

COMMENT LETTER 106 - LINDA JOHNSON AND KAREN KIBLER (OCTOBER 5, 1996), RECEIVED OCTOBER 7, 1996.

Response to Comment 106-1

Comment Summary: The comment states that the Draft EIR/EIS does not meet its requirement for public access due to both the expense of purchasing the full document, and the lack of availability of the library copies. The comment then requests that the City of Santa Rosa specify the legal requirements for public access that must be met, and explain how the City has met those requirements.

Refer to Master Response 3, located in Section 6.2 of this document, which deals with comments regarding the cost and availability of the Draft EIR/EIS.

Response to Comment 106-2

Comment Summary: The comment requests that the City of Santa Rosa provide a count of the number of responses they have received from West County residents, and the number of responses they have received from West County rural residents.

Names of all members of the public that commented on the Draft EIR/EIS are shown on the original comment letters, which are contained in Volumes XVII and XIX. The comment letters include about 25 from West County residents, presumably most of them rural residents, although it is not possible to determine from the letters which residents are rural and which are not. Comments were submitted by two organizations representing West County residents and their interests: Friends of the Esteros and the Agricultural Property Rights Alliance. In addition, about a dozen of the public commentators who spoke at the hearing on the Draft EIR/EIS were West County residents.

Response to Comment 106-3

Comment Summary: The comment states that at least one potentially affected landowner did not receive Volume I of the Draft EIR/EIS. The comment then requests that the City of Santa Rosa provide documentation that Volume I of the Draft EIR/EIS has been sent to all necessary parties.

The summary that was contained in Volume I of the Draft EIR/EIS was distributed by the City to approximately 700 people interested in the Project. The mailing list was generated by combining several resources into a single database. Resources such as land owners in the Project area, agencies that expressed interest or have jurisdiction, participants in the public meetings along with a variety of contacts made since the inception of the Long-Term Project have been entered into the database. The comment does not provide the name of the landowner that did not receive a notification, so it is not possible to verify if the landowner was notified. A copy of the list can be obtained from the City. A reasonable effort was made to notify all parties interested in the Project.

Response to Comment 106-4

Comment Summary: The comment states that the Draft EIR/EIS does not meet its burden of providing access to information in that the Draft EIR/EIS is almost incomprehensible and that the draft could have been made comprehensible had it followed each sub-alternative separately. The comment request documentation that the Draft EIR/EIS is comprehensible to the average person in a reasonable amount of time.

Refer to Master Response 1, Document Organization, located in Section 6.2 of this document.

Response to Comment 106-5

Comment Summary: The comment asks for a detailed study of ambient noise in the project area.

The ambient noise environment was characterized based on land use and typical noise levels for each type of setting (refer to Figure 4.13-2 in the Draft EIR/EIS). The Draft EIR/EIS therefore takes the conservative approach of assuming very quiet noise levels for remote rural areas such as West County. This leads to the conclusion that all West County Alternatives will have significant unavoidable noise impacts, both during construction and operation. Further analysis of ambient noise is not necessary because it would not change this conclusion, would not change the recommendations for mitigation, and would not provide decision-makers or the public with more information regarding Project impacts.

Response to Comment 106-6

Comment Summary: The comment asks for more detailed studies of noise impacts at each receptor.

The noise analysis is conservative in that it uses the closest sensitive receptor (usually a residence) and does not consider atmospheric absorption or noise reduction from intervening topography or other barriers. Thus, actual noise levels at receptors will probably be slightly lower than projected in the Draft EIR/EIS. In addition, mitigation measures are designed with the intent of controlling noise levels at the property line of the pump station sites. This approach is deemed appropriate because it provides the greatest degree of protection for surrounding land uses, including potential future uses. More detailed analysis of impacts would not change the conclusion that there are significant noise impacts, and is thus not necessary.

Response to Comment 106-7

Comment Summary: The comment requests analysis for all combination of subalternatives.

The Draft EIR/EIS is arranged by components so as to present this information in a document of manageable length. The essence of the noise analysis is that all West County subalternatives will have significant unavoidable noise impacts.

Response to Comment 106-8

Comment Summary: The comment requests that noise impacts consider reflection of noise from proposed dams.

The EIR/EIS authors acknowledge that depending on the location of the pump station at the reservoirs, there could be some reflective noise due to the dam wall. The increase in noise due to reflection is dependent on the distance between the noise source and the dam wall, the absorptive characteristic of the dam wall, as well as the angle of the dam wall. Because detailed design information is not available at this time, it is not possible to precisely assess the reflective noise. However, since the analysis used conservative calculations, such as excluding the effect of atmospheric absorption and barriers, the net effect will not be significant. In addition, as described in the pump station noise control on page 2-93 of the Draft EIR/EIS, a qualified noise engineer will assist in the final design of the pump stations to ensure that noise reduction measures are properly incorporated into the design.

Response to Comment 106-9

Comment Summary: The comment states that the noise analysis is inadequate because it does not consider the factors described in comments 106-5 through 106-8.

For the reasons described in Responses to Comments 106-5 through 106-8, the EIR/EIS authors believe the analysis to be adequate.

Response to Comment 106-10

Comment Summary: The comment says that Table 4.13-19 shows fewer West County pumps than elsewhere in the Draft EIR/EIS.

The EIR/EIS authors have reviewed Table 4.13-19 on page 4.13-42, and cannot find that any pump stations are missing. Because the comment does not identify the location in the Draft EIR/EIS where more pump stations are shown, no further clarification is possible.

Response to Comment 106-11

Comment Summary: The comment states that studies must determine the long-term constant effect of noise on persons, animals, plants and wildlife; and the effects of such noise pollution on other land uses, either current or possible in the future.

The EIR/EIS authors acknowledge the concern expressed in the comment regarding the long-term effect of noise on persons, animals, plants, and wildlife, as well as on other

land uses. Long term noise effects on persons can include speech interference, sleep disturbance, and noise-induced hearing loss.

One of the ways that noise affects daily life is by prevention or impairment of speech communication. In a noisy environment, understanding speech is diminished when speech signals are masked by intruding noises. Reduced intelligibility of speech may also have other effects; for example, if the understanding of speech is interrupted, performance may be reduced, annoyance may increase, and learning may be impaired. The U.S. EPA has recommended noise criteria to predict the effect of noise on speech communications (U.S. EPA 1981). For outdoors, an L_{eq} of 50 dBA or less would not have an effect on speech communication. Increasing the level of noise to 75 dBA will reduce the intelligibility to zero, even if the people speak in loud voices.

The effects of noise on sleep are of concern, primarily in assuring suitable residential environments. Noise levels can create momentary disturbances of natural sleep patterns by causing shifts from deep to lighter stages. Noise may even cause awakening, which the person may or may not be able to recall. At levels of 40 to 50 dBA, some subjects have reported difficulty in falling asleep, frequently taking over an hour (U.S. EPA 1981). Studies have shown that at levels of 70 dBA or above, behavioral awakening will most likely occur (U.S. EPA 1981).

Hearing loss is measured in decibels and refers to a permanent auditory threshold shift of an individual's hearing. The Federal Interagency Committee on Urban Noise states that hearing loss due to noise: (1) may begin to occur in people exposed to long-term noise at or above a L_{dn} of 75 dBA; (2) will not likely occur in people exposed to noise between a L_{dn} of 70 and 75 dBA; and (3) will not occur in people exposed to noise less than a L_{dn} of 70 dBA (U.S. DOT 1980). The U.S. EPA has recommended a limiting daily equivalent energy value of L_{eq} of 70 dBA to protect against hearing impairment over a period of 40 years (U.S. EPA 1981).

With the proposed noise mitigation measures implemented, the calculated pump noise at existing sensitive receptors will be below the levels for outdoor speech interference and sleep disturbance. However, at some of the future sensitive receptors, there could be some outdoor speech and sleep interference. Hearing loss is not be expected at existing and future sensitive receptors.

Refer to Response to Comment 65-9 for a discussion of studies on domestic animals.

There are no known long-term effects of noise on plants.

Studies on wildlife have shown that noise levels as high as 95 dBA have little or no effect on turkey vultures, great egrets, and grebes. Noise levels between 85 to 95 dBA could disturb or agitate the ring-necked duck, coot, gadwall, purple gallinule, and pintail duck (Newman and Beatie 1985). Noise levels within the range of 110 to 135 dBA would affect the nesting of turkeys (Jeannoutot and Adams 1961). Another study, using low flying F-16 aircraft, has shown that noise levels of up to 100 dBA would not alter the

reproductive behavior of great egret, snowy egret, tricolor heron, little blue heron, and cattle egret (Black, et al. 1984).

With the proposed noise mitigation measures implemented, adverse effects on wildlife is not expected.

Other land uses have a less restrictive noise impact criteria than the sensitive receptor criteria used in this analysis. Therefore, impacts at other land uses will be less than those analyzed.

References

Black, B.B., M. W. Callopy, H. F. Percival, A. A. Tiller, and P. G. Bohall. 1984. *Effects of Low-Level Military Training Flights on Wading Bird Colonies in Florida*, Florida Cooperative Fish and Wildlife Research Unit, School of Forest Resources and Conservation, University of Florida, Tech. Report No. 7, 1984.

Jeannoutot, D. W. and J.L. Adams, 1961. Progesterone Versus Treatment by High Intensity Sound as Method of Controlling Broodiness in Broad Breasted Bronze Turkeys. *Poultry Science*: 40, 1961.

Newman, J.S. and K.R. Beattie, 1985. *Aviation Noise Effects*, Federal Aviation Administration, Office of Environment and Energy, Report No. FAA-EE-85-2, 1985.

U.S. DOT, 1980. United States Department of Transportation. *Guidelines for Considering Noise in Land Use Planning and Control*, Federal Interagency Committee on Urban Noise, June 1980.

U.S. EPA, 1981. United States Environmental Protection Agency. *Noise Effects Handbook, a Desk Reference to Health and Welfare Effects of Noise*, EPA-550/9-82-106, 1981.

Response to Comment 106-12

Comment Summary: The comment request a description of all septic systems that would be adequate under the West County Alternative.

Groundwater levels at the Carroll Road, Bloomfield, and Huntley sites after reservoir construction could be between one and six feet below the ground surface. If groundwater were three or more feet below the soil absorption system, then a Wisconsin at-grade system without pretreatment (sand filter) or a standard leachfield system could be used. If groundwater were two or more feet below the soil absorption system then a Wisconsin mound system or a Wisconsin at-grade system with pretreatment (sand filter) could be used. At Valley Ford, the groundwater would be about six feet deep, making conventional systems possible. Other systems mentioned above could also be used at this site. Reservoir construction at the Two Rock site will not cause groundwater to rise

within 6 feet of the ground surface, and will thus not affect septic systems in the vicinity of that site.

Response to Comment 106-13

Comment Summary: The comment asks how replacement septic systems would be financed.

The City will pay for the removal of existing septic systems and installation of a non-conventional system if such a system were deemed necessary by the Sonoma County Permit and Resource Management Department.

Response to Comment 106-14

Comment Summary: The comment states that the Draft EIR/EIS only addresses those houses that would be lost to the condemnation of land for the dams and reservoirs. It does not address the loss of houses due to secondary effects of the project such as noise, odor, well contamination, or the prohibitive costs of an “unconventional” septic system that would make properties uninhabitable.

The analysis in the Draft EIR/EIS does not show that any properties will be made uninhabitable. Mitigation is provided for the effects on wells and septic systems, making these impacts less than significant. Significant odor impacts are not predicted. While noise impacts are considered significant because of the existing quiet rural nature of the area, mitigation will reduce noise to an acceptable level for residential use.

Response to Comment 106-15

Comment Summary: The comment asks for documentation of the assumptions used to determine groundwater flow rates.

The Draft EIR/EIS contains a discussion of methodology, beginning on page 4.5-24, which includes information on determining hydraulic conductivity (K) values. The hydraulic conductivity values were used to determine groundwater movement rates expressed in feet per year. The assumptions used in the groundwater calculations are contained in Appendix H-1 (Hydrogeology of Storage/Reuse Areas and Evaluation of Potential Impacts to Groundwater) of the Draft EIR/EIS, beginning on page 5-6.

Response to Comment 106-16

Comment Summary: The comment states that groundwater contamination from a wide range of constituents is possible.

The Draft EIR/EIS contains numerous discussions in Sections 4.5, Groundwater, and Section 4.6, Public Health and Safety, that conclude that the only constituent contained in the reclaimed water that could pose adverse health affects in drinking water is nitrate. The proposed Mitigation Measure 2.3.12: Provide Replacement Water Supply for

Affected Wells, requires quarterly groundwater sampling and analysis as stated on page 2-85 of the Draft EIR/EIS. Therefore, groundwater in the vicinity of reservoir sites will be sampled every three months for nitrate and any other chemical that the City is required to monitor by the California Department of Health or by Regional Water Quality Control Board.

Response to Comment 106-17

Comment Summary: The comment inquires about the financing of groundwater analyses and replacement water supply.

The City will incur the cost of groundwater monitoring. If replacement water supply were necessary, the City will pay for the installation of pipelines and distribution systems. Residences, once hooked up to municipal water supply, may have to pay for water, but this will be a policy decision of the Board of Public Utilities, to be determined later.

Response to Comment 106-18

Comment Summary: The comment states that the Draft EIR/EIS has not provided an adequate alternatives analysis, because it has not provided discussion of all of the new alternatives that would be created by combining parts of different sub-alternatives.

The process by which the alternatives and sub-alternatives discussed in the Draft EIR/EIS was conducted in such a way as to provide a reasonable range of feasible alternatives. For the most part impacts were determined to be additive, so that it was not necessary to conduct additional evaluation of specific component combinations to reflect the total impact. For example, loss of wetland habitat is additive, so the total acreage affected by a particular combination of reservoir site and pipeline route can be determined by adding the acreage together. Information is presented in such a way as to allow the reader to judge the impacts of various combinations of components. In other cases, components affect totally different resources (e.g. Russian River discharge and West County reservoir construction), and thus effects are not multiplied when these types of components are combined. Where components can act together on the same resource the effects were analyzed and disclosed. For example, water quality effects of reservoir construction and irrigation in West County act together on the creeks and esteros, and the effects are presented that way in the Draft EIR/EIS.

Response to Comment 106-19

Comment Summary: The comment states that the Draft EIR/EIS has failed to consider the potential environmental consequences that would result from the growth and development that would be encouraged by the implementation of this project.

A discussion of growth-inducement is provided on pages 5-3 through 5-13 of the Draft EIR/EIS. In summary, this discussion indicates that the growth (i.e., buildout) that has been planned for by the subregional system's member entities will be accommodated by

the Project rather than induced by the Project. No significant growth beyond that planned for in the subregional system's member entities' general plans (adopted as of April 1994) is expected to occur as a result of implementing the Project.

Response to Comment 106-20

Comment Summary: The commentor indicates that the West County alternative appears to place a pump station on property located at 6000 Bloomfield Road, and asks for the proposed location of pump station WBPS-10.

No pump station is proposed for the property in question, and the pump station designated as WBPS-10 was deleted from the Project when the aquifer storage and recharge component was dropped from further consideration in early 1996.

Response to Comment 106-21

Comment Summary: The comment states that definitive statements regarding impacts associated with the project cannot be made due to the fact that there are too many variables within the sub-alternatives (e.g., three alternative transmission pipeline routes leading to the Bloomfield and other reservoir sites).

The premise upon which the comment is based is inaccurate. The Project includes only one proposed transmission pipeline route leading into a reservoir. The alternative routes that the commentor refers to can be found in Appendix D-25 (Transmission Pipeline Routes to Reservoir Sites) of the Draft EIR/EIS. This Appendix documents the process by which the proposed transmission pipeline routes were chosen. As a result of this process, a recommended alignment was chosen for each transmission pipeline route leading to a reservoir site, based on cost, environmental impacts, and engineering restrictions. It is this single route for each reservoir that was brought forward into the Project design and that was analyzed in the Draft EIR/EIS.

Response to Comment 106-22

Comment Summary: The comment requests that the City of Santa Rosa provide an explanation of why it has not abandoned some of the less desirable alternatives and concentrated on producing a comprehensive and responsive EIR/EIS on a limited number of feasible alternatives.

The purpose of the EIR/EIS is to evaluate all feasible alternatives so that decision makers can determine which are "less desirable" and which are more environmentally sound. It is not possible to identify which options are desirable options without evaluating them. It would thus have been premature to eliminate options before the public and decision makers had an opportunity to review the results of environmental analysis. Previous environmental documents were determined to be flawed precisely because they did not evaluate other feasible options at a project level of detail. To develop a project that best meets Project objectives it is necessary to have the flexibility to combine components,

and to do that each component must be evaluated in the EIR/EIS. Refer to Response to Comment 5-9 for further discussion. The EIR/EIS authors believe that the analysis has been completed in such a way as to provide a comprehensive and responsive document.

Response to Comment 106-23

Comment Summary: The comment states that the West County alternative requires willing irrigators and asks for proof that verifiable acreage exists for willing use of reclaimed water for irrigation.

For a discussion of the feasibility of the West County alternative, please see Master Response 6, located in Section 6.2 of this document.

Response to Comment 106-24

Comment Summary: This comment asserts that the West County Alternative is based on a misconception as to the total volume of wastewater West County irrigation lands are capable of accepting without causing runoff and drainage problems that will “destroy the land”.

The total acreage of irrigable lands, as defined by U.S. Bureau of Reclamation criteria, was determined by standard field soil inventory techniques. The Bureau provided a quality control review of the report and approved the maps and findings. Proposed planning level irrigation application rates in the Draft EIR/EIS are based on consideration of the West County’s climate, soils, drainage conditions, and potential crops that could be grown. Irrigation volume estimates were made utilizing methods for water demand calculations developed by U.C. Cooperative Extension. Actual application rates will be based on real time climatic monitoring and soil moisture sensors as described on pages 21-24 of Appendix D-19 (Irrigation Management Guidelines for the West County and South County Alternatives). This approach, as well as the monitoring program described on page 43-44 of Appendix D-19, will avoid the development of the sort of drainage problems asserted.

A hydrologic analysis was also completed utilizing a conservative approach that estimated the amount of irrigation runoff and subflow contributions to nearby surface streams. Very modest to insignificant/unmeasurable increases in flow are estimated by the model.

Response to Comment 106-25

Comment Summary: The comment expresses concern that use of reclaimed water will contaminate land and that reclaimed water cannot be used by organic farmers.

Impact 2.7.4 (which starts on page 4.2-23 of the Draft EIR/EIS) contains a discussion of suitability or reclaimed water for agricultural irrigation, and concludes that reclaimed water will not damage soils. The Irrigation and Conservation Management Plans

described in Measures 2.2.1 through 2.2.7 on pages 2-21 through 2-37 of the Draft EIR/EIS describe the City's plan for management of irrigation to protect soil and water resources. The City's existing irrigation system provides reclaimed water for an organic farmer, so it is not expected that organic farmers could not use reclaimed water. However, organic farmers and any other land owners that do not want reclaimed water can choose not to contract for water.

Response to Comment 106-26

Comment Summary: The comment asks if the City would reimburse landowners in the event of contamination with reclaimed water.

Implementation of Irrigation and Conservation Management Plans will protect agricultural lands from adverse effects. Irrigation with reclaimed water will not contaminate soils, and, as described in Measure 2.2.3: Restrict Surface and Subsurface Irrigation Water Runoff, on page 2-23 of the Draft EIR/EIS, if there are drainage problems that cannot be managed, the City will cease delivery of reclaimed water.

Response to Comment 106-27

Comment Summary: The comment expresses concern about odors from sludge.

Sludge application is not proposed as part of the Long-Term Project. Sludge management was mentioned in this Draft EIR/EIS only because the expansion of the headworks capacity will increase sludge production, so odors from sludge at the Laguna Treatment Plant were addressed in Section 4.12 of the Draft EIR/EIS, beginning on page 4.12-15. Odor problems are not expected to be associated with irrigation with reclaimed water.

Response to Comment 106-28

Comment Summary: The comment asks if the City will compensate landowners and business owners for their losses?

The comment apparently pertains to adverse effects from sludge odors. No odor problems are expected, and sludge application is not part of this Project, so no adverse effects are expected.

Response to Comment 106-29

Comment Summary: The comment requests that impacts to wildlife associated with lighting at the dams and pump stations be analyzed.

The only Project components that require a source of lighting are the pump stations. Lights associated with the pump stations will be manually-operated, used only during routine maintenance and operation checks or emergency events, and will not be used throughout the night. In addition, the lights are designed to illuminate only the area

encompassed by the pump station. This impact is addressed on page 4.14-87 of the Draft EIR/EIS.

Response to Comment 106-30

Comment Summary: The comment states that because the project extends beyond the boundaries of the City of Santa Rosa, the Lead Agency for this project should be Sonoma County rather than the City of Santa Rosa.

The premise upon which this comment is based is incorrect. Section 15051(a) of the State CEQA Guidelines states that “If the project will be carried out by a public agency, that agency shall be the Lead Agency even if the project would be located within the jurisdiction of another public agency.”

Response to Comment 106-31

Comment Summary: The comment states that each sub-alternative can be considered as a stand alone project, and that the Draft EIR/EIS has violated CEQA because it has not considered each sub-alternative as a stand alone project.

The premise on which this comment is based is inaccurate. The Draft EIR/EIS is structured in such a way that each sub-alternative can be evaluated as a stand alone project, or alternatively as a component of a larger project. The initial study covered the Bloomfield alternative.

