

COMMENT LETTER 102 - HOLLY GUSTAFSON (OCTOBER 6, 1996), RECEIVED OCTOBER 7, 1996

Response to Comment 102-1

Comment Summary: The comment is an introductory paragraph to the comments that follow in Comment Letter 102. The comment states that an environmentally sound project has not been presented in the Draft EIR/EIS.

Specific concerns were expressed in subsequent comments and these comments are addressed specifically in the Responses to Comments below.

Response to Comment 102-2

Comment Summary: The comment states that the length of the document makes it virtually impossible for anyone to review the whole document. Additionally, the printed version has no index. Furthermore, there are lists of references offered at the end of each section, but they are not footnoted to the statements that they support. Thus, it is impossible to verify facts presented in the Draft EIR/EIS. Lastly, many of the tables have labels that don't seem to related to each other or the figures contained therein. Tables 1-14 and 1-15 are provided as examples.

In reference to the comment related to the size of the document and time for review, refer to Master Response 4, located in Section 6.2 of this document. The Draft EIR/EIS provides a table of contents which is sufficient to allow the reader to navigate through the document and find pertinent sections or analysis that they may be particularly interested in. In addition, Chapter 1 of the Draft EIR/EIS provides an index of key issues to be resolved that directs the reader to the appropriate part of the Draft EIR/EIS for discussion of those issues (refer to pages 1-28 and 1-29). This index is in compliance with NEPA requirements, as approved by the United States Corps of Engineers, San Francisco Region. The Draft EIR/EIS CD ROM also provides a search function, which by entering a key word or phrase will provide a list of pages where the word or phrase appears. Refer to Master Response 1, located in Section 6.2 of this document, for a further response to document organization.

The comment which states that references provided at the end of each section are not "footnoted" to the statements that they support is technically accurate. However, it is not correct that statements in the text of the Draft EIR/EIS are not specifically referenced to supporting documentation. Each of the references found at the end of a section relates back to information or statements that are provided in the Affected Environment or Environmental Consequences section of that section and the specific reference is identified at the end of such information or statements. These references are therefore essentially citations and are formatted as such. Therefore, it is possible to verify the information provided in the Draft EIR/EIS by going back to these original references and reviewing the information which was referenced. For an example, see page 4.2-27 where

the following statement is found: “The National Research Council concludes that there is not evidence for adverse effect to livestock due to trace elements in feed from sludge-amended soils (National Research Council 1996)”. This citation leads the reader to the reference section for Section 4.2, where the complete reference is listed. The reference is not provided in a footnote, but is found directly in the citation in the text.

Lastly, Tables 1-14 and 1-15 are summary tables of information presented elsewhere in the Draft EIR/EIS. They are presented as part of the Introduction and Summary. However, the statement that the title of Table 1-14 is inappropriate is accurate

Therefore, the following change is made to the Draft EIR/EIS:

Page 1-58, Table 1-14. The title of Table 1-14 is revised as follows

~~Growth-Inducing Factors~~

Growth in Sonoma County Over the Life of the Project

The title of Table 1-15 is correct.

Response to Comment 102-3

Comment Summary: The comment asks if the growth that the project will allow is disclosed, if the build-out includes all annexations, includes County building projections, and how capacity will be controlled.

Population and housing projections are based on the subregional jurisdiction’s General Plans at buildout, using the General Plans in effect in April, 1994. The projections include annexations that are within the existing subregional general plans. Additional annexations would require an amendment to the existing general plans. A general plan amendment requires the appropriate environmental documentation under the California Environmental Quality Act (CEQA). Such a document would result in an analysis of impacts proposed annexations have on the subregional wastewater system.

The buildout projections utilized information from the counties of Sonoma, Marin, the Subregional Jurisdictions, California Department of Finance and the Association of Bay Area Governments.

The capacity of the Project to serve growth is controlled by the design capacity of 21 million gallons per day average dry weather flow (ADWF), which, as described above, is sized to serve the buildout of the General Plans of the Subregional System’s member entities. The Project does not provide capacity to serve any growth beyond that buildout.

Response to Comment 102-4

Comment Summary: The comment indicates that the implementation of the project will result in growth-inducement that has only been given passing treatment in the Draft EIR/EIS.

A discussion of growth-inducement is provided on pages 5-3 through 5-13 of the Draft EIR/EIS. In summary, this discussion indicates that the growth (i.e., buildout) that has been planned for by the Subregional System's member entities will be accommodated by the Project rather than induced by the Project. No significant growth beyond that planned for in the Subregional System's member entities' General Plans (adopted as of April 1994) is expected to occur as a result of implementing the Project. The Project will not provide "unlimited sewer capacity", but will only accommodate planned growth. Also, refer to Response to Comment 102-3.

Response to Comment 102-5

Comment Summary: The comment indicates that if both increased discharge and expanded irrigation are implemented, the project will result in growth-inducing impacts that have not been given adequate treatment in the Draft EIR/EIS.

The capacity of the Project is limited by the headworks expansion to an average dry weather flow (ADWF) of 21 million gallons per day (mgd). This is just enough to satisfy the treatment capacity required by the growth projections of the Subregional System's member entities' General Plans (adopted as of April 1994). Expansion of the capacity of the system beyond 21 mgd ADWF is not included in the Project, and would require supplemental environmental documentation. Thus the Project does not allow unlimited growth, but only serves to accommodate planned growth.

Response to Comment 102-6

Comment Summary: The comment states that government officials need to administer both water and wastewater programs and may be disinclined to support conservation if money can be made by selling water and charging for the treatment of the wastewater. The comment is in support of conservation measures.

The Project includes a substantial conservation program, which is described starting on page 3.2-3 of the Project Description. The Project objectives also include "wise use of water resources" (see page 1-3 of the Draft EIR/EIS).

Response to Comment 102-7

Comment Summary: The comments states that the project seems to emphasize the treatment and disposal of larger volumes of wastewater rather than diminishing the amount of wastewater produced, and suggests that conservation aspects need to be expanded. The comment also asserts that although low flow toilets and showers receive some attention, such appliances can save only relatively minor amounts of water.

As explained in Appendix D-4 (Wastewater Flow Projections) of the Draft EIR/EIS, the Project includes water conservation measures which will produce quantifiable, sustainable reductions in wastewater flow. For a discussion of additional or expanded conservation measures in relation to the Project, refer to Response to Comment 87-6. It should be noted that at buildout the projected reduction in wastewater flow through the system resulting from implementation of low flow toilets and showers as proposed in the Project is approximately 4.8 million gallons per day which is equal to 18 percent of the projected flow without implementation of conservation.

Response to Comment 102-8

Comment Summary: The comment suggests that if infiltration/inflow (I/I) into the sewage collection piping system were eliminated, the flowrate to be treated/disposed by the Subregional System would be significantly reduced, and that without I/I reduction, -the project cannot maximize its goal of conservation.

Elimination of all inflow/infiltration (I/I) is a desirable goal of all sewage collection systems. This is generally considered to be an impossible and prohibitively expensive task due to the need to continuously locate and dig up new leaks in the aging collection sewer system. Santa Rosa has an on-going program to reduce or stabilize I/I by identifying and repairing/eliminating leaks into the collection system. The City spends about 15 percent of its annual sanitary sewer operations and maintenance budget on this program. The other member entities in the Subregional System are contractually obligated to commit at least 5 percent of their annual sewer operations and maintenance budget on I/I reduction.

I/I reduction will not reduce storage volume requirements nor the maximum discharge rates. Storage volume and maximum discharge rates are controlled by the quantity of reclaimed water that is produced in dry years, and I/I does not significantly affect reclaimed water production in dry years. In years with large amounts of I/I, river flow is also high and there is typically no problem with discharge. For this reason, an I/I reduction program was not considered to be within the scope of the present Project.

The I/I issue is unrelated to the effectiveness of the potable water conservation program. The conservation program described in Appendix D-4 (Wastewater Flow Projections) does not require any reduction in I/I to be effective, and will reduce the amount of wastewater generated by approximately 18 percent at buildout.

Response to Comment 102-9

Comment Summary: The comment asserts that a greywater system has not received adequate investigation in the Draft EIR/EIS, and that various alternative toileting systems which handle solids at the source should be considered.

For a discussion of greywater and related alternative systems, refer to Master Responses 16 and 17, located in Section 6.2 of this document.

Response to Comment 102-10

Comment Summary: The comment asserts that with the way the alternatives are presented, it is not clear to the reader that two disposal methods are needed, one summer and one winter. The comment also states that this confusion is demonstrated by the chosen alternatives of Santa Rosa City Council candidates, referring to an article in a local newspaper, and that the EIR needs to explain specifically what each alternative involves. The comment finally states that the Santa Rosa City Council will make the final decision and should be fully informed.

The Project components are clearly identified in the description of alternatives in Section 3.1 of the Draft EIR/EIS (pages 3.1-21 through 3-27), and the components which comprise the alternatives are described in Section 3.3 of the Draft EIR/EIS. The statement that two disposal methods are needed for the Project is true only for Alternatives 2 and 3, and for these alternatives characterizing the disposal methods as “summer” and “winter” is an oversimplification. As explained in Section 3.1 of the Draft EIR/EIS (pages 3.1-10 through 3.1-15), discharge is allowed between October 1 and May 14, spanning fall, winter and spring, while irrigation may occur during any month of the year, depending upon weather conditions. Neither Alternative 4 nor Alternative 5 require two disposal methods. Alternative 4 relies on recharge of the Geysers Steamfield for disposal, while Alternative 5 relies on discharge to either the Russian River or the Laguna de Santa Rosa.

The Draft EIR/EIS addresses particular alternatives that were developed through a public process. The EIR/EIS authors have not evaluated alternatives that are not described in Section 3 of the Draft EIR/EIS, and are unable to comment on the particular alternatives offered by candidates for the Santa Rosa City Council. However, different alternatives espoused by candidates, as well as others, may reflect different perspectives on the problem and different priorities for a solution. One of the purposes of the Draft EIR/EIS is to inform decision-makers. All City Council members have received a copy of the Draft EIR/EIS and will also receive a copy of the Final EIR, and at the time of certification, they will be required to exercise their independent judgment and make their own independent determination whether the EIR is adequate and satisfies the requirements of law.

Response to Comment 102-11

Comment Summary: The comment suggests that aquifer storage and recovery (ASR) needs to be evaluated in this EIR/EIS if it is ever proposed to be implemented anywhere in the County.

Aquifer Storage and Recovery (ASR) is no longer part of the Subregional Long-Term Wastewater Project. A separate ASR project was considered by the City, but all work on ASR was recently halted pending selection of a Long-Term Project alternative. Depending on the selected alternative, additional storage for reclaimed water may or may not be needed, and an ASR project may be considered in the future. If ASR is proposed it would undergo separate environmental documentation. CEQA allows separate consideration of the two projects because they are separate and distinct actions. Implementation of an ASR project is not a second phase of the Subregional Long-Term Wastewater Project: selection of any particular Project alternative will not lead to the need for an ASR project.

Response to Comment 102-12

Comment Summary: The comment states that the topic of sludge production receives little discussion in the Draft EIR/EIS and that the long-term accumulations of sludge in the soil and sludge components in run-off should be investigated.

Impacts from the increased production of sludge at the Laguna Treatment Plant have been addressed in the Draft EIR/EIS, which concludes that odor in the vicinity of the Treatment Plant will be a significant impact (refer to page 4.12-18). Page 3.3-4 of the Draft EIR/EIS states that the impacts of disposing of the projected sludge production from increased volume of effluent because of the headworks expansion at the Laguna Plant are addressed in the Santa Rosa Subregional Sludge Beneficial Use Project Environmental Impact Report (LSA 1991). The application of sludge for agricultural use is not a component of the Santa Rosa Subregional Long-Term Wastewater Project. Refer to the LSA (1991) document for questions about sludge application.

Response to Comment 102-13

Comment Summary: The comment states that the deep pit digester in operation at St. Helena thoroughly destroys the sludge materials during treatment. The comment proposes that the Final EIR review the possibilities of this technique and search out any other methods that are applicable.

Refer to Response to Comment 102-12.

Response to Comment 102-14

Comment Summary: The comment states that plants can take up contaminants from wastewater and that wastewater should not be used to irrigate edible plants.

The EIR/EIS authors agree that some small portion of chemicals can be taken up by plants but do not agree that this uptake presents a significant human health impact based on our findings presented on pages 4.7-8 through 4.7-10 and in Appendix J-3 (Human Health Risks from Chemical and Biological Components of Reclaimed Water) of the Draft EIR/EIS. Appendix J-3 contains a discussion of the environmental fate of chemicals detected in wastewater, beginning on page A-1. In addition, the National Research Council's Water Science and Technology Board, which is administered jointly by the National Academies of Science and Engineering and the Institute of Medicine, has recently published a report, *Use of Reclaimed Water and Sludge in Food Crop Production* (referenced and discussed in Section 4.2 of the Draft EIR/EIS), that examines evidence for uptake of chemicals by plants from reclaimed water used for irrigation. The Water Science and Technology Board reviewed existing studies on the use of reclaimed water for irrigation of edible crops and concluded that toxic organics and inorganic trace elements in treated municipal wastewater effluents are either not transferred from soil to plant tissues or that translocation to edible tissues does not reach levels harmful to consumers under normal agricultural conditions.

Response to Comment 102-15

Comment Summary: The comment states that the final EIR should contain an extensive analysis of all crop materials receiving wastewater.

The EIR/EIS authors disagree that such a study is necessary based on the findings discussed in Response to Comment 102-14.

Response to Comment 102-16

Comment Summary: The comment requests evaluation of accumulative effects of irrigation on soils.

The requested evaluation is provided in the Draft EIR/EIS in Table 4.2-12 on page 4.2-25. Problems with accumulation in soils are not expected.

Response to Comment 102-17

Comment Summary: The comment states that new pathogens are being identified, and asks how can pathogen-free reclaimed water be assured. The comment states that the "final EIR should include much more disclosure about the 'new' pathogens, discuss detection problems and disallow wastewater use on edible crops."

The Draft EIR/EIS does not assure pathogen-free reclaimed water. The Draft EIR/EIS characterizes the change in risk due to exposure to reclaimed water under Project alternatives. State regulations specify treatment standards for reclaimed water that is to be used on edible crops, and Santa Rosa's reclaimed water meets the State standard for such use. Pathogens evaluated in the Draft EIR/EIS include coliform bacteria, heterotrophic bacteria, enteric viruses, *Giardia*, *Cryptosporidium*, *Legionella*,

Salmonella, and *Shigella*. Refer to Table 2 in Appendix H-2 (Reclaimed Water Quality), of the Draft EIR/EIS. These pathogens were selected because analytical methods are sufficiently well developed and because information exists about their abundance in various types of waters to evaluate the results. Impact significance is evaluated using coliform bacteria, *Giardia* and *Cryptosporidium*, as described in Master Response 8, located in Section 6.2 of this document. Coliform tests will detect *E. coli* 0157. *Cyclospora* is a bacterium, and bacteria are readily killed by chlorine and ultra-violet disinfection methods (as described in Master Response 8). Epidemics of Mad Cow and similar diseases result from recycling of slaughter house waste into animal feed, and the EIR/EIS authors are aware of no cases resulting from transmission through reclaimed water reuse. Other pathogens may be present in reclaimed water, some of which may not yet have been identified by microbiologists. Without analytical methods and background information, collection and interpretation of such data is not possible.

Response to Comment 102-18

Comment Summary: The comment requests consideration of "perfect purification of the wastestream".

While it is theoretically possible to make pure distilled water from wastewater, the cost is prohibitive, and the need for such high level of treatment has not been demonstrated. The Draft EIR/EIS has considered additional treatment to address impacts identified in the analysis. For instance, nitrate in reclaimed water that is discharged to the Laguna de Santa Rosa or Russian River will cause impacts on algae growth, so the potential for nitrate removal is discussed in Mitigation Measure 2.5.6: Total and Ammonia Nitrogen Source Control Program (page 2-131 of the Draft EIR/EIS). However, for agricultural irrigation, nitrate is a benefit, and can reduce reliance on fertilizer applications. Although perfect purification is not deemed to be necessary, the City of Santa Rosa has a New Technologies Committee, which will continually evaluate treatment methods and recommend improvements as appropriate. This process has resulted in the recommendation to proceed with conversion of the existing disinfection system, which uses chlorination, to ultraviolet light disinfection.

Response to Comment 102-19

Comment Summary: The comment requests that the Draft EIR/EIS specify the exact nature of the restrictions proposed to protect trees in agricultural irrigation areas.

Page 2-28 of the Draft EIR/EIS provides protective measures for sensitive biological resources, including "Protected trees as defined in the Sonoma County and Marin County tree ordinances", which covers valley oaks. Specific measures include prohibiting any activity within the dripline of protected trees and establishing a minimum 50-foot setback from irrigation application and a minimum 30-foot setback from new cultivation and construction around any identified sensitive plant species habitat.