California Regional Water Quality Control Board
Santa Ana Region

July 22, 2016

ITEM: 9

SUBJECT: UPDATE ON THE CITY OF BEAUMONT (INFORMATION ITEM)

Background:

The City of Beaumont (City) owns the Beaumont Wastewater Treatment Plant (Facility), a tertiary treatment facility. Utilities Partners LLC, a private contractor, currently operates the Facility for the City. The Facility receives and treats domestic and commercial/industrial wastewater generated within the City of Beaumont and Highland Springs (portions of the unincorporated area of Cherry Valley). The Facility is currently designed and permitted to discharge up to 4.0 million gallons per day (MGD). Wastewater discharges from the Facility are currently regulated under Order No. R8-2015-0026, NPDES No CA105376 (Permit). The City is required to meet tertiary treatment standards for discharges to surface waters and for the production of recycled water.

As shown in Figure 1, the City's treated wastewater is currently discharged to Cooper's Creek, a tributary of Marshall Creek and to Nobel Creek all of which are tributary to San Timoteo Creek. The discharge to Cooper's Creek and Nobel Creek overlie the Beaumont Groundwater Management Zone (GMZ); however, studies have shown that very little of the wastewater actually recharges the Beaumont GMZ and that the discharge primarily recharges the San Timoteo GMZ.

On April 25, 2014, the Regional Board approved amendments to the Water Quality Control Plan for the Santa Ana Basin (Basin Plan) that established alternative total dissolved solids (TDS) and nitrate-nitrogen water quality objectives (called "maximum benefit" objectives) for the San Timoteo and Beaumont GMZs. The "maximum benefit" TDS and nitrate-nitrogen objectives, which had been proposed by various stakeholders[1] in the San Timoteo watershed including the City of Beaumont, are less stringent than the 2004 established "antidegradation" objectives for these GMZs. The less stringent TDS and nitrate-nitrogen "maximum benefit" objectives are designed to accommodate water recycling and recharge projects (which are of benefit to the people of the state) while still ensuring protection of the beneficial uses of the San Timoteo and Beaumont GMZs. Pursuant to the Basin Plan, the application of the "maximum benefit" objectives, rather than the "antidegradation objectives" are applied to the City's Facility discharge and is contingent on the implementation by the City and other stakeholders of their "maximum benefit" commitments. The "maximum benefit" commitments are a specific program of projects and requirements (shown in Basin Plan Chapter 5 Implementation, Table 5-9b for the San Timoteo GMZ and Table 5-9c for the Beaumont GMZ). The City's Permit includes language that requires implementation of the "Maximum Benefit" Program.

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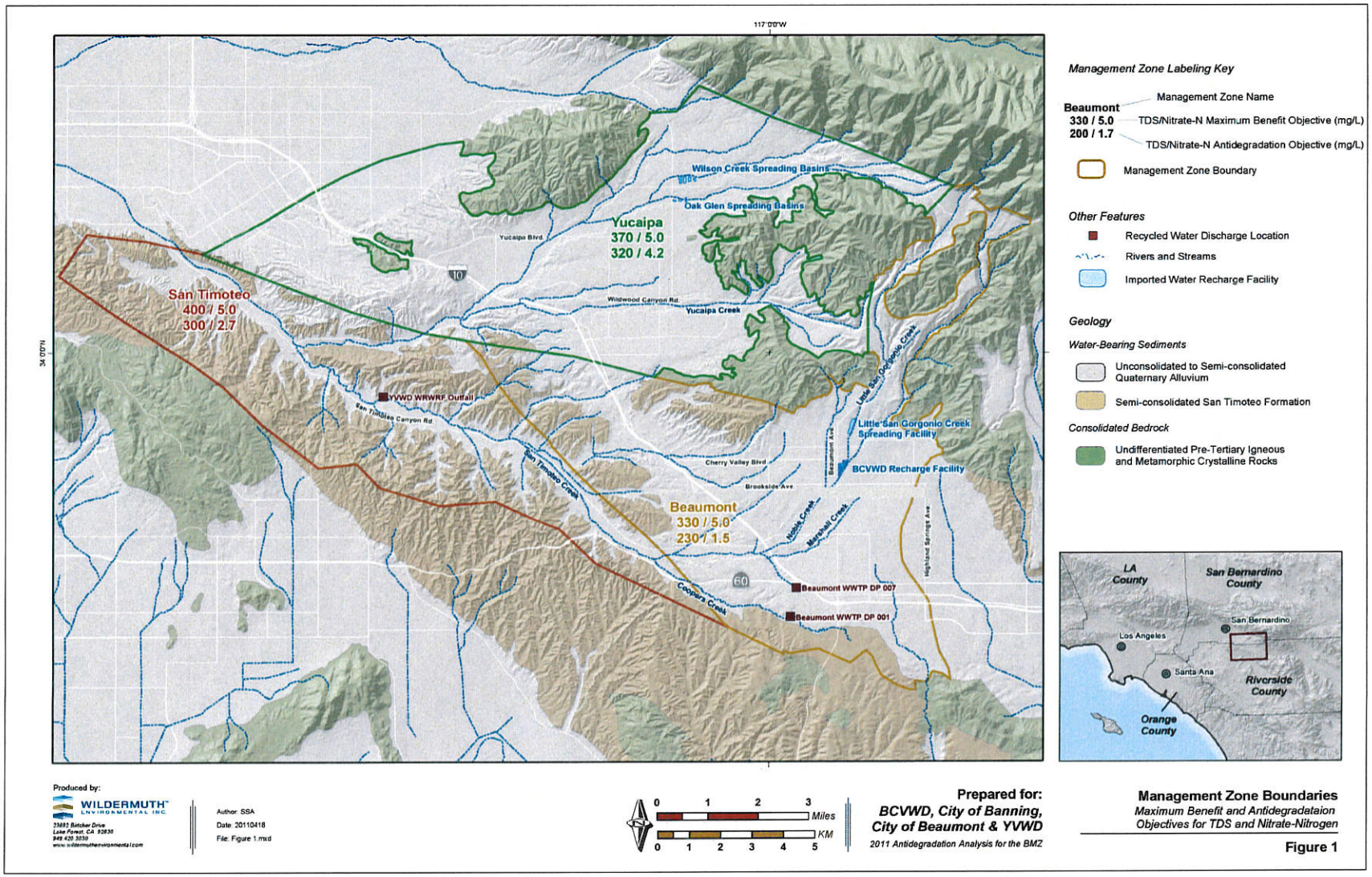
[1] For the San Timoteo GMZ, the "Maximum Benefit" partners are Yucaipa Valley Water District and the City of Beaumont. For the Beaumont GMZ, the "Maximum Benefit" partners are Yucaipa Valley Water District, Beaumont Cherry Valley Water District, San Gorgonio Pass Agency, the City of Banning and the City of Beaumont.

Figure 1. San Timoteo Watershed Management Zone Boundaries/ Yucaipa Valley Water District and City of Beaumont Wastewater Discharge Locations



Findings from the State Controller office's investigation into the City's financial status and allegations against former City officials by the County of Riverside have raised questions with regard to the City's ability to effectively manage their wastewater treatment plant, to effectively plan for continuing growth in the City and to meet their Salt Management Plan "Maximum Benefit" commitments. Regional Board staff will discuss these issues and provide an overview of actions that staff has taken and proposed staff actions to address these issues.

Wastewater Treatment Plant Capacity

As previously noted, the Facility is currently designed and permitted to discharge up to 4.0 MGD. In order to ensure that the Facility has the capacity to properly treat its wastewater, the City's Permit, section VI.A.15 requires the City file a written report with the Regional Board within ninety (90) days after the average dry-weather waste flow for any month equals or exceeds 75% of the design capacity of the waste treatment and/or disposal facilities. Transmittal of the report must be signed by the senior administrative officer and also must include a certification that the policymaking body, in this case, the City Council, is adequately informed in the matter. The City's Permit further requires that the report provide an estimate of when the average daily dry-weather flow rate will equal or exceed the design capacity of the treatment and/or disposal facilities and that the City submit a schedule for studies, design, and/or other steps needed to provide additional capacity for the waste treatment and/or disposal facilities before the waste flow rate equals the design capacity of 4.0 MGD.

In November 2015, Regional Board staff independently became aware that the Facility's waste flows had routinely been exceeding the 75% threshold of the design capacity. A letter was issued to the City on November 20, 2015, reminding the City of the Permit requirements in the event that the 75% design capacity was exceeded and required the City to submit a report to address design capacity issues and what steps the City planned to take. This report was due 90 days from the date of the November 20, 2015 Regional Board staff letter.

The City did not respond to the November 20, 2015 letter and on April 19, 2016, Regional Board staff issued a Notice of Violation (NOV) to the City. The NOV cited the failure of the City to provide the requested report to address the increased capacity and requested that the City respond to the NOV by May 19, 2016.

By letter dated May 3, 2016, the City submitted a response to the NOV. In their response, the City indicated that the dry-weather flows from the wastewater treatment plant have been at 75% capacity since March 2014. The City also estimates that, based on an average growth rate of new connections of 350 new homes/year or based on the actual current growth rate of new connections of 500 homes/year, the Facility will reach 4.0 MGD of design capacity by 2027 or 2024, respectively. The City indicates they will have adequate time to design and build an expansion of the Facility. In their May 3, 2016 response, the City provides a schedule for design and build as follows:

Task	Anticipated Start Date	Anticipated End Date
Feasibility Study	May 2016	December 2016
CEQA	November 2016	July 2017
Preliminary Design	January 2017	May 2017
Financing Plan	January 2017	December 2017
Final Design	June 2017	December 2017
Construction	March 2018	March 2020

Source: City of Beaumont, May 3, 2016

Regional Board staff have identified a number of issues associated with the City's proposed schedule. First, the City is in process of evaluating options for wastewater treatment. The City is deciding on whether to expand their existing Facility, construct desalting and brine disposal facilities or send their wastewater to the Yucaipa Valley Water District (YVWD) Reclamation Plant for treatment since YVWD has a desalter and access to the brine disposal line. Transport of the City's wastewater to the YVWD plant would require that new conveyance facilities (approximately 10 miles) be constructed and would also require expansion of YVWD's facilities to accommodate the additional 4.0 MGD (or more) from the City of Beaumont (design capacity of YVWD's plant is 8.0 MGD; current dry weather discharge for the YVWD plant is 3.5 MGD; accepting up to 4.0 MGD of wastewater from the City would result in YVWD reaching 75% of their design capacity). The City has retained the services of a consulting firm to conduct a Feasibility Study to evaluate which option would be in the City's best interest. This Feasibility Study report will not be submitted until December 2016, which in and of itself is a violation of the City's Permit (the original due date in the Permit was June 15, 2016 – see Salt Management Plan discussion below). Of further concern to Regional Board staff is the tight timeframe proposed for the design, financing and building of expanded facilities. Given the City's recent financial problems, Regional Board staff is not confident that this timeframe will be met.

Second, Regional Board staff is not confident that the 2024 or 2027 grow/connection projections (see above) of when the City's Facility will reach and/or exceed the 4.0 MGD design capacity are accurate. The City estimates a maximum growth rate of 500 homes/year; however, based on the City's web-site, there are a number of approved communities that could potentially force the City to exceed the 500 new home connections/year and thus accelerate the rate at which the design capacity is reached and/or exceeded. In addition, the City's projections for when the design capacity will be reached do not address any planned connections from commercial or industrial facilities. Again, as noted on the City's web-site and as reported to Regional Board staff by the public, there are number of commercial and industrial facilities that could potentially connect to the City's wastewater treatment facility. These connections would need to be considered in the City's projections.

In order to confirm the City's projections for when design capacity will be reached and to ensure that the City's expansion schedule is appropriate, Regional Board staff need to obtain additional information on the planned/approved development in the City, including residential, commercial and industrial development and to specifically include the number of actual connections each year. To obtain this information, Regional Board staff intends to issue a Water Code section 13267 Investigative Order requiring the City to provide all planning documents associated with development activities and sewer connections.

City's Wastewater Industrial Waste Pretreatment Program
Federal regulations require that NPDES permits specify a Pretreatment Program unless certain criteria are met. As stated in the City's NPDES Permit, the City is not required to develop and implement a pretreatment program. The Permit cites that the justification for not requiring a pretreatment program is that a) the discharge from the Facility is less than 5 MGD and b) the City has no significant industrial users within their service area (Order No. R8-2015-0026, Fact Sheet, IX.B.5.).

As noted above, Regional Board staff have received comments and information from the public that relate to the City's potential treatment of waste from commercial and industrial facilities. It is of particular concern if the City's Wastewater Facility is accepting or planning to accept industrial wastes. Pursuant to information that may be obtained from a Water Code section 13267 Investigative Order, if the City submits information on industrial facilities that are located, or are planned to be located within the City and Regional Board staff determines that there is the potential for significant industrial facilities to be connected to the City's wastewater treatment plant, Regional Board staff would recommend that the City's Permit be amended to require the City to develop and implement a pretreatment program consistent with federal regulations (40 CFR Part 403) which would include, but not be limited to, the following requirements: adopt and maintain adequate legal authority; maintain lists of industrial users; conduct compliance monitoring; develop and implement an enforcement program and provide reports to the Regional Board of pretreatment program activities.

City's failure to submit Title 22 Engineering Report
Local residents have raised concern that the City has failed to submit a Title 22 Engineering Report for its wastewater treatment plant. Regional Board staff point out that currently the City's wastewater treatment plant produces tertiary treated water and disinfected recycled water which is consistent with Title 22 requirements. **A Title 22 Engineering Report must be developed and approved by the State Water Resources Control Board, Division of Drinking Water, prior to the City distributing recycled water for surface irrigation or other similar uses**. Regional Board staff point out that the current discharge quality is consistent with any treatment requirements for recycled water that may be prescribed under Title 22, Sections 60301 through 60355. Further, the City is currently not distributing recycled water to any recycled water users. Regional Board staff understands that the City has a draft Title 22 Engineering Report, but it has not been submitted to the Regional Water Board; Regional Board staff is unaware if the draft Report has been submitted to the State Board's Division of Drinking Water for their review and approval.

City's failure to comply with Salt Management Plan "Maximum Benefit" program commitments
As you may recall, the 2004 Salt Management Plan contained a maximum benefit program for the Beaumont and San Timoteo GMZs. Because of a number of issues with implementation of that program (*e.g.*, dissolution of the San Timoteo Watershed Management Authority which was one of the partners), most of the commitments had not been met. Consequently, a new coalition of partners was formed and over a 2 year period, during meetings coordinated by Regional Board staff, the partners developed a revised "Maximum Benefit" program for the Beaumont and San Timoteo GMZs. After several Regional Board workshops, in 2014, the revised "Maximum Benefit" program was incorporated into the Basin Plan and was eventually approved by the State Water Board and Office of Administrative Law. Both the 2004 and 2014 Basin Plan amendments required significant amount of staff time and effort to prepare the

necessary Basin Plan amendment documents and conduct the approval process, but given that the "Maximum Benefit" program promotes water resource management in the San Timoteo watershed, Regional Board staff supported that effort.

Now, however Regional Board staff believe that the future of the revised "Maximum Benefit" program as approved in 2014 may be in jeopardy. The "Maximum Benefit" program allows the City of Beaumont and other water supply and wastewater agencies to comply with less stringent groundwater TDS and nitrate-nitrogen water quality objectives provided that certain commitments are met. The attached table (Table 5-9c from the Basin Plan) provides an overview of the commitments for the Beaumont GMZ (note: for the San Timoteo GMZ, the commitments are similar). As noted in the table, the City has not complied with Commitment #6 – providing Recycled Water for Non-potable Use throughout the Beaumont GMZ and Commitment #8 – submittal of an Antidegradation Salt Mitigation Plan which provides for a plan if the Regional Board finds that "Maximum Benefit" is no longer being achieved and the City is required to mitigate for excess salt discharges. Further, several other Beaumont GMZ "Maximum Benefit" partners, Beaumont Cherry Valley Water District, San Gorgonio Pass Agency and the City of Banning, are also not in compliance with Commitment #8.

In addition, the City is only in partial compliance with Commitment #4 – the Development and Implementation of a Desalter and Brine Disposal facilities. The City did submit their Plan and schedule for the desalter facility design and build which the Executive Officer approved on March 26, 2015. This schedule was incorporated into the City's Permit. However, the schedule as proposed by the City has not been met. The schedule required the City to submit their feasibility report by June 15, 2016. As noted above under the capacity discussion, expansion of the City wastewater treatment plant would also address the desalter requirements. The feasibility report submittal is not projected by the City to be submitted until December 2016, which is 6 months after the scheduled due date specified in the City's Permit. Non-submittal of the Feasibility Report pursuant to the schedule specified in the City's Permit is subject to enforcement.

Under the "Maximum Benefit" programs, the Basin Plan specifies that the Regional Board would review periodically implementation of the maximum benefit program commitments for the San Timoteo and Beaumont GMZs. The intent of the review is to determine whether the commitments are being met, and therefore the application of the "maximum benefit" objectives continues to be justified. If, as a result of this review, the Regional Board finds that the commitments are not being met, the Regional Board may make the finding that the "maximum benefit" (less stringent) 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 would then apply for regulatory purposes. Maximum benefit partners would be required to mitigate for discharges in excess of the antidegradation objectives.

Further, if the City moves forward with the proposal to send wastewater to YVWD for treatment, it would require additional revisions to the revised "Maximum Benefit" program that is currently specified in the Basin Plan. It would also require that both the YVWD and the City's Permits be revised.

Conclusion

Permit Compliance: Regional Board staff have met with City staff to discuss many of these issues and staff believes, where appropriate, these meetings should continue.

"Maximum Benefit" Program: Given that some of the "Maximum Benefit" commitments have not been met by the City of Beaumont, and by certain other Partners as well, there are a couple of options for the Regional Board to consider.

First, Regional Board staff can meet and work with all of the "Maximum Benefit" partners to determine if the partners believe the "Maximum Benefit" program should continue as is or be revised. This would include an evaluation of the San Timoteo and Beaumont GMZs "Maximum Benefit" program status and consideration of any proposed changes by the various agencies. Again, revision to the "Maximum Benefit" programs would require a Basin Plan amendment that may be a 2-3 year process.

Second, given that since 2004, the various water supply and wastewater agencies in the San Timoteo watershed have failed to meet several of their commitments, after consideration at a duly noticed public hearing, the Board could find that the "Maximum Benefit" programs and implementation of less stringent objectives resulting in the lowering of water quality are no longer of maximum benefit to the people of the state. Waste discharges would need to comply with the more stringent antidegradation objectives and mitigation of excess TDS and nitrogen applied since 2014 also would be required.

Table 5-9c
Beaumont Groundwater Management Zone - Maximum Benefit Commitments and Status as of July 2016[2]

Description of Commitment	Compliance Date – as soon as possible, but no later than	Compliance Status
1. Surface Water Monitoring Program		
a. Submit Draft Revised Monitoring Program to Regional Board	a. May 30, 2014	a. September 30, 2014: Draft Monitoring Program submitted
b. Implement Revised Monitoring Program	b. Upon Executive Officer approval	b. January 6, 2015: Executive Officer approved Plan. Plan implemented
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	c. n/a
d. Implement Revised Monitoring Program (s)	d. Upon Executive Officer approval	d. n/a
e. Annual data report submittal	e. April 15th	e. 1st Annual report submitted May 17, 2016
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	a. September 30, 2014: Draft Monitoring Program

[2] Responsible Agencies: Yucaipa Valley Water District, City of Beaumont, City of Banning, San Gorgonio Pass Water Agency and the Beaumont Cherry Valley Water District

Table 5-9c
Beaumont Groundwater Management Zone - Maximum Benefit Commitments and Status as of July 2016[2]

Description of Commitment	Compliance Date – as soon as possible, but no later than	Compliance Status
b. Implement revised monitoring plan(s) c. Annual data report submittal	b. Upon Executive Officer approval c. April 15th	b. January 6, 2015: Executive Officer approved Plan. Plan implemented c. 1st Annual report submitted May 17, 2016
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)	Completed July 31, 2015
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	a. January 28, 2015: Draft Desalter Plan submitted b. March 26, 2015: Executive Officer approves Plan and Schedule
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	n/a – the City of Banning has not planned for recycled water reuse

Table 5-9c
Beaumont Groundwater Management Zone - Maximum Benefit Commitments and Status as of July 2016[2]

Description of Commitment	Compliance Date – as soon as possible, but no later than	Compliance Status
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	Deadline not met - Non-potable recycled water system has not been implemented
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 programs to support enhanced recharge.	n/a – compliance to occur 10 years from time recycled water reuse is initiated which is pending.

Table 5-9c
Beaumont Groundwater Management Zone - Maximum Benefit Commitments and Status as of July 2016[2]

Description of Commitment	Compliance Date – as soon as possible, but no later than	Compliance Status
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. 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.	a. 6 months prior to initiation of construction of any basins/other facilities to support enhanced storm water/imported water recharge b. Submit as part of each Report of Waste Discharge (ROWD)	

Table 5-9c
Beaumont Groundwater Management Zone - Maximum Benefit Commitments and Status as of July 2016[2]

Description of Commitment	Compliance Date – as soon as possible, but no later than	Compliance Status
8. Antidegradation Salt Mitigation Plan a. Submit a proposed Salt Mitigation Plan and Implementation Schedule b. Implement Salt Mitigation Plan	a. October 29, 2015 b. Within 30 days of Regional Board finding that maximum benefit no longer being achieved	October 30, 2015: Mitigation Plan submitted by YVWD. No report has been submitted by the City of Beaumont, BCVWD, Pass Agency or the City of Banning
9. Ambient groundwater quality determination	July 1, 2014 and every 3 years thereafter	All partners are paying members of the Basin Monitoring Program TF which undertakes ambient water quality determination.