

COMMENT LETTER 132 - TOM YARISH (OCTOBER 6, 1996), RECEIVED OCTOBER 7, 1996

Response to Comment 132-1

Comment Summary: The comment describes the organization of the Friends of the Esteros comments submitted by the Co-Chair and notes that the comments address deficiencies or inadequacies in the Draft EIR/EIS that must be resolved. The comment also states that it incorporates by reference all previous testimony and commentary.

Specific concerns were expressed in subsequent comments and these comments are addressed specifically in the Responses to Comments below. Responses cannot, however, be provided to the previous testimony and commentary.

Response to Comment 132-2

Comment Summary: The comment says that the EIR/EIS “fails to discuss cumulative impacts of reclaimed water when released, irrigated, or accumulated in specific aquifers, waterways, storage sites and habitats where the wastewater constituents may be accumulated, magnified, synergized, or combined.”

Cumulative water quality impacts are discussed on pages 4.6-130 through 4.6-148 of the Draft EIR/EIS, and cumulative biological impacts such as bioaccumulation and synergies are considered on pages 4.9-90 through 4.9-91 of the Draft EIR/EIS. Discharge, irrigation and storage impacts are considered in these cumulative impacts sections.

Response to Comment 132-3

Comment Summary: The comment raises concerns about potential estrogenic effects of reclaimed water, and states that the Draft EIR/EIS ignores potential interactions in reclaimed water and their effects on receiving waters.

Refer to Master Response 9, located in Section 6.2 of this document, regarding endocrine disrupters.

Response to Comment 132-4

Comment Summary: The comment asks for evaluation criteria and points of significance for short- and long-term impacts of pollutants. The comment also asks how the points of significance were determined.

Short- and long-term impacts of pollutants are evaluated in Sections 4.6 (Water Quality), 4.7 (Human Health) and 4.9 (Aquatic Life) of the Draft EIR/EIS. The evaluation criteria, points of significance and the justification are described in each of these sections. Additional justification is provided in Appendices I-12 (Development of Evaluation

Criteria for Potential Water Quality Impacts) and K-3 (Biological Resources, Volume III) of the Draft EIR/EIS.

Response to Comment 132-5

Comment Summary: The comment states that reclaimed water that would be irrigated contains pollutants and that these pollutants can combine with pollutants already in West County watersheds.

Existing conditions were considered in all analyses. Background conditions are described, and methods used to evaluate the effect of irrigation on existing conditions are described in Appendices E-2, E-3, E-4, E-5, E-6, E-7, H-1, H-5, I-1, I-2, I-3, I-10, I-11, and I-16 of the EIR/EIS.

Response to Comment 132-6

Comment Summary: The comment indicates that the Draft EIR/EIS must answer the questions posed in comments 132-4 and 132-5 in the Friends of the Esteros letter prior to proposing any credible mitigations, and mitigations must be identified and fully described prior to any credible cost estimates.

Refer to Responses to Comments 132-4 and 132-5. A detailed mitigation program is presented in Chapter 2 of the Draft EIR/EIS, and costs of mitigations are included in cost estimates, both as line items and as part of the cost contingency.

Response to Comment 132-7

Comment Summary: The comment indicates that the regulatory, agricultural, educational, monitoring, and enforcement mitigations presented in the Draft EIR/EIS are “mere project-based programs and implementations” described without any sense of long term commitment, funding, or viability.

The Mitigation and Monitoring Program for all Santa Rosa Subregional Long-Term Wastewater Project is presented on pages 2-1 through 2-144 of the Draft EIR/EIS. For each mitigation measure, the Program identifies the affected alternatives and/or components, the implementing and monitoring agencies, the duration of the monitoring (in many cases coincident with the life of the Project), and the validation criteria. The monitoring results are to be documented through completion of Verification reports by the in-field monitor, responsible agency, or construction manager, and completion of quarterly Mitigation Monitoring Checklists by the City of Santa Rosa.

By State law, the City is required to implement applicable portions of the adopted Mitigation and Monitoring Program. Mechanisms for funding implementation of the Mitigation and Monitoring Program include sewer user charges for wastewater disposal system operation and maintenance.

Response to Comment 132-8

Comment Summary: The comment states that the EIR/EIS lacks a consideration of the combined effects of reclaimed water discharges to the Russian River and other factors such as agriculture, nonpoint source discharges, highway runoff, leaking septic systems and large upstream municipal discharges.

The effect of these other water quality factors is considered in the EIR/EIS in the analysis of Project impacts and in the cumulative impacts analysis. In the Project impacts analysis, the effect of agriculture, nonpoint source discharges, highway runoff, leaking septic systems and large upstream municipal discharges are each included in the characterization of existing conditions, and the incremental effect of Project alternatives is evaluated. The cumulative impact analysis uses the same inclusive characterization of existing conditions and considers future changes such as increases in other wastewater discharges, changes in agricultural pollutant loads, and changes in urban pollutant loads. The description Project and cumulative impacts analyses is provided respectively on pages 24 and 157 in Appendix I-16 (Water Quality Impact Analysis Report Volume I - Text) of the Draft EIR/EIS.

Response to Comment 132-9

Comment Summary: The comment states that project costs for Russian River discharge are not accurate because mitigation to provide advanced water treatment at downstream water systems is not included.

The analysis in the Draft EIR/EIS has not identified any impacts on downstream water systems, so changes in treatment technology at those systems are not needed. Refer to Master Response 8, located in Section 6.2 of this document, for additional discussion of drinking water supplies.

Response to Comment 132-10

Comment Summary: The comment indicates that the growth projections presented in the Draft EIR/EIS were based on erroneous planning assumptions by the jurisdictions served by the project. The erroneous planning assumptions are evidenced by existing traffic congestion, air and water pollution, habitat loss, and endangered species, and the general degradation of the quality of urban and sub-urban living conditions.

As noted on page 3-1 of the Draft EIR/EIS, in preparing the growth projections, preference was given to the Member Entity General Plans over any other source. Environmental analysis conducted for adoption of those General Plans evaluated the impacts of growth. The Project accommodates those General Plans, but does not control growth in the Project area.

Response to Comment 132-11

Comment Summary: The comment indicates that the Draft EIR/EIS is flawed by its reliance on the myth that population growth and urban sprawl are necessary for real economic growth

Analysis presented in the Draft EIR/EIS supports the conclusion that a moratorium on growth will have negative economic impacts. Refer to page 4-18-52. The commentor has not submitted any evidence that suggests error in that conclusion.

Response to Comment 132-12

Comment Summary: The comment indicates that the Draft EIR/EIS fails to acknowledge the questionable bases for the growth projections presented therein, and “fails to analyze key elements of environmental degradation that will directly result from the completion of any one of the four alternatives that realize the regional growth projections.”

Refer to Response to Comment 132-10.

Response to Comment 132-13

Comment Summary: The comment states that proposals for large scale storage projects appear not to consider the compelling need for constant improvement in water conservation and recycling measures.

The Project includes a significant reduction in wastewater flow due to increased conservation. As described in Section 3.1 of the Draft EIR/EIS (page 3.1-5) and as presented in more detail in Appendix D-4 (Wastewater Flow Projections), the projected wastewater flow at buildout of the General Plans will be decreased from about 26 million gallons per day (mgd) to 21 mgd due to conservation measures incorporated in the Project. Even with additional conservation, however, there will still be a need for major new facilities to meet projected demand. Appendix D-3 (Water Conservation Element) of the Draft EIR/EIS, which considers the potential additional reduction in wastewater under a Maximum Conservation scenario, concludes that the wastewater flow at buildout would be reduced only from 21 mgd to 20 mgd.

Response to Comment 132-14

Comment Summary: The comment indicates that the Draft EIR/EIS fails to adequately present the negative growth inducing impacts resulting from construction of project components such as the Two Rock/Button Ranch dam which has the “capacity to serve unlimited growth in the urban corridor”.

Growth inducing impacts are addressed on pages 5-3 through 5-13 of the Draft EIR/EIS. As noted on pages 5-8 and 5-9 of the Draft EIR/EIS, the estimated employment, population, and housing demand increases and decreases for each alternative are presented in Table 5.3-3. Although for Alternative 3A - Two Rock, the estimated

increase in population resulting from the Project is 5,790, the Draft EIR/EIS concludes that none of the Project alternatives are growth inducing. Refer also to Response to Comment 132-10.

Response to Comment 132-15

Comment Summary: The comment asks what is the Draft EIR/EIS rationale for continued urban expansion within the project service area and what rationale was used to isolate the Draft EIR/EIS from the adverse effects of urban expansion.

Whatever urban expansion of the member entities of the Subregional System is projected for the study period is derived from the General Plans of those communities in effect as of April, 1994. Each community has its own rationale for the growth estimates it developed in its General Plan. Each of these General Plans has already been subject to environmental review when it was prepared, so there is no need to again evaluate the potential environmental effects of growth for these communities.

Growth inducing impacts of the Long-Term Project are addressed on pages 5-3 through 5-13 of the Draft EIR/EIS. As noted on pages 5-8 and 5-9, the estimated employment, population, and housing demand increases and decreases for each alternative are presented in Table 5.3-3. The basis for the Draft EIR/EIS conclusion that none of the Project alternatives are growth inducing is presented on pages 5-8 through 5-13.

Response to Comment 132-16

Comment Summary: The comment suggests that reservoir-induced seismicity is a potentially significant impact of the project, and cites an evaluation by Dr. Kojan.

This issue is discussed on page 4.3-72 of the Draft EIR/EIS. The conclusion is that even the largest reservoir proposed by this Project will not create enough pressure to result in induced seismicity. Dr. Kojan makes no comments about reservoir-induced seismicity. Refer to Responses to Comment Letter 110 for specific responses to each of Dr. Kojan's comments.

Response to Comment 132-17

Comment Summary: The comment requests an analysis of cumulative induced seismicity impacts in the vicinity of Two Rock reservoir.

The reservoirs proposed as part of this Project will be too small to cause seismic activity. Therefore, no cumulative induced seismicity impacts could result.

Response to Comment 132-18

Comment Summary: The comment states that induced seismicity from storage reservoirs threatens water quality and soil stability.

As described in the response to comment 132-17, storage reservoirs of the size proposed in the Project do not induce seismicity.

Response to Comment 132-19

Comment Summary: The comment suggests that the Bloomfield fault should not be discounted as a source of earthquake activity.

The Draft EIR/EIS does not discount the possibility of activity on older, local faults. While the Bloomfield fault is not considered a fault rupture hazard because it is not zoned under the Alquist-Priolo Act (refer to Evaluation Criterion 2 in Table 4.3-6 on page 4.3-54), the design of any reservoir built in the vicinity of the fault will include an evaluation of the maximum expected ground acceleration that could be produced by rupture of the fault. The ground shaking will be less than for a large earthquake on the San Andreas or Rodgers Creek fault. Refer also to Response to Comment 89-3.

Response to Comment 132-20

Comment Summary: This comment asks "What is the potential for induced seismicity in the West County Alternative?"

As indicated in the discussion of Impact 3.5.4 on page 4.3-72 of the Draft EIR/EIS, there will be no induced-seismicity impacts at any of the reservoir sites. Refer also to Response to Comment 132-16.

Response to Comment 132-21

Comment Summary: The comment suggests that groundwater contribution from operation of a reservoir at the Two Rock site could affect the Sonoma County Landfill.

The comment refers to information that suggests that increased hydrostatic pressure could cause leachate to percolate out of the landfill. It is not possible to respond to this hypothesis because a source for this information is not provided. The groundwater analysis has shown that the reservoir will not affect the landfill. Refer to Response to Comment 95-21.

Response to Comment 132-22

Comment Summary: The comment refers to inadequacies in the EIR/EIS identified by Dr. Kojan.

Dr. Kojan's comments pertain to earthquake-induced landsliding. Refer to Responses to Comment Letter 110 for specific responses to each of Dr. Kojan's comments.

Response to Comment 132-23

Comment Summary: This comment states that costs for specific geologic mitigation are not provided, but if they were, they would likely show the cost infeasibility of a West County Alternative.

The Draft EIR/EIS evaluates the potential environmental impacts of the proposed Project. Preliminary cost analysis, including cost of mitigation, has shown that each alternative is feasible.

Response to Comment 132-24

Comment Summary: The comment asks "What specific assurance can be given that seismic activity and/or hydrostatic pressure will not increase the level of leachate from the landfill."

Refer to Response to Comment 95-21.

Response to Comment 132-25

Comment Summary: The comment requests consideration of a joint project with the City of Petaluma.

Refer to Response to Comment 38-8.

Response to Comment 132-26

Comment Summary: The comment requests consideration of a phased project with public/private investments, support for the most productive use of irrigation, avoidance of condemnation of agricultural properties, protection of the Russian River.

Refer to Master Response 14, located in Section 6.2 of this document, regarding a phased Project. While the City of Santa Rosa would prefer not to condemn agricultural properties for storage reservoirs, it is not clear whether storage can be constructed without condemnation. The water quality analysis presented in the Draft EIR/EIS has determined effects of discharges to the Russian River and developed mitigation measures to protect beneficial uses. Support for minimal Russian River discharge and productive use of agricultural irrigation is an opinion regarding Project selection, which will occur after the EIR has been certified. Refer to Master Response 2, located in Section 6.2 of this document, regarding Project selection.

Response to Comment 132-27

Comment Summary: The comment states that the EIR/EIS "give little specific information or detail related to protective measures and mitigations" for Estero impacts.

Measures that reduce Project impacts on the Sanctuary include Measures 2.2.1 through 2.2.12, 2.5.1 2.5.2, and 2.5.3. The descriptions of the specified mitigations include specific performance standards and documentation of feasibility. The criterion for the Sanctuary calls for no change, either positive or negative. Potential mitigation was considered (and found to be infeasible) on page 223 in Appendix I-16 (Water Quality Impact Analysis Report Volume I - Text) of the Draft EIR/EIS.

Response to Comment 132-28

Comment Summary: The comment states that irrigation runoff and pollution threatens the Sanctuary and that because impacts are not fully mitigated, the Draft EIR/EIS is inadequate in its description of protections and mitigations.

The Draft EIR/EIS identifies subsurface irrigation drainage and reservoir seepage as causes of impacts on the Sanctuary. Impacts will also result from the reduction in manure load entering the Sanctuary. The comment is correct that impacts on the Sanctuary are not fully mitigated. The principal purpose of the EIR/EIS is to analyze and describe potential impacts and identify feasible mitigation to eliminate or reduce them. Reporting that certain impacts may not be mitigable does not diminish the adequacy of the EIR/EIS.

Response to Comment 132-29

Comment Summary: The comment indicates that the Draft EIR/EIS is inadequate in its descriptions of protections and mitigations and related long term costs of operation, management, enforcement, and liability, and asks why, due to these costs, the West County project alternative should not be identified as economically unfeasible?

The Mitigation and Monitoring Program the Santa Rosa Subregional Long-Term Wastewater Project, is presented on pages 2-1 through 2-144 of the Draft EIR/EIS. This Program describes each mitigation measure and identifies the affected alternatives and/or components, the implementing and monitoring agencies, the duration of the monitoring (in many cases coincident with the life of the Project), and the validation criteria. Over seventy mitigation measures are described, including operation and maintenance measures.

Project costs (including costs for protections and mitigations) used for analysis are presented in Table 4.18-10 on page 4.18-24 of the Draft EIR/EIS and in Appendix D-30 (Alternative Projects Construction Cost Estimate) of the Draft EIR/EIS. With respect to eliminating of West County Reclamation Alternative from consideration due to unfeasibility, refer to Master Response 2, located in Section 6.2 of this document, which addresses Project selection. Refer also to Response to Comment 5-9.

Response to Comment 132-30

Comment Summary: The comment asks why the West County project alternative should not be explicitly disqualified or deselected because of the potential adverse environmental impacts (e.g. irrigation induced runoff and pollutant discharges to the coastal sanctuaries and esteros)?

Refer to Response to Comment 5-9.

Response to Comment 132-31

Comment Summary: The comment indicates that the Draft EIR/EIS is inadequate or deficient since it fails to describe, quantify, and cost-estimate the long-term agricultural management practices, operations, and mitigations required to protect the environment in perpetuity.

The Mitigation and Monitoring Program for the Santa Rosa Subregional Long-Term Wastewater Project, is presented on pages 2-1 through 2-144 of the Draft EIR/EIS. The Program identifies a number of agricultural management practices and operations and management measures including Measure 2.2.1: Irrigation Conservation and Management Programs and Mitigation Measure 2.5.6: Total and Ammonia Nitrogen Source Control Program (refer to pages 2-21 and 2-131 respectively in the Draft EIR/EIS).

For each mitigation measure, the Mitigation and Monitoring Program identifies the affected alternatives and/or components, the implementing and monitoring agencies, the duration of the mitigation activity (in many cases coincident with the life of the Project), and the validation criteria. The over seventy mitigation measures described include measures incorporated as part of the Project, planning measures, construction measures, and operation and maintenance measures. Completion of the specific tasks is to be documented through preparation of Verification reports by the in-field monitor, responsible agency, or construction manager, and preparation of quarterly Mitigation Monitoring Checklists by the City of Santa Rosa. Costs of mitigation are included in the cost estimate, either as specific line items, or as part of the overall cost contingency. Timing of the mitigation measure and monitoring is also indicated for each mitigation measure. Many are related to design and construction and will not need further monitoring after completion of construction; other measures are specified for monitoring throughout the life of the Project.

Response to Comment 132-32

Comment Summary: The comment expresses the opinion that irrigation management measures are lacking in specifics and commitment.

Measures 2.2.1 through 2.2.7 on pages 2-21 and 2-36 provide details of the measures that are proposed to assure appropriate management of irrigation. The City is committed to implementing all of these measures, which are included as part of the Project.

Enforcement will include cessation of delivery of Project water, enforceable under terms of the City's water delivery contract with each irrigator, if appropriate management practices are not followed. Refer also to Response to Comment 132-7.

Response to Comment 132-33

Comment Summary: The comment states that the analysis of “sediment carrying capacity of waters released either through direct discharge or through irrigation projects” is inadequate.

Streambed erosion due to streamflow changes resulting from agricultural irrigation and direct discharge is addressed on pages 4.4-28 and 4.4-30 of the Draft EIR/EIS, respectively. The analysis of erosion due to streamflow changes is based on accepted relationships of hydraulics and sediment particle size. Erosion due to irrigation is addressed in Appendix D-19 (Irrigation Management Guidelines for the West County and South County Alternatives), and in Measure 2.2.4: Restrict Soil Erosion and Sediment Movement on page 2-26 of the Draft EIR/EIS, where recognized practices for erosion prevention are described. The comment is not specific as to how the evaluation is inadequate.

Response to Comment 132-34

Comment Summary: The comment indicates that the Draft EIR/EIS is inadequate or deficient since hundreds of West County property owners and ranchers representing a large portion of the designated irrigation areas are opposed to a West County project.

Public acceptance or opposition are not relevant factors in deciding which alternatives to study under either the CEQA or NEPA process. The feasibility of the West County Reclamation alternative is addressed in Master Response 6, located in Section 6.2 of this document.

Response to Comment 132-35

Comment Summary: The comment asks how West County agriculture could compete with other areas in range and value of agricultural products?

The Draft EIR/EIS has determined that irrigated agriculture can be economically viable in West County. Refer to page 4.18-38 for a discussion of increased value of agricultural production. It is not clear why West County will need to outcompete other areas to remain a viable area for irrigated agriculture.

Response to Comment 132-36

Comment Summary: The comment states that “cumulative nutrient and pollutant loading in the jurisdiction of the Sonoma County Water Agency may require additional treatment.”

Nitrogen is the only algal growth nutrient that is regulated in drinking water. The analysis in Section 4.7 and Appendix J-3 (Human Health Risks from Chemical and Biological Components of Reclaimed Water) of the Draft EIR/EIS shows that the impact on nitrogen and other pollutants in drinking water supplies is less than significant and that no additional treatment or removal will be needed. The effect of pathogens on the need for additional treatment facilities is addressed in the Response to Comment 14-6 and in Master Response 8, which is located in Section 6.2 of this document.

Response to Comment 132-37

Comment Summary: The comment states that the project and cumulative impacts analysis on the Russian River in Section 4.6 and 4.7 are inadequate because “statistical averaging, short-term acute mortality fish studies, and controversial water quality models are inadequate measures of long-term and cumulative impacts.”

The comment is not specific about the nature of the alleged inadequacies, and provides no substantiation that the methods are inadequate. Averages were used to summarize and evaluate some data, and all data used to derive average values is included in the Draft EIR/EIS. Use of average reclaimed water quality values to evaluate impacts is addressed in Response to Comment 85-200. Receiving water quality data were averaged over periods consistent with water quality regulations upon which evaluation criteria and points of significance were based (e.g. monthly average for conductivity). Short-term acute toxicity tests were not used to evaluate Project impacts; only sensitive life-stage chronic toxicity tests were used as described in Appendix H-3 (Reclaimed Water Quality Update) of the Draft EIR/EIS. Water quality models were used to evaluate Project impacts in West County esteros and the Russian River. The estero water quality model is described in Appendix I-11 (Water Quality and Flow Model for Irrigation/Storage Area Streams) and the Russian River model in Appendix I-8 (Russian River Water Quality Model) of the Draft EIR/EIS. Also refer to Master Response 5, located in Section 6.2 of this document. In the absence of a specific criticism of the models, no further response is possible.

Response to Comment 132-38

Comment Summary: The comment asks what is being done to protect “downstream users and biology” from long-term adverse cumulative impacts of known pollutants.

The EIR/EIS authors do not agree that there will be adverse health impacts from known pollutants to human users of the Russian River downstream of the proposed discharge. Based on our findings in Section 4.7 and Appendix J-3 (Human Health Risks from Chemical and Biological Components of Reclaimed Water) of the Draft EIR/EIS, no protective (mitigation) measures are required for human health impacts. Section 4.9 of the Draft EIR/EIS concluded that the Project alone will not present a significant ecological risk to aquatic biota, but found that there is a potential for a significant cumulative impact (refer to page 4.9-90). Thus Measure 2.4.16: Ecological Risk Monitoring and Source Control, is proposed to collect additional toxicity data, refine the

ecological risk assessment, and control sources of aluminum if a problem is confirmed (refer to page 2-119 of the Draft EIR/EIS).

Response to Comment 132-39

Comment Summary: The comment is a statement regarding the ability of the public to review the complete Draft EIR/EIS.

The availability and cost of the Draft EIR/EIS are addressed in Master Response 3, located in Section 6.2 of this document

Response to Comment 132-40

Comment Summary: With respect to the CD-ROM version of the Draft EIR/EIS, the comment indicates that since the index does not work for some keywords such as "landfill," some searches and references are problematic and uncertain. The comment further indicates that some charts and tables are nearly unreadable.

The EIR/EIS authors used the index provided in the CD-ROM version of the Draft EIR/EIS to search for the word "landfill" and the search listed 13 locations where "landfill" was used.

Also refer to Master Responses 3 and 1, located in Section 6.2 of this document.

Response to Comment 132-41

Comment Summary: The comment states that the format of the Draft EIR/EIS made it very difficult to evaluate specific alternatives because the alternatives are defined in generalized terms with insufficient detail for evaluation.

Refer to Master Response 1, located in Section 6.2 of this document, concerning organization of the document.