

**COMMENT LETTER 304 - MARIN AUDUBON SOCIETY, BARBARA SALZMAN  
(OCTOBER 6, 1996), RECEIVED OCTOBER 11, 1996**

**Response to Comment 304-1**

*Comment Summary: The comment states that because of the limited circulation of the Draft EIR/EIS, only a portion of the document was reviewed.*

Refer to Master Response 3, located in Section 6.2 of this document, concerning cost and availability of the document.

**Response to Comment 304-2**

*Comment Summary: The comment states that the Draft EIR/EIS provides little comprehensive analysis because components are addressed separately and there is a lack of overview of the environmental impacts.*

Refer to Master Response 1, located in Section 6.2 of the Draft EIR/EIS, concerning document organization..

**Response to Comment 304-3**

*Comment Summary: The comment states the opposition of the Marin Audubon Society to the use of baylands or adjacent lands in the South County alternative.*

This comment is an opinion regarding Project selection. Refer to Master Response 2, located in Section 6.2 of this document. Specific concerns regarding impacts are expressed in subsequent comments and these comments are addressed specifically in the Responses to Comments below.

**Response to Comment 304-4**

*Comment Summary: The comment asks why irrigation of bay flats requires more acreage than other areas.*

The comment has confused irrigation application rate with acreage. As stated on page 3.3-36 of the Draft EIR/EIS "Annual average irrigation application rates are 2.9 acre feet for South County, 2.0 acre feet for West County, 1.7 acre feet for Sebastopol, and 3.0 acre feet for bay flats." This means that less acreage of bay flats is required to use a particular amount of reclaimed water. The reason for this is that it is recommended that Reyes soils be purposely over-irrigated to maintain a high water content in the subsoils to reduce oxidation of sulfides and consequent leaching of acidic compounds to drainage waters. Refer to page 27 of Appendix D-19 (Irrigation Management Guidelines for the West County and South County Alternatives) of the Draft EIR/EIS, for further discussion of irrigation management for the bay flats.

### **Response to Comment 304-5**

*Comment Summary: With respect to the description of agricultural irrigation areas in Section 3.3 (page 3.3-36), the comment asks what is meant by the statement that “potential irrigation sites have been evaluated” and also asks what components were evaluated and how sites were chosen.*

Potential irrigation sites were evaluated for their irrigation suitability according to criteria such as soil, slope and drainage characteristics. This was accomplished through a land classification study which identified lands, according to these and other characteristics, that are suited for sustained, economically viable irrigation with reclaimed water. The process by which this study was conducted and study area characteristics are explained in detail in two appendices to the Draft EIR/EIS. Appendix E-1 (Irrigation Suitability Land Classification - South County Area) addresses land in the South County and Sebastopol areas while Appendix E-2 (Irrigation Suitability Land Classification - West County Area) addresses land in the West County area.

### **Response to Comment 304-6**

*Comment Summary: The comment asks whether the implementing agency would be able to hire the same contractor for implementation of mitigation and monitoring of the mitigation? The comment also states that there should be a restriction that the same contractor who implements the mitigation does not monitor the mitigation.*

This is an issue that will be addressed by the City of Santa Rosa when the final mitigation monitoring plan is adopted by the city.

### **Response to Comment 304-7**

*Comment Summary: The comment asks how the city will enforce restrictions and terminate an agricultural irrigators use of water if that entity does not comply with the conditions that have been established for use of the water (specifically, guidelines established for Mitigation Measure 2.2.1)?*

The City, as the water supplier, controls the supply of water to the agricultural irrigator. The City has the ability to turn off the supply to any given agricultural irrigator. In addition, it is expected that water that was used by a terminated irrigator will either be stored, discharged to the Russian River, or used by another, existing agricultural irrigator. It is also expected that a waiting list of other agricultural irrigators who wish to receive water may be maintained and that water may ultimately be diverted to new users as the opportunity or need arises. The City has terminated irrigation contracts in the past when conditions of use were not met, and will do so in the future, if needed.

### **Response to Comment 304-8**

*Comment Summary: The comment asks what methods would be used to restrict agricultural irrigation runoff and how the city will enforce restrictions and terminate an agricultural irrigator's use of water if that entity does not comply with the conditions that have been established for use of the water (specifically, guidelines established for Mitigation Measure 2.2.3)?*

The specific methods that will be used to avoid irrigation water runoff will be determined individually for each Irrigation Conservation and Management Program (ICMP) since measures that work for one parcel may not work effectively for another parcel. The specific measures that will be implemented to avoid irrigation runoff will have to meet the performance criteria that are established for that particular parcel. Therefore, what measures are implemented are not as important as the fact that the performance criteria will have to be met or water will not be provided to that parcel. In regard to how the City will enforce restrictions, refer to Response to Comment 304-7.

### **Response to Comment 304-9**

*Comment Summary: The comment asks how surface ponding will be avoided on lands receiving reclaimed water? The comment also asks how runoff water will be prevented from flowing into the Petaluma River and ultimately San Pablo Bay? Lastly, would the public have access to the monitoring and irrigation records for the project?*

The measures that have been included on pages 2-23 and 2-24 of the Draft EIR/EIS have proven to be effective in reducing runoff and ponding of surface water. However, other measures that achieve the same results (i.e., the performance criteria established in Measure 2.2.3: Restrict Surface and Subsurface Irrigation Water Runoff, on page 2-23 of the Draft EIR/EIS) can also be utilized and are encouraged. The efficacy of implemented measures will be monitored and if the measures used by any given agricultural irrigator do not achieve the performance criteria, the user will not have continued access to the City's reclaimed water. It is the land owners' responsibility to comply if they wish to continue to use reclaimed water. It is the City's responsibility to ensure accountability of the reclaimed water users. Lastly, the public will have access to the results of monitoring since the Project is a publicly-funded Project. The City prepares regular self-monitoring reports that are submitted to the Regional Water Quality Control Board, and these are available for public review.

### **Response to Comment 304-10**

*Comment Summary: The comment asks how wide buffer strips would be, would native vegetation be used, and what would happen if the plants in the buffer strips die. The comment also recommends that a buffer be established around filter strips.*

Buffer strips will be designed to meet the soil capture objective per the filter strip design criteria of the United States Department of Agriculture Conservation Reserve Program as

described in Measure 2.2.4: Restrict Soil Erosion and Sediment Movement (Irrigation Sites) of the Draft EIR/EIS on page 2-26. The design criteria specify a buffer between irrigation areas and the filter strip, and native vegetation that meets the filtration objective. Maintenance of the filter strip is the responsibility of the Subregional System, as described in Measure 2.2.4.

### **Response to Comment 304-11**

*Comment Summary: The comment directs that all streams, wetlands, and riparian habitats be restored to pre-project elevations and vegetative conditions immediately after completion of a specific “segment”.*

Measure 2.2.8: Revegetate Temporarily Disturbed Sites, on page 2-37 of the Draft EIR/EIS specifies that sites be revegetated as construction is completed. This measure also calls for preserving native plant material from the construction area for use in revegetation.

### **Response to Comment 304-12**

*Comment Summary: The comment suggests that attempts should be made to save and replant trees when restoring sites after facility construction.*

The following change is made to the Draft EIR/EIS:

Page 2-33. The following sentence is added after the first sentence of the first paragraph.

Where feasible, trees, and shrubs will be salvaged for replanting in temporarily disturbed areas.

### **Response to Comment 304-13**

*Comment Summary: The comment asks how the 30-foot exclusionary buffer designated for irrigation activities around wetlands was developed. The comment continues to suggest a minimum buffer of 100 feet is required to protect wetlands and a greater than 100-foot buffer is required for special status species.*

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 that additional buffer widths will provide greater protection of these resources. 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. The comment also asks about setbacks for unvegetated wetlands. The buffers apply to all jurisdictional wetlands. If the wetlands do not meet the Clean Water Act Section 404 criteria as jurisdictional wetlands, buffers are not required.

### **Response to Comment 304-14**

*Comment Summary: The comment asks what the setback would be from native oak trees.*

Page 2-29 of the Draft EIR/EIS states that no activity (including irrigation, construction or cultivation) will occur within the dripline of trees protected by the Sonoma and Marin County Tree Ordinances. The Marin County Tree Ordinance has not been finalized. The Sonoma County Tree Ordinance protects several species of native oaks over 9 inches in dbh (diameter at breast height) including black oak (*Quercus kelloggii*), blue oak (*Q. douglasii*), coast live oak (*Q. agrifolia*), interior live oak (*Q. wislizenii*) oracle oak (*Q. morehus*) and Oregon oak (*Q. garryana*). No activity will be allowed in the dripline of any individuals of these species.

### **Response to Comment 304-15**

*Comment Summary: The comment suggests that at least 50 feet should separate irrigation activities from tree driplines.*

The EIR/EIS authors do not concur with this statement and the comment presents no information to support this claim.

### **Response to Comment 304-16**

*Comment Summary: The comment states that two setback distances for cultivation and riparian corridors are provided in the Measure 2.2.5: Avoid Sensitive Biological Resources on page 2-28. The comment states that the more conservative setback (100 feet) should apply.*

The EIR/EIS authors concur that the 100-foot setback provided for Mitigation Measure 2.2-5 should apply to cultivation, and that the reference to cultivation regarding the 50-foot setback should be deleted. Therefore, the following change is made to the Draft EIR/EIS:

Page 2-29. The first sentence in the fifth paragraph is revised as follows:

A minimum 50-foot setback from irrigation application ~~and new cultivation~~ around the upland riparian corridor (outer most dripline) of all linear waterways, including streams, creeks, and rivers.

### **Response to Comment 304-17**

*Comment Summary: The comment suggests that a 100-foot buffer be required between staging areas and wetland/riparian edges.*

The EIR/EIS authors agree with this comment and have modified Measure 2.2.5: Avoid Sensitive Biological Resources.

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

Page 2-29. The sixth paragraph is revised as follows:.

A minimum 100-foot setback from the edge of upland riparian corridors and jurisdictional wetlands from construction (including staging areas) and cultivation.

### **Response to Comment 304-18**

*Comment Summary: The comment states that it is not uncommon for there to be poor communication between construction contractors and the agency that is responsible for mitigation implementation. As a consequence, mitigation implementation is not always conducted properly. The comment asks who will be responsible for communicating mitigation requirements to the construction contractors and monitoring their compliance?*

The City will have responsibility for ensuring that the appropriate mitigation is written into the construction specifications for any given Project component. Compliance with the mitigation then becomes part of the construction contractor's contract. Inability to comply may then have ramifications such as termination or cost of damages. Monitoring to ensure that compliance is occurring will be conducted by the City or another contractor retained by the City.

### **Response to Comment 304-19**

*Comment Summary: The comment asks what are the applicable provisions of the Sonoma County tree ordinance. The comment also notes that Marin County does not currently have a tree ordinance.*

The ordinance establishes tree replacement ratios based on weighted arboreal values which take into account the total number of trees by range in dbh. Trees with a dbh of 9 to 15 inches are assigned a weighted value of 1; trees with a dbh between 15 and 21 inches have a weighted value of 2; trees with a dbh between 21 and 27 inches have a weighted value of 3; trees with a dbh between 27 and 33 inches have a weighted value of 4; and trees with a dbh greater than 33 inches have a weighted value of 5. For example, if 8 trees with a dbh of 9 to 15 inches are removed, the total arboreal value lost will be 8. The total arboreal value of replacement trees must equal the total arboreal value of trees removed. To achieve this goal, the ordinance has established the following replacement arboreal valuations:

1 point - Arboreal Value: Six 1-gallon trees and two 15-gallon trees

2 points - Arboreal Value: One 24-inch box tree

Marin County currently has a draft tree ordinance, which has not been adopted. Due to the long-term duration of the monitoring activities being proposed, the Marin County

Tree Ordinance is being mentioned in the Draft EIR/EIS since it is assumed it will be adopted in some form before actual Project construction commences.

### **Response to Comment 304-20**

*Comment Summary: The comment asks what happens if the plants in the vegetative filter strips die.*

Refer to Response to Comment 304-10

### **Response to Comment 304-21**

*Comment Summary: The comment addresses Mitigation Measure 2.2.8 (Revegetate Temporarily Disturbed Sites) and questions why there is no revegetation requirement in the document. The comment continues to state that wetland vegetation eliminated through project actions should be replaced, and restoration should be accomplished with existing trees and shrubs.*

Revegetation requirements are identified in the Draft EIR/EIS. Measure 2.2.8: Revegetate Temporarily Disturbed Sites (Pages 2-37 and 2-38 of the Draft EIR/EIS) requires revegetation of all sites disturbed or scarred by construction activities. Wetland mitigation detail is also provided in Mitigation Measure 2.3.11: Sensitive Resource Conservation Program (pages 2-76 through 2-84 of the Draft EIR/EIS).

### **Response to Comment 304-22**

*Comment Summary: The comment states that each site be restored immediately upon construction.*

The EIR/EIS authors agree. For clarification, Measure 2.2.8: Revegetate Temporarily Disturbed Sites (page 2-38 of the Draft EIR/EIS) has been modified.:

The following change is made to the Draft EIR/EIS:

Page 2-38. The following sentence is added after the first sentence under the Timing section, after Start.

**Start:** During construction of Project components. [Revegetation along pipeline segments will commence immediately after backfilling and compacting of trenches.](#)

### **Response to Comment 304-23**

*Comment Summary: The comment asks what enforcement will be required and who will conduct the enforcement for revegetation of temporarily disturbed areas.*

Enforcement will be conducted by the City of Santa Rosa through appropriate construction specifications, contracting with the construction contractors, and monitoring of construction and mitigation activities. Refer to Response to Comment 304-18 for additional detail.

#### **Response to Comment 304-24**

*Comment Summary: The comment suggests that the Draft EIR/EIS include a requirement that plants be replaced that do not survive after six months and that subsequent annual monitoring should occur.*

The EIR/EIS authors agree that annual monitoring should be a requirement, but concluded that replacement planting should occur annually during the appropriate season. Measure 2.2.8: Revegetate Temporarily Disturbed Sites in the Draft EIR/EIS provides for annual monitoring over the-five year period following completion of construction.

The following changes are made to the Draft EIR/EIS to provide further clarification for remediation measures:

Page 2-38. The following text is added to Measure 2.2.8 at the end of the Monitoring section:

2. Performance and monitoring criteria will specify a minimum of 80% survival rate that must be reached at the end of the first five-year period for the mitigation to be considered successful. Eighty-percent survival ensures that no net loss of habitat function and value occur due to the mitigated Project. Annual reports will include measures to be implemented to remediate the previous year's failures including replacement planting. These measures shall be implemented in accordance with the direction provided in the annual reports.

#### **Response to Comment 304-25**

*Comment Summary: The comment states that it is not sufficient to limit construction during the rainy season, but that all construction with a potential to cause erosion should be prohibited during the rainy season.*

As discussed in Measure 2.2.10: Storm Water Pollution Prevention Plan, on page 2-40 of the Draft EIR/EIS a site-specific Storm Water Pollution Prevention Plan will be prepared for each construction area, and will be subject to approval by the North Coast or San Francisco Bay Regional Water Quality Control Board. It is likely that all construction during the rainy season will be prohibited in some areas, but that certain types of construction will be possible during the rainy season without causing erosion. The details of the construction procedures for each site will be determined in the permit.



### **Response to Comment 304-26**

*Comment Summary: The comment recommends use of coconut mesh or other natural materials for slope stabilization, and asks how erosion control will be enforced.*

Measure 2.2.10 is not intended to serve as a detailed Storm Water Pollution Prevention Plan, and the measure does not list all of the possible erosion control materials that could be employed. There are a variety of possible measures including coconut mesh, jute netting, and other natural materials that could be used. As described on page 2-41 of the Draft EIR/EIS, erosion control measures will be monitored by the City, and the ultimate enforcement agency will be either the North Coast or San Francisco Bay Regional Water Quality Control Board, depending on the location of the construction site.

### **Response to Comment 304-27**

*Comment Summary: The comment relates to Measure 2.2.11 and states that extraordinary measures may be needed to prevent toxic discharge during construction.*

Measure 2.2.11: Protect Creeks from Toxic Discharge on page 2-42 of the Draft EIR/EIS specifies that “every reasonable precaution” be taken to control construction-related discharge of toxics. Particular measures are specified in the mitigation description. The EIR/EIS authors consider these measures sufficient to protect the environment, and no additional measures were suggested in the comment.

### **Response to Comment 304-28**

*Comment Summary: The comment suggests that the Agriculture Irrigation Demonstration Program described in Mitigation Measure 2.3.2 should have been implemented before project selection.*

None of the Project alternatives depends on irrigation of new orchards and vineyards on slopes greater than 10 percent or irrigation of specialty crops on slopes greater than 5 percent. Mitigation Measure 2.3.2: Restrict Approval of Agricultural Irrigation Contracts, on page 2-63 in the Draft EIR/EIS prohibits irrigation contracts for these lands, unless methods are developed to reduce erosion. Measure 2.3.3: Agricultural Irrigation Demonstration Program, on page 2-64 in the Draft EIR/EIS is intended to provide a mechanism for allowing exceptions to the prohibition in those instances where appropriate cultivation procedures can be developed (and demonstrated to be effective) to avoid erosion. Irrigation alternatives can succeed without significant erosion problems even if the demonstration program is never conducted.

### **Response to Comment 304-29**

*Comment Summary: The comment asks what areas require extensive slope stabilization.*

Areas of potential unstable slope conditions are listed in Section 4.3 of the Draft EIR/EIS under Impacts 3.4.1, 3.5.1, and 3.8.1. Areas of particular concern include the Geysers

pipeline along Pine Flat Road and the Bennett Valley urban irrigation pipeline, pipelines within the Geysers steamfield, and South County reservoir sites.

### **Response to Comment 304-30**

*Comment Summary: The comment requests that evidence be provided that shows that the first mitigation, to avoid, is utilized.*

Avoidance of impacts to sensitive resources due to the agricultural irrigation, pipeline, discharge, and pump stations components is provided for in the Project description (refer to Measure 2.2.5: Avoid Sensitive Biological Resources, pages 2-28 through 2-33 in the Draft EIR/EIS). Avoidance of sensitive resources is not feasible for the storage reservoir component.

### **Response to Comment 304-31**

*Comment Summary: The comment questions who would make decisions regarding mitigation, by what criteria mitigation would be implemented, and how the public would be involved.*

Mitigation will be adopted by the City of Santa Rosa when the City makes their findings (CEQA, Section 15091). Mitigation proposed as part of the Project is described in detail in Chapter 2 of the Draft EIR/EIS, and the public has had an opportunity to comment on the proposed mitigation as described there. However, the Draft EIR/EIS also acknowledges that final details of mitigation will be subject to permits, including a 404 Permit from the U.S. Army Corps of Engineers. Project permitting will occur after Project selection and prior to Project construction. Mitigation for Project actions requiring permitting will be accepted as conditions of Project approval when the City of Santa Rosa makes its decision on Project approval. The 404 Permit process also includes opportunities for public input.

### **Response to Comment 304-32**

*Comment Summary: The comment suggest that wetland mitigation ratios should be 2:1 for restoration and 3:1 for enhancement.*

The mitigation ratios provided in Table 2.3-1 on page 2-78 of the Draft EIR/EIS are preliminary and the final mitigation ratios will be determined by the U.S. Army Corps of Engineers during the Section 404 permitting process.

### **Response to Comment 304-33**

*Comment Summary: The comment inquires about the Sonoma Bay Trust Preservation Plan.*

This document was misnamed in the Draft EIR/EIS. The correct title is the Sonoma Baylands Enhancement Plan, which was prepared in November 1989 by the Sonoma

Land Trust and California State Coastal Conservancy. The following text is from the introduction to the document:

The purpose of this plan is to summarize the existing physical and biological characteristics of the 800-acre site known as the Sonoma Baylands, formulate several alternatives for wetland enhancement, and outline an implementation program. Currently, the Sonoma Land Trust holds an option to purchase the property. The California State Coastal Conservancy hopes to fund this acquisition using Proposition 70 (the California Wildlife Coastal and Park lands Conservation Act) funds, and a wetland enhancement plan is required before the funding can be approved.

The Sonoma Baylands site is located on the north side of San Pablo Bay just east of the Petaluma River. Lakeville Highway and Reclamation Road form the eastern boundary, and San Pablo Bay forms the southern boundary. Highway 37 and the Northwestern Pacific railroad divide the site into unequal thirds.

The following change is made to the Draft EIR/EIS:

Page 2-77. The last bulleted item under Mitigation Opportunities is modified as follows.

- [Sonoma Baylands Enhancement Plan](#)~~Sonoma Bay Trust Preservation Plan~~.

#### **Response to Comment 304-34**

*Comment Summary: The comment questions if the resource agencies provided in Table 2.3-2 (page 2-79) will monitor mitigation activities.*

The resource agencies identified in Table 2.3-2 of the Draft EIR/EIS will provide input into the necessary survey methodologies to be utilized for identifying resources on irrigation parcels. The monitoring agencies for Mitigation Measure 2.3.11: Sensitive Resource Conservation Program are identified on page 2-82 of the Draft EIR/EIS and include the City of Santa Rosa, The California Department of Fish and Game, the United States Fish and Wildlife Service and the U.S. Army Corps of Engineers.

#### **Response to Comment 304-35**

*Comment Summary: The comment states that the No Project alternative should be the approved alternative until more information regarding the feasibility of mitigation has been provided.*

Refer to Master Response 2, regarding Project selection and Master Response 11, regarding feasibility of mitigation. Both Master Responses are located in Section 6.2 of this document.

### **Response to Comment 304-36**

*Comment Summary: The comment requests the location of wetland mitigation sites for South County reservoir and states that the City would be required to buy land to restore wetlands in-kind and in the vicinity.*

The development of specific mitigation implementation plans, including decisions on the type of mitigation to be utilized (habitat creation, restoration or preservation) and location (on-site or off-site) will be prepared during the Project permitting phase in consultation with the permitting agency. The City will be responsible for the implementation of the mitigation plan including site(s) procurement. For further information on mitigation feasibility, refer to Master Response 11, located in Section 6.2 of this document.

### **Response to Comment 304-37**

*Comment Summary: The comment suggest that mitigation sites be located near the site of the actual loss.*

Preferred wetland mitigation Projects will be located as close to the actual area lost as possible.

### **Response to Comment 304-38**

*Comment Summary: The comment asks what is meant by a “naturalistic habitat complex” (Page 2-80 of Draft EIR/EIS).*

The term “naturalistic habitat complex” refers to a restored or created mitigation site which has utilized native vegetation to establish habitats that are similar to other native habitats in a particular geographic region.

### **Response to Comment 304-39**

*Comment Summary: The comment asks for evidence which supports the claim that the impacts would be less than significant after mitigation.*

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

### **Response to Comment 304-40**

*Comment Summary: The comment suggests that the Draft EIR/EIS does not provide sufficient information on the Bayland wetland resources and how they will be impacted by the Project.*

Baylands wetlands resources will be avoided, and will not be affected by irrigation. Refer to Responses to Comments 126-6, 126-7, and 126-10.

### **Response to Comment 304-41**

*Comment Summary: The comment contends that five years is not sufficient to monitor tree restoration.*

Monitoring for woodland habitat under Mitigation Measure 2.3.11: Sensitive Resource Conservation Program, has been increased to fifteen years. Refer to Response to Comment 12-81.

### **Response to Comment 304-42**

*Comment Summary: The comment asks if there has ever been a successful capture and release program for red-legged frogs, where suitable relocation habitat exists, and why they don't already occur there if it is suitable habitat.*

One large project involving an ongoing California red-legged frog relocation program is at the Los Vaqueros Dam project site in Contra Costa County, California. Large numbers of California red-legged frogs, western pond turtles and California tiger salamanders have been relocated to a mitigation site over the last two years (pers. comm. Mark Jennings, National Biological Service, telephone conversation with Sam Bacchini, HBA biologist, January 6, 1997).

Relocation of four individual adult California red-legged frogs was conducted by Mark Jennings of the National Biological Service for a project in Monterey County, California. The success of this relocation is unknown at this time (pers. comm. Mark Jennings, National Biological Service, telephone conversation with Sam Bacchini, HBA biologist, January 6, 1997).

Perhaps the most notable example of the success of relocating California red-legged frogs is the introduction and long term establishment of California red-legged frog populations in Smoky Valley, in Lincoln County, Nevada and Duckwater, in Nye County, Nevada (Stebbins 1985 and Green 1985). The introductions occurred sometime prior to 1966; however the reasons for these introductions are unclear. The population at Duckwater was still present in the mid-1980s when the population was confirmed to be California red-legged frog by biochemical analysis (Green 1985). Information regarding the current status of the Smoky Valley population was unavailable.

The capture and relocation program is just part of the mitigation proposed for this species. The primary goal of this mitigation plan is habitat restoration. California red-legged frogs will be re-introduced to locations where they had been extirpated due to habitat degradation, after restoration has occurred.

### **Response to Comment 304-43**

*Comment Summary: The comment states that more than 2.5 acres is needed to protect raptor nests.*

Page 2-103 of the Draft EIR/EIS states that buffer zones around active raptor nests will be established in consultation with the California Department of Fish and Game, a trustee agency for California's wildlife.

#### **Response to Comment 304-44**

*Comment Summary: The comment suggests that nesting bird species such as green heron should be avoided during reservoir construction.*

It is not feasible to avoid impacts to all nesting bird species. Impacts to nesting non-raptorial birds not protected through the endangered species acts (state and federal) are analyzed under Impact 8.5.4 beginning on page 4.8-91 of the Draft EIR/EIS. Impacts to nesting birds are analyzed through loss of habitat. Significant impacts are mitigated to less than significant through habitat restoration and creation.

#### **Response to Comment 304-45**

*Comment Summary: The comment asks why no monitoring for soil and irrigation waters is proposed for South County.*

The City of Santa Rosa has an existing monitoring program for reclaimed water quality that will be continued with any Project that is selected. There may be some modifications to the program, depending on the selected alternative. Monitoring of any new agricultural irrigation areas is included in the Project. Measure 2.2.6: Agrochemical and Fertilizer Best Management Practices, specifies soil testing (refer to page 2-34 of the Draft EIR/EIS). Appendix D-19 (Irrigation Management Guidelines for the West County and South County Alternatives) of the Draft EIR/EIS provides details regarding monitoring, including, on page 52, a hypothetical monitoring program for soils, surface water, and groundwater. The specifics will vary depending on the specific sites that are included in an irrigation program.

#### **Response to Comment 304-46**

*Comment Summary: The comment asks the length of creek and amount of surface water located upstream of the proposed Tolay dams. The comment also asks how much riparian habitat is found upstream from the proposed Tolay dams.*

Surface waters and creeks were not mapped upstream from the reservoir sites since the Project will not affect these resources. Table 4.9-14 on page 4.9-64 of the Draft EIR/EIS identifies the length of creek and area of surface water within the storage reservoir inundation and construction zones of Tolay Reservoir:

- Tolay Extended: 1,850 linear feet of Warmwater Type A habitat (approximate width of 8 feet); 27,300 linear feet of Warmwater Type B habitat (approximate width of 8 feet); and 1 acre of pond habitat.

- Tolay Confined: 1,850 linear feet of Warmwater Type A habitat (approximate width of 8 feet); 12,500 linear feet of Warmwater Type B habitat (approximate width of 8 feet); and 1 acre of pond habitat.

A different view of the same resource can be found on page 4.10-39 of the Draft EIR/EIS. Table 4.10-6 identifies the following wetland acreage estimates for the storage reservoir inundation and construction zones of Tolay Reservoir:

- Tolay Extended: 27 surface acres of linear waters (Drainage, Excavated Drainage, Mixed Riparian Woodland, Non-Riparian Woodland, Willow Riparian; all Warmwater habitats); and 221 surface acres of other non-linear waters (including ponded habitat).
- Tolay Confined: 25 surface acres of linear waters (Drainage, Excavated Drainage, Mixed Riparian Woodland, Non-Riparian Woodland, Willow Riparian; all Warmwater habitats); and 62 surface acres of other non-linear waters (including ponded habitat).
- Table 4.8-13 on pages 4.8-92 and 4.8-93 of the Draft EIR/EIS identifies that 8 acres of riparian habitat, categorized as Valley Foothill Riparian, will be impacted by the construction of either of the dams and reservoirs on Tolay Creek.

#### **Response to Comment 304-47**

*Comment Summary: With respect to length of creek, area of surface water and area of riparian habitat upstream from the Tolay dams, the comment states that Table 3.3-2 on page 3.3-21 of the Draft EIR/EIS indicates that these are not included.*

The comment appears to be based upon a misunderstanding of Table 3.3-2 of the Draft EIR/EIS. This table, as indicated in the title, presents characteristics of the proposed storage reservoirs, including the amount of stormwater runoff diversion included in each of the reservoirs. The table is not intended to provide information about upstream characteristics. The table includes a gross area of watershed tributary to the reservoir which, with respect to this table, is used only as the basis for calculating the amount of stormwater runoff affecting reservoir storage capacity.

#### **Response to Comment 304-48**

*Comment Summary: The comment refers to the proposed Tolay Reservoir and asks what impact the reservoir would have on migration to and from San Francisco Bay and the Petaluma River. The comment also asks how much flow would be blocked by the reservoir.*

The aquatic species that migrate from above the Tolay dam to the Bay were identified in the Appendices L-4 (Aquatic Habitat Survey Results) and L-5 (Aquatic Life Survey Results) of the Draft EIR/EIS. The impact of Tolay Reservoir on flow is described in

Appendix C of Appendix L-7 (Aquatic Biological Resources Impacts Analysis Report) of the Draft EIR/EIS. As described in Section 3.3 (page 3.22) of the Draft EIR/EIS, flow from particular parts of the watershed will be diverted around the reservoir; flow from other parts of the watershed will flow into and be retained in the reservoir.

#### **Response to Comment 304-49**

*Comment Summary: The comment states that the description of the South County and other reservoirs includes concrete conduits, which the comment suggests are apparently to carry overflow and discharge it into downstream creeks. The comment asks for a description of the purpose of these conduits, and also asks why they could not be designed to be above ground to allow for retention of values such as wildlife habitat.*

The comment appears to be referring to the concrete box conduits proposed as part of the runoff diversion structures for the Tolay reservoirs. The purpose of these conduits, as stated in Section 3.3 of the Draft EIR/EIS (page 3.3-22) is to limit consumption of storage volume in the reservoir by runoff from the watershed tributary to the reservoir or to remove runoff which will collect behind backdams proposed for the Tolay reservoirs. As indicated in Section 3.3 (page 3.3-23), these conduits, which will range in size from 7 feet by 8 feet to 10 feet by 12 feet will carry stormwater runoff from stormwater detention basins located at the backdams around the water surface area of the reservoir, and discharge to the stream channel below the main dam. The location of these stormwater conduits as shown on Figures 3.3-1 and 3.3-3 of the Draft EIR/EIS, will be in the slope above the reservoir. Because of the size and location of the conduits, an above ground location would be more environmentally disruptive than a buried conduit as proposed. The construction of the conduits, which lie within the overall construction zone for the reservoirs, could have some temporary impact on wildlife habitat; however restoration of the area above the conduit will mitigate any permanent impacts.

#### **Response to Comment 304-50**

*Comment Summary: The comment suggests that the Draft EIR/EIS include discussion of how plant communities and habitats function together and how these functions benefit resident wildlife and Pacific Flyway species.*

The habitats located within the South County agricultural area (including the Bay Flats) 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. Additional detail is provided in the wetlands habitat descriptions provided in Section 4.10. Refer to the description of the Baylands on pages 4.10-32 and 4.10-33 of the Draft EIR/EIS.



### **Response to Comment 304-51**

*Comment Summary: The comment suggests that the loss of the amount of riparian woodland noted on Table 4.8-15 should be considered significant.*

Table 4.8-15 on page 4.8-95 of the Draft EIR/EIS identifies the acreage of sensitive native plant communities, including riparian woodland, that will be impacted by the creation of storage reservoirs.

The significance criteria and conclusions presented in the Draft EIR/EIS in Table 4.8-6 on page 4.8-72 are consistent with the comment. Under Terrestrial Biology Criterion 5, any loss greater than 0 acres of sensitive native plant communities is considered significant, and riparian woodland is designated as a sensitive native plant community. Therefore, the loss of riparian woodland habitat at each of the storage reservoirs is listed as a significant impact. Mitigation has been provided to reduce these impacts to less than significant at all reservoir sites (refer to Mitigation Measure 2.3.11: Sensitive Resource Conservation Program on page 2-76 through 2-84 of the Draft EIR/EIS).

### **Response to Comment 304-52**

*Comment Summary: The comment states that diked baylands usually pond water in winter as a result of rainfall.*

The EIR/EIS authors concur.

Therefore, the following changes are made to the Draft EIR/EIS.

Page 4.8-43. The fourth sentence in the fifth paragraph is revised as follows:

Pastures that pond water naturally (i.e., during the winter) or that are flood-irrigated provide feeding and roosting sites for wetland-associated birds such as shorebirds, waterfowl, and some raptors.

### **Response to Comment 304-53**

*Comment Summary: The comment states there is no discussion on the seasonal wetlands habitats within the Bay Flats area or their importance to the Bay ecosystem.*

The terrestrial resources of the South County area (including the Bay Flats) are identified and discussed on pages 4.8-58 through 4.8-60 of the Draft EIR/EIS. The aquatic resources of the South County area (including the Bay Flats) are discussed on pages 4.9-32 through 4.9-33 of the Draft EIR/EIS. The jurisdictional wetlands resources of the South County area (including the Bay Flats) are discussed on page 4.10-26 of the Draft EIR/EIS.

## Response to Comment 304-54

*Comment Summary: The comment inquires about the bird species that utilize the baylands area.*

The *Sonoma Baylands Enhancement Plan*, which was prepared by the California State Coastal Conservancy and Sonoma Land Trust in 1989, 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. Typical species observed within the baylands included great egret, killdeer, American avocets, greater yellowlegs, willet, long-billed curlew, western and least sandpiper, dunlin, and ring-billed gull. The study states that these water birds use the baylands sporadically, but can be very abundant following flooding events. Special-status bird species that the Draft EIR/EIS wildlife biologists observed during field reconnaissance surveys included horned lark, northern harrier, western burrowing owl, merlin, and white-tailed kite.

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

Page 4.8-59. The third sentence in the last paragraph is revised as follows:

...The wildlife areas provide foraging habitat and cover for migratory waterfowl; and cover, breeding, and foraging for resident water birds and other wildlife including ~~special-status species~~ great egret, killdeer, American avocets, greater yellowlegs, willet, long-billed curlew, western and least sandpiper, dunlin, and ring-billed gull. These water birds use the baylands sporadically, but can be very abundant following flooding events (California State Coastal Conservancy 1989). Special-status species associated with the unique habitat...

## Response to Comment 304-55

*Comment Summary: The comment suggest that the EIR include discussion on the importance of oak and riparian woodlands to neotropical birds.*

Page 4.8-48 of the Draft EIR/EIS states that valley foothill riparian habitats are "necessary habitats for migrant wildlife species such as neotropical migrant songbirds." Pages 2.3-59 through 2.3-69 in Appendix K-1 (Biological Resources, Volume I) of the Draft EIR/EIS also provides discussion on the importance of riparian habitat for neotropical birds, specifically referring to storage reservoir sites. To further indicate that oak woodlands are important for neotropical birds text is added to Section 4.8 of the Draft EIR/EIS.

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

Page 4.8-45 The last paragraph is revised as follows:

Oak trees and other hardwoods in this community provide shelter, shade, and breeding habitat for many wildlife species, including raccoon (*Procyon lotor*),

striped skunk (*Mephitis mephitis*), cottontail (*Sylvilagus audubonii*), and gray fox (*Urocyon cinereoargenteus*). A variety of woodpecker species are primary-cavity nesters in oak trees, while house wren (*Troglodytes aedon*), western bluebird (*Sialia mexicana*), and American kestrel (*Falco sparverius*) are secondary-cavity nesters (i.e., utilizing abandoned woodpecker cavities). Coastal oak woodland is also important to neotropical migrant songbirds (i.e., warblers, vireos, grosbeaks) in terms of providing feeding, resting, and nesting habitat.

Loss of oak woodland is considered a significant impact. Refer to Impact 8.5.5 on page 4.8-94.

### **Response to Comment 304-56**

*Comment Summary: The comment suggests that policies covering the Bayfront Conservation Zone should be listed.*

The Bayfront Conservation Zone is located outside the Project area. The Marin Countywide Plan (page EQ-38) identifies the Bayfront Conservation Zone as consisting of lands west of the Petaluma River, which does not overlap with the Project area. The Project, and in particular Bay Flats agricultural irrigation, is located east of the Petaluma River.

### **Response to Comment 304-57**

*Comment Summary: The comment questions whether the Marin and Sonoma Conservation Leagues are really meant to be called Districts.*

The EIR/EIS authors acknowledge that the organizations should be called Districts.

The following change is made to the Draft EIR/EIS:

Page 4.8-71. The last sentence is revised as follows:

Policies adopted by local private organizations such as the Sierra Club-Sonoma Chapter, Marin and Sonoma Resource Conservation **Leagues** Districts, Sonoma Land Trust, and the Marin Land Trust were evaluated.

### **Response to Comment 304-58**

*Comment Summary: The comment inquires how a loss of 15% or less of CNPS List 2, 3, or 4 plants is considered acceptable.*

Refer to Response to Comment 15-52.

### **Response to Comment 304-59**

*Comment Summary: The comment questions how a loss of 25 percent of sensitive terrestrial wildlife habitat could be less than significant.*

Refer to Responses to Comments 126-21, 12-74, 12-76, 12-78 and 12-79.

### **Response to Comment 304-60**

*Comment Summary: The comment asks what criteria were used to identify losses less than 25 percent as being acceptable.*

Refer to Responses to Comments 126-21, 12-74, 12-76, 12-78 and 12-79.

### **Response to Comment 304-61**

*Comment Summary: The comment recommends that the Draft EIR/EIS include how much of each terrestrial wildlife habitat (as presented in the Draft EIR/EIS) existed historically and presently.*

CEQA requires impacts to be evaluated against the existing environmental conditions (CEQA Guidelines Section 15125). NEPA regulations of the Council on Environmental Quality also specify that the affected environment be characterized (CEQ 40 CFR, Section 1502.15). The current estimation of wildlife habitats in Sonoma and Marin counties is provided on page 4.8-93 of the Draft EIR/EIS and allows for an evaluation of the change in the existing environmental conditions (i.e., impacts) that will occur with implementation of the proposed Project alternatives. Resource agencies have factored previous loss of habitat into their designations of sensitive habitats, and this information is used in the development of criteria.

### **Response to Comment 304-62**

*Comment Summary: The comment asks how many trees would be removed with a 25 percent loss of riparian habitat noting that only 2 % of the historic distribution of this habitat currently remains.*

It is not known how many trees will be removed with a 25 percent loss of riparian habitat. Assuming this comment addresses the Point of Significance for sensitive terrestrial wildfire habitat loss, the EIR/EIS authors note that any loss of riparian habitat is considered significant. Refer to criterion 5 on page 4.8-72 of the Draft EIR/EIS, which indicates the point of significance is greater than 0 acres.

### **Response to Comment 304-63**

*Comment Summary: The comment asks how migration or travel corridors were mapped.*

The EIR/EIS authors conducted literature searches and contacted biologists with the California Department of Fish and Game and U.S. Fish and Wildlife Service to determine the existence of major migration or travel corridors within the Project area. No major migration or travel corridors were mapped in the Draft EIR/EIS because none were identified in the Project area.

#### **Response to Comment 304-64**

*Comment Summary: The comment states that plant assessments should be conducted in the spring.*

Surveys were, in fact, conducted in the spring within the agricultural irrigation areas; the statement referred to in the Draft EIR/EIS is incorrect.

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

Page 4.8-76. The first sentence in the sixth paragraph is revised as follows:

Surveys to assess terrestrial biological resources located within the agricultural irrigation areas were conducted from April ~~August~~ through October 1995."

#### **Response to Comment 304-65**

*Comment Summary: The comment questions why no focused wildlife surveys were conducted on the agricultural irrigation lands.*

Survey methodologies for irrigation components were developed in coordination with resources agencies. A general approach to the wildlife surveys was established through consultation with the California Department of Fish and Game, U.S. United States Fish and Wildlife Service, and U.S. Army Corps of Engineers. Due to the extensive acreage associated with the agricultural irrigation components and the long-term implementation program for this component (20 years) it was determined that intensive surveys conducted at this time would be excessive and not provide data essential for the environmental analysis. The methodology chosen for wildlife surveys utilized the California Wildlife Habitat Relationships System (CWHR) to predict species occurrence for the purposes of the impact analysis. As detailed on Page 2-22 and Page 2-29 of the Draft EIR/EIS, focused surveys will be undertaken at the time each parcel enters into the irrigation system. All sensitive resources (including wetlands) will be avoided through design, construction and implementation of the irrigation system; refer to Measure 2.2.5: Avoid Sensitive Biological Resources on page 2-28 of the Draft EIR/EIS.

In addition:

- Page 4.8-77 of the Draft EIR/EIS states that "All observed wildlife species and wildlife species signs were recorded on standardized field forms." A comprehensive list of wildlife species observed within each major agricultural irrigation area is included in Appendix K-1 (Biological Resources, Volume I) of the Draft EIR/EIS.

- The California Wildlife Habitat Relationships (CWHR) analysis provides additional information regarding wildlife species that could potentially occur on agricultural irrigation lands. Each described habitat within an agricultural irrigation area has an associated wildlife species list that was generated by the CWHR analysis. The CWHR analysis is more thoroughly discussed in Appendix K-1 (Biological Resources, Volume I) of the Draft EIR/EIS (pages 2.3-6 through 2.3-20 and pages 3.3-2 3.3-5).

## **Response to Comment 304-66**

*Comment Summary: The comment suggests that the EIR provide discussion on migratory birds.*

CEQA requires that an EIR address special-status species that have potential to occur within a Project area and provide an environmental setting which describes the typical wildlife and plant species associated with the habitats within the Project area. The EIR/EIS authors feel that the Draft EIR/EIS provides adequate discussion of these two topics. Discussion is provided for all migratory bird species that are considered special-status species on pages 204 through 270 in Appendix K-2 (Biological Resources, Volume 2) of the Draft EIR/EIS. The Draft EIR/EIS identifies areas which are important wintering grounds for migratory waterfowl and shorebirds (i.e., Petaluma Marsh, San Pablo Bay, Estero Americano, etc.) on pages 4.9-13 through 4.9-23 and page 4.9-33 of the Draft EIR/EIS. The California Wildlife Habitat Relationships (CWHR) analysis provides additional information regarding wildlife species, including migratory bird species, that have potential to occur on agricultural irrigation lands. Each described habitat within an agricultural irrigation area has an associated wildlife species list that was generated by the CWHR analysis. The CWHR analysis is more thoroughly discussed in Appendix K-1 (Biological Resources, Volume I) of the Draft EIR/EIS.

## **Response to Comment 304-67**

*Comment Summary: The comment asks what is meant by “occupied habitat” in the mitigation measures provided for potential impacts to biological resources due to pipeline-related actions. The comment also states that suitable habitat should be considered occupied habitat.*

“Occupied habitat” is defined as habitat utilized by individuals of a species of interest. Occupation is determined through a variety of methods generally determined by the appropriate regulatory agency. These methods include surveys for individuals or evidence of use (i.e., tracks, nests, etc.). Suitable habitat is defined as any habitat having the general habitat characteristics that make it possible for species use. The majority of habitat is not occupied by all species for which it is suitable. To avoid all suitable habitat would therefore be onerous and unnecessary. As detailed on page 2-28 of the Draft EIR/EIS, suitable habitat will be surveyed prior to construction to determine species occupation. All habitat occupied by special-status species will then be avoided. In

addition, all wetland areas will be avoided, whether or not they are occupied by special-status species.

### **Response to Comment 304-68**

*Comment Summary: The comments questions that the acreage shown for coastal oak woodland in Table 4.8-9 on page 4.8-84 is the same for all reservoir sites.*

The oak woodland (i.e., Coastal Oak Woodland) acreage identified in Table 4.8-9 on page 4.8-84 of the Draft EIR/EIS pertains to sensitive wildlife habitat that was observed along pipeline segments associated with the Sebastopol Agricultural Irrigation area. Both Alternative 2 (South County) and Alternative 3 (West County) include Sebastopol Agricultural Irrigation. Consequently, the same pipeline segments associated with the Sebastopol Agricultural Irrigation component are also associated with each of the storage reservoir site sites in these alternatives, and the acreage is identical.

No other Coastal Oak Woodland acreage was identified along pipelines associated with a particular reservoir.

### **Response to Comment 304-69**

*Comment Summary: The comment questions that the acreage of oak-bay-madrone woodland and oak woodland in Table 4.8-10 on page 4.8-86 is the same for all reservoir sites.*

All oak-bay-madrone woodland (listed as Montane Hardwood) and oak woodland (Coastal Oak Woodland and Montane Hardwood together) to be avoided is in the Sebastopol Agricultural Irrigation component, which is common to all West County and South County Irrigation Alternatives. Therefore, the acreage listed is identical.

### **Response to Comment 304-70**

*Comment Summary: The comment letter suggests that a loss of less than 25 percent of each sensitive wildlife habitat in Sonoma and Marin counties is a significant impact.*

The evaluation criteria and point of significance state that losses up to 25% of the regional extent that potentially supports sensitive wildlife species is not considered significant. Refer to Responses to Comments 126-21, 12-74, 12-76, 12-78 and 12-79.

### **Response to Comment 304-71**

*Comment Summary: The comment inquires about the Cal Veg data that were used to calculate habitat percentages.*

The California Department of Forestry and Fire Protection, Forest and Rangeland Resources Assessment Program (FRRAP) established and funded the Cal Veg project to assist in developing a system to access and monitor the extent, condition, and use of

California's rangelands. The project was completed in 1991 by the Natural Resources Department at California Polytechnic State University, San Luis Obispo. The source of the Cal Veg data was black and white aerial photographs from 1981 captured at 1:24,000 scale by California Department Water Resources. The data source for Federal lands were National High Altitude Program color infrared photos at 1:58,000 scale.

## **Response to Comment 304-72**

*Comment Summary: The comment asks how much of the Cal Veg data acreage has been potentially lost due to development and other activities.*

The California Department of Forestry and Fire Protection is currently working on a contracted project to update the rangeland data. Landsat Thematic Mapping Imagery from 1990 is the source medium for this update. Acreages of habitat potentially lost through development and other activities cannot be determined at this time.

## **Response to Comment 304-73**

*Comment Summary: The comment suggests that the Draft EIR/EIS does not provide adequate information regarding wildlife travel/migration corridors.*

The EIR/EIS authors consulted with biologists from both the California Department of Fish and Game (CDFG) and U. S. Fish and Wildlife Service on several occasions with regard to the biological resources study plan being used for the Project. In reviewing Project location maps, the biologists from these resource agencies never indicated that major terrestrial wildlife corridors were present. CDFG biologists were also unaware of any reports or studies which had been conducted with regard to wildlife movement corridors in Sonoma County. The EIR/EIS authors also conducted an extensive literature search in an attempt to obtain more information regarding wildlife movement corridors in Sonoma County. The basis for making the assertion that no major wildlife movement corridors exist at any of the storage reservoir sites is that each of the storage reservoir sites was visited several times over a two-year period in order to complete all of the required surveys. Biologists did not observe any sign indicating that the storage reservoir sites support a major terrestrial wildlife migration or travel corridor.

To clarify what a "major corridor" refers to with regard to terrestrial wildlife, the following changes are made to the Draft EIR/EIS:

Page 4.8-73, Table 4.8. The following text is added as footnote 4.

4. In terms of terrestrial habitats, a "major corridor", for purposes of the EIR/EIS, is defined as any habitat which serves as a movement corridor for entire populations of a given species, essential to completion of their life cycle.

Page 4.8-73, Table 4.8-6. Criterion 6 is revised as follows:



6. Will the Project substantially block or disrupt major fish or aquatic wildlife migration corridors?<sup>42</sup>

#### **Response to Comment 304-74**

*Comment Summary: The comment asks about assurances for maintaining suitable foraging and hunting habitat in the agricultural irrigation areas.*

The protective buffers identified in Measure 2.2.5: Avoid Sensitive Biological Resources (pages 2-28 through 2-33 of the Draft EIR/EIS) are designed to ensure that loss of individuals of special-status ground-nesting species such as burrowing owl and northern harrier will not occur as a direct result of agricultural irrigation. However, there are no assurances for maintaining suitable hunting or foraging habitat for species such as burrowing owl within agricultural irrigation lands. Loss of annual grassland that might be converted to other agricultural uses could adversely affect species that forage in grasslands. Loss of annual grassland habitat due to agricultural conversion is analyzed in the Draft EIR/EIS on pages 4.8-104 through 4.8-107 and pages 4.8-117 and 4.8-118. Cumulative grassland loss has been determined to be a significant impact for which there is no feasible mitigation; refer to the discussion starting on page 4.8-117.

#### **Response to Comment 304-75**

*Comment Summary: The comment inquires about the amount of seasonal wetlands that would remain in the South County following agricultural irrigation.*

All seasonal wetlands within South County agricultural irrigation lands, if delineated as being jurisdictional, will be avoided and buffered. It is therefore expected that all jurisdictional wetlands presently found on South County lands will remain following agricultural irrigation. Table 4.10-7 on pages 4.10-52 and 4.10-53 of the Draft EIR/EIS lists the acreages of each wetland type by agricultural area.

#### **Response to Comment 304-76**

*Comment Summary: The comment questions how seasonal wetlands would be protected by a 30-foot buffer.*

Refer to Responses to Comments 304-13 and 304-77.

#### **Response to Comment 304-77**

*Comment Summary: The comment asks how the existing hydrology would be retained.*

Measure 2.2.3: Restrict Surface and Subsurface Irrigation Water Runoff and Measure 2.2.4: Restrict Soil Erosion and Sediment Movement (Irrigation Sites) in the Draft EIR/EIS have been developed to protect the existing hydrology on agricultural lands. Measure 2.2.3 requires that lands irrigated with reclaimed water are managed such that surface runoff of reclaimed water to adjacent waterways does not occur. Measure 2.2.4

requires that lands irrigated with reclaimed water will be managed so that no net increase in sediment movement or soil erosion occurs over existing conditions. Measure 2.2.5: Avoid Sensitive Biological Resources on page 2-28 establishes buffers and irrigation setbacks from wetland and stream features for agricultural irrigation. These vegetated buffers and set-backs assure the surface run-off will not enter these aquatic systems. To meet each of these performance criteria, several Best Management Practices (BMPs) have been identified for inclusion in the Irrigation Conservation and Management Programs (ICMPs). These BMPs are discussed on pages 2-23 through 2-27 of the Draft EIR/EIS. Finally, drainage of jurisdictional wetlands and water is regulated by the Corps and the Natural Resources Conservation Service. Any drainage of jurisdictional waters will require the appropriate permitting and regulatory review.

### **Response to Comment 304-78**

*Comment Summary: The comment suggest that the potential loss of seasonal wetland habitat for migratory shorebirds and waterfowl in South County must be addressed.*

Any loss of jurisdictional wetland (including seasonal wetland habitat) is considered a significant impact, as discussed on pages 4.10-27 and 4.10-28, of the Draft EIR/EIS. Jurisdictional wetlands delineated within agricultural irrigation areas will be avoided by implementing Measure 2.2.5: Avoid Sensitive Biological Resources, on pages 2-28 through 2-35 of the Draft EIR/EIS.

### **Response to Comment 304-79**

*Comment Summary: The comment states that cumulative habitat losses in the Baylands should be addressed.*

Cumulative impacts to biological resources are discussed in the Draft EIR/EIS on pages 4.8-116 through 120; pages 4.9-86 through 91; and pages 4.10-55 through 56.

### **Response to Comment 304-80**

*Comment Summary: The comment requests identification of where the analysis of impacts to special-status species from loss of wetland habitat (specifically Bayflats resources) is provided in the Draft EIR/EIS.*

Impacts to special-status species associated with wetland habitat loss are identified under Evaluation Criteria 1, 2, 3 and 4 in Section 4.9 of the Draft EIR/EIS. Analysis of impacts to upland special-status species associates of wetlands habitat are identified under Evaluation Criteria 1, 2, 3, and 4 of Section 4.8 of the Draft EIR/EIS. No impacts to special-status species of the Bayflats area have been identified. The Bayflats area is the potential site for three Project component: pipelines, pump stations and irrigation. Implementation of Measure 2.2.5: Avoid Sensitive Biological Resources on pages 2-28 through 2-33 of the Draft EIR/EIS will ensure avoidance of all wetlands and special-status species associated with Bayflats area.

## **Response to Comment 304-81**

*Comment Summary: The comment requests the width of buffers provided for nesting raptors in irrigation areas.*

The setbacks associated with irrigation and agricultural practices and special-status species are provided on page 2-29 of the Draft EIR/EIS.

In order to provide clarification, the following changes are made to the Draft EIR/EIS:

Page 2-29. The seventh paragraph is revised as follows:

A minimum 500-foot setback from irrigation application, new cultivation, or construction around all known breeding sites of state ~~or~~ federally listed, proposed or candidate avian or amphibian species including any active raptor nest-sites.

Page 2-30. The following paragraph is added after the third paragraph:

The City of Santa Rosa shall consult with the appropriate resource agencies to determine the suitable setbacks necessary to avoid impacts to sensitive species identified on page 2-28 of this document.

## **Response to Comment 304-82**

*Comment Summary: The comment inquires how nesting northern harriers would be avoided.*

Impacts to nesting northern harriers will be avoided by implementation of Measure 2.2.1: Irrigation Conservation and Management Programs (Page 2-21 of the Draft EIR/EIS); Measure 2.2.2: Irrigation Site Resource Maps (Page 2-22 of Draft EIR/EIS); and Measure 2.2.5: Avoid Sensitive Biological Resources (Pages 2-28 and 2-29 of the Draft EIR/EIS). Refer to Response to Comment 304-81.

## **Response to Comment 304-83**

*Comment Summary: The comment contends that the loss of riparian woodland at the Russian River outfall structure should be mitigated at a 2:1 ratio.*

As discussed on page 4.8-115 of the Draft EIR/EIS, it is not possible to locate the outfall structure in a manner which will fully avoid riparian woodland. Consequently, up to 0.25 acres of Mixed Riparian Woodland will be lost. However, implementation of Measure 2.2.5: Avoid Sensitive Biological Resources, will provide for partial mitigation of this impact. This measure is identified on pages 2-28 through 2-33 of the Draft EIR/EIS and will be implemented as part of the Project by the City of Santa Rosa. Note that this measure provides for restoration at a ratio of 2 acres restored for each 1 acre lost. Additional mitigation is provided by Mitigation Measure 2.3.11: Sensitive Resource

Conservation Program, on page 2-76, which calls for compliance with the Sonoma County Tree Protection and Replacement Ordinance.

Implementation of the above measures will reduce any impacts to Mixed Riparian Woodland associated with construction of the Russian River outfall to a level that is less than significant.

#### **Response to Comment 304-84**

*Comment Summary: The comment suggests that the Draft EIR/EIS include discussion regarding conversion of saltmarsh to freshwater marsh along the Petaluma River.*

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

#### **Response to Comment 304-85**

*Comment Summary: The comment states that the Petaluma Marsh should be identified in the Draft EIR/EIS as the largest undiked saltmarsh in San Francisco Bay. In addition, the unique characteristics, functions, and values of this marsh should be discussed.*

As stated in Section 15125 of the CEQA Guidelines, a description of the environment in the vicinity of the Project shall be no longer than is necessary for an understanding of the significant impacts of the Project and its alternatives. Refer also to 40 CFR. Section 1502.15. Since the Draft EIR/EIS does not identify any impacts to the Petaluma Marsh that will occur as a result of the Project, additional information on the unique characteristics, functions, and values of the Petaluma Marsh is not necessary for the decision-makers who will use the document. Therefore, no additional information is deemed necessary.

#### **Response to Comment 304-86**

*Comment Summary: The comment indicates all of the diked bayland or bay flats in the south county alternative are palustrine wetlands. In addition, the comment asks what functions do these shallow non-tidal wetlands serve for shorebird and waterfowl species of the Pacific Flyway?*

The diked portion of the bay flats were historically palustrine wetlands. However, much of this area now does not meet the three mandatory criteria used by the U.S. Army Corps of Engineers (Corps) for delineating wetlands. The remaining areas of the bay flats that do meet the Corps' criteria were mapped and used to evaluate potential impacts to vegetation communities, wildlife habitat, and jurisdictional wetlands. In addition, the functions of the bay flats habitats (including functions for avian species that utilize the Pacific Flyway) have been described on pages 4.8-58 through 4.8-60, 4.9-16 through 4.9-21, and 4.10-26 of the Draft EIR/EIS. The information on the functions of the bay flats habitats that has been included in the Draft EIR/EIS is considered adequate for the purposes of evaluating the changes in the existing conditions (i.e., impacts) of this area

that will occur with implementation of the Project and are therefore sufficient for the purposes of the decision-makers who will utilize the Draft EIR/EIS. Additional information on the functions of habitats of the bay flats will not provide decision-makers with any new substantive information which will result in a different evaluation of the expected impacts.

#### **Response to Comment 304-87**

*Comment Summary: The comment indicates that a site plan showing the south county watershed should be provided in order to understand the geographic distribution of the watershed's drainages, how they flow, and how they could be impacted.*

Figure 4.4-1c in the Draft EIR/EIS illustrates the drainages that could be impacted by the Project. In addition, pages 4.4-14 through 4.4-16 of the Draft EIR/EIS describe these drainages, while pages 4.4-24 through 4.4-28 of the Draft EIR/EIS evaluate impacts that could occur to these drainages as a result of the Project.

#### **Response to Comment 304-88**

*Comment Summary: The comment states that an evaluation of the value and condition of the baylands should be sought from wildlife and wetlands scientists. The comment also indicates that the justification for the statement that the seasonal wetlands located north of State Highway 37 have been greatly reduced and degraded should be stated, especially given that these seasonal wetlands provide habitat for large numbers of shorebirds.*

The consultant team that prepared the Draft EIR/EIS includes competent and knowledgeable wildlife and wetlands scientists. In addition, the analysis in the Draft EIR/EIS was reviewed by the Project's Peer Review Committee for its accuracy and completeness before the document was deemed ready for public circulation and review. This latter entity included individuals from various academic institutions in California and the western United States. Preparers and reviewers are identified at the end of each section of the Draft EIR/EIS. The characterization of the Project area was based on a conversation with Laurel Marcus of the California Coastal Conservancy, and is referenced as such in the text.

#### **Response to Comment 304-89**

*Comment Summary: The comment asks what the basis was for choosing a point of significance of 15 percent for the loss of warmwater Type A stream habitat.*

This point of significance was chosen after discussions with a number of technical experts with the resource agencies and academic institutions indicated that on average 15 percent of the warmwater Type A stream habitat in any given drainage could be lost before that loss became significant. This point of significance was therefore based on the prevailing opinion of a number of experts in this field.

### **Response to Comment 304-90**

*Comment Summary: The comment asks what the basis was for choosing a point of significance of 25 percent for the loss of warmwater Type B stream habitat.*

Determination of point of significance is the same as described in Response to Comment 304-89 for warmwater Type A habitat.

### **Response to Comment 304-91**

*Comment Summary: The comment asks about the 50 % decrease in wet season streamflow as the point of significance.*

This point of significance was chosen after discussions with a number of technical experts with the resource agencies and academic institutions indicated that on average up to a 50 percent reduction in wet season streamflow could occur before habitat value was significantly reduced. This point of significance was therefore based on the prevailing opinion of a number of experts in this field. Any reduction in dry season flows was considered significant.

### **Response to Comment 304-92**

*Comment Summary: The comment states that these percentages would result in an excessive loss and recommends that they be reduced.*

For the reasons given in Responses to Comment 304-89 through 304-91, the EIR/EIS authors do not agree that the points of significance are inappropriate. The comment does not suggest different points of significance or provide justification for a lower percentage.

### **Response to Comment 304-93**

*Comment Summary: The comment states that surveys of aquatic habitat should encompass migration season.*

The aquatic species of concern have been surveyed in much of the Project area during the times of the year when migration normally occurs. The Draft EIR/EIS incorporates the 1991-1993 results of the *Steelhead Trout Migration in Mark West Creek and Santa Rosa Creek* study and the 1990-1995 results of the *Anadromous Fish Migration Study Program* which is being conducted in the Laguna de Santa Rosa watershed. In addition, although the aquatic habitat and aquatic life surveys for the Draft EIR/EIS were conducted in late spring and summer to target other sensitive aquatic species that are largely resident species, these surveys were conducted to also note any potential spawning habitat of steelhead trout or coho salmon, spawning redds, and presence of juvenile steelhead trout or coho salmon. The various survey efforts that have provided information and data to the Draft EIR/EIS are therefore considered adequate to describe the migratory fish resources that could be impacted by the Project.

## **Response to Comment 304-94**

*Comment Summary: The comment states that if there is one red-legged frog at a site there is likely to be more individuals of that species at the site. The comment also states that loss of habitat for this species should be considered a significant impact.*

The loss of any individuals or occupied habitat of endangered, threatened, or rare wildlife or plant species is considered significant and has been mitigated. The Draft EIR/EIS provides the minimum number of individuals of each endangered, threatened, or rare wildlife or plant species that will be impacted at each site. This minimum number of individuals is based on the actual number of individuals that were observed during surveys for these species. Although it is likely that all individuals of these species at a site were not found or observed, it is speculative to attempt to describe the total number of individuals at the site. It is also assumed that all suitable habitat at a site where an endangered, threatened, or rare wildlife or plant species has been observed or recorded is occupied. The acreage of occupied habitat for any given endangered, threatened, or rare wildlife or plant species that will be impacted by the Project is identified in the Draft EIR/EIS.

## **Response to Comment 304-95**

*Comment Summary: The comment asks why “210 %” (apparently meaning 20%) has been utilized as the point of significance for loss of potential or occupied habitat of aquatic wildlife species of concern? The comment also states that a point of significance of 20 percent is too high for aquatic habitats, especially for species such as western pond turtle.*

Concerning how points of significance were determined for biological resources impacts, refer to Response to Comment 304-89. Since the comment does not provide any substantive data to justify a change in the point of significance, no reevaluation of this criterion is possible. In addition, though the loss of less than 20% of habitat for aquatic wildlife species of concern in the local watershed is considered less than significant, if the habitat is considered to be jurisdictional waters (under Corps regulation) any loss is considered significant. Refer to Criterion 1 on page 4.10-28 of the Draft EIR/EIS.

## **Response to Comment 304-96**

*Comment Summary: The comment suggests that standards for flows into the Petaluma River/San Pablo Bay should be as stringent as those for the esteros.*

The stringent standards used for the Estero de San Antonio and Estero Americano are based on the Gulf of the Farallones National Marine Sanctuary's Interpretation of policies established by the National Marine Sanctuaries Act (16 U.S.C. 1436) and the National Oceanic and Atmospheric Administration (15 CFR Part 922, Subpart H) for national marine sanctuaries such as the Gulf of Farallones. These protective policies do not apply to the Petaluma River/San Pablo Bay system because it is not designated as a national

marine sanctuary. However, several measures have been included in the Mitigation and Monitoring Program in Chapter 2 of the Draft EIR/EIS which will ensure that no adverse effects to the biological resources of the Petaluma River/San Pablo Bay system will occur as a result of the Project.

### **Response to Comment 304-97**

*Comment Summary: The comment questions if any native fish, besides the steelhead trout, were observed in any of the streams surveyed.*

The analysis on page 4.9-69 of the Draft EIR/EIS indicates that no migratory aquatic species other than a single steelhead trout was observed during aquatic life surveys conducted in support of the Draft EIR/EIS. Note that a total of three steelhead trout were observed at the Carroll Road storage reservoir site, as indicated in Response to Comment 77-12.

Impact 9.5.7 relates only to migratory or anadromous fish. Non-migratory fish are reported in Appendix L-5 (Aquatic Life Survey Results) and potential impacts to them are evaluated under criteria related to habitat. Refer to Impact 9.5.3 on pages 4.9-59 through 4.9-62 and Impact 9.5.5 on pages 4.9-65 through 4.9-67 of the Draft EIR/EIS.

### **Response to Comment 304-98**

*Comment Summary: The comment requests a definition for the term migratory fish.*

A migratory fish is a species that requires two separate and distinct areas to complete its entire life cycle. This definition includes anadromous and catadromous fish. Anadromous fish begin their life cycle in fresh water, mature in salt water, and return to fresh water to spawn. Catadromous fish feed and grow in fresh water but return to the sea to spawn.

### **Response to Comment 304-99**

*Comment Summary: The comment states that native and anadromous fish should be addressed by the Draft EIR/EIS.*

Native and anadromous fish are addressed in the Draft EIR/EIS. Appendices L-1 (Anadromous Fish Migration Study Program, 1991-1994) and L-2 (Anadromous Fish Migration Study Program, 1991-1995) of the Draft EIR/EIS provide the results of the anadromous fish migration study program that has been conducted since 1991 within the Laguna de Santa Rosa, Santa Rosa Creek, Mark West Creek, Green Valley Creek, and Maacama Creek. Appendix L-4 (Aquatic Habitat Survey Results) discusses aquatic habitat types and the specific species (including native and anadromous fish) that are associated with each habitat type. Table 2 on pages 7 through 12 in Appendix L-5 (Aquatic Life Survey Results) of the Draft EIR/EIS summarizes both special-status and non-listed aquatic species observed in each stream that was surveyed.



### **Response to Comment 304-100**

*Comment Summary: The comment contends that fencing and revegetation is not suitable mitigation for changing streamflows.*

The EIR/EIS authors agree that it would be inappropriate to mitigate for change in stream flows and aquatic habitat downstream of proposed dam sites by revegetation and fencing within the same drainage. However, the mitigation currently proposed is designed to occur off-site, not at the site of the actual proposed dam. Existing degraded stream systems within the effected watershed will be restored to original functions through fencing and revegetation. As an example, impacts associated with a proposed Valley Ford storage reservoir could be mitigated for by restoring degraded portions of the streams which flow through the Carroll Road storage site, thus increasing the habitat value of the existing stream to compensate for habitat degradation due to stream flow alteration.

### **Response to Comment 304-101**

*Comment Summary: The comment suggests that EIR/EIS provide further discussion as to why South County agricultural irrigation would not cause the loss of rare wildlife species.*

Project measures (Measure 2.2.2: Irrigation Site Resource Maps and Measure 2.2.5: Avoid Sensitive Biological Resources on pages 2-22 and 2-28) have been developed which will require the preparation of a resource map for every potential irrigation parcel, verification of previous biological surveys, and establishment of buffers around sensitive areas within agricultural irrigation areas to protect all sensitive biological resources located on all parcels brought into agricultural production through use of Project-reclaimed water. Exclusionary buffers will be established around the riparian corridor of all linear waterways and occupied burrows of sensitive ground-dwelling species (i.e., burrowing owl, California tiger salamander). Therefore, agricultural irrigation will not result in the loss of individuals or populations or occupied habitat of rare wildlife species. Potential loss of sensitive terrestrial wildlife habitat is discussed on pages 4.8-103 through 4.8-107, of the Draft EIR/EIS, and is found not to be significant.

### **Response to Comment 304-102**

*Comment Summary: The comment asks that the Draft EIR/EIS provide clearer discussion as to why irrigation would not cause a permanent loss of aquatic habitat.*

The assertion that agricultural irrigation will not result in the permanent loss of aquatic habitat is based on the implementation of protective measures provided in the Mitigation and Monitoring Program in Chapter 2 of the Draft EIR/EIS). Response to Comment 304-77 provides additional discussion of these protective measures.

### **Response to Comment 304-103**

*Comment Summary: The comment states that species of concern and habitat conditions of irrigation sites must be known prior to stating that sensitive biological resources will be protected by buffering. The comment also states that contiguous habitat types must be retained and fragmentation should be avoided.*

The habitat conditions and diversity of special-status species occupying potential irrigation sites was determined during the habitat assessments conducted on the accessible irrigation sites. Mitigation buffers were developed based on these findings. Measure 2.2.2: Irrigation Site Resource Maps (page 2-22 of the Draft EIR/EIS) calls for the City of Santa Rosa to contract qualified botanists and wildlife biologists to delineate sensitive biological resources present within each parcel that is proposed to receive reclaimed water. These maps will be developed by verifying and updating previous biological studies, as well by conducting new studies on those parcels not previously surveyed. These resource maps will serve as the foundation for each Irrigation Conservation and Management Program (ICMP).

The EIR/EIS authors agree that habitat fragmentation is not desirable. However, Measure 2.2.5: Avoid Sensitive Biological Resources (Pages 2-28 through 2-33 of the Draft EIR/EIS) will ensure that entire oak woodlands and riparian corridors will be buffered, thus retaining contiguous habitat systems which will provide for foraging, cover and travel corridors.

### **Response to Comment 304-104**

*Comment Summary: The comment states that the Draft EIR/EIS should include a table which addresses potential loss of South County seasonal wetlands.*

Refer to Responses to Comments 126-6 and 126-7.

### **Response to Comment 304-105**

*Comment Summary: The comment inquires how it would be impossible for overflow to run off into streams with the South County alternative.*

Refer to Response to Comment 304-77 and Master Response 10, located in Section 6.2 of this document.

### **Response to Comments 304-106**

*Comment Summary: The comment asks how bioaccumulation in soil invertebrates has been addressed.*

As indicated in Response to Comment 126-24, there is little potential for buildup of metals and organic chemicals in irrigated soils given their low concentrations in the reclaimed water. In the case of metals, reclaimed water concentrations are so low relative

to typical concentrations in soils that a reduction in soil concentration by leaching and infiltration is more likely. Refer to Table 5.1 on page 5-3 in Appendix K-4 (Ecological Risk Assessment) of the Draft EIR/EIS.

### **Response to Comment 304-107**

*Comment Summary: The comment inquires about what assurances there are that Russian River discharge would be limited to only 4 days.*

There are no assurances that the Russian River discharge will be limited to only four days. The following changes are made to the Draft EIR/EIS:

Page 4.9-85. The last paragraph in the Analysis section is revised as follows:

During dry winters, discharge to the Russian River may be restricted by low Russian River flows. During these periodic events, contributions of reclaimed water to the Russian River or Laguna will increase substantially. However, these discharges will last for very short periods, ~~a maximum of four days~~. Because of such a brief exposure, it is not appropriate to apply the same chronic risk factors as for the previous risk assessment. No bioaccumulation will occur during such short exposures. Impacts will be the same as non-contingency discharge.

### **Response to Comment 304-108**

*Comment Summary: The comment asks that the Draft EIR/EIS demonstrate how impacts to the red-legged frog would be fully mitigated for through habitat creation, restoration, and preservation, as well as translocation.*

Refer to Response to Comment 304-42 for a discussion of success of other red-legged frog programs. Each of the proposed reservoir sites as well as other areas of degraded habitat within the Project area represent potential mitigation sites. Red-legged frog habitat mitigation will occur in conjunction with wetland mitigation Projects. Preliminary identification of potential mitigation sites and the feasibility of wetland mitigation Projects is discussed in Master Response 11, located in Section 6.2 of this document. Final development of mitigation, including site selection, will be executed during the permitting phase of the Project.

### **Response to Comment 304-109**

*Comment Summary: The comment asks that western pond turtle mitigation sites be identified and shown to be feasible.*

Each of the proposed reservoir sites as well as other areas of degraded habitat within the Project area represent potential mitigation sites. Northwestern pond turtle habitat mitigation would occur in conjunction with wetland mitigation Projects (only those that propose creation or restoration of pond or stream type wetlands). Preliminary

identification of potential mitigation sites and the feasibility of wetland mitigation Projects is discussed in Master Response 11, located in Section 6.2 of this document. Final development of mitigation, including site selection, will be executed during the permitting phase of the Project.

#### **Response to Comment 304-110**

*Comment Summary: The comment states that any loss of seasonal wetlands in the baylands area is significant and should be analyzed cumulatively.*

Pages 4.10-27 and 4.10-28 in the Draft EIR/EIS discuss the evaluation criterion and points of significance for assessing potential wetland impacts. The point of significance for jurisdictional wetlands is greater than 0 acre. As such, any loss of jurisdictional wetlands (including seasonal wetlands) in the baylands area will be considered significant. Cumulative impacts associated with jurisdictional wetland resources are provided on pages 4.10-55 and 4.10-56 of the Draft EIR/EIS.

#### **Response to Comment 304-111**

*Comment Summary: The comment asks that wetland mitigation sites be identified and shown to be feasible.*

Refer to Master Response 11, located in Section 6.2 of this document, and Response to Comment 109-10.

#### **Response to Comment 304-112**

*Comment Summary: The comment inquires over what time period the risk assessment was considered.*

The Ecological Risk Assessment was conducted to determine impacts associated with the life of the Project (20 years). The time period of exposure was extended beyond the life of the Project where appropriate. See Appendix K-4 (Ecological Risk Assessment) of the Draft EIR/EIS for additional detail.

#### **Response to Comment 304-113**

*Comment Summary: The comment asks why a new classification system was used for cropland wetlands in this section.*

Section 4.10 of the Draft EIR/EIS provides characterization of wetlands based on prominent vegetative communities associated with the wetlands. Cropland wetlands were cultivated at the time of the study. Cultivation limits any natural vegetation association. Cropland wetlands best characterizes these wetlands.

## **Response to Comment 304-114**

*Comment Summary: The comment states that the term “Prior converted cropland” has a very specific meaning under federal law and regulations.*

The comment is correct; the term “Prior converted cropland” does have a very specific meaning. The definition for the term “Prior converted cropland” as described in the NRCS National Food Security Act Manual, 3rd Edition (1994), is discussed on pages 4.10-5 and 4.10-6 of the Draft EIR/EIS.

## **Response to Comment 304-115**

*Comment Summary: The comment questions how seasonally wet vegetation differs from palustrine or annual grassland wetlands.*

Seasonally wet vegetation wetlands are an intermediate classification between vernal pools and annual grassland wetlands. The period of inundation separates the three types of seasonally inundated wetlands. Vernal pools hold water the longest and contain the highest diversity of native, endemic species, and annual grassland (palustrine) wetlands hold water for a shorter length of time and contain more non-native species. Seasonally wet vegetation is found in depressions in the landscape such as swales and basin floors that briefly pond water in the winter and spring or that become saturated by perched near-surface groundwater. Annual grassland wetlands include a mixture of obligate and facultative wetland plants. Annual grassland wetlands primarily occur on unconsolidated materials located on valley floors, basins, elevated stream terraces, lower alluvial fans and flat areas at the base of slopes. The wetland/upland boundary in these communities was determined to be where a prevalence of the hydrophytic species listed above shifted to a prevalence of upland and facultative upland species.

## **Response to Comment 304-116**

*Comment Summary: The comment asks how minimally or unvegetated seasonal wetlands would be classified.*

Minimally vegetated seasonal wetlands, depending upon the associated vegetation and hydrology, could fall into several wetland categories, including cropland wetlands, annual grassland wetlands, seasonally wet vegetation, and drainages. The Corps recognizes an area as a jurisdictional wetland when it possesses hydric soil, appropriate hydrology, and hydrophytic vegetation.

## **Response to Comment 304-117**

*Comment Summary: The comment suggests that the Draft EIR/EIS identify and give acreages for seasonal wetlands in the bayflats area.*

Refer to Responses to Comments 126-6 and 126-7.

### **Response to Comment 304-118**

*Comment Summary: The comment asks how the buffer distances were determined. The comment also states that a 30-foot buffer is not sufficient to protect wetlands.*

Buffer distances were determined using best professional judgment in conjunction with resources agency consultation. Refer to Response to Comment 304-13.

### **Response to Comment 304-119**

*Comment Summary: The comment asks were mitigation wetlands for unavoidable impacts be located and their feasibility discussed.*

Refer to Master Response 11, located in Section 6.2 of this document, and to Response to Comment 109-10.

### **Response to Comment 304-120**

*Comment Summary: The comment inquires what would happen if wetlands are lost later due to changes in hydrology and who would be responsible for tracking this.*

Measure 2.2.1: Irrigation Conservation and Management Programs (ICMPs) as discussed on page 2-21 of the Draft EIR/EIS requires that ICMPs be updated annually by the City of Santa Rosa to insure that protection measures are being adequately implemented. Measure 2.2.4: Restrict Soil Erosion and Sediment Movement (pages 2-26 and 2-27 of the Draft EIR/EIS) requires that irrigation application rates be adjusted if sediment movement criteria are not being met. If none of the Best Management Practices are effective in protecting existing wetlands in irrigation areas, the City will cease delivery of Project water.

### **Response to Comment 304-121**

*Comment Summary: The comment suggest that a site map of the South County irrigation area and Tolay Creek drainage be included in the Botanical Resources Technical Memorandum.*

A site map of the South County irrigation areas is included as Figure 3.3-11 on page 3.3-37 of the Draft EIR/EIS. Figure 4.8-1c on page 4.8-4 of the Draft EIR/EIS illustrates the Tolay Creek watershed.

### **Response to Comment 304-122**

*Comment Summary: The comment suggest that the amounts and locations of wetlands at the Tolay Reservoir site be included in the Botanical Resources Technical Memorandum.*

Figures 4.10-1 and 4.10-3 (pages 4.10-40 and 4.10-42 of the Draft EIR/EIS) illustrate the locations of wetlands present at the Tolay Extended and Tolay Confined storage reservoir

sites. Table 4.10-6 (page 4.10-39 the Draft EIR/EIS) provides the acres for each wetland type found at each of the storage reservoirs. In addition, more detailed maps are found in Appendix B to Appendix M-3 (Planning Level Wetland Determination Report for Reservoir Sites) of the Draft EIR/EIS.

### **Response to Comment 304-123**

*Comment Summary: The comment asks how much of the wetland resources (identified on page 21 of Sycamore Environmental's report) will be destroyed by the reservoir and associated drainages.*

Table 4.10-5 (page 4.10-37 of the Draft EIR) provides the acreages of jurisdictional wetland that potentially could be affected by each storage reservoir site. Note that the presence of "wetland indicator" species does not necessarily indicate the presence of a jurisdictional wetland. The 1987 Corps of Engineers Wetland Delineation Manual (Environmental Laboratory 1987) utilizes a three-parameter approach (vegetation, soils and hydrology) to identify and delineate the boundaries of jurisdictional wetlands. To be considered a wetland, all three positive wetland parameters must be present: (1) a dominance of wetland vegetation, (2) presence of hydric soils, and (3) hydrologic conditions that result in periods of inundation or saturation on the surface from flooding or ponding. Further description of the parameters are provided below.

1. Vegetation. Wetland vegetation includes those plants that possess physiological traits that allow them to grow and persist in soils subject to inundation and anaerobic soil conditions. Plant species are classified according to their probability of being associated with wetlands. Obligate (OBL) wetland plant species almost always occur in wetlands (more than 99 percent of the time), facultative wetland (FACW) plant species occur in wetland most of the time (67 to 99 percent), facultative (FAC) plant species have about an equal chance (33 to 66 percent) of occurring in wetlands as in uplands.
2. Hydric soils. Hydric soils are saturated, flooded, or ponded in the upper stratum long enough during the growing season to develop anaerobic conditions and favor the growth of wetland plants. Hydric soils usually have low chroma values, redoximorphic features, or a combination of the two. Low chroma values are generally defined as having a value of 2 or less using the Munsell Soil Notations. Redoximorphic features (commonly referred to as mottles) are areas in the soil that have brighter (higher chroma) or grayer (lower chroma) colors than the soil matrix. Redoximorphic features are the result of the oxidation and reduction process that occurs under anaerobic conditions.
3. Hydrology. Wetlands by definition are seasonally inundated or saturated at or near the surface. Indicators include visual soil saturation, flooding, water marks, drainage patterns, sediment and plant deposits, cryptogammic lichens, algal mats, and bare spots in basins.

### **Response to Comment 304-124**

*Comment Summary: The comment questions the validity of comparing the flora at the Project's reservoir sites with flora from other regions.*

No floristic studies, comparable in size to the Santa Rosa Project, were found for the coastal ranges of Sonoma County. The best available floristic studies from other coastal ranges of California were used. Also refer to Master Response J, located in Section 6.2 of this document.

### **Response to Comment 304-125**

*Comment Summary: The comment contends that the Botanical Resources Technical Memorandum is trying to convey that sites are already degraded due to the high numbers of introduced species, and therefore, are not considered important.*

The technical memorandum is stating the results of the floristic analysis that was conducted for the Santa Rosa Subregional Wastewater Project. This document is not attempting to convey that the storage reservoir sites are not important because they contain high percentages of introduced vegetation due to degradation.

### **Response to Comment 304-126**

*Comment Summary: The comment letter states that approximately 2 percent of California's historic riparian habitat is believed to remain in 1996, while page 40 of Volume XI, Appendix K-3, Appendix A of the Draft EIR/EIS indicates that a larger percentage of California's historic riparian habitat remains.*

The percentage of remaining riparian habitat indicated on page 40 in Appendix A of Appendix K-3 (Biological Resources, Volume III) refers specifically to riparian habitats located in the Central Valley of California and not the entire state. There are many differing estimates of the riparian loss in California. This is a highly impacted vegetation community and any loss is considered significant, as stated in Draft EIR/EIS.

### **Response to Comment 304-127**

*Comment Summary: The comment letter states that the analysis of wetland habitats in the Draft EIR/EIS is inadequate since the location of wetland habitats and the functions they serve are not identified.*

The location of wetland habitats that will be impacted by proposed storage reservoirs are identified in Figures 4.10-1 through 4.10-10 of the Draft EIR/EIS, while the functions provided by these wetland habitats are provided on pages 4.10-10 through 4.10-22 of the Draft EIR/EIS. The primary purpose Appendix A of Appendix K-3 (Biological Resources, Volume III) of the Draft EIR/EIS was to analyze botanical resources associated with the Project area, and more specifically, the storage reservoir sites. Section 4.10 of the Draft EIR/EIS, as well as Appendices M-1 (Planning Level Wetlands



Determination for Agricultural Irrigation Areas), M-2 (Wetland Determination and Mitigation for Pipeline Alignments Volume I), and M-3 (Planning Level Wetland Determination Report for Reservoir Site), provide additional information regarding wetland resources.

### Response to Comment 304-128

*Comment Summary: The comment states the headings South County and West County are incorrectly indicated on Table 5-1 (Draft EIR/EIS, Volume XI, Appendix K-3, Appendix A).*

The headings were reviewed and found to be incorrectly indicated.

Therefore, the following changes are made to the Draft EIR/EIS:

Page 42, Appendix K-3. The headings in Table 5-1 are revised as follows:

**Table 5-1.**

Acreage of Plant Communities and Mapped Features Potentially Affected by  
Project Components

Vegetative Communities/ Mapped Features	<del>South County</del> West County					<del>West County</del> South County				
	Bloomfield	Carroll Rd	Huntley	Valley Ford	Two Rock	Adobe Rd	Lakeville Hillside	Sears Pt.	Tolay A	Tolay C

### Response to Comment 304-129

*Comment Summary: The comment states that the sensitive plant communities discussion in the Botanical Resources Technical Memorandum include discussion on the Petaluma Marsh.*

Refer to Response to Comment 304-85

### Response to Comment 304-130

*Comment Summary: The comment contends that a good deal of the wetland resources found in the baylands would not be identified if only vegetation mapping was used for identification.*

Vegetation was not the only indicator used to identify wetlands. Refer to Response to Comment 304-123.

### **Response to Comment 304-131**

*Comment Summary: The comment asks why Cowardin categories were not used to classify wetlands.*

The Cowardin categories were used in Section 4.10 of the Draft EIR/EIS as well as the supporting technical memoranda, for jurisdictional wetland resources. Appendix B to Appendix K-3 (Biological Resources, Volume III) of the Draft EIR/EIS, deals specifically with botanical resources. As a result, only the plant community categories are referenced, not the Cowardin categories.

### **Response to Comment 304-132**

*Comment Summary: The comment asks what the category would be for the seasonal wetlands that form on the baylands.*

The seasonal wetlands found in the baylands area could be classified as annual grassland wetlands, seasonally wet vegetation wetlands, undetermined wetland type, excavated drainages, drainages, or cropland wetlands depending upon the associated vegetation, hydrology, and soils.

### **Response to Comment 304-133**

*Comment Summary: The comment states that wetland functions and values are not solely tied to vegetation.*

As stated in the Response to Comment 304-131, the primary purpose of the Appendix K-3 (Biological Resources, Volume III) of the Draft EIR/EIS is to analyze botanical resources, not jurisdictional wetland resources. As a result, plant communities are categorized solely on the basis of vegetation type. Section 4.10 of the Draft EIR/EIS utilizes the Cowardin wetland classification system (Pages 4.10-9 through 4.10-21 of the Draft EIR/EIS).

### **Response to Comment 304-134**

*Comment Summary: The comment asks how palustrine seasonal wetlands in the baylands area would be classified.*

Wetland types, including approximate acreages, associated with the Bay Flats area are presented in Table 4.10-7 of the Jurisdictional Wetlands Resources section (Pages 4.10-52 through 4.10-53 of the Draft EIR/EIS). Refer to Response to Comment 304-132.

### **Response to Comment 304-135**

*Comment Summary: The comment asks for loadings of trace elements after 25 years.*

Table 4.2-12 on page 4.2-25 of the Draft EIR/EIS provides additional information regarding metals loading. For each constituent, the table provides the least number of years until the state guidelines or EPA rules are exceeded. Mercury is the most limiting constituent, approaching state guideline limits in about 700 years. For some constituents, such as boron, there are no state guidelines or EPA roles. Because boron is not a metal, it will be leached out of soils and is not expected to accumulate.

### **Response to Comment 304- 136**

*Comment Summary: The comment asks about the potential effects of bioaccumulation in invertebrates and small mammals.*

There is no significant risk to wildlife or invertebrates as a result of irrigation and subsequent bioaccumulation, as illustrated in the Tables 1, 2 and 3 in Response to Comment 126-24. The calculation basis for the ecological quotients is discussed in Response to Comment 126-24.

### **Response to Comment 304-137**

*Comment Summary: The comment suggests that Appendix K-3 include discussion regarding wetlands in the baylands area and provide NWI maps and infrared photos for the baylands agricultural area wetlands.*

The primary purpose of Appendix K-3 (Biological Resources, Volume III) of the Draft EIR/EIS is to analyze botanical resources, not jurisdictional wetland resources. Jurisdictional wetland resources are addressed in Appendices M-1 (Planning Level Wetlands Determination for Agricultural Irrigation Areas), M-2 (Wetland Determination and Mitigation for Pipeline Alignments Volume I), and M-3 (Planning Level Wetland Determination Report for Reservoir Site), of the Draft EIR/EIS. National Wetland Inventory maps were utilized in the irrigation suitability mapping. Infrared photos were not necessary to provide adequate wetland definition for the Draft EIR/EIS but may be a useful tool in formulating Resource Maps associated with the Irrigation Conservation Management Plans developed for each property brought into the irrigation system.

### **Response to Comment 304-138**

*Comment Summary: The comment suggests that any patches of non-native grassland that will be lost should be restored.*

There are no plans to set aside land for non-native grassland restoration. However, native grasslands (i.e., areas composed primarily of native grasses) is considered sensitive plant communities, and any loss of native grasslands is considered significant (Page 4.8-95 of the Draft EIR/EIS). Mitigation Measure 2.3.11: Sensitive Resource Conservation Program provides for habitat creation and/or restoration for any loss of a sensitive plant community, including native grasslands (refer to page 2-76 through 2-84 of the Draft EIR/EIS).

### **Response to Comment 304-139**

*Comment Summary: The comment suggest that the 30-foot buffer from wetlands is inadequate.*

Refer to Response to Comment 304-13 regarding justification for the 30-foot buffer. The 50-foot buffer for riparian areas starts from the outermost drip-line on the upland edge of the riparian corridor.

### **Response to Comment 304-140**

*Comment Summary: The comment inquires about what would occur in areas where riparian vegetation is already non-existent due to grazing and other destruction.*

If the area is within a jurisdictional wetland then it will be buffered like any other wetland area, whether vegetation is present or not.

### **Response to Comment 304-141**

*Comment Summary: The comment suggests that there should be discussion on the potential impacts of salinity change on the Petaluma Marsh due to the possible increase in fresh water flow. The same standards which apply to the West County alternatives should apply to the South County alternatives.*

Refer to Master Response 10, located in Section 6.2 of this document, and Response to Comment 304-96.

### **Response to Comment 304-142**

*Comment Summary: The comment requests that impacts of the Russian River Discharge Alternative on water supply be evaluated, and that a site plan showing water intake and discharge points be provided.*

Refer to Response to Comment 126-4 regarding locations of water intakes and discharge points. The Draft EIR/EIS has concluded that there will be no impacts on water supply from discharge of reclaimed water to the Russian River. Discharge is evaluated in both Section 4.6 and Section 4.7 of the Draft EIR/EIS.

### **Response to Comment 304-143**

*Comment Summary: The comment asks what is the size and flow capacity of the pipelines that would be installed to the reservoirs.*

As indicated in Section 3.3 of the Draft EIR/EIS, the transmission pipelines from the Laguna Plant to the reservoir sites are typically 48 inches in diameter, although the size of pipe will vary from 42 to 60 inches in diameter depending on the segment, due to the length of the pipelines, the need to minimize head loss in the pipelines, and the varying

topography along the pipeline alignment. The flow capacity also could vary by segment, although typically, a flow rate of 3 cubic feet per second (cfs) will be maintained. More detailed information about the size and capacity of the pipeline segments, as well as the process by which the size and capacity were determined may be found in Appendices D-23 (KYPIPE Model Optimization for Agricultural Irrigation Systems) and D-25 (Transmission Pipeline Routes to All Reservoir Sites) of the Draft EIR/EIS.

#### **Response to Comment 304-144**

*Comment Summary: The comment requests consideration of reverse osmosis.*

Because the purpose of the Project is disposal and reuse of reclaimed water, alternative treatment technologies have only been evaluated when there is a need to address a water quality impact. The Laguna Treatment Plant produces excellent quality reclaimed water, and a need for reverse osmosis has not been identified. Refer also to Response to Comment 126-3 regarding logistical problems of reverse osmosis.

#### **Response to Comment 304-145**

*Comment Summary: The comment is a duplicate of Comment Letter 304.*

Refer to the Responses to Comments 304-1 through 304-144.

