

US EPA ARCHIVE DOCUMENT

Responsiveness Summary
Santa Clara River Chlorides TMDL
June 17, 2003

Introduction

On May 1, 2003, U.S. Environmental Protection Agency (EPA) proposed to establish TMDLs for Santa Clara River (SCR) Reaches 3, 5, and 6 and invited public comment on the proposed TMDLs. This responsiveness summary describes comments received from the public and demonstrates how EPA considered these comments in its final TMDL decision. Based in part on comments received, and as further discussed in the final TMDL document, EPA is establishing a TMDL only for SCR Reach 3 at this time.

This responsiveness summary is organized by comment because many of the comments received were repetitive. Comments were received from or in behalf of 5 parties:

1. Downey Brand, LLP, on behalf of the City of Santa Paula
2. City of Fillmore
3. Los Angeles Regional Water Quality Control Board
4. Newhall Land and Farming Company
5. Downey Brand, LLP, on behalf of the County Sanitation Districts of Los Angeles County.

Extensive comments were received concerning the currently applicable numeric water quality standards for chlorides and beneficial use designations in SCR Reaches 3, 5, and 6. Because EPA's proposed TMDLs applied the currently applicable numeric objectives for chlorides and did not propose to modify those objectives, these standards-related comments are not delineated in detail in this responsiveness summary. These standards-related comments are summarized in Comment 15.

Comment 1: Under the doctrine of constructive submission, EPA lacks the statutory authority to issue the TMDLs because EPA has not disapproved a State TMDL submission.

Response: EPA disagrees that its authority to establish TMDLs is limited to circumstances in which we have disapproved TMDLs. The doctrine of constructive submission has been put forth in some court cases as a way to require EPA to establish TMDLs in certain circumstances when a State has not done so; it has never been used to limit the circumstances when EPA may establish TMDLs. EPA is establishing the TMDL for SCR Reach 3 to fulfill its obligations under the consent decree in *Heal the Bay v. Browner*. The State of California, through the Los Angeles Regional Water Quality Control Board, full supports EPA's establishment of this TMDL, and has provided key assistance and analysis to EPA in development of the TMDL.

Comment 2: A TMDL should not be established for SCR Reach 3 because it is not impaired and does not violate water quality standards. Reach 3 should not be included on the Section 303(d) list.

Response: California concluded that SCR Reach 3 is a water quality limited segment due to chlorides, and included it on the 2002 Section 303(d) list submitted to EPA March 3, 2003. EPA approved this listing on June 5, 2003.

EPA reviewed the data compiled by the State to support its listing decision. EPA found that 21% of samples collected between 1997 and 2000 exceeded the currently applicable water quality standard for chlorides. EPA assessment guidance generally recommends that waters that exceed applicable water quality standards in more than 10% of samples for conventional pollutants like chlorides be considered water quality limited and suitable for listing on the Section 303(d) list (EPA, 2001).

Commenters cited information from the State's proceeding in which it considered revising the numeric water quality objective upward to 100 mg/L. The commenters asserted that this information supports a finding that the uses of SCR Reach 3 are not impaired at chloride concentrations below 100 mg/L. However, the State has not adopted or submitted for EPA approval a revision to the 80 mg/L numeric water quality objective for chlorides in SCR Reach 3 that is currently applicable. EPA is required to apply the 80 mg/L objective through its TMDL decision.

Commenters also cited information in the draft EPA TMDLs for SCR chlorides indicating that existing mean chloride concentrations in Reach 3 are below 80 mg/L. This information is cited as evidence that the segment does not exceed the applicable water quality objective. However, EPA's analysis of the data considered in the most recent Section 303(d) listing decision found that the applicable objective was exceeded frequently enough to support the State's determination that Reach 3 is water quality limited and in need of a TMDL for chlorides.

If the State adopts and EPA approves revisions to the chlorides objective for Reach 3 in the future, it may be appropriate for the State to revisit the TMDL and allocations.

Comment 3: The State finds that the TMDL should be based on critical conditions of low flow rather than average conditions as proposed in order to be consistent with the applicable water quality standards, which are interpreted by the State to apply as instantaneous maximums rather than long term averages.

Response: EPA agrees with the State's conclusion that it is inappropriate to base the TMDL on average conditions and has reevaluated receiving water conditions in Reach 3 under critical low flow conditions as recommended. Federal regulations require that critical conditions of loads and flows be considered in establishing TMDLs (40 CFR 130.7(c)(1)). Because the applicable numeric objective for chlorides is interpreted as an instantaneous maximum, it is necessary to ensure that the TMDL will result in attainment of the objective under a wide range of flow conditions. EPA has previously issued

technical guidance for developing TMDLs that implement water quality standards with short averaging periods or that are expressed as instantaneous maximum values (EPA, 1986, EPA, 1991a, EPA 1991b, EPA, 2001a). In the Santa Clara River, chloride standard exceedences appear to be more common during low flow conditions than during other periods of the year. Moreover, point source discharges appear to be responsible for the largest proportion of chloride loads and flows during low flow conditions. Under these circumstances, EPA guidance recommends setting TMDLs and allocations that ensure attainment of applicable standards under these low flow conditions. This approach ensures that water quality standards will also be met under higher flow conditions (see EPA 1991b, EPA, 1986).

The text of the TMDL has been modified to include a revised analysis of chloride assimilative capacity in Reach 3 under low flow conditions. The revised analysis concludes that during low flow conditions, it is necessary to establish load allocations for upstream loads at 100 mg/L and for point sources discharging to Reach 3 at 80 mg/L in order to ensure that the 80 mg/L objective is attained during critical low flow conditions.

Comment 4: EPA violated the Clean Water Act and its regulations by failing to comply with requirements applicable to State establishment of water quality standards.

Response: The commenter references requirements in the Clean Water Act and federal regulations that pertain to establishment of water quality standards. EPA is not establishing or altering water quality standards for chlorides through this TMDL action; therefore, the standard-setting requirements mentioned by the commenter are inapplicable to the present decision. The TMDL is based on currently applicable numeric water quality standards previously set by the State and approved by EPA.

Comment 5: EPA is not required to establish chloride TMDLs for SCR Reaches 5 and 6 and should not do so.

Response: EPA agrees that we are not required to establish chloride TMDLs for SCR Reaches 5 and 6 pursuant to the *Heal the Bay* consent decree.

SCR Reaches 3, 5, and 6 are included on California's 2002 Section 303(d) list as high priorities for TMDL development. The State has committed to complete the high priority TMDLs within approximately 2 years following the State listing decision (SWRCB, 2003, 40 CFR 130.7(b)(4)). EPA approved these listings on June 5, 2003. Although we are aware that there is disagreement among the interested parties concerning the appropriateness of the currently applicable water quality standards for chlorides that are applicable to Reaches 5 and 6, these reaches do currently exceed the applicable standards and require TMDL development. However, we have decided not to complete EPA TMDLs for these reaches at this time, as discussed below.

We are aware that the State is in the process of adopting chlorides TMDLs for Reaches 5 and 6 at this time (CRWQCB, 2003). We note that the Regional Board already adopted

these TMDLs and associated implementation provisions once, but that the State Water Resources Control Board remanded the TMDLs to the Regional Board with specific instructions to modify certain implementation provisions. We understand that the Regional Board has made these modifications in the revised TMDLs that were public noticed on April 8, 2003. Based on conversations with senior managers at the State and Regional Boards, EPA expects that the revised TMDLs and implementation provisions will be adopted by the State and Regional Boards in the next few months (telephone conference with CRWQCB, SWRCB, and EPA, June 11, 2003).

The RWQCB found that flows and chloride loads from the upstream reaches 5 and 6 contribute significantly to flows and loads in downstream reach 3, and requested that EPA include Reaches 5 and 6 in its decision to establish SCR chlorides TMDLs. However, other commenters urged EPA not to establish the TMDLs for Reaches 5 and 6, and to defer to the State's TMDL adoption efforts that are currently underway. One commenter argued that there is no significant hydrologic or chloride loading connection between the upstream and downstream reaches. As discussed in the response to comments 8-11, in which the issue of upstream-downstream connections is analyzed, EPA concludes that there is significant uncertainty as to whether there is a current or potential future connection between loads and flows in upstream Reaches 5 and 6 and downstream Reach 3. As discussed in that comment response and in the revised TMDL document, EPA is accounting for potential upstream effects on Reach 3 by establishing a load allocation applicable to upstream discharge sources as proposed in the draft TMDL.

Based on the State's assurances that the chloride TMDLs for SCR Reaches 5 and 6 will be adopted in the next few months by both the Regional Board and State Board, and submitted for EPA approval, EPA has decided not to establish the chlorides TMDLs for Reaches 5 and 6 at this time. However, if the State fails to adopt these high priority TMDLs in accordance with its Section 303(d) targeting commitments and current adoption schedule, EPA may reconsider its decision concerning Reaches 5 and 6.

EPA believes it is important for all TMDLs, and high priority TMDLs in particular, to be completed in a timely manner. Substantial time and resources have been expended by the State, EPA, and commenters to develop and review the draft chloride TMDLs for SCR Reaches 5 and 6. EPA believes it would be inappropriate for the State to simply defer action on these TMDLs and associated implementation provisions. EPA supports the State's proposed approach of setting TMDLs at this time for Reaches 5 and 6 while providing lengthy opportunities for interested parties to conduct studies needed to complete the review of the chlorides water quality standards prior to requiring full compliance with the TMDLs.

Comment 6: EPA failed to follow the procedure under the *Heal the Bay* consent decree to include a chloride TMDL for Reaches 5 and 6 as part of the consent decree compliance schedule.

Response: EPA was not proposing to adopt the chlorides TMDLs for Reaches 5 and 6 pursuant to the consent decree; therefore, we did not intend to implement the procedure

provided in the decree for substituting additional TMDLs for TMDLs specifically listed in the decree. EPA was proposing to adopt the chlorides TMDLs because the State had requested that EPA establish the TMDLs for Reaches 5 and 6 at the same time EPA was establishing the TMDL for Reach 3, as required by the decree. As discussed in the Response to comment 5, EPA has decided not to establish the chlorides TMDLs for Reaches 5 and 6 at this time.

Comment 7: EPA should allow the State to establish the chloride TMDL for SCR Reaches 5 and 6.

Response: We agree. See response to comment 5. Based on the State's assurances that the chloride TMDLs for SCR Reaches 5 and 6 will be adopted in the next few months by both the Regional Board and State Board, and submitted for EPA approval, EPA has decided not to establish the chlorides TMDLs for Reaches 5 and 6 at this time.

Comment 8: Very little hydraulic connection exists between flows in SCR Reaches 5 and 6 and downstream Reach 3. On the other hand, there is evidence of long term relationships between loads and flows in Reaches 5 and 6 and resulting loads and flows in the downstream reaches including Reach 3.

Response: Different commenters presented different arguments concerning the issue of whether there is a significant connection between SCR Reaches 5 and 6 and the downstream SCR Reach 3. This issue was important for the draft TMDLs because EPA cited as part of its rationale for completing TMDLs for Reaches 5 and 6 the connection between loads and flows in the upstream and downstream reaches. Because EPA is not establishing final TMDLs for SCR Reaches 5 and 6 at this time, the issue of whether loads and flows in Reaches 5 and 6 affect Reach 3 is now a less important consideration in EPA's decision to establish TMDLs solely for Reach 3.

Based on our review of the different arguments raised by commenters on this issue, EPA concludes that the potential degree of connection between upstream flows and loads in Reaches 5 and 6 and resulting loads and flows in downstream Reach 3 is uncertain at this time. This issue may warrant additional investigation through followup assessment of water flows and pollutant loads in the SCR.

Available data and information do support EPA's conclusion that there are significant flows and chloride loads that originate in Reach 4 and flow to Reach 3. For this reason, EPA is establishing a load allocation applicable to chloride flows from Reach 4 into Reach 3.

Comment 9: Contributing sources in Reaches 5 and 6 do not affect water quality in Reach 3.

Response: See response to Comment 8.

Comment 10: Over the long term, flows in and chloride loads to SCR Reaches 5 and 6 likely reach and affect Reach 3. A significant hydraulic connection exists.

Response: See response to Comment 8.

Comment 11: The source assessment and linkage analysis are inadequate and do not establish any linkage between Reaches 3, 5, and 6.

Response: As discussed above, EPA has decided not to establish final TMDLs for Reaches 5 and 6 at this time. The final TMDL document has been revised to focus upon Reach 3. The chlorides TMDL for SCR Reach 3 includes a load allocation to account for chloride contributions from sources upstream from Reach 3. The State may need to conduct additional analysis to determine how to implement this load allocation in the future.

Comment 12: The source assessment and linkage analysis do not establish that WRP discharges are affecting water quality in Reach 3.

Response: See response to Comment 3. The revised source analysis and mass balance analysis for Reach 3 under critical low flow conditions demonstrates that WRP discharges to Reach 3 need to be limited to no more than 80 mg/L in their WLAs in order to ensure that the water quality standards will be met during critical low flow periods.

Comment 13: EPA failed to comply with the federal Administrative Procedures Act and Clean Water Act rulemaking provisions by failing to properly notice the draft TMDLs. The TMDLs should be renoticed in the Federal Register.

Response: EPA disagrees with the commenter's assertion that establishment of TMDLs constitutes "rulemaking" under the Administrative Procedures Act or Clean Water Act. These TMDLs are specific factual determinations and calculations of the amounts of chlorides the SCR can receive and still achieve the applicable water quality standards. They have no application nationwide, or even statewide. Furthermore, we submit that if Congress had intended to require EPA to use rulemaking procedures, it would have given EPA more than 30 days in which EPA is expected to establish TMDLs after disapproving State TMDLs pursuant to Section 303(d)(2). Indeed, the fact that Congress explicitly established a rulemaking procedure for other actions, e.g. establishing water quality standards in Section 303(c), indicates that such a procedure is not required for actions such as TMDL establishment under Section 303(d), where the statute does not specify any type of public participation at all, much less rulemaking procedures.

Although the CWA does not require any type of public notice prior to establishment of TMDLs by either EPA or the State, EPA regulations do require some public review when TMDLs are established under some circumstances. For example, 40 CFR 130.7 provides that when EPA establishes a TMDL after disapproving a State TMDL, EPA must "issue a public notice seeking comment" and consider the public comments received. There is no requirement, however, for publication in the Federal Register.

For the SCR chlorides TMDLs, EPA determined that the most effective way of providing notice and seeking public comment was through the local newspaper of general circulation and EPA Region 9's TMDL web site. Thus, EPA public noticed the draft TMDLs in the Los Angeles Times and on Region 9's TMDL web site. Copies of the TMDLs and supporting administrative record were available for public review in EPA's office.

The commenter makes reference to a letter from Catherine Kuhlman, EPA Region 9, to Los Angeles City Council Members in which EPA committed to publish notice in the Federal Register of future draft TMDLs that EPA is proposing to establish (letter dated May 6, 2003). We note that this letter was sent after the SCR chlorides TMDLs were public noticed and that the letter clearly states EPA's positions that establishment of TMDLs does not constitute "rulemaking" and that publication of notice in the Federal Register is not required. EPA intends to publish in the Federal Register notice of future TMDLs, if any, proposed for EPA establishment pursuant to the *Heal the Bay* consent decree.

Comment 14: EPA improperly linked the need for the chlorides TMDLs to the protection of groundwater. EPA cannot establish TMDLs for groundwater.

Response: EPA is not establishing TMDLs for groundwater. EPA's TMDL is designed to implement the currently applicable numeric water quality objective for chlorides in SCR Reach 3 surface water. We understand that the State established this numeric objective to protect the surface water designated beneficial uses of agricultural supply and groundwater recharge. TMDLs must be set at levels necessary to result in attainment of all applicable surface water quality standards. EPA notes that the beneficial use of groundwater is in no way inconsistent with the Clean Water Act. CWA Section 303(c)(2)(A) provides that use designations may take into account "other purposes" of water. EPA's 1994 Water Quality Standards Handbook (p. 2-4) specifically identifies groundwater recharge as a use a State may adopt.

Comment 15: No evidence exists that the agricultural supply beneficial use is impaired. The numeric objectives for SCR chlorides are inappropriate.

Response: EPA provided background information in the draft TMDL based on information in the State's draft chloride TMDLs for SCR Reaches 5 and 6 that discussed how chlorides may affect agricultural uses of SCR water. This background information was provided for information only and does not constitute regulatory findings or decisions by EPA.

EPA proposed TMDLs for SCR Reaches 3, 5, and 6, and is now establishing a TMDL for Reach 3, that are designed to implement currently applicable numeric water quality objectives for chlorides. EPA is not reviewing, setting or revising any water quality standard for the SCR as part of this action. Therefore, comments concerning the

appropriateness of the applicable standard are beyond the scope of EPA's proposed and final decisions, and need not be addressed further in this responsiveness summary.

Comment 16: There is a disparity between the numeric targets for the Calleguas Creek chlorides TMDLs and SCR chlorides TMDLs.

Response: The Los Angeles Regional Water Quality Control Plan (Basin Plan) includes different numeric water quality objectives for chlorides for Calleguas Creek and for Santa Clara River. The EPA TMDLs for chlorides for Calleguas Creek and Santa Clara River are both designed to implement the applicable numeric water quality objectives applicable in each basin. Therefore, the disparity in the TMDL numeric targets in the two TMDL decisions simply reflects differences in the applicable numeric water quality objectives. As discussed in response to comment 15, EPA is not reviewing, setting, or revising water quality standards as part of this TMDL action.

Comment 17: Piru Creek is a significant loading source to Reach 4 that should receive an allocation in the TMDL and/or be listed on the Section 303(d) list.

Response: We appreciate the additional information concerning chlorides in Piru Creek and will forward it to the State for consideration in the 2004 update of the Section 303(d) list. The final TMDL for SCR Reach 3 includes a concentration based load allocation applicable to chloride loads that flow into Reach 3 from upstream sources. This allocation would address any loading sources in Piru Creek that contribute to chloride loads into Reach 3.

Comment 18: The TMDLs violate the Data Quality Act and EPA's Guidelines promulgated pursuant to this Act. The information disseminated in the TMDL is neither accurate or complete. EPA gives the impression that it is biased towards formulating a chloride TMDL for the SCR even where a TMDL is not required because the SCR is not impaired.

Response: EPA disagrees that we violated any provisions of the Data Quality Act and EPA's guidelines developed pursuant to the Data Quality Act. As stated clearly in the draft TMDL, the background information provided in the TMDL was based on information provided in the draft chlorides TMDLs developed by the State of California for SCR Reaches 5 and 6. This background information was provided for information only. EPA is aware that some parties disagree with the State's assessment that the SCR violates water quality standards for chlorides and that agricultural uses of SCR water may be at risk due to high chloride levels in the River. The Data Quality Act does not require EPA to present every possible point of view concerning environmental conditions in waters addressed by TMDLs.

EPA reviewed the specific examples cited by the commenter as evidence that information in the TMDL document is neither accurate or complete. EPA disagrees that any of these statements are inaccurate or misleading. We added language to the final TMDL document stating that some parties disagree with the State's analysis that particular

chloride levels are associated with adverse impacts on sensitive crops and that sensitive crops are actually being irrigated with SCR surface water. We also clarified the source analysis discussion to more clearly indicate that much of the chloride load discharged into the Santa Clara River originates in supply water sources.

EPA disagrees with the commenter's assertion that the SCR does not require chlorides TMDLs for Reaches 3, 5, and 6. The State of California recently adopted a revised Section 303(d) list that includes chlorides listings for SCR Reaches 3, 5, and 6. EPA approved these listings on June 5, 2003. EPA also reviewed the data evaluated by the State to support its decision to continue listing Reach 3 for chlorides and found that the applicable water quality objective was exceeded in 21% of samples.

The commenters cite recent efforts by the Regional Board to revise the water quality objectives for chlorides in Reach 3. These revisions have not been reviewed or approved by the State Water Resources Control Board or EPA and are not in effect. If the water quality standards revisions are adopted by the State and approved by EPA in the future, it may be appropriate for the State to revisit the TMDL.

Comment 19: The statement that Reach 3 is near the Los Angeles-Ventura County Line is inaccurate.

Response: The text has been clarified on this point.

Comment 20: Fillmore WRP only discharges to surface water during the winter or wet weather events, and the TMDL should be clarified in the TMDL load estimates.

Response: The commenter did not describe the basis for this information or discuss how or why it would result in changes to the TMDL. The draft TMDL provided summary loading information for discharges to Reach 3, and it is unclear that the comment would affect that summary information. The TMDL document has been revised to indicate that Fillmore WRP generally discharges during the winter or wet weather events.

Comment 21: The TMDL should describe the basis for interpreting the chloride objective as an instantaneous maximum.

Response: As described in the draft TMDL, the basis for interpreting the chloride objective as an instantaneous maximum is that the State recently articulated this interpretation of the State standard in its SCR chloride TMDLs proposed in 2002.

Comment 22: The statement that avocados are irrigated near the downstream end of the reaches addressed in the TMDLs is inaccurate.

Response: The statements in the draft TMDL concerning irrigation of avocados are based on information provided in the State's draft TMDL. As discussed in response to comment 18, we added language to the TMDL that explains that some parties disagree with the State's assessment of avocado irrigation.

Comment 23: The discussion in the TMDL concerning potential effects of chlorides on avocados is inaccurate.

Response: The discussion in the TMDL concerning the potential effects of chlorides on irrigated crops is provided for background information only and was based on information provided in the State's proposed TMDL. EPA acknowledges that different parties disagree about whether and to what extent chloride content of water in the SCR has adverse effects on irrigated crops. As discussed above, the EPA TMDL is designed to directly implement the State's currently applicable numeric water quality objective for chlorides. Issues concerning the appropriateness of this numeric objective are beyond the scope of EPA's TMDL action and therefore require no further examination by EPA as part of this action. In establishing this TMDL, EPA is taking no action to modify the water quality standards which it is designed to implement.

Comment 24: The TMDL should explain why chloride concentrations at Blue Cut are increasing. The TMDL should identify supply water and water softeners as the cause of these increases, and acknowledge the County Sanitation Districts' efforts to remedy chloride issues. The TMDL should indicate that chloride loads should not increase in the Districts' service area due to recent restrictions on water softeners.

Response: We agree that supply water and water softeners contribute substantial chloride loads into the basin, and acknowledge the Districts' aggressive efforts to address the discharge of chlorides from water softeners. Significant uncertainty remains concerning the causes of increasing chloride concentrations at Blue Cut; therefore, we are not adding language addressing this issue to the final TMDL document.

Comment 25: The estimated concentration data in Table 4 should be replaced with actual data for the year the table is intended to reflect.

Response: Table 4 has been removed from the final TMDL.

Comment 26: The TMDL ignores the issue of assigning load allocations to State Water Project supply water.

Response: To our knowledge, the State Water Project does not discharge supply water directly to the SCR or its tributaries. Wasteload and load allocations are usually provided for sources of pollutant loading to the waters for which TMDLs are set. Therefore it is uncertain whether it would be appropriate to establish load allocations for loadings from supply water in the SCR basin. The information necessary to consider this possibility was not available to EPA to prepare this TMDL. The draft TMDL acknowledged that chloride loads in source water contribute to overall chloride loads in the SCR basin (draft TMDL, p. 15).

Comment 27: The groundwater allocation of 100 mg/L should be clarified to ensure that it does not allow further degradation of water quality in Piru Creek and is consistent with groundwater objectives in effect in other areas of the basin.

Response: The TMDL report will be clarified to state that no load allocation provision of this TMDL has the effect of superceding or rendering inapplicable any more restrictive surface water or groundwater objectives applicable to Piru Creek basin or any other areas of the SCR basin.

Comment 28: The TMDL should address implementation, cost, and future growth.

Response: TMDLs established by EPA are not required to:

- include implementation plans,
- characterize or consider compliance costs, or
- provide for future growth.

By setting the TMDL on a concentration basis, the TMDL indirectly provides for future growth in discharge volumes as long as the chloride concentrations in discharges do not exceed the applicable TMDL, wasteload allocations, or load allocations.

The State's proposed TMDLs provide more detailed analysis of implementation options and costs and identify detailed implementation provisions. EPA generally supports the State's proposed implementation provisions.

Comment 29: The TMDL for SCR Reach 3 should be based on the 100 mg/L objective adopted by the Regional Board, not the currently applicable objective of 80 mg/L.

Response: See response to Comment 2. EPA is required to apply the currently applicable SCR Reach 3 objective of 80 mg/L in developing the TMDL.

Comment 30: The TMDL for SCR Reach 3 should be based on the objective rather than the 45 mg/L target shown in the TMDL report.

Response: As described in the draft TMDL, the TMDL for Reach 3 is based on the 80 mg/L objective. The commenter is apparently referring to the information in the dilution calculation presented in Table 7 of the draft TMDL, which identified the predicted receiving water conditions in Reach 3 following implementation of the proposed load and wasteload allocations. This analysis demonstrated that, under average flow conditions, implementation of the allocations would ensure that the receiving water was below the applicable numeric objective.

As discussed in the revised TMDL document and response to comment 3, EPA has provided an additional linkage analysis to demonstrate how the proposed Reach 3 TMDL and allocations are sufficiently stringent to result in attainment of the applicable water quality objective under critical low flow conditions. This additional analysis shows that

the proposed load and wasteload allocations are necessary to ensure attainment of the numeric objective under low flow conditions (i.e., less stringent allocations would not result in attainment of standards).

Comment 31: The EPA TMDL should recommend development of use attainability analysis and/or site specific objectives prior to implementing the TMDLs.

Response: EPA generally supports the State's proposed TMDL implementation provisions for its chloride TMDLs for SCR Reaches 5 and 6. EPA is aware that the State is considering potential revisions to the chloride objectives applicable to SCR Reach 3, but EPA is taking no position concerning these potential revisions at this time.

Comment 32: The linkage analysis should be revised to show that the State's analysis did not include Reach 3.

Response: The State conducted separate analyses to support the linkage analyses for Reaches 5 and 6 and for Reach 3. The TMDL document language has been edited to reflect that the State's analysis presented in its draft TMDLs addressed Reaches 5 and 6.

Comment 33: The modeling done to support the SCR nutrient TMDL should not be used to support the chloride TMDL analysis as the model was not calibrated for chloride.

Response: The model results were used for the EPA chlorides TMDL to estimate flows under different critical conditions. The flow estimation results are insensitive to the pollutant under consideration. EPA disagrees that it was inappropriate to use the flow analysis provided by the model.

Comment 34: Consideration of groundwater extraction rates in the basin is irrelevant to the development of the chloride TMDL for SCR.

Response: The text has been edited to remove this reference as it is unnecessary in the final TMDL.

Comment 35: The TMDL should clarify that it accounts for future growth. The TMDL should also account for potential future consolidation of the Santa Paula and Fillmore Water Reclamation Plants.

Response: See response to comment 28. The commenter provided no information to support modification of the TMDL or its allocations to account for a potential future consolidation of the WRPs mentioned in the comment.