

COMMENT LETTER 109 - MARIN CONSERVATION LEAGUE, PEGI KNOPP (OCTOBER 4, 1996), RECEIVED OCTOBER 7, 1996

Response to Comment 109-1

Comment Summary: This comment consists of an introductory paragraph. The comment also states that the maps provided in Chapter 1.6 are inadequate and do not clearly identify the project location or the alternatives and subalternatives.

Chapter 1 of the Draft EIR/EIS is an introduction to and summary of the Project, intended to provide an overview of the existing system and proposed alternatives; subsequently, it is brief and does not provide many specifics. Figures 1-5, 1-6, 1-7, 1-8, and 1-9 on pages 1-18 through 1-22 of the Draft EIR/EIS, therefore, are to provide a quick overview to orient the public. Figures 3.1-5, 3.1-6, 3.1-7, and 3.1-8 on pages 3.1-22 through 3.1-30 provide detailed maps depicting the components for each of the alternatives. Even more detailed maps are provided in Appendix D-32 (Alternative Projects Facilities Plan).

Response to Comment 109-2

Comment Summary: This comment requests additional information be added to the Irrigation Management Guidelines (ICMP) on the direct effects of irrigation with wastewater on slope areas and that the cumulative impacts arising from project induced erosion/sedimentation be added to the continuing erosion/sedimentation problems caused by turn of the century agricultural practices.

Direct erosion impacts of irrigation on slope areas are addressed in detail in Appendix E-7 (Evaluation of Soil Erosion Impacts for the West and South County Alternative).

The comment is correct in acknowledging ongoing soil erosion impacts, particularly gullyng from historic hillslope cultivation of potatoes and vegetable crops, and intensive livestock grazing during the 1880s-1920s. These past erosion impacts have formed the existing setting, which serves as the basis of the Project impact analysis. The soil erosion analysis anticipates reduced soil erosion over current and historic conditions through adoption of the ICMP, due to the following key provisions:

1. Moderately erosive soils and gullied lands will not be cultivated, but placed in a permanent cover (irrigated pasture). Steep slopes and erosive soils will not be irrigated.
2. Fall cover crops will be established by sprinkler irrigation on cultivated sloping lands to reduce early season rainfall erosion. Currently, fall seeded dry-farmed oat hay crops are susceptible to early season rainfall erosion.
3. Provisions will be made to heal eroding gullies and stream-courses, reducing sediment from these sources from current, historic conditions.

Response to Comment 109-3

Comment Summary: This comment discusses the importance of changes in pesticide usage that may occur with conversion of dry-land pasture to irrigated pasture or high-tech agriculture. The comment further states that the monitoring proposed for pesticides in Appendix D-19 (Irrigation Management Guidelines for the West County and South County Alternatives) is inadequate because it only consists of visual inspection.

Appendix D-19 (Irrigation Management Guidelines for the West County and South County Alternatives) of the Draft EIR/EIS contains a recommended monitoring program, which includes collecting surface water samples and analyzing them "for herbicides and pesticides that have been used on adjacent fields in the watershed" (refer to page 53). Actual monitoring requirements will be determined by the Regional Water Quality Control Board.

Response to Comment 109-4

Comment Summary: The comment states that impacts from landslide and gully erosion were not adequately addressed, and criticizes use of the Universal Soil Loss Equation (USLE).

Landslide and gully erosion are evaluated in the Draft EIR/EIS in the Section 4.3,. The first evaluation criterion in Table 4.3-6 (page 4.3-54) pertains to unstable slope conditions and includes landslides and other types of mass movement. Refer to Response to Comment 110-3 which provides a complete response regarding the landslide concerns.

The USLE does consider rilling. Other hill slope processes, such as gullying, landslides, debris flows, and other mass wasting processes, are most active and significant on disturbed steeper slopes, which typically have current expressions of instability in the form of gullies and active slides. These processes can be removed from the quantitative erosion analysis of agricultural practices because the Irrigation Conservation and Management Program (ICMP) places cropping restrictions on sloping and eroded/gullied lands most susceptible to these processes. For this Project, a permanent no-till cropping system employing a winter cover crop is generally required on slopes over 10% and gullied lands and eroded banks adjacent to irrigation areas will be stabilized. Irrigation is generally restricted on slopes steeper than 15%.

Thus, the USLE was not used to address landslide and gully erosion, but is an appropriate tool for the analysis of impacts of agricultural activities. The EIR/EIS authors acknowledged the limitations of the USLE on page 6 of Appendix E-7 (Evaluation of Soil Erosion Impacts for the West and South County Reclamation Alternatives). Most agricultural conservationists consider the USLE one of the best tools available to evaluate soil erosion impacts from agricultural activities, particularly when used to compare crop land conversion or evaluate conservation practices. This is how the USLE model was used in the erosion analysis: to compare before and after effects from conversion of rangeland and dry-farmed oat hay to irrigated pasture and cultivated crops (pages 6 and 7

of Appendix E-7). In fact, most USDA programs providing support for crop and farm improvements require analysis utilizing USLE, including analysis on sloping non-tilled land. Such a "before and after" land use conversion comparison requires that USLE be applied to the non-tilled pasture land. Subjectivity in the analysis was reduced by contacting District Conservationists in Sonoma, Marin, and surrounding counties (including where similar crops are grown in the Watsonville-Salinas area) to determine appropriate USLE factors commonly used. The conclusion of the analysis is that conversion of dry-farmed hay lands and rangelands on slopes less than 15% to well managed irrigated pasture will not result in a significant widespread increase in erosion from non-sheet/rill erosion processes.

Response to Comment 109-5

Comment Summary: The comment states that impacts from reservoir filling and drawdown and related landsliding are not addressed in the Draft EIR/EIS.

This impact is evaluated in the Draft EIR/EIS. As stated in the discussion of Impact 3.5.1 on page 4.3-69, alternating wetting and drying of reservoir slope material can reactivate existing landslides or create new landslides. This is identified as a significant impact of the Project for the South County reservoir sites that are underlain by the Petaluma Formation, which is susceptible to slope failure. The Draft EIR/EIS, on page 4.3-70, acknowledges that landsliding and other slope instability will result in reduced storage capacity at these reservoir sites and will require maintenance dredging at Adobe Road and Lakeville Hillside.

Response to Comment 109-6

Comment Summary: The comment states that reduction of static and dynamic slope stability in the vicinity of reservoir sites is not addressed in the Draft EIR/EIS.

The potential for Project components to result in unstable slope conditions is evaluated throughout Section 4.3 of the Draft EIR/EIS in accordance with Evaluation Criterion #1 (defined in Table 4.3-6 on page 4.3-54). Also refer to Response to Comment 110-4.

Response to Comment 109-7

Comment Summary: The comment states that impacts from reservoir seepage, increased groundwater levels, and slope destabilization are not addressed in the Draft EIR/EIS and references comments made by Dr. Eugene Kojan.

Refer to Response to Comments 110-5 and 110-6.

Response to Comment 109-8

Comment Summary: This comment states that inadequate evidence has been presented to show that heavy metals would not pose a problem to higher organisms in treatment wetlands. The comment relates to Appendix I-9 (Treatment Wetlands Evaluation).

Bioaccumulation is addressed in Appendices L-6 (Evaluation of Bioaccumulation in Organisms Exposed to Reclaimed Water from the Santa Rosa Subregional System) and K-4 (Ecological Risk Assessment). Although the Draft EIR/EIS authors consider the analyses presented in Appendices L-6 and K-4 to adequately address this issue, the issue is no longer relevant since treatment wetlands are not included as part of the Project.

Response to Comment 109-9

Comment Summary: This comment requests predictions of future concentrations of toxins in clams at the time of maximum population or build-out.

Since this comment is referring to Appendix I-9 (Treatment Wetlands Evaluation), the Draft EIR/EIS authors assume the comment is referring to clams which might be resident in a treatment wetland. Treatment wetlands are not included as part of the Project. Appendix L-6 (Evaluation of Bioaccumulation in Organisms Exposed to Reclaimed Water from the Santa Rosa Subregional System) addresses the issue of bioaccumulation in organisms in other receiving waters.

Response to Comment 109-10

Comment Summary: The comment suggests that the Draft EIR/EIS include maps which show where created wetlands would occur.

Created wetlands for purposes of treatment are not included as a possible Project component, and therefore are not studied in the Draft EIR/EIS. However, wetlands will be created for mitigation of any wetlands lost due to construction of Project facilities. Figures 3.1 through 3.6 on pages 3-36 through 3-41 of Appendix M-3 (Planning Level Wetland Determination Report for Selected Proposed Reservoir Sites), of the Draft EIR/EIS show approximate locations of identified conceptual wetland mitigation opportunities. In addition, as referenced on page 2-77 of the Draft EIR/EIS, each storage reservoir site evaluated in this Project provides mitigation opportunities. Appendix M-3 contains maps of the wetland resources present at the storage reservoir sites. A more defined mitigation plan will be developed for the selected Project prior to permitting.

Response to Comment 109-11

Comment Summary: The comment suggests that an inventory of special-status wildlife be discussed in the EIR/EIS. The comment also asks if there will be wildlife corridors that make created wetlands accessible to wildlife. The comment concludes by asking if there are any preventative measures which would exclude wildlife from a created wetland if it presents a problem.

Before final selection of mitigation areas, potential wetland creation sites will need to be assessed for their function and value. An inventory of special-status that occurs or would be likely to occur at a wetland site following creation will be included as part of this functions and values assessment.

Since it will increase the function and value of a created wetland site, every effort will be made to insure that created wetlands are readily accessible to wildlife. The size of a potential wildlife corridor will depend upon the location of wetland creation site and the amount of available wildlife habitat currently adjacent to a site.

No such preventative measures have been developed since it is not anticipated that a created wetland will present a problem for wildlife.

Response to Comment 109-12

Comment Summary: The comment offers an opinion about irrigation-dependent agriculture, suggesting that use of water for irrigated pasture, would create new water demand which could contribute to wasting water resources.

One of the objectives of the Project is to "Develop and operate the wastewater treatment and disposal system in ways that protect public health and safety and promote wise use of water resources." (refer to page 1-3 of the Draft EIR/EIS) Decision makers will have to weigh the benefits and disadvantages of each alternative in selecting a Project from among the alternatives evaluated in the Draft EIR/EIS. Refer to Master Response 2, located in Section 6.2 of this document regarding Project selection.

Response to Comment 109-13

Comment Summary: The comment calls for the City of Santa Rosa to amend the general plan to restrict growth and therefore to reduce the needed system capacity. The comment then states that the system that is constructed may affect the availability of choices and costs of those alternatives in the future and that the Draft EIR/EIS should analyze these effects on future options.

The Subregional System does not have the power to modify the General Plans of its member entities. Revisions to General Plans must be considered by each city as part of their respective General Plan processes. The Long-Term Project is designed to "accommodate projected growth as indicated in the currently adopted General Plans of

each of the Subregional entities" (refer to page 1-3 of the Draft EIR/EIS). Evaluation of future alternatives and their costs is highly speculative, and is beyond the scope of this EIR/EIS.