

**COMMENT LETTER 2 - U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION IX,
DAVID J. FARREL (OCTOBER 7, 1996), RECEIVED OCTOBER 7, 1996**

Response to Comment 2-1

Comment Summary: The comment states that the US EPA did not receive the appendices to the Draft EIR/EIS.

Refer to Master Response 3 which lists agencies that received the Draft EIR/EIS. This list indicates that the U.S. Environmental Protection Agency (EPA) - Region 9, San Francisco received one copy of Volumes I-III and one copy of the CD-ROM which contains all of the appendices except Volumes XVI and XVII (Final Scoping Report). This list also indicates that the Environmental Protection Agency - Washington D.C. office received five copies of Volume I-III and two Copies of Volumes IV-VII and one copy of the CD-ROM.

The EPA Region 9 office was contacted by phone and asked if they had received hard copy of the appendices. EPA staff stated that they had received Volume I-III of the Draft EIR/EIS and that this was sufficient for them to comment on the document. The staff person was not able to confirm whether or not the agency received all of the appendices in hard copy (pers. com. David Tomsovic, Environmental Protection Agency, February 25, 1997).

Response to Comment 2-2

Comment Summary: The comment describes the purpose of the Project and identifies the federal lead agency for the NEPA process.

The EIR/EIS authors agree with the comment's summary of the Project purpose and potential permitting requirements.

Response to Comment 2-3

Comment Summary: The comment provides a brief history on the environmental documentation process for the Project and describes the alternatives that are addressed in the Draft EIR/EIS.

The EIR/EIS authors agree with the comment's summary of the Project history and alternatives.

Response to Comment 2-4

Comment Summary: The comment provides a description of the US EPA's previous involvement in the Project addressed in the Draft EIR/EIS, and urges that note be taken of concerns and viewpoints set forth in previous correspondence. The referenced correspondence consists of: 1) a letter commenting on the US Bureau of Reclamation EIS prepared for the 1991 project [Letter to Richard Chelini from Deanna Wieman, February 15, 1991]; 2) Letter to Ross Liscum, Santa Rosa, from Jeff Rosenbloom, May 26, 1994; and 3) Letter to Dan Carlson, Santa Rosa, from Nancy Yoshikawa, July 1994.

The 1991 letter referenced in the comment concerns a previous project which is substantially different than the current Long-Term Project. The EIR/EIS authors contacted EPA to try to determine which of the comments in the 1991 letter EPA believed pertinent to the current Project. Because EPA did not provide any further clarification, the EIR/EIS authors have responded specifically to those comments which the authors believe are pertinent to the present Project, and have identified in the individual responses those comments which the authors believe are not relevant to the present Project. Responses to Comments from the 1991 letter are contained in Responses to Comments 2-31 to 2-93.

The 1994 correspondence referred to in the Comment regarding the present Long-Term Project was used in developing the scope of work for the environmental document. Responses to Comments in the 1994 correspondence are contained in Responses to Comments 2-94 to 2-120. Copies of the correspondence referred to in the comment are located in the replacement pages for Appendix V in Section 6.6 of this document.

Response to Comment 2-5

Comment Summary: The comment states that water conservation and reuse should be a high priority. It explains that water conservation reduces environmental impacts by lowering the demand for freshwater as well as lowering the volume of wastewater for treatment. The comment recommends a 35% level of conservation rather than the 25% assumed in the Draft EIR/EIS.

The City's objectives include: "Maximize reclamation, recycling, and reuse of advanced treated wastewater to the greatest extent feasible;" and "Optimize water conservation where practical". Refer to Master Response 17, located in Section 6.2 of this document concerning water conservation. The City continues to have an aggressive water conservation program; however the EIR/EIS authors believe that the projected wastewater flows presented in Appendix D-4, (Wastewater Flow Projections), are appropriate for Project planning purposes.

Response to Comment 2-6

Comment Summary: The comment supports the agricultural irrigation or Geysers recharge alternatives, because both have strong reuse components. The comment urges protection of wetlands and other habitats from adverse effects of irrigation with reclaimed water.

Regarding the recommendation for selection of a particular alternative, refer to Master Response 2, located in Section 6.2 of this document.

The EIR/EIS authors concur with the need for protection of wetlands and other habitats. Detailed mitigation measures for habitat protection are included in Chapter 2 to regulate application of reclaimed water to agricultural areas. Specifically, Measure 2.2.5: Avoid Sensitive Biological Resources, on page 2-28, is designed to protect wetlands and other habitats through use of irrigation set-backs and buffer strips. Measure 2.2.6: Agrochemical and Fertilizer Best Management Practices, on page 2-34, is designed to provide protection against effects of over-use of pesticides and to control movement of these materials outside of irrigation areas. Measure 2.2.1: Irrigation Conservation and Management Programs, on page 2-21, requires that each parcel to receive reclaimed water is the subject of an individual program that will manage application of irrigation water so as to avoid adverse effects to surface and groundwater.

Response to Comment 2-7

Comment Summary: The comment recommends consideration of wetlands creation for "polishing" of reclaimed water.

The primary purpose for polishing would be removal of nitrogen. Wetlands creation for nitrogen removal is evaluated in Appendix I-9 (Treatment Wetlands Evaluation) of the Draft EIR/EIS. This concept was considered as a potential element of the Project, but was eliminated as a Project component due to problems with availability of adequate acreage of suitable land. Criteria for suitable sites included avoidance of existing wetlands, including vernal pools in the Santa Rosa Plain. Wetlands creation would have eliminated existing agricultural irrigation operations using reclaimed water. Although wetlands creation for nitrogen removal was not carried forward as a part of the Project description, it is still considered as a possible mitigation for Project impacts. Nitrogen removal could also be accomplished by adding additional processes at the treatment plant. Mitigation Measure 2.5.6: Total and Ammonia Nitrogen Source Control Program, on page 2-131 of the Draft EIR/EIS, discusses both options for nitrogen removal. If wetlands were created for treatment, they would be sited and designed to avoid adverse effects on existing wetlands, and separate environmental compliance would be required.

Response to Comment 2-8

Comment Summary: The comment states that conversion of salt marsh to brackish wetlands due to discharge of reclaimed water should be avoided.

The Draft EIR/EIS has incorporated measures in the Project Description which are designed to avoid impacts to waterways located adjacent to agricultural irrigation areas. Measure 2.2.3: Restrict Surface and Subsurface Irrigation Water Runoff (pages 2-23 through 2-25), requires that lands irrigated with reclaimed water are managed in a manner which insures that surface and subsurface runoff of reclaimed water to adjacent waterways including marshes does not occur. Also, refer to Master Response 10, located in Section 6.2 of this document, concerning saline habitats.

Response to Comment 2-9

Comment Summary: The comment expresses concern regarding potential adverse impacts of reclamation and discharge and urges continued conservation efforts and measures to minimize impacts.

Refer to Responses to Comments 2-6 and 2-8. The City of Santa Rosa has an active and aggressive water conservation program, which is described in Chapter 3 of the Draft EIR/EIS (page 3.2-3). The City continues to explore reliable ways to reduce wastewater flows. Additional water conservation methods are evaluated in Appendix D-3 (Water Conservation Element), of the Draft EIR/EIS. Chapter 2 of the Draft EIR/EIS contains an extensive program of mitigation to minimize potential Project impacts

Response to Comment 2-10

Comment Summary: The comment encourages a multi-faceted reuse program.

The Draft EIR/EIS was structured to provide a wide variety of components that could be combined to achieve Project objectives. The intent is to allow adoption of a Project that incorporates a wide array of options, thereby maximizing system reliability

Response to Comment 2-11

Comment Summary: The comment recommends tracking of technological developments.

The Santa Rosa Board of Public Utilities has established a Technology Committee, which continues to track new developments in water reuse, water conservation, and treatment technologies. This committee reports regularly to the Board and recently recommended pilot programs for aquifer storage and recovery, ultraviolet disinfection and reuse using subsurface irrigation of redwood trees. This is an ongoing process and will continue throughout implementation of the Long-Term Project. As new technologies become available they will be incorporated in the Project as appropriate.

Response to Comment 2-12

Comment Summary: The comment notes that the U.S. EPA has an oversight role in regard to the North Coast Regional Water Quality Control Board's potential approval of any increased discharge to the Russian River.

The City of Santa Rosa is aware of the U.S. EPA's role and will work with both agencies regarding approval of the selected Project.

Response to Comment 2-13

Comment Summary: The comment commends the Draft EIR/EIS as an organized and well-written document, and cites the Mitigation Program and the supporting objective for reclamation, recycling, and reuse.

The EIR/EIS authors are gratified that the U.S. EPA found the document useful.

Response to Comment 2-14

Comment Summary: The Draft EIR/EIS is classified as category EC-2, Environmental Concerns-Insufficient Information. The comment expresses concern regarding adverse impacts to sensitive wetland and riparian habitats, water quality, and air quality. The comment states that information provided in the appendices to the Draft EIR/EIS should be summarized within the main body of the Draft EIR/EIS.

Because the insufficient information which is responsible for the U.S. EPA's EC-2 rating is not specifically identified in the comment, it is difficult to respond and submit the information which the EPA feels is lacking.

The Draft EIR/EIS identifies significant adverse effects regarding the issues listed by the EPA: sensitive wetland and riparian habitats, water quality, and air quality. Wetland and riparian habitat impacts can be mitigated for all alternatives; air and water quality impacts are significant for all alternatives.

The information in the appendices to the Draft EIR/EIS is summarized in the environmental analyses in Sections 4 and 5 of the Draft EIR/EIS. Due to the extensive amount of information necessary to support the environmental analyses in the Draft EIR/EIS, much of the information and analysis was placed in appendices in order to provide a document that would not be too unwieldy to use in the decision-making process. Chapters 4 and 5 of the Draft EIR/EIS are therefore a distillation of the supporting background information and analysis that is provided by the complete Draft EIR/EIS.

Response to Comment 2-14A

Comment Summary: The comment lists the Summary of Rating Definitions and Follow-up Action.

Receipt of the Rating Structure is acknowledged; the comment does not constitute a comment on the Draft EIR/EIS nor does it request a response

Response to Comment 2-15

Comment Summary: The comment supports selection of Alternative 4, Geysers Recharge. It encourages the City and Corps to pursue an agreement with the Geysers operators to purchase reclaimed water, and recommends the true feasibility and costs of the Geysers Recharge Alternative be presented assuming such an agreement is reached.

Regarding the recommendation for selection of a specific Project alternative, refer to Master Response 2, located in Section 6.2 of this document.

The City has been in contact with the operators of the Geysers Steamfields in this region during Project design. It is, however, inappropriate for the City to enter into negotiations for sale of reclaimed water for the Geysers or other alternatives. Such negotiations could appear to predispose the City toward selection of a particular alternative. The City has, therefore, refrained from such negotiations regarding sale of reclaimed water to agricultural land owners, urban irrigation water recipients, reservoir land owners, pipeline easement owners, and similar interests, including the Geysers operators, until after certification of this EIR. These negotiations will take place during the Project selection phase.

During preparation of the Draft EIR/EIS research was conducted concerning the availability of a reliable market price for reclaimed water which could be used instead of a negotiated price. However, it was found that few similar examples exist, and that prices are wholly dependent upon policies or agreements regarding a variety of factors such as funding of capital costs. These policies or agreements have not and cannot be established at this time. The Draft EIR/EIS used standard cost assumptions for this Alternative, as it did for all Alternatives, to permit a broad comparison of potential financial impact.

The EIR/EIS authors acknowledge that, although more precise information regarding potential costs, and therefore ultimate financial feasibility, of the Geysers Recharge Alternative would be valuable, some financial aspects of such a project could not be established prior to certification of the EIR. During the Project selection phase, it may be appropriate for the City to consider further financial analysis, if it is interested in pursuing the Geysers Recharge Alternative.

Response to Comment 2-16

Comment Summary: The comment expresses grave concern about the implementation of Alternatives 2 and 3 based on the significant adverse effects to wetlands and sensitive habitats.

The Draft EIR/EIS provides analysis on pages 4.9-60 through 4.9-79 and 4.10-37 through 4.10-49 which identifies several significant impacts for Alternatives 2 and 3 regarding both jurisdictional wetlands and sensitive aquatic habitats. Each of these significant impacts can be mitigated to a level below significance, except for aquatic impacts in the West County relative to criterion concerning change in the physical conditions of aquatic

habitat in the Estero Americano or the Estero de San Antonio within the Gulf of the Farallones National Marine Sanctuary.

Response to Comment 2-17

Comment Summary: The comment expresses concern about the effect of Alternatives 2 and 3 on “biostimulation in surface and groundwater due to nutrients (nitrogen) from reservoir seepage and irrigation.”

The Draft EIR/EIS does not identify any significant impacts of reservoir seepage or irrigation on biostimulation of algae in surface water (refer to Impact 6.5.2 on page 4.6-84). Significant unavoidable impacts on the National Marine Sanctuary are identified, but the impacts relate to a decrease in biostimulation, not an increase (refer to Impact 6.5.3 on page 4.6-84 and 4.6-85).

Biostimulation is a term used in the Draft EIR/EIS to describe the effect of nutrients on algae in surface waters, and is thus not applicable to groundwater. However, significant impacts due to nitrates were identified in groundwater due to reservoir seepage (pages 4.5-30 through 4.5-47). Mitigation is provided which will reduce the impacts on groundwater to a level below significance.

Response to Comment 2-18

Comment Summary: The comment expresses concern about the effect of Alternatives 2 and 3 due to exceedences of air quality standards.

Both Alternatives 2 and 3 would result in construction emissions exceeding threshold levels for particulates and nitrogen oxides. These emissions are associated with reservoir and pipeline construction at any of the proposed sites. Emissions of sulfur dioxide for these alternatives are either less than significant or can be mitigated to a less than significant level. Construction emissions of carbon monoxide are less than significant for Alternative 3 and Alternatives 2A and 2C, but are significant for Alternatives 2B and 2D (refer to pages 4.10-20 through 4.10-26 of the Draft EIR/EIS). These impacts occur only during the construction period, and neither Alternative violates air quality standards during Project operation.

Response to Comment 2-19

Comment Summary: The comment expresses concern regarding inundation of septic systems and reductions in groundwater flows to sensitive downstream areas.

Potential impacts due to groundwater mounding were identified in the Draft EIR/EIS for the Carroll Road, Bloomfield, Huntley, and Valley Ford reservoir sites in West County (refer to Impact 5.5.3 on pages 4.5-38). However, these impacts are mitigable with use of alternative septic systems (Mitigation Measure 2.5.9 on page 2-136). The zone of groundwater depletion is generally confined to the area directly downgradient of the dam

(refer to Figures 4.5-2 through 4.5-10 on pages 4.5-36 through 4.5-44). Adverse effects on aquatic habitat are discussed in Section 4.9, starting on page 4.9-70. For those areas where there would be significant reductions in flows, habitat restoration is provided to reduce impacts to less than significant.

Response to Comment 2-20

Comment Summary: The comment states that the West County alternative could adversely affect sensitive habitats and resources in the esteros through a reduction of salinity.

Significant unavoidable impacts related to the esteros are identified in the Draft EIR/EIS (Impacts 9.5.6 and 9.7.6), but these impacts are not necessarily adverse. In particular, a change in salinity, a decrease in the manure nitrogen load, and an increase in dissolved oxygen are not necessarily adverse, and these changes would be considered beneficial were it not for the Gulf of the Farallones National Marine Sanctuary's approach to Sanctuary management and interpretation of federal regulations for the Sanctuary.

The special site evaluation criterion (with the point of significance being any water quality change) was established to be consistent with the Sanctuary's interpretation of Sanctuary regulations, not because any water quality change is necessarily adverse. Measures 2.2.1 through 2.2.12, 2.5.1, 2.5.2, and 2.5.3 are included in the Draft EIR/EIS to minimize impacts, but the stringent point of significance means that impacts cannot be mitigated to a less than significant level (which equates to no change), as discussed on page 225 of Appendix I-16 (Water Impact Analysis Report Volume I - Text).

Response to Comment 2-21

Comment Summary: The comment states that the South County alternative could cause habitat conversion of salt marshes to brackish marshes in South San Francisco Bay through excessive freshwater discharges, and urges that the Corps and the City of Santa Rosa seriously consider implementation of other Project alternatives.

Refer to Response to Comment 2-8 and Master Response 10, regarding saline habitats. Refer to Master Response 2, regarding recommendations about Project selection. These Master Responses are located in Section 6.2 of this document.

Response to Comment 2-22

Comment Summary: The comment expresses concern about implementation of the environmentally superior alternative because of the "significant water quality problems which already exist in the Laguna de Santa Rosa."

The water quality problems in the Laguna are, according to North Coast Regional Water Quality Control Board findings, a result of nonpoint source discharges to the Laguna, primarily from agriculture. The Regional Board has developed the Waste Load

Reduction Strategy that would reduce water quality impacts in the Laguna substantially. With successful implementation of the Waste Load Reduction Strategy under the Cumulative Impacts scenario, Alternative 5B, as evaluated in Section 4.6 of the Draft EIR/EIS (pages 4.6-138 to 4.6-143), will result in no significant unavoidable water quality impacts. Without implementation of the Waste Load Reduction Strategy, Alternative 5B will result in significant unavoidable impacts on dissolved oxygen approximately 1% of the time, and significant unavoidable impacts on algal growth about 11% of the time (refer to Impact 6.9.1 concerning Dissolved Oxygen on page 4.6-109 through 4.6-111 and Impact 6.9.2 concerning Biostimulatory Substances-Adverse on page 4.6-112 through 4.6-111).

Response to Comment 2-23

Comment Summary: The comment is a statement regarding existing water quality conditions and Regional Board establishment of waste load reduction goals for the Laguna.

Both water quality conditions and the Regional Board waste reduction goals are acknowledged in the discussion of the Environmental Setting in Section 4.6 of the Draft EIR/EIS. Water quality criteria used in evaluating this Project include effects on the Regional Board Waste Reduction Strategy (refer to page 4.6-62).

Response to Comment 2-24

Comment Summary: The comment states that implementation of Alternative 5B “would significantly aggravate the dissolved oxygen and ammonia problem and considerably reduce attainment of water quality standards” in the Laguna. The comment also includes the recommendation that an alternative other than 5B be selected.

Refer to Response to Comment 2-22, concerning the attainment of water quality standards. Refer to Master Response 2, located in Section 6.2 of this document, concerning Project selection.

Response to Comment 2-25

Comment Summary: The comment questions whether the proposed mitigation would actually reduce wetland impacts to a level that is less than significant.

Refer to Master Response 11, located in Section 6.2 of this document, concerning wetland mitigation.

Response to Comment 2-26

Comment Summary: The comment recommends that the Draft EIR/EIS include a report on the major plant species of each habitat to provide a more definitive description.

A comprehensive list of plant species observed within the Area of Direct Impact of each storage reservoir, pipeline route and the Geysers recharge area, as well as within the Area of Indirect Impact of accessible agricultural irrigation areas is provided in Appendix K-3 (Biological Resources Vol III) of the Draft EIR/EIS. This appendix also provides a description of each plant community observed within each subcomponent (i.e., Adobe Road, Lakeville Hillside, Bloomfield, etc.) as well as a list of the dominant plant species associated with each community.

Response to Comment 2-27

Comment Summary: The comment recommends that metals data reported as total recoverable units be used for comparison with dissolved metals data by assuming all metal in the total recoverable concentration is dissolved.

Such an assumption was not necessary because dissolved metals data for reclaimed water and receiving water were available and were used to evaluate Project impacts on water quality. Since dissolved metals data were available, there is no need to use less applicable total recoverable data. Based on these evaluations, one potentially significant impact was identified, and mitigation is recommended in the Draft EIR/EIS to control dissolved copper levels in West County Creeks (refer to Measure 2.5.2 on page 2-123).

Response to Comment 2-28

Comment Summary: The comment suggests alternative approaches to the assumption that all metal in the total recoverable concentration is dissolved.

Refer to Response to Comment 2-27.

Response to Comment 2-29

Comment Summary: The comment suggests considering the addition of several features to the Geysers pipeline segment along Pine Flat Road, including addition of check valves and automatic cutoff valves (triggered by detection of pressure drops) along the pipeline; reduction of distance between manual isolation valves; and addition of detention basins and flow diversion structures.

The addition of “check valves and automatic cutoff valves (triggered by detection of pressure drops) along the pipeline” is marginally feasible, but cannot be claimed to be completely effective or absolutely reliable. The effectiveness of the added valves is limited due to the uncertainty in predicting the exact location of a future break or leak in the pipeline and therefore the associated optimum location of the automatic operating shutoff valve(s). The reliability of the added valves is imperfect because the electrical service to the remote valve locations required to operate the valves is subject to interruption and physical damage leading to loss of electrical service. Other energy systems used to operate the valves require frequent inspection and maintenance to ensure a high level of reliability.

All or a major portion of an automatic operating valve systems as discussed here is typically housed in an underground vault straddling the pipeline. Entry into the vault for maintenance must therefore comply with required safety procedures for entry into confined spaces. The complexity of this procedure tends to reduce the frequency of inspection and maintenance, thereby increasing the potential for a malfunction or failure of the system when called upon to operate.

The effectiveness of the necessary control system is also affected by pressure variations occurring along the pipeline following normal pump startup and shutdown. These "normal" transient pressure variations must be disregarded by the control system to prevent the automatically operated valves being falsely triggered to close. However, this action reduces the sensitivity of the control system to detect small leaks in the pipeline and thereby reduces its effectiveness.

A control system would consist of pressure sensing instruments installed at several locations along the pipeline and wired to a system computer. A system control program would then be established (after experimentation with operation of installed pipeline) to slowly close the automatic operating shutoff valve upon the "presumed detection" of a pipeline leak (or the occurrence of a seismic event). Experience with similar control systems has shown that the frequent occurrence of false detections, resulting in the shut-down of the pipeline, has lead the operating staff to disable the control system. Because of these operational problems, limited effectiveness and reliability, automatic valves are not recommended.

The suggested reduction in distance between manually operated isolation valves along the pipeline would provide minimal or no benefit in effectiveness because the time involved in detecting the leak and then traveling to the appropriate valve location would typically exceed the time required to drain the shortened length of pipeline between added isolation valves.

The suggested addition of "detention basins and flow diversion structures" is not practical due to the rough and steep topography and the uncertainty in predicting the necessary volume, number and location of required basins.

Response to Comment 2-30

Comment Summary: This comment number is assigned to a second copy of the comment letter which was sent to the U.S. Army Corps of Engineers and subsequently forwarded to the City of Santa Rosa.

This comment letter is the same as that sent directly to the City and the comments in that letter have been addressed under Responses to Comments 2-1 through 2-29.

Note: Response to Comments 2-31 through 2-93 are provided in response to the February 15, 1991 letter to Richard Chelini from Deanna Wieman referenced in

Comment 2-4. A copy of this letter is included in the Replacement Pages for Appendix V, contained in Section 6.6 of this document.

Response to Comment 2-31

Comment Summary: The comment concerns the 1991 Santa Rosa Wastewater Reclamation System Draft EIS and states that the document focuses on a former goal of reuse and other options to minimize the need to discharge into the Russian River. The comment also states that the document does not clearly state that treatment volumes would expand and factors concerned with the proposed increase in capacity. Finally, the comment states that greater detail should be provided for secondary and cumulative impacts.

The comment refers specifically to information and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-32

Comment Summary: The comment states that it is inappropriate under NEPA to segment the analyses and for the 1991 Draft EIS to analyze only the disposal of wastewater and not the disposal of produced residual solids. The comment urges a description of the alternatives including the impacts of the disposal of sludge generated by the proposed Project.

However, the comment specifically addresses the 1991 project. Refer to Response to Comment 102-12, concerning disposal of residual solids (sludge).

Response to Comment 2-33

Comment Summary: The comment states that the 1991 document places a heavy emphasis on the preferred west county alternative and that relatively less detailed information is provided for the other alternatives. It also states that the alternatives analysis should consider sludge disposal.

The present Draft EIR/EIS has analyzed each of the Project Alternatives at a similar level of detail. In regards to sludge disposal, refer to Response to Comment 102-12.

Response to Comment 2-34

Comment Summary: The comment states that the EPA supports reuse of effluent, and that Section 9.2 of the 1991 document suggests that impacts of the west county alternative would be beneficial to Americano Creek by providing water flow similar to historical flows that may have been lost because of diversion or groundwater pumping.

The present Long-Term Project provides for reuse of reclaimed water. The remainder of the comment refers specifically to information and analyses in the 1991 Santa Rosa

Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-35

Comment Summary: The comment states that reclaimed water from the 1991 project should meet all draft state objectives in the Inland Surface Waters Plan and criteria developed by the EPA pursuant to the Clean Water Act. In addition, all priority pollutants and potential significant contaminants should be addressed.

Pages 4.6-3 through 4.6-5 in the Surface Water Quality Section of the Draft EIR/EIS discuss the specific regulations that relate to inland and ocean surface waters. The Inland Surface Waters Plan is not discussed because the State no longer has such a plan. These regulations include objectives and EPA criteria pursuant to Section 304(a) of the Clean Water Act that are used as points of significance for the evaluation criteria, as is presented in Table 4.6-27 on pages 4.6-56 through 4.6-64 of the Draft EIR/EIS. Evaluation of project impacts for each of the proposed alternatives using the criteria occur on pages 4.6-75 through 4.6-158 of the Draft EIR/EIS.

Response to Comment 2-36

Comment Summary: The comment states that the 1991 document does not provide sufficient information about alternatives, compliance with water quality standards, endangered species impacts, potential significant degradation, and mitigation.

The comment refers specifically to information and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-37

Comment Summary: In reference to the 1991 document, the comment states that the EPA prefers the “polishing” of wastewater through created wetlands prior to entry into an existing wetland system. The comment states as well that the polishing of wastewater in created wetlands should be evaluated as a means of avoiding impacts to existing wetland values and functions.

Refer to Response to Comment 2-7.

Response to Comment 2-38

Comment Summary: The comment states that the 1991 document should determine how benefits may be gained through wastewater reuse without conversion, loss, or degradation of the existing estuarine system.

No creation or enhancement of existing freshwater wetlands in the West County components is proposed in this Draft EIR/EIS. Therefore, no conversion, loss or

degradation of the existing estuarine system will occur because of wetland creation or enhancement. The comment refers to a proposed alternative in the 1991 Draft EIS for the Santa Rosa Wastewater Reclamation System, not in the current Draft EIR/EIS.

Response to Comment 2-39

Comment Summary: The comment states that information should be made consistent between the 1991 document and its appendices.

The comment refers specifically to information and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-40

Comment Summary: In reference to the 1991 document, the comment states that the EPA will evaluate the basic project purpose in consultation with the Corps to help define a least-damaging practicable alternative and determine compliance with the 404(b)(1) guidelines.

The Corps is the federal lead agency for the proposed Project pursuant to its responsibilities under Section 404 of the Clean Water Act. The purpose and need of the Project is presented on page 3.1-5 of the Draft EIR/EIS.

Response to Comment 2-41

Comment Summary: The comment refers to the 1991 document, which analyzes five alternatives, including an ocean disposal alternative, stating that the document does not analyze adequately less-damaging alternatives, including those that avoid impacts to waters of the U.S.

The comment refers specifically to alternatives, information, and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-42

Comment Summary: In reference to the 1991 document, the comment states that the overall impacts to waters of the U.S. for the proposed alternatives need to be clearly identified. In addition, the Corps has not confirmed the delineation of jurisdictional waters which may be impacted.

Wetland determinations, with Corps verification, were conducted on Project component sites utilizing Corps recommended on-site and off-site methods. It was decided, in consultation with the Corps, that formal detailed jurisdictional delineations of the wetland boundaries on all components of the selected alternative will be conducted during Project

permitting, and the results included in the Final EIS. Refer to pages 4.10-28 through 4.10-32 of the Draft EIR/EIS for a description of the methodology used for the wetland determination for each Project component.

Response to Comment 2-43

Comment Summary: The comment refers to specific examples and discrepancies in the text of the 1991 document concerning wetlands acreage and riparian woodland.

The comment refers specifically to alternatives, information, and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-44

Comment Summary: The comment states that some impacts in the 1991 document are not sufficiently assessed.

The comment refers specifically to alternatives, information, and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-45

Comment Summary: The comment refers to specific water volumes and volumes of earth fill proposed in the 1991 document. In addition, the comment states that the Final EIS should include figures for impacts to waters of the U.S. for all project-related activities.

Refer to Response to Comment 2-42. In addition, the comment refers specifically to alternatives, information, and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-46

Comment Summary: The comment states that the “no project” alternative in the 1991 document is not the equivalent of a “no action” alternative under Section 404.

Alternative 1 for the proposed Project is a No Action/No Project Alternative. This alternative evaluates impacts which will occur if no Project were implemented. In this case, the No Action/No Project Alternative consists of the existing Santa Rosa Subregional Water Reclamation System, plus various upgrades at the treatment plant, as well as other projects to improve the reliability of the reclamation system prior to implementation of the Project. Refer to pages 3.1-21 through 3.1-24 of the Draft EIR/EIS for a description of the No Action/No Project Alternative.

Response to Comment 2-47

Comment Summary: The comment states that because of the interdependency between wastewater and sludge disposal, and the potential cumulative impacts, the 1991 Final EIS should discuss alternatives and potential impacts from sludge disposal.

Refer to Response to Comment 102-12.

Response to Comment 2-48

Comment Summary: The comment states that the 1991 Final EIS should evaluate combinations of project alternatives.

The Draft EIR/EIS has defined the alternatives based on components. Because the analysis of environmental impacts is presented per component, it is possible to consider combinations of components. In addition, Appendix A to the Draft EIR/EIS discusses the impacts from a range of discharge scenarios with smaller reservoir components.

Response to Comment 2-49

Comment Summary: The comment states that the 1991 document should examine the effectiveness of incorporating water conservation measures into an existing alternative in order to reduce project impacts.

Water conservation is addressed in Appendix D-3 (Water Conservation Element) of the Draft EIR/EIS. Refer also to Master Response 17, located in Section 6.2 of this document.

Response to Comment 2-50

Comment Summary: In reference to the 1991 project, the comment refers to a 6,000-foot open channel above the proposed reservoir and requests evaluation of its impact on wildlife.

No open channels are proposed upstream of the reservoirs in the current project. The comment refers specifically to information and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-51

Comment Summary: The comment refers to specific alternatives proposed by the 1991 document, including ocean disposal, aquifer storage, and enhanced treatment alternatives.

The comment refers specifically to alternatives, information, and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the

proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-52

Comment Summary: The comment states that detailed analysis of proposed alternative reservoir sites is necessary and that the 1991 Final EIS should contain the results of the Corps' jurisdictional survey.

A wetlands determination for all of the Project alternatives occurred in the Draft EIR/EIS as described in Response to Comment 2-42. Once the preferred alternative is selected, a detailed formal jurisdictional wetlands delineation of the alternative will be performed for U.S. Army Corps permitting and the Final EIS.

Response to Comment 2-53

Comment Summary: The comment states that the 1991 document should explain how the storage capacities were determined for the storage reservoirs, suggesting that a reduced need for storage capacity would reduce wetland impacts. Conservation and other methods need to be addressed.

Refer to Response to Comment 2-5 for a discussion of optimization of conservation and reuse within the present Long-Term Project. Pages 3.1-10 through 3.1-15 of the Draft EIR/EIS describe the methodology and model used to determine system requirements, including the storage capacities for the reservoir components. Table 3.3-2 on page 3.3-21 of the Draft EIR/EIS presents the storage reservoir characteristics for each alternative.

Response to Comment 2-54

Comment Summary: The comment refers to specific costs relative to reservoir sites proposed in the 1991 document.

The comment refers specifically to alternatives, information, and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-55

Comment Summary: The comment states that amendments to the applicable Basin Plans would be necessary to allow proposed wastewater discharges for the 1991 South and West County alternatives. The comment suggests consultation with the North Coast and San Francisco California Regional Water Quality Control Boards.

The City has consulted with the North Coast Regional Water Quality Control Board concerning possible future Basin Plan Amendments. Refer to Responses to Comments 2-2, 2-12, and 8-21.

Response to Comment 2-56

Comment Summary: The comment states that surveys for vernal pools and sensitive/rare plants have not been performed in areas proposed for conversion and enhancement. In addition, the 1991 Final EIS should include the results of such surveys and describe mitigation to avoid direct and indirect impacts.

Conversion or enhancement of existing wetlands is not part of the Project evaluated in this Draft EIR/EIS. Therefore, no further response is provided.

Response to Comment 2-57

Comment Summary: The comment states that the 1991 document does not include sufficient information to ensure that significant degradation of the aquatic environment would not result from project implementation. It states that the EPA is concerned about the potential increase to the total load of contaminants to be introduced to waters of the U.S. and about conversion of existing wetlands from one habitat type to another.

Some of the alternatives would result in increased contaminant load to receiving waters, and this is described in Section 4.6 (Surface Water Quality) and Appendix I-16 (Water Quality Impacts Analysis) of the Draft EIR/EIS as increases in the concentration of contaminants. The increased contaminant load was also evaluated in Section 4.9 (Aquatic Biological Resources) and Appendix K-4 (Ecological Risk Assessment) as toxicity and bioaccumulation. Impacts 6.9.1 (Conductivity, Cyanide, Dissolved Oxygen), 6.9.2 (Biostimulatory Substances, Turbidity, Waste Reduction Strategy, Toxicity), 6.1 and 6.2C (Conductivity, Dissolved Oxygen, Benthic Algae), 9.9C (Ecological Risk) were identified as significant impacts. Impacts 6.9.1 (Conductivity, Dissolved Oxygen), and 6.9.2 (Biostimulatory Substances) were identified as significant impacts after mitigation.

Conversion of existing wetlands to other habitat types is not proposed as part of the Project Alternatives.

Response to Comment 2-58

Comment Summary: The comment states that the 1991 Final EIS should provide information about the impacts of contaminants attributable to the implementation of the Project alternatives, specifically cadmium, copper, lead, and zinc. The comment notes that one source of copper in Americano Creek is from copper sulfate foot baths for cows.

Two sections of the Draft EIR/EIS, the Surface Water Quality Section (4.6) and the Public Health and Safety Section (4.7) address the potential impacts of chemicals, including cadmium, copper, lead, and zinc, resulting from the various project components. The evaluation criteria on pages 4.6-56 through -60 and 4.7-25 through -30 of the Draft EIR/EIS specifically set out thresholds for chemicals within treated wastewater. Pages 4.7-9, -10, -16, -21, and -32 of the Draft EIR/EIS present the sources, inputs, and exposure pathways for these chemicals into the wastewater supply. On pages

4.6-75 through -148 and 4.7-35 through -64 of the Draft EIR/EIS, the potential impacts from chemicals are addressed for the components for each alternative. An analysis for impacts from dissolved copper for the agricultural irrigation component is located on pages 4.6-87 and 4.6-88 of the Draft EIR/EIS.

Response to Comment 2-59

Comment Summary: The comment states that the 1991 Final EIS should address changes in agricultural uses and resultant impacts on pesticides, herbicides and metal contamination of aquatic systems.

The methodology for evaluating water quality impacts associated with changes in irrigation practices is described on page 4.6-67 of the Draft EIR/EIS. The analysis is based on technical reports, including Appendix I-1 (Estimation of Nitrogen, Salt and Herbicide/Pesticide Concentrations in Surface Water), Appendix I-2 (Evaluation of Metals in Irrigation-Affected Percolate) and Appendix K-4 (Ecological Risk Assessment) of the Draft EIR/EIS. These analysis are based on the assumption that the cropping patterns will change as a result of the availability of irrigation water, and this analysis describes water quality effects of three different scenarios for revised cropping patterns. These scenarios, which are described as “low-tech”, “medium-tech” and “high-tech”, are defined in Appendix E-3 (Cropping Scenarios for the West County and South County Reclamation Alternatives). The water quality analyses and ecological risk assessment did not find any significant impacts due to herbicides or pesticides, and analysis of metals impacts on water quality showed that only copper was potentially significant. A control program for copper is proposed to reduce impacts to less than significant (see Mitigation Measure 2.5.2, Control Program for Dissolved Copper Levels in West County Creeks).

Response to Comment 2-60

Comment Summary: Concerning the 1991 project, the comment states that any conversion of wetlands habitat types needs to be fully disclosed.

No conversion of wetlands habitat types is proposed as part of the Project Alternatives. Pages 4.10-32 through 4.10-56 of the Draft EIR/EIS present the wetlands impact analyses for each of the Project components, and impacts to existing wetlands are identified and mitigation provided. Mitigation Measure 2.3.11 Sensitive Resource Conservation Program on pages 2-76 through 2-84 of the Draft EIR/EIS will compensate for loss of wetlands acreage and function through creation of new wetlands and the restoration and preservation of degraded wetlands.

Response to Comment 2-61

Comment Summary: Concerning the 1991 project, the comment states that hydrologic impacts to Todd Road Preserve should be determined prior to initiation of wetland creation.

The comment refers specifically to alternatives, information, and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-62

Comment Summary: Concerning the 1991 project, the comment states that although nutrient reduction is one of the functions of wetlands, it is not known to what degree specific wetlands perform this reduction and when a saturation point may be reached. The use of created or existing wetlands for this purpose should be clarified and the feasibility of this use examined.

The present Long-Term Project does not propose to use created or existing wetlands to perform nutrient reduction of treated wastewater. This nutrient reduction will occur at the Laguna Plant as part of the improvements in the Advanced Treatment Upgrade Project (pages 3.2-4 and 3.2-5 of the Draft EIR/EIS).

Response to Comment 2-63

Comment Summary: Concerning the 1991 project, the comment refers to the discharge of reclaimed water to Americano Creek from created wetlands.

The comment refers specifically to alternatives, information, and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-64

Comment Summary: Concerning the 1991 project, the comment states that the conversion of the intermittent Americano Creek to a perennial system may negatively impact species adapted to this environment and that it is therefore important to document the perennial nature of the creek.

The comment refers specifically to alternatives, information, and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS; no further response is, therefore, provided.

Response to Comment 2-65

Comment Summary: Concerning discharge of reclaimed water to Americano Creek through created wetlands as proposed in the 1991 project, the comment states that surveys should be conducted to determine impacts from changes in the stream channel geometry of Americano Creek because of altered flows.

The present Project does not propose augmentation of flows into Americano Creek and would, therefore, not change the stream channel geometry of Americano Creek.

Response to Comment 2-66

Comment Summary: Concerning the 1991 project, the comment states that the document should clarify the anticipated quantity of water that will enter Americano Creek from reclaimed water releases from wetlands.

The present Project does not propose releasing reclaimed water to wetlands, and, therefore, would not release reclaimed water from the wetlands to Americano Creek.

Response to Comment 2-67

Comment Summary: The comment refers to salinity analyses at the mouth of the Estero Americano presented in the 1991 document.

The West County reservoirs in the present Long-Term Project may affect salinity in the Estero Americano through subflow from irrigation entering the streams. This is considered a significant impact, and no feasible mitigation has been identified (page 4.9-68 of the Draft EIR/EIS). Otherwise, the comment refers specifically to alternatives, information, and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-68

Comment Summary: The comment refers specifically to text and analyses in the 1991 document that pertain to altered salinity and alternative impacts to sensitive habitats.

The West County reservoirs and agricultural irrigation in the present project may affect salinity in the Estero Americano and Estero de San Antonio through subflow entering streams. This is considered a significant impact, and no feasible mitigation has been identified (page 4.9-68 and 4.9-78 through 4.9-79 of the Draft EIR/EIS). Otherwise, the comment refers specifically to alternatives, information, and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-69

Comment Summary: The comment refers specifically to the west county alternative as proposed in the 1991 document and impacts on the esteros from that alternative.

The current project does not include flow augmentation in Stemple or Americano Creek. The comment refers specifically to alternatives, information, and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the

proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-70

Comment Summary: The comment states that impacts to saltmarsh and eelgrass beds in the Estero de San Antonio due to increased outflows to Stemple Creek have not been specifically addressed in the 1991 document.

The Estero de San Antonio has not been observed to develop hypersaline conditions. Much of the wetland habitat along the estero is considered to be seasonal brackish marsh. In addition, approximately two acres of eelgrass beds has been identified within the Estero de San Antonio. This information is found on page 4.9-30 of the Draft EIR/EIS. No discharge to Stemple Creek is proposed for the present Project; that is an alternative presented in the 1991 document, and therefore, no further response is provided.

Response to Comment 2-71

Comment Summary: Concerning the 1991 document, the comment states that discharge of reclaimed water into San Pablo Bay would result in a reduction of salinity in the summer months, and that the effects should be investigated. In addition, there is concern about the potential conversion of salt marsh to fresh/brackish marsh and the bioaccumulation of metals.

The Project does not propose the discharge of reclaimed water into San Pablo Bay; the comment refers to an alternative proposed in the 1991 document. Refer as well to Master Response 10 concerning saline habitats, located in Section 6.2 of this document.

Response to Comment 2-72

Comment Summary: The comment refers to the discussion of cumulative impacts in the 1991 document and states that it is incomplete.

Cumulative impacts on flora and fauna have been evaluated in the Draft EIR/EIS. The comment refers specifically to alternatives, information, and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-73

Comment Summary: The comment states that the 1991 document does not provide sufficient information regarding compensation for Project impacts, and that acreage values and type of habitats to be created are not consistently stated within the document and the appendices.

Wetlands creation and the restoration and preservation of degraded wetlands are a part of Mitigation Measure 2.3.11: Sensitive Resource Conservation Program on pages 2-76

through 2-84 of the Draft EIR/EIS and will compensate for loss of wetlands acreage and function. Once a preferred alternative is selected, the delineation of wetlands and waters of the U.S. will be performed for the Final EIS. Acreage values and types of habitats to be created will be stated in the Final EIS.

Response to Comment 2-74

Comment Summary: The comment states that the 1991 Final EIS should define what is proposed as mitigation for Section 404 impacts for each alternatives and that the acreage and type of waters of the U.S. which are to be restored, enhanced, and created should be provided. In addition, the proponent should provide assurances about the proposed compensation.

Once a preferred alternative is selected for the Project, then a delineation, using Corps parameters, of acreages and types of waters of the U.S. that will be affected by the preferred alternative will be prepared. The results will be included in the Final EIS. Proposed compensation will be provided within the Final EIS as well. Refer also to Response to Comment 2-42 and to Master Response 11, located in Section 6.2 of this document.

Response to Comment 2-75

Comment Summary: The comment refers to proposed creation and restoration of wetlands or other habitat in the Laguna de Santa Rosa in the 1991 project.

The comment refers specifically to alternatives, information, and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-76

Comment Summary: The comment refers to proposed wetland creation and riparian restoration for the Stemple Creek watershed in the 1991 project.

The comment refers specifically to alternatives, information, and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-77

Comment Summary: The comment refers to the loss of 218 acres of wetlands in the 1991 proposed south county alternative due to reservoir construction.

Refer to Response to Comment 2-42 and to Master Response 11, located in Section 6.2 of this document.

Response to Comment 2-78

Comment Summary: The comment refers to the creation of fresh and brackish water wetlands in the Lakeville/Sears Point area in the 1991 project.

The comment refers specifically to alternatives, information, and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-79

Comment Summary: The comment refers to specifics about impacts and mitigation to wetlands in the 1991 document.

The comment refers specifically to information and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-80

Comment Summary: The comment refers to specifics about numeric figures in the 1991 document.

The comment refers specifically to information and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-81

Comment Summary: The comment refers to a table missing in the 1991 document.

The comment refers specifically to information and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-82

Comment Summary: The comment refers to a technical memo supporting the 1991 document.

The comment refers specifically to information and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-83

Comment Summary: The comment refers to a discrepancy between the 1991 document and an appendix.

The comment refers specifically to information and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-84

Comment Summary: The comment refers to a specific omission in an appendix of the 1991 document.

The comment refers specifically to information and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-85

Comment Summary: The comment refers to specific flow projections for Americano Creek presented in the 1991 document.

The comment refers specifically to information and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-86

Comment Summary: The comment refers to the ocean disposal alternative proposed in the 1991 document.

The present Project does not propose an ocean disposal alternative. The comment refers specifically to information and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-87

Comment Summary: The comment refers to the ocean disposal alternative proposed in the 1991 document.

The present Project does not propose an ocean disposal alternative. The comment refers specifically to information and analyses in the 1991 Santa Rosa Wastewater Reclamation System Draft EIS, which do not pertain to the proposed Project or the present Draft EIR/EIS. No further response is, therefore, provided.

Response to Comment 2-88

Comment Summary: The comments states that the 1991 Draft EIS lacks a conformity determination pursuant to the provisions of Section 176 of the amended Clean Air Act.

The Draft EIR/EIS for the present Long-Term Project has evaluated air pollutants in accordance with requirements of the two affected air districts. Each air district is responsible for implementing the Clean Air Act, including any specific implementation plans which Section 176 refers to. The evaluation of pollutants indicates significant construction-related impacts as detailed on pages 4.12-14 through 4.12-35.

Response to Comment 2-89

Comment Summary: The comment states that while the 1991 Draft EIS includes a list of five tests provided by the Bay Area Air Quality Management District, no evaluation is provided, nor are the tests a substitute for the requested conformity determination.

Refer to Response to Comment 2-88.

Response to Comment 2-90

Comment Summary: The comment states that the 1991 Draft EIS should include a health risk assessment addressing impacts from increases in air pollutants at the plant.

The Draft EIR/EIS for the present Long-Term Project evaluates increases in air pollution due to greater throughput at the Laguna Plant, including the results of a health risk assessment, on pages 4.12-15 through 4.12-19.

Response to Comment 2-91

Comment Summary: The comment states the EPA's concerns for air quality impacts related to increased "vehicle miles traveled" within the affected region due to the expansion of project facilities. The EPA also encourages the affected communities to consider trip reduction ordinances to address mobile sources air emissions.

The current Project has been designed to accommodate the buildout of the General Plans of the subregional member entities (as adopted in April, 1994). As such, the Project is growth accommodating, not growth inducing. Growth inducing impacts are discussed in Chapter 5.3 of the Draft EIR/EIS.

Response to Comment 2-92

Comment Summary: The comment states that secondary impacts from growth-inducement should be addressed in the cumulative impact analysis of the 1991 Draft EIS.

The current Project is defined as the expansion of sewage treatment facilities sufficient to meet the needs of buildout as defined by the general plans of the Subregional System

member entities, as adopted in 1994. As such the Project is growth accommodating rather than growth inducing. In addition, reasonably foreseeable past, present, and future cumulative projects are defined in the Project Description, page 3.5-1 through 3.5-4, listed in Appendix D-31, and evaluated at the end of each impact section in Chapter 4.

Response to Comment 2-93

Comment Summary: The comment states that the 1991 Draft EIS should address secondary and cumulative impacts of urban run-off and erosion, increases in stationary sources and vehicle traffic, and increased demands on wildlife habitat.

In the current Draft EIR/EIS, each of these issues has been analyzed under the cumulative impact section at the back of each section of Chapter 4.

Note: Responses to Comments 2-94 through 2-113 are provided in response to the May 25, 1994 letter to Ross Liscum from Jeff Rosenbloom concerning the Scoping Report for the present Long-Term Project, and referenced in Comment 2-4. A copy of this letter is included in the Replacement Pages for Appendix V, contained in Section 6.6 of this document.

Response to Comment 2-94

Comment Summary: The comment states that the EPA offers comments based on its understanding of the alternatives presented in the March 1994 Screening Report, discussions with the Technical Review Group, review of materials, and discussions with state and federal agencies.

The comments provided by the EPA staff concerning the Screening Report were considered in preparing the Draft EIR/EIS.

Response to Comment 2-95

Comment Summary: The comment states that the EPA's involvement in the Project stems from the regulatory responsibilities under the Clean Water Act and the National Environmental Policy Act.

The comment is a statement of the regulatory responsibilities of the EPA. No response is required.

Response to Comment 2-96

Comment Summary: The comment suggests an approach for screening of alternatives to select those to be evaluated in the EIR/EIS.

Dr. Connor's comments on screening of alternatives were made to the City in 1994, and were considered in the selection of alternatives that have been evaluated in the Draft EIR/EIS.

Response to Comment 2-97

Comment Summary: The comment states that water conservation and reuse should be a high priority and that all of the Draft EIR/EIS alternatives should include components of conservation and reuse.

Refer to Response to Comment 2-5. All alternatives include components of conservation and reuse/recycling.

Response to Comment 2-98

Comment Summary: The comment states that water conservation reduces environmental impacts by lowering the demand for freshwater as well as lowering the volume of wastewater for treatment.

Refer to Response to Comment 2-5.

Response to Comment 2-99

Comment Summary: The comment recommends a 35% level of conservation and states that by using graywater systems, composting toilets, a standard retrofitting program, and requirements for new construction, it may be possible to achieve greater conservation levels.

Refer to Responses to Comments 2-5 and 2-11.

Response to Comment 2-100

Comment Summary: The comment states that increased water conservation in the Subregional System services area will require establishment of major water conservation programs in Santa Rosa and other communities.

The City of Santa Rosa demonstration program referenced in the 1994 letter has since been significantly expanded, and the City's full-scale retrofit program is described in Appendix D-3 (Water Conservation Element). Appendix D-3 also describes programs of the other Subregional System members. Refer also to Response to Comment 2-117.

Response to Comment 2-101

Comment Summary: The comment supports agricultural irrigation because of the strong reuse component. The comment urges protection of wetlands and other habitats from adverse affects of irrigation with reclaimed water.

Refer to Response to Comment 2-6.

Response to Comment 2-102

Comment Summary: The comment states that wetland creation should occur only if existing wetlands are not adversely affected.

Refer to Response to Comment 2-7.

Response to Comment 2-103

Comment Summary: The comment states that conversion of salt marsh to brackish wetlands because of the discharge of treated effluent should be avoided.

Refer to Responses to Comments 2-8 and 2-21.

Response to Comment 2-104

Comment Summary: The comment states that the West County alternative could adversely affect sensitive habitats and resources in the creeks, the Esteros, and the Gulf of the Farallones National Marine Sanctuary.

Refer to Response to Comment 2-20.

Response to Comment 2-105

Comment Summary: The comment notes that the U.S. EPA has an oversight role in regard to the North Coast Regional Water Quality Control Board's potential approval of any increased discharge to the Russian River.

Refer to Response to Comment 2-12.

Response to Comment 2-106

Comment Summary: The comment recommends that the City of Santa Rosa pursue water conservation and reuse as the primary methods of addressing wastewater.

The Draft EIR/EIS authors concur that conservation and reuse are important elements of the Project. Refer to Response to Comment 2-5.

Response to Comment 2-107

Comment Summary: The comment states that wetland creation and stream flow augmentation should be undertaken with utmost caution.

Neither of these components is included in the current Project.

Response to Comment 2-108

Comment Summary: The comment states appreciation at providing comments and to future participation in Project decisions.

The EIR/EIS authors appreciate the EPA's comments.

Response to Comment 2-109

Comment Summary: The comment introduces points to consider about aspects of procedure in the process of picking alternatives to study.

The points to consider are addressed in Responses to Comments 2-110 through 2-113.

Response to Comment 2-110

Comment Summary: The comment states that alternatives should be structured so that they can handle more than the expected wastewater generation, so that an alternative would not be disqualified if one component is determined to be infeasible.

Refer to Response to Comment 2-96. Because alternatives are structure to allow mixing and matching of components, the aim of the comment has been achieved. For example, a variety of discharge rate options has been studied, and can be matched with other feasible components to achieve the required wastewater capacity.

Response to Comment 2-111

Comment Summary: The comment suggests a mix and match approach, and recommends elements to be included in a South County Alternative.

As discussed in Response to Comment 2-110, a mix and match approach has been used. The South County Alternative described in the Project Description includes conservation, Russian River discharge at 1%, agricultural irrigation with a wide variety of geographic areas, urban irrigation, and four reservoir sites. Aquifer storage and recovery and streamflow augmentation were included in a project alternative, but, as discussed in Responses to Comments 2-119 and 2-120, are no longer part of the Project. Wetlands creation was also eliminated from consideration. The reasons for elimination of wetlands creation are discussed on page 16 of Appendix D-6 (Documentation in Support of the Elimination of Alternatives) of the Draft EIR/EIS.

Response to Comment 2-112

Comment Summary: The comment expresses concern that if mixing and matching is not possible, viable alternatives may be rejected because of a single fatal flaw.

Refer to Response to Comment 2-110 and 2-111. A mix and match approach has been used, and while individual components have been eliminated if they were determined not to be feasible, there are still a wide array of viable options under consideration.

Response to Comment 2-113

Comment Summary: The comment urges flexible alternatives to maximize the chances of finding the best solutions and to blunt potential criticisms of the process.

The comment states an opinion about alternatives and components. Refer to Master Response 2, located in Section 6.2 of this document.

Note: Responses to Comments 2-114 through 2-120 are provided in response to the July 20, 1994 letter to Dan Carlson from Nancy Yoshikawa concerning the Scope of Work for the Scope of Work for the Long-Term Project Draft EIR/EIS and referenced in Comment 2-4. A copy of this letter is included in the Replacement Pages for Appendix V, contained in Section 6.6 of this document.

Response to Comment 2-114

Comment Summary: The comment states that comments on the scope of work for the Project will be forthcoming from various staff members of the EPA.

The comment is introductory in nature and does not require a response.

Response to Comment 2-115

Comment Summary: The comment states that water conservation should be a high priority for addressing Santa Rosa's wastewater needs since it reduces adverse environmental impacts.

This comment was addressed in Response to Comment 2-5.

Response to Comment 2-116

Comment Summary: The comment states concern about the water conservation portion of the Draft Scope of Work. Specifically, the term "standard conservation" in the Draft Scope of Work should be defined as the maximum conservation achievable using current programs and technologies that have been shown to be successful.

This comment on the Draft Scope of Work has been addressed in the Draft EIR/EIS. On pages 3.2-3 and 3.2-4 of the Draft EIR/EIS, the water conservation programs in use by the Santa Rosa Subregional Water Reclamation System are described. These programs include water auditing, conservation fixtures law enforcement, metering of water services, and rebate and retrofit programs. In addition, the Santa Rosa Board of Public Utilities has formed a Technical Committee to evaluate developing water conservation technologies and bring recommendations to the Board as these technologies become

practicable. Water conservation information and education are provided by the Sonoma County Water Agency to its customers to promote voluntary customer conservation.

Response to Comment 2-117

Comment Summary: The comment states that the costs and benefits of an aggressive retrofit program should be evaluated.

The City of Santa Rosa has an aggressive water conservation program centering around retrofit, which is described in detail in Appendix D-3 (Water Conservation Element) and summarized in the Draft EIR/EIS on page 3.2-3. Costs and benefits of various conservation technologies are addressed in Appendix D-3. Conservation programs are financed by the City of Santa Rosa.

Response to Comment 2-118

Comment Summary: The comment suggests that the Scope of Work be revised to reflect concerns about water conservation and pollution and states that the water conservation findings in the Draft EIR/EIS will be examined closely.

Refer to Responses to Comments 2-5 and 2-116.

Response to Comment 2-119

Comment Summary: The comment states that impacts of flow augmentation on flooding should be evaluated.

Stream flow augmentation is no longer proposed as an element of the project. However, the impacts of discharge options on flooding are evaluated in the Section 4.4, Surface Water Hydrology, of the Draft EIR/EIS. The reasons for elimination of stream flow augmentation are discussed on page 11 of Appendix D-6 (Documentation in Support of the Elimination of Alternatives) of the Draft EIR/EIS.

Response to Comment 2-120

Comment Summary: The comment offers assistance in evaluation of aquifer storage and recovery.

The EIR/EIS authors appreciate the EPA's offer of assistance. However, Aquifer Storage and Recovery (ASR) is no longer proposed as a project component. The reasons for elimination of ASR are discussed on page 21 of Appendix D-6 (Documentation in Support of the Elimination of Alternatives) of the Draft EIR/EIS.