

**COMMENT LETTER 126 - SIERRA CLUB, MARIN GROUP, SUSAN STOMPE  
(OCTOBER 6, 1996), RECEIVED OCTOBER 7, 1996**

**Response to Comment 126-1**

*Comment Summary: The comment states that the Sierra Club Marin Group has reviewed the Draft EIR/EIS and that the main focus of the group's comments is the South County alternative. The comment also states that policies attributed to the Sierra Club in the Draft EIR/EIS are in error. The approved Sierra Club position on the project is attached to the comment letter, but is provided here as follows: "The NC/RCC of the Sierra Club supports a long-term wastewater project for the City of Santa Rosa that: (1) maximizes water conservation; (2) maximizes reclamation and reuse, including reuse to benefit natural resources and agriculture; (3) selects the most environmentally beneficial option; (4) protects the historic salt-brackish characteristics of San Pablo Bay and coastal estuaries, and the historic characteristics of the Russian River and other environmentally sensitive areas; and (5) is based on a meaningful reduction in the growth potential of the service area of the Santa Rosa Subregional Water Reclamation System."*

The objectives of the City of Santa Rosa as listed in page 1-3 of the Draft EIR/EIS are in agreement with much of the Sierra Club's position. The City's objectives include:

- "Maximize reclamation, recycling, and reuse of advanced treated wastewater to the greatest extent feasible;
- Reclaimed water that is not reused will be recycled or disposed of in a manner that protects beneficial uses of receiving waters;
- Optimize water resource conservation where practical;"

However, it is not within the purview of the Subregional System to reduce projected growth in its service area. Decisions regarding growth are made through the General Plan processes of each of the member entities. The overall objective for the Project is to "Provide wastewater treatment and disposal for the Santa Rosa Subregional Wastewater System to accommodate projected growth as indicted in the currently adopted General Plans of each of the Subregional entities".

**Response to Comment 126-2**

*Comment Summary: The comment states that the member entities in the Subregional System should get together and try to agree on a reduced growth alternative should be considered as a solution to the purpose and need of this project.*

The appropriate forum to address this issue is the general plan process of each of the subregional system's member entities. The need for this Project is a function of the growth which is expected and that has been planned for in each of the Subregional System's member entities' adopted general plans. A reduced growth alternative as a

solution to this expected and approved growth is therefore not a viable solution to the problem. Refer to Response to Comment 126-1.

### **Response to Comment 126-3**

*Comment Summary: The comment recommends evaluation of reverse osmosis, and suggests that brine disposal is not a problem.*

Although the reverse osmosis process is expensive and energy intensive, the problem of brine disposal is, in fact, one of the major logistic difficulties standing in the way of reverse osmosis. The City currently manages sludge through a beneficial use program, which includes land application and composting. The high salt levels of brine from a reverse osmosis facility preclude this kind of use, and would make existing sludge unusable for these purposes if the brine were to be combined with sludge. Brine disposal would most likely require the construction of an ocean outfall to discharge to a saline environment, where the high salt levels of brine would not have adverse effects. An ocean outfall for brine disposal would require a 24-mile long pipeline from the treatment plant. Construction of such a pipeline for discharge of reclaimed water has been evaluated in the past, and poses several logistics constraints. The pipeline would cross the San Andreas fault zone, and involves other significant construction issues including difficult creek crossings and coastal impacts. While not impossible, construction of an ocean outfall is both costly and difficult. Reverse osmosis thus would not be considered unless necessary to mitigate water quality impacts, and was thus not considered as part of the Project description.

### **Response to Comment 126-4**

*Comment Summary: The comment requests a map showing locations where water is taken from the Russian River in relationship to reclaimed water discharge locations, and requests evaluation of impacts of locating discharge pipes upstream of water intakes.*

There are no drinking water intakes that take water directly from the Russian River surface waters. The Sonoma County Water Agency has five Ranney Collectors that collect water from gravel beds that underlie the Russian River. The two upstream collectors near Wohler Road are known as the Wohler Collectors. Three downstream collectors located near the confluence of Mark West Creek and the Russian River are known as the Mirabel Collectors. The Ranney Collectors are not considered to be under surface water influence. Figure E-3B-P in Appendix D-32 (Alternative Projects Facilities Plan) of the Draft EIR/EIS shows the location of the Wohler Collectors (labeled as SCWA Wells), but the Mirabel Collectors were omitted from this figure. A revised Figure E-3B-P as well as a revised Figure 3.1-8 are included in Section 6.6 of this document, and show both groups of collectors.

Alternative 5A was designed to illustrate the impact of locating a discharge upstream of the Sonoma County drinking water intakes. Alternative 5B will continue discharge to the Laguna de Santa Rosa. Under the latter alternative reclaimed water will continue to enter

the Russian River via the Laguna at a point near the Mirabel Collectors. The impacts of Alternatives 5A and 5B on human health via drinking water supplies are found on pages 4.7-60 through 63 of the Draft EIR/EIS.

### **Response to Comment 126-5**

*Comment Summary: The comment states that a map showing the locations of discharges to the Petaluma River from South County irrigation should be shown.*

As explained in Section 3.3 of the Draft EIR/EIS (page 3.3-36) the specific location of the irrigation systems has not been determined and therefore the location of discharges cannot be shown. As described in Section 2.2 of the Draft EIR/EIS (pages 2-20 through 2-36), a specific Irrigation Conservation and Management Program must be prepared for each site, and the systems must comply with standards in this Section.

### **Response to Comment 126-6**

*Comment Summary: The comment requests that the Draft EIR/EIS provide a more complete discussion of the South County Alternative with regard to agricultural irrigation component. The comment also asks how many acres of seasonal wetland occur within the baylands.*

Page 13 of Appendix B of Appendix K-3 (Biological Resources, Volume III) of the Draft EIR/EIS provides discussion on agricultural lands and plant communities adjacent to the Petaluma River.

Approximately 861 acres of total jurisdictional wetland were mapped within the baylands area. Table 4.10-7 (Pages 4.10-52 and 4.10-53 of the Draft EIR/EIS) lists the acreage of each specific habitat type identified for each agricultural area. No Project components will be located within areas mapped as wetlands. Irrigation will be designed to avoid wetlands areas.

### **Response to Comment 126-7**

*Comment Summary: The comment requests that the Draft EIR/EIS provide a map which shows the location of existing seasonal wetlands in the baylands area.*

Appendix M-1 (Planning Level Wetlands Determination for Agricultural Irrigation Areas) of the Draft EIR/EIS provides maps that show the locations of wetlands identified within proposed agricultural lands. Maps 11 and 13 provide the locations of wetlands mapped on the baylands agricultural area.

### **Response to Comment 126-8**

*Comment Summary: The comment asks that the description of Alternative 2 be expanded to describe how runoff from bayland irrigation sites will be prevented from reaching the Petaluma River and Bay.*

Page 10 in Appendix I-10 (Baseline Hydrology and Irrigation Drainage Evaluation for West and South County Reclamation Alternatives) of the Draft EIR/EIS describes the baylands irrigation area as being intersected with ditches that collect drainage and runoff. Pumping is required for drainage and runoff to reach the Petaluma River and the Bay. The pumps will be managed as described in Master Response 10, located in Section 6.2 of this document. Drainage will be managed so that it will be discharged only during rainy months when impacts will be less than significant..

### **Response to Comment 126-9**

*Comment Summary: The comment asks that the description of Alternative 2 be expanded to describe how runoff from South County irrigation areas other than baylands will be managed.*

Runoff management is described in Measure 2.2.3: Restrict Surface and Subsurface Irrigation Water Runoff, on page 2-23 of the Draft EIR/EIS.

### **Response to Comment 126-10**

*Comment Summary: This comment requests information on how the proposed South County baylands would be irrigated and managed; specifically if they would be managed similarly to the Novato Sanitary District irrigated baylands alongside Highway 37. The comment notes that these lands provide little or no seasonal wetland habitat value and no ponding.*

Perhaps the biggest difference between the two projects is that sensitive biological resources, including wetlands, will not be irrigated in the Santa Rosa Project (refer to Measure 2.2.5: Avoid Sensitive Biological Resources, on page 2-28 of the Draft EIR/EIS). The Novato project was apparently initiated before there was widespread recognition of the value of such lands. Appendix D-19 (Irrigation Management Guidelines for the West County and South County Alternatives) of the Draft EIR/EIS provides for establishment of a Task Force to develop Best Management Practices for irrigation of baylands. Presumably these will draw on the experience of the Novato project and the Sonoma Land Trust's current research on integrating farming and seasonal wildlife values of baylands.

For most of the more level areas of baylands that lack significant wetlands and have had a long-term cultivation history, management will likely be similar to the Novato project. The lands will be fenced and cross-fenced, a permanent grass pasture established, and animals rotated through the fields in a grazing management system. Subsoil moisture levels will be carefully monitored and managed. Over-irrigation to the extent that field runoff occurs is prohibited by Regional Board regulations.

### **Response to Comment 126-11**

*Comment Summary: The comment asks what the potential is for conversion of tidal marsh to fresh water marsh. The comment also asks what the potential is for tidal marsh conversion to less saline marsh in the South County.*

Refer to Master Response 10, located in Section 6.2 of this document.

### **Response to Comment 126-12**

*Comment Summary: The comment asks if the blockage identified in Tolay Creek is permanent.*

The nature of the blockage is not known with complete certainty but is believed to be a natural geologic feature.

### **Response to Comment 126-13**

*Comment Summary: The comment states that Page 2-78 (Table 2.3-1) of the Draft EIR/EIS states that creation, restoration or preservation will be considered as mitigation for biological resources losses. The comment goes on to state that preservation of existing habitat, while approving habitat destruction, will result in a net loss of habitat. The comment therefore requests that preservation not be considered an acceptable form of mitigation.*

The comment is correct in stating that a net loss of habitat will occur if preservation is implemented to mitigate for loss of habitat. However, given the variety of resources that could be affected by Project components, their geographic distribution and constraints associated with creating or restoring habitats, it is possible that these latter opportunities may not exist in some situations. Preservation therefore provides another form of mitigation that can be implemented to protect sensitive, limited resources. In addition, though preservation (in and of itself) will result in a net loss of acres, there can be a net gain in habitat value. Furthermore, preservation in conjunction with restoration and creation may result in no net loss of habitat acreage.

### **Response to Comment 126-14**

*Comment Summary: The comment contends that a 1:1 mitigation ratio is far below what other projects have used.*

These mitigation ratios are subject to final determination by the U.S. Army Corps of Engineers (refer to page 2-78 of the Draft EIR/EIS) during the Section 404 permitting process (to commence following final Project selection).

## **Response to Comment 126-15**

*Comment Summary: The comment states that the Draft EIR/EIS identifies migratory fish being found in only one stream which was considered for use by the project and asks about other native fish.*

It is not clear what portion of the Appendices of the Draft EIR/EIS is being referenced in the comment, since it is not identified. Appendices L-1 (Anadromous Fish Migration Study Program, 1991-1994), L-2 (Anadromous Fish Migration Study Program, 1991-1995), and L-4 (Aquatic Habitat Survey Results) of the Draft EIR/EIS identify that migratory fish (steelhead trout) occur in the Laguna de Santa Rosa system (Santa Rosa Creek and Mark West Creek). Appendix L-4 presents data on other native fish. In addition, West County streams that are known or were found to support migratory fish include the unnamed stream associated with the Carroll Road Reservoir site, Green Valley Creek, and Atascadero Creek. Although migratory fish may not have been found in each of the drainages that were evaluated, each stream was evaluated in terms of its ability to provide suitable habitat for migratory and resident fish species that occur in the region. The impact analysis in the Draft EIR/EIS was based on this more conservative approach to the issue.

## **Response to Comment 126-16**

*Comment Summary: The comment asks what would be the potential impacts of the proposed Tolay Reservoir on aquatic resources.*

Potential impacts associated with construction, operation, and maintenance of the Tolay Confined and Extended reservoir dams are discussed in the Section 4.9 of the Draft EIR/EIS on pages 4.9-55 to 4.9-74.

## **Response to Comment 126-17**

*Comment Summary: The comment asks about potential mitigation sites for wetlands at the Tolay site and the Baylands.*

Potential mitigation sites as compensation for loss of wetlands at the Tolay Confined and Extended storage reservoir sites are identified on Page 2-77 of the Draft EIR/EIS. Additional information on potential mitigation sites is provided in Appendix M-3 (Mitigation for Wetlands and Waters of the U.S. for Proposed Reservoir Sites) of the Draft EIR/EIS. Also refer to Master Response 11, located in Section 6.2 of this document, for a discussion of feasibility of mitigation for reservoir sites. Impacts to seasonal and other jurisdictional wetlands associated with the Bayland agricultural component will be avoided as provided by Measure 2.2.5: Avoid Sensitive Biological Resources, on pages 2-28 through 2-29 of the Draft EIR/EIS.

## **Response to Comment 126-18**

*Comment Summary: The comment suggests that the wetland classification system be modified to include seasonal wetlands that pond on diked baylands.*

The EIR/EIS authors believe that the current wetland classification system adequately describes the wetland resources found within the Project region and, specifically, the baylands area. Refer to Pages 4.10-10 through 4.10-21 and Page 4.10-26 of the Draft EIR/EIS for more information regarding the wetland classification system and discussions on each of the wetland habitat types. The classification includes a category for wetlands with seasonally wet vegetation.

## **Response to Comment 126-19**

*Comment Summary: The comment suggests that the EIR/EIS include a more thorough discussion on the importance of seasonal wetlands and upland areas in the baylands area to migratory birds of the Pacific Flyway.*

The habitats located within the South County agricultural irrigation areas (including the baylands) are identified and discussed on pages 4.8-58 through 4.8-60 of the Draft EIR/EIS. In addition, the function and value of each wildlife habitat occurring within the South County agricultural area is described on pages 4.8-41 through 4.8-49 of the Draft EIR/EIS.

The text below has been added to page 4.8-59 of the Draft EIR/EIS, to further identify species that commonly occur within the baylands area. This text was taken from the *Sonoma Baylands Enhancement Plan*, which was prepared by the California State Coastal Conservancy and Sonoma Land Trust in 1989. This document summarizes the results of a six-year (January 1983 to June 1989) bird use study conducted by U.S. Fish and Wildlife Service staff and volunteers in the baylands area.

The following changes are made to the Draft EIR/EIS:

Page 4.8-59. The following paragraph is added before the last paragraph:

Common avian species occurring within the baylands include great egret, killdeer, American avocets, greater yellowlegs, willet, long-billed curlew, western and least sandpiper, dunlin, and ring-billed gull. These species tend use the baylands sporadically, but are normally abundant following flooding events. Raptors such as red-tailed hawk, northern harrier, and western burrowing owl utilize the open grassland and agricultural fields for foraging habitat.

## **Response to Comment 126-20**

*Comment Summary: The comment requests information on methodologies of the bird surveys conducted in the bayflats. In addition, the comment suggests that winter surveys should be conducted.*

Reconnaissance-level bird surveys were conducted at all agricultural irrigation areas (including the bayflats) in which access was granted. The results of these surveys are provided on pages 4.8-76 through 4.8-77 of the Draft EIR/EIS, and methodologies for wildlife surveys (which included birds) are described on page 4.8-77. The California Wildlife Habitat Relationships (CWHR) habitat types and associated acreages identified in the bayflats agricultural irrigation area are provided in Table 3.3-1 on page 3.3-4 in Appendix K-1 (Biological Resources, Volume I) of the Draft EIR/EIS. Special-status wildlife species predicted to occur in these habitat types are identified on page 3.3-5 in Appendix K-1. A complete list of predicted species by habitat type can be found in Appendix B of Appendix K-1. The CWHR model predicts seasonal and yearlong species occurrences.

### **Response to Comment 126-21**

*Comment Summary: The comment states that justification for the points of significance should be provided in the Draft EIR/EIS. The comment also states that the points of significance should be lower for impacts to sensitive terrestrial wildlife habitat, CNPS List 2-4 plants, and aquatic habitats. The comment also states that other attributes (location and actual acreage) should be considered.*

Justifications for biological evaluation criteria and points of significance are presented in Table 4.8-6 (pages 4.8-72 and 4.8-73), and Table 4.9-3 (pages 4.9-36 through 4.9-38) of the Draft EIR/EIS. Article 5, Sections 15065 and 15380, and Appendix G of the California Environmental Quality Act Guidelines (pages 4.8-62 and 63 of the Draft EIR/EIS), provide guidance to the determination of significance in biological resource impacts. The EIR/EIS authors utilized this guidance, in coordination with the appropriate resources agencies and technical understanding of the resource, to develop the points of significance presented in the Draft EIR/EIS. The points of significance were developed to specifically address biological resource impacts associated with the Project, accounting for both the location, the relative size, and the quality of the resources in question. No substantive information has been provided in the comment to support an alteration of the points of significance as presented in the Draft EIR/EIS.

Refer also to Responses to Comments 12-74, 12-76, 12-78, and 12-79 for further detail on the points of significance for wildlife habitats; CNPS List 2, 3, and 4 species; and aquatic habitats.

### **Response to Comment 126-22**

*Comment Summary: The comment asks what are the potential mitigation sites for impacts to resources associated with South County and West County alternatives.*

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



## **Response to Comment 126-23**

*Comment Summary: The comment states that analysis of metals accumulation should show loading beyond 25 years.*

Table 4.2-12, on pages 4.2-25 and 4.2-26 in the Draft EIR/EIS shows not only what loading will be after 25 years, but also the least number of years until state guidelines or EPA rules are exceeded. As indicated on Table 4.2-12 and as stated in paragraph three on page 4.2-25 of the Draft EIR/EIS, “accumulation of metals in soil is very low and will not affect productivity or toxicity after 25 years or even 500 years of use.”

## **Response to Comment 126-24**

*Comment Summary: The comment asks when there would be evidence of bioaccumulation in invertebrates.*

A significant increase in tissue concentrations relative to soil concentrations would indicate the potential for bioaccumulation, not only for invertebrate and plant species but also for vertebrates that derive their diet from those two types of food sources. Because metals and organic substances are present in the reclaimed water at trace levels, in most cases below analytical detection limits, no analysis was conducted on potential bioaccumulation associated with the use of reclaimed water in irrigation. Reported reclaimed water concentrations over a several year monitoring period are so low that irrigation is not likely to significantly increase the concentration of chemical substances in soils.

To amplify and clarify that no risk is associated with bioaccumulation of chemical substances from irrigated soils, additional risk calculations were conducted to assess the effects of a potential transfer along the food chain. These calculations, summarized in Tables 1, 2 and 3 below, indicate that no significant risk is associated with any of eight compounds present in the reclaimed water that theoretically have a potential for bioaccumulation. These compounds are (see selection criteria in EPA, 1993b, Tables 6 and IX-5): toluene, four chlorinated pesticides, and three metals (cadmium, mercury and selenium).

## Response to Comment 126-24 - Table 1

### Risk to Vegetation and Soil Organisms from Exposure by Irrigation to Reclaimed Water Constituents with Potential for Bioaccumulation

	Average Soil Concentration* (mg/kg)	Vegetation		Soil Organisms		
		Benchmark Value	Ecological Quotient	Benchmark Value	Surrogate Chemical	Ecological Quotient
Volatile Organics						
Toluene	0.0004	200	0.00	50		0.00
Chlorinated Hydrocarbons						
Aldrin	0.0001	25	0.00	0.45	Endrin	0.00
Alpha-BHC	0.0001	6	0.00	0.45	Endrin	0.00
Gamma-BHC	0.0007	6	0.00	0.45	Endrin	0.00
Heptachlor	0.0001	6	0.00	0.45	Endrin	0.00
Metals						
Cadmium	0.002	3	0.00	20		0.00
Mercury	0.001	0.3	0.00	30		0.00
Selenium	0.002	1	0.00	70		0.00

\* Assumes that, on a mass-basis, soil values are equal to reclaimed water concentrations

## Response to Comment 126-24 - Table 2

### Risk to Mammals from Exposure by Irrigation to Reclaimed Water Constituents with Potential for Bioaccumulation

	Average Soil Concentration  (mg/kg)*	Exposure Assessment					Risk Assessment			
		Transfer Factors			Exposure** (mg/kg/d)		Benchmark  (mg/kg/d)	Surrogate  Chemical	Ecological Quotient	
		Vegetation	Invertebrates	Vertebrates	Robin	Hawk			Robin	Hawk
Volatile Organics										
Toluene	0.0004	0.50	1.0	1.0	0.005	0.001	20.0	Xylene	0.00	0.00
Chlorinated Hydrocarbons										
Aldrin	0.0001	0.20	4.0	1.9	0.003	0.001	0.06		0.05	0.01
Alpha-BHC	0.0001	0.30	4.2	1.0	0.003	0.000	0.56		0.01	0.00
Gamma-BHC	0.0007	0.40	4.2	1.0	0.030	0.003	4.0		0.01	0.00
Heptachlor	0.0001	0.30	10.0	1.6	0.009	0.002	20.8		0.00	0.00
Metals										
Cadmium	0.002	4.80	19.0	1.0	0.425	0.047	15.2		0.03	0.00
Mercury	0.001	2.00	13.0	3.5	0.140	0.054	5.1		0.03	0.01
Selenium	0.002	0.35	1.0	1.0	0.023	0.003	0.5		0.05	0.01

\* Assumes that, on a mass-basis, soil values are equal to reclaimed water concentrations

\*\* Exposure rate = Soil conc. x mobility factor x transfer factor(s) x benchmark extrapolation

	Mobility Factor	Ingestion (g/g/day)	Diet Composition			Benchmark Extrapolation
			Vegetation	Invertebrates	Vertebrates	
American robin	1.0	0.90	0.3	0.7	0.0	16
Red-tailed hawk	1.0	0.10	0.0	0.0	1.0	16

## Response to Comment 126-24 - Table 3

### Risk to Birds from Exposure by Irrigation to Reclaimed Water Constituents with Potential for Bioaccumulation

	Average Soil Concentration (mg/kg)*	Exposure Assessment					Risk Assessment			
		Transfer Factors			Exposure** (mg/kg/d)		Benchmark (mg/kg/d)	Surrogate Chemical	Ecological Quotient	
		Vegetation	Invertebrates	Vertebrates	Robin	Hawk			Robin	Hawk
Volatile Organics										
Toluene	0.0004	0.50	1.0	1.0	0.005	0.001	20.0	Xylene	0.00	0.00
Chlorinated Hydrocarbons										
Aldrin	0.0001	0.20	4.0	1.9	0.003	0.001	0.06		0.05	0.01
Alpha-BHC	0.0001	0.30	4.2	1.0	0.003	0.000	0.56		0.01	0.00
Gamma-BHC	0.0007	0.40	4.2	1.0	0.030	0.003	4.0		0.01	0.00
Heptachlor	0.0001	0.30	10.0	1.6	0.009	0.002	20.8		0.00	0.00
Metals										
Cadmium	0.002	4.80	19.0	1.0	0.425	0.047	15.2		0.03	0.00
Mercury	0.001	2.00	13.0	3.5	0.140	0.054	5.1		0.03	0.01
Selenium	0.002	0.35	1.0	1.0	0.023	0.003	0.5		0.05	0.01

\* Assumes that, on a mass-basis, soil values are equal to reclaimed water concentrations

\*\* Exposure rate = Soil conc. x mobility factor x transfer factor(s) x benchmark extrapolation

American robin  
Red-tailed hawk

Mobility Factor	Ingestion (g/g/day)	Diet Composition			Benchmark Extrapolation
		Vegetation	Invertebrates	Vertebrates	
1.0	0.90	0.3	0.7	0.0	16
1.0	0.10	0.0	0.0	1.0	16

For the risk calculations it was assumed that the concentrations of chemical substances in soil reach a steady-state with those of the reclaimed water (on a mass-basis, soil and reclaimed water concentrations are the same). Chemical substances are transferred from soils to vegetation and soil organisms and subsequently to an herbivore mammal (deer mouse), two insectivores (vagrant shrew and American robin), and a predator (red-tailed hawk). Exposure values, transfer factors, and benchmark values used in these risk calculations were obtained from tabulated data presented in Tables 4.1, 4.2, 4.3, 5.1, 5.2, 5.3 and 5.4 in Appendix K-4 (Ecological Risk Assessment) of the Draft EIR/EIS. It was conservatively assumed that those wildlife species, including raptors with extensive foraging ranges, derived their entire diet from the irrigation areas.

As expected from the low concentrations of chemical substances in the reclaimed water, ecological quotients calculated on the basis of potential bioaccumulation along the food chain were well below a value of 1, which is the value indicative of potential adverse effects on wildlife, including predatory birds (refer above to Tables 2 and 3 in this Response To Comment). Ecological quotient is defined in the footnote of Table 4.9-3 of the Draft EIR/EIS as "the ratio of the exposure concentration of exposure rate to the appropriate benchmark value (i.e., reference values for potential effects on site organisms)." Use of an EQ of 1 is a standard criterion developed by Menzie et. al. and published by the USEPA Science Advisory Board. Also refer to the Reference section at the end of Section 4.9 of the Draft EIR/EIS.

## **Response to Comment 126-25**

*Comment Summary: The comment contends that a 30-foot buffer/setback from wetlands is not adequate.*

The 30-foot buffer was developed to minimize impacts to isolated wetlands. Thirty-foot vegetated buffers will reduce the potential for irrigation run-off entering the wetland and impede sedimentation induced by cultivation. The comment provides no supporting evidence which suggests that a 30 foot buffer is not adequate. As stated on Page 2-29 of the Draft EIR/EIS, a 30-foot buffer from cultivation, construction and irrigation activities is required around sensitive plant populations while a 500-foot buffer from these same activities is required around nests or dens of special-status avian, amphibian and mammalian species.

## **Response to Comment 126-26**

*Comment Summary: This comment expresses concern over potentially high levels of native metals in baylands soils, which could be translocated under irrigation to drainage ditch waters and thence into San Pablo Bay. The comment notes high levels of certain contaminants in Novato Sanitary District drainage ditch water (notably manganese). The comment requests information on metals levels in bayland soils.*

Information on select trace elements (heavy metals) has been collected by Novato Sanitary District as part of ongoing monitoring of their irrigation project. Trace elements

are not high in Reyes soils, according to this monitoring data. Information on salts, nutrients, and metals in soils was also collected for baylands areas by LSA as part of the City of Santa Rosa's Biosolids Beneficial Use Project EIR, and by CH<sub>2</sub>M Hill associated with the 1991 irrigation suitability evaluation of baylands for the previous Draft EIR. Although these studies found high levels of salts, sodium, and boron, levels of trace elements were not elevated.

### **Response to Comment 126-27**

*Comment Summary: This comment requests information on how use of the proposed high efficiency irrigation management in the South County would affect movement of heavy metals in the reclaimed water and soils to surface waters, and ultimately Petaluma River and the Bay. The comment also asks if high efficiency irrigation is the same as higher irrigation application rates.*

High efficiency irrigation is a management goal whereby modern irrigation technology involving moisture sensors and climatic driven irrigation scheduling programs are used to closely match crop needs with actual water applications. This system minimizes the amount of water lost to runoff or deep percolation. This careful management approach can greatly reduce the contributions of nutrients, salts, and metals to surface water and groundwater carried by inefficient or “wasted” water.

High efficiency irrigation most often does not mean high irrigation applications, except for crops with very high water demands such as alfalfa.

### **Response to Comment 126-28**

*Comment Summary: The Sierra Club Marin Group requests a copy of the responses to comments and Final EIR. The comment states that one hard copy and a CD ROM did not allow sufficient ability to read and analyze the documents.*

The Final EIR, including responses to comments, will be available to the public. Refer to Master Response 3, located in Section 6.2 of this document, for discussion of document availability for the Draft EIR/EIS and to Section 6.1 of this document regarding distribution of responses to comments.

### **Response to Comment 126-29**

*Comment Summary: The comment provides a resolution approved by the Northern California/Nevada Regional Conservation Committee of the Sierra Club at its meeting on May 15, 1994.*

This resolution is restated in Response to Comment 126-1. Refer to Response to Comment 126-1.

