water sources, such as storm water or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the San Timoteo Groundwater Management Zone. The use of recycled water for irrigation and other direct reuse shall be limited to the amount that can be blended with other water sources, such as storm water or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the San Timoteo Groundwater Management Zone.

Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified for recycled water recharge and re-use in the San Timoteo Groundwater Management Zone and will apply if the Regional Board finds that the maximum benefit commitments are not met.

3. Review of Project Status

The Regional Board intends to review periodically YVWD's and the City of Beaumont's implementation of the maximum benefit program commitments described above and summarized in Table 5-9b. This review is intended to determine whether the commitments are met, and whether the application of the "maximum benefit" objectives continues to be justified. As indicated above, if, as a result of this review, the Regional Board finds that the YVWD and/or the City of Beaumont commitments are not met, then the Regional Board may make the finding that the "maximum benefit" objectives are not consistent with the maintenance of water quality that is of maximum benefit to the people of the state, and that the more stringent "antidegradation" objectives for the San Timoteo Groundwater Management Zone (300 mg/L for TDS and 2.7 mg/L for nitrate-nitrogen; see Chapter 4) must apply instead for regulatory purposes. In the event that the Regional Board makes these determinations, the Regional Board will require that YVWD and/or the City of Beaumont, either individually or collectively, implement the Salt Mitigation Plan (see commitment # 8) and mitigate the adverse water quality effects, both on the immediate and downstream waters, which resulted from recycled water discharges based on the "maximum benefit" objectives.

3. Beaumont Groundwater Management Zone – Yucaipa Valley Water District, the City of Beaumont, the City of Banning, Beaumont Cherry Valley Water District, San Gorgornio Pass Agency

The application of the "maximum benefit" objectives established for the Beaumont Groundwater Management Zone is contingent on the implementation of commitments by the YVWD, the City of Beaumont, the City of Banning, Beaumont Cherry Valley Water District (BCVWD), and the San Gorgonio Pass Water Agency (Pass Agency) to implement a specific water and wastewater resources management program identified in the Regional Strategy [Ref. 10D]. This program is part of a coordinated effort by these agencies to develop and implement projects that will assure reliable water supplies to meet rapidly increasing demands in this area. The Regional Strategy entails enhanced recharge of native and recycled water, maximizing the direct use of recycled water, optimizing the direct use of imported water, recharge and conjunctive use. The maximum benefit commitments identified in the Regional Strategy for the Beaumont Groundwater Management Zone will be implemented by the City of Beaumont, BCVWD, YVWD, the Pass Agency and the City of Banning. The Regional Strategy forms the basis for the Beaumont Groundwater Management Zone maximum benefit program discussed below.

Wastewater collection and treatment services are provided by the City of Beaumont, the City of Banning, as well as YVWD. The City of Beaumont discharges tertiary treated wastewater to Cooper's Creek, a tributary of San Timoteo Creek, Reach 3. This unlined reach of the Creek overlies and recharges both the Beaumont and San Timoteo Groundwater Management Zones. The City of Banning does not currently utilize recycled water in the Beaumont Management Zone. The City of Banning has selected to participate in the Maximum Benefit program and commitments if it becomes necessary to use recycled water.

Table 5-9c identifies the projects and requirements that must be implemented by the cities of Beaumont and Banning, YVWD, BCVWD, and the Pass Agency to demonstrate that water quality consistent with maximum benefit to the people of the state will be maintained with the applications of the "maximum benefit" objectives. Table 5-9c also specifies an implementation schedule. The Regional Board will revise waste discharge requirements for the City of Beaumont and YVWD, and will work with the Colorado River Water Board to ensure discharges from the City of Banning comply with the maximum benefit requirements. The Regional Board will also consider issuance of waste discharge requirements for BCVWD and take other actions as necessary to require that these commitments be met by the responsible parties.

Dilution of recycled water with water to meet the 330 mg/L TDS concentration and the 5 mg/L nitrate-N concentration recycled water recharge and direct use requirements will be limited to new water recharge such as reverse osmosis permeate (diluent), imported water or new storm water. New storm water recharge is defined as storm water recharged in quantities greater than historical amounts (net increase) over the groundwater management zone since January 1, 2004. January 2004 corresponds to the month and year when the Regional Board authorized the original maximum benefit objectives and compliance commitments by adopting Resolution No. R8-2004-0001.

Table 5-9c
Beaumont Groundwater Management Zone
Maximum Benefit Commitments

Responsible Agencies – Yucaipa Valley Water District, City of Beaumont, City of Banning, San Gorgonio Pass Water Agency, Beaumont Cherry Valley Water District

Description of Commitment	Compliance Date – as soon as possible, but no later than
1. Surface Water Monitoring Program	
a. Submit Draft Revised Monitoring Program to Regional Board	a. *(**30 days from Regional Board approval of BPA)*
b. Implement Revised Monitoring Program	b. Upon Executive Officer approval
c. Submit Draft Revised Monitoring Program(s) (subsequent to that required in "a", above) to Regional Board	c. Every three years, in coordination with ambient water quality determination (#6, below) or more frequently upon notification of the need to do so from the Regional Board Executive Officer and in accordance with the schedule prescribed by the Executive Officer
d. Implement Revised Monitoring Program (s)	d. Upon Executive Officer approval
e. Annual data report submittal	e. April 15th
2. Groundwater Monitoring Program	
a. Submit Draft Revised Monitoring Program(s)	a. Every three years, in coordination with ambient water quality determination (#6, below) or more frequently upon notification of the need to do so from the Regional Board Executive Officer and in accordance with the schedule prescribed by the Executive Officer
b. Implement revised monitoring plan(s)	b. Upon Executive Officer approval
c. Annual data report submittal	c. April 15th
3. YVWD Wastewater and/or Groundwater Desalter(s) and Brine Disposal Facilities	
Complete construction of Desalter and Brine Disposal Facilities	June 30, 2015 (or as provided by the Executive Officer - see text below)
4. City of Beaumont, Wastewater and/or Groundwater Desalter(s) and Brine Disposal Facilities	
a. Submit detailed plan and schedule for construction of desalter(s) and brine disposal facilities. Facilities are to operational as soon as possible but no later than 5 years from date of Executive Officer approval of plan/schedule or as	a. January 30, 2015

Table 5-9c
Beaumont Groundwater Management Zone
Maximum Benefit Commitments

Responsible Agencies – Yucaipa Valley Water District, City of Beaumont, City of Banning, San Gorgonio Pass Water Agency, Beaumont Cherry Valley Water District

Description of Commitment	Compliance Date – as soon as possible, but no later than
provided by the Executive Officer (see text below). b. Implement the plan and schedule	b. Upon Executive Officer approval
5.City of Banning, Wastewater and/or Groundwater Salt Mitigation Plan a. Submit detailed plan and schedule for achieving compliance with the maximum benefit objectives. b. Implement the plan and schedule	a. 6 months prior to initiation of the use recycled water application or recharge b. Upon Executive Officer approval
6. Non-potable recycled water supply YVWD, the City of Beaumont, the City of Banning (at the onset of recycled water use in the Beaumont Basin), BCVWD and the Pass Agency shall implement non-potable water supply systems (utilizing recycled water) to serve water for irrigation purposes and direct non-potable reuse. The non-potable supplies used in the Beaumont Groundwater Management Zone shall comply with a 10-year running average TDS concentration of 330 mg/L or less and, in addition, for any non-irrigation reuse that has the potential to affect groundwater quality, the nitrate-nitrogen shall be less than or equal to the 5 mg/L nitrate-nitrogen "maximum benefit" objective (taking the nitrogen loss coefficient into consideration).	December 31, 2015
7. Recycled water recharge The recharge of recycled water in the Beaumont Groundwater Management Zone shall be limited to the amount that can be blended with other recharge sources or reverse osmosis diluent to achieve a 10-year running average equal to or less than the 330 mg/L "maximum benefit" TDS objective and less than or equal to the 5 mg/L nitrate-nitrogen "maximum benefit" objective (taking the nitrogen loss coefficient into consideration). Submit documentation of amount, TDS and nitrogen quality of all sources of recharge and recharge locations. For any discharger proposing to utilize "new" storm water as a blending source, the following steps must be followed: a. Submit for Executive Officer approval, a report that identifies the methodology used in calculating baseline (2004) and "new" storm water (post 2004) recharge. The report shall identify the amount, locations, TDS and nitrogen quality of storm water recharge and any imported water recharge. Further, the report shall identify the manner in which the enhanced storm	Compliance must be achieved by end of 10th year after initiation of recycled water use/recharge operations. Annually, by April 15th, after initiation construction of facilities/implementation of programs to support enhanced recharge. a. 6 months prior to initiation of construction of any basins/other facilities to support enhanced storm water/imported water recharge

Table 5-9c
Beaumont Groundwater Management Zone
Maximum Benefit Commitments

Responsible Agencies – Yucaipa Valley Water District, City of Beaumont, City of Banning, San Gorgonio Pass Water Agency, Beaumont Cherry Valley Water District

Description of Commitment	Compliance Date – as soon as possible, but no later than
water/imported water recharge facility will assure, individually or with other facilities, compliance with the 330 mg/L TDS and 5 mg/L nitrate-nitrogen 10-year running average "maximum benefit" objective. The report will be posted for public comment for 30 days. If there are significant adverse comments received on this report, the Executive Officer will present the report to the Regional Board for its consideration at a regularly scheduled meeting. b. Submit 5-year plan for implementation of additional storm water recharge facilities to ensure compliance with the 330 mg/L TDS and the 5 mg/L 10-year running average "maximum benefit" objective.	b. Submit as part of each Report of Waste Discharge (ROWD)
8. Antidegradation Salt Mitigation Plan a. Submit a proposed Salt Mitigation Plan and Implementation Schedule b. Implement Salt Mitigation Plan	a. Within *(**1 year from OAL approval of BPA)* b. Within 30 days of Regional Board finding that maximum benefit no longer being achieved
9. Ambient groundwater quality determination	July 1, 2014 and every 3 years thereafter

A. Description of Yucaipa Valley Water District (YVWD), City of Beaumont, Beaumont Cherry Valley Water District (BCVWD), City of Banning, San Gorgonio Pass Water Agency (Pass Agency) Commitments for the Beaumont Management Zone

1. Surface Water Monitoring Program (Table 5-9c, # 1)

A surface water monitoring program was developed, approved and implemented in response to the maximum benefit commitments initially incorporated in the Basin Plan in 2004 (Resolution No. R8-2004-0001). The Regional Board approved the Surface Water Monitoring Program in 2005 (Resolution No. R8-2005-0066). Subsequently, the need to revise the monitoring program was recognized and appropriate amendments were adopted in 2014 (Resolution No. R8-2014-0005). These include the requirement that by *(**30 days from Regional Board approval of the BPA**)*, YVWD BCVWD, the Pass Agency, the City of Beaumont and the City of Banning shall submit a revised surface water monitoring program to the Regional Board for approval. The monitoring program must be implemented upon Executive Officer approval.

It is expected that the monitoring program will be reviewed as it is implemented over time, and that further updates may be necessary. YVWD, the City of Beaumont, the City of Banning, the Pass Agency and BCVWD committed to review the surface water monitoring program (and the groundwater monitoring program, see #2, below) as part of the determination of ambient groundwater quality, which occurs every three years pursuant to Basin Plan requirements (see #6, below). Though considered unlikely, it is possible that more frequent review and revision of these monitoring programs may be necessary. Accordingly, the Basin Plan requires review of the surface water monitoring program in coordination with the ambient quality determination and, further, that draft revised monitoring programs be submitted upon notification by the Regional Board's Executive Officer of the need to do so. The schedule for the submittal will be prescribed by the Executive Officer. Any such revision to the monitoring program is to be implemented upon Executive Officer approval.

An annual report summarizing all data collected for the year and evaluating compliance with relevant surface water objectives shall be submitted by April 15th of each year.

2. Groundwater Monitoring Program (Table 5-9c, #2)

In response to the maximum benefit program requirements established in 2004 (Resolution No. R8- 2004-0001), a proposed groundwater monitoring program was submitted in 2005. The Regional Board approved a groundwater monitoring program to determine ambient water quality in the Beaumont Groundwater Management Zone (Resolution No. R8-2005-0066). The purpose of the Groundwater Monitoring Program is to identify the effects of the implementation of the Beaumont Groundwater Management Zone maximum benefit water quality objectives on water levels and water quality within the Beaumont Groundwater Management Zone. The groundwater monitoring program has been implemented since 2005 and YVWD, the City of Beaumont, the City of Banning, the Pass Agency and BCVWD must continue to implement that program.

The existing groundwater monitoring implemented by the City of Beaumont and YVWD to comply with the Maximum Benefit program authorized by the 2004 amendments to the salt management plan shall be continued into the future on a cooperative basis by all of the maximum benefit partners until a new monitoring plan is approved by the Executive Officer. Any new monitoring plan developed shall preserve the geospatial distribution of groundwater wells and the sampling of those wells utilized in the existing Regional Board-approved maximum benefit monitoring program.

As noted above, the groundwater monitoring program will be reviewed as part of regular ambient groundwater quality determinations and may be revised. Once again, more frequent review and revision may be necessary as the monitoring program is implemented over time. Accordingly, the Basin Plan requires that draft revised monitoring programs be submitted upon notification by the Regional Board's Executive Officer of the need to do so. The schedule for the submittal will be prescribed by the Executive Officer. Any such revision to the monitoring program is to be implemented upon Executive Officer approval.

An annual report, including all raw data and summarizing the results of the approved groundwater monitoring program, shall be submitted to the Regional Board by April 15th of each year.

3. YVWD Wastewater and/or Groundwater Desalter(s) and Brine Disposal (Table 5-9c, #3)

YVWD anticipated that demineralization of groundwater or recycled water would be necessary in the future to protect the Beaumont Groundwater Management Zone and has constructed desalting and associated brine disposal facilities. YVWD shall ensure that the planned desalter system is operational by June 30, 2015. The Regional Board may extend this compliance date upon submittal of compelling evidence that the extension is warranted and would not compromise timely implementation of the other maximum benefit program commitments identified in Table 5-9a.

4. City of Beaumont Wastewater and/or Groundwater Desalter(s) and Brine Disposal (Table 5-9c, #4)

The City of Beaumont shall construct and operate desalting facilities and brine disposal facilities to improve recycled water quality and/or other sources of non-potable supply. A detailed desalter/brine line plan and schedule shall be submitted by January 30, 2015. The schedule shall assure that these facilities are in place within 5 years of Executive Officer approval. The Executive Officer may extend the compliance date upon submittal of compelling evidence that the extension is warranted and would not compromise timely implementation of the other maximum benefit program commitments identified in Table 5-9c.

5. City of Banning Salt Mitigation Plan (Table 5-9c, #5)

The City of Banning shall submit a plan and schedule to improve recycled water quality and/or other sources of non-potable supply. The plan and schedule shall be submitted 6 months prior to the initiation of recycled water application or recharge and must be implemented upon Executive Officer approval.

6. Non-potable Recycled Water Supply Distribution System (Table 5-9c, # 6)

A key element of resources management plan in areas overlying the Beaumont Groundwater Management Zone is the construction of a non-potable supply system to serve a mix of recycled water and un-treated imported water and/or storm water for irrigation uses and direct non-potable reuse. The intent is to minimize the use of potable water for non-potable uses. YVWD, the City of Beaumont and the City of Banning will produce a non-potable supply with a running ten-year average TDS concentration for the Beaumont Groundwater Management Zone of 330 mg/L and, in addition, for any non-irrigation reuse that has the potential to affect groundwater quality, the 10-year running average nitrate-nitrogen concentration shall comply with 6.7 mg/L (taking the 25% nitrogen loss coefficient into account to assure that the “maximum benefit” objective of 5 mg/L will be met). To meet this “maximum benefit” objective, YVWD, the City of Beaumont and the City of Banning, BCVWD and San Gorgonio Pass Agency will blend the recycled water with other water sources or desalt the recycled water as needed.

Compliance with the non-potable water supply TDS and nitrate-nitrogen objective shall be measured in the non-potable water system as a weighted 10-year running average of all water sources added to that system and used within the Beaumont Groundwater Management Zone.

As part of the Maximum Benefit Annual Report, YVWD, BCVWD, the Pass Agency, the City of Beaumont and the City of Banning shall report on the TDS and nitrogen quality and quantity of all sources of non-potable water and summarize the annual and 10-year annual weighted TDS

and nitrogen average concentrations utilized in the Beaumont Groundwater Management Zone.

7. Recycled Water Recharge (Table 5-9c, # 7)

The use and recharge of recycled water within the Beaumont Groundwater Management Zone are necessary to maximize the use of the water resources of the Beaumont area. The demonstration of "maximum benefit" and the continued application of the "maximum benefit" objectives are contingent on the recharge of recycled water to the Beaumont Groundwater Management Zone of a 10-year annual average (running average) TDS concentration of 330 mg/L and nitrate-nitrogen concentration of 6.7 mg/L (taking the 25% nitrogen loss coefficient into account to assure that the "maximum benefit" objective of 5 mg/L will be met). These concentrations may be achieved by desalting or other treatment of the recycled water, and/or by blending the recycled water with other sources, such as imported water and/or storm water.

Compliance with these concentrations shall be measured at the point of discharge(s) to the recharge facility as a weighted average concentration of the recycled water and other sources, if any, used for blending.

As part of the Maximum Benefit Annual Report, YVWD, BCVWD, the Pass Agency, the City of Beaumont and the City of Banning shall report on the TDS and nitrogen quality and quantity of all sources of recharged water and summarize the annual and 10-year annual weighted TDS and nitrogen average concentrations recharged to the Beaumont Groundwater Management Zone.

8. Antidegradation Objectives Salt Mitigation Plan (Table 5-9c, #8)

Within *(**1 year of approval by OAL of the BPA**)*, YVWD, BCVWD, the Pass Agency, the City of Beaumont and the City of Banning shall submit a Salt Mitigation Plan to mitigate excess salt loading above the antidegradation water quality objectives. The Salt Mitigation Plan shall provide a conceptual framework for mitigation projects should the Regional Board make a finding that the lowering of water quality associated with the "maximum benefit" TDS and nitrate-nitrogen water quality objectives that are higher than historical water quality (the "antidegradation" objectives) is not of maximum benefit to the people of the state. The Salt Mitigation Plan must be implemented within 30 days of a Regional Board finding that maximum benefit is no longer being achieved.

9. Ambient Groundwater Quality Determination (Table 5-9c, # 8)

By July 1, 2014, and every three years thereafter, YVWD, BCVWD, the Pass Agency, the City of Beaumont and the City of Banning shall submit a determination of ambient TDS and nitrate-nitrogen quality in the Beaumont Groundwater Management Zone. This determination shall be accomplished using methodology consistent with the calculation (20-year running averages) used by the Nitrogen/TDS Task Force to develop the TDS and nitrate-nitrogen "antidegradation" water quality objectives for groundwater Management Zones within the region. [Ref. 1].

B. Implementation by Regional Board

1. Revision to Yucaipa Valley Water District NPDES Permit

To implement the "maximum benefit" objectives, the Regional Board will revise the waste discharge requirements and producer/user reclamation requirements for the YVWD wastewater discharges to reflect the commitments described above, as appropriate. This includes the following:

For any surface water discharges that affect the Beaumont Groundwater Management Zone, discharge limits for TDS and TIN will be specified as an annual volume-weighted average at the end of pipe not to exceed 330 mg/L TDS and 6.7 mg/L TIN. These limits are based on the "maximum benefit" objectives of the Beaumont Groundwater Management Zone shown in Table 4-1 and take the nitrogen loss coefficient into account. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified and will apply should the Regional Board find that maximum benefit is not demonstrated. These alternative objectives are also specified in Table 4-1. Compliance schedules for these alternative limits will be specified in the YVWD's waste discharge requirements, as necessary and appropriate.

YVWD's waste discharge requirements will require that any planned recharge of recycled water shall be limited to the amount that can be blended with other water sources, such as new storm water or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Beaumont Groundwater Management Zone. The use of recycled water for irrigation and other direct re-use shall be limited to the amount that can be blended with other water sources, such as storm water or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Beaumont Groundwater Management Zone.

Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified for recycled water recharge and re-use in the Beaumont Groundwater Management Zone and will apply if the Regional Board finds that the maximum benefit commitments are not met.

2. Revision to the City of Beaumont NPDES Permit

To implement the "maximum benefit" objectives, the Regional Board will revise the waste discharge requirements and producer/user reclamation requirements for the City of Beaumont wastewater discharges to reflect the commitments described above, as appropriate. This includes the following:

For surface water discharges that affect the Beaumont Groundwater Management Zone, discharge limits for TDS and TIN will be specified as an annual volume-weighted average at the end of pipe not to exceed 330 mg/L TDS and 6.7 mg/L TIN. These limits are based on the "maximum benefit" objectives of the Beaumont Groundwater Management Zone shown in Table 4-1 and take the nitrogen loss coefficient into account. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified and will apply should the Regional Board find that maximum benefit is not demonstrated. These alternative objectives are also specified in Table 4-1. Compliance schedules for these alternative limits will be specified in the City of Beaumont's waste discharge requirements, as necessary and appropriate.

The City of Beaumont's waste discharge requirements will require that any planned recharge of recycled water shall be limited to the amount that can be blended with other water sources, such as storm water or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Beaumont Groundwater Management Zone. The use of recycled water for irrigation and other direct re-use shall be limited to the amount that can be blended with other water sources, such as storm water or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Beaumont Groundwater Management Zone.

Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified for recycled water recharge and re-use in the Beaumont Groundwater Management Zone and will apply if the Regional Board finds that the maximum benefit commitments are not met.

3. Revision of City of Banning NPDES Permit

Discharges from the City of Banning are currently regulated by the Colorado River Water Board. To implement the "maximum benefit" objectives, the Santa Ana Water Board will work with the Colorado River Water Board to revise the NPDES permit for the City of Banning's wastewater discharge to reflect the commitments described below, as appropriate.

For any surface water discharges that affect the Beaumont Groundwater Management Zone, discharge limits for TDS and TIN will be specified as an annual volume-weighted average at the end of pipe not to exceed 330 mg/L TDS and 6.7 mg/L TIN. These limits are based on the "maximum benefit" objectives of the Beaumont Groundwater Management Zone shown in Table 4-1 and take the nitrogen loss coefficient into account. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified and will apply should the Regional Board find that maximum benefit is not demonstrated. These alternative objectives are also specified in Table 4-1. Compliance schedules for these alternative limits will be specified in the City of Banning's waste discharge requirements, as necessary and appropriate.

The City of Banning waste discharge requirements will require that any planned recharge of recycled water shall be limited to the amount that can be blended with other water sources, such as storm water or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Beaumont Groundwater Management Zone. The use of recycled water for irrigation and other direct re-use shall be limited to the amount that can be blended with other water sources, such as storm water or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Beaumont Groundwater Management Zone.

Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified for recycled water recharge and re-use in the Beaumont Groundwater Management Zone and will apply if the Regional Board finds that the maximum benefit commitments are not met.

4. Review of Project Status

The Regional Board intends to review periodically YVWD, the City of Beaumont, the City of

Banning, BCVWD and the Pass Agency's implementation of the maximum benefit program commitments described above and summarized in Table 5-9c. This review is intended to determine whether the commitments are met, and whether the application of the "maximum benefit" objectives continues to be justified. As indicated above, if, as a result of this review, the Regional Board finds that the commitments are not met, then the Regional Board may make the finding that the "maximum benefit" objectives are not consistent with the maintenance of water quality that is of maximum benefit to the people of the state, and that the more stringent "antidegradation" objectives for the Beaumont Groundwater Management Zone (230 mg/L for TDS and 1.5 mg/L for nitrate-nitrogen; see Chapter 4) must apply instead for regulatory purposes. In the event that the Regional Board makes these determinations, the Regional Board will require that YVWD, the City of Beaumont, the City of Banning, BCVWD and the Pass Agency, either individually or collectively, implement the Salt Mitigation Plan (see commitment # 6) and mitigate the adverse water quality effects, both on the immediate and downstream waters, which resulted from recycled water discharges based on the "maximum benefit" objectives.

Page 5-90ff
Insert the following language

Minimum Lot Size Requirements and Exemption Criteria for New Developments Using On-Site Septic Tank-Subsurface Leaching/Percolation Systems

[These Requirements shall sunset no later than May 13, 2018. If a Local Agency Management Plan (LAMP) developed pursuant to the State Water Resources Control Board's Onsite Wastewater Treatment System Policy is approved prior to that date, the LAMP shall supersede these requirements as of the date of approval.]

Page 5-204ff
Update the Chapter 5 references as follows:

REFERENCES:

1. Wildermuth Environmental, Inc., TIN/TDS – Phase 2A of the Santa Ana Watershed, Development of Groundwater Management Zones, Estimation of Historic and Current TDS and Nitrogen Concentrations in Groundwater, Final Technical Memorandum," July 2000.

2. Wildermuth Environmental, Inc., "Santa Ana Watershed Data Collection and Management Program, Final Technical Memorandum," October 2001.

3. Wildermuth Environmental, Inc., "TIN/TDS Study - Phase 2B of the Santa Ana Watershed, Wasteload Allocation Investigation Memorandum," October 2002.

4. Wildermuth Environmental, Inc., Memo to TIN/TDS Task Force, "Transmittal of Final Tables, Figures and CD in Support of Basin Plan Amendments – TIN/TDS Study," October 2002.

5. Wildermuth Environmental, Inc., "June 2003 Addendum TIN/TDS Study – Phase 2B of the Santa Ana Watershed Wasteload Allocation Investigation," July 2003

6. California Regional Water Quality Control Board – Santa Ana Region, "Guidelines for Sewage Disposal from Land Developments," January 1979.

7. State Water Resources Control Board, "Order No. 73-4, Rancho Caballero Decision," April 1972.

8. Department of Water Resources, "Mineral Increases from Municipal Use of Water in the Santa Ana River Basin," Memorandum Report, June 1982.

9. City of Riverside, Memo from Rod Cruze to TIN/TDS Task Force," Nitrogen Loss Assumptions for Reach 3 of the Santa Ana River," April 2002.

10A. ~~California Regional Water Quality Control Board – Santa Ana Region, Staff Report, "Santa Ana River at Prado Dam, Results of Annual Water Quality Sampling for 2002", April 2003. Santa Ana Watershed Project Authority,~~

10B. Chino Basin Watermaster, Letter to Gerard Thibeault, "Chino Basin Watermaster Proposal for New Total Dissolved Solids (TDS) and Nitrogen Water Quality Objectives for the Chino and Cucamonga Basins Based on Maximum Beneficial Use," December 2002.

10C. Chino Basin Watermaster, "Chino Basin Optimum Basin Management Plan," 1999.

10D. ~~Yucaipa Valley Water District, Letter to Gerard Thibeault, "Yucaipa Valley Water District Proposal for New Total Dissolved Solids (TDS) and Total Inorganic Nitrogen Water Quality Objectives for the San Timoteo and Yucaipa Management Zones Based on Maximum Beneficial Use," January 2002.~~ City of Banning, Beaumont Cherry Valley Water District, San Gorgonio Pass Water Agency, Yucaipa Valley Water District, (2011), Proposed Regional Implementation of Maximum Benefit Commitments for the Beaumont Management Zone. Preliminary Draft

10E. San Timoteo Watershed Management Agency, Letter to Gerard Thibeault, "Revised San Timoteo Watershed Management Agency Proposal for New Total Dissolved Solids (TDS) and Total Inorganic Nitrogen Water Quality Objectives for the Beaumont, San Timoteo and Yucaipa Management Zones Based on Maximum Beneficial Use," December 2002 (Revised November 11, 2003).

10F. Daniel B. Stephens & Associates. (2007), Quantification of Nitrogen Removal Under Recycled Water Ponds, Prepared for Eastern Municipal Water District.

ATTACHMENT B

Proposed Revisions to the January 31, 2014 draft
Basin Plan Amendment (released to the public December 17, 2013)

Proposed Basin Plan amendment changes to the January 31, 2014 public released document [released to the public December 17, 2013] are shown as ~~strikeout~~ for deletions and underline for additions

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Chapter 2, Plans and Policies

Page 2-4, Insert under "State Board Policies":

- New and/or revised Statewide Plans and Policies are posted on the State Water Resources Control Board's website at the following link:

  http://www.waterboards.ca.gov/plans_policies/

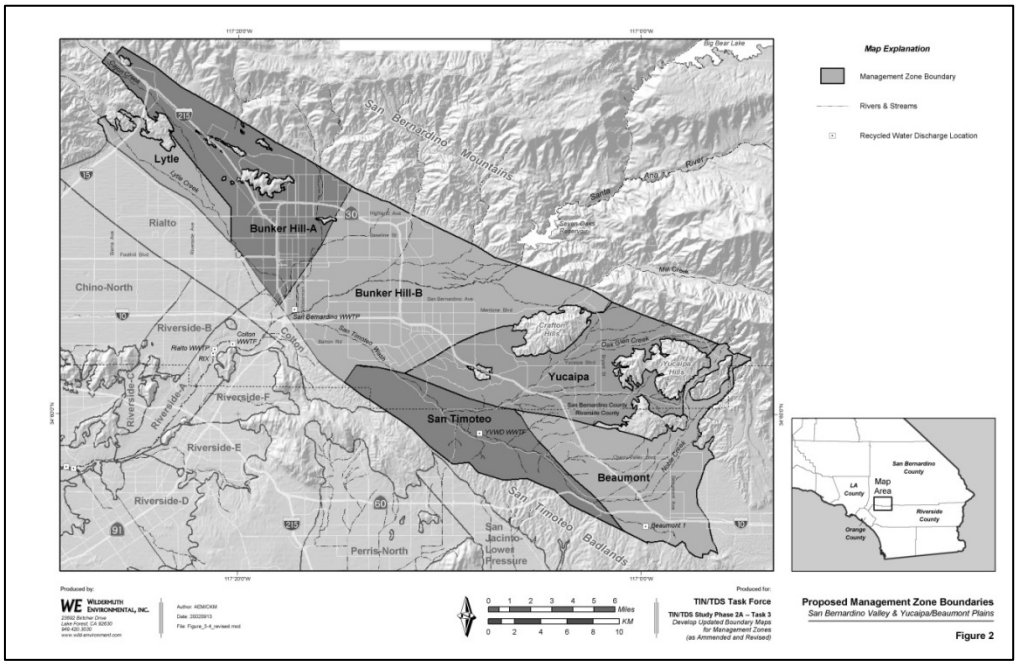
- **Policy on Onsite Wastewater Treatment Systems (Resolution No. 2012-0032, adopted by the State Water Resources Control Board on June 19, 2012)**

  This Policy (OWTS Policy) regulates the siting, design, operation, and maintenance of onsite wastewater treatment systems. The Policy implements the California Water Code, Chapter 4.5, Division 7, § 13290-13291.7 by establishing statewide regulations and standards for permitting onsite wastewater systems. The OWTS Policy specifies criteria for existing, new and replacement onsite systems and establishes a conditional waiver of waste discharge requirements for onsite systems that comply with the Policy.

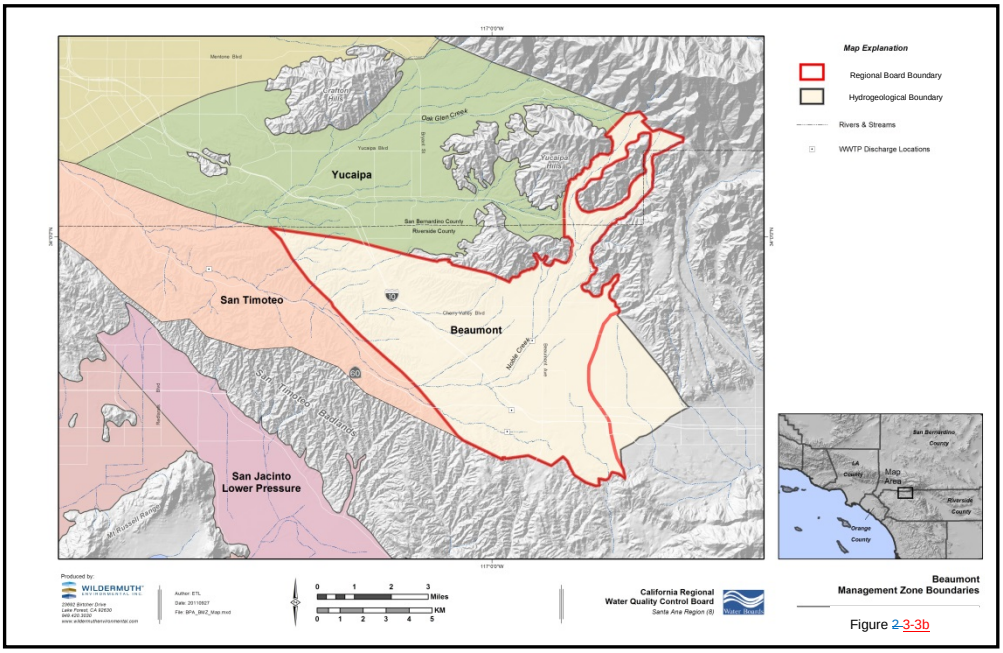
Chapter 3, "Beneficial Uses"

Page 3-12, Figure 3-3; Management Zone Boundaries – San Bernardino Valley and Yucaipa/Beaumont Plains

- ~~Delete existing Basin Plan map~~ Re- number Figure as Figure 3-3a – Legal Boundary



- ~~Insert~~ Number new map as Figure 3-3b – Beaumont Management Zone ~~Legal and~~ Hyrdogeological Boundary~~ies – San Bernardino Valley and Yucaipa/Beaumont Plains~~



- Add the following footnote to the map

  The eastern-most boundary of the Beaumont Management Zone is defined by the jurisdictional boundary, established in the California Water Code, between the Santa Ana Regional Water Board (Santa Ana Water Board) and the Colorado River Regional Water Board (Colorado Water Board). This legal boundary separates the two regions based on topography and surface water drainage. However, with respect to groundwater flow and quality, hydrogeological and water quality data indicate that the Beaumont groundwater management zone actually extends to the east of the current legal boundary, into the jurisdictional domain of the Colorado Water Board. The Santa Ana and Colorado Water Boards will work together to coordinate regulatory actions for discharges that occur in this area of the management zone.

Chapter 5, "Implementation"

Page 5-17ff

II.B.1. Salt Assimilative Capacity
Some waters in the Region have assimilative capacity for additions of TDS and/or nitrogen; that is, wastewaters with higher TDS/nitrogen concentrations than the receiving waters are diluted sufficiently by natural processes, including rainfall or recharge, such that the TDS and nitrogen objectives of the receiving waters are met. The amount of assimilative capacity, if any, varies depending on the individual characteristics of the waterbody in question and must be reevaluated over time.

The 2004 adoption of new groundwater management zone boundaries (Chapter 3) and new TDS and nitrate-nitrogen objectives for these management zones (Chapter 4), pursuant to the work of the Nitrogen/TDS Task Force, necessitated the re-evaluation of the assimilative capacity findings initially incorporated in the 1995 Basin Plan. To conduct this assessment, the Nitrogen-TDS study consultant calculated current ambient TDS and nitrate-nitrogen water quality using the same methods and protocols as were used in the calculation of historical ambient quality (see Chapter 4). The analysis focused on representing current water quality as a 20-year average for the period from 1978 through 1997. [Ref. 1]. For each management zone, current TDS and nitrate-nitrogen water quality were compared to water quality objectives (historical water quality)[1]. Assimilative capacity was also assessed relative to the "maximum benefit" objectives established for certain management zones. If the current quality of a management zone is the same as or poorer than the specified water quality objectives, then that management zone does not have assimilative capacity. If the current quality is better than the specified water quality objectives, then that management zone has assimilative capacity. The difference between the objectives and current quality is the amount of assimilative capacity available.

Since adoption of the 2004 Basin Plan amendment and per Basin Plan requirements, ambient quality and assimilative capacity findings have been, and will continue to be, updated every three years. The updated findings of ambient quality and assimilative capacity will be posted on the Regional Board's web-site and will be used for regulatory purposes.

[section discussion continues with no further revisions]

[1] As noted in Chapter 4, ammonia-nitrogen and nitrite-nitrogen data were also included in the analysis, where available. This occurred for a very limited number of cases and ammonia-nitrogen and nitrite-nitrogen concentrations were insignificant.

Page 5-25ff

3. Nitrogen Loss Coefficient

The City of Riverside presented data to the Task Force regarding nitrogen transformation and losses associated with wetlands. These data support a nitrogen loss coefficient of 50%, rather than 25%, for the lower portions of Reach 3 of the Santa Ana River that overlie the Chino South groundwater management zone. [Ref. 9]. In fact, the data indicate that nitrogen losses from wetlands in this part of Reach 3 can be greater than 90%. However, given the limited database, the Task Force again recommended a conservative approach, i.e., 50% in this area, with confirmatory monitoring.

Eastern Municipal Water District also presented data that support a 60% nitrogen loss coefficient in the San Jacinto Basin [Ref 10F]. This 60% nitrogen loss is only applicable to discharges to the following management zones that overlie the San Jacinto Basin: Perris North, Perris South, San Jacinto Lower Pressure, San Jacinto Upper Pressure, Lakeview-Hemet North, Menifee, Canyon and Hemet South.

Page 5-27ff

4. TDS and Nitrogen Wasteload Allocations for the Santa Ana River

NOTE : Based on comments received, staff IS NOT proposing any changes to the wasteload allocation section of the Basin Plan; therefore, the strikeout/underline to this section reflects the original Basin Plan language as incorporated in 2004.

Wasteload allocations for regulating discharges of TDS and total inorganic nitrogen (TIN) to the Santa Ana River, and thence to groundwater management zones recharged by the River, are an important component of salt management for the Santa Ana Basin. As described earlier, the Santa Ana River is a significant source of recharge to groundwater management zones underlying the River and, downstream, to the Orange County groundwater basin. The quality of the River thus has a significant effect on the quality of the Region's groundwater, which is used by more than 5 million people. Control of River quality is appropriately one of the Regional Board's highest priorities.

Sampling and modeling analyses conducted in the 1980's and early 1990's indicated that the TDS and total nitrogen water quality objectives for the Santa Ana River were being violated or were in danger of being violated. Under the Clean Water Act (Section 303(d)(1)(c); 33 USC 466 *et seq*.), violations of water quality objectives for surface waters must be addressed by the calculation of the maximum wasteloads that can be discharged to achieve and maintain compliance. Accordingly, TDS and nitrogen wasteload allocations were developed and included in the 1983 Basin Plan. The nitrogen wasteload allocation was updated in 1991; an updated TDS wasteload allocated was included in the 1995 Basin Plan when it was adopted and approved in 1994/1995.

The wasteload allocations distribute a share of the total TDS and TIN wasteloads to each of the discharges to the River or its tributaries. The allocations are implemented principally through TDS and nitrogen limits in waste discharge requirements issued to municipal wastewater treatment facilities (Publicly Owned Treatment Works or POTWs) that discharge to the River, either directly or indirectly[2]. Nonpoint source inputs of TDS and nitrogen to the River are also considered in the development of these wasteload allocations. Controls on these inputs are more difficult to identify and achieve and may be addressed through the areawide stormwater permits issued to the counties by the Regional Board or through other programs. For example, the Orange County Water District has constructed and operates more than 400 acres of wetlands ponds in the Prado Basin Management Zone to remove nitrogen in flows diverted from, and then returned to, the Santa Ana River.

[2] With some exceptions that may result from groundwater pumping practices, the ground and surface waters in the upper Santa Ana Basin (upstream of Prado Dam) eventually enter the Santa Ana River and flow through Prado Dam. Discharges to these waters will therefore eventually affect the quality of the River and must be regulated so as to protect both the immediate receiving waters and other affected waters, including the River.

Because of the implementation of these wasteload allocations, the Orange County Water District wetlands and other measures, the TDS and TIN water quality objectives for the Santa Ana River at Prado Dam are no longer being violated, as shown by annual sampling of the River at the Dam by Regional Board staff [Ref. 10A]. However, as part of the Nitrogen/TDS Task Force studies to update the TDS/nitrogen management plan for the Santa Ana Basin, a review of the TDS and TIN wasteload allocations initially contained in this Basin Plan was conducted. In part, this review was necessary in light of the new groundwater management zones and TDS and nitrate-nitrogen objectives for those zones recommended by the N/TDS Task Force (and now incorporated in Chapters 3 and 4). The wasteload allocations were evaluated and revised to ensure that the POTW discharges would assure compliance with established surface water objectives and would not cause or contribute to violation of the groundwater management zone objectives. The Task Force members also recognized that this evaluation was necessary to determine the economic implications of assuring conformance with the new management zone objectives. Economics is one of the factors that must be considered when establishing new objectives (Water Code Section 13241).

WEI performed the wasteload allocation analysis for both TDS and TIN [Ref. 3, 5], In contrast to previous wasteload allocation work, the QUAL-2e model was not used for this analysis. Further, the Basin Planning Procedure (BPP) was not used to provide relevant groundwater data. Instead, WEI developed a projection tool using a surface water flow/quality model and a continuous-flow stirred-tank reactor (CFSTR) model for TDS and TIN. The surface water Waste Load Allocation Model (WLAM) is organized into two major components – RUNOFF (RU) and ROUTER (RO). RU computes runoff from the land surface and RO routes the runoff estimated with RU through the drainage system in the upper Santa Ana watershed. Both the RU and RO models contain hydrologic, hydraulic and water quality components.

To ensure that all hydrologic regimes were taken into account, hydrologic and land use data from 1950 through 1999 were used in the analysis. The analysis took into account the TDS and nitrogen quality of wastewater discharges, precipitation and overland runoff, instream flows and groundwater. Off-stream and in-stream percolation rates, rising groundwater quantity and quality, and the 25% and 50% nitrogen loss coefficients described in the preceding section were also factored into the analysis. The purpose of the modeling exercise was to estimate discharge, TDS and TIN concentrations in the Santa Ana River and tributaries and in stream bed recharge. These data were then compared to relevant surface and groundwater quality objectives to determine whether changes in TDS and TIN regulation were necessary.

Discharges from POTWs to the Santa Ana River or its tributaries were the focus of the analysis. POTW discharges to percolation ponds were not considered. The wasteload allocation analysis assumed, correctly, that these direct groundwater discharges will be regulated pursuant to the management zone objectives, findings of assimilative capacity and nitrogen loss coefficients identified in Chapter 4 and earlier in this Chapter.

The surface waters evaluated included the Santa Ana River, Reaches 3 and 4, Chino Creek, Cucamonga/Mill Creek and San Timoteo Creek. Management zones that are directly under the influence of these surface waters and that receive wastewater discharges were evaluated. These

included the San Timoteo, Riverside A, Chino South, and Orange County Management Zones[3]. In addition, wastewater discharges to the Prado Basin Management Zone were also evaluated.

WEI performed three model evaluations in order to assess wasteload allocation scenarios through the year 2010. These included a "baseline plan" and two alternative plans ("2010-A" and "2010-B"). The baseline plan generally assumed the TDS and TIN limits and design flows for POTWs specified in waste discharge requirements as of 2001. These limits implemented the wasteload allocations specified in the 1995 Basin Plan when it was approved in 1995. A TDS limit of 550 mg/L was assumed for the Rapid Infiltration and Extraction Facility (RIX) and the analysis assumed a 540 mg/L TDS for the City of Beaumont. The baseline plan also assumed reclamation activities at the level specified in the 1995 Basin Plan, when it was approved. The purpose of the baseline plan assessment was to provide an accurate basis of comparison for the results of evaluation of the two alternative plans. For alternative 2010-A, it was generally assumed that year 2001 discharge effluent limits for TDS and TIN applied to POTW discharges, but projected year 2010 surface water discharge amounts were applied. TDS limits of 550 mg/L and 540 mg/L were again assumed for RIX and the City of Beaumont discharges. The same limited reclamation and reuse included in the baseline plan was assumed (see Table 5-7 in Section III.B.5.). For alternative 2010-B, POTW discharges were also generally limited to the 2001 TDS and TIN effluent limits (RIX was again held to 550 mg/L and Beaumont to 540 mg/L). However, in this case, large increases in wastewater recycling and reuse were assumed (Table 5-7), resulting in the reduced surface water discharges projected for 2010.

Analysis of the model results demonstrated that the TDS and nitrogen objectives of affected surface waters would be met and that water quality consistent with the groundwater management zone objectives would be achieved under both alternatives. It is likely that water supply and wastewater agencies will implement reclamation projects with volumes that are in the range of the two alternatives. The wasteload allocations would be protective throughout the range of surface water discharges identified. The year 2010 flow values are not intended as limits on POTW flows; rather, these flows were derived from population assumptions and agency estimates and are used in the models for quality projections. Surface water discharges significantly different than those projected will necessitate additional model analyses to confirm the propriety of the allocations.

The wasteload allocations for TDS and TIN are specified in Table 5-5. Allocations based on the 2010-A and 2010-B alternatives are shown for both TDS and TIN to reflect the expected differences in surface water discharge flows that would result from variations in the amount of wastewater recycling actually accomplished in the Region. As shown in this Table, irrespective of these differences, the TDS and TIN allocations remain the same.

It is essential to point out that the wasteload allocations in Table 5-5 will be not be used to specify TDS and TIN effluent limitations for wastewater recycling (reuse for irrigation) and recharge by the listed POTWs, but will be applied only to the surface water discharges by these

[3] The City of Beaumont discharges to Coopers Creek in a subunit of the Beaumont Management Zone. However, for analytical and regulatory purposes, it is considered a discharge to the San Timoteo Management Zone since it enters that Management Zone essentially immediately. Recharge of wastewater discharges by YVWD and Beaumont in downgradient management zones that may be affected by surface water discharges (e.g., Bunker Hill B, Colton), is not expected to be significant. Therefore, these management zones were not evaluated as part of the wasteload allocation analysis.

POTWs to the Santa Ana River and its tributaries. TDS and TIN limitations for wastewater recycling and recharge by these POTWs will be based on the water quality objectives for affected groundwater management zones or, where appropriate, surface waters. These limitations are likely to be different than the wasteload allocations specified in Table 5-5.

~~The wasteload allocations for TDS (and TIN discharges) that are specified in the 2004 Basin Plan were developed to address the effects of discharges on the Santa Ana River and underlying groundwater. For Yucaipa Valley Water District (YVWD) and the City of Beaumont, both with discharge to San Timoteo Creek, the best available evidence demonstrates that these discharges do not reach the Santa Ana River, apart from extreme wet weather events, and thus have no appreciable effect on River. Therefore, the 2014 amendments to the Basin Plan deleted the wasteload allocation assigned to YVWD and the City of Beaumont. For these POTWs, the regulatory approach is to apply TDS limits that assure protection of the groundwater management zones affected by the discharges.~~

For most dischargers, the allocations specified in Table 5-5 are the same as those specified in the prior 1995 Basin Plan TDS and TIN wasteload allocations. However, for certain dischargers, two sets of TDS and TIN wasteload allocations are shown in Table 5-5. One set is based on the assumption that the "maximum benefit" objectives defined in Chapter 4 for the applicable groundwater management zones are in effect. The other set of wasteload allocations applies if maximum benefit is not demonstrated and the antidegradation objectives for these management zones are therefore in effect. Maximum benefit implementation is described in Section VI. of this Chapter.

In addition, in contrast to the prior wasteload allocations, a single wasteload allocation for TDS and TIN that would be applied on a flow-weighted average basis to all of the treatment plants operated by the Inland Empire Utilities Agency as a whole is specified. These allocations are based on the water quality objectives for Chino Creek, Reach 1B (550 mg/L TDS and 8 mg/L TIN), to which the IEUA discharges occur, directly or indirectly. As described in Section VI, IEUA proposes to implement a "maximum benefit" program to support the implementation of the "maximum benefit" TDS and nitrate-nitrogen objectives for the Chino North and Cucamonga Management Zones. Separate "maximum benefit" and "antidegradation" wasteload allocations are not necessary for IEUA, as they are for YVWD and Beaumont. This is because the IEUA wasteload allocations are based solely on the Chino Creek objectives and are not contingent on "maximum benefit" objectives or implementation. The IEUA surface water discharges do not affect the groundwater management zones for which "maximum benefit" objectives are to be implemented.

Finally, the TDS wasteload allocation for the RIX facility is less stringent (550 mg/L) than the prior wasteload allocation. The new allocation will assure beneficial use protection and will not result in a significant lowering of water quality. As such, it is consistent with antidegradation requirements. Given this, the less stringent effluent limitation can be specified pursuant to the exception to the prohibition against backsliding established in the Clean Water Act, Section 303(d)(4)(a).

In most cases, the surface water discharges identified in Table 5-5 will affect or have the potential to affect groundwater management zones without assimilative capacity for TDS and/or nitrogen. As discussed earlier in this section, the lack of assimilative capacity normally dictates the application of the water quality objectives of the affected receiving waters as the appropriate waste discharge limitations. However, as shown in Table 5-5, the TIN and, in some cases, TDS wasteload allocations for these discharges exceed the objectives for these management zones.

This is because the wasteload allocation analysis conducted by WEI demonstrated that POTW discharges at these higher-than-objective levels will not result in violations of the TDS and nitrate-nitrogen objectives of the affected management zones, or surface waters. Accordingly, these wasteload allocations will be used for surface water discharge regulatory purposes, rather than the underlying groundwater management zone objectives. If the extensive monitoring program to be conducted by the dischargers (see Salt Management Plan – Monitoring Program Requirements, below) indicates that this strategy is not effective, then this regulatory approach will be revisited and revised accordingly.

Table 5-5

Alternative Wasteload Allocations through 2010
based on "Maximum Benefit" or "Antidegradation" Water Quality[1]

Publicly Owned Treatment Works (POTW)	**Alternative 2010A – Reclamation in 1995 Basin Plan**			**Alternative 2010B – Reclamation Plans Advocated by POTWs/others**		
	Surface Water Discharge (MGD)	**TDS (mg/L)**	**TIN (mg/L)**	**Surface Water Discharge (MGD)**	**TDS (mg/L)**	**TIN (mg/L)**
Beaumont – "max benefit" [2]	2.3	490	6.0	1.0	490	6.0
Beaumont – "antideg" [2, 3]	2.3	320[3]	4.1[3]	1.0	320[3]	4.1[3]
YVWD – Wochholz – "max benefit"	5.7	540	6.0	0.0	540	6.0
YVWD – Wochholz – "antideg" [3]	5.7	320[3]	4.1[3]	0.0	320[3]	4.1[3]
Rialto	12.0	490	10.0	10.0	490	10.0
RIX	49.4	550	10.0	28.2	550	10.0
Riverside Regional WQCP	35.0	650	13.0	26.1	650	13.0
Western Riverside Co. WWTP	4.4	625	10.0	3.3	625	10.0
EMWD[~~4~~]	43	650	10.0	6.0	650	10.0
EVMWD – Lake Elsinore Regional	7.2	700	13.0	2.0	700	13.0
Lee Lake WRF	1.6	650	13.0	1.6	650	13.0
Corona WWTP # 1	3.6	700	10.0	2.0	700	10.0
Corona WWTP # 2	0.2	700	10.0	0.5	700	10.0
Corona WWTP # 3	2.0	700	10.0	0.5	700	10.0
IEUA Facilities [5]	80.0	550	8.0	37.4	550	8.0

1. "Antidegradation" wasteload allocation is the default allocation if the Regional Board determines that "maximum benefit" commitments are not being met.
2. Beaumont discharges to Coopers Creek, a tributary of San Timoteo Creek, Reach 4, it is a *de facto* discharge to San Timoteo Creek/San Timoteo Management Zone.
3. "Antidegradation" wasteload allocations for City of Beaumont and YVWD based on additional model analysis performed by WEI (WEI, October 2002).

~~2.~~4. EMWD discharges are expected to occur only during periods of wet weather.

~~3.~~5. IEUA facilities include the RP#1, Carbon Canyon WRP, RP#4 and RP#5; these facilities are to be regulated as a bubble (see text).

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5. Wastewater Reclamation

Wastewater is presently being reclaimed in the Santa Ana Watershed in a number of different ways:

3. Groundwater Recharge by Percolation

This type of reclamation is common throughout the Region. Most wastewater treatment plants that do not discharge directly to the River discharge their effluent to percolation ponds. All of the treated wastewater in the upper Santa Ana Basin that is not directly reclaimed for commercial agricultural and landscape irrigation purposes, or discharged directly to the Santa Ana River, is returned to local or downstream groundwater management zones by percolation. In Orange County, reclaimed water is used for greenbelt and landscape irrigation, and injected into coastal aquifers to control sea water intrusion.

Significant additional reclamation activities are planned in the Region. The Chino Basin Watermaster, Inland Empire Utilities Agency, Yucaipa Valley Water District, the City of Beaumont and the City of Banning propose to implement extensive groundwater recharge projects using recycled water. To accommodate these projects and other water and wastewater management strategies, these agencies have made the requisite demonstrations necessary to support the "maximum benefit" TDS and nitrate-nitrogen water quality objectives specified in this Plan for certain groundwater management zones (see Chapter 4). The recharge projects will provide reliable sources of additional water supply needed to support expected development within the agencies' areas of jurisdiction. These agencies' "maximum benefit" programs are described in detail in Section VI. of this Chapter.

Significant additional reclamation activities are planned in the Region. The Chino Basin Watermaster, Inland Empire Utilities Agency, Yucaipa Valley Water District, the City of Beaumont and the City of Banning propose to implement extensive groundwater recharge projects using recycled water. To accommodate these projects and other water and wastewater management strategies, these agencies have made the requisite demonstrations necessary to support the "maximum benefit" TDS and nitrate-nitrogen water quality objectives specified in this Plan for certain groundwater management zones (see Chapter 4). The recharge projects will provide reliable sources of additional water supply needed to support expected development within the agencies' areas of jurisdiction. These agencies' "maximum benefit" programs are described in detail in Section VI. of this Chapter.

The ~~construction of~~ ~~the~~ Yucaipa Valley Regional Brine line and ~~installation of~~ a reverse osmosis facility ~~at the Water Purification Facility~~ located at the Wochholz Regional Water Recycling Facility will facilitate ~~a~~ groundwater replenishment reuse ~~project~~ in the upper groundwater management zones ~~in~~of the Santa Ana Watershed. Treated wastewater will receive extensive advanced treatment, including microfiltration, reverse osmosis and disinfection using ultraviolet light. The recharge of recycled water will enhance both the quality of and quantity of groundwater resources, the major source of water supply in the area.

draft

In Orange County, significant reclamation activities include the implementation of the Groundwater Replenishment System, a joint effort of the Orange County Water District and Orange County Sanitation District. Treated wastewater provided by the Sanitation District ~~will~~ receives extensive advanced treatment, including microfiltration, reverse osmosis, and disinfection using ultraviolet light and hydrogen peroxide. In the first phase of the project, approximately 70, 000 acre-feet per ear of highly treated recycled water will be produced and distributed to groundwater recharge facilities and to injection wells used to maintain a seawater intrusion barrier. The System will enhance both the quality and quantity of groundwater resources, the major source of water supply in the area. It will reduce the need for imported water and prevent, or at least delay, the need for an additional ocean outfall for disposal of the wastewater treated by the Sanitation District. Implementation of the GWR System -Operation of Phase 1 began in 2008. Future phases to expand the capacity of the GWR System are planned.

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V. Other Projects and Programs

In addition to the regulatory efforts of the Regional Board described in the preceding section, water and wastewater purveyors and other parties in the watershed have implemented, and propose to implement, facilities and programs designed to address salt problems in the groundwater of the Region. These include the construction of brine lines ~~and~~ groundwater desalters, recycled water demineralization systems, implementation of programs to enhance the recharge of high quality ~~stormwater~~storm water and imported water, where available, and re-injection of recycled water to maintain salt water intrusion barriers in coastal areas. These projects and programs are motivated by the need to protect and augment water supplies, as well as to facilitate compliance with waste discharge requirements.

A. Brine Lines

There are two brine line systems in the Region, the Inland Empire Brine Line, formerly known as the Santa Ana Regional Interceptor (SARI), and the older Chino Basin Non-Reclaimable Line (NRL). These lines are used to transport brine wastes out of the basin for treatment and disposal to the ocean. They are a significant part of industrial waste management and essential for operation of desalters in the upper watersheds.

1. Inland Empire Brine Line

The Inland Empire Brine Line (Brine Line) was constructed and is owned by SAWPA. It is approximately 93 miles of 16 inch to 84 inch pipeline connected to the Orange County Sanitation District treatment facilities. SAWPA owns capacity rights in SARI downstream of Prado Dam. The line extends from the Orange County Line near Prado Dam northeast to the San Bernardino area. The Brine Line has been extended southerly to serve the San Jacinto Watershed. Brine Line, Reach 5 extends up the Temescal Canyon from the City of Corona to the Eastern Municipal Water District (EMWD) brine line terminus in the Lake Elsinore area. EMWD's Menifee Desalter and other high salinity discharges from EMWD and Western Municipal Water District now have access to the brine line.

The Brine Line, Reach IVE has been extended to the east about 15 miles from the City of San Bernardino to Yucaipa Water District's Wochholz Regional Water Recycling Facility. The Brine Line will be utilized by Yucaipa Valley Water District and the Mountainview Power Plant for brine disposal.

2. Chino Basin Non-Reclaimable Waste Line

The Chino Basin Non-Reclaimable Waste Line (NRWL) is connected to the Los Angeles County Sanitation District sewer system in the Pomona area. The NRWL, which is owned and operated by Inland Empire Utilities Agency, exports non-reclaimable industrial wastes and brine from the Chino Basin. It extends eastward from the Los Angeles County Line to the City of Fontana. It was originally built to serve industries including the Kaiser Steel Company and Southern California Edison Power Plants.

B. Groundwater Desalters

The studies leading to the development of the TDS/Nitrogen management plan included in this Basin Plan when it was approved in 1995 demonstrated that it was not realistic to achieve compliance with all the nitrogen and TDS objectives for the groundwater subbasins then identified within the Region. Long-term historic land use practices, particularly agriculture, have left an enormous legacy of salts that are now in the unsaturated soils overlying the groundwater subbasins (now, newly defined groundwater management zones). A significant amount of these salts will, over time, degrade groundwater quality. The programs of groundwater extraction, treatment, and replenishment needed to completely address these historic salt loads were shown to far exceed the resources available to implement them.

While the boundaries of the groundwater management zones have been revised and new TDS and nitrate-nitrogen water quality objectives established, the salt legacy problem remains. The construction and operation of groundwater desalters to extract and treat poor quality groundwater continues to be an essential component of salt management in the Region. Such projects will be increasingly important to protect local water supplies and to provide supplemental, reliable sources of potable supplies.

A number of groundwater desalters have already been constructed, and more are planned. These facilities are described below.

1. Upper Santa Ana Basin

In the Upper Santa Ana Basin, the Santa Ana Watershed Project Authority constructed the Arlington desalter, which is now owned and operated by Western Municipal Water District. This desalter, with a capacity of about 7 MGD, treats water extracted from the Arlington Management Zone, which was heavily impacted by historic agricultural activities.

In the Chino Basin, the Chino Desalter Authority operates the Chino 1 desalter, which is planned for expansion from 8 MGD to 13 MGD capacity. Additional desalters and desalter capacity will be constructed as part of a "maximum benefit" proposal by the Chino Basin Watermaster and the Inland Empire Utilities Agency (see Section VI., Maximum Benefit Implementation Plans for Salt Management).

The City of Corona began operation of the Temescal desalter in late 2001 with product water.

capacity of 10 MGD. In 2004, the City expanded the desalter plant capacity by adding a fourth train to increase the product water capacity by 5 MGD for a current total of 15 MGD. The product water is used to supplement other municipal supplies as a blending source. The improved TDS quality of these supplies is an important part of the City's efforts to assure compliance with waste discharge requirements.

In the San Timoteo Watershed areas, desalters will be implemented as necessary for the Yucaipa and Beaumont areas, as discussed in detail in Section VI., Maximum Benefit San Timoteo Watershed Salt Management Plan.

2. San Jacinto Watershed

EMWD operates the Menifee desalter, which has a capacity of about 3 MGD. Product water is added to the EMWD municipal supply system, and the waste brine is discharged to a non-reclaimable waste disposal system that is ultimately connected to the SAWPA SARI system. The desalter extracts groundwater from the Perris South and Menifee Management Zones, both of which are adversely affected by historic salt loads contributed largely by agricultural activities.

EMWD plans to construct a desalter with capacity of about 4.5 MGD to treat poor quality water extracted from the Perris South and Lakeview/Hemet North Management Zones. The purpose of this facility is to stop subsurface migration of poor quality groundwater from the Perris South Management Zone into the Lakeview/Hemet North Management Zone.

3. Orange County

The Tustin Seventeenth Street Desalter, which began operation in 1996 reduces high nitrate and TDS concentrations from groundwater pumped by Tustin's Seventeenth Street wells, adding approximately 3,000 acre-feet of water annually to Tustin's domestic water supply. A second facility, Tustin's Main Street Treatment Plant, began operating in 1989 with a yield of 2,000 acre-feet per year. The plant reduces nitrate levels from groundwater produced by Tustin's Main Street wells, employs reverse osmosis and ion exchange. The Orange County Water District and Irvine Ranch Water District (IRWD) cooperated to build the Irvine Desalter, a dual-purpose regional groundwater remediation and water supply project located in the City of Irvine and its sphere of influence. The project consists of an extensive seven-well groundwater extraction and collection system, a treatment system, a five-mile brine disposal pipeline, a finished water delivery system, and ancillary facilities. While providing approximately 8,000 acre-feet per year to IRWD for potable and non-potable supply, the desalter extracts and treats brackish groundwater and captures an overlapping regional plume of TCE-contaminated groundwater demonstrated to have originated from the former U.S. Marine Corps Air Station-El Toro.

C. Recharge of ~~Stormwater~~Storm water and/or Imported Water

The Orange County Water District, San Bernardino Valley Water Conservation District and other agencies in the Region operate extensive facilities designed to enhance the capture and recharge of high quality ~~stormwater~~storm water. More such facilities are planned as part of "maximum benefit" proposals by the Chino Basin Watermaster/Inland Empire Utilities Agency, and agencies implementing the maximum benefit programs in the San Timoteo watershed (Section VI., Maximum Benefit Implementation Plans for Salt Management).

These proposals also include efforts to import and recharge high quality State Water Project water, when it is available. These activities increase both the quantity and quality of available groundwater resources.

D. Sea Water Intrusion Barriers

The Orange County Water District operates advanced facilities designed to provide significantly enhanced tertiary treatment of secondary treated municipal wastewater from the Orange County Sanitation District's (Sanitation District) Fountain Valley Reclamation Plant No. 1. The recycled water is injected into a series of wells located along Ellis Avenue in the City of Fountain Valley to maintain the Talbert Gap Seawater Intrusion Barrier. The treatment facility, the Groundwater Replenishment System (GWRS) was constructed jointly by Orange County Water District and the Sanitation District (see preceding section on wastewater reclamation).

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V. Salt Management Plan – Monitoring Program Requirements
(insert at end of section)

Subsequent to the approval of the Region's Salt and Nutrient Management Plan in 2004, a new task force, the "Basin Monitoring Program Task Force" (BMPTF) was formed to implement the requisite nitrogen/TDS monitoring and analyses programs described previously. SAWPA serves as the administrator for the BMPTF.

The Task Force includes the following agencies:

- Eastern Municipal Water District
- Inland Empire Utilities Agency
- Orange County Water District
- City of Riverside
- Lee Lake Water District
- Elsinore Valley Municipal Water District
- Irvine Ranch Water District
- Colton/San Bernardino Regional Tertiary Treatment and Wastewater Reclamation Authority
- Chino Basin Watermaster
- Yucaipa Valley Water District
- City of Beaumont
- City of Corona
- City of Redlands
- City of Rialto
- Jurupa Community Services District
- Western Riverside Co Regional Wastewater Authority

The Santa Ana Regional Water Quality Control Board and SAWPA are also signatories to the BMPTF agreement.

As indicated above (Section V.A and V.B), the task force agencies are required to conduct the following investigations:

1. Recomputation of the Ambient Water Quality – every three years
2. Preparation of a Water Quality Report for the Santa Ana River – annually

Declaration of Conformance

Another major activity that the BMPTF completed in March 2010 was the development of a "Declaration of Conformance" for approval by the Regional Board and the State Water Resources Control Board. With the Declaration, the Task Force and Regional Board declared conformance with the then-new State Board Recycled Water Policy requirements for the completion of a salt and nutrient management plan for the Santa Ana Region, and other requirements of this Policy. This finding of conformance was based on the work of the Nitrogen/TDS Task Force. That work resulted in the 2004 adoption of a Basin Plan amendment to incorporate a revised salt and nutrient management plan for the Region (Resolution No. R8-2004-0001). Further, the Declaration documented conformance with the emerging constituents monitoring requirements in the Policy through the "Emerging Constituents Sampling and Investigation Program", submitted to the Regional Board on an annual basis by the Emerging Constituents Program Task Force. The Sampling and Investigation Program will be reviewed annually and revised as necessary and will integrate

the State Board's recommendations when they become available. Finally, the Declaration of Conformance documents the analyses and procedures that will be used to streamline the permitting process for recycled water projects, as required by the Policy.

The Declaration of Conformance was formally adopted by resolution of the Regional Board on March 18, 2010 (Resolution No. R8-2010-0012) and formally submitted to the State Board on April 12, 2010.

Salt Monitoring Cooperative Agreement

In January, 2008 the Regional Board entered into a Cooperative Agreement with several water and wastewater agencies in the Santa Ana River Watershed to analyze and report the amount of salt and nitrates entering local groundwater aquifers as a consequence of recharging imported water in the region. The “Cooperative Agreement to Protect Water Quality and Encourage the Conjunctive Use of Imported Water in the Santa Ana River Basin” is Attachment A to Resolution No. R8-2008-0019.

As with the BMPTF effort underwritten by local stakeholders, the Cooperative Agreement obligates signatories to assess current groundwater quality every three years. In addition, the signatories have agreed to estimate every six years the changes that are likely to occur in groundwater quality as a result of on-going and expected projects that recharge imported water. By emphasizing the use of "real-time" monitoring, rather than complex fate and transport models, the Regional Board is better able to evaluate the effects of these recharge projects.

The parties of the Cooperative Agreement execute the terms of the agreement through a workgroup that meets regularly under the administration of SAWPA. As the informal administrator, SAWPA assists in coordination among the signatories of the necessary basin salinity monitoring and modeling reports, along with final compilation and submittal of the reports to the Regional Board by the deadlines defined in the agreement.

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B. Salt Management – San Timoteo Watershed

The 2004 amendments to the Basin Plan established both "antidegradation" and "maximum benefit" nitrogen and TDS objectives for the Yucaipa, San Timoteo and Beaumont Groundwater Management Zones (see Chapter 4). These Groundwater Management Zones are within the San Timoteo Watershed. The agencies that proposed the "maximum benefit" objectives committed to implement specific programs of projects and actions that were also identified in the 2004 Salt Management Plan incorporated in the Basin Plan. These programs were intended to assure that water quality consistent with the maximum benefit to the people of the state would be maintained with the application of the "maximum benefit" objectives. These commitments included the implementation of surface and groundwater monitoring programs, use of recycled water supplies for non-potable uses and construction and operation of desalting facilities to manage recycled water quality.

In 2014 amendments to the Salt Management Plan, changes to these "maximum benefit" commitments and the parties responsible for them were made based on a regional strategy for the San Timoteo Watershed [Ref 10D] developed and proposed by the Yucaipa Valley Water District, the City of Beaumont, the City of Banning, Beaumont-Cherry Valley Water District and the San Gorgonio Pass Agency. The Regional Strategy initially addressed the Maximum Benefit program in the Beaumont Groundwater Management Zone; however, in order to have a consistent approach throughout the San Timoteo Watershed, the Regional Strategy approach was expanded to the San Timoteo and Yucaipa Groundwater Management Zones. The goal of this strategy is to assure reliable water supplies to meet present and anticipated demands. The "maximum benefit" commitments of each responsible agency are described below and shown in Tables 5-9a (Yucaipa Groundwater Management Zone), 5-9b (San Timoteo Groundwater Management Zone) and 5-9c (Beaumont Groundwater Management Zone). These commitments must be implemented by the responsible agencies in accordance with the prescribed schedule in order to assure that water quality consistent with maximum benefit to the people of the state will be maintained.

The Regional Board will revise waste discharge requirements as appropriate to require implementation of these commitments. For each groundwater management zone, it is assumed that maximum benefit is demonstrated, and that the "maximum benefit" water quality TDS and nitrate-nitrogen objectives apply as long as the commitments and schedule applicable to that groundwater management zone are satisfied. If the Regional Board determines that any or all of the maximum benefit programs are not being implemented effectively in accordance with the schedule(s) shown in Tables 5-9a through 5-9c, then maximum benefit is not demonstrated and the "antidegradation" TDS and nitrate-nitrogen objectives apply. In this situation, the Regional Board will require mitigation for TDS and nitrate-nitrogen discharges to the affected groundwater management zone that took place in excess of limits based on the "antidegradation" objectives for that Groundwater Management Zone. As specified for Chino Basin Watermaster and Inland Empire Utilities Agency (see Section VI.A, above), discharges in excess of the antidegradation objectives that must be considered for mitigation include both recycled water and imported water at TDS 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.

1. Yucaipa Groundwater Management Zone - Yucaipa Valley Water District

The application of the "maximum benefit" objectives established for the Yucaipa Groundwater Management Zone relies on the implementation by the Yucaipa Valley Water District (YVWD) of the specific program of projects and requirements shown in Table 5-9a. These "maximum benefit" commitments were updated and revised in 2014 based on YVWD's ongoing activities to implement the 2004 program and the regional strategy YVWD helped to develop. The projected water demands for the Yucaipa area for the year 2030 require approximately an additional 10,000 AF/Y of supplemental water, which may include State Water Project water, water imported from local sources, recharged storm water and recycled water. The goal is to meet these demands through implementation of the "maximum benefit" commitments, which include enhanced recharge of ~~stormwater~~storm water and recycled water, optimizing direct use of recycled and imported water, desalting of wastewater and/or groundwater and conjunctive use.

In addition to its water supply responsibilities, YVWD provides sewage collection and treatment services within its service area. YVWD operates a wastewater treatment facility that currently discharges tertiary treated wastewater to San Timoteo Creek, Reach 3. This unlined reach of the Creek overlies and recharges the San Timoteo Groundwater Groundwater Management Zone (see 2. San Timoteo Groundwater Management Zone – Yucaipa Valley Water District and the City of Beaumont). In response to commitments in the 2004 Salt Management Plan, YVWD has taken steps to improve recycled water quality, including the installation of new denitrification facilities and the design and construction of ~~desalting facilities~~the Yucaipa Valley Regional Brineline and reverse osmosis treatment systems at the Wochholz Regional Water Recycling Facility~~, which may be used to treat recycled water or other sources if needed to comply with effluent limitations based on the "maximum benefit" commitments.~~ The desalting facilities are expected to be complete by June 30, 2015.

Dilution of recycled water with water to meet the 370 mg/L TDS concentration and the 5 mg/L nitrate-N concentration recycled water recharge and direct use requirements will be limited to new water recharge such as reverse osmosis permeate (diluent), imported water or new storm water. New stormwater recharge is defined as stormwater recharged in quantities greater than historical amounts (net increase) over the groundwater management zone since January 1, 2004. January 2004 corresponds to the month and year when the Regional Board authorized the original maximum benefit objectives and compliance commitments by adopting Resolution No. R8-2004-0001.

Table 5-9a

Yucaipa Groundwater Management Zone
Maximum Benefit Commitments

Responsible Agency – Yucaipa Valley Water District

Description of Commitment	**Compliance Date – as soon as possible, but no later than**
1. Surface Water Monitoring Program	
a. Submit Draft Revised Monitoring Program to Regional Board	a. *(**30 days from Regional Board approval of BPA)*
b. Implement Revised Monitoring Program	b. Upon ~~Regional Board approval~~Executive Officer approval
c. Submit Draft Revised Monitoring Program(s) (subsequent to that required in "a", above) to Regional Board	c. Every three years, in coordination with ambient water quality determination (#6, below) or more frequently upon notification of the need to do so from the ~~Regional Board~~ Executive Officer and in accordance with the schedule prescribed by the Executive Officer
d. Implement Revised Monitoring Program (s)	d. Upon ~~Regional Board approval~~Executive Officer approval
e. Annual data report submittal	e. April 15th
2. Groundwater Monitoring Program	
a. Submit Draft Revised Monitoring Program(s)	a. Every three years, in coordination with ambient water quality determination (#6, below) or more frequently upon notification of the need to do so from the ~~Regional Board~~ Executive Officer and in accordance with the schedule prescribed by the Executive Officer
b. Implement revised monitoring plan(s)	b. Upon ~~Regional Board approval~~Executive Officer approval
c. Annual data report submittal	c. April 15th
3. YVWD Wastewater and/or Groundwater Desalter(s) and Brine Disposal Facilities Complete construction of Desalter and Brine Disposal Facilities	June 30, 2015 (or as provided by the ~~Regional Board~~ Executive Officer - see text below)
4. Non-potable water supply Implement non-potable water supply system to serve water for irrigation purposes and/or direct non-potable reuse. The non-potable supply used in the Yucaipa Groundwater Management Zone shall comply with a 10-year running average TDS concentration of 370	June 30, 2015

Table 5-9a

Yucaipa Groundwater Management Zone
Maximum Benefit Commitments

Responsible Agency – Yucaipa Valley Water District

Description of Commitment	**Compliance Date – as soon as possible, but no later than**
mg/L or less, and in addition, for any non-irrigation reuse that has the potential to affect groundwater quality, the nitrate-nitrogen shall be less than or equal to the 5 mg/L nitrate-nitrogen "maximum benefit" objective (taking the nitrogen loss coefficient into consideration).	
5. Recycled water recharge The recharge of recycled water in the Yucaipa Groundwater Management Zone shall be limited to the amount that can be blended with other recharge sources or reverse osmosis diluent to achieve a 10-year running average equal to or less than the 370 mg/L "maximum benefit" TDS objective and less than or equal to the 5 mg/L nitrate-nitrogen "maximum benefit" objective (taking the nitrogen loss coefficient into consideration). a. Submit for Executive Officer approval, a proposed methodology for computing baseline and "new" storm water recharge. The report will be posted for public comment for 30 days. If there are significant comments received, the Executive Officer will present the report to the Regional Board for its consideration at a regularly scheduled meeting. ~~a.~~b.Submit baseline report of amount, locations, and TDS and nitrogen quality of ~~storm~~water/imported water recharge per the approved methodology (#5a). ~~b.~~c.Submit documentation of amount, TDS and nitrogen quality of all sources of recharge and recharge locations. For ~~stormwater~~storm water recharge used for blending, submit documentation that the recharge is the result of YVWD enhanced recharge facilities/programs	Compliance must be achieved by end of 10th year after initiation of recycled water use/recharge operations. a. 6 months ~~P~~prior to initiation of construction of any basin~~s~~/other facility~~ies~~ to support enhanced ~~stormwater~~storm water/imported water recharge. b. 1 year from Executive Officer approval of methodology. c. Annually, by April 15th, after construction of facilities/implementation of programs to support enhanced recharge.
6. Antidegradation Objectives Salt Mitigation Plan a. Submit a proposed Salt Mitigation Plan and Implementation Schedule b. Implement Salt Mitigation Plan	a. Within *(**1 year from OAL approval of BPA)* b. Within 30 days of Regional Board finding that maximum benefit no longer being achieved
~~6~~7. Ambient groundwater quality determination	July 1, 2014 and every 3 years thereafter

A. Description of Yucaipa Valley Water District Commitments for the Yucaipa Management Zone

1. Surface Water Monitoring Program (Table 5-9a, # 1)

A surface water monitoring program was developed, approved and implemented in response to the maximum benefit commitments initially incorporated in the Basin Plan in 2004 (Resolution No. R8-2004-0001). The Regional Board approved the Surface Water Monitoring Program in 2005 (Resolution No. R8-2005-0065). Subsequently, the need to revise the monitoring program was recognized and appropriate amendments were adopted in 2014 (Resolution No. R8-2014-0005). These include the requirement that *by (**30 days from Regional Board approval of the BPA**)*, YVWD shall submit a revised surface water monitoring program to the Regional Board for approval. The monitoring program must be implemented upon ~~Regional Board approval~~Executive Officer approval.

It is expected that the monitoring program will be reviewed as it is implemented over time, and that further updates may be necessary. YVWD committed to review the surface water monitoring program (and the groundwater monitoring program, see #2, below) as part of the determination of ambient groundwater quality, which occurs every three years pursuant to Basin Plan requirements (see #6, below). Though considered unlikely, it is possible that more frequent review and revision of these monitoring programs may be necessary. Accordingly, the Basin Plan requires review of the surface water monitoring program in coordination with the ambient quality determination and, further, that draft revised monitoring programs be submitted upon notification by the Regional Board's Executive Officer of the need to do so. The schedule for the submittal will be prescribed by the Executive Officer. Any such revision to the monitoring is to be implemented upon ~~Regional Board approval~~Executive Officer approval.

An annual report summarizing all data collected for the year and evaluating compliance with relevant surface water objectives shall be submitted by April 15th of each year.

2. Groundwater Monitoring Program (Table 5-9a, #2)

In response to the maximum benefit program requirements established in 2004 (Resolution No. R8- 2004-0001), in 2005, YVWD submitted a proposed groundwater monitoring program. The Regional Board approved a groundwater monitoring program to determine ambient water quality in the Yucaipa Groundwater Management Zone (Resolution No. R8-2005-0065). The purpose of the groundwater monitoring program is to identify the effects of the implementation of the Yucaipa Groundwater Management Zone maximum benefit water quality objectives on water levels and water quality within the Yucaipa Groundwater Management Zone. The groundwater monitoring program has been implemented since 2005 and must continue to be implemented.

The existing groundwater monitoring implemented by YVWD to comply with the Maximum Benefit program authorized by the 2004 amendments to the salt management plan shall be continued into the future until a new monitoring plan is approved by the Executive Officer. Any new monitoring plan developed by YVWD shall preserve the

geospatial distribution of groundwater wells and the sampling of those wells utilized in the existing Regional Board-approved maximum benefit monitoring program.

As noted above, the groundwater monitoring program will be reviewed as part of regular ambient groundwater quality determinations and may be revised. Once again, more frequent review and revision may be necessary as the monitoring program is implemented over time. Accordingly, the Basin Plan requires that draft revised monitoring programs be submitted upon notification by the Regional Board's Executive Officer of the need to do so. The schedule for the submittal will be prescribed by the Executive Officer. Any such revision to the monitoring program is to be implemented upon ~~Regional Board approval~~Executive Officer approval.

An annual report, including all raw data and summarizing the results of the approved groundwater monitoring program, shall be submitted to the Regional Board by April 15th of each year.

3. YVWD Wastewater and/or Groundwater Desalter(s) and Brine Disposal (Table 5-9a, #3)

YVWD anticipated that demineralization of groundwater or recycled water would be necessary in the future to protect the Yucaipa Groundwater Management Zone and has ~~planned and designed~~ constructed desalting and associated brine disposal facilities. YVWD shall ensure that the planned ~~desalter~~ demineralization system is operational by June 30, 2015. The ~~Regional Board~~ Executive Officer may extend this compliance date upon submittal of compelling evidence that the extension is warranted and would not compromise timely implementation of the other maximum benefit program commitments identified in Table 5-9a.

4. Non-potable Water Supply Distribution System (Table 5-9a, # 4)

A key element of YVWD's water resources management plan is the construction of a non-potable supply system to serve a mix of recycled water, diluent from the Wochholz Regional Water Recycling Facility and un-treated imported water, treated backwash water from the Yucaipa Valley Regional Water Filtration Facility and/or storm water for irrigation uses and other direct non-potable reuse. The intent is to minimize the use of potable water for non-potable uses. For use in the Yucaipa Groundwater Management Zone, YVWD will produce a non-potable supply with a running 10-year average TDS concentration equal to or less than ~~of~~ 370 mg/L and, in addition, for any non-irrigation reuse that has the potential to affect groundwater quality, the 10-year running average nitrate-nitrogen concentration shall comply with 6.7 mg/L (taking the 25% nitrogen loss coefficient into account to assure that the "maximum benefit" objective of 5 mg/L will be met). To meet this "maximum benefit" objective, YVWD will blend the recycled water with other water sources or desalt the recycled water.

Compliance with the non-potable water supply TDS and/or nitrate-nitrogen objective shall be measured in the non-potable water system as a weighted 10-year average of all water sources added to that system and used within the Yucaipa Groundwater Management Zone.

As part of the Maximum Benefit Annual Report, YVWD shall report on the TDS and nitrogen quality and quantity of all sources of non-potable water and summarize the annual and 10-year annual weighted TDS and nitrogen average concentrations utilized in the Yucaipa Groundwater Management Zone.

5. Recycled Water Recharge (Table 5-9a, # 5)

The use and recharge of recycled water within the Yucaipa Groundwater Management Zone are necessary to maximize the use of the water resources in the Yucaipa area. The demonstration of "maximum benefit" and the continued application of the "maximum benefit" objectives are contingent on the recharge of recycled water to the Yucaipa Groundwater Management Zone of a 10-year annual average (running average) TDS concentration of 370 mg/L and nitrate-nitrogen concentration of 6.7 mg/L (taking the 25% nitrogen loss coefficient into account to assure that the "maximum benefit" objective of 5 mg/L will be met). These concentrations may be achieved by desalting or other treatment of the recycled water, and/or by blending the recycled water with other sources, such as imported water, ~~and/or~~ storm water and reverse osmosis permeate diluent.

Compliance with these concentrations shall be measured at the point of discharge(s) to the recharge facility as a weighted average concentration of the recycled water and other sources, if any, used for blending.

As part of the Maximum Benefit Annual Report, YVWD shall report on the TDS and nitrogen quality and quantity of all sources of recharged water and summarize the annual and 10-year running annual weighted TDS and nitrogen average concentrations recharged to the Yucaipa Groundwater Management Zone.

6. Antidegradation Salt Mitigation Plan (Table 5-9a, #6)

Within *(**1 year of approval by OAL of the BPA**)*, YVWD shall submit a Salt Mitigation Plan to mitigate excess salt loading above the antidegradation water quality objectives. The Salt Mitigation Plan shall provide a conceptual framework for mitigation projects should the Regional Board make a finding that the lowering of water quality associated with the "maximum benefit" TDS and nitrate-nitrogen water quality objectives that are higher than historical water quality (the "antidegradation" objectives) is not of maximum benefit to the people of the state. The Salt Mitigation Plan must be implemented within 30 days of a Regional Board finding that maximum benefit is no longer being achieved.

~~6~~7. Ambient Groundwater Quality Determination (Table 5-9a, # 6)

By July 1, 2014, and every three years thereafter, YVWD shall submit a determination of ambient TDS and nitrate-nitrogen quality in the Yucaipa Groundwater Management Zone. This determination shall be accomplished using methodology consistent with the calculation (20-year running averages) used by the Nitrogen/TDS Task Force to develop the TDS and nitrate-nitrogen "antidegradation" water quality objectives for groundwater Management Zones within the region. [Ref. 1].

B. Implementation by Regional Board

1. Revision to Yucaipa Valley Water District NPDES Permit

To implement the "maximum benefit" objectives, the Regional Board will revise the waste discharge and producer/user reclamation requirements permit for YVWD wastewater discharges to reflect the commitments described above, as appropriate. This includes the following:

For surface water discharges that affect the Yucaipa Groundwater Management Zone~~,~~ discharge limits for TDS and TIN will be specified as an annual volume-weighted average not to exceed 370 mg/L TDS and 6.7 mg/L TIN. These limits are based on the "maximum benefit" objectives of the Yucaipa Groundwater Management Zone shown in Table 4-1 and take the nitrogen loss coefficient into account. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified and will apply should the Regional Board find that maximum benefit is not demonstrated. These alternative objectives are also specified in Table 4-1. Compliance schedules for these alternative limits will be specified in YVWD's waste discharge requirements, as necessary and appropriate.

YVWD's waste discharge and producer/user reclamation requirements will require that the recharge of recycled water shall be limited to the amount that can be blended with other water sources, such as ~~stormwater~~storm water, ~~or~~ imported water or reverse osmosis diluent, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Yucaipa Groundwater Management Zone. The use of recycled water for irrigation and other direct re-use purposes in the Yucaipa Groundwater Management Zone shall be limited to the amount that can be blended with other water sources, such as ~~stormwater~~storm water, ~~o~~r imported water or reverse osmosis diluent, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Yucaipa Groundwater Management Zone. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified for recycled water recharge and re-use in the Yucaipa Groundwater Management Zone and will apply if the Regional Board finds that the maximum benefit commitments are not met.

2. Review of Project Status

The Regional Board intends to review periodically YVWD's implementation of the maximum benefit program commitments described above and summarized in Table 5-9a. This review is intended to determine whether the commitments are met, and whether the application of the "maximum benefit" objectives continues to be justified. As indicated above, if, as a result of this review, the Regional Board finds that the YVWD commitments are not met, then the Regional Board may make the finding that the "maximum benefit" objectives are not consistent with the maintenance of water quality that is of maximum benefit to the people of the state, and that the more stringent "antidegradation" objectives for the Yucaipa Management Zone (320 mg/L for TDS and 4.2 mg/L for nitrate-nitrogen; see Chapter 4) must apply instead for regulatory purposes. In the event that the Regional Board makes these determinations, the Regional Board will require that the YVWD implement the Salt Mitigation Plan (see commitment # 6) and mitigate the adverse water quality effects, both on the immediate and downstream waters, which resulted from recycled water discharges based on the "maximum benefit" objectives.

2. San Timoteo Groundwater Management Zone – Yucaipa Valley Water District and the City of Beaumont

The application of the "maximum benefit" objectives established for the San Timoteo Groundwater Management Zone relies on the implementation by both the Yucaipa Valley Water District (YVWD) and the City of Beaumont of the specific program of projects and requirements shown in Table 5-9b [Ref. 10D]. Since the Salt Management Plan was amended in 2004 to incorporate "maximum benefit" commitments applicable to the San Timoteo Management Zone, both YVWD and the City of Beaumont have been engaged in implementing those commitments.

As discussed above, YVWD operates a wastewater treatment facility that discharges a portion of its treated effluent to San Timoteo Creek, Reach 3, which overlies and recharges the San Timoteo Groundwater Management Zone. Similarly, the City of Beaumont provides sewage collection and treatment services within its service area, and a portion of the treated wastewater discharged to Reach 3 of San Timoteo Creek, also recharges the San Timoteo Groundwater Management Zone. Surface water discharges by both YVWD and the City affect groundwater quality in the San Timoteo Groundwater Management Zone. Consistent with the 2004 "maximum benefit" commitments, both the District and the City must identify and implement an acceptable plan to address the adverse water quality impacts of their wastewater discharges.

Dilution of recycled water with water to meet the 400 mg/L TDS concentration and the 5 mg/L nitrate-N concentration recycled water recharge and direct use requirements will be limited to new recharge such as reverse osmosis permeate (diluent), imported water or new storm water. New storm water recharge is defined as storm water recharged in quantities greater than historical amounts (net increase) over the groundwater management zone since January 1, 2004. January 2004 corresponds to the month and year when the Regional Board authorized the original maximum benefit objectives and compliance commitments by adopting Resolution No. R8-2004-0001.

Table 5-9b

San Timoteo Groundwater Management Zone
Maximum Benefit Commitments

Responsible Agencies – Yucaipa Valley Water District and the City of Beaumont

Description of Commitment	**Compliance Date – as soon as possible, but no later than**
1. Surface Water Monitoring Program	
a. Submit Draft Revised Monitoring Program to Regional Board	a. *(**30 days from Regional Board approval of BPA)*
b. Implement Revised Monitoring Program	b. Upon ~~Regional Board approval~~Executive Officer approval
c. Submit Draft Revised Monitoring Program(s) (subsequent to that required in "a", above) to Regional Board	c. Every three years, in coordination with ambient water quality determination (#6, below) or more frequently upon notification of the need to do so from the Regional Board Executive Officer and in accordance with the schedule prescribed by the Executive Officer
d. Implement Revised Monitoring Program (s)	d. Upon ~~Regional Board approval~~Executive Officer approval
e. Annual data report submittal	e. April 15th
2. Groundwater Monitoring Program	
a. Submit Draft Revised Monitoring Program(s)	a. Every three years, in coordination with ambient water quality determination (#6, below) or more frequently upon notification of the need to do so from the Regional Board Executive Officer and in accordance with the schedule prescribed by the Executive Officer
b. Implement revised monitoring plan(s)	b. Upon ~~Regional Board approval~~Executive Officer approval
c. Annual data report submittal	c. April 15th
3. YVWD Wastewater and/or Groundwater Desalter(s) and Brine Disposal Facilities	
Complete construction of Desalter and Brine Disposal Facilities	June 30, 2015 (or as provided by the ~~Regional Board~~ Executive Officer - see text below)

Table 5-9b

San Timoteo Groundwater Management Zone
Maximum Benefit Commitments

Responsible Agencies – Yucaipa Valley Water District and the City of Beaumont

Description of Commitment	**Compliance Date – as soon as possible, but no later than**
4. City of Beaumont, Wastewater and/or Groundwater Desalter(s) and Brine Disposal Facilities a. Submit detailed plan and schedule for construction of desalter(s) and brine disposal facilities. Facilities are to operational as soon as possible but no later than 5 years from date of ~~Regional Board approval~~Executive Officer approval of plan/schedule or as provided by the Executive Officer (see text below). b. Implement the plan and schedule	a. ~~*(*15 days from approval date by OAL of this Basin Plan amendment*)*~~ January 30, 2015 b. Upon ~~Regional Board approval~~Executive Officer approval
5. YVWD, City of Beaumont Non-potable water supply Implement non-potable water supply system to serve water for irrigation purposes and direct non-potable reuse. The non-potable supply used in the San Timoteo Groundwater Management Zone shall comply with a 10-year running average TDS concentration of 400 mg/L or less, and in addition, for any non-irrigation reuse that has the potential to affect groundwater quality, the nitrate-nitrogen shall be less than or equal to the 5 mg/L nitrate-nitrogen "maximum benefit" objective (taking the nitrogen loss coefficient into consideration).	December 31, 2015
6. Recycled water recharge/habitat maintenance discharge The recharge of recycled water in the San Timoteo Groundwater Management Zone or discharge to San Timoteo Creek to maintain the riparian habitat shall be limited to the amount that can be blended with other recharge sources or reverse osmosis diluent to achieve a 10-year running average equal to or less than the 400 mg/L "maximum benefit" TDS objective and less than or equal to the 5 mg/L nitrate-nitrogen "maximum benefit" objective (taking the nitrogen loss coefficient into consideration). a. Submit for Executive Officer approval, a proposed methodology for computing baseline and new storm water recharge. The report will be posted for public comment for 30 days. If there are significant comments received, the Executive Officer will present the report to the Regional Board for its consideration at a regularly scheduled meeting.	Compliance must be achieved by end of 10th year after initiation of recycled water use/recharge operations. a. 6 months p~~P~~rior to initiation of construction of anybasin~~s~~/other facility~~ies~~ to support enhanced ~~stormwater~~storm water/imported water recharge.

Table 5-9b

San Timoteo Groundwater Management Zone
Maximum Benefit Commitments

Responsible Agencies – Yucaipa Valley Water District and the City of Beaumont

Description of Commitment	**Compliance Date – as soon as possible, but no later than**
~~a.~~b. Submit baseline report of amount, locations, and TDS and nitrogen quality of ~~stormwater~~"new" storm water/imported water recharge per the approved methodology (#6a). ~~b.~~c. Submit documentation of amount, TDS and nitrogen quality of all sources of recharge and recharge locations. For ~~stormwater~~storm water recharge used for blending, submit documentation that the recharge is the result of YVWD and/or City of Beaumont enhanced recharge facilities/programs.	b. 1 year from Executive Officer approval of methodology. c. Annually, by April 15th, after construction of facilities/implementation of programs to support enhanced recharge.
7. Improve quality of surface water discharges to the San Timoteo Groundwater Management Zone a. Submit plan and schedule to comply with underlying San Timoteo Groundwater Management Zone Maximum Benefit TDS and nitrate-nitrogen water quality objectives b. Implement upon approval	a. *(*30 days from Regional Board approval of BPA*)* b. Upon ~~Regional Board approval~~Executive Officer approval
8. Antidegradation Objectives Salt Mitigation Plan a. Submit a proposed Salt Mitigation Plan and Implementation Schedule b. Implement Salt Mitigation Plan	a. Within *(**1 year from OAL approval of BPA)* b. Within 30 days of Regional Board finding that maximum benefit no longer being achieved
9~~8~~. Ambient groundwater quality determination	July 1, 2014 and every 3 years thereafter

A. Description of Yucaipa Valley Water District (YVWD), City of Beaumont Commitments for the San Timoteo Management Zone

1. Surface Water Monitoring Program (Table 5-9b, # 1)

A surface water monitoring program was developed, approved and implemented in response to the maximum benefit commitments initially incorporated in the Basin Plan in 2004 (Resolution No. R8-2004-0001). The Regional Board approved the Surface Water Monitoring Program in 2005 (Resolutions No. R8-2005-0065 and R8-2005-0066). Subsequently, the need to revise

the monitoring program was recognized and appropriate amendments were adopted in 2014 (Resolution No. R8-2014-0005). These include the requirement that *by (**30 days from Regional Board approval of the BPA**)*, YVWD and the City of Beaumont shall submit a revised surface water monitoring program to the Regional Board for approval. The monitoring program must be implemented upon ~~Regional Board approval~~Executive Officer approval.

It is expected that the monitoring program will be reviewed as it is implemented over time, and that further updates may be necessary. YVWD and the City of Beaumont committed to review the surface water monitoring program (and the groundwater monitoring program, see #2, below) as part of the determination of ambient groundwater quality, which occurs every three years pursuant to Basin Plan requirements (see #6, below). Though considered unlikely, it is possible that more frequent review and revision of these monitoring programs may be necessary. Accordingly, the Basin Plan requires review of the surface water monitoring program in coordination with the ambient quality determination and, further, that draft revised monitoring programs be submitted upon notification by the Regional Board's Executive Officer of the need to do so. The schedule for the submittal will be prescribed by the Executive Officer. Any such revision to the monitoring is to be implemented upon ~~Regional Board approval~~Executive Officer approval.

An annual report summarizing all data collected for the year and evaluating compliance with relevant surface water objectives shall be submitted by April 15th of each year.

2. Groundwater Monitoring Program (Table 5-9a, #2)

In response to the maximum benefit program requirements established in 2004 (Resolution No. R8- 2004-0001), in 2005, YVWD and the City of Beaumont submitted a proposed groundwater monitoring program. The Regional Board approved a groundwater monitoring program to determine ambient water quality in the Yucaipa and San Timoteo Groundwater Management Zones (Resolutions No. R8-2005-0065 and R8-2005-0066). The purpose of the groundwater monitoring program is to identify the effects of the implementation of the San Timoteo Groundwater Management Zone "maximum benefit" water quality objectives on water levels and water quality within the San Timoteo Groundwater Management Zone. The groundwater monitoring program has been implemented since 2005. YVWD and the City of Beaumont have since installed additional wells as part of revised groundwater monitoring workplans to ensure adequate data are collected for ambient quality determination. The workplans were approved in 2009 (Resolution No. R8-2009-0034 for YVWD and R8-2009-0035 for the City of Beaumont).

The existing groundwater monitoring implemented by the City of Beaumont and YVWD to comply with the Maximum Benefit program authorized by the 2004 amendments to the salt management plan shall be continued into the future on a cooperative basis until a new monitoring plan is approved by the Executive Officer. Any new monitoring plan developed by the City of Beaumont and/or YVWD shall preserve the geospatial distribution of groundwater wells and the sampling of those wells utilized in the existing Regional Board-approved maximum benefit monitoring program.

As noted above, the groundwater monitoring program will be reviewed as part of regular ambient groundwater quality determinations and may be revised. Once again, more frequent review and revision may be necessary as the monitoring program is implemented over time. Accordingly, the Basin Plan requires that draft revised monitoring programs be submitted upon notification by the Regional Board's Executive Officer of the need to do so. The schedule for the

submittal will be prescribed by the Executive Officer. Any such revision to the monitoring program is to be implemented upon ~~Regional Board approval~~Executive Officer approval.

An annual report, including all raw data and summarizing the results of the approved groundwater monitoring program, shall be submitted to the Regional Board by April 15th of each year.

3. YVWD Wastewater and/or Groundwater Desalter(s) and Brine Disposal (Table 5-9b, #3)

YVWD anticipated that demineralization of groundwater or recycled water would be necessary in the future to protect the San Timoteo Groundwater Management Zone and has planned and designed desalting and associated brine disposal facilities. YVWD shall ensure that the planned desalter system is operational by June 30, 2015. The ~~Regional Board~~ Executive Officer may extend this compliance date upon submittal of compelling evidence that the extension is warranted and would not compromise timely implementation of the other maximum benefit program commitments identified in Table 5-9~~a and~~ b.

4. City of Beaumont Wastewater and/or Groundwater Desalter(s) and Brine Disposal (Table 5-9b, #4)

The City of Beaumont shall construct and operate desalting facilities and brine disposal facilities to improve recycled water quality and/or other sources of non-potable supply. A detailed desalter/brine line plan and schedule shall be submitted ~~*(*15 days from approval date by OAL of the Basin Plan amendment)*~~ by January 30, 2015. The schedule shall assure that these facilities are in place within 5 years of ~~Regional Board approval~~Executive Officer approval. The Executive Officer may extend this compliance date upon submittal of compelling evidence that the extension is warranted and would not compromise timely implementation of the other maximum benefit program commitments identified in Table 5-9b.

5. YVWD/City of Beaumont Non-potable Water Supply Distribution System (Table 5-9b, # 5)

Both YVWD and the City of Beaumont are planning for the construction of a non-potable supply system to serve a mix of recycled water, ~~and~~ un-treated imported water, reverse osmosis permeate (diluent) and/or storm water for irrigation uses and direct non-potable reuse. The intent is to minimize the use of potable water for non-potable uses. Both YVWD and/or the City of Beaumont will produce a non-potable supply for use within the San Timoteo Groundwater Management Zone with a running ten-year average TDS concentration of 400 mg/L. and, in addition, for any non-irrigation reuse that has the potential to affect groundwater quality, the 10-year running average nitrate-nitrogen concentration shall comply with 6.7 mg/L (taking the 25% nitrogen loss coefficient into account to assure that the “maximum benefit” objective of 5 mg/L will be met). To meet this “maximum benefit” objective, YVWD/City of Beaumont will blend the recycled water with other water sources or desalt the recycled water.

Compliance with the non-potable water supply TDS and/or nitrate-nitrogen objective shall be measured in the non-potable water system as a weighted 10-year average of all water sources added to that system and used within the San Timoteo Groundwater Management Zone.

As part of the Maximum Benefit Annual Report, YVWD and the City of Beaumont shall report on the TDS and nitrogen quality and quantity of all sources of non-potable water and summarize the annual and 10-year annual weighted TDS and nitrogen average concentrations utilized in

the San Timoteo Groundwater Management Zone.

6. Recycled Water Recharge/ Riparian Habitat Maintenance Discharge (Table 5-9b, #6)

The use and recharge of recycled water within the San Timoteo Groundwater Management Zone or the discharge of recycled water to San Timoteo Creek to maintain the riparian habitat and the demonstration of "maximum benefit" are contingent on the recharge/discharge of recycled water ~~to the San Timoteo Groundwater Management Zone of~~ as a 10-year annual average (running average) TDS concentration of 400 mg/L and nitrate-nitrogen concentration of 6.7 mg/L (taking the 25% nitrogen loss coefficient into account to assure that the "maximum benefit" objective of 5 mg/L will be met). These concentrations may be achieved by desalting or other treatment of the recycled water, and/or by blending the recycled water with other sources, such as imported water, reverse osmosis permeate (diluent) and/or storm water.

Compliance with these concentrations shall be measured at the point of discharge(s) to the recharge facility or at the end of pipe for a recycled water discharge as a weighted average concentration of the recycled water and other sources, if any, used for blending.

As part of the Maximum Benefit Annual Report, YVWD and/or the City of Beaumont shall report on the TDS and nitrogen quality and quantity of all sources of recharged water and summarize the annual and 10-year annual weighted TDS and nitrogen average concentrations recharged to the San Timoteo Groundwater Management Zone.

7. Improve Surface Water Discharge Quality to the San Timoteo Groundwater Management Zone (Table 5-9b, #7)

YVWD and the City of Beaumont wastewater discharges to the unlined reach of San Timoteo Creek impact the quality of the San Timoteo Groundwater Management Zone. In order to protect underlying groundwater Management Zone quality, by *(*30 days from Regional Board approval of this Basin Plan amendment),* the City of Beaumont and YVWD shall submit a proposed plan and schedule to improve the quality of wastewater discharged to the portion of San Timoteo Creek overlying the San Timoteo Groundwater Management Zone in order to assure compliance with the Groundwater Management Zone "maximum benefit" objectives. A contingency plan and schedule to meet the "antidegradation" objectives for the Groundwater Management Zone shall also be identified and implemented upon a finding by the Regional Board that "maximum benefit" is not demonstrated and that the "antidegradation" objectives apply. The plan must be implemented upon ~~Regional Board approval~~Executive Officer approval.

8. Antidegradation Objectives Salt Mitigation Plan (Table 5-9b, #8)

Within *(**1 year of approval by OAL of the BPA**)*, YVWD and the City of Beaumont shall submit a Salt Mitigation Plan to mitigate excess salt loading above the antidegradation water quality objectives. The Salt Mitigation Plan shall provide a conceptual framework for mitigation projects should the Regional Board make a finding that the lowering of water quality associated with the "maximum benefit" TDS and nitrate-nitrogen water quality objectives that are higher than historical water quality (the "antidegradation" objectives) is not of maximum benefit to the people of the state. The Salt Mitigation Plan must be implemented within 30 days of a Regional Board finding that maximum benefit is no longer being achieved.

~~8~~9. Ambient Groundwater Quality Determination (Table 5-9b, # 8)

By July 1, 2014, and every three years thereafter, YVWD and the City of Beaumont shall submit a determination of ambient TDS and nitrate-nitrogen quality in the San Timoteo Groundwater Management Zone. This determination shall be accomplished using methodology consistent with the calculation (20-year running averages) used by the Nitrogen/TDS Task Force to develop the TDS and nitrate-nitrogen "antidegradation" water quality objectives for groundwater Management Zones within the region. [Ref. 1].

B. Implementation by Regional Board

1. Revision to Yucaipa Valley Water District NPDES Permit

To implement the "maximum benefit" objectives, the Regional Board will revise the waste discharge requirements and producer/user reclamation requirements for the YVWD wastewater discharges to reflect the commitments described above, as appropriate. This includes the following:

For surface water discharges that affect the San Timoteo Groundwater Management Zone, discharge limits for TDS and TIN will be specified as an annual volume-weighted average at the end of pipe not to exceed 400 mg/L TDS and 6.7 mg/L TIN. These limits are based on the "maximum benefit" objectives of the San Timoteo Groundwater Management Zone shown in Table 4-1 and take the nitrogen loss coefficient into account. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified and will apply should the Regional Board find that maximum benefit is not demonstrated. These alternative objectives are also specified in Table 4-1. Compliance schedules for these alternative limits will be specified in the YVWD's waste discharge requirements, as necessary and appropriate.

YVWD's waste discharge requirements will require that any planned recharge of recycled water shall be limited to the amount that can be blended with other water sources, such as ~~stormwater~~storm water, reverse osmosis permeate (diluent) or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the San Timoteo Groundwater Management Zone. The use of recycled water for irrigation and other direct re-use shall be limited to the amount that can be blended with other water sources, such as ~~stormwater~~storm water, reverse osmosis permeate (diluent), or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the San Timoteo Groundwater Management Zone.

Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified for recycled water recharge and re-use in the San Timoteo Groundwater Management Zone and will apply if the Regional Board finds that the maximum benefit commitments are not met.

2. Revision to the City of Beaumont NPDES Permit

To implement the "maximum benefit" objectives, the Regional Board will revise the waste discharge requirements for the City of Beaumont's wastewater discharges to reflect the commitments described above, as appropriate. This includes the following:

For discharges to the San Timoteo Groundwater Management Zone, discharge limits for TDS and TIN will be specified as an annual volume-weighted average not to exceed 400 mg/L TDS and 6.7 mg/L TIN to be determined at the end of pipe. These limits are based on the "maximum benefit" objectives of the San Timoteo Groundwater Management Zone shown in Table 4-1 and take the nitrogen loss coefficient into account. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified and will apply should the Regional Board find that maximum benefit is not demonstrated. These alternative limits are also specified in Table 4-1. Compliance schedules for these alternative limits will be specified in the City's waste discharge requirements, as necessary and appropriate.

The City of Beaumont's waste discharge requirements will require that any planned recharge of recycled water shall be limited to the amount that can be blended with other water sources, such as ~~stormwater~~storm water or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the San Timoteo Groundwater Management Zone. The use of recycled water for irrigation and other direct reuse shall be limited to the amount that can be blended with other water sources, such as ~~stormwater~~storm water or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the San Timoteo Groundwater Management Zone.

Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified for recycled water recharge and re-use in the San Timoteo Groundwater Management Zone and will apply if the Regional Board finds that the maximum benefit commitments are not met.

3~~2~~. Review of Project Status

The Regional Board intends to review periodically YVWD's and the City of Beaumont's implementation of the maximum benefit program commitments described above and summarized in Table 5-9b. This review is intended to determine whether the commitments are met, and whether the application of the "maximum benefit" objectives continues to be justified. As indicated above, if, as a result of this review, the Regional Board finds that the YVWD and/or the City of Beaumont commitments are not met, then the Regional Board may make the finding that the "maximum benefit" objectives are not consistent with the maintenance of water quality that is of maximum benefit to the people of the state, and that the more stringent "antidegradation" objectives for the San Timoteo Groundwater Management Zone (300 mg/L for TDS and 2.7 mg/L for nitrate-nitrogen; see Chapter 4) must apply instead for regulatory purposes. In the event that the Regional Board makes these determinations, the Regional Board will require that YVWD and/or the City of Beaumont, either individually or collectively, implement the Salt Mitigation Plan (see commitment # 8) and mitigate the adverse water quality effects, both on the immediate and downstream waters, which resulted from recycled water discharges based on the "maximum benefit" objectives.

3. Beaumont Groundwater Management Zone – Yucaipa Valley Water District, the City of Beaumont, the City of Banning, Beaumont Cherry Valley Water District, San Gorgornio Pass Agency

The application of the "maximum benefit" objectives established for the Beaumont Groundwater Management Zone is contingent on the implementation of commitments by the YVWD, the City of Beaumont, the City of Banning, Beaumont Cherry Valley Water District (BCVWD), and the San Gorgonio Pass Water Agency (Pass Agency) to implement a specific water and wastewater resources management program identified in the Regional Strategy [Ref. 10D]. This program is part of a coordinated effort by these agencies to develop and implement projects that will assure reliable water supplies to meet rapidly increasing demands in this area. The Regional Strategy entails enhanced recharge of native and recycled water, maximizing the direct use of recycled water, optimizing the direct use of imported water, recharge and conjunctive use. The maximum benefit commitments identified in the Regional Strategy for the Beaumont Groundwater Management Zone will be implemented by the City of Beaumont, BCVWD, YVWD, the Pass Agency and the City of Banning. The Regional Strategy forms the basis for the Beaumont Groundwater Management Zone maximum benefit program discussed below.

Wastewater collection and treatment services are provided by the City of Beaumont, the City of Banning, as well as YVWD. The City of Beaumont discharges tertiary treated wastewater to Cooper's Creek, a tributary of San Timoteo Creek, Reach 3. This unlined reach of the Creek overlies and recharges both the Beaumont and San Timoteo Groundwater Management Zones. The City of Banning does not currently utilize recycled water in the Beaumont Management Zone. The City of Banning has selected to participate in the Maximum Benefit program and commitments if it becomes necessary to use recycled water.

Table 5-9c identifies the projects and requirements that must be implemented by the cities of Beaumont and Banning, YVWD, BCVWD, and the Pass Agency to demonstrate that water quality consistent with maximum benefit to the people of the state will be maintained with the applications of the "maximum benefit" objectives. Table 5-9c also specifies an implementation schedule. The Regional Board will revise waste discharge requirements for the City of Beaumont and YVWD, and will work with the Colorado River Water Board to ensure discharges from the City of Banning comply with the maximum benefit requirements. The Regional Board will also consider issuance of waste discharge requirements for BCVWD and take other actions as necessary to require that these commitments be met by the responsible parties.

Dilution of recycled water with water to meet the 330 mg/L TDS concentration and the 5 mg/L nitrate-N concentration recycled water recharge and direct use requirements will be limited to new water recharge such as reverse osmosis permeate (diluent), imported water or new storm water. New storm water recharge is defined as storm water recharged in quantities greater than historical amounts (net increase) over the groundwater management zone since January 1, 2004. January 2004 corresponds to the month and year when the Regional Board authorized the original maximum benefit objectives and compliance commitments by adopting Resolution No. R8-2004-0001.

Table 5-9c
Beaumont Groundwater Management Zone
Maximum Benefit Commitments

Responsible Agencies – Yucaipa Valley Water District, City of Beaumont, City of Banning, San Gorgonio Pass Water Agency, Beaumont Cherry Valley Water District

Description of Commitment	**Compliance Date – as soon as possible, but no later than**
1. Surface Water Monitoring Program	
a. Submit Draft Revised Monitoring Program to Regional Board	a. *(**30 days from Regional Board approval of BPA)*
b. Implement Revised Monitoring Program	b. Upon ~~Regional Board approval~~Executive Officer approval
c. Submit Draft Revised Monitoring Program(s) (subsequent to that required in "a", above) to Regional Board	c. Every three years, in coordination with ambient water quality determination (#6, below) or more frequently upon notification of the need to do so from the Regional Board Executive Officer and in accordance with the schedule prescribed by the Executive Officer
d. Implement Revised Monitoring Program (s)	d. Upon ~~Regional Board approval~~Executive Officer approval
e. Annual data report submittal	e. April 15th
2. Groundwater Monitoring Program	
a. Submit Draft Revised Monitoring Program(s)	a. Every three years, in coordination with ambient water quality determination (#6, below) or more frequently upon notification of the need to do so from the Regional Board Executive Officer and in accordance with the schedule prescribed by the Executive Officer
b. Implement revised monitoring plan(s)	b. Upon ~~Regional Board approval~~Executive Officer approval
c. Annual data report submittal	c. April 15th
3. YVWD Wastewater and/or Groundwater Desalter(s) and Brine Disposal Facilities	
Complete construction of Desalter and Brine Disposal Facilities	June 30, 2015 (or as provided by the ~~Regional Board~~ Executive Officer - see text below)
4. City of Beaumont, Wastewater and/or Groundwater Desalter(s) and Brine Disposal Facilities	
a. Submit detailed plan and schedule for construction of desalter(s) and brine disposal facilities. Facilities are to	a. ~~*(*15 days from date of OAL approval of this Basin Plan amendment*)*~~ January 30, 2015

Table 5-9c
Beaumont Groundwater Management Zone
Maximum Benefit Commitments

Responsible Agencies – Yucaipa Valley Water District, City of Beaumont, City of Banning, San Gorgonio Pass Water Agency, Beaumont Cherry Valley Water District

Description of Commitment	**Compliance Date – as soon as possible, but no later than**
operational as soon as possible but no later than 5 years from date of ~~Regional Board approval~~Executive Officer approval of plan/schedule or as provided by the Executive Officer (see text below). b. Implement the plan and schedule	b. Upon ~~Regional Board approval~~Executive Officer approval
5.City of Banning, Wastewater and/or Groundwater ~~Desalter(s) and Brine Disposal Facilities~~ Salt Mitigation Plan a. Submit detailed plan and schedule for ~~construction of desalter(s) and brine disposal facilities~~ achieving compliance with the maximum benefit objectives. ~~Facilities are to operational as soon as possible but no later than 5 years from date of Regional Board approval of plan/schedule.~~ b. Implement the plan and schedule	a. ~~*(*15 days from date of OAL approval of this Basin Plan amendment*)*~~ . 6 months prior to initiation of the use recycled water application or recharge b. Upon ~~Regional Board approval~~Executive Officer approval
6. Non-potable recycled water supply YVWD, the City of Beaumont, the City of Banning (at the onset of recycled water use in the Beaumont Basin), BCVWD and the Pass Agency shall implement non-potable water supply systems (utilizing recycled water) to serve water for irrigation purposes and direct non-potable reuse. The non-potable supply~~y~~ies used in the Beaumont Groundwater Management Zone shall comply with a 10-year running average TDS concentration of 330 mg/L or less and, in addition, for any non-irrigation reuse that has the potential to affect groundwater quality, the nitrate-nitrogen shall be less than or equal to the 5 mg/L nitrate-nitrogen "maximum benefit" objective (taking the nitrogen loss coefficient into consideration).	December 31, 2015
7. Recycled water recharge The recharge of recycled water in the Beaumont Groundwater Management Zone shall be limited to the amount that can be blended with other recharge sources or reverse osmosis diluent to achieve a 10-year running average equal to or less than the 330 mg/L "maximum benefit" TDS objective and less than or equal to the 5 mg/L nitrate-nitrogen "maximum benefit" objective (taking the nitrogen loss coefficient into consideration). Submit documentation of amount, TDS and nitrogen quality of all sources of recharge and recharge locations.	Compliance must be achieved by end of 10th year after initiation of recycled water use/recharge operations. Annually, by April 15th, after initiation construction of facilities/implementation of

Table 5-9c
Beaumont Groundwater Management Zone
Maximum Benefit Commitments

Responsible Agencies – Yucaipa Valley Water District, City of Beaumont, City of Banning, San Gorgonio Pass Water Agency, Beaumont Cherry Valley Water District

Description of Commitment	**Compliance Date – as soon as possible, but no later than**
	programs to support enhanced recharge.
For any discharger proposing to utilize "new" storm water as a blending source, the following steps must be followed:	
a. Submit for Executive Officer approval, a report that identifies the methodology used in calculating baseline (2004) and "new" storm water (post 2004) recharge. The report shall identify the amount, locations, TDS and nitrogen quality of storm water recharge and any imported water recharge. Further, the report shall identify the manner in which the enhanced storm water/imported water recharge facility will assure, individually or with other facilities, compliance with the 330 mg/L TDS and 5 mg/L nitrate-nitrogen 10-year running average "maximum benefit" objective. The report will be posted for public comment for 30 days. If there are significant adverse comments received on this report, the Executive Officer will present the report to the Regional Board for its consideration at a regularly scheduled meeting.	a. 6 months prior to initiation of construction of any basins/other facilities to support enhanced storm water/imported water recharge
b. Submit 5-year plan for implementation of additional storm water recharge facilities to ensure compliance with the 330 mg/L TDS and the 5 mg/L 10-year running average "maximum benefit" objective.	b. Submit as part of each Report of Waste Discharge (ROWD)
~~b. Submit baseline report of amount, locations, and TDS and nitrogen quality of stormwater/imported water recharge.~~	~~b. Prior to initiation of construction of basins/other facilities to support enhanced stormwater/imported water recharge.~~
~~c. Submit documentation of amount, TDS and nitrogen quality of all sources of recharge and recharge locations. For stormwater recharge used for blending, submit documentation that the recharge is the result of enhanced recharge facilities/programs~~	~~c. Annually, by April 15th, after initiation construction of facilities/implementation of programs to support enhanced recharge.~~
8. Antidegradation Salt Mitigation Plan	
a. Submit a proposed Salt Mitigation Plan and Implementation Schedule	a. Within *(**1 year from OAL approval of BPA)*
b. Implement Salt Mitigation Plan	b. Within 30 days of Regional Board finding that maximum benefit no longer being achieved
~~8~~9. Ambient groundwater quality determination	July 1, 2014 and every 3 years thereafter

A. Description of Yucaipa Valley Water District (YVWD), City of Beaumont, Beaumont Cherry Valley Water District (BCVWD), City of Banning, San Gorgonio Pass Water Agency (Pass Agency) Commitments for the Beaumont Management Zone

1. Surface Water Monitoring Program (Table 5-9c, # 1)

A surface water monitoring program was developed, approved and implemented in response to the maximum benefit commitments initially incorporated in the Basin Plan in 2004 (Resolution No. R8-2004-0001). The Regional Board approved the Surface Water Monitoring Program in 2005 (Resolution No. R8-2005-0066). Subsequently, the need to revise the monitoring program was recognized and appropriate amendments were adopted in 2014 (Resolution No. R8-2014-0005). These include the requirement that by *(**30 days from Regional Board approval of the BPA**)*, YVWD BCVWD, the Pass Agency, the City of Beaumont and the City of Banning shall submit a revised surface water monitoring program to the Regional Board for approval. The monitoring program must be implemented upon ~~Regional Board approval~~Executive Officer approval.

It is expected that the monitoring program will be reviewed as it is implemented over time, and that further updates may be necessary. YVWD, the City of Beaumont, the City of Banning, the Pass Agency and BCVWD committed to review the surface water monitoring program (and the groundwater monitoring program, see #2, below) as part of the determination of ambient groundwater quality, which occurs every three years pursuant to Basin Plan requirements (see #6, below). Though considered unlikely, it is possible that more frequent review and revision of these monitoring programs may be necessary. Accordingly, the Basin Plan requires review of the surface water monitoring program in coordination with the ambient quality determination and, further, that draft revised monitoring programs be submitted upon notification by the Regional Board's Executive Officer of the need to do so. The schedule for the submittal will be prescribed by the Executive Officer. Any such revision to the monitoring program is to be implemented upon ~~Regional Board approval~~Executive Officer approval.

An annual report summarizing all data collected for the year and evaluating compliance with relevant surface water objectives shall be submitted by April 15th of each year.

2. Groundwater Monitoring Program (Table 5-9c, #2)

In response to the maximum benefit program requirements established in 2004 (Resolution No. R8- 2004-0001), a proposed groundwater monitoring program was submitted in 2005. The Regional Board approved a groundwater monitoring program to determine ambient water quality in the Beaumont Groundwater Management Zone (Resolution No. R8-2005-0066). The purpose of the Groundwater Monitoring Program is to identify the effects of the implementation of the Beaumont Groundwater Management Zone maximum benefit water quality objectives on water levels and water quality within the Beaumont Groundwater Management Zone. The groundwater monitoring program has been implemented since 2005 and YVWD, the City of Beaumont, the City of Banning, the Pass Agency and BCVWD must continue to implement that program.

The existing groundwater monitoring implemented by the City of Beaumont and YVWD to comply with the Maximum Benefit program authorized by the 2004 amendments to the salt management plan shall be continued into the future on a cooperative basis by all

of the maximum benefit partners until a new monitoring plan is approved by the Executive Officer. Any new monitoring plan developed shall preserve the geospatial distribution of groundwater wells and the sampling of those wells utilized in the existing Regional Board-approved maximum benefit monitoring program.

As noted above, the groundwater monitoring program will be reviewed as part of regular ambient groundwater quality determinations and may be revised. Once again, more frequent review and revision may be necessary as the monitoring program is implemented over time. Accordingly, the Basin Plan requires that draft revised monitoring programs be submitted upon notification by the Regional Board's Executive Officer of the need to do so. The schedule for the submittal will be prescribed by the Executive Officer. Any such revision to the monitoring program is to be implemented upon ~~Regional Board approval~~Executive Officer approval.

An annual report, including all raw data and summarizing the results of the approved groundwater monitoring program, shall be submitted to the Regional Board by April 15th of each year.

3. YVWD Wastewater and/or Groundwater Desalter(s) and Brine Disposal (Table 5-9c, #3)

YVWD anticipated that demineralization of groundwater or recycled water would be necessary in the future to protect the ~~Yucaipa~~ Beaumont Groundwater Management Zone and has ~~planned and designed~~ constructed desalting and associated brine disposal facilities. YVWD shall ensure that the planned desalter system is operational by June 30, 2015. The Regional Board may extend this compliance date upon submittal of compelling evidence that the extension is warranted and would not compromise timely implementation of the other maximum benefit program commitments identified in Table 5-9a.

4. City of Beaumont Wastewater and/or Groundwater Desalter(s) and Brine Disposal (Table 5-9c, #4)

The City of Beaumont shall construct and operate desalting facilities and brine disposal facilities to improve recycled water quality and/or other sources of non-potable supply. A detailed desalter/brine line plan and schedule shall be submitted ~~*(*15 days from approval date by OAL of the Basin Plan amendment)*~~ by January 30, 2015. The schedule shall assure that these facilities are in place within 5 years of ~~Regional Board approval~~Executive Officer approval. The Executive Officer may extend the compliance date upon submittal of compelling evidence that the extension is warranted and would not compromise timely implementation of the other maximum benefit program commitments identified in Table 5-9c.

5. City of Banning ~~Wastewater and/or Groundwater Desalter(s) and Brine Disposal~~ Salt Mitigation Plan (Table 5-9c, #5)

The City of Banning shall ~~construct and operate desalting facilities and brine disposal facilities~~ submit a plan and schedule to improve recycled water quality and/or other sources of non-potable supply. ~~A detailed desalter/brine line~~ The plan and schedule shall be submitted ~~*(*15 days from approval date by OAL of the Basin Plan amendment)*~~ ~~January 30, 2015~~ 6 months prior to the initiation of recycled water application or recharge and must be implemented upon Executive Officer approval. ~~The schedule shall assure that these facilities are in place within 5 years of Regional Board approval. The Regional Board may extend this compliance date upon submittal of compelling evidence that the extension is warranted and would not compromise~~

~~timely implementation of the other maximum benefit program commitments identified in Table 5-9c.~~

6. Non-potable Recycled Water Supply Distribution System (Table 5-9c, # 6)

A key element of resources management plan in areas overlying the Beaumont Groundwater Management Zone is the construction of a non-potable supply system to serve a mix of recycled water and un-treated imported water and/or storm water for irrigation uses and direct non-potable reuse. The intent is to minimize the use of potable water for non-potable uses. YVWD, the City of Beaumont and the City of Banning will produce a non-potable supply with a running ten-year average TDS concentration for the Beaumont Groundwater Management Zone of 330 mg/L and, in addition, for any non-irrigation reuse that has the potential to affect groundwater quality, the 10-year running average nitrate-nitrogen concentration shall comply with 6.7 mg/L (taking the 25% nitrogen loss coefficient into account to assure that the "maximum benefit" objective of 5 mg/L will be met). To meet this "maximum benefit" objective, YVWD, the City of Beaumont and the City of Banning, BCVWD and San Gorgonio Pass Agency will blend the recycled water with other water sources or desalt the recycled water as needed.

Compliance with the non-potable water supply TDS and nitrate-nitrogen objective shall be measured in the non-potable water system as a weighted 10-year running average of all water sources added to that system and used within the Beaumont Groundwater Management Zone.

As part of the Maximum Benefit Annual Report, YVWD, BCVWD, the Pass Agency, the City of Beaumont and the City of Banning shall report on the TDS and nitrogen quality and quantity of all sources of non-potable water and summarize the annual and 10-year annual weighted TDS and nitrogen average concentrations utilized in the Beaumont Groundwater Management Zone.

7. Recycled Water Recharge (Table 5-9c, # 7)

The use and recharge of recycled water within the Beaumont Groundwater Management Zone are necessary to maximize the use of the water resources of the Beaumont area. The demonstration of "maximum benefit" and the continued application of the "maximum benefit" objectives are contingent on the recharge of recycled water to the Beaumont Groundwater Management Zone of a 10-year annual average (running average) TDS concentration of 330 mg/L and nitrate-nitrogen concentration of 6.7 mg/L (taking the 25% nitrogen loss coefficient into account to assure that the "maximum benefit" objective of 5 mg/L will be met). These concentrations may be achieved by desalting or other treatment of the recycled water, and/or by blending the recycled water with other sources, such as imported water and/or storm water.

Compliance with these concentrations shall be measured at the point of discharge(s) to the recharge facility as a weighted average concentration of the recycled water and other sources, if any, used for blending.

As part of the Maximum Benefit Annual Report, YVWD, BCVWD, the Pass Agency, the City of Beaumont and the City of Banning shall report on the TDS and nitrogen quality and quantity of all sources of recharged water and summarize the annual and 10-year annual weighted TDS and nitrogen average concentrations recharged to the Beaumont Groundwater Management Zone.

8. Antidegradation Objectives Salt Mitigation Plan (Table 5-9c, #8)

Within *(**1 year of approval by OAL of the BPA**)*, YVWD, BCVWD, the Pass Agency, the City of Beaumont and the City of Banning shall submit a Salt Mitigation Plan to mitigate excess salt loading above the antidegradation water quality objectives. The Salt Mitigation Plan shall provide a conceptual framework for mitigation projects should the Regional Board make a finding that the lowering of water quality associated with the "maximum benefit" TDS and nitrate-nitrogen water quality objectives that are higher than historical water quality (the "antidegradation" objectives) is not of maximum benefit to the people of the state. The Salt Mitigation Plan must be implemented within 30 days of a Regional Board finding that maximum benefit is no longer being achieved.

~~8~~9. Ambient Groundwater Quality Determination (Table 5-9c, # 8)

By July 1, 2014, and every three years thereafter, YVWD, BCVWD, the Pass Agency, the City of Beaumont and the City of Banning shall submit a determination of ambient TDS and nitrate-nitrogen quality in the Beaumont Groundwater Management Zone. This determination shall be accomplished using methodology consistent with the calculation (20-year running averages) used by the Nitrogen/TDS Task Force to develop the TDS and nitrate-nitrogen "antidegradation" water quality objectives for groundwater Management Zones within the region. [Ref. 1].

B. Implementation by Regional Board

1. Revision to Yucaipa Valley Water District NPDES Permit

To implement the "maximum benefit" objectives, the Regional Board will revise the waste discharge requirements and producer/user reclamation requirements for the YVWD wastewater discharges to reflect the commitments described above, as appropriate. This includes the following:

For any surface water discharges that affect the Beaumont Groundwater Management Zone, discharge limits for TDS and TIN will be specified as an annual volume-weighted average at the end of pipe not to exceed 330 mg/L TDS and 6.7 mg/L TIN. These limits are based on the "maximum benefit" objectives of the Beaumont Groundwater Management Zone shown in Table 4-1 and take the nitrogen loss coefficient into account. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified and will apply should the Regional Board find that maximum benefit is not demonstrated. These alternative objectives are also specified in Table 4-1. Compliance schedules for these alternative limits will be specified in the YVWD's waste discharge requirements, as necessary and appropriate.

YVWD's waste discharge requirements will require that any planned recharge of recycled water shall be limited to the amount that can be blended with other water sources, such as new ~~stormwater~~storm water or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Beaumont Groundwater Management Zone. The use of recycled water for irrigation and other direct re-use shall be limited to the amount that can be blended with other water sources, such as ~~stormwater~~storm water or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Beaumont Groundwater Management Zone.

Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified for recycled water recharge and re-use in the Beaumont Groundwater Management Zone and will apply if the Regional Board finds that the maximum benefit commitments are not met.

2. Revision to the City of Beaumont NPDES Permit

To implement the "maximum benefit" objectives, the Regional Board will revise the waste discharge requirements and producer/user reclamation requirements for the City of Beaumont wastewater discharges to reflect the commitments described above, as appropriate. This includes the following:

For surface water discharges that affect the Beaumont Groundwater Management Zone, discharge limits for TDS and TIN will be specified as an annual volume-weighted average at the end of pipe not to exceed 330 mg/L TDS and 6.7 mg/L TIN. These limits are based on the "maximum benefit" objectives of the Beaumont Groundwater Management Zone shown in Table 4-1 and take the nitrogen loss coefficient into account. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified and will apply should the Regional Board find that maximum benefit is not demonstrated. These alternative objectives are also specified in Table 4-1. Compliance schedules for these alternative limits will be specified in the City of Beaumont's waste discharge requirements, as necessary and appropriate.

The City of Beaumont's waste discharge requirements will require that any planned recharge of recycled water shall be limited to the amount that can be blended with other water sources, such as ~~stormwater~~storm water or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Beaumont Groundwater Management Zone. The use of recycled water for irrigation and other direct re-use shall be limited to the amount that can be blended with other water sources, such as ~~stormwater~~storm water or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Beaumont Groundwater Management Zone.

Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified for recycled water recharge and re-use in the Beaumont Groundwater Management Zone and will apply if the Regional Board finds that the maximum benefit commitments are not met.

3. Revision of City of Banning NPDES Permit

Discharges from the City of Banning are currently regulated by the Colorado River Water Board. To implement the "maximum benefit" objectives, the Santa Ana Water Board will work with the Colorado River Water Board to revise the NPDES permit for the City of Banning's wastewater discharge to reflect the commitments described below, as appropriate.

For any surface water discharges that affect the Beaumont Groundwater Management Zone, discharge limits for TDS and TIN will be specified as an annual volume-weighted average at the end of pipe not to exceed 330 mg/L TDS and 6.7 mg/L TIN. These limits are based on the "maximum benefit" objectives of the Beaumont Groundwater Management Zone shown in Table

4-1 and take the nitrogen loss coefficient into account. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified and will apply should the Regional Board find that maximum benefit is not demonstrated. These alternative objectives are also specified in Table 4-1. Compliance schedules for these alternative limits will be specified in the City of Banning's waste discharge requirements, as necessary and appropriate.

The City of Banning waste discharge requirements will require that any planned recharge of recycled water shall be limited to the amount that can be blended with other water sources, such as ~~stormwater~~storm water or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Beaumont Groundwater Management Zone. The use of recycled water for irrigation and other direct re-use shall be limited to the amount that can be blended with other water sources, such as ~~stormwater~~storm water or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Beaumont Groundwater Management Zone.

Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified for recycled water recharge and re-use in the Beaumont Groundwater Management Zone and will apply if the Regional Board finds that the maximum benefit commitments are not met.

4. Review of Project Status

The Regional Board intends to review periodically YVWD, the City of Beaumont, the City of Banning, BCVWD and the Pass Agency's implementation of the maximum benefit program commitments described above and summarized in Table 5-9c. This review is intended to determine whether the commitments are met, and whether the application of the "maximum benefit" objectives continues to be justified. As indicated above, if, as a result of this review, the Regional Board finds that the commitments are not met, then the Regional Board may make the finding that the "maximum benefit" objectives are not consistent with the maintenance of water quality that is of maximum benefit to the people of the state, and that the more stringent "antidegradation" objectives for the Beaumont Groundwater Management Zone (230 mg/L for TDS and 1.5 mg/L for nitrate-nitrogen; see Chapter 4) must apply instead for regulatory purposes. In the event that the Regional Board makes these determinations, the Regional Board will require that YVWD, the City of Beaumont, the City of Banning, BCVWD and the Pass Agency, either individually or collectively, implement the Salt Mitigation Plan (see commitment # 6) and mitigate the adverse water quality effects, both on the immediate and downstream waters, which resulted from recycled water discharges based on the "maximum benefit" objectives.

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Insert the following language

Minimum Lot Size Requirements and Exemption Criteria for New Developments Using On-Site Septic Tank-Subsurface Leaching/Percolation Systems

[These Requirements shall sunset no later than May 13, 2018. If a Local Agency Management Plan (LAMP) developed pursuant to the State Water Resources Control Board's Onsite Wastewater Treatment System Policy is approved prior to that date, the LAMP shall supersede these requirements as of the date of approval.]

Page 5-204ff:

Update the Chapter 5 references as follows:

REFERENCES:

1. Wildermuth Environmental, Inc., TIN/TDS – Phase 2A of the Santa Ana Watershed, Development of Groundwater Management Zones, Estimation of Historic and Current TDS and Nitrogen Concentrations in Groundwater, Final Technical Memorandum," July 2000.

2. Wildermuth Environmental, Inc., "Santa Ana Watershed Data Collection and Management Program, Final Technical Memorandum," October 2001.

3. Wildermuth Environmental, Inc., "TIN/TDS Study - Phase 2B of the Santa Ana Watershed, Wasteload Allocation Investigation Memorandum," October 2002.

4. Wildermuth Environmental, Inc., Memo to TIN/TDS Task Force, "Transmittal of Final Tables, Figures and CD in Support of Basin Plan Amendments – TIN/TDS Study," October 2002.

5. Wildermuth Environmental, Inc., "June 2003 Addendum TIN/TDS Study – Phase 2B of the Santa Ana Watershed Wasteload Allocation Investigation," July 2003

6. California Regional Water Quality Control Board – Santa Ana Region, "Guidelines for Sewage Disposal from Land Developments," January 1979.

7. State Water Resources Control Board, "Order No. 73-4, Rancho Caballero Decision," April 1972.

8. Department of Water Resources, "Mineral Increases from Municipal Use of Water in the Santa Ana River Basin," Memorandum Report, June 1982.

9. City of Riverside, Memo from Rod Cruze to TIN/TDS Task Force," Nitrogen Loss Assumptions for Reach 3 of the Santa Ana River," April 2002.

10A. California Regional Water Quality Control Board – Santa Ana Region, Staff Report, "Santa Ana River at Prado Dam, Results of Annual Water Quality Sampling for 2002", April 2003. Santa Ana Watershed Project Authority,

10B. Chino Basin Watermaster, Letter to Gerard Thibeault, "Chino Basin Watermaster Proposal for New Total Dissolved Solids (TDS) and Nitrogen Water Quality Objectives for the Chino and Cucamonga Basins Based on Maximum Beneficial Use," December 2002.

10C. Chino Basin Watermaster, "Chino Basin Optimum Basin Management Plan," 1999.

10D. City of Banning, Beaumont Cherry Valley Water District, San Gorgonio Pass Water Agency, Yucaipa Valley Water District, (2011), Proposed Regional Implementation of Maximum Benefit Commitments for the Beaumont Management Zone. Preliminary Draft

10E. San Timoteo Watershed Management Agency, Letter to Gerard Thibeault, "Revised San Timoteo Watershed Management Agency Proposal for New Total Dissolved Solids (TDS) and Total Inorganic Nitrogen Water Quality Objectives for the Beaumont, San Timoteo and Yucaipa Management Zones Based on Maximum Beneficial Use," December 2002 (Revised November 11, 2003).

10F. Daniel B. Stephens & Associates. (2007), Quantification of Nitrogen Removal Under Recycled Water Ponds, Prepared for Eastern Municipal Water District.

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Attachment C

Response to Comments

Comment No.	Commenting Party	Date of Comment Letter(s)	Comment	Response
1	Greg Woodside OCWD (via e-mail)	December 18, 2013	The footnotes in Tables 1 and 2 of the staff report appear to be numbered incorrectly.	Staff made the corrections to the Tables in the December 17, 2013 staff report. These corrections were reflected in the staff report presented at the January 31, 2014 hearing.
2	Alan Kapanicas City of Beaumont	January 15, 2014	The City wants confirmation that incorporating the State Board new Onsite Wastewater Treatment system (OWTS) policy in the proposed Basin Plan amendment will result in minimum lot size requirement for OWTS of 2.5 acres in the unsewered areas overlying and tributary to the Beaumont Groundwater Management Zone (BMZ) after May 13, 2018. After May 13, 2018, conventional OWTS can only be installed or replaced in-kind if the lot size is greater than or equal to 2.5 acres which could be reduced if a Local Agency Management Program (LAMP) was developed and approved by the Regional Board providing for smaller minimum lot size requirements.	The City's understanding of the OWTS Policy is consistent with Regional Board staff's understanding. The 0.5 acre minimum lot size criterion currently specified in the Basin Plan will stay in effect until Riverside County's LAMP is approved or until May 13, 2018, whichever comes first. If a LAMP is not approved by that date, then the 2.5 acre minimum lot size criterion in the OWTS Policy will apply. If the County wants to allow septic systems on lot sizes less than 2.5 acres, they will have to justify that their proposed criterion is protective of groundwater quality before Regional Board staff recommend approval of the LAMP.
3	Alan Kapanicas City of Beaumont	January 15, 2014	The City is concerned about the continuing impacts OWTS in the Beaumont forebay will have on Beaumont Management Zone water quality given that the City has no ability to regulate OWTS. What will be the effect of the OWTS Policy on TDS and nitrate concentration in the water supplies developed from BMZ groundwater?	Changing the minimum lot size requirements from 0.5 acre to 2.5 acres will significantly reduce OWTS impacts on groundwater quality. However, this provision applies only to new development. Regional Board staff believe that the existing county prohibition will address some of the City's issues. If appropriate in the future, the Regional Board may consider adoption of a prohibition.

Comment No.	Commenting Party	Date of Comment Letter(s)	Comment	Response
4	Alan Kapanicas City of Beaumont	January 15, 2014	The draft Basin Plan (page 18 of 63) does not list all Beaumont area agencies as members of the Basin Monitoring Program Task Force. Beaumont Cherry Valley Water District (BCVWD), City of Banning and San Gorgonio Pass Agency should be required to become Task Force members and share the monitoring and other program costs.	The proposed amendment text recognizes those agencies that are current Basin Monitoring Program Task Force members as of 2013. The non-inclusion of the City of Banning, San Gorgonio Pass Agency and Beaumont Cherry Valley Water District on that list does not mean they are not required to undertake the various tasks associated with implementation of the maximum benefit requirements. For each Management Zone, the proposed amendment indicates the responsible agencies. In the case of the Beaumont Management Zone, all agencies - BCVWD, the City of Banning and San Gorgonio Pass Agency (Pass Agency) as well as Yucaipa Valley Water District (YVWD) and the City of Beaumont, are identified as being responsible for meeting the maximum benefit commitments (revised Basin Plan amendment page 37 of 45). To ensure that these agencies conduct the required monitoring and groundwater ambient determination, Board staff has the option to issue an investigative order pursuant to Water Code Section13267.
5	Alan Kapanicas City of Beaumont	January 15, 2014	The City wants clarification that if the maximum benefit commitments are not met by one or more agency, then only that specific agency would lose the benefits of the maximum benefit objectives and be required to mitigate excess salt loads.	The demonstration that the lowering of water quality is of maximum to the people of the state relies on the implementation of a watershed-wide water resource and water quality program that is a coordinated effort by <u>all</u> of the maximum benefit partners. Staff does not believe it is appropriate to allow the maximum benefit program to proceed if one or more

Comment No.	Commenting Party	Date of Comment Letter(s)	Comment	Response
				of the partners fail to meet their obligation since this could fragment maximum benefit program implementation to the detriment of management zone water quality.
6	Alan Kapanicas City of Beaumont	January 15, 2014	The proposed Basin Plan states (pg 37) that: "Mitigation by groundwater extraction and desalting must be adjusted to address concentrations of salt and nitrogen in the basin, not simply salt load." 4The City finds this language vague and recommends that a separate commitment be added to Tables 5-9a, 5-9b and 5-9c that would identify projects to be implemented if one (or more) of the parties is required to comply with the antidegradation objectives.	Board staff agree and have added language to the Basin Plan amendment for each management zone that within 1 year of approval of the Basin Plan amendment by the Office of Administrative Law (OAL), the respective maximum benefit agencies are required to develop and submit for Regional Board approval a salt mitigation plan. Specific salt offsets and/or mitigation projects would need to be identified along with an implementation schedule (revised Basin Plan amendment pages 23, 31 and 40 of 45).
7	Alan Kapanicas City of Beaumont	January 15, 2014	The City has concerns with the stormwater blending requirement under the non-potable water use and recycled water recharge commitments. This requirement should be limited to "new" stormwater capture since the 2004 Salt Management Plan amendments already took a certain amount of stormwater capture into account. A narrative definition of the base line stormwater recharge needs to be included in the proposed Basin Plan amendment to insure uniformity among the management zones where new storm water recharge is used for dilution to achieve TDS and nitrate compliance. The City recommends that this definition be stated as follows:	Board staff agree and have added proposed language defining new stormwater recharge to the Basin Plan amendment (revised Basin Plan amendment Tables 5-9a, 5-9b and 5-9c).

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			"New Storm Water Recharge – Increase in storm water recharge in quantities greater than historical amounts (net increase) over the groundwater management zone since January 1, 2004."	
8	Alan Kapanicas City of Beaumont	January 15, 2014	The City believes the maximum benefit parties need to ensure that their groundwater monitoring program design and implementation is consistent with the ambient TDS and nitrate determination methodology used by the BMPTF and approved by the Regional Board to estimate "current" ambient TDS and nitrate concentrations. The City suggests that the language under the groundwater monitoring program requirements be modified to provide a nexus to the requirements of the ambient TDS and nitrate determination methodology.	Board staff agree and have added relevant language to the proposed Basin Plan amendment (revised Basin Plan amendment pages 21, 29 and 38 of 45).
9	Alan Kapanicas City of Beaumont	January 15, 2014	The City commented that the existing maximum benefit program incorporated into the 2004 Basin Plan did not contemplate the need for desalter construction for a number of years and this should be recognized in the Basin Plan. The City has provided recommended language.	Staff do not see the need for or benefit of including the City's proposed language since this language focuses on providing a historical perspective. The proposed revision of the maximum benefit program focuses on specific requirements of all of the parties.
10	Alan Kapanicas City of Beaumont	January 15, 2014	The proposed revision to the maximum benefit program requires the City to: 1) submit a desalting plan within 15 days of OAL approval; and 2) complete desalter construction 5 years from Regional Board approval of that plan. The City believes that the timeframe to submit the plan/schedule is unachievable. The City request that the due date for submittal of the plan be extended to January 2015.	Board staff agree to modify the proposed desalter plan/schedule due date to January 2015 and to add language to allow flexibility in meeting the 5-year desalter compliance date. (Tables 5-9b, #4, 5-9c, #4, #5 and pages 30 and 39 of 45).

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			Further, given that there are no brine facilities available to the City and it is unlikely that the appropriate facilities can be constructed within a 5 year timeframe, the City requests that, in lieu of strict compliance with the five-year time limit, the proposed Basin Plan amendment include a salt offset option whereby the City can offset TDS concentrations in excess of 330 mg/L for recharge and direct use of recycled water	
11	Alan Kapanicas City of Beaumont	January 15, 2014	The proposed Basin Plan amendment requires YVWD and the City of Beaumont to submit a plan for compliance for wastewater discharges that impact the San Timoteo Management Zone (Table 5-9b, #7), to either comply with the TDS and nitrate maximum benefit objectives, or if maximum benefit is found not to be occurring, the antidegradation objectives. The City notes that the requirement to provide a plan for meeting antidegradation objectives is not reflected in Table 5-9b, #7.	Board staff have added that requirement to Table 5-9b, #7
12	Alan Kapanicas City of Beaumont	January 15, 2014	The City seeks confirmation that discharges at DP 001 to Cooper's Creek are defacto discharges to the San Timoteo Management Zone and therefore TDS and nitrate discharge limits to protect the San Timoteo Management Zone would be specified for this discharge location.	Board staff agree. For this discharge location, as incorporated into the Basin Plan in 2004 (Salt Management Plan amendments), the wasteload allocation specifies that the TDS and nitrogen effluent limits are based on the San Timoteo Management Zone.
13	Alan Kapanicas City of Beaumont	January 15, 2014	The City seeks confirmation that discharges at DP 007 and DP 008 that recharge into the Beaumont Management Zone would need to comply with the Beaumont Management Zone. Further, DP 007 discharge constitutes incidental recharge; the discharge to DP 008 is a planned recharge project. The City seeks confirmation that only discharges from DP 008 would be regulated as a recharge project?	Board staff agree that TDS and nitrogen effluent limits for both DP 007 and DP 008 discharges would be based on the Beaumont Management Zone objectives. As Board staff have indicated to the City in the past, discharges at <u>both</u> DP 007 and DP 008 would constitute recharge projects. If the City intends to pursue the discharge of DP 007 as incidental

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				recharge, this would constitute a wastewater disposal project that is not consistent with the maximum benefit approach and therefore, the antidegradation objectives would apply.
14	Alan Kapanicas City of Beaumont	January 15, 2014	The City seeks confirmation that for groundwater reuse recharge projects at both DP 007 and 008, the Regional Board would require compliance with Title 22 regulations for groundwater reuse recharge projects and questions where in the proposed Basin Plan amendment, this requirement is specified. The City also asks for the legal justification for this "new" requirement.	The Basin Plan amendment does not need to include this requirement, as it is a requirement of Title 22 that need not be repeated in the Basin Plan. Further, this is not a "new" requirement. Title 22 has had groundwater recharge requirements for a number of years and the Regional Board has been implementing those requirements in waste discharge requirements. As noted above, because the City is no longer proposing to "discharge waste" at DP 007 and 008, but to use the recycled water for recharge benefits, this does provide maximum benefit. Consequently, the proposed use recycled water for groundwater recharge is regulated under Title 22, Article 5.1 and must be implemented through waste discharge requirements issued by the Regional Board.
15	Alan Kapanicas City of Beaumont	January 15, 2014	<u>Section B.3. –</u> Beaumont Management Zone – Yucaipa Valley Water District, the City of Beaumont, the City of Banning, Beaumont Cherry Valley Water District, San Gorgonio Pass Agency (pg. 52 of 63) The second paragraph of this section omits the City of Banning as a sewer collection agency overlying the BMZ that is also a partner to the maximum benefit program. Discharges from the City of Banning are to the	The proposed Basin Plan amendment has been revised to add a description of the City of Banning (revised Basin Plan amendment page 34 of 45). As stated in the proposed Basin Plan amendment, Santa Ana Board staff will work with RB7 staff to include appropriate waste discharge requirements for discharges of recycled water from the City of Banning that affect the Beaumont

Comment No.	Commenting Party	Date of Comment Letter(s)	Comment	Response
			Colorado Region (Regional Board 7 – RB7) and no TDS effluent limit is specified in their current WDRs from RB7. The City of Beaumont is unclear how the City of Banning will be regulated for recycled water reuse over the Beaumont Management Zone.	Management Zone. Since waste discharge requirements need to comply with applicable Basin Plan requirements, including water quality objectives and the implementation plan to ensure compliance with those objectives, Board staff do not envision problems in ensuring the City of Banning compliance with Beaumont Management Zone objectives through the issuance of waste discharge requirements by RB7. Board staff is proposing to make it clear, that for the City of Banning, if not directly incorporated into waste discharge requirements, implementation of the maximum benefit requirements may be required through the issuance of a Water Code Section 13267 letter or other appropriate regulatory actions.
16	Alan Kapanicas City of Beaumont	January 15, 2014	The City asks for a 90-day deferral of Regional Board consideration of the proposed Basin Plan amendment to allow all of the maximum benefit parties to discuss and resolve outstanding issues.	Board staff do not agree that the proposed amendment needs to be delayed an additional 90 days. The maximum benefit parties have been working on these issues for approximately 3 years and staff believes that, if the City is committed to the maximum benefit program, these issues can be resolved well in advance of the March 14, 2014 Regional Board public hearing.
17	Janet Hashimoto US Environmental Protection Agency	January 15, 2014	The US Environmental Protection Agency (USEPA) raised concerns about the proposal to remove the TDS and nitrogen waste load allocations for the Yucaipa Valley Water District (YVWD) and the City of Beaumont Wastewater Treatment Plant (Beaumont WWTP) facilities since this constitutes a modification	The concerns expressed by USEPA are acknowledged. Since work is currently underway to reconsider both the nitrogen and TDS wasteload allocations and a separate Basin Plan amendment is expected in the near future to address

Comment No.	Commenting Party	Date of Comment Letter(s)	Comment	Response
			to the Santa Ana River nutrient TMDL approved by USEPA in 1995. As currently proposed, USEPA would interpret the removal of wasteload allocations to mean that these two facilities would have TDS and TIN allocations equal to zero. Therefore, these two facilities would not be allowed to discharge effluent containing these two parameters into ambient waters.	needed modifications, the initial proposal to remove YVWD and the City of Beaumont from the allocation scheme will not be pursued at this time. For the present, we note the following: First, it is not clear on what basis USEPA would interpret the removal of wasteload allocations to mean zero discharges. What had been proposed was the removal of two discharges from the allocation scheme, given that they are not significant sources of nitrogen or TDS to the Santa Ana River system, for which the allocations were developed. Regional Board staff would appreciate USEPA's justification for this interpretation. Second, it should be noted that the TMDL to which USEPA refers is not for nutrients but for total inorganic nitrogen (TIN) and that there is no TDS TMDL. We also note that in USEPA's approval of the 2004 Salt Management Plan Basin Plan amendment, which contained an update of the 1995 TIN WLA, USEPA did not comment on the WLA. As discussed in the 2004 Salt Management Plan staff report, the intent of the WLA is to ensure protection of underlying groundwaters. Further, as discussed in the 2004 stat report, the Santa Ana River is not impaired for either TDS or nitrogen and therefore a TMDL is not required or needed. The Regional Board continues to ensure groundwater protection by evaluating and continuing to specify

Comment No.	Commenting Party	Date of Comment Letter(s)	Comment	Response
				appropriate POTW TDS and nitrogen discharge limits which are expressed in wasteload allocation tables.
18	Janet Hashimoto US Environmental Protection Agency	January 15, 2014	USEPA expressed concerns that the proposed Basin Plan amendment appears to recommend relaxing the WWTP effluent limits for total dissolved solids (TDS) and total inorganic nitrogen (TIN) for YVWD and the City WWTP which may be inconsistent with backsliding federal regulations at 40 CFR 122.44. This proposal appears to first apply the maximum beneficial use and related water quality numeric objectives and, if certain conditions are not met, then secondly apply the antidegradation use and related numeric objectives. The TDS and TIN numeric water quality objectives associated with maximum beneficial use are higher values (less restrictive) than those associated with antidegradation use. For any facility discharges to surface waters, EPA would expect the antidegradation values to be met first, so as to maintain high water quality in streams as well as to ensure effluent levels do not approach impairment levels in such effluent dominant waters.	USEPA appears to misunderstand the nature of maximum benefit and antidegradation objectives, which were established in accordance with antidegradation policy (SWRCB Resolution No.68-16). In both cases, the objectives will assure the protection of beneficial uses, as required. The objectives are **not** differentiated on the basis of the protection of a “maximum beneficial use” versus an “antidegradation beneficial use”. Application of less stringent maximum benefit objectives in setting effluent limitations does not result in impairment or approaching impairment in receiving waters. The Basin Plan text provides extensive discussion of the nature and basis of establishing these objectives [see Basin Plan, 4-27 and 5-45]. The 2004 amendments to the Basin Plan, already approved by USEPA, included allocations for certain dischargers (including YVWD and the City of Beaumont) that were based on both “maximum benefit” and antidegradation objectives for affected receiving waters. In the proposed Basin Plan amendment staff recommends that the TDS and TIN discharges from the City of Beaumont and YVWD be regulated at the relevant management zone maximum benefit

Comment No.	Commenting Party	Date of Comment Letter(s)	Comment	Response
				water quality objectives, depending on which management zone (Yucaipa, San Timoteo and/or Beaumont Management Zone) is affected by the effluent discharges. For each of these management zones, the, application of the maximum benefit water quality objectives results in more stringent effluent limitations than the existing TDS and TIN wasteload allocations. Given this, backsliding concerns are simply invalid.
19	Janet Hashimoto US Environmental Protection Agency	January 15, 2014	Per federal regulations at 40 CFR 130.7, the proposed TMDL modification would require EPA's review and approval which is not indicated in the draft resolution.	Please see response to comment #18.
20	Joseph Zoba Yucaipa Valley Water District	February 27, 2014 via e-mail	The existing wasteload allocation specifies 0.0 MGD discharge volume for Yucaipa Valley Water District (YVWD) (Table 5-5) for alternative 2010B. YVWD will require a minimum discharge contribution of 1.8 MGD to San Timoteo Creek to maintain the riparian habitat. How is a 0.0 MGD wasteload allocation administered to enable the discharge to maintain the habitat in the creek?	As discussed in the Basin Plan, Alternative 2010B assumed that reclamation plans by the various POTWs would be in place. In the event that those reclamation plans were not achieved, the Basin Plan also specifies an alternate wasteload allocation – 2010A. Pursuant to the 2010A wasteload allocation (Table 5-5), YVWD would be allowed to discharge up to 5.0 MGD to San Timoteo Creek.
21	Joseph Zoba Yucaipa Valley Water District	February 27, 2014 via e-mail	In 2006, the RWQCB adopted R8-2006-0003 which permitted the City of Beaumont to recharge recycled water up to the Beaumont Management Zone maximum benefit objective for TDS of 330 mg/L at the DP 001 location. In 2009, the RWQCB adopted R8-2009-0002 which permitted the City of Beaumont to discharge recycled water at discharge location DP 008 in the Beaumont Management Zone with a TDS effluent limit of 330 mg/L.	YVWD is incorrect in identifying a TDS effluent limit for the City of Beaumont of 330 mg/L. Pursuant to the maximum benefit program that was incorporated into the Basin Plan in 2004 and the TDS and nitrogen wasteload allocation, the City of Beaumont's discharge permit specifies a TDS effluent limit of 490 mg/L TDS. The TDS effluent limit of 330 mg/L to

Comment No.	Commenting Party	Date of Comment Letter(s)	Comment	Response
			Please confirm that the discharge of recycled water from DP 001 and DP 008 complied with the "five-year running average" for TDS of 330 mg/L. Please forward the spreadsheet showing the monthly DP-001 and DP-008 discharge quantity and TDS mass loadings used to calculate TDS compliance. I would also appreciate any supporting documentation such as correspondence, reports and other related documents related to TDS compliance in the Beaumont Management Zone at both discharge points.	which YVWD refers, is the proposed TDS limit that would be applied to the City's discharges from DP 007 and DP 008 if and once this Basin Plan amendment is approved. As documented in the City's annual maximum benefit report, the City for discharges from DP 007, the City of Beaumont has complied with the 490 mg/L TDS limit; for discharges at DP 001, the City has complied with the 400 mg/L TDS limit. Discharge at DP 008 has not been initiated. See also response to comment #13.
22	Joseph Zoba Yucaipa Valley Water District	February 27, 2014 via e-mail	YVWD assumes that since the City of Beaumont does not have the ability to remove salt through a desalter, the City's recycled water discharge that overlies the Beaumont Management Zone is approximately 400 mg/L TDS. Therefore, the City is not in compliance with the 330 mg/L TDS limit as specified in the "maximum benefit" program (R8-2009-0002).	YVWD is incorrect. The existing regulatory TDS effluent limit for the City of Beaumont specified in Order No. R8-2006-0003 as amended by Order No. R8-2009-0002 is 490 mg/L. This effluent limit is specified in the wasteload allocation approved by the Regional Board in 2004 (Resolution No. R8-2004-0001). If this proposed Basin Plan amendment is approved, then the TDS effluent limit for the City (as well as other recycled water users) would be 330 mg/L as a 10-year running average. See also response to comment #13, 21.
23	Joseph Zoba Yucaipa Valley Water District	February 27, 2014 via e-mail	Is the purpose of the proposed language in the basin plan amendment to recalculate stormwater contributions back to January 2004 in order to provide an opportunity to reconcile the "maximum	The purpose of the proposed addition of language related to "new" stormwater is to ensure that as the maximum benefit program moves forward, all parties have

Comment No.	Commenting Party	Date of Comment Letter(s)	Comment	Response
			benefit" TDS exceedance (page 35 of 47)? If so, does this dilution strategy provide a maximum benefit to the State?	an agreed upon method in place to correctly track dilution water recharge that is newly created since the 2004 Basin Plan amendment.
24	Joseph Zoba Yucaipa Valley Water District	February 27, 2014 via e-mail	According to the SWRCB Division of Water Rights, the capture and recharge of stormwater in a creek system will require a water rights diversion permit which will be an expensive and time consuming effort.	Comment noted. It is not clear that the City and/or other maximum benefit parties only propose to divert stormwater from surface waters. Any "new" stormwater capture plan that is proposed to address maximum benefit program requirements must satisfy applicable law and regulations.
25	Joseph Zoba Yucaipa Valley Water District	February 27, 2014 via e-mail	The requirement to "submit a proposed methodology for computing a baseline and new stormwater recharge" (page 37 of 47) for the dilution of recycled water from the City of Beaumont is unlikely to occur in the near future since the City of Beaumont has not provided a plan, project description, or related documents that indicate where this stormwater capture project is located or how it will operate.	The proposed Basin Plan amendment requires that the methodology for computing baseline stormwater recharge plan be submitted for Executive Officer approval by March 2015. This methodology is not specific to the City, but must be developed and agreed upon by <u>all</u> maximum benefit partners.
26	Joseph Zoba Yucaipa Valley Water District	February 27, 2014 via e-mail	YVWD recommends the deletion of the "new water" language proposed by the City and the deletion of the requirement to compute the new stormwater contributions until a plan is developed and agreements are reached with all parties (private and public) to secure the necessary water rights to allow the dilution strategy.	Board staff does not support deletion of the requirement. Board staff believes that the proposed requirement to develop a methodology is needed in order to ensure accurate tracking of recycled water usage by all maximum benefit parties. Staff would also note that, based on discussion with all maximum benefit partners, including Mr. Zoba, the "new stormwater" language has been expanded to also cover other sources of dilution water, including reverse osmosis permeate and/or imported water.

Comment No.	Commenting Party	Date of Comment Letter(s)	Comment	Response
27	Joseph Zoba Yucaipa Valley Water District	February 27, 2014 via e-mail	YVWD supported the proposed Basin Plan amendment presented at the January 31, 2014 Regional Board meeting. YVWD does not support the changes suggested by the City of Beaumont (wrt to the "new stormwater") since it does not reflect the regional coordination approach or the commitments made by YVWD.	Board staff believe that the proposed revisions to the Basin Plan suggested by the City of Beaumont provide greater clarity and certainty for when the maximum benefit partners initiate their recycled water reuse plans. We believe that this approach is consistent the partners' regional strategy in that it will result in a consistent and clear-cut method for assigning dilution credits amongst all of the partners. See also response to comment #26
28	Brian Villalobos (on behalf of) City of Banning	March 7, 2014 via e-mail	The City of Banning does not use recycled water in the Beaumont Management Zone (BMZ) and may not in the future. If the City were to use recycled water, SWP water would be used to offset the TDS concentrations to the maximum benefit objective (330 mg/L). Therefore, a desalter construction would not be needed by the City. The City has proposed language to reflect the fact that they may not use recycled water and that the maximum benefit requirements therefore would not be applicable.	Based on discussion with City of Banning staff, recycled water use in the Beaumont Management Zone would likely be limited to approximately 800 acre-feet to support golf course irrigation. Given the limited use of recycled water by the City of Banning, staff believes that the desalting requirement is not needed and instead propose that the requirement be revised to require the City to prepare a plan to ensure that any excess salt added to the Beaumont Management Zone in excess of the maximum benefit objective is mitigated (see Table 5-9c, #5).
29	Brian Villalobos (on behalf of) City of Banning	March 7, 2014 via e-mail	The City of Banning notes that any new stormwater diverted and used for dilution of recycled water use would require a diversion permit from the State Water Resources Control Board (Division of Water Rights) and that should be reflected in the Basin Plan.	See response to comment #24

Comment No.	Commenting Party	Date of Comment Letter(s)	Comment	Response
30	Brian Villalobos (on behalf of) City of Banning	March 7, 2014 via e-mail	The desalting schedule requirement for the City of Banning (Table 5-9c, #5a) should be revised to specify that a desalter plan and schedule is due within one year of initiation of the recycled water application/recharge. The City of Banning requests that the desalting requirements be removed.	See response to comment #28
31	Alan Kapanicas City of Beaumont	March 12, 2014	**Note:** The City of Beaumont provided their responses to comments submitted by YVWD and the City of Banning. No response from Regional Board staff is necessary. Responses to the following issues raised by the City are provided.	n/a
32	Alan Kapanicas City of Beaumont	March 12, 2014	The City of Beaumont intends to meet the 400 mg/L TDS effluent for their discharges that affect the San Timoteo Management Zone. Further, upon approval of the Basin Plan amendment, for discharges to the Beaumont Management Zone, the City is developing plans to comply with the proposed TDS effluent limit of 330 mg/L.	Comment noted.
33	Alan Kapanicas City of Beaumont	March 12, 2014	The City of Beaumont notes that the current Basin Plan TDS and nitrogen wasteload allocation is confusing and believes that revision of the wasteload allocations that were recently conducted (2009) by the Basin Monitoring Program Task Force should be incorporated into the Basin Plan. If the City has a need to discharge greater volume than 1.8 MGD (the minimum volume required to maintain the riparian habitat), the 2009 wasteload allocation analysis evaluated a range of discharge conditions that would ensure compliance with the San Timoteo maximum benefit objectives.	The 2009 wasteload allocation cannot be incorporated into the Basin Plan since the wasteload allocation does not ensure compliance with all applicable water quality objectives. The Basin Monitoring Program Task Force is in the process of making revisions to the 2009 wasteload allocation analysis and if appropriate, the revised allocations (which are the basis of effluent limits) and allowable discharge volumes will be incorporated into the Basin Plan in the future.

Comment No.	Commenting Party	Date of Comment Letter(s)	Comment	Response
				Until that occurs, the City of Beaumont would be regulated by the existing Basin Plan wasteload allocation - Alternative 2010A, which allows a surface water discharge up to 2.3 MGD.
34	Alan Kapanicas City of Beaumont	March 12, 2014	The City of Beaumont is fully supportive of and committed to the implementation of the Regional Strategy and continues to recommend the proposed changes to the Basin Plan amendment as provided in their January 15, 2014 letter.	Comment noted. Board staff believes that the proposed Basin Plan amendment will ensure protection of water quality and provide flexibility to all of the maximum benefit partners.
35 - 66	Joseph Zoba Yucaipa Valley Water District	March 19, 2014 via e-mail	YVWD submitted proposed edits to the Basin Plan amendment. These edits were provided on a marked up version of the proposed Basin Plan amendment.	Board staff have numbered all of the edits recommended by YVWD – See Attachment D. For the most part, Board staff agree with the recommendations and have incorporated the suggested revisions. For those recommended edits that Board staff have not incorporated, staff has provided a summary of the recommended edit, and staff's rationale/responses for not incorporating the recommended edits are provided below.
			#35 <u>Table 5-5, WLA Table – footnote #2</u>. <u>2 attached maps</u> YVWD recommends deletion of the language identifying the City of Beaumont discharge location as being a discharge to the San Timoteo Management Zone and insert language identifying the City's discharge as being to the Beaumont Management Zone.	Because Board staff is not proposing to make any changes to the wasteload allocation at this time, these edits will not be incorporated. The issue of the City of Beaumont's discharge can reviewed as part of stakeholder's update of the wasteload allocation which is planned for 2015. See also response to comment #17

Comment No.	Commenting Party	Date of Comment Letter(s)	Comment	Response
			#36, #37, #38, #39, #40 #42, #43, #44, #45, #46, #47 #49, #50, #53, #56, #58, #59, #61, #65	Board staff agree and the recommended modifications have been made to the proposed Basin Plan Amendment (see Attachment to Resolution No. R8-2014-0005).
			#41 Yucaipa Management Zone, Table 5-9a, #4 (Non-potable water supply) YVWD recommended that the phrase " …in addition to non-irrigation reuse…" be deleted in referencing non-potable reuse nitrogen limits.	Board staff does not agree with this recommended edit since there is the potential for non-irrigation uses to affect groundwater quality. Instead, based on discussions with the maximum benefit partners, Board staff have modified the non-potable water commitment to specify that these requirements are specific to any non-potable uses that affects groundwater quality.
			#48 San Timoteo Management Zone, Table 5-9b, #6 (Recycled water recharge/habitat maintenance discharge) YVWD recommends that the recycled water recharge/discharge commitment specifically identify that the recharge/discharge quality meet maximum benefit objectives at the point of discharge.	While Board staff agrees with this comment, staff does not believe that this recommended addition is necessary in the Table of Commitments. This language is included in the description of Commitment #6 and staff believes that this is sufficient.
			#51 San Timoteo Management Zone, Commitment Description #6 (Recycled water recharge/habitat maintenance discharge) YVWD recommends that for recycled water discharges, the Basin Plan specifically identify that compliance with the maximum benefit objectives be measured "…at the end of the outfall …"	In concept, Board staff agree with the recommended edits; however, staff have modified the recommended language. Staff propose that the phrase "...at the end of pipe..." be utilized since this is consistent with the terminology used throughout the Salt Management Plan.

Comment No.	Commenting Party	Date of Comment Letter(s)	Comment	Response
			#52 San Timoteo Management Zone, Implementation by the Regional Board, #1 Revisions to YVWD NPDES Permit YVWD recommends that for surface water discharges, the Basin Plan specifically identify that compliance with the maximum benefit objectives be measured "…at the end of the outfall …" #54 San Timoteo Management Zone, Commitment Description, Implementation by the Regional Board, #2 Revisions to the City of Beaumont NPDES Permit YVWD recommends that for surface water discharges, the Basin Plan specifically identify that compliance with the maximum benefit objectives be measured "…at the end of the outfall …"	
			#55 Beaumont Management Zone, introductory discussion, 2nd paragraph YVWD recommends that the Beaumont Management Zone be identified as the location of the City of Beaumont discharge.	Board staff does not believe that this language is necessary or needed. The subsequent sentence describes the discharge location appropriately as affecting both the San Timoteo and Beaumont Management Zones.
			#57 Table 5-9c, #7 (Recycled water recharge) YVWD recommends that recycled water "discharge" be added to the commitment title.	Board staff does not believe that these recommended modifications are needed since this language is included in the description of Commitment #7. Staff believes that this is sufficient.

Comment No.	Commenting Party	Date of Comment Letter(s)	Comment	Response
			#60 Beaumont Management Zone, Commitment Description #5 (City of Banning desalter requirements) YVWD recommends minor edits to the Banning desalting requirements.	As shown in Attachment to Resolution No. R8-2014-0005, the desalting requirement for the City of Banning has been modified. Therefore the recommended revisions are no longer relevant (see Response to Comment #28)
			#62 Beaumont Management Zone, Commitment Description #7 (Recycled water recharge) YVWD recommends that recycled water "discharge" be added to the commitment title. #63 Beaumont Management Zone, Commitment Description #7 (Recycled water recharge) In the commitment description, in addition to identifying recycled water recharge, YVWD recommends that recycled water "discharge" be added to the commitment description	Board staff do not agree with these recommended edits. This commitment is specific to recycled water recharge not the discharge of treated wastewater effluent.
			#64 Beaumont Management Zone, Commitment Description #7 (Recycled water recharge) YVWD recommends that for surface water discharges, the Basin Plan specifically identify that compliance with the maximum benefit objectives be measured "…at the end of the outfall …"	In concept, Board staff agree with the recommended edits; however, staff have modified the recommended language. Staff propose that the phrase "...at the end of pipe..." be utilized since this is consistent with the terminology used throughout the Salt Management Plan.

Comment No.	Commenting Party	Date of Comment Letter(s)	Comment	Response
			#66 Beaumont Management Zone, Implementation by the Regional Board, #2 Revisions to the City of Beaumont NPDES Permit YVWD recommends that the Basin Plan identify the City's discharge locations – DP 001, DP 002, DP 007, DP 008.	Board staff do not believe that this recommended language is needed in the Basin Plan since the City's discharge locations may change in the future. Further, appropriate waste discharge requirements for the City of Beaumont will be addressed at the permitting stage for any of the City's proposed discharge locations.
			#67 Beaumont Management Zone, Implementation by the Regional Board, #2 Revisions to the City of Beaumont NPDES Permit YVWD recommends that recycled water "discharge" be added to the description of requirements for the City of Beaumont.	Board staff do not believe that this recommended language is needed. Appropriate waste discharge requirements for the City of Beaumont will be addressed at the permitting stage for the City's planned recycled water recharge and/or recycled water discharge.

ATTACHMENT D

Comment Letters

From: Woodside, Greg
To: "Tim Moore"; Smythe, Hope@Waterboards
Cc: Westropp, Marsha
Subject: FW: Basin Plan Amendment Docs
Date: Wednesday, December 18, 2013 3:11:26 PM
Attachments: ocwdlogo698824
gwrsystemsef1fef
twitter575b08
BP Amendment Staff Report.pdf
Attachment A - Final Resolution R8-2014-0005 and attachment.pdf
Attachment B - CEQA checklist.pdf

Tim and Hope:

Some minor comments on this:

- The footnotes in Table 1 of the staff report appear to be off (shifted) by one column;
- Same issue with footnotes in Table 2 of the staff report

Greg

Greg Woodside
Executive Director of Planning and Natural Resources
Orange County Water District
18700 Ward Street, Fountain Valley, CA 92708
tel: (714) 378-3275
email: gwoodside@ocwd.com

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GWRS GROUNDWATER REPLENISHMENT SYSTEM

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From: Zyanya Blancas [mailto:ZBlancas@sawpa.org]
Sent: Monday, December 16, 2013 2:20 PM
Subject: BMP: Basin Plan Amendment Docs

Good afternoon,

Attached you will find:

1. Staff Report
2. Attachment A – Tentative Resolution No. R8-2014-0005 with BP amendments
3. Attachment B – CEQA Checklist

Have a great day,

Zyanya Blancas
Admin. Assistant I - Santa Ana Watershed Project Authority
11615 Sterling Avenue, Riverside, CA 92503-4979 | 951.354.4220

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This electronic transmission, and any documents attached hereto, (a) are protected by the Electronic Communications Privacy Act (18

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CITY OF BEAUMONT

January 15, 2014

Santa Ana Regional Water Quality Control Board
Attention: Kurt Berchtold, *Executive Officer*
Hope Smythe, *Chief of Planning*
3737 Main Street, Suite 500
Riverside, California 92501-3348

RE: Comments on Draft Regional Board Resolution R8-2014-0005

Dear Mr. Berchtold and Ms. Smythe:

Thank you for the opportunity to provide the following comments on the draft Regional Board Resolution R8-2014-0005 (Resolution). The City would also like to express its gratitude to the Regional Board staff for its patience and expertise working with all the responsible parties and interests in the Beaumont and San Timoteo Management Zones to prepare the draft resolution.

The City understands that the Resolution, when approved, will amend the Basin Plan in seven areas that include:

1. Update the Basin Plan Onsite Wastewater Treatment Systems provisions
2. Revise Figure 3-3 Management Zone Boundary – San Bernardino Valley and Yucaipa/Beaumont Plains
3. Update the ambient TDS and Nitrate-nitrogen concentrations and the assimilative capacity for each groundwater management zone
4. Update the N loss coefficient for the San Jacinto area groundwater management zones
5. Deletion of the TDS and total inorganic nitrogen wasteload allocation for the Yucaipa Valley Water District (YVWD) and the City of Beaumont (City)
6. Update the Wastewater Reclamation section
7. Update the Yucaipa, San Timoteo and Beaumont Management Zone Maximum Benefit Programs.

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www.ci.beaumont.ca.us

The City has prepared the following comments related to Items Nos. 1 and 7 below.

Item 1 – Update the Basin Plan Onsite Wastewater Treatment Systems Provisions

It is the City's understanding that incorporating the State Board new Onsite Wastewater Treatment system (OWTS) policy in the proposed Basin Plan amendment will result in minimum lot size requirement for OWTS of 2.5 acres in the un-sewered areas overlying and tributary to the Beaumont Management Zone (BMZ) after May 13, 2018. That is, after May 13, 2018, conventional OWTS can only be installed or replaced in-kind if the lot size is greater than or equal to 2.5 acres. This minimum lost size requirement could be reduced if a Local Agency Management Program (LAMP) was developed and approved by the Regional Board providing for smaller minimum lot size requirements. Could you please confirm that our understanding is correct?

As you know the preponderance of OWTS in the BMZ are located in the forebay of the Beaumont Basin and have been shown to degrade the BMZ groundwater and water supplies provided to the citizens of the City. The total dissolved solids (TDS) concentration of groundwater has increased due to the OWTS located over the forebay and this degradation has and will continue to contribute to increased TDS management cost to the City. The City has no ability to regulate the OWTS that contribute to this cost. The rate payers in the City will also face increased water supply costs to mitigate nitrate degradation caused by the OWTS. Qualitatively, what impacts will the new OWTS provisions in the proposed Basin Plan amendment have on TDS and nitrate concentration in the water supplies developed from BMZ groundwater?

Item 7 – Update the Yucaipa, San Timoteo and Beaumont Management Zone Maximum Benefit Programs

The City has prepared a set of itemized comments and questions related to the proposed changes in the Basin Plan. The City has commented on the maximum benefit programs for all three management zones to preserve the symmetry among of commitments across the management zones. The City's comments are listed below.

1. Draft Proposed Resolution, Page 18 of 63, Task Force Participants.

The text lists all the members of the Basin Monitoring Program Task Force (BMPTF). The Beaumont-Cherry Valley Water District (District), the City of Banning (Banning) and the San Gorgonio Pass Water Agency (Agency) should be required to become members of the Basin Monitoring Program Task Force given their inclusion in the BMZ maximum benefit program and their required commitments to benefit from it. The City of Beaumont has been the only BMZ maximum benefit program party to contribute the BMPTF since the maximum benefit program started in 2004 and has paid for all the required monitoring since 2004 (except for a small amount

contributed by the District between 2004 and 2009). Inclusion of the District, Banning and the Agency is more equitable among the BMZ maximum benefit program parties and the BMPTF, but it is not clear how the requirement will be enforced. Please confirm that the City will not be held responsible in the event the District, Banning and the Agency do not contribute to the maximum benefit program.

2. Draft Proposed Resolution, Page 37 of 63, VI.B Salt Management in the San Timoteo Watershed, last full paragraph on the page.

The proposed text reads as follows:

> "The Regional Board will revise waste discharge requirements as appropriate to require implementation of these commitments. For each groundwater management zone, it is assumed that maximum benefit is demonstrated, and that the "maximum benefit" water quality TDS and nitrate-nitrogen objectives apply as long as the commitments and schedule applicable to that groundwater management zone are satisfied. <u>If the Regional Board determines that any or all of the maximum benefit programs are not being implemented effectively in accordance with the schedule(s) shown in Tables 5-9a through 5-9c, then maximum benefit is not demonstrated and the "antidegradation" TDS and nitrate-nitrogen objectives apply.</u> In this situation, the Regional Board will require mitigation for TDS and nitrate-nitrogen discharges to the affected groundwater management zone that took place in excess of limits based on the "antidegradation" objectives for that Groundwater Management Zone. As specified for Chino Basin Watermaster and Inland Empire Utilities Agency (see Section VI.A, above), discharges in excess of the antidegradation objectives that must be considered for mitigation include both recycled water and imported water at TDS concentrations in excess of the antidegradation objectives. <u>Mitigation by groundwater extraction and desalting must be adjusted to address concentrations of salt and nitrogen in the basin, not simply salt load</u>." (emphasis added)

The text first highlighted above could be interpreted to mean that if a maximum benefit commitment is not implemented by one party in one management zone that the maximum benefit program would default to antidegradation objectives for all parties in all management zones. The text is unclear as to the how the consequences of failing to implement the maximum benefit commitments will affect the maximum benefit parties. Do all the maximum benefit parties have to meet antidegradation objectives in the case of where one or more of the maximum benefit parties, but not all, fail to implement a required commitment? For example in the San Timoteo Groundwater Management Zone (STMZ) if the City implemented their maximum benefit commitments and the YVWD failed to, would the City's discharge still be regulated to the maximum benefit objectives? The City recommends that this language be clarified to state that within a groundwater management zone that individual parties that implement their maximum benefit commitments will be regulated to maximum benefit objectives and those parties that fail to implement their

maximum benefit commitments will be regulated to antidegradation objectives and incur the consequences of mitigation.

The last sentence in the proposed text is vague and problematic. In the case where mitigation is required to deal with a failure to meet maximum benefit commitments, the Regional Board and the maximum benefit parties would both benefit from the having specific projects or class of projects identified and with implementation schedules. For example a commitment could be added to Tables 5-9a through 5-9c that requires the maximum benefit parties to identify specific projects or types of projects that would be implemented in the event that a party is required to comply with antidegradation objectives.

3. Draft Proposed Resolution, Page 39 of 63, Table 5-9a Commitment 2. Groundwater Monitoring Program and related text on page 41 of 63.

There needs to be a clear nexus between the design and implementation of the groundwater monitoring program and its subsequent use by the BMPTF to estimate ambient TDS and nitrate concentrations. The maximum benefit parties need to demonstrate through their monitoring program design and reporting that they are collecting groundwater level and quality data consistent with the ambient TDS and nitrate determination methodology used by the Regional Board. The City suggests that the language be modified to provide a nexus to the requirements of the ambient TDS and nitrate determination methodology on Tables 5-9a through 5-9c and related text descriptions to make it clear to all the parties participating in a maximum benefit program about the monitoring and reporting requirements . The City's intent in providing this comment is to avoid failing to meet a maximum benefit commitment and subsequent finger pointing.

4. Draft Proposed Resolution, Page 39 of 63, Table 5-9a Commitment 4 Non-potable Supply and related text on page 41 of 63.

See comment number 5 below related to storm water used for dilution of recycled water recharge. Storm water cannot be diverted to dilute non-potable water supplies to comply with Basin Plan requirements if it reduces storm water recharge downstream of the diversion to below historical levels of recharge. Perhaps language could be crafted consistent with the New Storm Water Recharge definition suggested below.

5. Draft Proposed Resolution, Page 40 of 63, Table 5-9a Commitment 5. Recycled Water Recharge and related text on page 42 of 63.

The use of storm water to dilute recycled water recharge needs to be limited to new storm water as storm water recharge is currently part of the hydrology that has historically diluted other discharges. This was the intent in Regional Board resolution R8-2004-0001 that amended the Basin Plan to include the original maximum benefit programs. A narrative definition of the base line stormwater recharge needs to be

included in the proposed Basin Plan amendment to ensure uniformity among the management zones where new storm water recharge is used for dilution to achieve TDS and nitrate compliance. The City recommends that this definition be stated as follows:

> New Storm Water Recharge – Increase in storm water recharge in quantities greater than historical amounts (net increase) over the groundwater management zone since January 1, 2004.

The date January 1, 2004 corresponds to the month that Resolution R8-2004-0001 was approved by the Regional Board. Storm water recharge at new facility is not new storm water recharge if it reduces recharge downstream of that facility. Therefore, storm water recharge at any new facility that reduces downstream recharge cannot be used for recycled water dilution to meet maximum benefit requirements.

6. Draft Proposed Resolution, Page 44 of 63, first full paragraph.

The citation to Reference 10D seems out of place as it relates to the BMZ.

7. Draft Proposed Resolution, Page 45 of 63, Table 5-9b Commitment 2. Groundwater Monitoring Program and related text on page 48 of 63.

The City's comment is identical to its comment number 3 above relating to ensuring a nexus of the groundwater monitoring requirements to future ambient water quality determinations.

8. Draft Proposed Resolution, Page 45 of 63, Table 5-9b Commitment 4. City of Beaumont Wastewater and/or Groundwater Desalters and related text on page 48 of 63.

Planning done for the current maximum benefit program for the STMZ and the BMZ authorized by R8-2004-0001 demonstrated that the City would not have to construct and operate desalting facilities for a very long time, probably decades. During the planning for the existing maximum benefit program BMZ authorized by R8-2004-0001 the City and the District decided not to participate in the brine line that was planned (and subsequently constructed) by the YVWD because the need was decades into the future and other issues. The proposed maximum benefit program in R8-2014-0005 will require the City to construct and operate at least one desalter as soon as one can practically be constructed and within about five years of the date of approval of the proposed resolution. The language in the proposed resolution needs to reflect that the City had made prudent salt management plans consistent with the existing maximum benefit program, that the Regional Board and other BMZ stakeholders desired changes in the maximum benefit program to achieve greater regional benefit, and that the City is cooperating with the Regional Board and the other BMZ stakeholders in developing and implementing the new maximum benefit program with significant salt management costs to the City.

As you know the City is currently planning a 4-mgd expansion to the City's wastewater plant that will include desalting capability to enable the City to comply with the maximum benefit TDS and nitrogen standards. The biggest challenge for the City in implementing the desalting is brine disposal. The planning for brine disposal will take time and the City believes that the being required to submit a "desalter/brine line plan and schedule" within 15 days from the approval of the basin plan amendment by the OAL may not be reasonable or achievable. The City commits that it can have a plan and schedule to the Regional Board on or before January 2015.

The City respectfully suggests that the text of Commitment 4 be modified as shown below and that Table 5-9b be modified to consistent with the City's proposed text.

> "Planning done for the current maximum benefit program for the BMZ authorized by R8-2004-0001 demonstrated that the City would not have to construct and operate desalting facilities for a very long time, probably decades. During the planning for the maximum benefit program authorized by R8-2004-0001 the City and the BCVWD jointly decided not to participate in the brine line that was planned (and subsequently constructed) by the YVWD because the need was decades into the future and other issues. The proposed maximum benefit program in R8-2014-0005 requires the City to construct and operate desalting facilities as soon as can be practically constructed. In implementing the maximum benefit program authorized by R8-2004-0001, the City made prudent salt management decisions consistent with maximum benefit program authorized by R8-2004-0001. The Regional Board and other BMZ stakeholders desired changes in the maximum benefit program authorized by R8-2004-0001 to achieve greater regional benefits, and the City cooperated with the Regional Board and the other BMZ stakeholders to develop and implement the new maximum benefit program described in R8-2014-0005. Adoption of the R8-2014-0005 will result in significant new salt significant salt management costs for the City.
>
> The City of Beaumont shall construct and operate desalting facilities and brine disposal facilities to improve recycled water quality and/or other sources of non-potable supply. A detailed desalter/brine line plan and schedule shall be submitted on or before January 1, 2015. The schedule shall assure that these facilities are in place within 5 years of Regional Board approval."

There is no brine disposal capacity available to the City. The planning and subsequent design and construction cannot be completed in five years as required in this commitment. Respectfully the City requests that the Regional Board modify the proposed resolution to include a salt offset option whereby the City can offset the TDS concentration in excess of 330 mg/L recharge and direct use of recycled water in lieu of the five-year time limit.

9. Draft Proposed Resolution, Page 46 of 63, Table 5-9b Commitment 5. YVWD/City of Beaumont Non-potable Water Supply and related text starting on page 48 of 63.

See the City's comments number 4 and 5 above related to storm water used for dilution. Storm water cannot be diverted to dilute non-potable water supplies to comply with Basin Plan requirements if it reduces storm water recharge downstream of the diversion to below historical levels. Language should be crafted consistent with the New Storm Water Recharge definition suggested above.

10. Draft Proposed Resolution, Page 46 of 63, Table 5-9b Commitment 6. Recycled Water Recharge and related text on page 49 of 63.

The City's comment is identical to its comments number 4 and 5 above related to storm water recharge.

11. Draft Proposed Resolution, Page 47 of 63, Table 5-9b Commitment 7. Improve Surface Water Discharge Quality to the San Timoteo Groundwater Management Zone and related text starting on page 49 of 63.

The City requests clarification as follows. The clear commitment in the proposed Basin Plan amendment is the preparation of the plan and schedule as to how the City will (manage) improve its discharge to comply with the maximum benefit objectives – due 30 days from approval of the Basin Plan amendment by the Regional Board and subsequent implementation upon Regional Board approval. The proposed Basin Plan amendment seems to include a commitment to include a contingency plan in case the City fails to meet other maximum benefit commitments and will be required comply with the antidegradation objectives – due when the Regional Board makes a finding that the maximum benefit is not demonstrated. This second requirement is not in Table 5-9b. Does the Regional Board want this contingency plan included in the commitment labeled 7a in Table 5-9b?

12. Draft Proposed Resolution, Page 50 of 63, Revision to YVWD and the City's NPDES permits.

The City's comment is identical to its comments number 4 and 5 above regarding storm water used for dilution of recycled water recharge and non-potable supplies. On page 51, bottom of the first full paragraph change "as necessary" to "as necessary and appropriate" so that the City's requirement is identical to the YVWD requirement.

13. Draft Proposed Resolution, Page 51 of 63, Review of Project Status.

The City's comment is identical to its comment number 2.

14. Draft Proposed Resolution, Page 52 of 63, 3. Beaumont Groundwater Management Zone ...second and third paragraph.

The second paragraph states that the City discharges a DP 001 to Coopers Creek and unlined tributary that recharges the BMZ and STMZ. The City has stated and the Regional Board has accepted that this discharge is a de facto discharge to the STMZ as the groundwater levels in the BMZ underlying Coopers Creek in this reach are at the stream bottom the discharge point is adjacent to the boundary separating the BMZ from the STMZ. It is the City's understanding that this discharge will be regulated to the STMZ maximum benefit objectives if the Regional Board approves the proposed Resolution R8-2014-005. Could you please confirm that this is true if R8-2014-0005 is approved?

The City also discharges at DP 007, the un-named tributary of Marshall Creek and plans to discharge at the DP 008 in the future. The discharge at DP 007 and DP 008 will completely recharge in the BMZ. The City's discharge at DP 007 is planned as limited incidental recharge when recycled water supply for direct use exceeds direct use demand, especially in winter months. DP 008 on the other hand, is a planned recharge project which is being designed to augment groundwater supplies in the Beaumont Basin. Both these discharges will be regulated to the maximum benefit objectives for the BMZ if the Regional Board approves the proposed Resolution R8-2014-005. Could you please confirm that only discharges from DP 008 will be regulated as recharge projects if R8-2014-0005 is approved?

Verbally, the Regional Board staff has stated, on its own initiative, that it will require that the City (and by extension other BMZ dischargers) to complete engineering investigations consistent with the Department of Health Services draft Title 22 regulations for groundwater reuse recharge projects for the incidental recharge of its recycled water discharged at DP 007 and DP 008. We could not find this requirement stated explicitly in R8-2014-0005. Could you confirm that this is still the Regional Board intention, where it can be found in R8-20140-0005, and state the legal justification for this new requirement for incidental recharge of recycled water?

Finally in the second paragraph of this section it was omitted that the City of Banning is a sewer collection agency overlying the BMZ which discharges to the Colorado River Basin and also uses potable water from the BMZ to irrigate the Sun Lakes Golf Course. The City of Banning exports low TDS groundwater from the BMZ and does not have a TDS limit specified for discharge of its wastewater or any requirement to reduce the irrigation demand for potable and imported water. Since 2004, there has been no incentive or requirement for Banning to implement maximum benefit obligations including recycled or salt management in the BMZ. It is unclear how the proposed amendment will regulate Banning to produce recycled water and deliver it for use in or over the BMZ.

15. Draft Proposed Resolution, Page 53 of 63, Table 5-9c Commitment 2. Groundwater Monitoring Program and related text on page 55 of 63.

The nexus between the design and implementation of the groundwater monitoring program and its subsequent use by the BMPTF to estimate ambient TDS and nitrate concentrations is unclear. The maximum benefit parties should be required to demonstrate through their monitoring program design and reporting that they are collecting groundwater level and quality data consistent with the ambient TDS and nitrate determination methodology. The City suggests that the language be modified to provide a clear nexus to the requirements of the ambient TDS and nitrate determination methodology on Tables 5-9a through 5-9c and related text descriptions to make monitoring and reporting requirements clear to all the parties participating in a maximum benefit program.

16. Draft Proposed Resolution, Page 53 of 63, Table 5-9c Commitment 4. City of Beaumont Wastewater and/or Groundwater Desalters and Brine Disposal and related text on page 57 of 63.

Planning done for the current maximum benefit program for the STMZ and the BMZ authorized by R8-2004-0001 demonstrated that the City would not have to construct and operate desalting facilities for a very long time, probably decades. During the planning for the existing maximum benefit program BMZ authorized by R8-2004-0001 the City and the District decided not to participate in the brine line that was planned (and subsequently constructed) by the YVWD because the need was decades into the future and other issues. The proposed maximum benefit program in R8-2014-0005 will require the City to construct and operate at least one desalter as soon as one can practically be constructed and within about five year of the approval of the proposed resolution. The language in the proposed resolution needs to reflect that the City had made prudent salt management plans consistent with the existing maximum benefit program, that the Regional Board and other BMZ stakeholders desired changes in the maximum benefit program to achieve greater regional benefit, and that the City is cooperating with the Regional Board and the other BMZ stakeholders in developing and implementing the new maximum benefit program with significant salt management costs to the City.

As you know the City is currently planning a 4-mgd expansion to the City's wastewater plant that will include desalting capability to enable the City to comply with the maximum benefit TDS and nitrogen standards. The biggest challenge for the City in implementing the desalting is brine disposal. The planning for brine disposal will take time and the City believes that the being required to submit a "desalter/brine line plan and schedule" within 15 days from the approval of the basin plan amendment by the OAL may not be reasonable or achievable. The City commits that it can have a plan and schedule to the Regional Board on or before January 2015.

The City respectfully suggests that the text of Commitment 4 be modified as shown below and that Table 5-9c be modified to consistent with the City's proposed text.

"Planning done for the current maximum benefit program for the BMZ and STMZ authorized by R8-2004-0001 demonstrated that the City would not have to construct and operate desalting facilities for a very long time, probably decades. During the planning for the maximum benefit program authorized by R8-2004-0001 the City and the BCVWD jointly decided not to participate in the brine line that was planned (and subsequently constructed) by the YVWD because the need was decades into the future and other issues. The proposed maximum benefit program in R8-2014-0005 requires the City to construct and operate desalting facilities as soon as can be practically constructed. In implementing the maximum benefit program authorized by R8-2004-0001, the City made prudent salt management decisions consistent with maximum benefit program authorized by R8-2004-0001. The Regional Board and other BMZ stakeholders desired changes in the maximum benefit program authorized by R8-2004-0001 to achieve greater regional benefits, and the City cooperated with the Regional Board and the other BMZ stakeholders to develop and implement the new maximum benefit program described in R8-2014-0005. Adoption of the R8-2014-0005 will result in significant new salt significant salt management costs for the City.

The City of Beaumont shall construct and operate desalting facilities and brine disposal facilities to improve recycled water quality and/or other sources of non-potable supply. A detailed desalter/brine line plan and schedule shall be submitted on or before January 1, 2015. The schedule shall assure that these facilities are in place within 5 years of Regional Board approval."

There is no brine disposal capacity available to the City. The planning and subsequent design and construction cannot be completed in five years as required in this commitment. Respectfully the City requests that the Regional Board modify the proposed resolution to include a salt offset option whereby the City can offset the TDS concentration in excess of 330 mg/L recharge and direct use of recycled water in lieu of the five-year time limit.

17. Draft Proposed Resolution, Page 54 of 63, Table 5-9c Commitment 6. Non-potable Water Supply and related text starting on page 56 of 63.

See the City's comment number 4 and 5 above related to storm water used for dilution. Storm water cannot be diverted to dilute non-potable water supplies to comply with Basin Plan requirements if it reduces storm water recharge downstream of the diversion to below historical levels. Perhaps language could be crafted consistent with the New Storm Water Recharge definition suggested comment number 4 above.

18. Draft Proposed Resolution, Page 54 of 63, Table 5-9c Commitment 7. Recycled Water Recharge and related text on page 57 of 63.

The City's comment is identical to its comment number 5 above related to storm water recharge.

19. Draft Proposed Resolution, Page 57 of 63, Revision to the City of Beaumont/YVWD/City of Banning NPDES permits.

The City's comment is identical to its comments number 4 and 8 above regarding storm water used for dilution of recycled water recharge and non-potable supplies.

20. Draft Proposed Resolution, Page 59 of 63, Review of Project Status.

The City's comment is identical to its comment number 2.

Concluding Comments

The City staff is concerned with being able to comply with the short time requirements in the proposed maximum benefit commitments 4a in Table 5-9b and Table 5-9c. The City is currently on a schedule to prepare this plan and implementation schedule by the end of 2014 and would prefer to commit to completing and submitting a plan to the Regional Board by January 2015. The planning and subsequent design and construction cannot be completed in five years as required in this commitment due to the lack of an existing brine disposal system. Respectfully the City requests that the Regional Board modify the proposed resolution to include a salt offset option whereby the City can offset the TDS concentration in excess of maximum benefit-based limits in lieu of the five-year time limit. The City recommends that Regional Board consideration of Resolution R8-2014-0005 be deferred at least 90 days to allow the Regional Board staff and BMZ stakeholders to develop new language to eliminate the five-year deadline and provide for a salt offset.

The City is very concerned about the estimation of new storm water and the allocation of that water for dilution of non-potable supplies and recycled water recharge; and the lack of agreement among the BMZ stakeholders on this seemingly important manner. In fact, most of the BMZ stakeholders are parties to the Beaumont Basin stipulated agreement and they have not been able to develop an implementable definition of new storm water recharge among themselves ten years after the stipulated agreement was completed! The draft proposed Basin Plan amendment is not clear as to what storm water can be used for dilution which suggest to the City that perhaps even the Regional Board staff is unclear and more discussion is required among the Regional Board staff and BMZ stakeholders. The City recommends that Regional Board consideration of Resolution R8-2014-0005 be deferred at least 90 days to allow the Regional Board staff and BMZ stakeholders to develop a clear

understanding and new language in the Basin Plan that will define what storm water can be used for dilution and ownership of it.

The City is appreciative of the Regional Board staff 's tremendous effort in working with the Beaumont and San Timoteo stakeholders on the updated maximum benefit programs and Basin Plan amendment. The City is also appreciative of the opportunity to have reviewed the draft proposed Basin Plan amendment and hopes our comment bring clarity and demonstrate our support for it. City staff and consultants will be made available to the Regional Board staff to discuss the City's comments if desired by the Regional Board.

Very truly yours,
CITY OF BEAUMONT

Alan C. Kapanicas
City Manager

Cc: Beaumont City Council

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

January 15, 2014

Hope Smythe
Division Chief
Santa Ana Regional Water Quality Control Board
3737 Main St., Ste. 500
Riverside, CA 92501

Re: proposed Salt Management Plan, including potential revisions to NPDES permits for Yucaipa Valley Water District (NPDES Permit No. CA0105619) and City of Beaumont Municipal Wastewater Treatment Plant (NPDES Permit No. CA0105376)

Dear Ms. Smythe:

Thank you for the opportunity to review and comment on the proposed Basin Plan Amendment for the Salt Management Plan within the Santa Ana River watershed, which was public noticed on November 15, 2013. We have concerns about the proposal to remove waste load allocations for two wastewater treatment plant (WWTP) facilities since this constitutes a modification to the Santa Ana River nutrients TMDL, approved by EPA in 1995. Per federal regulations at 40 CFR 130.7, the proposed TMDL modification would require EPA's review and approval which is not indicated in the draft resolution. We also have concerns that the proposal appears to recommend relaxing the WWTP effluent limits for total dissolved solids (TDS) and total inorganic nitrogen (TIN) for these two WWTP facilities which may be inconsistent with backsliding federal regulations at 40 CFR 122.44. We provide more detailed discussion below and include recommendations where feasible.

First and foremost, we urge the Regional Board to reconsider the proposed modification that involves removing existing wasteload allocations for TDS and TIN for these two WWTP facilities. As mentioned above, any modification of wasteload allocations would require EPA's review and approval. As currently proposed, EPA would interpret the removal of wasteload allocations to mean the wasteload allocations for TDS and TIN equal zero, thereby indicating these two facilities would not be allowed to discharge effluent containing these two parameters into ambient waters. We believe that is not the intent of this proposal, since it includes descriptions of future revisions to existing NPDES permits for these two facilities and such future revisions appear to modify the effluent limits for TDS and TIN but not altogether eliminate these limits.

We offer an option for your consideration although it may not be the only method of avoiding the issue described immediately above. The proposal could retain the existing wasteload allocations which would allow these two facilities to continue discharging effluent with TDS and

TIN therein. The proposal would retain relevant information and rationale describing that future permit renewal(s) for these two facilities will contain more restrictive effluent limits for TDS and TIN discharges to meet groundwater quality objectives that are more protective than the existing wasteload allocations. The permit renewal factsheets would also explain this. Permit effluent limits that are more stringent than wasteload allocations are consistent with the TMDL because such limits are more protective and therefore more likely to successfully achieve the water quality standards. We understand these facilities must also release minimum level flows to maintain water in San Timoteo Creek and Cooper's Creek; therefore we recommend the proposal indicate that any possible revised effluent limits for TDS and TIN will also meet all applicable surface water quality standards in these immediate or downstream waters.

Our second concern pertains to the possible relaxation of effluent limits for discharges to surface waters, which relates to NPDES backsliding regulations. We realize the State has sole authority over discharges to water reuse or indirect groundwater recharge. However, this proposal appears to first apply the maximum beneficial use and related water quality numeric objectives and, if certain conditions are not met, then secondly apply the antidegradation use and related numeric objectives. The TDS and TIN numeric water quality objectives associated with maximum beneficial use are higher values (less restrictive) than those associated with antidegradation use. For any facility discharges to surface waters, EPA would expect the antidegradation values to be met first, so as to maintain high water quality in streams as well as to ensure effluent levels do not approach impairment levels in such effluent dominant waters.

We recognize the State's proposal intends to encourage retaining or increasing local water supply via efforts to recharge groundwater. We believe certain modifications to the proposed amendment can achieve this goal as well as be consistent with the Clean Water Act and its implementing federal regulations. We look forward to working with you on this matter. Please contact me at (415) 972-3452 or Peter Kozelka, NPDES permits liaison, at (415) 972-3448 if you have any questions regarding our comments.

Sincerely,

Janet Hashimoto

Janet Hashimoto, Manager
Standards and TMDLs Office (WTR-2)

From: Joseph Zoba <jzoba@yvwd.dst.ca.us>
Sent: Thursday, February 27, 2014 8:10 AM
To: Smythe, Hope@Waterboards
Cc: Bob Wall; Brian Villalobos; Li, Cindy@Waterboards; Dennis Williams; Burk, Duane; Eric Fraser; Stewart, Gary@Waterboards; Hisam Baqai; Jeff Davis; Schneider, Joanne@Waterboards; Kishen Prathivadi; Berchtold, Kurt@Waterboards; Mark Norton; Mark Wildermuth; Kristen Wardlaw; Amin, Najah@Waterboards; Perry Gerdes; Samantha Adams; McCarthy, Sean (CDPH-DDWEM); Smythe, Mark@Waterboards; Tim Moore; Jack Nelson; jares@yvwd.dst.ca.us
Subject: RE: Beaumont MZ Proposed Basin Plan Amendment
Attachments: Resolution R8-2014-0005 and attachment - hearing version #1.pdf

Thank you for your work on the Basin Plan amendment. I have been reviewing the latest draft and comparing the proposed amendment with previous documents to better understand the purpose for the proposed changes by the Regional Board staff. I look forward to reviewing the latest version of the basin plan amendment when it is available for review so I can provide formal comments.

Please send information on how we implement the Wasteload Allocation of 0.0 MGD for Yucaipa Valley Water District as provided in Table 5-5. The Yucaipa Valley Water District will require a minimum contribution of 1.8 MGD to San Timoteo Creek to maintain habitat. How do we administer a wasteload allocation of 0.0 mgd and discharge to maintain the habitat in the creek?

Table 5-5

Alternative Wasteload Allocations through 2010
based on "Maximum Benefit" or "Antidegradation" Water Quality[1]

Publicly Owned Treatment Works (POTW)	Alternative 2010A – Reclamation in 1995 Basin Plan			Alternative 2010B – Reclamation Plans Advocated by POTWs/others		
	Surface Water Discharge (MGD)	TDS (mg/L)	TIN (mg/L)	Surface Water Discharge (MGD)	TDS (mg/L)	TIN (mg/L)
Beaumont – "max benefit"[2]	2.3	490	6.0	1.0	490	6.0
Beaumont – "antideg"[2,3]	2.3	320[3]	4.1[3]	1.0	320[3]	4.1[3]
YVWD – Wochholz – "max benefit"	5.7	540	6.0	0.0	540	6.0
YVWD – Wochholz – "antideg"[3]	5.7	320[3]	4.1[3]	0.0	320[3]	4.1[3]

Regarding the implementation of maximum benefit in the Beaumont Management Zone, on January 18, 2006, the RWQCB adopted R8-2006-0003 which permitted the City of Beaumont to recharge recycled water up to the maximum benefit objective for TDS of 330 mg/l.

5. Recycled water recharge [1] The recharge of recycled water in the Beaumont or San Timoteo Management Zones shall be limited to the amount that can be blended with other recharge sources to achieve a 5-year running average equal to or less than the "maximum benefit" objectives for TDS and nitrate-nitrogen for the relevant Management Zone(s).	Compliance must be achieved by end of 5th year after initiation of recycled water use/recharge operations.
a. Submit baseline report of amount, locations, and TDS and nitrogen quality of stormwater/imported water recharge.	a. Prior to initiation of construction of basins/other facilities to support enhanced stormwater/imported water recharge.
b. Submit documentation of amount, TDS and nitrogen quality of all sources of recharge and recharge locations. For stormwater recharge used for blending, submit documentation that the recharge is the result of City of Beaumont/STWMA enhanced recharge facilities/programs	b. Annually, by January 15th, after initiation construction of facilities/implementation of programs to support enhanced recharge.

In 2009, the RWQCB adopted R8-2009-0002 which provided for a second recycled water discharge point (DP-008) in the Beaumont Management Zone with a TDS objective of 330 mg/l. Please confirm that the discharge of recycled water from DP-001 and DP-008 complied with the "five-year running average" for TDS of 330 mg/l. Please forward the spreadsheet showing the monthly DP-001 and DP-008 discharge quantity and TDS mass loadings used to calculate TDS compliance. I would also appreciate any supporting documentation such as correspondence, reports and other related documents related to TDS compliance in the Beaumont Management Zone at both discharge points.

Without the ability to remove salt, I assume the City of Beaumont has discharged recycled water at about 400 mg/l in the Beaumont Management Zone and is therefore not in compliance with "maximum benefit" for TDS pursuant to R8-2009-0002 for DP-008 (and/or DP-001). Is the purpose of the proposed language in the basin plan amendment to recalculate stormwater contributions back to January 2004 in order to provide an opportunity to reconcile the "maximum benefit" TDS exceedance (page 35 of 47)? If so, does this dilution strategy provide a maximum benefit to the State?

> Dilution of recycled water with storm water to meet the 330 mg/L TDS concentration and the 5 mg/L nitrate-N concentration recycled water recharge and direct use requirements will be limited to new stormwater recharge. New stormwater recharge is defined as stormwater recharge in quantities greater than historical amounts (net increase) over the groundwater management zone since January 1, 2004. January 2004 corresponds to the month and year when the Regional Board authorized the original maximum benefit objectives and compliance commitments by adopting Resolution No. R8-2004-0001.

I contacted the SWRCB Division of Water Rights and was informed that the capture and recharge of stormwater in a creek system will require a water rights diversion permit which will be an expensive and time consuming effort. Additionally, the requirement to "submit a proposed methodology for computing a baseline and new stormwater recharge" (page 37 of 47) for the dilution of recycled water from the City of Beaumont is unlikely to occur in the near future since the City of Beaumont has not provided a plan, project description, or related documents that indicate where this stormwater capture project is located or how it will operate.

Therefore, I recommend the deletion of the "new water" language proposed by Mark Wildermuth for his client from the Basin Plan Amendment and the deletion of the requirement to compute the new stormwater contributions until a plan is developed and agreements are reached with all parties (private and public) to secure the necessary water rights to allow the dilution strategy of salinity advocated by Wildermuth Environmental on behalf of the City of Beaumont.

While I supported the proposed basin plan amendment presented at the RWQCB meeting in January 2014, the proposed changes in the latest draft of the basin plan amendment do not reflect the regional coordination, cooperation and commitment approved by the Yucaipa Valley Water District.

Joe

Joseph Zoba, General Manager
Yucaipa Valley Water District

From: Smythe, Hope@Waterboards [mailto:Hope.Smythe@waterboards.ca.gov]
Sent: Thursday, February 20, 2014 2:58 PM
To: Joseph Zoba
Cc: Bob Wall; Brian Villalobos; Li, Cindy@Waterboards; Dennis Williams; Burk, Duane; Eric Fraser; Stewart, Gary@Waterboards; Hisam Baqai; Jeff Davis; Jennifer Ares; Schneider, Joanne@Waterboards; Kishen Prathivadi; Berchtold, Kurt@Waterboards; Mark Norton; Mark Wildermuth; Amin, Najah@Waterboards; Perry Gerdes; Samantha Adams; McCarthy, Sean (CDPH-DDWEM); Kristen Wardlaw; Smythe, Mark@Waterboards
Subject: RE: Beaumont MZ Proposed Basin Plan Amendment

Hello all - in preparation for our meeting on Monday, attached is the revised proposed basin plan amendment. Revisions are based on the comments received and based on the draft language provided by WEI. We can discuss these revisions at our meeting.

Regards,
Hope

==========
Hope Smythe
Division Chief
951-782-4493

From: Smythe, Hope@Waterboards
Sent: Tuesday, February 18, 2014 9:43 AM
To: 'Joseph Zoba'
Cc: Bob Wall; Brian Villalobos; Li, Cindy@Waterboards; Dennis Williams; Burk, Duane; Eric Fraser; Stewart, Gary@Waterboards; Hisam Baqai; Jeff Davis; Jennifer Ares; Schneider, Joanne@Waterboards; Kishen Prathivadi; Berchtold, Kurt@Waterboards; Mark Norton; Mark Wildermuth; Amin, Najah@Waterboards; Perry Gerdes; Robert Holub; Samantha Adams; McCarthy, Sean (CDPH-DDWEM); Kristen Wardlaw
Subject: Beaumont MZ Proposed Basin Plan Amendment

All – please see attached for Wildermuth Environmental's proposed Basin Plan Amendment language.

We will discuss at the meeting on February 24, 2014 (1:30 at Regional Board office)

==========
Hope Smythe

Division Chief
Santa Ana Regional Water Quality Control Board
951-782-4493
Hope.Smythe@waterboards.ca.gov

From: Joseph Zoba [mailto:jzoba@yvwd.dst.ca.us]
Sent: Wednesday, February 05, 2014 4:15 PM
Cc: Bob Wall; Brian Villalobos; Li, Cindy@Waterboards; Dennis Williams; Burk, Duane; Eric Fraser; Stewart, Gary@Waterboards; Hisam Baqai; Smythe, Hope@Waterboards; Jeff Davis; Jennifer Ares; Schneider, Joanne@Waterboards; Joseph Zoba; Kishen Prathivadi; Berchtold, Kurt@Waterboards; Mark Norton; Mark Wildermuth; Amin, Najah@Waterboards; Perry Gerdes; Robert Holub; Samantha Adams; McCarthy, Sean (CDPH-DDWEM); Kristen Wardlaw
Subject: RWQCB Beaumont Management Zone Meeting Request

On February 3, 2014, the Santa Ana Regional Water Quality Control Board staff met with representatives from the City of Beaumont to discuss issues related to the proposed Basin Plan amendment. A copy of the meeting agenda is attached for your review.

The Regional Board staff has requested a meeting of all parties to discuss the issues raised by the City of Beaumont.

I have prepared a meeting poll with times on Tuesday, February 11, 2014 and Thursday, February 13, 2014. The poll can be accessed using the following link:

http://doodle.com/vnqas4x6szm4284q

Please confirm your availability and forward this invite to consultants and other staff members as needed.

The poll will close on Friday, February 7, 2014 at noon and a meeting date/time will be selected.

Joe

PS – SAWPA is conducting a Basin Monitoring Program Task Force meeting on Wednesday, February 12, 2014 at 1:30 pm. http://www.sawpa.org/event/basin-monitoring-program-task-force-14/ This topic may be included on the Task Force agenda.

Joseph B. Zoba, General Manager

Yucaipa Valley Water District
12770 Second Street
Yucaipa, California 92399
(909) 797-5119 x2

From: Brian Villalobos <bvillalobos@geoscience-water.com>
Sent: Friday, March 07, 2014 12:35 PM
To: Bob Wall; Li, Cindy@Waterboards; Eric Fraser; Stewart, Gary@Waterboards; Hisam Baqai; Jeff Davis; Schneider, Joanne@Waterboards; Kishen Prathivadi; Berchtold, Kurt@Waterboards; Mark Norton; Mark Wildermuth; Kristen Wardlaw; Amin, Najah@Waterboards; Perry Gerdes; Samantha Adams; McCarthy, Sean (CDPH-DDWEM); Smythe, Mark@Waterboards; Tim Moore; Jack Nelson; jares@yvwd.dst.ca.us; Joe Zoba
Cc: Smythe, Hope@Waterboards; Burk, Duane; avela@ci.banning.ca.us; Dennis Williams
Subject: City of Banning: Requested language change-Basin Plan Amendment - Beaumont Management Zone
Attachments: City of Banning_suggested language_Basin Plan(1).docx

All,

Per your request (through Hope Smythe), attached is the City of Banning's requested language change for Beaumont Management Zone portion of the Basin Plan Amendment. (Section 3 – Attachment A-Resolution No. R8-2014-005)

Thank you

Brian Villalobos, CEG,CHg
Senior Geohydrologist
Geoscience Support Services, Inc.
P.O. Box 220 Claremont, Ca., 91711
Tel: 909-451-6650
bvillalobos@geoscience-water.com

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Background for Proposed Language Amendment:
The City of Banning does not use recycled water in the Beaumont Management Zone (BMZ) and may not in the future. The City has elected to participate in the BMZ Maximum Benefits Program should the City of Banning choose to use recycled water in the future. The City of Banning proposed planned use of recycled water was provided to the Max Benefit partners as the Water Supply Plan used for the for TDS/Nitrogen spreadsheet modeling. In the TDS/nitrogen projections, the City's historical and planned purchase and recharge of SWP water will provide the offset required to maintain the City's recycled water impact to concentrations below the Max Benefit TDS concentration of 330 mg/L and Nitrate-nitrogen concentration of 5 mg/L. Therefore, the City will not require a desalting facility to maintain TDS/Nitrogen concentrations below the Max Benefit concentrations. The previous set of Max Benefit commitments (2011) accounted for the City of Banning' unique condition with regards to the use of recycled water. The current Basin Plan Amendment (2013) does not.

We request the following language (shown in red font below) addition/revisions be added to the current iteration of Basin Plan Amendment:

<u>Proposed Language Addition/Revisions:</u>
1) Second Paragraph; Page 35 of 47:

Wastewater collection and treatment services are provided by the City of Beaumont, the City of Banning, as well as the YVWD. The City of Beaumont discharges tertiary treated wastewater to Cooper's Creek, a tributary of San Timoteo Creek Reach 3. This unlined reach of the Creek overlies and recharges both the Beaumont and San Timoteo Groundwater Management Zones. The City of Banning does not and may not discharge treated wastewater in the Beaumont Management Zone. The City of Banning has selected to participate in the Maximum Benefits program and commitments in the case that it becomes necessary to use recycled water in the Beaumont Management Zone. Should the City of Banning not use recycled water in the Beaumont Management Zone, they shall be exempt from compliance with salt load mitigation actions in the management zone.

2) To the Last Paragraph of Page 35 of 47- Section 3 please add:

The use of new storm water by any of the Max Benefit partners to apply an offset (dilution) for the mass loading resulting from their recycled water use, will be subject to obtaining and the appropriate water right from the State Water Resources Control Board.

3) Please revise the current text for Compliance #5a in Table 5-9c to the following:

> "a. will be submitted <u>within one-year</u> of initiation of recycled water application or recharge within the Beaumont Management Zone." (Compliance date should be time-certain: one-year of initiation of recycled water use in the Beaumont Basin)
>
> "b. Upon Regional Board Approval

4) Please revise the current text for Commitment #6 in Table 5-9c to the following:

YVWD, the City of Beaumont, the City of Banning (at the onset of recycled water use in the Beaumont Basin), BCVWD…….

5) Please remove Section 3 (A)(5).
Note: The city will not build a Desalter to meet the Max Benefit concentrations. The City will either use water at or below anti-degradation concentrations or will dilute with SWP water to meet the Max Benefit concentrations.

CITY OF BEAUMONT

March 12, 2014

Regional Water Quality Control Board
Attention Kurt Berchtold, Executive Officer
3737 Main Street, Suite 500
Riverside, CA 92501-3339

Subject: Proposed Basin Plan Amendment, Draft Resolution R8-2014-0005

Dear Mr. Berchtold,

The City of Beaumont appreciates the hard work by you and your staff in bringing this Basin Plan amendment forward.

We have reviewed the redline draft that was prepared by Hope Smythe and discussed at the February 24, 2014 stakeholder meeting at your office. We have one question regarding the wasteload allocation table. And, we have prepared responses to some of Joe Zoba's concerns expressed in his email to Hope Smythe, dated February 27, 2014, and responses to Brian Villalobos' comments received via email on March 7, 2014 on behalf of the City of Banning.

As to the wasteload allocation, the City intends to meet the 400 mg/L TDS discharge limit required to comply with the lack of assimilative capacity in the San Timoteo management zone (STMZ) and its 400 mg/L maximum benefit TDS objective. As has been stated, the City is currently developing plans to comply with the new TDS limits required for the Basin Plan amendment in the Beaumont management zone (BMZ) and the STMZ. That said, the wasteload allocation described in Table 5-5 seems confusing. The Basin Monitoring Program Task Force conducted wasteload allocation investigations in 2009 and 2010, and perhaps it would be good to review that work and update Table 5-5 for the City based on those investigations. For the record, the City intends to use its best efforts to minimize its discharge at DP-001 pursuant to its maximum benefit commitment but may need to discharge at rates higher than 1.8 mgd during the winter and wet conditions. The wasteload allocation work performed in 2009 and 2010 examined a range of discharge conditions that are more reasonable and still protective of the STMZ. The City recommends that this be discussed at the upcoming stakeholder meetings. We understand that the Yucaipa Valley Water District (YVWD) will also be interested in updating Table 5-5.

As to Mr. Zoba's comments, the City has committed to the regional maximum benefit plan initially proposed by Mr. Zoba (see attached City Council resolution 2012-18, dated May 1, 2012) and included by reference in the proposed Basin Plan amendment. The language changes that were recommended by the City and included in the recent draft prepared by Ms. Smythe

550 E. 6th Street • Beaumont • CA • 92223 • Phone: (951) 769-8520 • Fax: (951) 769-8526
www.ci.beaumont.ca.us

do not conflict with the regional maximum benefit plan; in fact, they enhance it. Our responses to Mr. Zoba's specific comments follow.

Mr. Zoba wrote:

"Regarding the implementation of maximum benefit in the Beaumont Management Zone, on January 18, 2006, the RWQCB adopted R8-2006-0003 which permitted the City of Beaumont to recharge recycled water up to the maximum benefit objective for TDS of 330 mg/l."

City Response:

The City believes this comment is not relevant to the proposed Basin Plan amendment and would not require a response except that it is factually incorrect. The permit provides that the City and the BCVWD comingle the City's recycled water with imported SWP water to achieve a ten-year volume-weighted average of 390 mg/L. The City and the BCVWD have never completed their joint recycled water system; thus, no direct use or recycled water recharge has occurred pursuant to the subject permit.

The City's discharge permit in R8-2006-0003 allows for the discharge of recycled water with a TDS concentration maximum of 490 mg/L, provided that the maximum benefit has been demonstrated. As has been pointed out in the Basin Plan and the subject permit, "DP-001 is located in the downstream end of the BMZ and is a de facto discharge to the STMZ and is thus regulated to the STMZ maximum benefit objective." There is no requirement in the Basin Plan or the subject permit to meet a 330 mg/L TDS limit.

Subsequent to R8-2006-0003 being issued, it was demonstrated that there is no assimilative capacity for TDS in the STMZ. The City is waiting for a new permit from the Regional Board to regulate its discharge to the STMZ maximum benefit objective of 400 mg/L, and it is the City's intent to fully comply.

Mr. Zoba wrote:

"In 2009, the RWQCB adopted R8-2009-0002 which provided for a second recycled water discharge point (DP-008) in the Beaumont Management Zone with a TDS objective of 330 mg/l. Please confirm that the discharge of recycled water from DP-001 and DP-008 complied with the "five-year running average" for TDS of 330 mg/l. Please forward the spreadsheet showing the monthly DP-001 and DP-008 discharge quantity and TDS mass loadings used to calculate TDS compliance. I would also appreciate any supporting documentation such as correspondence, reports and other related documents related to TDS compliance in the Beaumont Management Zone at both discharge points.

Without the ability to remove salt, I assume the City of Beaumont has discharged recycled water at about 400 mg/l in the Beaumont Management Zone and is therefore not in compliance with "maximum benefit" for TDS pursuant to R8-2009-0002 for DP-008 (and/or DP-001)."

City Response:

Permit R8-2009-0002 provided for two additional discharge points in the BMZ: DP-007 and DP-008. The City has discharged about 0.7 mgd to DP-007 since about the time that R8-2009-0002 was approved and has not completed the infrastructure to discharge at DP-008. The City's discharge at DP-007 and DP-008 was permitted at 490 mg/L under the current maximum benefit program. The Regional Board also found that there was assimilative capacity for TDS in the BMZ under the maximum benefit TDS objective and allowed the City access to this assimilative capacity provided the City was meeting its maximum benefit commitments. There is no explicit provision in the Basin Plan or the City's permit that would limit the discharge TDS concentration to 330 mg/L. The City understands that it will be required to reduce the TDS concentration in its discharge at DP-007 and DP-008 to 330 mg/L after the proposed Basin Plan amendment is adopted.

Mr. Zoba wrote:

"Is the purpose of the proposed language in the basin plan amendment to recalculate stormwater contributions back to January 2004 in order to provide an opportunity to reconcile the "maximum benefit" TDS exceedance (page 35 of 47)? If so, does this dilution strategy provide a maximum benefit to the State?

City Response:

It is not. The City fully intends to comply with the new regional maximum benefit plan and is not looking backward to get dilution credits. In looking back to 2004, the City is interested in establishing new recharge credits pursuant to the Beaumont Basin adjudication but not dilution credits.

There are three purposes in incorporating the City's recommended language as to new stormwater recharge. The first purpose is to clearly define for all the maximum benefit parties what new recharge is and to avoid conflict among the maximum benefit parties when a party plans and subsequently reports dilution credits to the Regional Board. The second purpose is to make sure that dilution is not double counted. The third purpose is to provide a definition that is functionally consistent with the Beaumont Basin stipulated agreement and the current maximum benefit program and that will avoid confusion among the Parties to the Beaumont Basin adjudication.

Mr. Zoba wrote:

"I contacted the SWRCB Division of Water Rights and was informed that the capture and recharge of stormwater in a creek system will require a water rights diversion permit which will be an expensive and time consuming effort. Additionally, the requirement to "submit a proposed methodology for computing a baseline and new stormwater recharge" (page 37 of 47) for the dilution of recycled water from the City of Beaumont is unlikely to occur in the near future since the City of Beaumont has not provided a plan, project description, or related documents that indicate where this stormwater capture project is located or how it will operate.

Therefore, I recommend the deletion of the "new water" language proposed by Mark Wildermuth for his client from the Basin Plan Amendment and the deletion of the requirement to compute the new stormwater contributions until a plan is developed and agreements are reached with all parties (private and public) to secure the necessary water rights to allow the dilution strategy of salinity advocated by Wildermuth Environmental on behalf of the City of Beaumont."

City Response:

The City will submit a plan of new stormwater management facilities along with its plan to comply with the proposed Basin Plan amendment as specified. This should jump start the process of implementing the new recharge definition and the methodology consistent with it.

The City supports the acquisition of appropriative rights through the State Board process, if appropriate. And, the definition of new recharge, as recommended by the City, is entirely consistent with that process. The State Board will not accept applications to appropriate water if that water does not exist. New recharge includes new storm water created by new development and therefore is new. The City does not intend to divert and recharge water that is currently recharging the BMZ or STMZ—only new stormwater that is created from new development where that new stormwater is captured and recharged pursuant to the Riverside County MS4 permit issued by the Regional Board. There is presently no legal requirement to apply for a water right permit to manage stormwater pursuant to the Riverside County MS4 permit. Using the new recharge definition recommended by the City will avoid impacts to existing water rights, which should be a benefit to the maximum benefit parties and all downstream water users.

Mr. Zoba wrote:

"While I supported the proposed basin plan amendment presented at the RWQCB meeting in January 2014, the proposed changes in the latest draft of the basin plan amendment do not reflect the regional coordination, cooperation and commitment approved by the Yucaipa Valley Water District."

City response:

The City hopes that our responses to Mr. Zoba's questions will provide him assurances that the City is completely committed to the regional maximum benefit plan, is not seeking retroactive dilution credits, and by recommending a precise definition for new recharge, is trying to ensure that only truly new stormwater recharge will be used for dilution. As to the latter, this will make sure that there is no double counting for TDS and nitrate dilution and should slow degradation.

Finally, the City respectfully submits that the Beaumont Basin Watermaster has not fully implemented the Beaumont Basin adjudication because, among other things, it has not addressed new recharge. It is not the prerogative of an individual party to determine whether its priority in establishing and implementing rules for new recharge should determine the Beaumont Basin Watermaster's priorities to do so. The Watermaster is failing in its duties to equitably implement the Court-ordered adjudication. While the Beaumont Basin Watermaster's failure to faithfully implement the adjudication is not an issue in the subject Basin Plan amendment, Watermaster's reticence appears to have found its way into the Basin Plan amendment process in the form of Watermaster members opposing a new recharge definition—and implementation thereof—that that is protective of water quality and water rights.

Mr. Villalobos wrote:

"To the Last Paragraph of Page 35 of 47- Section 3 please add: The use of new storm water by any of the Max Benefit partners to apply an offset (dilution) for the mass loading resulting from their recycled water use, will be subject to obtaining and the appropriate water right from the State Water Resources Control Board."

City Response:

The City supports the acquisition of appropriative rights through the State Board process, if appropriate. And, the definition of new recharge as recommended by the City is entirely consistent with that process. The State Board will not accept applications to appropriate water if that water does not exist. New recharge includes new storm water created by new development and therefore is <u>new</u>. The City does not intend to divert and recharge water that is currently recharging the BMZ or STMZ—only new stormwater that is created from new development where that new stormwater is captured and recharged pursuant to the Riverside County MS4 permit issued by the Regional Board. There is presently no legal requirement to apply for a water right permit to manage stormwater pursuant to the Riverside County MS4 permit. Using the new recharge definition recommended by the City will avoid impacts to existing water rights which should be a benefit to the maximum benefit parties and all downstream water users.

Mr. Villalobos wrote:

"3) Please revise the current text for Compliance #5a in Table 5-9c to the following:

> *"a. will be submitted <u>within one-year</u> of initiation of recycled water application or recharge within the Beaumont Management Zone." (Compliance date should be time-certain: one-year of initiation of recycled water use in the Beaumont Basin)*
>
> *"b. Upon Regional Board Approval"*

AND

"5) Please remove Section 3 (A)(5).
Note: The city will not build a Desalter to meet the Max Benefit concentrations. The City will either use water at or below anti-degradation concentrations or will dilute with SWP water to meet the Max Benefit concentrations."

City Response:

These two comments are inconsistent with each other given that the text of Section 3(A)(5) is intended to describe commitment #5 of Table 5-9c. The City is supportive of Banning's request to tie the due date of its desalting plan and schedule to the initiation of recycled water permits. The City is not supportive of removing this commitment altogether. Banning, should it move forward with recycled water reuse in the BMZ, must be required to develop a Regional Board approved plan and schedule for controlling the TDS and N concentrations of recycled water just as the BCVWD, the YVWD, and City are required to in commitments #3 and #4.

Mr. Berchtold, the City of Beaumont reiterates that it is fully supportive and committed to the regional maximum benefit program and asserts that its recommended language changes are consistent with and helpful to all of the maximum benefit parties and to managing water quality. We look forward to working with all parties and your staff in getting this important Basin Plan amendment approved and implemented.

If you have any questions regarding the technical details provided above, please call Mark Wildermuth at (949) 420-3030. If you have any questions with regards to policy, please contact me at (951) 769-8520.

Very truly yours,

City of Beaumont

Alan Kapanicas
City Manager

Smythe, Hope@Waterboards

From: Joseph Zoba <jzoba@yvwd.dst.ca.us>
Sent: Wednesday, March 19, 2014 3:40 PM
To: Smythe, Hope@Waterboards
Subject: BPA Comments - February 20, 2014 Version
Attachments: 140318 Basin Plan Comments - Zoba.pdf

Hope – I have attached a copy of my comments related to the Basin Plan Amendment (version 2/20/2014). I indicated my changes with red underline/strike and highlighted in yellow to facilitate your review. I only copied the pages with changes.

You will also find attached a copy of the maps that show the discharge locations in the Beaumont Management Zone. I would appreciate the information Mark Wildermuth mentioned this morning about the factual basis related to DP 001 for the discharge in the Beaumont Management Zone that is tributary to the San Timoteo Management Zone.

Thank you for your help and guidance.

Joe

Table 5-5

Alternative Wasteload Allocations through 2010
based on "Maximum Benefit" or "Antidegradation" Water Quality[1]

Publicly Owned Treatment Works (POTW)	Alternative 2010A – Reclamation in 1995 Basin Plan			Alternative 2010B – Reclamation Plans Advocated by POTWs/others		
	Surface Water Discharge (MGD)	TDS (mg/L)	TIN (mg/L)	Surface Water Discharge (MGD)	TDS (mg/L)	TIN (mg/L)
Beaumont – 'max benefit' [2]	2.3	490	6.0	1.0	490	6.0
Beaumont – 'antideg' [2, 3]	2.3	320[3]	4.1[3]	1.0	320[3]	4.1[3]
YVWD – Wochholz – 'max benefit'	5.7	540	6.0	0.0	540	6.0
YVWD – Wochholz – 'antideg' [3]	5.7	320[3]	4.1[3]	0.0	320[3]	4.1[3]
Rialto	12.0	490	10.0	10.0	490	10.0
RIX	49.4	550	10.0	28.2	550	10.0
Riverside Regional WQCP	35.0	650	13.0	26.1	650	13.0
Western Riverside Co. WWTP	4.4	625	10.0	3.3	625	10.0
EMWD[4]	43	650	10.0	6.0	650	10.0
EVMWD – Lake Elsinore Regional	7.2	700	13.0	2.0	700	13.0
Lee Lake WRF	1.6	650	13.0	1.6	650	13.0
Corona WWTP # 1	3.6	700	10.0	2.0	700	10.0
Corona WWTP # 2	0.2	700	10.0	0.5	700	10.0
Corona WWTP # 3	2.0	700	10.0	0.5	700	10.0
IEUA Facilities [5]	80.0	550	8.0	37.4	550	8.0

1. "Antidegradation" wasteload allocation is the default allocation if the Regional Board determines that "maximum benefit" commitments are not being met.
2. Beaumont discharges to Coopers Creek, a tributary of San Timoteo Creek, Reach 4, ~~it is a *de facto*~~
2. ~~discharge to San Timoteo Creek/San Timoteo Management Zone~~ located in the Beaumont Management Zone.
3. "Antidegradation" wasteload allocations for City of Beaumont and YVWD based on additional model analysis performed by WEI (WEI, October 2002).
4. EMWD discharges are expected to occur only during periods of wet weather.
5. IEUA facilities include the RP#1, Carbon Canyon WRP, RP#4 and RP#5; these facilities are to be regulated as a bubble (see text).

Page 5-34ff

5. Wastewater Reclamation

Wastewater is presently being reclaimed in the Santa Ana Watershed in a number of different ways:

3. Groundwater Recharge by Percolation

This type of reclamation is common throughout the Region. Most wastewater treatment-plants that do not discharge directly to the River discharge their effluent to percolation ponds. All of the treated wastewater in the upper Santa Ana Basin that is not directly reclaimed for commercial agricultural and landscape irrigation purposes, or discharged directly to the Santa Ana River, is returned to local or downstream groundwater management zones by percolation. In Orange County, reclaimed water is used for greenbelt and landscape irrigation, and injected into coastal aquifers to control sea water intrusion.

Significant additional reclamation activities are planned in the Region. The Chino Basin Watermaster, Inland Empire Utilities Agency, Yucaipa Valley Water District, the City of Beaumont and the City of Banning propose to implement extensive groundwater recharge projects using recycled water. To accommodate these projects and other water and wastewater management strategies, these agencies have made the requisite demonstrations necessary to support the "maximum benefit" TDS and nitrate-nitrogen water quality objectives specified in this Plan for certain groundwater management zones (see Chapter 4). The recharge projects will provide reliable sources of additional water supply needed to support expected development within the agencies' areas of jurisdiction. These agencies' "maximum benefit" programs are described in detail in Section VI. of this Chapter.

draft

Significant additional reclamation activities are planned in the Region. The Chino Basin Watermaster, Inland Empire Utilities Agency, Yucaipa Valley Water District, the City of Beaumont and the City of Banning propose to implement extensive groundwater recharge projects using recycled water. To accommodate these projects and other water and wastewater management strategies, these agencies have made the requisite demonstrations necessary to support the "maximum benefit" TDS and nitrate-nitrogen water quality objectives specified in this Plan for certain groundwater management zones (see Chapter 4). The recharge projects will provide reliable sources of additional water supply needed to support expected development within the agencies' areas of jurisdiction. These agencies' "maximum benefit" programs are described in detail in Section VI. of this Chapter.

The ~~construction of the~~ Yucaipa Valley Regional Brine line and ~~installation of~~ a reverse osmosis facility at the Water Purification Facility located at the Wochholz Regional Water Recycling Facility will facilitate ~~a~~ groundwater replenishment reuse ~~project~~ in the upper groundwater management zones ~~in~~ of the Santa Ana Watershed. Treated wastewater will receive extensive advanced treatment, including microfiltration, reverse osmosis, and disinfection using ultraviolet light. The recharge of recycled water will enhance both the quality and quantity of groundwater resources, the major source of water supply in the area.

36

In Orange County, significant reclamation activities include the implementation of the Groundwater Replenishment System, a joint effort of the Orange County Water District and Orange County Sanitation District. Treated wastewater provided by the Sanitation District will receive extensive advanced treatment, including microfiltration, reverse osmosis, and

approximately 70, 000 acre-feet per ear of highly treated recycled water will be produced and distributed to groundwater recharge facilities and to injection wells used to maintain a seawater intrusion barrier. The System will enhance both the quality and quantity of groundwater resources, the major source of water supply in the area. It will reduce the need for imported water and prevent, or at least delay, the need for an additional ocean outfall for disposal of the wastewater treated by the Sanitation District. Implementation of the GWR System Operation of Phase 1 began in 2008. Future phases to expand the capacity of the GWR System are planned.

page 5-38ff

V. Other Projects and Programs

In addition to the regulatory efforts of the Regional Board described in the preceding section, water and wastewater purveyors and other parties in the watershed have implemented, and propose to implement, facilities and programs designed to address salt problems in the groundwater of the Region. These include the construction of brine lines, ~~and~~ groundwater desalters, recycled water demineralization systems, implementation of programs to enhance the recharge of high quality stormwater and imported water, where available, and re-injection of recycled water to maintain salt water intrusion barriers in coastal areas. These projects and programs are motivated by the need to protect and augment water supplies, as well as to facilitate compliance with waste discharge requirements. 37

A. Brine Lines

There are two brine line systems in the Region, the Inland Empire Brine Line, formerly known as the Santa Ana Regional Interceptor (SARI), and the older Chino Basin Non-Reclaimable Line (NRL). These lines are used to transport brine wastes out of the basin for treatment and disposal to the ocean. They are a significant part of industrial waste management and essential for operation of desalters in the upper watersheds.

1. Inland Empire Brine Line

The Inland Empire Brine Line (Brine Line) was constructed and is owned by SAWPA. It is approximately 93 miles of 16 inch to 84 inch pipeline connected to the Orange County Sanitation District treatment facilities. SAWPA owns capacity rights in SARI downstream of Prado Dam. The line extends from the Orange County Line near Prado Dam northeast to the San Bernardino area.

The Inland Empire Brine Line has been extended southerly to serve the San Jacinto Watershed. Brine Line, Reach 5 extends up the Temescal Canyon from the City of Corona to the Eastern Municipal Water District (EMWD) brine line terminus in the Lake Elsinore area. EMWD's Menifee Desalter and other high salinity discharges from EMWD and Western Municipal Water District now have access to the brine line.

The Inland Empire Brineline, Reach IVE has been extended to the east about 15 miles from the City of San Bernardino to the territory of the Wochholz Regional Water Recycling Facility. This brineline extension will be utilized by the Yucaipa Valley Water District and the Mountainview Power Plant for brine disposal. 38

2. Chino Basin Non-Reclaimable Waste Line

2. San Jacinto Watershed

EMWD operates the Menifee desalter, which has a capacity of about 3 MGD. Product water is added to the EMWD municipal supply system, and the waste brine is discharged to a non-reclaimable waste disposal system that is ultimately connected to the SAWPA SARI system. The desalter extracts groundwater from the Perris South and Menifee Management Zones, both of which are adversely affected by historic salt loads contributed largely by agricultural activities.

EMWD plans to construct a desalter with capacity of about 4.5 MGD to treat poor quality water extracted from the Perris South and Lakeview/Hemet North Management Zones. The purpose of this facility is to stop subsurface migration of poor quality groundwater from the Perris South Management Zone into the Lakeview/Hemet North Management Zone.

3. Orange County

The Tustin Seventeenth Street Desalter, which began operation in 1996 reduces high nitrate and TDS concentrations from groundwater pumped by Tustin's Seventeenth Street wells, adding approximately 3,000 acre-feet of water annually to Tustin's domestic water supply. A second facility, Tustin's Main Street Treatment Plant, began operating in 1989 with a yield of 2,000 acre-feet per year. The plant reduces nitrate levels from groundwater produced by Tustin's Main Street wells, employs reverse osmosis and ion exchange. The Orange County Water District and Irvine Ranch Water District (IRWD) cooperated to build the Irvine Desalter, a dual-purpose regional groundwater remediation and water supply project located in the City of Irvine and its sphere of influence. The project consists of an extensive seven-well groundwater extraction and collection system, a treatment system, a five-mile brine disposal pipeline, a finished water delivery system, and ancillary facilities. While providing approximately 8,000 acre-feet per year to IRWD for potable and non-potable supply, the desalter extracts and treats brackish groundwater and captures an overlapping regional plume of TCE-contaminated groundwater demonstrated to have originated from the former U.S. Marine Corps Air Station-El Toro.

C. Recycled Water Demineralization Systems

The Orange County Water District and the Yucaipa Valley Water District have implemented advanced water purification processes that utilize microfiltration, reverse osmosis and ultraviolet disinfection to purify water so it can be used for groundwater replenishment and indirect potable reuse. These advanced demineralization systems utilize the most advanced filtration processes that provide safe, reliable and high quality water supplies to the region.

~~C.~~D. Recharge of Stormwater and/or Imported Water

The Orange County Water District, San Bernardino Valley Water Conservation District and other agencies in the Region operate extensive facilities designed to enhance the capture and recharge of high quality stormwater. More such facilities are planned as part of "maximum benefit" proposals by the Chino Basin Watermaster/Inland Empire Utilities Agency, and agencies implementing the maximum benefit programs in the San Timoteo watershed (Section VI., Maximum Benefit Implementation Plans for Salt Management). These proposals also include efforts to import and recharge high quality State Water Project water, when it is available. These activities increase both the quantity and quality of available groundwater resources.

~~D.~~E. Sea Water Intrusion Barriers

1. Yucaipa Groundwater Management Zone - Yucaipa Valley Water District

The application of the "maximum benefit" objectives established for the Yucaipa Groundwater Management Zone relies on the implementation by the Yucaipa Valley Water District (YVWD) of the specific program of projects and requirements shown in Table 5-9a. These "maximum benefit" commitments were updated and revised in 2014 based on YVWD's ongoing activities to implement the 2004 program and the regional strategy YVWD helped to develop. The projected water demands for the Yucaipa area for the year 2030 require approximately an additional 10,000 AF/Y of supplemental water, which may include State Water Project water, water imported from local sources, recharged storm water and recycled water. The goal is to meet these demands through implementation of the "maximum benefit" commitments, which include enhanced recharge of stormwater and recycled water, optimizing direct use of recycled and imported water, desalting of wastewater and/or groundwater and conjunctive use.

In addition to its water supply responsibilities, YVWD provides sewage collection and treatment services within its service area. YVWD operates a wastewater treatment facility that currently discharges tertiary treated wastewater to San Timoteo Creek, Reach 3. This unlined reach of the Creek overlies and recharges the San Timoteo Groundwater Groundwater Management Zone (see 2. San Timoteo Groundwater Management Zone – Yucaipa Valley Water District and the City of Beaumont). In response to commitments in the 2004 Salt Management Plan, YVWD has taken steps to improve recycled water quality, including the installation of new denitrification facilities, the construction of the Yucaipa Valley Regional Brineline and reverse osmosis treatment systems at the Wochholz Regional Water Recycling Facility. ~~and the design and construction of desalting facilities, which may be used to treat recycled water or other sources if needed to comply with effluent limitations based on the "maximum benefit" commitments. The desalting facilities are expected to be complete by June 30, 2015.~~

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Dilution of recycled water with ~~storm~~ water to meet the 370 mg/L TDS concentration and the 5 mg/L nitrate-N concentration recycled water recharge and direct use requirements will be limited to new ~~storm~~water ~~recharge~~ such as imported water, reverse osmosis permeate (diluent), and/or new stormwater. New ~~storm~~water recharge is defined as ~~storm~~water recharge in quantities greater than historical amounts (net increase) over the groundwater management zone since January 1, 2004. January 2004 corresponds to the month and year when the Regional Board authorized the original maximum benefit objectives and compliance commitments by adopting Resolution No. R8-2004-0001.

Table 5-9a

Yucaipa Groundwater Management Zone
Maximum Benefit Commitments

Responsible Agency – Yucaipa Valley Water District

Description of Commitment	Compliance Date – as soon as possible, but no later than
1. Surface Water Monitoring Program	
a. Submit Draft Revised Monitoring Program to Regional Board	a. *(**30 days from Regional Board approval of BPA)*
b. Implement Revised Monitoring Program	b. Upon Regional Board approval
c. Submit Draft Revised Monitoring Program(s) (subsequent to that required in "a", above) to Regional Board	c. Every three years, in coordination with ambient water quality determination (#6, below) or more frequently upon notification of the need to do so from the Regional Board Executive Officer and in accordance with the schedule prescribed by the Executive Officer
d. Implement Revised Monitoring Program (s)	d. Upon Regional Board approval
e. Annual data report submittal	e. April 15th
2. Groundwater Monitoring Program	
a. Submit Draft Revised Monitoring Program(s)	a. Every three years, in coordination with ambient water quality determination (#6, below) or more frequently upon notification of the need to do so from the Regional Board Executive Officer and in accordance with the schedule prescribed by the Executive Officer
b. Implement revised monitoring plan(s)	b. Upon Regional Board approval
c. Annual data report submittal	c. April 15th
3. YVWD Wastewater and/or Groundwater Desalter(s) and Brine Disposal Facilities Complete construction of Desalter and Brine Disposal Facilities	June 30, 2015 (or as provided by the Regional Board - see text below)
4. Non-potable water supply Implement non-potable water supply system to serve water for irrigation purposes and/or direct non-potable reuse. The non-potable supply used in the Yucaipa Groundwater Management Zone shall comply with a 10-year running average TDS concentration of 370 mg/L or less, and ~~in addition, for any non-irrigation reuse,~~ the nitrate-nitrogen shall be less than or equal to the 5 mg/L nitrate-nitrogen "maximum benefit" objective (taking the nitrogen loss coefficient into consideration).	June 30, 2015

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Table 5-9a

Yucaipa Groundwater Management Zone
Maximum Benefit Commitments

Responsible Agency – Yucaipa Valley Water District

Description of Commitment	Compliance Date – as soon as possible, but no later than
5. Recycled water recharge The recharge of recycled water in the Yucaipa Groundwater Management Zone shall be limited to the amount that can be blended with other recharge sources (or reverse osmosis diluent) to achieve a 10-year running average equal to or less than the 370 mg/L "maximum benefit" TDS objective and less than or equal to the 5 mg/L nitrate-nitrogen "maximum benefit" objective (taking the nitrogen loss coefficient into consideration). a. Submit for Executive Officer approval, a proposed methodology for computing baseline and new stormwater recharge. ~~a.~~b. Submit baseline report of amount, locations, and TDS and nitrogen quality of stormwater/imported water recharge per the approved methodology (#5a). ~~b.~~c. Submit documentation of amount, TDS and nitrogen quality of all sources of recharge and recharge locations. For stormwater recharge used for blending, submit documentation that the recharge is the result of YVWD enhanced recharge facilities/programs	Compliance must be achieved by end of 10th year after initiation of recycled water use/recharge operations. a. Prior to initiation of construction of basins/other facilities to support enhanced stormwater/imported water recharge. b. 1 year from Executive Officer approval of methodology. c. Annually, by April 15th, after construction of facilities/implementation of programs to support enhanced recharge.
6. Anti-degradation Objectives Salt Mitigation Plan a. Submit a proposed Salt Mitigation Plan and Implementation Schedule b. Implement Salt Mitigation Plan	a. Within *(**1 year from OAL approval of BPA)* b. Within 30 days of Regional Board finding that maximum benefit no longer being achieved
~~6~~7. Ambient groundwater quality determination	July 1, 2014 and every 3 years thereafter

A. Description of Yucaipa Valley Water District Commitments

1. Surface Water Monitoring Program (Table 5-9a, # 1)

A surface water monitoring program was developed, approved and implemented in response to the maximum benefit commitments initially incorporated in the Basin Plan in 2004 (Resolution No. R8-2004-0001). The Regional Board approved the Surface Water Monitoring Program in 2005 (Resolution No. R8-2005-0065). Subsequently, the need to revise the monitoring program

was recognized and appropriate amendments were adopted in 2014 (Resolution No. R8-2014-0005). These include the requirement that *by (**30 days from Regional Board approval of the BPA**)*, YVWD shall submit a revised surface water monitoring program to the Regional Board for approval. The monitoring program must be implemented upon Regional Board approval.

It is expected that the monitoring program will be reviewed as it is implemented over time, and that further updates may be necessary. YVWD committed to review the surface water monitoring program (and the groundwater monitoring program, see #2, below) as part of the determination of ambient groundwater quality, which occurs every three years pursuant to Basin Plan requirements (see #6, below). Though considered unlikely, it is possible that more frequent review and revision of these monitoring programs may be necessary. Accordingly, the Basin Plan requires review of the surface water monitoring program in coordination with the ambient quality determination and, further, that draft revised monitoring programs be submitted upon notification by the Regional Board's Executive Officer of the need to do so. The schedule for the submittal will be prescribed by the Executive Officer. Any such revision to the monitoring is to be implemented upon Regional Board approval.

An annual report summarizing all data collected for the year and evaluating compliance with relevant surface water objectives shall be submitted by April 15th of each year.

2. Groundwater Monitoring Program (Table 5-9a, #2)

In response to the maximum benefit program requirements established in 2004 (Resolution No. R8- 2004-0001), in 2005, YVWD submitted a proposed groundwater monitoring program. The Regional Board approved a groundwater monitoring program to determine ambient water quality in the Yucaipa Groundwater Management Zone (Resolution No. R8-2005-0065). The purpose of the groundwater ~~m~~monitoring program is to identify the effects of the implementation of the Yucaipa Groundwater Management Zone maximum benefit water quality objectives on water levels and water quality within the Yucaipa Groundwater Management Zone. The groundwater monitoring program has been implemented since 2005 and must continue to be implemented.

The existing groundwater monitoring implemented by YVWD to comply with the Maximum Benefit program authorized by the 2004 amendments to the salt management plan shall be continued into the future until a new monitoring plan is approved by the Executive Officer. Any new monitoring plan developed by YVWD shall preserve the geospatial distribution of groundwater wells and the sampling of those wells utilized in the existing Regional Board-approved maximum benefit monitoring program.

As noted above, the groundwater monitoring program will be reviewed as part of regular ambient groundwater quality determinations and may be revised. Once again, more frequent review and revision may be necessary as the monitoring program is implemented over time. Accordingly, the Basin Plan requires that draft revised monitoring programs be submitted upon notification by the Regional Board's Executive Officer of the need to do so. The schedule for the submittal will be prescribed by the Executive Officer. Any such revision to the monitoring program is to be implemented upon Regional Board approval.

An annual report, including all raw data and summarizing the results of the approved groundwater monitoring program, shall be submitted to the Regional Board by April 15th of each year.

3. YVWD Wastewater and/or Groundwater Desalter(s) and Brine Disposal (Table 5-9a, #3)

YVWD anticipated that demineralization of groundwater or recycled water would be necessary in the future to protect the Yucaipa Groundwater Management Zone and has ~~planned and designed~~constructed desalting and associated brine disposal facilities. YVWD shall ensure that the ~~planned desalter~~demineralization system is operational by June 30, 2015. The Regional Board may extend this compliance date upon submittal of compelling evidence that the extension is warranted and would not compromise timely implementation of the other maximum benefit program commitments identified in Table 5-9a. 43

4. Non-potable Water Supply Distribution System (Table 5-9a, # 4)

A key element of YVWD's water resources management plan is the construction of a non-potable supply system to serve a mix of recycled water and diluent from the Wochholz Regional Water Recycling Facility, ~~and~~ un-treated imported water, treated backwash water from the Yucaipa Valley Regional Water Filtration Facility and/or storm water for irrigation uses and other direct non-potable reuse. The intent is to minimize the use of potable water for non-potable uses. For use in the Yucaipa Groundwater Management Zone, YVWD will produce a non-potable supply with a running 10-year average TDS concentration equal to our less than ~~of~~ 370 mg/L and, ~~in addition, for any non-irrigation reuse,~~ the 10-year running average nitrate-nitrogen concentration shall comply with 6.7 mg/L (taking the 25% nitrogen loss coefficient into account to assure that the "maximum benefit" objective of 5 mg/L will be met). To meet this "maximum benefit" objective, YVWD will blend the recycled water with other water sources or desalt the recycled water. 44

Compliance with the non-potable water supply TDS and/or nitrate-nitrogen objective shall be measured in the non-potable water system as a weighted 10-year average of all water sources added to that system and used within the Yucaipa Groundwater Management Zone.

As part of the Maximum Benefit Annual Report, YVWD shall report on the TDS and nitrogen quality and quantity of all sources of non-potable water and summarize the annual and 10-year annual weighted TDS and nitrogen average concentrations utilized in the Yucaipa Groundwater Management Zone.

5. Recycled Water Recharge (Table 5-9a, # 5)

The use and recharge of recycled water within the Yucaipa Groundwater Management Zone are necessary to maximize the use of the water resources in the Yucaipa area. The demonstration of "maximum benefit" and the continued application of the "maximum benefit" objectives are contingent on the recharge of recycled water to the Yucaipa Groundwater Management Zone of a 10-year annual average (running average) TDS concentration of 370 mg/L and nitrate-nitrogen concentration of 6.7 mg/L (taking the 25% nitrogen loss coefficient into account to assure that the "maximum benefit" objective of 5 mg/L will be met). These concentrations may be achieved by desalting or other treatment of the recycled water, and/or by blending the recycled water with other sources, such as imported water, ~~and/or~~ storm water and reverse osmosis permeate as diluent. 45

Compliance with these concentrations shall be measured at the point of discharge(s) to the recharge facility as a weighted average concentration of the recycled water and other sources, if any, used for blending.

As part of the Maximum Benefit Annual Report, YVWD shall report on the TDS and nitrogen quality and quantity of all sources of recharged water and summarize the annual and 10-year annual weighted TDS and nitrogen average concentrations recharged to the Yucaipa

Groundwater Management Zone.

6.Anti-degradation Salt Mitigation Plan (Table 5-9a, #6)

Within *(**1 year of approval by OAL of the BPA**)*, YVWD shall submit a Salt Mitigation Plan to mitigate excess salt loading above the anti-degradation water quality objectives. The Salt Mitigation Plan shall provide a conceptual framework for mitigation projects should the Regional Board make a finding that the lowering of water quality associated with the "maximum benefit" TDS and nitrate-nitrogen water quality objectives that are higher than historical water quality (the "antidegradation" objectives) is not of maximum benefit to the people of the state. The Salt Mitigation Plan must be implemented within 30 days of a Regional Board finding that maximum benefit is no longer being achieved.

~~6~~7. Ambient Groundwater Quality Determination (Table 5-9a, # 6)

By July 1, 2014, and every three years thereafter, YVWD shall submit a determination of ambient TDS and nitrate-nitrogen quality in the Yucaipa Groundwater Management Zone. This determination shall be accomplished using methodology consistent with the calculation (20-year running averages) used by the Nitrogen/TDS Task Force to develop the TDS and nitrate-nitrogen "antidegradation" water quality objectives for groundwater Management Zones within the region. [Ref. 1].

B. Implementation by Regional Board

1. Revision to Yucaipa Valley Water District NPDES Permit

To implement the "maximum benefit" objectives, the Regional Board will revise the waste discharge and producer/user reclamation requirements permit for YVWD wastewater discharges to reflect the commitments described above, as appropriate. This includes the following:

For surface water discharges that affect the Yucaipa Groundwater Management Zone, discharge limits for TDS and TIN will be specified as an annual volume-weighted average not to exceed 370 mg/L TDS and 6.7 mg/L TIN. These limits are based on the "maximum benefit" objectives of the Yucaipa Groundwater Management Zone shown in Table 4-1 and take the nitrogen loss coefficient into account. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified and will apply should the Regional Board find that maximum benefit is not demonstrated. These alternative objectives are also specified in Table 4-1. Compliance schedules for these alternative limits will be specified in YVWD's waste discharge requirements, as necessary and appropriate.

YVWD's waste discharge and producer/user reclamation requirements will require that the recharge of recycled water shall be limited to the amount that can be blended with other water sources, such as stormwater, ~~or~~ imported water, or reverse osmosis diluent to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Yucaipa Groundwater Management Zone. The use of recycled water for irrigation and other direct re-use purposes in the Yucaipa Groundwater Management Zone shall be limited to the amount that can be blended with other water sources, such as stormwater ~~or~~ imported water, or reverse osmosis diluent to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Yucaipa Groundwater Management Zone. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified for recycled water recharge and re-use in the Yucaipa Groundwater

2. San Timoteo Groundwater Management Zone – Yucaipa Valley Water District and the City of Beaumont

The application of the "maximum benefit" objectives established for the San Timoteo Groundwater Management Zone relies on the implementation by both the Yucaipa Valley Water District (YVWD) and the City of Beaumont of the specific program of projects and requirements shown in Table 5-9b [Ref. 10D]. Since the Salt Management Plan was amended in 2004 to incorporate "maximum benefit" commitments applicable to the San Timoteo Management Zone, both YVWD and the City of Beaumont have been engaged in implementing those commitments.

As discussed above, YVWD operates a wastewater treatment facility that discharges a portion of its treated effluent to San Timoteo Creek, Reach 3, which overlies and recharges the San Timoteo Groundwater Management Zone. Similarly, the City of Beaumont provides sewage collection and treatment services within its service area, and a portion of the treated wastewater discharged to Reach 3 of San Timoteo Creek, also recharges the San Timoteo Groundwater Management Zone. Surface water discharges by both YVWD and the City affect groundwater quality in the San Timoteo Groundwater Management Zone. Consistent with the 2004 "maximum benefit" commitments, both the District and the City must identify and implement an acceptable plan to address the adverse water quality impacts of their wastewater discharges.

Dilution of recycled water with ~~storm~~ water to meet the 400 mg/L TDS concentration and the 5 mg/L nitrate-N concentration recycled water recharge and direct use requirements will be limited to new ~~storm~~water ~~recharge~~ such as reverse osmosis permeate (diluent), new stormwater or imported water. New stormwater recharge is defined as stormwater recharge in quantities greater than historical amounts (net increase) over the groundwater management zone since January 1, 2004. January 2004 corresponds to the month and year when the Regional Board authorized the original maximum benefit objectives and compliance commitments by adopting Resolution No. R8-2004-0001.

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Table 5-9b

San Timoteo Groundwater Management Zone
Maximum Benefit Commitments

Responsible Agencies – Yucaipa Valley Water District and the City of Beaumont

Description of Commitment	Compliance Date – as soon as possible, but no later than
4. City of Beaumont, Wastewater and/or Groundwater Desalter(s) and Brine Disposal Facilities a. Submit detailed plan and schedule for construction of desalter(s) and brine disposal facilities. Facilities are to operational as soon as possible but no later than 5 years from date of Regional Board approval of plan/schedule or as provided by the Regional Board (see text below). b. Implement the plan and schedule	a. ~~(*15 days from approval date by OAL of this Basin Plan amendment*)~~ January 30, 2015 b. Upon Regional Board approval
5. YVWD, City of Beaumont Non-potable water supply Implement non-potable water supply system to serve water for irrigation purposes and direct non-potable reuse. The non-potable supply used in the San Timoteo Groundwater Management Zone shall comply with a 10-year running average TDS concentration of 400 mg/L or less, and in addition, for any non-irrigation reuse, the nitrate-nitrogen shall be less than or equal to the 5 mg/L nitrate-nitrogen "maximum benefit" objective (taking the nitrogen loss coefficient into consideration).	December 31, 2015
6. Recycled water recharge/habitat maintenance discharge The recharge of recycled water in the San Timoteo Groundwater Management Zone or discharge to San Timoteo Creek to maintain the riparian habitat shall be limited to the amount that can be blended with other recharge sources to achieve a 10-year running average equal to or less than the 400 mg/L "maximum benefit" TDS objective at the point of discharge and less than or equal to the 5 mg/L nitrate-nitrogen "maximum benefit" objective (taking the nitrogen loss coefficient into consideration). a. Submit for Executive Officer approval, a proposed methodology for computing baseline and new stormwater recharge. ~~a.~~b. Submit baseline report of amount, locations, and TDS and nitrogen quality of stormwater/imported water recharge per the approved methodology (#6a). ~~b.~~c. Submit documentation of amount, TDS and nitrogen quality of all sources of recharge and recharge locations. For	Compliance must be achieved by end of 10th year after initiation of recycled water use/recharge operations. a. 6 months pPrior to initiation of construction of basins/other facilities to support enhanced stormwater/imported water recharge. b. 1 year from Executive Officer approval of methodology. c. Annually, by April 15th, after construction of facilities/implementation of programs

It is expected that the monitoring program will be reviewed as it is implemented over time, and that further updates may be necessary. YVWD and the City of Beaumont committed to review the surface water monitoring program (and the groundwater monitoring program, see #2, below) as part of the determination of ambient groundwater quality, which occurs every three years pursuant to Basin Plan requirements (see #6, below). Though considered unlikely, it is possible that more frequent review and revision of these monitoring programs may be necessary. Accordingly, the Basin Plan requires review of the surface water monitoring program in coordination with the ambient quality determination and, further, that draft revised monitoring programs be submitted upon notification by the Regional Board's Executive Officer of the need to do so. The schedule for the submittal will be prescribed by the Executive Officer. Any such revision to the monitoring is to be implemented upon Regional Board approval.

An annual report summarizing all data collected for the year and evaluating compliance with relevant surface water objectives shall be submitted by April 15th of each year.

2. Groundwater Monitoring Program (Table 5-9a, #2)

In response to the maximum benefit program requirements established in 2004 (Resolution No. R8- 2004-0001), in 2005, YVWD and the City of Beaumont submitted a proposed groundwater monitoring program. The Regional Board approved a groundwater monitoring program to determine ambient water quality in the Yucaipa and San Timoteo Groundwater Management Zones (Resolutions No. R8-2005-0065 and R8-2005-0066). The purpose of the groundwater monitoring program is to identify the effects of the implementation of the San Timoteo Groundwater Management Zone "maximum benefit" water quality objectives on water levels and water quality within the San Timoteo Groundwater Management Zone. The groundwater monitoring program has been implemented since 2005. YVWD and the City of Beaumont have since installed additional wells as part of revised groundwater monitoring workplans to ensure adequate data are collected for ambient quality determination. The workplans were approved in 2009 (Resolution No. R8-2009-0034 for YVWD and R8-2009-0035 for the City of Beaumont).

The existing groundwater monitoring implemented by the City of Beaumont and YVWD to comply with the Maximum Benefit program authorized by the 2004 amendments to the salt management plan shall be continued into the future on a cooperative basis until a new monitoring plan is approved by the Executive Officer. Any new monitoring plan developed by the City of Beaumont and/or YVWD shall preserve the geospatial distribution of groundwater wells and the sampling of those wells utilized in the existing Regional Board-approved maximum benefit monitoring program.

As noted above, the groundwater monitoring program will be reviewed as part of regular ambient groundwater quality determinations and may be revised. Once again, more frequent review and revision may be necessary as the monitoring program is implemented over time. Accordingly, the Basin Plan requires that draft revised monitoring programs be submitted upon notification by the Regional Board's Executive Officer of the need to do so. The schedule for the submittal will be prescribed by the Executive Officer. Any such revision to the monitoring program is to be implemented upon Regional Board approval.

An annual report, including all raw data and summarizing the results of the approved groundwater monitoring program, shall be submitted to the Regional Board by April 15th of each year.

3. YVWD Wastewater and/or Groundwater Desalter(s) and Brine Disposal (Table 5-9b, #3)

YVWD anticipated that demineralization of groundwater or recycled water would be necessary in the future to protect the San Timoteo Groundwater Management Zone and has planned and designed desalting and associated brine disposal facilities. YVWD shall ensure that the planned desalter system is operational by June 30, 2015. The Regional Board may extend this compliance date upon submittal of compelling evidence that the extension is warranted and would not compromise timely implementation of the other maximum benefit program commitments identified in Table 5-9~~a and~~ b.

4. City of Beaumont Wastewater and/or Groundwater Desalter(s) and Brine Disposal (Table 5-9b, #4)

The City of Beaumont shall construct and operate desalting facilities and brine disposal facilities to improve recycled water quality and/or other sources of non-potable supply. A detailed desalter/brine line plan and schedule shall be submitted ~~(*15 days from approval date by OAL of the Basin Plan amendment)~~ by January 30, 2015. The schedule shall assure that these facilities are in place within 5 years of Regional Board approval. The Regional Board may extend this compliance date upon submittal of compelling evidence that the extension is warranted and would not compromise timely implementation of the other maximum benefit program commitments identified in Table 5-9b.

5. YVWD/City of Beaumont Non-potable Water Supply Distribution System (Table 5-9b, # 5)

Both YVWD and the City of Beaumont are planning for the construction of a non-potable supply system to serve a mix of recycled water, ~~and~~ un-treated imported water, reverse osmosis permeate (diluent), and/or storm water for irrigation uses and direct non-potable reuse. The intent is to minimize the use of potable water for non-potable uses. Both YVWD and/or the City of Beaumont will produce a non-potable supply for use within the San Timoteo Groundwater Management Zone with a running ten-year average TDS concentration of 400 mg/L. and~~, in addition, for any non irrigation reuse,~~ the 10- year running average nitrate-nitrogen concentration shall comply with 6.7 mg/L (taking the 25% nitrogen loss coefficient into account to assure that the "maximum benefit" objective of 5 mg/L will be met). To meet this "maximum benefit" objective, YVWD/City of Beaumont will blend the recycled water with other water sources or desalt the recycled water.

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Compliance with the non-potable water supply TDS and/or nitrate-nitrogen objective shall be measured in the non-potable water system as a weighted 10-year average of all water sources added to that system and used within the San Timoteo Groundwater Management Zone.

As part of the Maximum Benefit Annual Report, YVWD and the City of Beaumont shall report on the TDS and nitrogen quality and quantity of all sources of non-potable water and summarize the annual and 10-year annual weighted TDS and nitrogen average concentrations utilized in the San Timoteo Groundwater Management Zone.

6. Recycled Water Recharge/ Riparian Habitat Maintenance Discharge (Table 5-9b, #6)

The use and recharge of recycled water within the San Timoteo Groundwater Management Zone or the discharge of recycled water to San Timoteo Creek to maintain the riparian habitat and the demonstration of "maximum benefit" are contingent on the recharge/discharge of recycled water ~~to the San Timoteo Groundwater Management Zone of~~ as a 10-year annual average (running average) TDS concentration of 400 mg/L and nitrate-nitrogen concentration of

6.7 mg/L (taking the 25% nitrogen loss coefficient into account to assure that the "maximum benefit" objective of 5 mg/L will be met). These concentrations may be achieved by desalting or other treatment of the recycled water, and/or by blending the recycled water with other sources, such as imported water, reverse osmosis permeate (diluent), and/or new storm water. 50

Compliance with these concentrations shall be measured at the point of discharge(s) to the recharge facility or at the end of the outfall for a recycled water discharge as a weighted average concentration of the recycled water and other sources, if any, used for blending. 51

As part of the Maximum Benefit Annual Report, YVWD and/or the City of Beaumont shall report on the TDS and nitrogen quality and quantity of all sources of recharged water and summarize the annual and 10-year annual weighted TDS and nitrogen average concentrations recharged to the San Timoteo Groundwater Management Zone.

7. Improve Surface Water Discharge Quality to the San Timoteo Groundwater Management Zone (Table 5-9b, #7)

YVWD and the City of Beaumont wastewater discharges to the unlined reach of San Timoteo Creek impact the quality of the San Timoteo Groundwater Management Zone. In order to protect underlying groundwater Management Zone quality, by *(*30 days from Regional Board approval of this Basin Plan amendment)*, the City of Beaumont and YVWD shall submit a proposed plan and schedule to improve the quality of wastewater discharged to the portion of San Timoteo Creek overlying the San Timoteo Groundwater Management Zone in order to assure compliance with the Groundwater Management Zone "maximum benefit" objectives. A contingency plan and schedule to meet the "antidegradation" objectives for the Groundwater Management Zone shall also be identified and implemented upon a finding by the Regional Board that "maximum benefit" is not demonstrated and that the "antidegradation" objectives apply. The plan must be implemented upon Regional Board approval.

8. Anti-degradation Objectives Salt Mitigation Plan (Table 5-9b, #8)

Within *(**1 year of approval by OAL of the BPA**)*, YVWD and the City of Beaumont shall submit a Salt Mitigation Plan to mitigate excess salt loading above the anti-degradation water quality objectives. The Salt Mitigation Plan shall provide a conceptual framework for mitigation projects should the Regional Board make a finding that the lowering of water quality associated with the "maximum benefit" TDS and nitrate-nitrogen water quality objectives that are higher than historical water quality (the "antidegradation" objectives) is not of maximum benefit to the people of the state. The Salt Mitigation Plan must be implemented within 30 days of a Regional Board finding that maximum benefit is no longer being achieved.

~~8~~9. Ambient Groundwater Quality Determination (Table 5-9b, # 8)

By July 1, 2014, and every three years thereafter, YVWD and the City of Beaumont shall submit a determination of ambient TDS and nitrate-nitrogen quality in the San Timoteo Groundwater Management Zone. This determination shall be accomplished using methodology consistent with the calculation (20-year running averages) used by the Nitrogen/TDS Task Force to develop the TDS and nitrate-nitrogen "antidegradation" water quality objectives for groundwater Management Zones within the region. [Ref. 1].

B. Implementation by Regional Board

1. Revision to Yucaipa Valley Water District NPDES Permit

To implement the "maximum benefit" objectives, the Regional Board will revise the waste discharge requirements and producer/user reclamation requirements for the YVWD wastewater discharges to reflect the commitments described above, as appropriate. This includes the following:

For surface water discharges that affect the San Timoteo Groundwater Management Zone, discharge limits for TDS and TIN will be specified as an annual volume-weighted average not to exceed 400 mg/L TDS at the end of the outfall and 6.7 mg/L TIN. These limits are based on the "maximum benefit" objectives of the San Timoteo Groundwater Management Zone shown in Table 4-1 and take the nitrogen loss coefficient into account. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified and will apply should the Regional Board find that maximum benefit is not demonstrated. These alternative objectives are also specified in Table 4-1. Compliance schedules for these alternative limits will be specified in the YVWD's waste discharge requirements, as necessary and appropriate. 52

YVWD's waste discharge requirements will require that any planned recharge of recycled water shall be limited to the amount that can be blended with other water sources, such as stormwater, reverse osmosis permeate (diluent) or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the San Timoteo Groundwater Management Zone. The use of recycled water for irrigation and other direct re-use shall be limited to the amount that can be blended with other water sources, such as stormwater, ~~or~~ imported water, or reverse osmosis permeate (diluent) to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the San Timoteo Groundwater Management Zone. 53

Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified for recycled water recharge and re-use in the San Timoteo Groundwater Management Zone and will apply if the Regional Board finds that the maximum benefit commitments are not met.

2. Revision to the City of Beaumont NPDES Permit

To implement the "maximum benefit" objectives, the Regional Board will revise the waste discharge requirements for the City of Beaumont's wastewater discharges to reflect the commitments described above, as appropriate. This includes the following:

For discharges to the San Timoteo Groundwater Management Zone, discharge limits for TDS and TIN will be specified as an annual volume-weighted average not to exceed 400 mg/L TDS at the end of the outfall and 6.7 mg/L TIN. These limits are based on the "maximum benefit" objectives of the San Timoteo Groundwater Management Zone shown in Table 4-1 and take the nitrogen loss coefficient into account. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified and will apply should the Regional Board find that maximum benefit is not demonstrated. These alternative limits are also specified in Table 4- 54

1. Compliance schedules for these alternative limits will be specified in the City's waste discharge requirements, as necessary and appropriate.

3. Beaumont Groundwater Management Zone – Yucaipa Valley Water District, the City of Beaumont, the City of Banning, Beaumont Cherry Valley Water District, San Gorgornio Pass Agency

The application of the "maximum benefit" objectives established for the Beaumont Groundwater Management Zone is contingent on the implementation of commitments by the YVWD, the City of Beaumont, the City of Banning, Beaumont Cherry Valley Water District (BCVWD), and the San Gorgonio Pass Water Agency (Pass Agency) to implement a specific water and wastewater resources management program identified in the Regional Strategy [Ref. 10D]. This program is part of a coordinated effort by these agencies to develop and implement projects that will assure reliable water supplies to meet rapidly increasing demands in this area. The Regional Strategy entails enhanced recharge of native and recycled water, maximizing the direct use of recycled water, optimizing the direct use of imported water, recharge and conjunctive use. The maximum benefit commitments identified in the Regional Strategy for the Beaumont Groundwater Management Zone will be implemented by the City of Beaumont, BCVWD, YVWD, the Pass Agency and the City of Banning. The Regional Strategy forms the basis for the Beaumont Groundwater Management Zone maximum benefit program discussed below.

Wastewater collection and treatment services are provided by the City of Beaumont, the City of Banning, as well as YVWD. The City of Beaumont discharges tertiary treated wastewater to Cooper's Creek, a tributary of San Timoteo Creek, Reach 3 located in the Beaumont Management Zone. This unlined reach of the Creek overlies and recharges both the Beaumont and San Timoteo Groundwater Management Zones. 55

Table 5-9c identifies the projects and requirements that must be implemented by the cities of Beaumont and Banning, YVWD, BCVWD, and the Pass Agency to demonstrate that water quality consistent with maximum benefit to the people of the state will be maintained with the applications of the "maximum benefit" objectives. Table 5-9c also specifies an implementation schedule. The Regional Board will revise waste discharge requirements for the City of Beaumont and YVWD, and will work with the Colorado River Water Board to ensure discharges from the City of Banning comply with the maximum benefit requirements. The Regional Board will also consider issuance of waste discharge requirements for BCVWD and take other actions as necessary to require that these commitments be met by the responsible parties.

Dilution of recycled water with ~~storm~~-water to meet the 330 mg/L TDS concentration and the 5 mg/L nitrate-N concentration recycled water recharge and direct use requirements will be limited to new ~~storm~~water recharge such as imported water, reverse osmosis permeate (diluent) and/or new stormwater. New stormwater recharge is defined as stormwater recharge in quantities greater than historical amounts (net increase) over the groundwater management zone since January 1, 2004. January 2004 corresponds to the month and year when the Regional Board authorized the original maximum benefit objectives and compliance commitments by adopting Resolution No. R8-2004-0001. 56

Table 5-9c
Beaumont Groundwater Management Zone
Maximum Benefit Commitments

Responsible Agencies – Yucaipa Valley Water District, City of Beaumont, City of Banning, San Gorgonio Pass Water Agency, Beaumont Cherry Valley Water District

Description of Commitment	Compliance Date – as soon as possible, but no later than
b. Implement the plan and schedule	c. ~~b.~~ Upon Regional Board approval ~~c.~~d.
5. City of Banning, Wastewater and/or Groundwater Desalter(s) and Brine Disposal Facilities a. Submit detailed plan and schedule for construction of desalter(s) and brine disposal facilities. Facilities are to operational as soon as possible but no later than 5 years from date of Regional Board approval of plan/schedule or as provided by the Regional Board (see text below). b. Implement the plan and schedule	a. ~~(*15 days from date of OAL approval of this Basin Plan amendment*)~~. 6 months prior to initiation of the use recycled water application or recharge b. Upon Regional Board approval
6. Non-potable water supply YVWD, the City of Beaumont, the City of Banning (at the onset of recycled water use in the Beaumont Basin), BCVWD and the Pass Agency shall implement non-potable water supply system to serve water for irrigation purposes and direct non-potable reuse. The non-potable supply used in the Beaumont Groundwater Management Zone shall comply with a 10-year running average TDS concentration of 330 mg/L or less and, in addition, for any non-irrigation reuse, the nitrate-nitrogen shall be less than or equal to the 5 mg/L nitrate-nitrogen "maximum benefit" objective (taking the nitrogen loss coefficient into consideration).	December 31, 2015
7. Recycled water recharge/discharge The recharge of recycled water in the Beaumont Groundwater Management Zone shall be limited to the amount that can be blended with other recharge sources to achieve a 10-year running average equal to or less than the 330 mg/L "maximum benefit" TDS objective at the point of discharge/recharge and less than or equal to the 5 mg/L nitrate-nitrogen "maximum benefit" objective (taking the nitrogen loss coefficient into consideration).	Compliance must be achieved by end of 10th year after initiation of recycled water use/recharge operations.
a. Submit for Executive Officer approval, a proposed methodology for computing baseline and new stormwater recharge.	a. March 2015
b. Submit baseline report of amount, locations, and TDS and nitrogen quality of stormwater/imported water recharge per the approved methodology (#7a).	b. ~~Prior to initiation of construction of basins/other facilities to support enhanced stormwater/imported water recharge.~~ 1 year from Executive Officer approval of methodology
c. Submit documentation of amount, TDS and nitrogen quality of all	

implemented upon Regional Board approval.

An annual report summarizing all data collected for the year and evaluating compliance with relevant surface water objectives shall be submitted by April 15th of each year.

2. Groundwater Monitoring Program (Table 5-9c, #2)

In response to the maximum benefit program requirements established in 2004 (Resolution No. R8- 2004-0001), a proposed groundwater monitoring program was submitted in 2005. The Regional Board approved a groundwater monitoring program to determine ambient water quality in the Beaumont Groundwater Management Zone (Resolution No. R8-2005-0066). The purpose of the Groundwater Monitoring Program is to identify the effects of the implementation of the Beaumont Groundwater Management Zone maximum benefit water quality objectives on water levels and water quality within the Beaumont Groundwater Management Zone. The groundwater monitoring program has been implemented since 2005 and YVWD, the City of Beaumont, the City of Banning, the Pass Agency and BCVWD must continue to implement that program.

The existing groundwater monitoring implemented by the City of Beaumont and YVWD to comply with the Maximum Benefit program authorized by the 2004 amendments to the salt management plan shall be continued into the future on a cooperative basis by all of the maximum benefit partners until a new monitoring plan is approved by the Executive Officer. Any new monitoring plan developed shall preserve the geospatial distribution of groundwater wells and the sampling of those wells utilized in the existing Regional Board-approved maximum benefit monitoring program.

As noted above, the groundwater monitoring program will be reviewed as part of regular ambient groundwater quality determinations and may be revised. Once again, more frequent review and revision may be necessary as the monitoring program is implemented over time. Accordingly, the Basin Plan requires that draft revised monitoring programs be submitted upon notification by the Regional Board's Executive Officer of the need to do so. The schedule for the submittal will be prescribed by the Executive Officer. Any such revision to the monitoring program is to be implemented upon Regional Board approval.

An annual report, including all raw data and summarizing the results of the approved groundwater monitoring program, shall be submitted to the Regional Board by April 15th of each year.

3. YVWD Wastewater and/or Groundwater Desalter(s) and Brine Disposal (Table 5-9c, #3)

YVWD anticipated that demineralization of groundwater or recycled water would be necessary in the future to protect the Yucaipa Groundwater Management Zone and has ~~planned and designed~~constructed desalting and associated brine disposal facilities. YVWD shall ensure that the planned desalter system is operational by June 30, 2015. The Regional Board may extend this compliance date upon submittal of compelling evidence that the extension is warranted and would not compromise timely implementation of the other maximum benefit program commitments identified in Table 5-9a.

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4. City of Beaumont Wastewater and/or Groundwater Desalter(s) and Brine Disposal (Table 5-9c, #4)

The City of Beaumont shall construct and operate desalting facilities and brine disposal facilities to improve recycled water quality and/or other sources of non-potable supply. A detailed desalter/brine line plan and schedule shall be submitted ~~(*15 days from approval date by OAL of the Basin Plan amendment)~~ by January 30, 2015. The schedule shall assure that these facilities are in place within 5 years of Regional Board approval. The Regional Board may extend ~~this~~ the compliance date to construct these facilities upon submittal of compelling evidence that the extension is warranted and would not compromise timely implementation of the other maximum benefit program commitments identified in Table 5-9c. 59

5. City of Banning Wastewater and/or Groundwater Desalter(s) and Brine Disposal (Table 5-9c, #5)

The City of Banning shall construct and operate desalting facilities and brine disposal facilities to improve recycled water quality and/or other sources of non-potable supply. A detailed desalter/brine line plan and schedule shall be submitted ~~(*15 days from approval date by OAL of the Basin Plan amendment)~~ January 30, 2015. The schedule shall assure that these facilities are in place within 5 years of Regional Board approval. The Regional Board may extend ~~this~~ the compliance date to construct these facilities upon submittal of compelling evidence that the extension is warranted and would not compromise timely implementation of the other maximum benefit program commitments identified in Table 5-9c. 60

6. Non-potable Water Supply Distribution System (Table 5-9c, # 6)

A key element of resources management plan in areas overlying the Beaumont Groundwater Management Zone is the construction of a non-potable supply system to serve a mix of recycled water and un-treated imported water and/or storm water for irrigation uses and direct non-potable reuse. The intent is to minimize the use of potable water for non-potable uses. YVWD, the City of Beaumont and the City of Banning will produce a non-potable supply with a running ten-year average TDS concentration for the Beaumont Groundwater Management Zone of 330 mg/L and, in addition, for any non-irrigation reuse, the 10-year~~ear~~ running average nitrate-nitrogen concentration shall comply with 61
6.7 mg/L (taking the 25% nitrogen loss coefficient into account to assure that the "maximum benefit" objective of 5 mg/L will be met). To meet this "maximum benefit" objective, YVWD, the City of Beaumont and the City of Banning, BCVWD and San Gorgonio Pass Agency will blend the recycled water with other water sources or desalt the recycled water as needed.

Compliance with the non-potable water supply TDS and nitrate-nitrogen objective shall be measured in the non-potable water system as a weighted 10-year average of all water sources added to that system and used within the Beaumont Groundwater Management Zone.

As part of the Maximum Benefit Annual Report, YVWD, BCVWD, the Pass Agency, the City of Beaumont and the City of Banning shall report on the TDS and nitrogen quality and quantity of all sources of non-potable water and summarize the annual and 10-year annual weighted TDS and nitrogen average concentrations utilized in the Beaumont Groundwater Management Zone. 62

7. Recycled Water Recharge/Discharge (Table 5-9c, # 7) 63

The use and recharge/discharge of recycled water within the Beaumont Groundwater Management Zone

are necessary to maximize the use of the water resources of the Beaumont area. The demonstration of "maximum benefit" and the continued application of the "maximum benefit" objectives are contingent on the recharge of recycled water to the Beaumont Groundwater Management Zone of a 10-year annual average (running average) TDS concentration of 330 mg/L and nitrate-nitrogen concentration of 6.7 mg/L (taking the 25% nitrogen loss coefficient into account to assure that the "maximum benefit" objective of 5 mg/L will be met). These concentrations may be achieved by desalting or other treatment of the recycled water, and/or by blending the recycled water with other sources, such as imported water and/or storm water.

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Compliance with these concentrations shall be measured at the point of discharge(s) to the recharge facility or at the end of an outfall for a discharge as a weighted average concentration of the recycled water and other sources, if any, used for blending.

As part of the Maximum Benefit Annual Report, YVWD, BCVWD, the Pass Agency, the City of Beaumont and the City of Banning shall report on the TDS and nitrogen quality and quantity of all sources of recharged water and summarize the annual and 10-year annual weighted TDS and nitrogen average concentrations recharged to the Beaumont Groundwater Management Zone.

8.Anti-degradation Objectives Salt Mitigation Plan (Table 5-9c, #8)

Within *(**1 year of approval by OAL of the BPA**)*, YVWD, BCVWD, the Pass Agency, the City of Beaumont and the City of Banning shall submit a Salt Mitigation Plan to mitigate excess salt loading above the anti-degradation water quality objectives. The Salt Mitigation Plan shall provide a conceptual framework for mitigation projects should the Regional Board make a finding that the lowering of water quality associated with the "maximum benefit" TDS and nitrate-nitrogen water quality objectives that are higher than historical water quality (the "antidegradation" objectives) is not of maximum benefit to the people of the state. The Salt Mitigation Plan must be implemented within 30 days of a Regional Board finding that maximum benefit is no longer being achieved.

~~8~~9. Ambient Groundwater Quality Determination (Table 5-9c, # 8)

By July 1, 2014, and every three years thereafter, YVWD, BCVWD, the Pass Agency, the City of Beaumont and the City of Banning shall submit a determination of ambient TDS and nitrate-nitrogen quality in the Beaumont Groundwater Management Zone. This determination shall be accomplished using methodology consistent with the calculation (20-year running averages) used by the Nitrogen/TDS Task Force to develop the TDS and nitrate-nitrogen "antidegradation" water quality objectives for groundwater Management Zones within the region. [Ref. 1].

B. Implementation by Regional Board

1. Revision to Yucaipa Valley Water District NPDES Permit

To implement the "maximum benefit" objectives, the Regional Board will revise the waste discharge requirements and producer/user reclamation requirements for the YVWD wastewater discharges to reflect the commitments described above, as appropriate. This includes the following:

For any surface water discharges that affect the Beaumont Groundwater Management Zone, discharge limits for TDS and TIN will be specified as an annual volume-weighted average not to

exceed 330 mg/L TDS and 6.7 mg/L TIN. These limits are based on the "maximum benefit" objectives of the Beaumont Groundwater Management Zone shown in Table 4-1 and take the nitrogen loss coefficient into account. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified and will apply should the Regional Board find that maximum benefit is not demonstrated. These alternative objectives are also specified in Table 4-1. Compliance schedules for these alternative limits will be specified in the YVWD's waste discharge requirements, as necessary and appropriate.

YVWD's waste discharge requirements will require that any planned recharge of recycled water shall be limited to the amount that can be blended with other water sources, such as new stormwater, ~~or~~ imported water, reverse osmosis permeate (diluent), to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Beaumont Groundwater Management Zone. The use of recycled water for irrigation and other direct re-use shall be limited to the amount that can be blended with other water sources, such as stormwater or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Beaumont Groundwater Management Zone. 65

Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified for recycled water recharge and re-use in the Beaumont Groundwater Management Zone and will apply if the Regional Board finds that the maximum benefit commitments are not met.

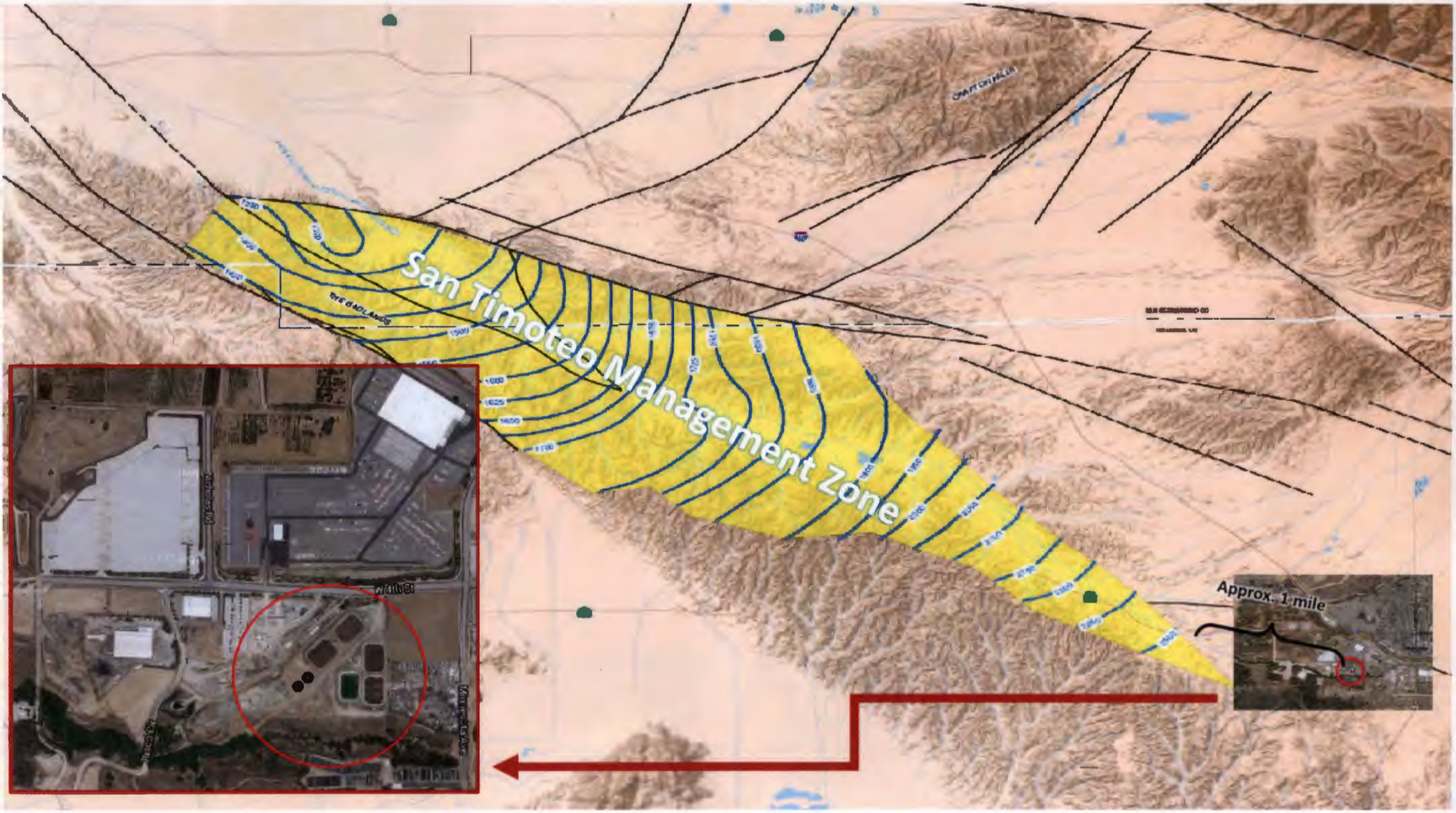
2. Revision to the City of Beaumont NPDES Permit

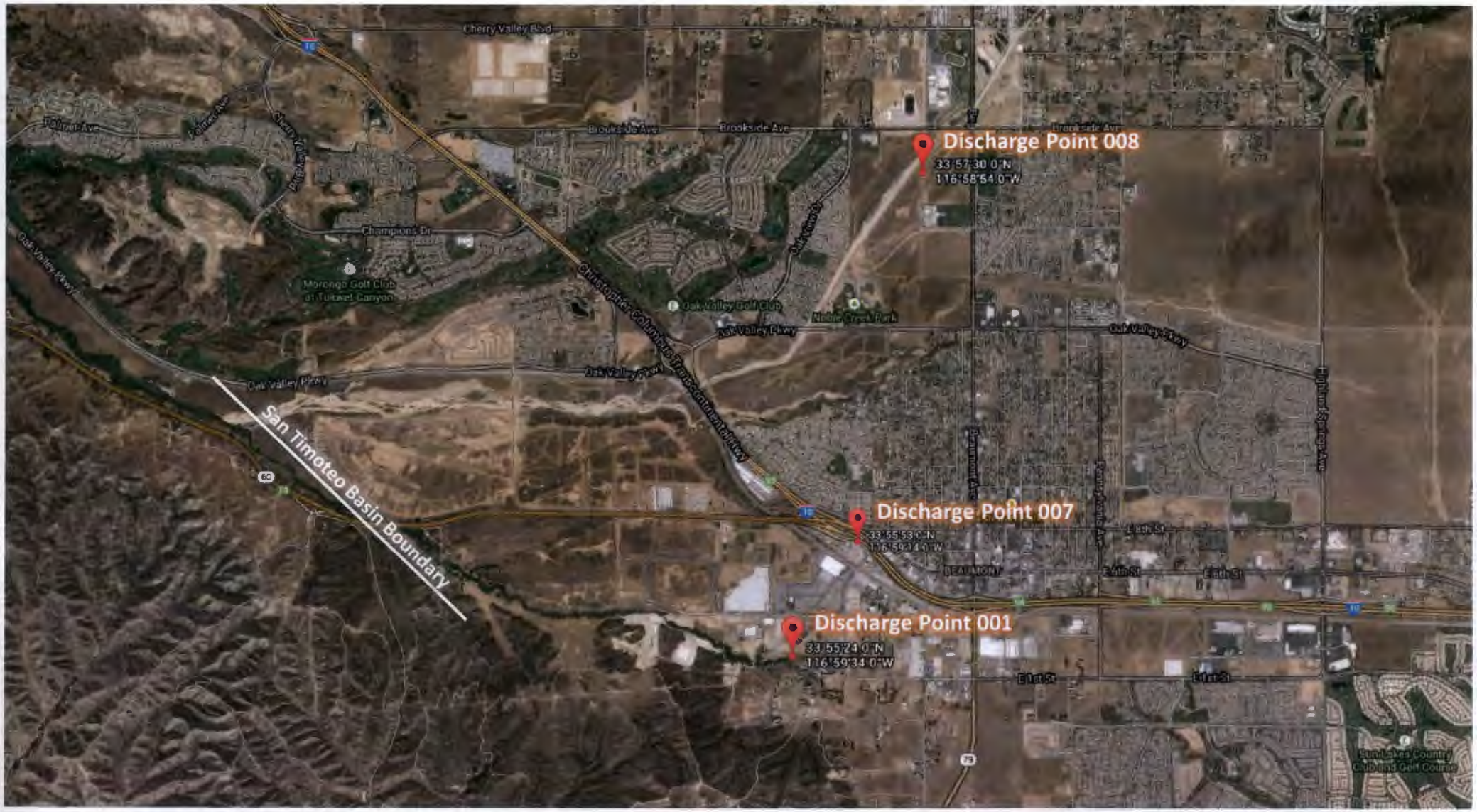
To implement the "maximum benefit" objectives, the Regional Board will revise the waste discharge requirements and producer/user reclamation requirements for the City of Beaumont wastewater discharges to reflect the commitments described above, as appropriate. This includes the following:

For surface water discharges that affect the Beaumont Groundwater Management Zone (DP 001, 002, 007 and 008), discharge limits for TDS and TIN will be specified as an annual volume-weighted average not to exceed 330 mg/L TDS and 6.7 mg/L TIN. These limits are based on the "maximum benefit" objectives of the Beaumont Groundwater Management Zone shown in Table 4-1 and take the nitrogen loss coefficient into account. Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will also be specified and will apply should the Regional Board find that maximum benefit is not demonstrated. These alternative objectives are also specified in Table 4-1. Compliance schedules for these alternative limits will be specified in the City of Beaumont's waste discharge requirements, as necessary and appropriate. 66

The City of Beaumont's waste discharge requirements will require that any planned discharge/recharge of recycled water shall be limited to the amount that can be blended with other water sources, such as new stormwater or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Beaumont Groundwater Management Zone. The use of recycled water for irrigation and other direct re-use shall be limited to the amount that can be blended with other water sources, such as stormwater or imported water, to achieve 10-year running average concentrations equal to or less than the "maximum benefit" TDS and nitrate-nitrogen objectives for the Beaumont Groundwater Management Zone. 67

Alternative TDS and nitrate-nitrogen limitations based on the "antidegradation" objectives will


San Timoteo Management Zone
Approx. 1 mile
W 4th St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116°58'54.0"W
Discharge Point 007
33°55'53.0"N
116°59'14.0"W
Discharge Point 001
33°55'24.0"N
116°59'34.0"W
San Timoteo Basin Boundary
Cherry Valley Blvd
Brookside Ave
Champions Dr
Oak Valley Pkwy
Oak Valley Golf Club
Noble Creek Park
Christopher Columbus Transcontinental Fwy
Beaumont Ave
E 8th St
E 5th St
E 1st St
Highland Springs Ave
Sun Lakes Country Club and Golf Course