

**COMMENT LETTER 15 - COUNTY OF SONOMA, PERMIT AND RESOURCE  
MANAGEMENT DEPARTMENT, RICHARD C. ROGERS, AICP (OCTOBER 7,  
1996), RECEIVED OCTOBER 7, 1996**

**Response to Comment 15-1**

*Comment Summary: The comment provides a discussion of Sonoma County's process for review of environmental documents and identifies that a list of reviewers and their telephone numbers is provided as an attachment.*

This introductory paragraph contains no specific comments on the Draft EIR/EIS. Each specific comment in the letter is addressed in Responses to Comments 15-2 through 15-97.

**Response to Comment 15-2**

*Comment Summary: The comment states the County's concern regarding impacts of construction activity on County roads and the ability of the City of Santa Rosa to detect and restore damage to County roadbeds. The comment also states that the County of Sonoma requests that the final Mitigation Program include a phase for consultation with the County of Sonoma Department of Transportation and Public Works (DTPW) staff regarding site-specific details of the alternative selected.*

The Mitigation and Monitoring Program Standard Traffic Control Procedure in Measure 2.2.21: Repair Road Damage, on page 2-53 of the Draft EIR/EIS is amended to address the County's request.

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

Page 2-53. The following sentence is inserted at the beginning of the first paragraph:

Prior to construction, the City of Santa Rosa will consult with the County of Sonoma Department of Transportation and Public Works (DTPW) staff and other affected agencies regarding site-specific details of the alternative selected prior to the preliminary design stage including construction drawings.

**Response to Comment 15-3**

*Comment Summary: The comment expresses concern about the impact of Alternative 4, Geysers Recharge, on scenic resources in areas affected by the proposed pipeline and pump station.*

Specific comments concerning these impacts are addressed in Responses to Comments 15-25 and 15-87 through 15-92.

#### **Response to Comment 15-4**

*Comment Summary: The comment expresses concern about consistency of the Project with the Land Use Element and map of the Sonoma County General Plan.*

The specific comment concerning this consistency is addressed in Response to Comment 15-24.

#### **Response to Comment 15-5**

*Comment Summary: The comment expresses concern about consistency of the Project with the Resource Conservation Element of the Sonoma County General Plan.*

The specific comments concerning this consistency are addressed in Responses to Comments 15-32 and 15-40.

#### **Response to Comment 15-6**

*Comment Summary: The comment expresses concern about consistency of the Project with the Open Space Element of the Sonoma County General Plan.*

The specific comments concerning this consistency are addressed in Responses to Comments 15-86, 15-87, 15-89 and 15-90.

#### **Response to Comment 15-7**

*Comment Summary: The comment expresses concern regarding consistency with the Noise Element of the General Plan.*

Specific comments regarding this consistency are addressed in Responses to Comments 15-75 through 15-85.

#### **Response to Comment 15-8**

*Comment Summary: The comment notes that the Draft EIR/EIS concludes that reservoirs would affect groundwater, including existing wells.*

The comment is correct that the Draft EIR/EIS concludes that wells could be affected (refer to Impacts 5.5.1 and 5.5.2 on pages 4.5-32 through 4.5-48). The number of wells affected is different for each reservoir, ranging from no wells for the Sears Point and Tolay reservoirs to as much as 25 wells for the Two Rock reservoir site.

#### **Response to Comment 15-9**

*Comment Summary: The comment further notes that the Draft EIR/EIS concludes that reclaimed water storage would create significant areas with groundwater composed of 20% or more reclaimed water.*

Figures 4.5-2 through 4.5-10 on pages 4.5-36 through 4.5-44 of the Draft EIR/EIS show the zone of 20% reclaimed water concentration in groundwater, below each of the storage reservoirs.

### **Response to Comment 15-10**

*Comment Summary: The comment expresses concern that reclaimed water would have long-term adverse effects on agriculture and water quality.*

The analysis of groundwater impacts presented in Section 4.5 of the Draft EIR/EIS depicts the long-term effects. Groundwater moves very slowly, and in many instances would not reach nearby wells for over 100 years. Figures 4.5-2 through 4.5-10 on pages 4.5-36 through 4.5-44 of the Draft EIR/EIS reflect the long-term equilibrium concentration. The Draft EIR/EIS concludes that agriculture would not be adversely affected by reclaimed water (refer to Section 4.2, Agriculture), and in fact projects significant benefits to the agricultural economy (refer to Chapter 4.18, Socio-economics).

### **Response to Comment 15-11**

*Comment Summary: The comment from the County of Sonoma states that the Sonoma County Water Agency comment letter suggests that additional analysis of reclaimed water quality is necessary.*

Refer to Responses to Comments 14-2, 14-4, and 14-7.

### **Response to Comment 15-12**

*Comment Summary: The comment states that the large scale of reclamation facilities contributes to the impacts of groundwater infiltration and mounding.*

The impacts of reclaimed water storage reservoirs on groundwater infiltration are discussed in Chapter 4.5 of the Draft EIR/EIS (refer also to Responses to Comments 15-8 and 15-9 above). Mounding impacts are discussed on page 4.5-48; potentially significant impacts will occur at the Carroll Road, Bloomfield, Huntley, and Valley Ford sites. The evaluation of impacts reflects the scale of the facilities.

Groundwater impacts of a large storage reservoir will be similar to those at several smaller reservoir sites. Smaller reservoirs expose a larger area of land to leakage and potential infiltration of water into the groundwater. Very large reservoirs produce larger head or water pressure that would promote leakage. Overall, because all reservoirs can be subject to seepage, groundwater impacts associated with small or large reservoirs will be similar.

### **Response to Comment 15-13**

*Comment Summary: The comment states that the large scale of reclamation facilities contributes to adverse noise impacts.*

Noise impacts are discussed in Chapter 4.12 of the Draft EIR/EIS. The evaluation of impacts takes into account the scale of the facilities. It is not likely that noise impacts would be less overall with use of a number of smaller reservoirs. Pump stations would be necessary at each reservoir site, and given the generally quiet nature of rural locations in the Project area, the impacts of virtually any pump station would probably be significant. The number and location of pump stations would be different, but there would probably be more pump stations if there were more reservoir sites.

#### **Response to Comment 15-14**

*Comment Summary: The comment states that the large scale of reclamation facilities contributes to excess runoff to waterways.*

No significant adverse impacts were identified that result from excess irrigation runoff to waterways. Three significant impacts on waterways identified in Section 4.6 of the Draft EIR/EIS (Impacts 6.5.3, 6.7.1, 6.7.3) are caused at least in part by the impacts of subsurface irrigation drainage. Two of these impacts (6.5.3 and 6.7.1) are less than significant after mitigation. The evaluation of impacts reflects the scale of the facilities. Disposal of less reclaimed water via agricultural irrigation would decrease subsurface irrigation drainage.

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

*Comment Summary: The comment states that the large scale of the Project contributes to the disruption of aquatic habitat, which would be considered an adverse impact.*

Impacts to aquatic habitat are discussed in Chapter 4.9 of the Draft EIR/EIS. The evaluation of impacts reflects the scale of the facilities. Many small reservoirs would need to cover more land to store the same amount of reclaimed water as a large reservoir; small reservoirs would also dam up more streams. It is unknown whether many small reservoirs would have more impact to aquatic habitat than would one large reservoir.

#### **Response to Comment 15-16**

*Comment Summary: The comment states that the large scale of the Project would contribute to the disruption of terrestrial habitat, which would be considered an adverse impact.*

Impacts to terrestrial habitat are discussed in Chapter 4.8 of the Draft EIR/EIS. The evaluation of impacts takes into account the large scale of the facilities. Many small reservoirs would need to cover more land to store the same amount of reclaimed water as a large reservoir. It is unknown whether many small reservoirs would have more impact to terrestrial habitat than would one large reservoir.

#### **Response to Comment 15-17**

*Comment Summary: The comment request consideration of numerous smaller reservoirs.*

Refer to Master Response 14, located in Section 6.2 of this document, concerning the use of small reservoirs.

### **Response to Comment 15-18**

*Comment Summary: The comment states that the Sonoma County Water Agency's comments assume that all mitigation measures incorporated into the Project description and mitigation measures proposed by the Draft EIR/EIS will be accepted and implemented by the City of Santa Rosa and will form the basis for an impact rating of less than significant after mitigation. In addition, the comment indicates that the degree to which adverse environmental impacts are mitigated by the above measures will play a significant role in maintaining consistency with the Sonoma County General Plan.*

The comment is accurate in its portrayal of mitigation measures. The EIR/EIS authors agree that implementation of recommended mitigation measures would be needed to avoid significant impacts and would contribute to consistency with the County General Plan.

### **Response to Comment 15-19**

*Comment Summary: The comment indicates that the fourth paragraph on page 2-30 of the Draft EIR/EIS may be interpreted to require that pipelines be within 10 feet of the roadway centerline when wetlands parallel the road. The comment goes on to say that this measure would avoid wetland impacts, but could cause unnecessary traffic impacts.*

Given that the intent of the mitigation measure is to avoid wetland impacts by placing the pipelines within the pavement or disturbed area associated with the road the EIR/EIS authors agree that the Draft EIR/EIS be amended to clarify this point.

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

Page 2-30. The fourth paragraph is modified as follows:

Where potential jurisdictional wetlands and waters of the United States or riparian areas parallel existing roadways and no bridge or culvert structure is crossed, pipeline construction activities shall be confined to ~~within 10 feet of the roadway centerline or the existing road right-of-way~~ the disturbed areas within the right-of-way (i.e., the pavement, shoulder, or ditch) or nearby suitable upland location, and shall not be located within wetlands or other sensitive biological resource areas. Furthermore, all reasonable effort shall be made to locate the pipeline so as to minimize the impact on traffic flow and pavement.

## **Response to Comment 15-20**

*Comment Summary: In reference to Sections 3.3 (page 3.3-7) and 4.3 (pages 4.3-62 and 4.3-63) the comment asks whether the difference in size of the Geysers pipeline shown in these sections is an error or reflects a change in pipeline size over different portions of the route.*

The description of Transmission Pipelines on page 3.3-7 of the Draft EIR/EIS addresses such pipelines generally and indicates they are “typically” 48 inches in diameter. The Geysers pipeline, as specifically described in Section 3.3 (page 3.3-8) varies from 42 to 48 inches in diameter. The segments along Pine Flat Road and Chalk Hill Road addressed on pages 4.3-62 and 4.3-63 are 42 inches in diameter.

## **Response to Comment 15-21**

*Comment Summary: The comment states that lack of revenue projections from the sale of reclaimed water may lead to overstatement of costs for Alternatives 2, 3, and 4. Also, the comment states that imposition of costs would change the analysis of agricultural impacts.*

It is possible that the Subregional System will choose not to charge users for reclaimed water and that the revenue projections are correct. Farmers do not pay for reclaimed water from the Subregional System now. Operators at the Geysers do not pay for reclaimed water from Lake County Sanitation District now. The structuring of payments for reclaimed water are a matter of public policy and negotiations with the potential users, neither of which have been decided or completed at this time. Because the range of possible payment structures is so great, and may vary for design costs, capital costs, and operating costs, the EIR/EIS authors concluded that revenue projections are too speculative to include in the EIR. Also refer to Master Response 13, located in Section 6.2 of this document.

After certification of the EIR, during the Project selection phase, the City may choose to proceed with revenue projections if they are interested in pursuing the Geysers Recharge or agricultural irrigation alternatives. Refer to Response to Comment 2-13.

Regarding the comment that charging farmers for reclaimed water may alter environmental impacts, refer to the three cropping scenarios developed for the agricultural irrigation alternatives (the explanation begins on page 4.18-11 of the Draft EIR). Although charging for reclaimed water may alter the types of crops chosen for irrigation, the EIR/EIS authors believe that such alterations would fall within the range of cropping patterns established in the three cropping scenarios. The Draft EIR/EIS impact evaluation of the agricultural irrigation component was based on these three cropping scenarios.

## Response to Comment 15-22

*Comment Summary: The comment indicates that the discussion of the Sonoma County Geothermal Resource Management Plan (GRMP) should be deleted from the Draft EIR/EIS because the GRMP has never gone beyond a preliminary draft format.*

The EIR/EIS authors concur with the request to delete references in the Draft EIR/EIS to the GRMP.

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

Page 4.1-21. Delete the second, third and fourth paragraphs:

### *Sonoma County Geothermal Resources Management Plan*

~~The Sonoma County Geothermal Resources Management Plan (GRMP) is intended to work in conjunction with the Resource Conservation Element of the Sonoma County General Plan, and set policies and guidelines for the utilization and management of the County's geothermal resources, particularly the Geysers Known Geothermal Resource Area (KGRA), while minimizing environmental and land-use conflicts. Sonoma County's policy, reflected in the County's general plan, is to promote geothermal development within the primary resource area of the Geysers, which consists of about 35,000 acres including the existing Geysers operations. The Management Plan is based upon full-field development, which promotes development while protecting cultural and environmental values.~~

~~Under the Land Use Plan section of the GRMP, lands within the GRMP area (which corresponds to the primary resource area of the Geysers) are designated geothermal resources to protect and promote the management of resources. The Plan provides that the primary use of lands shall be geothermal management and production activities, including geothermal resource exploration activities, geothermal power generation facilities and related transmission facilities.~~

Page 4.1-25. Delete the last sentence:

~~Geothermal resources were defined by the Sonoma County Geothermal Resources Management Plan (1990).~~

Page 4.1-35. Delete the seventh paragraph:

~~Pump Station G-4 is located within the Geysers KGRA as defined in the Sonoma County Geothermal Resources Management Plan. The pump station, as a public service use supporting the production of geothermal energy would be consistent with the Land Use provisions of the Plan.~~

## Response to Comment 15-23

*Comment Summary: The comment states that although the introduction to the discussion of evaluation criteria in Section 4.1 of the Draft EIR/EIS states that potential land use impacts may result from a change in land use, the significance criteria do not include change in land use but only whether the Project is consistent with the land use map of the relevant General Plans. The comment also states that it seems clear that various Project options, particularly the reservoirs and pump stations represent significant changes in existing land uses and that those changes may have significant effects. The comment suggests that the following additional criterion should be added to all impact tables in Section 4.1 of the Draft EIR/EIS: “Will the Project result in a change in existing land use?”, and asserts that where such land use changes occur, potential impacts and mitigation measures need to be identified.*

The EIR/EIS authors do not agree that the additional criterion as put forth in the comment is necessary to evaluate significance of land use changes, and further believe that it would be inappropriate. As stated in the comment, the criterion would mean that any change in land use would be considered significant, regardless of what type of change was involved or whether it was in conformance with the relevant land use plans. This would render any discussion of land use changes meaningless, since all would be considered significant. Also, under this criterion, since the land use change itself would be considered significant, the only possible measure that could fully mitigate the impact would be avoidance of the land use change, irrespective of what that change was.

The evaluation of consistency with adopted plans and ordinances was made with regard to the entire plan, and not just the land use map of the relevant General Plan, as these documents describe the standards adopted by the local governing bodies (including Sonoma County) for permitting land uses. The EIR/EIS authors believe that conformance with these standards is a sound basis for determining whether land use changes would have a significant land use impact.



## Response to Comment 15-24

*Comment Summary: The comment indicates that the Draft EIR/EIS notes that numerous “agricultural reservoirs and storage ponds” have been approved in agricultural areas although they are “considerably smaller” than those proposed by this Project. The comment goes on to state that the storage reservoirs proposed for this Project are much larger, would be publicly owned, would generally inundate all or portions of more than one parcel, and are primarily for the purpose of storing reclaimed water prior to distribution for irrigation of large areas encompassing many parcels, as opposed to typical agricultural ponds approved by the County in the past which involve only a few acres, are generally contained to one privately owned parcel, and generally provide water to agricultural activities on the parcel. The comment indicates that in general, the Sonoma County General Plan designates very large government-owned public facilities as “Public/Quasi-Public”. The comment also states that a determination of consistency with the General Plan for the proposed storage reservoirs requires balancing of several General Plan policies, citing Policy AR-4a concerning primary use of parcel within agricultural zones, and Policy RC-3d concerning reuse of treated wastewater. The comment states that the EIR/EIS should address consistency with these and related policies, but that a General Plan amendment may be necessary to enable the selected Project.*

The comment’s characterization of the Draft EIR/EIS statements with regard to storage reservoirs is out of context. The full sentences in Section 4.1 (page 4.1-29) are as follows:

“In the vicinity of the reservoir sites, there are existing agricultural reservoirs and ponds located within the Land Extensive Agriculture category on the Sonoma County General Plan Land Use Maps and classified for agricultural use under existing Sonoma County zoning. While these reservoirs and ponds are considerably smaller in scale, they serve the same function as the proposed reservoirs in supplying water for agricultural use.”

The Draft EIR/EIS goes on in the next sentence to note that:

“Existing reservoirs and ponds operated as part of the Subregional System, although constructed prior to the adoption of the current Sonoma County General Plan, are also shown under the Land Extensive Agricultural category on the General Plan Land Use Maps.”

The comment’s distinctions between “typical agricultural ponds approved by the County in the past” and the storage reservoirs proposed by this Project are distinctions of size (large versus small), number of parcels served (one versus many), and ownership (private versus public). Neither size, number of parcels served, nor ownership is identified in either of the policies cited in the comment (Policy AR-4a and Policy RC-3d) as criteria or conditions for primary use of agriculturally designated parcel or for facilities for reuse of treated wastewater. The existing storage ponds of the Subregional System, which existed

at the time of the adoption of the County's General Plan, have all of the characteristics of the Project's storage reservoirs cited in the comment, and were allowed to remain in agricultural designations when the General Plan was adopted rather than being placed in the Public/Quasi-Public designation. In addition, with respect to consistency with the General Plan, the proposed storage reservoirs are necessary to provide reclaimed water for agricultural irrigation, and, as stated in Section 4.1 of the Draft EIR/EIS, are an integral part of agricultural practices for pasture, row crops and viticulture. While they are of larger scale than existing facilities (either public or private) in the County, they serve the same function, which is a part of agricultural production. This should therefore be considered consistent with Policy AR-4a. Because the purpose of the storage reservoirs is solely to store reclaimed water for reuse in agricultural irrigation, they should be considered consistent with Policy RC-3d.

For the reasons cited above, the EIR/EIS authors reaffirm their conclusion that the storage reservoirs appear to be consistent with the Land Extensive Agriculture designation of the Sonoma County General Plan, and therefore do not anticipate that a General Plan amendment will be required.

## **Response to Comment 15-25**

*Comment Summary: With respect to Mitigation Measure 2.3.1. on page 2-62, which provides for the replacement of open space easements impacted by Pump Station G3 under Alternative 4, the comment asserts that the Mitigation Measure, as proposed with a one-to-one replacement ratio for the acreage acquired, assumes that lands protected by conservation easement are uniform in their open space character and natural resource value. The comment also asks for the basis for the conclusion that a one-to-one replacement ratio is appropriate mitigation in this case.*

The comment is incorrect in its statement that the proposed mitigation measure assumes that land covered by conservation easements is uniform in character or value. As stated in the description of Mitigation Measure 2.3.1: Replacement of Open Space Easements in Section 2.2 of the Draft EIR/EIS (page 2-62) the intent is that the City's contribution shall be equal to the value of the land acquired, while the discussion of this mitigation measure in Section 4.1 (page 4.1-36) indicates that the purpose of the mitigation is to allow the District to purchase land in comparable areas, as identified by the District.

To clarify this point, the Draft EIR/EIS is amended as follows:

Page 2-62. The Description section of Mitigation Measure 2.3.1 is amended as follows:

The City shall contribute funds to the Sonoma County Agricultural Preservation and Open Space District as compensation for land acquired for Pump Station G3. The City's cash contribution shall be equal to the value of the land acquired for the pump station based upon the open space character and natural resource value of the land. All moneys contributed by the City shall be utilized in accordance with the Sonoma County Open Space Expenditure Plan.

Page 4.1-36. The last sentence is amended as follows:

This will allow purchase of easements on new acreage in areas of comparable open space character and open space value ~~areas~~ identified by the Open Space District as a priority acquisition area.

The proposed mitigation is considered appropriate in this case because, as clarified above, there is a direct nexus between the impact and the mitigation. The impact is the conversion of public open space for Project facilities. Because such facilities are not allowed under the terms of the conservation easement for the McCord Ranch, acquisition of property for the construction of a pump station will require termination of the easement. Contributions by the City of the value on a one-for-one acreage basis with the cost of an equivalent easement on land of equal open space character and natural resource value will directly mitigate the impact by allowing the District to replace the lost open space with new open space which was not previously protected.

### **Response to Comment 15-26**

*Comment Summary: The comment requests information to justify cancellation of Williamson Act contracts at reservoir sites.*

Appendix D-6 (Documentation in Support of the Elimination of Alternatives) provides a detailed discussion of the screening of reservoir sites. A total of 59 reservoir sites and configurations were evaluated based on cost effectiveness, size, suitable location and environmental constraints. Of these, 9 reservoir sites (10 configurations) were determined to be suitable, and all 10 suitable reservoirs were fully evaluated in the Draft EIR/EIS. Criteria for suitable sites are explained on page 27 of Appendix D-6. Table 1 on page 27 in Appendix D-6 lists the 49 reservoirs that were deemed unsuitable and gives the reasons for each site. Thus there are no suitable sites that are not evaluated in the Draft EIR/EIS, which identifies that all reservoir sites except Sears Point contain land under Williamson Act contract. Williamson Act status of unsuitable reservoir sites was not investigated, but the evaluation of 10 suitable sites would meet the requirement of Criterion 6. Refer to Master Response 14, located in Section 6.2 of this document, regarding feasibility of using small reservoirs.

### **Response to Comment 15-27**

*Comment Summary: This comment questions the accuracy of the calculated metals build-up in the soil by comparing the Draft EIR/EIS predictions with those for the Forestville-Graton reclaimed water irrigation proposal. As an example: the Forestville-Graton area had a chromium build-up about 400 times faster than the Santa Rosa Project; even though both utilized tertiary wastewater.*

The EIR/EIS authors have not reviewed the accuracy of the Forestville-Graton calculations; those in the Draft EIR/EIS were extensively peer-reviewed. Application rates for Forestville-Graton as stated in the comment are about 4 acre/feet per year, about

twice that utilized for the West County. Adjusting for this, metals build-up would be about 200 times faster. The comment also states that typical metal concentrations for municipal wastewater were used in the Forestville-Graton analysis, apparently not project specific metals data. If these values are from typical municipal treatment plants serving more industrialized areas than Santa Rosa, and utilizing only secondary treatment, metal levels could easily be 200 times greater.

## **Response to Comment 15-28**

*Comment Summary: The comment indicates that the 20 percent or greater contribution criterion used in the Draft EIR/EIS to define significant groundwater impacts does not provide enough information and that the zone of 0-19 percent contribution should be discussed. The comment asks for an explanation of the 20 percent contribution factor, how future wells will be affected, and whether there are any feasible means of avoiding impacts.*

The 20 percent reclaimed water contribution point of significance is based on draft regulations for Title 22 California Code of Regulations as discussed on page 5-2 in Appendix H-1 (Hydrogeology of Storage/Reuse Areas and Evaluation of Potential Impacts to Groundwater) of the Draft EIR/EIS. The draft regulations selected for the purpose of analyzing impacts at storage reservoir sites were developed for spreading basins, which allow percolation of large volumes of reclaimed water into the subsurface. The Project storage reservoirs will not be designed to “percolate” and would, over time, become less permeable as fine grained silts and clay accumulated on the bottom. The draft regulations indicate that the level of reclaimed water should not exceed 20 percent of the water obtained from a domestic well. The draft regulations are used because there are no current regulations in effect.

Figures 4.5-2 through 4.5-10 in the Draft EIR/EIS show the maximum 20 percent contribution line which is the demarcation between significant and less-than-significant impacts. Areas downgradient of the 20 percent contribution line will, as the comment indicates, contain reclaimed water in concentrations less than 20 percent (0 to 19 percent). The impact on groundwater quality will be minimal because the amount of reclaimed water would be small compared to the amount of ambient groundwater (refer to the Summary of Results in Appendix H-1 of the Draft EIR/EIS). Also, the time and distance the water would have traveled could well have improved the quality of the reclaimed water component through filtration.

The dilution models used to determine the zones of contribution do not provide contour-type information (refer to Table 5.2 in Appendix H-1 of the Draft EIR/EIS). Information in the form requested by the comment is thus not available. The results of the modeling were used to prepare the maps showing the zone of 20 percent or greater reclaimed water contribution presented in Section 4.5 of the Draft EIR/EIS. The line demarcating the 20 percent or greater zone may actually represent a significantly lower percent contribution, as discussed in Appendix H-1. The analysis used an iterative procedure of calculating dilution within the reservoir subbasin, and then adding in the dilution of adjoining

(upgradient and downgradient) subbasins until the resultant reclaimed water concentration was 20 percent or less. The process is summarized below.

The first calculation at each reservoir site was made using the dilution from the subbasin alone. At Sears Point this resulted in a 14 percent reclaimed water contribution at the downgradient extent of the subbasin. Calculations for the Tolay Reservoir site indicate that dilution would be about 9 percent reclaimed water contribution at the downgradient extent of the subbasin without a back dam and about 12 percent with a back dam. At Valley Ford calculations show approximately 20 percent reclaimed water contribution at the downgradient extent of the subbasin.

Dilution calculations at other reservoir sites resulted in greater than 20 percent reclaimed water within the subbasin and a second calculation was conducted that included dilution from the upgradient subbasin. At Carroll Road the second calculation resulted in a 19 percent reclaimed water contribution in the main valley floor. Calculations at the Huntley Reservoir site resulted in a 15 percent reclaimed water contribution in the main valley floor. At Lakeville the second calculation resulted in a 20 percent reclaimed water contribution in the main valley floor. Additional calculations were required at the Adobe Road and Bloomfield reservoir sites to identify the less than 20 percent contribution line. At Adobe Road dilution with the upgradient and downgradient subbasins resulted in a 20 percent contribution line in the main valley floor. At the Bloomfield reservoir site dilution of the upgradient and downgradient subbasins would result in an 18 percent contribution line in the main valley floor.

In general, groundwater just downgradient of the 20 percent or less zone will have reclaimed water contributions of between 9 and 20 percent. The reclaimed water contribution will decrease in the downgradient direction to a location in the main valley where reclaimed water will be undetectable in groundwater.

As indicated in the Draft EIR/EIS on page 4.5-47, future groundwater wells drilled within the zone of 20 percent or greater contribution of reclaimed water could be significantly affected by reduced groundwater quality. Consideration of mitigation measures to avoid this impact are discussed in Response to Comment 8-3.

## **Response to Comment 15-29**

*Comment Summary: The comment requests evaluation of potential human health impacts of both nitrate and ammonia in groundwater.*

Human health impacts of nitrate are discussed in Section 4.7 of the Draft EIR/EIS on page 4.7-10. If nitrate were to convert to ammonia in a reducing environment the 16.3 mg/L of nitrate assumed to be contained in the reclaimed water could produce about 20 mg/L of ammonia. There is no primary maximum contaminant limit (MCL) for ammonia and its presence in water is readily detected by odor and taste. Data indicate that human populations that include sensitive subpopulations cannot taste ammonia in concentrations of 34 mg/L or less. Health effects related to ammonia in water have not been observed at

concentrations below the taste threshold; therefore impacts from ammonia in wells are less than significant.

### **Response to Comment 15-30**

*Comment Summary: The comment indicates that wells within the reservoir footprint should be properly abandoned to prevent downward migration of groundwater.*

The EIR/EIS authors concur.

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

Page 2-85. The following paragraph is added after the second paragraph:

All wells identified during the well survey that are located within the reservoir footprint shall be properly abandoned under a permit issued by the Well and Septic Section of Sonoma County's Permit and Resource Management Department.

### **Response to Comment 15-31**

*Comment Summary: The comment indicates that groundwater within the 20 percent or greater contribution zone could be used for agricultural or irrigation uses.*

The Draft EIR/EIS includes Mitigation Measures to provide alternative municipal drinking water supplies to affected areas in the vicinity of the reservoir site. Individual property owners could decide to convert wells to uses other than drinking water. Abandonment of wells must occur under a permit from the Well and Septic Section of Sonoma County's Permit and Resource Management Department.

Design and installation of water supply pipeline would be conducted in accordance with all applicable codes and regulations including provisions of the California Plumbing Code. The City would consider the construction and operation of a Small Community Water System at the time abandonment of wells became necessary.

### **Response to Comment 15-32**

*The comment states that the reference to Sonoma County General Plan Goal RC-3e in Table 4.6-26 (page 4.6-53) of the Draft EIR/EIS is incomplete. The comment also suggests that plan consistency should be added as a "Point of Significance" on page 4.7-54, and that the subsequent impact analyses should evaluate the consistency of Project options with this General Plan policy.*

The EIR/EIS authors concur that the statement of the General Plan Goal is not complete, and agree that the complete text of the Goal should be included in the Table.

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

Page 4.6-53 The statement of Sonoma County General Plan Policy RC-3e in Table 4.6-26 is amended by the addition of the following:

If discharge is proposed, review and comment on projects and environmental documents and request that projects maximize reclamation, conservation and reuse programs to minimize discharges and protect water quality and aquifer recharge areas.

This sentence is a statement of action required by the County, and as such is beyond the control of the Subregional System as the Project proponent.

Table 4.6-26 (page 4.6-53) identifies which evaluation criteria in Table 4.6-27 (page 4.6-56 et seq) are relevant to each of the General Plan Goals, Objectives and Policies for impacts related to Surface Water Quality, and each of the evaluation criteria has an identified and quantifiable point of significance. Impacts related to Groundwater Quality are similarly treated in Section 4.5 of the Draft EIR/EIS (Tables 4.5-2 and 4.5-3 on pages 4.5-21 and 4.5-22). Surface Water Quality Evaluation Criteria 1, 2, and 4, which are indicated as the relevant criteria for General Plan Policy RC-3e, include exceedence of both numeric-based and narrative-based water quality criteria. The EIR/EIS authors believe that this adequately addresses consistency with the stated General Plan Policy, and do not agree that an additional evaluation criterion and point of significance is needed.

### **Response to Comment 15-33**

*Comment Summary: The comment asks for a complete description of Project impacts on West County streamflows (including rates, amounts, timing and manner of discharge) that will result in significant impacts on the esteros.*

Section 2 in Appendix I-11 (Water Quality and Flow Model for Irrigation/Storage Area Streams) of the Draft EIR/EIS provides an overview of the dam seepage and irrigation drainage processes that result in streamflows. Dam seepage rates are shown in Tables 2 through 5 in Appendix I-11. The rates vary from about 2 to 38 gallons per minute, depending on the storage site. Appendices A and B of Appendix L-7 (Aquatic Biological Resource Impacts Analysis Report) show the combined effect of storage and irrigation on stream flows that enter the Esteros. The project will increase flows into the esteros in summer about 0.5 cfs (when existing flows are about 1 cfs) and decrease flows into the esteros in spring by about 4 cfs (when existing flows are about 50 to 100 cfs). Appendix I-11 describes the model that was used to estimate Project impact on streamflows, and the model output is presented in the appendix to Appendix L-7 (Aquatic Biological Resources Impacts Analysis Report).

### **Response to Comment 15-34**

*Comment Summary: The comment requests an explanation of the apparent inconsistency between a statement on page 4.6-85 (0.01 cfs will not significantly affect stream water quality) and a statement on page 4.6-89 ("salinity, ammonia dissolved oxygen . . . will also be affected in the esteros").*

The statements are not inconsistent. The quote from page 4.6-85 refers to the creeks of West County, and the quote from 4.6-89 refers to the esteros of West County. The reason the significance of the impacts is different is that the evaluation criteria are different, as described on page 4.6-66. Impacts to creeks are only considered significant if water quality criteria are exceeded, while any change to the esteros is considered significant, even if criteria are not exceeded or the change would be an improvement in water quality.

### **Response to Comment 15-35**

*Comment Summary: The comment requests that an explanation be provided as to why irrigation runoff cannot be managed to avoid estero impacts.*

Irrigation runoff will generally not occur as a result of Measures 2.2.1 and 2.2.3 (pages 2-21 and 2-23 of the Draft EIR/EIS). Estero impacts are expected to result primarily from the impact of irrigation on shallow groundwater that discharges to surface water and from the impact of seepage from a storage reservoir. Measures 2.2.1 and 2.2.3 minimize these impacts to the maximum feasible extent. Significant impacts cannot be avoided in the esteros because of the stringent point of significance of "no" change.

### **Response to Comment 15-36**

*Comment Summary: The comment states that there is no mention of viruses in the section on Biological Constituents on page 4.7-12.*

Although total coliform generally is used as an indicator of enteric pathogens, enteric viruses are discussed in the referenced section, and analyses for viruses were conducted. As stated in the second paragraph on page 4.7.12 of the Draft EIR/EIS under Biological Constituents, "enteric viruses were not detected in any samples (Table 4.7-4)."

### **Response to Comment 15-37**

*Comment Summary: The comment asks to clarify the manner in which monitoring for viruses occurs.*

Monitoring for viruses is not routine, but was done as part of the special studies completed for the Draft EIR/EIS. To clarify this, Section 2.4 of Appendix H-2 (Reclaimed Water Quality) is amended.

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



Pages 3 and 4, Appendix H-2. Section 2.4 is revised as follows:

Some compounds of concern as constituents of drinking water are not required for analysis of Santa Rosa's reclaimed water or receiving waters and, therefore, are not routinely measured. In order to provide additional data on constituents in reclaimed water of concern for drinking water~~In order to provide additional data on reclaimed water quality~~, a special reclaimed water study was conducted in late 1994. The results of this study are given in Appendix 5, and include analyses for seven inorganic substances, 170 organic species, radionuclides, two metals (beryllium and thallium), and eight pathogens, all conducted on composite treatment plant reclaimed water samples collected on four dates. Also included are pathogens from Delta Pond which were analyzed on one date. The study also included (on two dates) a tentatively identified compound (TIC) search for 76 organic species as part of a special alkylphenol study. The methods used to analyze for constituents in this study were selected to be consistent with the methods used for routine analyses by the Subregional System. These methods include the following:

metals EPA 200.8, EPA 206.2, EPA 215.1, EPA 239.2, EPA 242.1, EPA 245.1, EPA 270.2, EPA 6010-200.7

organic compounds EPA 547, EPA 548, EPA 549, EPA 1613, EPA 504, EPA 525.1, EPA 531.1, EPA 515.1, EPA 508, EPA 524.2

Radiation EPA 900.0, EPA 903.0

Biology (bacteria, viruses, protozoa) SM<sup>1</sup> 9510, SM 9711B, SM 9260J, SM 9260D, SM 9260E, SM9215B, SM 9221B

Other EPA/SM 335.3, EPA 160.1, EPA 160.2, SM 2340B, EPA 300.0, EPA 100.1

<sup>1</sup> SM = APHA, AWWA, WEF. 1992. Standard Methods for the Examination of Water and Wastewater. 18<sup>th</sup> Edition.

## **Response to Comment 15-38**

*Comment Summary: The comment asks for documentation of results regarding actual types and amounts of viruses found.*

Section 4.7 of the Draft EIR/EIS specifies that enteric virus data were measured. Virus data are also presented in Table 2 in Appendix H-2 (Reclaimed Water Quality). All virus data are enteric viruses data, although this is not specified in Appendix H-2. The analyses cannot distinguish between different species of enteric viruses.

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

Page 3, Appendix H-2. The fourth paragraph is modified as follows:

Less frequently analyzed data on total organic carbon (TOC) (monthly from May 1994 through January 1995); [enteric](#) virus counts (seven dates); total Kjeldahl nitrogen (TKN) (two dates); and color, fluoride, sulfate and surfactants (1 date each) are included.

Page 6, Appendix H-2. The third paragraph is modified as follows:

Table 2 provides a summary of the reclaimed water biological data (BOD, bacteria and [enteric](#) viruses) contained in the appendix tables.

Page 10, Appendix H-2. Table 2 is modified as follows:

**Table 2**

Biological Constituents of Reclaimed Water

| Biological Constituent         | Units          | Concentration Range | Mean Concentration | Reporting Limits | Number of Detects | Number of Samples | Point of Significance |
|--------------------------------|----------------|---------------------|--------------------|------------------|-------------------|-------------------|-----------------------|
| BOD                            | mg/L           | 1.5 - 19            | 3.4                |                  | 49 <sup>1</sup>   | 49 <sup>1</sup>   | none                  |
| Total Coliform                 | Mpn/100 ml     | ND - 170            | 2.2                | 2.2              | 49 <sup>1</sup>   | 49 <sup>1</sup>   | none                  |
| <a href="#">Enteric</a> Virus  | PFU/100 L      | ND                  | N/A                | 1/~150 L         | 0                 | 7                 | none                  |
| <i>Giardia lamblia</i> cysts   | #cysts/100 L   | ND - 13.8           | 4.75               | 1/~200 L         | 2                 | 4                 | none                  |
| <i>Cryptosporidium</i> oocysts | #oocysts/100 L | ND                  | N/A                | 1/~200 L         | 0                 | 4                 | none                  |
| <i>Legionella</i> sp.          | Mpn/100 ml     | ND                  | N/A                | 7840             | 0                 | 4                 | none                  |
| <i>Salmonella</i> sp.          | Mpn/100 ml     | ND                  | N/A                | 2.2              | 0                 | 4                 | none                  |
| Shigella                       | Mpn/100 ml     | ND                  | N/A                | 2.2              | 0                 | 4                 | none                  |
| Heterotrophic Plate Count      | CFU/ml         | ND - 2              | 1.25               | 2                | 1                 | 4                 | none                  |

## Response to Comment 15-39

*Comment Summary: The comment requests mitigation measures for any environmental effects of viruses in wastewater.*

Appendix J-3 (Human Health Risks from Chemical and Biological Components of Reclaimed Water) of the Draft EIR/EIS did not identify any impacts that would require mitigation. Disinfection of wastewater provides adequate removal of viruses.

## Response to Comment 15-40

*Comment Summary: The comment states that the reference to Sonoma County General Plan Goal RC-3 in Table 4.7-6 (page 4.7-23) of the Draft EIR/EIS is incomplete. The comment also suggests that plan consistency should be added as a “Point of Significance” on page 4.7-25, and that the subsequent impact analyses should evaluate the consistency of Project options with the General Plan goal.*

The EIR/EIS authors concur that the statement of the General Plan Goal is not complete, and agree that the complete text of the Goal should be included in the Table.

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

Page 4.7-23. The statement of Sonoma County General Plan Goal RC-3 in Table 4.7-6 is deleted and replaced in its entirety as follows:

~~Assure and adequate long term supply of water for domestic use~~

Conserve, enhance and manage water resources, protect their quality, and assure an adequate supply of water for domestic, fishing, industrial, and agricultural use.

Table 4.7-6 identifies which evaluation criteria in Table 4.7-7 (page 4.7-25) are relevant to each of the General Plan Goals, Objectives and Policies, for impacts related to Public Health and Safety, and each of the evaluation criteria has an identified and quantifiable point of significance. Public Health and Safety Evaluation Criterion 1, which is indicated as the relevant criteria for General Plan Goal RC-3, includes exposure of the public to chemicals, radionuclides, pathogenic viruses, bacteria or other disease organisms at concentration detrimental to human health. All of the Project alternatives were selected to meet the City’s objective to “Develop and operate the wastewater treatment and disposal system in ways that protect public health and safety and promote wise use of water resources.” The EIR/EIS authors believe that the above cited criterion adequately addresses consistency with the General Plan Goal, and do not agree that an additional evaluation criterion and point of significance is needed.

## Response to Comment 15-41

*Comment Summary: The comment notes that contaminants associated with hazardous waste sites may move via groundwater farther than the 500 foot separation used in the Draft EIR/EIS and recommends that mitigation be added to address encountering previously unknown hazardous waste sites and to prevent further dispersion of contaminants during construction.*

Monitoring for hazardous wastes and handling of contaminated groundwater are included in the Construction Management Program in Section 2.3.15 of the Draft EIR/EIS.

The Draft EIR/EIS is modified as follows:

Page 2-89. The fourth paragraph is revised as follows:

Prior to construction, the City shall hire a Registered Environmental Assessor (REA) to perform an Initial Site Assessment following American Society of Testing Materials (ASTM) guidelines along pipeline corridors and near pump stations to identify potential hazardous waste sites that may affect Project construction activities. ~~Prior to~~ During construction the City shall hire a Registered Geologist or Registered Environmental Assessor to survey all pipeline alignments for contaminated soil, recording the location, extent, and type of contamination.

Page 2-89. The following sentence is added at the end of paragraph six:

Where contaminated groundwater is encountered, precautions will be taken to assure that the installation of piping or other construction activities do not further disperse contamination.

## Response to Comment 15-42

*Comment Summary: The comment asks that the possible growth inducing effects be addressed in relation to providing an alternate water supply subject to contamination in the vicinity of reservoirs. The comment specifically asks what the criteria will be for eligibility for such alternate supply; whether such supply will accommodate possible second dwelling units or farm worker/farm family units; and whether the availability of City water at remote locations will induce growth in these areas. The comment also cites County General Plan policy PF-1d regarding extension of sewer or water service outside the urban service area.*

Mitigation Measures 2.3.12 (page 2-85) and 2.3.13 (page 2-87) describe the criteria for provision of an alternative water supply. With respect to degraded water quality, the criterion, as identified on page 2-85, is a significant increase in nitrate levels as determined by data from monitoring wells to be installed and maintained by the City.

With respect to water quantity, the criterion, as stated on page 2-87 is reduced upgradient inflows as determined by monitoring wells to be installed and maintained by the City.

The question of the number of users to be accommodated is addressed on page 2-85, which states that the number of users served, the volume of water replaced and the size of the pipes shall be based on projected impacts at individual wells and consistency with applicable zoning laws. Therefore the maximum number of users or dwelling units would be limited by the applicable zoning. Farm worker/farm family units in conformance with zoning would be considered in the same fashion as primary residences.

In Section 5 (pages 5-10 and 5-11) the Draft EIR/EIS concludes that the provision of alternate water supplies will be growth-accommodating rather than growth-inducing, because the provision of the supplies would not result in development beyond that provided for in the Sonoma County General Plan. However, since the purpose of the alternate water supply is to resolve a potential public health hazard to existing development, rather than provide a source of water supply for new development, the EIR/EIS authors believe that Mitigation Measure 2.3.12 should be revised to ensure that the proposed water supply does not result in unplanned new development.

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

Pages 2-85 and 2-86. The last paragraph of the Description section is revised as follows:

Develop and provide a replacement water supply for any affected drinking water uses within the 20 percent or greater contribution zone, and in any other areas where nitrate levels exceed the MCL. Replacement water would be provided by a water pipe that would originate at the Laguna Wastewater Treatment Plant. This pipe would be installed at the time of construction, and would occupy the same trench as the reclaimed water pipe from the treatment plant to the reservoir. Potable water pipelines from the reservoir to users would be installed in the same trench as the reclaimed water distribution lines serving irrigation areas. Pipes would be installed with adequate vertical and horizontal separation between potable water and reclaimed water lines to insure that the potable water would be protected. Except as permitted by Sonoma County, the City will limit the service to existing drinking water users in the affected area, and number of users served, the volume of water replaced, and the size of the pipes shall be based on projected water quality impacts at individual wells ~~and approval of applicable zoning laws. Because the pipeline would be connected to the City's water supply, only City approval would be required for hook-ups.~~ The City has an adequate water supply to ensure this measure is feasible.

### **Response to Comment 15-43**

*Comment Summary: The comment requests that the EIR/EIS include a new significance criterion which reads: “Will the Project cause loss of trees or groups of trees and shrubs that have local significance, based on type, location, condition, or age.”*

The EIR/EIS authors conclude that the significance criteria provided in the Draft EIR/EIS adequately address impacts to biological resources associated with pipeline construction. Review of the CEQA Guidelines, specifically the section on evaluation of environmental impacts, did not disclose any criteria which pertain to the loss of trees and shrubs (unless protected by tree ordinances or part of sensitive plant community or habitat). It should be noted that avoidance of sensitive biological resources is addressed by Measure 2.2.5: Avoid Sensitive Biological Resources (pages 2-28 through 2-33 of the Draft EIR/EIS).

### **Response to Comment 15-44**

*Comment Summary: The comment recommends that the following measure be included in the mitigation program for pipelines and pump stations: “Pipeline alignments will be designed to minimize damage to roadside trees by placing pipes within the disturbed area of the road (i.e., pavement, shoulder, or ditch) when practical.”*

The EIR/EIS authors concur.

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

Page 2-30. The third paragraph is revised as follows:

Pipeline construction corridors shall be limited to 30 feet from the roadway centerline. Pipeline alignments will be designed to minimize damage to roadside trees by placing pipes within the disturbed area of the road (i.e., pavement, shoulder, or ditch) when practical.

### **Response to Comment 15-45**

*Comment Summary: The comment recommends that the following the measure be included in the mitigation program for pipelines and pump stations: “Construction plans will identify trees that are to be removed by the Project. Construction contracts will prohibit removal of other trees and shrubs within the right-of-way.”*

The EIR/EIS authors believe that the text describing Measure 2.2.5: Avoid Sensitive Biological Resources provided in the last four paragraphs of page 2-32 of the Draft EIR/EIS already includes these protective measures, and therefore no additional measures are required.

## Response to Comment 15-46

*Comment Summary: The comment recommends that the following measure be included in the mitigation program for pipelines and pump stations: “Construction specifications will prohibit stockpiling materials or parking equipment on undisturbed ground within driplines of trees within the right-of-way.”*

The EIR/EIS authors concur.

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

Page 2-31. This following paragraph is added before the last paragraph on the page:

Construction specifications will prohibit stockpiling materials or parking equipment on undisturbed ground within the driplines of trees within the right-of-way.

## Response to Comment 15-47

*Comment Summary: The comment recommends that the following measure be included in the mitigation program for pipelines and pump stations: “When it is necessary to prune branches or roots of trees within the right-of-way, the pruning shall be done in accordance with accepted aboricultural practices, including the pruning standards published by the California Department of Forestry (Coast Region).”*

The EIR/EIS authors concur.

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

Page 2-32. The eighth paragraph is modified as follows:

~~Limbing of trees is to be conducted by a certified arborist and only when necessary as a means of protecting the tree from damage or removal.~~ When it is necessary to limb trees, prune branches, or prune roots within the right-of-way, work will be conducted by a certified arborist in accordance with accepted aboricultural practices, including the pruning standards published by the California Department of Forestry (Coast Region). This work shall occur only as a means of protecting trees from damage or removal.

## Response to Comment 15-48

*Comment Summary: The comment recommends that the following measure be included in the mitigation program for pipelines and pump stations: “When it is necessary to remove or seriously damage roadside trees to install a pipeline, the Project proponent shall plant replacement trees at suitable places within or adjacent to the right-of-way. The requirement for planting will be determined when the construction plans are submitted to the County as part of the encroachment permit application process. Species, sizes, planting locations, and maintenance will be determined by the County.”*

Measure 2.2.8: Revegetate Temporarily Disturbed Sites (pages 2-37 and 2-38 of the Draft EIR/EIS) proposes the preparation of a Revegetation Plan which includes the use of potted plant materials to replace woody vegetation.

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

Page 2-37. The second paragraph describing Upland Sites is modified as follows:

2. The Revegetation Plan shall provide measures to ensure that trenching scars associated with pipeline construction are revegetated with drought tolerant plant species common to the disturbed area. The specifics of the Revegetation Plan (i.e., species, sizes, planting locations, and maintenance) shall be determined when the construction plans are submitted to the County as part of the encroachment permit application process.

## Response to Comment 15-49

*Comment Summary: The comment questions why the impact acreage indicated for coastal oak woodland (Table 4.8-9 on page 4.8-84 of the Draft EIR/EIS) is identical for the eight alternative pipeline corridors.*

Results of the habitat assessments conducted along pipeline alignments indicate that for all eight subalternative pipeline alignments, oak-bay-madrone (montane hardwood) and oak woodland (coastal oak woodland) habitats occur only along pipeline alignments associated with the Sebastopol Agricultural Irrigation Component. The Sebastopol Agricultural Irrigation Component is an element of all subalternatives of Alternatives 2 and 3. Therefore, the estimated impact acreage for oak-bay-madrone (montane hardwood) and oak woodland (coastal oak woodland) habitats are equivalent for the eight reclamation subalternatives referenced in Table 4.8-9 on page 4.8-84.

## Response to Comment 15-50

*Comment Summary: The comment suggests that all “points of significance” based on combined Marin and Sonoma county acreages be revised to reflect the degree of impact on the resources of each county individually.*



Potential impacts to biological resources were considered within a local and/or regional context as ecologically appropriate. Political boundaries were not recognized unless other more appropriate means of context were not available. In addition, analyzing resource losses by county will not alter the findings of significance.

### **Response to Comment 15-51**

*Comment Summary: The comments suggests that the EIR/EIS provide discussion that the Two Rock storage reservoir site was formerly owned by the University of California and was called the Button Ranch.*

Page 14 in Appendix A of Appendix K-3 (Biological Resources) of the Draft EIR/EIS provides discussion on the prior history of the Two Rock site.

### **Response to Comment 15-52**

*Comment Summary: The comment questions why less than a 15 percent loss of California Native Plant Society (CNPS) List 2, 3, and 4 species would not be considered significant, in light of Section 15065(a) of the CEQA Guidelines.*

Section 15065 describes mandatory findings of significance as follows:

"A Lead Agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared for the project where any of the following conditions occur:

(a) The project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory."

For the purposes of the EIR/EIS, rare or endangered species are defined by Section 15380 of the State CEQA Guidelines as follows:

- "Endangered" when its survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, over exploitation, competition, disease, or other factors; or
- "Rare" when either:
  - Although not presently threatened with extinction, the species is existing in such small numbers throughout all or a significant portion

of its range that it may become endangered if its environment worsens;  
or

- The species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered "threatened" as that term is used in the Federal Endangered Species Act.
- A species of animal shall be presumed to be rare or endangered as it is listed in:
  - Sections 670.2 or 670.5, Title 14, California Administrative Code; or
  - Title 50, Code of Federal Regulations Sections 17.11 or 17.12 pursuant to the Federal Endangered Species Act as rare, threatened, or endangered.
- A species not included in any listing identified above shall nevertheless be considered to be rare or endangered if the species can be shown to meet the criteria associated with "Endangered" or "Rare" species.

The California Native Plant Society provides the following classifications for sensitive plants:

- List 1B species are rare, threatened or endangered in California and elsewhere;
- List 2 species are classified as rare, threatened or endangered within California but are more common in other states;
- List 3 species require more information to be gathered prior to classification; and
- List 4 are species of limited distribution.

In the Draft EIR/EIS analysis, any loss to populations of CNPS List 1B species is considered to "reduce the numbers or restrict the range of a rare or endangered plant". Given the above definitions of species for List 2 through 4, the EIR/EIS authors determined that less than a 15% loss of these species' populations in Marin and Sonoma County would not result in a significant effect. It is important to emphasize, however, that there are no List 2 species potentially affected by the Project. Only List 3 and List 4 plants have been identified as being potentially impacted. Refer to Response to Comment 12-74 for more information regarding the impacts on and distribution of plants potentially affected by the Project.

### **Response to Comment 15-53**

*Comment Summary: The comment states that in the absence of mitigation, the impact of the Two Rock storage reservoir should be considered “significant and unmitigated.”*

The EIR/EIS authors assume that this comment is associated with impacts to bristly linanthus. The loss of bristly linanthus at the Two Rock storage reservoir site is considered significant under the cumulative impacts scenario (pages 4.8-116 and 4.8-117 of the Draft EIR/EIS). Based on this significant cumulative impact, Measure 2.4.15: Sensitive Plant Relocation Program (page 2-118) has been prescribed as an appropriate mitigation measure.

### **Response to Comment 15-54**

*Comment Summary: The comment indicates that the Draft EIR/EIS states that the Project will result in the cumulative loss of 3,400 acres of sensitive plant communities due largely to the development of storage reservoirs. The comment also questions the use of 25 percent loss of existing habitat in Sonoma and Marin counties as an appropriate point of significance.*

The Draft EIR/EIS does not identify 3,400 acres of sensitive plant communities as being lost due to the Project. Page 4.8-118 of the Draft EIR/EIS identifies that approximately 3,540 acres of annual grassland (i.e., 21 percent of the 16,884 acres of annual grassland in Sonoma and Marin counties) could be converted to crop production. The Project could therefore contribute up to 3,540 acres to the estimated cumulative loss of 6,780 acres of annual grassland in Sonoma and Marin counties. Annual grassland has not been identified as a sensitive plant community. It has been described as a sensitive wildlife habitat and it is sensitive wildlife habitat for which a greater than 25 percent loss has been identified as significant. The cumulative analysis concludes the Project will contribute to a significant cumulative loss of grassland, and finds this to be a significant impact that can not be mitigated (see page 4.8-118). Refer to Response to Comment 12-77 for further discussion of this issue.

### **Response to Comment 15-55**

*Comment Summary: The comment questions the feasibility of the Sensitive Plant Relocation Program and requests that the EIR/EIS comment on the effectiveness of similar programs for other projects. The comment also recommends that Mitigation Measure 2.4.15 be revised by adding the following statement: “Mitigation sites shall be chosen based on their ability to sustain displaced species over the long term.”*

The EIR/EIS authors agree with this recommendation.

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

Page 2-118. The first paragraph is modified as follows:

Seeds of hayfield tarplant or bristly linanthus and Lobb's aquatic buttercup populations shall be collected and reestablished in mitigation sites developed as a result of the Sensitive Resource Conservation Program. [These mitigation sites shall be chosen based on their ability to sustain displaced species over the long term.](#)

#### **Response to Comment 15-56**

*Comment Summary: The comment questions whether additional sampling and studies should have been conducted to determine the significance of the stream habitat at the Carroll Road site for steelhead trout.*

The EIR/EIS authors do not believe that additional sampling is needed. Refer to Responses to Comments 1-13, 1-14, 1-15, and 1-21. Also refer to Master Response 13, located in Section 6.2 of this document.

#### **Response to Comment 15-57**

*Comment Summary: The comment recommends that the Sensitive Resource Conservation Program include preparation of an adopted plan for each ecosystem affected, if the selected alternative affects wetlands. The comment also states that the impacts of several alternatives on small-area ecosystems cannot be effectively mitigated with proposals for replacement habitat and vegetation.*

The Mitigation and Monitoring Program will be adopted by the City of Santa Rosa when the City makes findings under CEQA. These findings will make that program a condition of Project approval in order to mitigate significant effects on the environment. A project-specific mitigation plan for the preferred alternative will be designed and developed, and circulated with the Final EIS. Although the approach for mitigation will be ecosystem-based, each impact will be fully mitigated through the plan. The plan will detail the amount and type of mitigation to be implemented for each habitat and biological resource type.

#### **Response to Comment 15-58**

*Comment Summary: The comment states that the Mitigation and Monitoring Program for roads should include consultation with County of Sonoma Department of Transportation and Public Works (DTPW) staff regarding site-specific details of the selected route prior to the preliminary design stage, including construction drawings.*

Refer to Response to Comment 15-2.

## **Response to Comment 15-59**

*Comment Summary: This comment expresses general concurrence with the identified mitigation measures outlined in the Mitigation and Monitoring Program Standard Traffic Control Procedure in the Draft EIR/EIS. The comment expresses concern that the site-specific details of the Mitigation and Monitoring Program for the selected route remain to be determined, and may exceed the mitigation noted in the Draft EIR/EIS.*

Section 4.11 of the Draft EIR/EIS discloses transportation impacts and provides mitigation measures for significant impacts. Refer to Response to Comment 15-2 regarding the Mitigation and Monitoring Program Standard Traffic Control Procedures as it relates to the site-specific details of the alternative selected. Implementation of mitigation will be coordinated with the County.

## **Response to Comment 15-60**

*Comment Summary: The comment states that the right-of-way of some public roads is not owned in fee title and that access rights are for roads, and may not allow use of a road as a pipeline route without acquisition of an easement.*

As stated on Page 3.3-5 of the Draft EIR/EIS, the City of Santa Rosa will negotiate or use its power of condemnation to acquire easements where necessary.

## **Response to Comment 15-61**

*Comment Summary: The comment inquires if all pipeline bridge crossing situations will be addressed with the “jack and bore” method or will some bridges carry pipeline. The comment also expresses concern about heavy construction equipment impact on bridges and possible damage to affected bridges.*

Measure 2.2.18: Jack and Bore Construction at Major Highways, on page 2-49 of the Draft EIR/EIS, provides a list of all the locations where the “jack and bore” method of construction will be utilized. All bridge crossing situations on affected County roads will employ the “jack and bore” method of construction. Regarding heavy construction equipment impact on bridges and possible damage to affected bridges, special provisions that address overall impacts of construction operations are required as a condition of the Transportation and Encroachment Permits. Compliance with these permit requirements will minimize potential traffic impacts during Project facility construction. Section 4.11 of the Draft EIR/EIS also discusses the need for the Project to obtain all necessary Encroachment and Transportation Permits. Refer also to Response to Comment 15-66.

## **Response to Comment 15-62**

*Comment Summary: The comment presents general observations on Sonoma County Transit routes affected by the Project and requests adequate notification of construction time schedules for all affected roadway segments in order to prepare for possible route deviations or schedule adjustments. The comment requests this notification be included in the Mitigation and Monitoring Program.*

Measure 2.2.20: Access to Businesses and Residences, on page 2-52 of the Draft EIR/EIS, states that the City of Santa Rosa will provide adequate notification to businesses, residences, and public facilities (to include agencies) of Project construction activities.

## **Response to Comment 15-63**

*Comment Summary: The comment notes discrepancies in four locations between Figures 4.11-1a, 4.11-1b, and 4.11-1c and Table 4.11-1 and assumes that Figures 4.11-1a through 4.11-1c are correct and the roadway segment descriptions in Table 4.11-1 are incorrect. If the assumption is not correct, the County of Sonoma requests an additional opportunity to review potential impacts not disclosed in the Draft EIR/EIS.*

Figures 4.11-1a through 4.11-1c on pages 4.11-3 through 4.11-7 are correct and the roadway segment descriptions in Table 4.11-1 on page 4.11-10 are incorrect for the four locations referenced in the comment.

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

Page 4.11-10. Table 4.11-1 is revised as follows:

**Table 4.11-1**

Affected Roadway Segments and Existing Traffic Volumes

| Roadway Segment   | Type                      | Lanes             | Peak Hour           |                     |                     | ADT                   |
|---|---------------------------|-------------------|---------------------|---------------------|---------------------|-----------------------|
|   |                           |                   | Weekday<br>a.m.     | Weekday<br>p.m.     | Saturday<br>Mid-day | Peak Month            |
| Petaluma-Valley Ford Road north of Bodega Avenue                    | Arterial                  | 2                 | 230                 | 328                 | 574                 | 4,371                 |
| Pepper Road south of Walker Road                                    | Arterial                  | 2                 | 203                 | 235                 | 219                 | 2,663                 |
| Spring Hill Road south of Bodega Avenue                             | Collector                 | 2                 | 71                  | 89                  | 74                  | 806                   |
| Old Redwood Hwy. <a href="#">south</a> north of Railroad Ave.       | Arterial                  | 2                 | 696                 | 1,081               | 762                 | 11,867                |
| Petaluma Hill Rd. north of <a href="#">Adobe Road</a> Railroad Ave. | Arterial                  | 2                 | 1,338               | 1,815               | 923                 | 17,727                |
| Petaluma Hill Road south of Crane Canyon Road                       | Arterial                  | 2                 | 886                 | 1,508               | 633                 | 12,647                |
| Redwood Highway south of Ely Road                                   | Arterial                  | 4                 | 1,226               | 1,702               | 1,080               | 18,929                |
| Adobe Road south of Corona Road                                     | Arterial                  | 2                 | 855                 | 1,075               | 577                 | 10,572                |
| East Washington Street east of Ely Road                             | Arterial                  | 2                 | 463                 | 642                 | 610                 | 8,220                 |
| <a href="#">Frates Road West of Adobe Road</a>                      | <a href="#">Arterial</a>  | <a href="#">2</a> | <a href="#">578</a> | <a href="#">860</a> | <a href="#">492</a> | <a href="#">8,590</a> |
| Ely Blvd. south of Frates Road                                      | Arterial                  | 2                 | 305                 | 572                 | 287                 | 4,953                 |
| Lakeville Highway north of Highway 37                               | Arterial                  | 4                 | 1,065               | 1,636               | 877                 | 16,664                |
| Llano Road South of Highway 12                                      | Arterial                  | 2                 | 177                 | 217                 | NA                  | 2,079                 |
| State Highway 1 north of Two Rock Road                              | Arterial/State<br>Highway | 2                 | NA                  | 200                 | NA                  | 1,300                 |
| State Highway 1 west of Petaluma-Valley Ford Road                   | Arterial/State<br>Highway | 2                 | NA                  | 650                 | NA                  | 4,600                 |
| State Highway 1 east of Valley Ford-Freestone Road                  | Arterial/State<br>Highway | 2                 | NA                  | 1,100               | NA                  | 4,650                 |
| State Highway 12 along Farmers Lane                                 | Arterial/State<br>Highway | 4                 | NA                  | 2,450               | NA                  | 30,000                |
| State Highway 37 east of Lakeville Highway                          | Arterial/State<br>Highway | 4                 | NA                  | 3,350               | NA                  | 35,500                |

**Table 4.11-1**

Affected Roadway Segments and Existing Traffic Volumes

| Roadway Segment   | Type                   | Lanes | Peak Hour       |                 |                     | ADT        |
|---|------------------------|-------|-----------------|-----------------|---------------------|------------|
|   |                        |       | Weekday<br>a.m. | Weekday<br>p.m. | Saturday<br>Mid-day | Peak Month |
| State Highway 116 <del>west</del> east of Stony Point Road                              | Arterial/State Highway | 2     | NA              | 1,650           | NA                  | 18,100     |
| State Highway 116 north of Lakeville Highway  | Arterial/State Highway | 2     | NA              | 1,300           | NA                  | 15,600     |
| State Highway 116 south of Adobe Road`  | Arterial/State Highway | 2     | NA              | 250             | NA                  | 3,000      |
| State Highway 121 north of State Highway 37   | Arterial/State Highway | 4     | NA              | 1,700           | NA                  | 16,300     |
| State Highway 128 south of Pine Flat Road   | Arterial/State Highway | 2     | NA              | 250             | NA                  | 2,450      |
| <b>Proposed Reservoir Access Roads</b>  |                        |       |                 |                 |                     |            |
| Cannon Lane at Lakeville Road   | Rural                  | 2     | 6               | 7               | 7                   | 70         |
| Private Driveway off of Stage Gulch Road (SR 116) south of Adobe Road                   | Rural                  | 1     | 1               | 1               | 1                   | 10         |
| Old Lakeville Road No. 3 (north) at Lakeville road                                      | Local                  | 2     | 8               | 10              | 9                   | 95         |
| Private Driveway off of Highway 121 at Tolay Creek                                      | Rural                  | 1     | 1               | 1               | 1                   | 10         |
| Access Roads (2) onto Sonoma Mountain Road  | Rural                  | 2     | 12              | 15              | 13                  | 145        |
| Private Driveway (Ielmorini Road) off of Adobe Road aligned with East Washington Street | Rural                  | 1     | 1               | 1               | 1                   | 10         |
| Walker Road Access Road   | Local                  | 2     | 4               | 5               | 4                   | 50         |
| Private Driveway off of Petaluma Valley Ford Road West of Bloomfield Road               | Rural                  | 1     | 1               | 1               | 1                   | 10         |
| Carroll Road off of Petaluma Valley Ford Road   | Rural                  | 1     | 11              | 13              | 12                  | 130        |



## **Response to Comment 15-64**

*Comment Summary: The comment notes that existing traffic volumes were used as the basis of the evaluation of transportation impacts and that given the long time horizon for construction of the Project, this approach does not allow for growth in traffic volumes or for the construction of roadway improvements.*

Appendix D-31 (Cumulative Project List) of the Draft EIR/EIS identifies the future roadway improvement projects and development projects that would be affected by the Project. In addition, Cumulative Project impacts on transportation are addressed on pages 4.11-53 and 4.11-54 of the Draft EIR/EIS.

## **Response to Comment 15-65**

*Comment Summary: The comment expresses some disagreement with Evaluation Criterion number 2 on page 4.11-20 and Mitigation Measure 2.2.15 on page 2-46 of the Draft EIR/EIS. Specific County concerns involve roadways that carry more than 10,000 average daily trips, and locations where there are no practical alternative routes, or where the detour route would significantly increase traffic on another road.*

The EIR/EIS authors believe that modifying Measure 2.2.17: Maintain Maximum Number of Open Lanes on Roadways, on page 2-48 of the Draft EIR/EIS, would address these concerns.

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

Page 2-48. The following paragraph is added at the end of the description section:

Prior to construction of a Project component, the City of Santa Rosa will implement standard traffic control measures to avoid potential impacts to roads and traffic congestion. The City of Santa Rosa will consult with the County of Sonoma Department of Transportation and Public Works (DTPW) staff and other affected agencies regarding site-specific details of the alternative selected prior to the preliminary design stage including construction drawings. The City of Santa Rosa will identify feasible alternative routes and minimize secondary congestion or hazards on roads on the alternative routes.

Refer also to Response to Comment 15-66.

## **Response to Comment 15-66**

*Comment Summary: The comment states that the County wishes to specify the length of roadway that may be closed at any one time, the times of the closure, and details regarding the timing and manner of excavation and restoration. The comment also asserts that conditions of approval of encroachment and construction permits will be site-specific. The comment requests that these County policies be incorporated into the Mitigation and Monitoring Program.*

Section 4.11 of the Draft EIR/EIS, states, in numerous locations, that “The City has agreed to conduct construction in accordance with existing regulations”. In addition, Section 4.11 also discusses the need for the Project to obtain all necessary Encroachment and Transportation Permits. The EIR/EIS authors concur that this language should also appear in the Mitigation and Monitoring Program and that Measure 2.2.15 should be modified.

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

Page 2-46. The first paragraph is revised, to include the following:

Prior to construction of a Project component, the City of Santa Rosa will implement standard traffic control measures to avoid potential impacts to roads and traffic congestion. The City of Santa Rosa will also obtain all necessary Encroachment and Transportation Permits from the appropriate agencies. At a minimum, the procedures...

#### **Response to Comment 15-67**

*Comment Summary: The comment notes that some of the roads being affected by construction, or by construction vehicle traffic, may not be in good condition and these roads may be susceptible to damage by heavy equipment, even when not directly affected by construction trenching.*

Measure 2.2.18: Repair Road Damage, on page 2-53 of the Draft EIR/EIS, states that “roads damaged by construction traffic or pipeline construction will be repaired to a condition equal or better than that which existed prior to the construction activity”. Refer also to Response to Comment 15-66.

#### **Response to Comment 15-68**

*Comment Summary: The comment states the County’s concerns that heavy equipment will cause deterioration of the road surface and the method outlined in the Draft EIR/EIS to detect roadbed damage (survey or video) may not be adequate.*

The comment does not provide specific evidence or recommendations on an alternative procedure for detecting roadbed damage caused by the Project. Measure 2.2.18: Repair Road Damage, on page 2-53 of the Draft EIR/EIS, states that “roads damaged by construction traffic or pipeline construction will be repaired to a condition equal or better than that which existed prior to the construction activity”. Refer also to Response to Comment 15-66.

#### **Response to Comment 15-69**

*Comment Summary: The comment expresses the County’s concerns about trenching in hilly areas and possible destabilization of the roadway embankment if trenching is not constructed or located properly.*

The EIR/EIS authors concur that pipeline construction in hilly areas can destabilize roadway embankments. Section 4.11 of the Draft EIR/EIS, states, in numerous locations, that “The City has agreed to conduct construction in accordance with existing regulations”. In addition, Section 4.11 also discusses the need for the Project to obtain all necessary Encroachment and Transportation Permits. Refer also to Response to Comment 15-66.

#### **Response to Comment 15-70**

*Comment Summary: The comment notes that roads damaged by construction or heavy equipment, even if not on the pipeline route, may require reconstruction and/or overlay.*

Refer to Response to Comment 15-67.

#### **Response to Comment 15-71**

*Comment Summary: The comment states the County’s policy of not allowing trenching in new pavement for a period of five years.*

Refer to Responses to Comment 15-2 and 15- 66. In addition, as part of the Encroachment and Transportation Permits process under Measure 2.2.15 on page 2-46 of the Draft EIR/EIS, the City of Santa Rosa will notify affected agencies as soon as possible about the schedule for Project construction. The purpose of this notification will be to postpone any planned roadway resurfacing and/or improvement projects until after Project construction has taken place on the affected facility. This notification will also provide an opportunity to coordinate construction related activities with other projects.

#### **Response to Comment 15-72**

*Comment Summary: The comment expresses concerns about the effects of increases in traffic due to construction, specifically, increases in traffic hazards due to large and heavy vehicles on rural County roads being used as haul routes.*

Special provisions that address traffic safety impacts of construction operations are required as a condition of the Transportation and Encroachment Permits. Compliance with these permit requirements will minimize potential traffic safety impacts during Project facility construction. In addition, Section 4.11, Transportation, of the Draft EIR/EIS also discusses the need for the Project to obtain all necessary Encroachment and Transportation Permits. Refer also to Response to Comment 15-66.

#### **Response to Comment 15-73**

*Comment Summary: The comment expresses concerns about the effects of increases in traffic due to construction, specifically, how heavy equipment traffic can cause road damage even when the Point of Significance threshold, as stated in the Evaluation Criteria on page 4.11-20 of the Draft EIR/EIS, is not exceeded.*

Refer to Responses to Comments 15-2, 15-65, and 15- 66.

### **Response to Comment 15-74**

*Comment Summary: The comment expresses concerns about the cumulative effects of increases in traffic due to construction, specifically, the cumulative deterioration of pavement on roads used by heavy equipment traffic.*

The statement cited in the comment concerning Impact 11.4.C addresses the circumstances under which a cumulative impact due to road damage from pipeline rupture could occur. Any impacts which are caused by Project construction traffic will be addressed under Measure 2.2.15 on page 2-46 of the Draft EIR/EIS, which requires compliance with Transportation and Encroachment Permits. Special provisions that address overall impacts of construction operations are required as a condition of the Transportation and Encroachment Permits. Compliance with these permit requirements will minimize potential traffic and construction impacts during Project construction. In addition, Section 4.11 of the Draft EIR/EIS also discusses the need for the Project to obtain all necessary Encroachment and Transportation Permits. Refer also to Response to Comment 15-66.

### **Response to Comment 15-75**

*Comment Summary: In reference to page 4.13-10, the comment states that the full text of the County General Plan should be cited in the text of the EIR/EIS.*

The EIR/EIS authors acknowledge the County request to cite the full text of the Sonoma County General Plan Policy NE-1C.

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

Page 4.13-10. Replace the first sentence in the first paragraph with the following sentences:

~~The Sonoma County General Plan states that the “noise level resulting from new sources and ambient noise shall not exceed the standards in Table 4.13-5 as measured at the exterior property line of any affected residential land uses.”~~ [The Noise Element of the Sonoma County General Plan contains a goal \(Goal NE-1\): “to protect people from the harmful effects of exposure to excessive noise and to achieve an environment in which people and land uses may function without impairment from noise.” Noise level performance standards in Table 4.13-4 are to be applied as performance standards for noise producing land uses which may affect noise sensitive land uses and vice versa.](#)

Page 4.13-10. Insert the following at the end of the first paragraph:

[The Noise Element of the County’s General Plan includes the following policy \(Policy NE-1C\):](#)

Control non-transportation related noise from new projects. The total noise level resulting from new sources and ambient noise shall not exceed the standards in Table 4.13-4 as measured at the exterior property line of any affected residential land use. Limit exceptions to the following:

If the ambient noise level exceeds the standards in Table 4.13-4, adjust the standards to equal the ambient level.

Reduce the applicable standards in Table 4.13-4 by five dBA for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises.

Reduce the applicable standards in Table 4.13-4 by 5 decibels if they exceed the ambient level by 10 or more decibels.

The EIR/EIS authors concur that there are proposed pump stations that would be located in a rural area where nighttime ambient noise could be below the County nighttime noise limit. Rather than setting the nighttime limit on noise to 40 dBA, the EIR/EIS utilized a more conservative evaluation criteria. That is, if the Project noise increases more than five dBA over the ambient, there will be a significant noise impact, even though noise levels still fall within the noise criteria.

## **Response to Comment 15-76**

*Comment Summary: The comment asks for more information regarding monitoring of construction noise and airblast, including corrective measures if noise exceeds levels predicted in the Draft EIR/EIS.*

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

Page 2-110. Add the following paragraphs at the end of the last paragraph:

Construction noise shall be monitored, at the nearest noise-sensitive receptor location(s) outside the Project boundaries, during high noise generating activity to determine compliance with local noise criteria.

Blasting noise would be monitored for all blasts. Efforts would be made to restrict the peak overpressures to 110 dB at any occupied property line and 130 dB at all building structures.

In the event that the noise criteria are exceeded, the construction activities shall be reviewed to determine additional mitigation measures to further reduce the construction noise. The telephone number of the contractor's construction engineer would be made available to the residents around the Project site so that annoyed residents would be able to report their complaints.

## **Response to Comment 15-77**

*Comment Summary: The comment asks for clarification regarding the terms "property line" and "yard line" and when each will be used.*

The "property line" or the "yard line" shown in Table 4.13-8 on page 4.3-18 of the Draft EIR/EIS represents the property or yard line of the affected receptors. The yard line is considered to be the edge of the outdoor area actively used for residential purposes, and is used instead of the property line if there are large areas in non-residential (e.g. agricultural) use between the property line and any residential structures. Most rural homes have a defined yard around the house that is distinct from the overall property line. The significance criteria are to be applied at the property or yard line whichever is closer to the affected structure.

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

Page 4.13-18. Add the following note to Table 4.13-18:

[Notes: 1 - The property or yard line of the affected receptor whichever is closer to the affected structure.](#)

## **Response to Comment 15-78**

*Comment Summary: The comment states that noise levels should be calculated at 20 feet rather than 10 feet, because there is a 10-foot setback on each side of property lines.*

The EIR/EIS authors do not agree with the conclusions of this comment, based on the assumption stated on page 4.13-21 of the Draft EIR/EIS. The EIR/EIS authors concur that there would be a minimum of 20 feet separation between a new residence and the proposed pump station. However, since the Project significance criteria are to be applied at the affected receptor property/yard line, the minimum distance between the affected property/yard line and the proposed pump stations would only be 10 feet.

## **Response to Comment 15-79**

*Comment Summary: The comment recommends additional measures to reduce construction noise, and requests their incorporation into the EIR/EIS.*

The EIR/EIS authors agree with the County request to incorporate the following additional construction noise mitigation measures into the Final EIR/EIS:

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

Page 2-109. The following paragraph is added after the seventh paragraph:

[Sensitive noise receptors would be specifically identified and notified in advance to keep windows and doors closed during peak construction activity.](#)

## Response to Comment 15-80

*Comment Summary: The comment recommends additional measures to reduce construction noise, and requests their incorporation into the EIR/EIS.*

The EIR/EIS authors agree with the County request to incorporate additional construction noise mitigation measures into the Final EIR/EIS.

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

Page 2-109. The following paragraph is added after the seventh paragraph:

Sensitive noise receptors should be notified when blasting will be conducted and instructed as to actions necessary to reduce noise impacts.

## Response to Comment 15-81

*Comment Summary: The comment recommends additional measures to reduce construction noise, and requests their incorporation into the EIR/EIS.*

The EIR/EIS authors agree with the County request to incorporate additional construction noise mitigation measures into the Final EIR/EIS.

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

Page 2-109. The second sentence of the tenth paragraph is revised as follows:

Noise barriers may be made of heavy plywood, loaded vinyl acoustical curtain (Sound Transmission Coefficient rating of 25 or better) ~~vinyl curtain material~~, or natural and temporary earth berms.

## Response to Comment 15-82

*Comment Summary: The comment recommends additional measures to reduce construction noise, and requests their incorporation into the EIR/EIS.*

The EIR/EIS authors agree with the County request to incorporate additional construction noise mitigation measures into the Final EIR/EIS:

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

Page 2-109. The following sentence is inserted at the end of the tenth paragraph:

A qualified noise control engineer shall design the temporary construction barriers used.

Page 2-109. The following sentence is inserted at the end of the page:

A qualified noise control engineer shall monitor the temporary construction barriers used, to ensure that any gaps or inadequate materials do not increase noise impacts by channeling, or fail to result in any noise mitigation.

### **Response to Comment 15-83**

*Comment Summary: The comment states that existing SCWA pump stations are not as loud as those projected for pump stations in the Draft EIR/EIS, and requests and explanation for the discrepancy.*

The EIR/EIS authors acknowledge that the calculated pump noise levels presented in the Draft EIR/EIS are higher than some of the County's noise measurements at existing pump stations. The discrepancy in the calculated noise levels is due to the following:

- The County's pump noise measurements were not available to the consultant for review during the analysis.
- The EIR/EIS noise analysis was performed using actual pump noise measurements at the Denner Ranch pump station (outdoor) and at the Delta Pond pump station (enclosed).
- A worst-case analysis was used, as discussed in the Methodology for Section 4.3 (pages 4.13-18 to 4.13-21) of the Draft EIR/EIS.
- The predicted noise levels are for unmitigated pump stations. Mitigation will reduce the noise level considerably.
- The County's noise measurement for two-1,250 hp pump station at Col. Well #5 pump station indicates an unusually low level for this size of pumps. The low noise level could have been due to the low operating condition during the measurement, noise control shroud for the pumps and motors, and noise control of the pump station housing.
- There is a large variation in the County's noise measurements. That is, noise inside the building at the Sonoma booster pump station with a 285 hp pump is 85 dBA whereas noise inside the housing at the Col. Well pump station with two 1,250 hp pump is 64 dBA. As mentioned before, the large variation in pump noise could have been due to the operating condition and noise control options.

### **Response to Comment 15-84**

*Comment Summary: The comment requests that a mitigation measure be included to provide that a noise engineer develop mitigation to meet the nighttime maximum exterior noise level of 40 dBA.*



As specified in Mitigation Measure 2.3.17 (page 2-93 of the Draft EIR/EIS), “the City shall retain a qualified noise engineer to assist in the final design of the pump stations. The noise engineer shall be responsible for ensuring that noise reduction measures are properly incorporated into the design of the pump stations.” Given the proposed mitigation measures, the estimated noise levels at most of the existing sensitive receptors will be reduced below the impact criteria. However, significant noise impacts will still occur, even after mitigation measures are applied at some sensitive receptors, especially at future sensitive receptors.

### **Response to Comment 15-85**

*Comment Summary: The comment recommends additional measures to reduce pump station noise, and requests their incorporation into the EIR/EIS.*

The EIR/EIS authors agree with the County request to incorporate additional noise mitigation measures for pump station into the Final EIR/EIS.

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

Page 2-93. The following paragraph is inserted after the third paragraph:

Locations of the pump stations shall be carefully considered, and placed as far away from any sensitive receptors as is feasible, especially in rural areas.

### **Response to Comment 15-86**

*Comment Summary: With respect to significant and unmitigable long-term visual resource impacts on Sonoma County Scenic Landscape Units and Scenic Corridors for the Sears Point, Tolay, Adobe Road, Two Rock, Valley Ford, Bloomfield and Carroll Road Reservoirs, which are identified in Table 4.14-6 of the Draft EIR/EIS, the comment states that these impacts raise the issue of whether these facilities can be found consistent with the Sonoma County General Plan. The comment further questions why the Draft EIR/EIS does not mention long-term open space preservation as a potential mitigation measure, and states that such preservation in the vicinity of reservoir site would be a significant factor in assessing the overall General Plan consistency of any reservoir component, particularly in view of General Plan Policy PF-1d.*

The Draft EIR/EIS does not propose long-term open space preservation in the vicinity of reservoir sites because there is no nexus between such open space preservation and visual resource impacts identified in Table 4.14-6. The significant and unmitigable impacts on visual resources are due to view obstruction resulting from construction of the reservoir dam (and in the case of the Bloomfield reservoir site, also due to the strong visual contrast created by the bottom of the reservoir viewed from residences on English Hill). Open space preservation would neither avoid, reduce or replace the lost view (or in the case of the Bloomfield site, the visual contrast), and therefore cannot be said to mitigate the impacts created by the Project.

The EIR/EIS recognizes that the proposed reservoirs may be inconsistent with the Open Space element of the General Plan. However, the connection between Policy PF-1d and the Scenic Corridors and Scenic Landscape Units designated in the Open Space element is unclear, as Policy PF-1d addresses extension of water and sewer service outside a sphere of influence or urban service area. This Project does not propose any extension of sewer service outside an urban service area, and the only water service extension proposed is limited to a mitigation measure if required to replace wells adversely impacted by a reservoir. This extension would comply with the criteria for such extensions stated in Policy PF-1d.

## **Response to Comment 15-87**

*Comment Summary: With respect to visual resource impacts identified in Section 4.14 of the Draft EIR/EIS (page 4.14-83), the comment suggests that impacts associated with the pump station buildings would be mitigated to a point of insignificance by undergrounding of the station structures, which the comment states is a mitigation measure recommended in the EIR/EIS for noise impacts. The comments further suggests that Section 4.14 should address the undergrounding of structures as a mitigation measure for open space impacts.*

Mitigation Measure 2.3.17 in the Draft EIR/EIS (page 2-93) proposes the housing of pumps that exceed noise criteria by more than 30dBA in underground facilities. However, while the pumps and motors would be underground, pumps with over 100 horsepower would still require aboveground structures to house electrical controls and other ancillary equipment. Of the pump stations identified in Section 4.14 as having significant visual impacts due to the pump station building, only 12 have pumps of less than 100 horsepower and could be located entirely underground. The remaining pump stations would require an above ground structure. However, as stated in Section 4.14 (pages 4-14.89 through 4.14-93), except for Pump Stations G-1, G-2, G-3 and G-4, vegetative screening of the pump station buildings would reduce the visual impact of these structure to less than significant.

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

Page 4.14-88. The Mitigation section is revised as follows:

Mitigation: *Alternatives 2, 3, and 4.*

2.4.6. Screen Concrete Diversion Channels, Pump Stations, and Other Facilities.

[Alternatives 2 and 3.](#)

[2.3.17 Pump Station Noise Control](#)

*Alternatives 1 and 5. No mitigation is needed.*

Page 4.14-89. The second paragraph is revised as follows:

Mitigation Measure 2.3.17 would result in Pump Stations SBPS-3, SBPS-11, WBPS-6, LBPS-3 and LBPS-4 being placed entirely underground, and therefore all permanent visual impacts would be eliminated. Except for Pump Stations G-1 and G-2, Mitigation Measure 2.4.6 will reduce the visual contrast of the pump stations by introducing vegetation to screen the structure from public view. The use of vegetation, will also blend the site with the surrounding landscape. The scale of structures at Pump Stations G-1 and G-2 is such that screening with vegetation would only partially eliminate views of the structures from public viewpoints. The 50-foot high storage tanks, in particular, ~~will~~ not be able to be screened from view by vegetation due to the proximity to the roadway. In addition, the proposed electrical service to Pump Station G-2 on the north side of Highway 128 could not effectively be screened from view.

Page 4.14-90. The Mitigation section is revised as follows:

Mitigation: *Alternatives 2, 3 and 4. (Pump Stations G1, G2, SBPS-2, SBPS-3, SBPS-7, SBPS-8, SBPS-10, SBPS-11, SBPS-12, WBPS-5, WBPS-6, WBPS-8, LBPS-1, and LBPS-3).*

2.4.6. Screen Concrete Diversion Channels, Pump Stations, and Other Facilities.

*Alternatives 2 and 3.*

2.3.17 Pump Station Noise Control

*Alternatives 1 and 5. No mitigation is needed.*

Page 4.14-90. The last paragraph is revised as follows:

Mitigation Measure 2.3.17 would result in Pump Stations SBPS-2, SBPS-3, SBPS-11, WBPS-6, WBPS-8, LBPS-1 and LBPS-3 being placed entirely underground, and therefore all permanent visual impacts would be eliminated. Except for Pump Stations G-1, G-2 and SPBS-10, ~~this Mitigation~~ Measure 2.4.6 will reduce the visual contrast of the pump stations by introducing vegetation to screen the structure from public view. The use of vegetation, will also blend the site with the surrounding landscape. The scale of structures at Pump Stations G-1 and G-2 is such that screening with vegetation would only partially eliminate views of the structures from public viewpoints. The 50-foot high storage tank at Pump Station G-2, in particular, ~~will~~ not be able to be screened from view by vegetation due to the proximity to the roadway, and the proposed electrical lines north of Highway 128, and along Railroad Avenue and Petaluma Hill Road cannot be screened from view.

Page 4.14-92. The Mitigation section is revised as follows:

Mitigation: *Alternatives 2, 3 and 4.*

2.4.6. Screen Concrete Diversion Channels, Pump Stations, and Other Facilities.

[Alternatives 2 and 3.](#)

[2.3.17 Pump Station Noise Control](#)

*Alternatives 1 and 5.* No mitigation is needed.

Page 4.14.92. The After Mitigation section is revised as follows:

After

Mitigation: *Significant after Mitigation; Alternatives 2, 3, and 4. (Pump Stations G3, G4 and S).*

Mitigation Measure 2.3.17 would result in Pump Stations BVB, SBPS-9, WBPS-3, WBPS-7, and LBPS-4 being placed entirely underground, and therefore all permanent visual impacts would be eliminated. Except for Pump Stations G-3, G-4 and S, ~~this~~ Mitigation Measure 2.4.6 will reduce the visual contrast of the pump stations by introducing vegetation to screen the structure from public view. The use of vegetation, will also blend the site with the surrounding landscape. The scale of structures at Pump Stations G-3 and G-4 is such that screening with vegetation would only partially eliminate views of the structures from public viewpoints. The 50<sup>±</sup> foot high storage tanks, in particular, ~~will~~ could not be able to be screened from view by vegetation due to the proximity to the roadway. The new electrical service lines to Pump Stations G-3, G-4 and S cannot be effectively screened from public view.

Page 4.14-93. The Mitigation section is revised as follows:

Mitigation: *Alternatives 2, 3 and 4.*

2.4.6. Screen Concrete Diversion Channels, Pump Stations, and Other Facilities.

[Alternatives 2 and 3.](#)

[2.3.17 Pump Station Noise Control](#)

*Alternatives 1 and 5.* No mitigation is needed.

Page 4.14-93. The last paragraph is revised as follows:

Mitigation Measure 2.3.17 would result in Pump Stations SBPS-2, SBPS-3, SBPS-9, SBPS-11, WBPS-1, WBPS-3, WBPS-6, WBPS-7, WBPS-8, LBPS-1, LBPS-3 and LBPS-4 being placed entirely underground, and therefore all permanent visual impacts would be eliminated. Except for Pump Stations G-2, S, T, SP, TR ,B and SBPS-10, ~~this Mitigation~~ Measure 2.4.6 will reduce the visual contrast of the pump stations by introducing vegetation to screen the structure from public view. The use of vegetation, will also blend the site with the surrounding landscape. The scale of structures at Pump Station G-2 is such that screening with vegetation would only partially eliminate views of the structures from public viewpoints. The 50 foot<sup>2</sup> high storage tanks, in particular, ~~will~~could not be able to be screened from view by vegetation due to the proximity to the roadway. The new electrical service lines to Pump Stations G-2, S, T, SP, TR , B and SPBS-10 cannot feasibly be screened from the view of nearby residences.

## **Response to Comment 15-88**

*Comment Summary: With reference to the discussion in Section 4.14 the Draft EIR/EIS (page 4.14-87) concerning visual impacts of light and glare at the proposed pump stations, the comment requests that the statements concerning use of shielded low-intensity lights and their use “as needed” rather than continuously operated, be included in the mitigation measures in Chapter 2 of the EIR/EIS.*

These items are intended to be included as part of the Project, and therefore to clarify this, the following changes are made to the Draft EIR/EIS:

Page 2-60. The following is added at the end of Section 2.2:

### **2.2.28 Control of Light and Glare at Pump Stations**

#### **Description:**

The City will specify installation of shielded low-intensity outdoor lighting at all pump stations, and will also install controls which will provide for non-continuous operation of the lighting.

Lighting at the pump stations will be turned on only on an “as needed” basis while monitoring and maintenance is being performed and when access to the building is necessary. Operational criteria for the pump stations will include instructions which limit the use of lighting to the conditions specified above.

#### **Lead Agency:**

City of Santa Rosa Public Utilities Department

#### **Implementing Agency:**

City of Santa Rosa Public Utilities Department

#### **Timing:**

Start: Design Phase of the Project.

Complete: Throughout the life of the Project or until operation of the pump station ceases.

Monitoring Agency: City of Santa Rosa Public Utilities Department

Validation: The design of the lighting will be verified during review and certification of Final Engineering Drawings. The City will check compliance with installation of the specified lighting and controls during regular inspections of construction. The City will monitor conformance with the operational criteria as part of regular reviews of operational procedures.

### **Response to Comment 15-89**

*Comment Summary: The comment suggests that another location, perhaps further up Pine Flat Road, should have been considered in the EIR/EIS for Pump Station G-2, in order to mitigate visual impacts on the Highway 128 Scenic Corridor and the Alexander Valley Scenic Landscape Unit. The comment also indicates that in the absence of suitable mitigation, placement of a pump station at this site may not be consistent with the Open Space Element of the Sonoma County General Plan.*

The location of Pump Station G-2 at Highway 128 and Pine Flat Road was based upon engineering requirements, as well as criteria for avoidance of biologically sensitive areas and minimizing disruption to agricultural activities. The Draft EIR/EIS recognizes that this location has significant and unmitigable impacts on visual resources, specifically with respect to the Sonoma County General Plan Open Space Element. While other locations further up Pine Flat Road could satisfy the engineering requirements, it is likely that an alternate location, while minimizing visual impacts, could have other impacts on biological resources or agriculture. In addition, the new electrical service to the pump station would still be highly visible from the Scenic Corridor and Scenic Landscape Unit, even if the pump station itself were relocated further up Pine Flat Road; and it is likely that the pump station itself, particularly the storage tank, would still be visible in the background.

### **Response to Comment 15-90**

*Comment Summary: In reference to discussion of visual impacts in Section 4.14 of the Draft EIR/EIS, the comment indicates that several pump stations require large fuel tanks which would result in open space impacts due to height (up to 50 feet). The comment states that these impacts should be mitigated by either reducing the height of the tanks or by fully or partially burying the tanks. The comment also states that these measures would help ensure consistency with the Open Space Element of the County General Plan.*

The tanks referred to in the comment would only be located at Pump Stations G-2, G-3 and G-4, and these tanks are for storage of reclaimed water, not fuel, as stated in the

comment. None of the other pump stations would have storage tanks. Also, the height of the storage tanks at Pump Stations G-2, G-3 and G-4 is misstated in the text of Section 4.14 of the Draft EIR/EIS. As stated in Section 3.3 of the Draft EIR/EIS (page 3.3-36), the height of these tanks would be 24 feet with a 60 foot diameter.

To correct this misstatement, the following changes are made to the Draft EIR/EIS:

Page 4.14-88. The first sentence is changed as follows:

View obstruction from public viewpoints would be minimal due to the small size of the structures (typically 20' by 20' or smaller), except for pump stations G-1 and G-2, which have larger structures (a 30' by 60' pump station building, and, for pump station G-2, an electrical substation along with a 2450' foot high storage tank ~~and, for pump station G-2, an electrical substation~~).

Page 4.14-89. The fourth sentence is changed as follows:

The 2450' feet high storage tanks, in particular, will~~could~~ not be able to be screened from view by vegetation due to the proximity to the roadway.

Page 4.14-89. The last sentence in the second full paragraph is changed as follows:

View obstruction from public viewpoints would be minimal due to the small size of the structures (typically 20' by 20' or smaller), except for pump stations G-1 and G-2, which have larger structures (a 30' by 60' pump station building, and, for pump station G-2, an electrical substation along with a 2450' foot high storage tank ~~and, for pump station G-2, an electrical substation~~).

Page 4.14-90. The last sentence is changed as follows:

The 2450' foot high storage tank at Pump Station G-2, in particular, will~~could~~ not be able to be screened from view by vegetation due to the proximity to the roadway, and the proposed electrical lines north of Highway 128, and along Railroad Avenue and Petaluma Hill Road cannot be screened from view.

Page 4.14-91. The second sentence in the first paragraph of the Analysis section is changed as follows:

View obstruction from public viewpoints would be minimal due to the small size of the structures (typically 20' by 20' or smaller), except for pump stations G-3 and G-4, which have larger structures (a 30' by 60' pump station building, along with a 2450' foot high storage tank and ~~, for pump station G-2, an electrical substation~~).

Page 4.14-92. The fourth sentence in the After Mitigation section is changed as follows:



The ~~2450'~~ 24 foot high storage tanks, in particular, ~~will~~ould not be able to be screened from view by vegetation due to the proximity to the roadway.

Page 4.14-92. The last sentence is changed as follows:

However, view obstruction from residences would be minimal due to the small size of the structures (typically 20' by 20' or smaller), except for pump station G-2, which has larger structures (a 30' by 60' pump station building, along with a 24 foot high storage tank and, ~~for pump station G-2,~~ an electrical substation).

Page 4.14-93. The fourth sentence in the After Mitigation section is changed as follows:

The ~~2450'~~ 24 foot high storage tanks, in particular, ~~will~~ould not be able to be screened from view by vegetation due to the proximity to the roadway.

The tanks are correctly shown in Figures 4.14-19 and 4.14-20, and the conclusions in Section 4.14 with respect to visual impacts of the tanks apply for the 24 foot height. The 24 foot height for these storage tanks cannot be further reduced because this is the minimum elevation above the pumps to maintain adequate pressure, and the tanks cannot be fully or partially buried for the same reason. The Draft EIR/EIS, in Table 4.14-7, recognizes that the inconsistency with the Open Space Element of the Sonoma County General Plan constitutes a significant, unmitigable impact.

## **Response to Comment 15-91**

*Comment Summary: With respect to the discussion of the cumulative visual impacts in Section 4.14 of the Draft EIR/EIS (page 4.14-102), the comment states that the cumulative analysis in the EIR/EIS should consider the impacts on the total area encumbered by the Geysers Recharge project, asserting that the Draft EIR/EIS only considers impacts from pump station construction and not impacts from all Geysers-related facilities including pump stations [sic], pipelines, and storage tanks.*

The comment appears to misunderstand the analysis of cumulative impacts. As stated in Section 4.14, this analysis considers the cumulative impact of all Project and non-project proposals with respect to the specific impacts identified for the Project. This includes Geysers-related facilities. Thus, for example, the cumulative analyses for consistency with the Open Space Element of the Sonoma County General Plan (Impacts 14.1C, 14.2C and 14.3C on pages 4.14-102 and 4.14-103) address cumulative impacts for all proposed Project components including those which are Geysers-related, based upon the analyses for impacts of each individual Project component.

These analyses, also in Section 4.14, concluded that pump stations and pipelines for the Geysers Alternative will have significant impacts. These impacts are summarized in Tables 4.14-3, 4.14-4, 4.14-5, and 4.14-7. Also, in Section 4.14 (page 4.14-98), the Draft EIR/EIS concluded that the proposed Geysers Steamfield component will not have significant impacts, because the Geysers Steamfield does not have any scenic resources



identified in the Sonoma County General Plan, and the proposed facilities at the Steamfield will not be visible from any public viewpoint or private residence.

### **Response to Comment 15-92**

*Comment Summary: With respect to the discussion of cumulative visual impacts in Section 4.14 of the Draft EIR/EIS, the comment asks whether Alternative would impact the Sonoma County Agricultural Preservation and Open Space District's Santa Angelina conservation easement which is contiguous to the eastern boundary of the McCord conservation easement.*

Alternative 4 will have no visual impacts on the Santa Angelina conservation easement. There are no proposed facilities on the Santa Angelina property, and there are no public viewpoints on the property from which Project facilities could be seen. There are no scenic resources, as designated in the Open Space Element of the Sonoma County General Plan, located on the property which will be affected by the proposed Project.

### **Response to Comment 15-93**

*Comment Summary: The comment noted that cultural resources field studies were not conducted for pipeline routes and irrigation areas for the Draft EIR/EIS and that these studies would be conducted after selection of the preferred alternative. Concern that this approach would not be adequate under CEQA unless the Draft EIR/EIS includes performance standards was also stated.*

Within the Mitigation Monitoring Program, performance standards are presented in Mitigation Measure 2.3.18 on page 2-95. These standards set forth the qualifications of persons conducting the cultural resource research and field effort as well as the standards to use while conducting field studies, preparing resource evaluations, subsurface testing, and, if necessary, data recovery work plans. A Memorandum of Agreement (MOA) between the U.S. Army Corps of Engineers, the City of Santa Rosa, the State Office of Historic Preservation, and the Advisory Council on Historic Preservation is required, pursuant to 36 CFR 800.6(c), and will set out the specific steps for avoiding or reducing harm to cultural resources. Therefore, this approach to mitigation is adequate under CEQA, the Public Resources Code as amended (1992), and the National Historic Preservation Act of 1966 (as amended).

### **Response to Comment 15-94**

*Comment Summary: The comments asks for an explanation of the reasoning behind the high costs of the Geysers re-injection alternative and why a more direct route was not considered for this Project alternative. In addition, the comment requests an estimate of the scale of any cost savings that might result from use of a more direct route.*

The Geysers Recharge Alternative is expected to cost \$208 million in capital costs and \$6.7 million in annual operation and maintenance costs. Capital costs for Alternative 4

are primarily for 35 miles of large diameter pipeline, four large pump stations, new electrical service, and rebuilding Pine Flat Road, plus engineering and land purchase costs. Capital costs are about 70% of the average for the agricultural irrigation Alternatives. Operation and maintenance costs are primarily for power used to pump wastewater through the 35 miles of pipeline and up 3,200 feet in elevation. They are about three times as much as annual operation and maintenance costs of average for agricultural irrigation Alternatives. Refer to Appendix D-30 (Alternative Projects Construction Cost Estimate) for more detail.

The choice of a pipeline alignment that utilizes public right-of-way may indeed have increased the length of the pipeline, perhaps by as much as two miles. However, because a cross-country alignment would need to traverse privately-owned lands including conservation easements, the cross-country approach, although possibly more cost effective, may not be feasible.

#### **Response to Comment 15-95**

*Comment Summary: The comment provides a table of noise levels for existing Sonoma County Water Agency (SCWA) facilities.*

This comment (i.e., table) is intended to provide information that supports the claim in Comment 15-83 that SCWA operates pumps that range up to 1,250 horsepower and yet the measured noise levels are not as high as the noise levels projected for pump stations in the Draft EIR/EIS. Refer to Response to Comment 15-83.

#### **Response to Comment 15-96**

*Comment Summary: This comment consists of an attached memo from the Sonoma County PRMD that provides a list of persons to call if there are questions regarding Sonoma County comments on the Draft EIR/EIS.*

The City of Santa Rosa appreciates the list of County contacts and will contact County staff as needed.

#### **Response to Comment 15-97**

*Comment Summary: This comment consists of a draft of comments from the Sonoma County Water Agency on the Draft EIR/EIS.*

The Sonoma County Water Agency submitted these comments independently. Responses are found in the Responses to Comments 14-1 through 14-8.