Comment 66 cont.

habitat lie between J.C. Boyle Dam and the next downriver dam. *Id.* at 3.3-25. There will be no dilution of organic and inorganic chemicals for the aquatic species in this area. Moreover, the problem is not confined to sediments behind J.C. Boyle Dam. Dioxin, a known carcinogen, exceeded human health screening levels in each of the three reservoirs behind the dams to be removed.

The EIS/EIR also ignores the fact that aquatic life could be threatened even if contaminant levels are diluted. What the EIS/EIR actually says is that dilution will result in "diminishing the potential" problem. *Id.* at 3.2-121. Diminishing the potential for a problem is far different than not having a problem – and the potential harm is never analyzed.

Nowhere is the unwillingness of the EIS/EIR to actually consider the effects of these contaminants on the environment more apparent than with respect to known carcinogens such as dioxin, DDT, and PCBs. The EIS/EIR states dioxin levels in sediment "exceed Oregon human health and bioaccumulation thresholds...." *Id.* at 3.2-31. While this is true, the EIS/EIR fails to explain that the dioxin contamination problem is not limited to the reservoir behind J.C. Boyle Dam. The EIS/EIR also neglects to mention that the dioxin concentrations exceed the Environmental Screening Level for Human Health set by California. The EIS/EIR then fails to consider that DDT is found in J.C. Boyle reservoir sediments above both fresh water and human health standards. Finally, the EIS/EIR fails to consider that dioxin, furan, and PCBs were found in each reservoir sediment at levels above Oregon's hazardous threshold for mammals. *Id.* at 3.2-119. The EIS/EIR cavalierly dismisses all of these problems by stating, for example, that Oregon's "human health thresholds" of harm are "lower" than federal levels and Oregon's standards do not apply in California. Therefore, there is risk to human health or the environment that merits analysis. *Id.* at 3.2-31 and 3.2-119.

Comment 66 cont.

Such a dismissal of issues, such a lack of analysis of actual and potential effects of known carcinogens, cannot be said to meet NEPA's or CEQA's standards for a hard look at environmental effects. Compounding these failures is the absence of any analysis of the effects of the plan to spray herbicides over up to 75% of the total reservoir area behind the dams. *Id.* at 3.2-120. The herbicides are to control invasive plant species. *Id.* However, the EIS/EIR does not examine the effects of adding herbicides to the environment, including the riverine environment into which the chemicals will wash. Why is there no analysis? Because DOI will be using approved herbicides and will be doing so in accordance with the labels. *Id.* That position ignores the fact that huge legal battles are now being waged about whether "approved" herbicides used in accordance with their labels are, in fact, causing harm to aquatic species. The EIS/EIR cannot ignore this issue, particularly when ESA protected species inhabit the river.

Finally, it is a telling commentary on the bias in the EIS/EIR that the EIS/EIR concludes the alleged mild contaminant effects of the Proposed Action justify a finding that the Proposed Action will have less than significant impact while the same EIS/EIR concludes that the "minor or limited adverse effects" of the No Action Alternative supports a determination of potentially significant impacts. EIS/EIR at 3.2-74 and 75. The threshold of significance cannot be changed on a whim such that chemicals found in concentrations likely to produce mild effects are significant when evaluating the No Action Alternative, but are less than significant when evaluating the Proposed Action. Lead Agencies have discretion to set significance thresholds, but not the discretion to employ those thresholds in a manner that leads to a biased evaluation of, and conclusions regarding the potential impacts of the Proposed Action as compared to project alternatives.

8. Conclusion

As to water quality, the EIS/EIR admits the Proposed Action makes the problems worse by increasing sediment and nutrient loads and the growth of harmful algae. DOI's Expert Panels conclude that the problem of increased water temperature and temperature variability is made worse by the Proposed Action. The EIS/EIR admits lower dissolved oxygen and elevated pH issues are made worse by the Proposed Action. But the EIS/EIR fails to examine key parameters, fails to properly assess significance of impacts, uses incorrect baseline assumptions, and fails to consider important issues. In short, once again, the EIS/EIR fails to meet even the minimal standards of legal adequacy as to analysis – and where such analysis exists, it shows the Proposed Action makes water quality problems worse, not better, further jeopardizing the already unsure habitat and water quality improvements that should be derived from implementation of the Foreseeable Restoration Measures.

H. Groundwater

Comment 67 - Groundwater

To examine the effects of the Proposed Action on groundwater, the EIS/EIR begins by inappropriately limiting the area of analysis. The EIS/EIR states the area of analysis is the Klamath Basin upstream of Copco 1 Dam because this area is covered by a U.S. Geological Survey model designed to determine the effects of various actions on groundwater. EIS/EIR at 3.7-1. The entire area below Copco 1 Dam is excluded from any analysis and never considered in the EIS/EIR because "[n]o model exists for areas below Copco 1 Dam." *Id.* The lack of any such model does not excuse the Lead Agencies from their NEPA and CEQA responsibility to consider the impacts of the Proposed Action. And impacts there will be.

Groundwater in the region is largely fed by percolation from the surface. *Id.* at 3.7-5. Clearly, the reservoirs behind the dams are a source of the percolation. Conspicuously absent from the EIS/EIR is any analysis of how a change from reservoir related groundwater recharge to

Comment 68 - Groundwater

Comment 59 cont.

river and aerial precipitation recharge will affect groundwater supplies. Instead, the EIS/EIR contains the unsupported conclusory statement that the amount of water will be about the same. *Id.* at 3.7-17. Compounding the lack of analysis regarding supply impacts is the absence of analysis regarding increased usage impacts. For example, the EIS/EIR admits the Proposed Action will result in hundreds of agriculture irrigators "pumping more groundwater." *Id.* at 3.15-72. Notwithstanding no factual analysis of either the supply or the demand side of the groundwater issue, the EIS/EIR concludes the impacts of the Proposed Action on groundwater "would be less than significant." *Id.* at 3.7-17. This type of unsupported conclusory statement is typical of the EIS/EIR and further documents its legal deficiency.

Comment 69 - Groundwater

This deficiency is crystallized by the admission that domestic and irrigation wells may need to be deepened so that users can continue to receive water in the needed quantity and flow. *Id.* at 3.7-16. Indeed, the chosen groundwater impact mitigation measure in the EIS/EIR "provides for the deepening (or replacement) of an existing affected domestic or irrigation groundwater well so the groundwater production rate from the well is returned to conditions prior to implementation of the Proposed Action...." *Id.* at 3.7-22. Wells would not need to be deepened if groundwater levels were not dropping because of the Proposed Action. Yet, the EIS/EIR offers no analysis of the impact of the Proposed Action on this natural resource.

Further illustrating the need for, and the absence of, analysis is the discussion of the effects of the KBRA. The EIS/EIR states the KBRA will reduce surface water diversions by a significant amount in order to leave water in the river for fish. *Id.* at 3.7-19. The EIS/EIR goes on to admit this will increase the need for groundwater pumping as a replacement water supply. *Id.* Are the interrelated and cumulative effects of dam removal and the KBRA ever considered in the EIS/EIR? Not surprisingly, the answer is no. The only thing said is that since the surface

Comment 70 - Groundwater

Comment 70 - cont.

actions associated with dam removal are geographically separated from actions associated with changing water diversions, groundwater is not likely to be affected. *Id.*

Finally, as discussed in more detail in the energy issues section of these Comments, (*see* Part II.N of these Comments), the EIS/EIR has no analysis of the cost to domestic and irrigation groundwater users of having to pay for increased pumping costs associated with deeper wells. Nor does the EIS/EIR address the issue of from where users will get temporary water supplies while their wells are being deepened.

Comment 71 - Groundwater

I. Air Quality and Climate Change

Comment 72 - Air Quality

The EIS/EIR states: "No operational sources are part of the Proposed Action; therefore, this analysis considers only construction-related air quality impacts." EIS/EIR at 3.9-10. While the Lead Agencies are not proposing an "operational" component of the Project, operational sources are a reasonably foreseeable outcome of the Proposed Action. For example, additional operational sources will be necessary to generate the power required to serve customers presently receiving power generated by the dams. This is expressly acknowledged in Section 3.10 of the EIS titled Greenhouse Gases/Global Climate Change. Thus, the statement that no operational sources are part of the Proposed Action is fundamentally flawed and inconsistent with other sections of the EIS/EIR. The EIS/EIR must address the additional pollutants that will be generated from the new sources needed to provide energy once the dams are removed. There is a high likelihood that the sources of this additional power will increase emissions because the hydroelectric power from the dams currently generates only minimal emissions associated with "vehicle exhaust from continued maintenance and operation of the Four Facilities." EIS/EIR at 3.9-10. In fact, the EIS/EIR admits increased air emissions are related to "replacing hydropower at the dams with power that is likely to be produced, at least in part, from fossil fuels through other regional sources." EIS/EIR at 3.10-14.

Comment 72 cont

To compensate for the likely increased air emissions resulting from not using clean hydropower, the EIS/EIR alleges emissions benefits could occur from "alterations in land use, agricultural resources (including the creation of new agricultural areas) and recreation from implementation of the KHSA and KBRA" and the EIS/EIR expects that "a net reduction in carbon emissions could occur from the land use conversion." *Id.* at 3.10-16-3.10-17. The problem with the EIS/EIR's treatment of this issue is that no substantive information is provided that describes the number of acres for which sequestration might be increased or the feasibility and responsibility for implementing such projects to demonstrate that they will in fact provide a net reduction in carbon emissions. Furthermore, while the KBRA includes a Renewable Power Program, that plan has not been developed and the EIS/EIR does not document the extent to which renewable power can realistically replace the existing hydropower from the dams.

Further, the mitigation measures proposed to address increased air emissions do not meet basic standards to qualify as mitigation measures. The measures focus on reducing energy use, presumably to reduce the demand for non-renewable energy resources, which demand will likely increase under the Proposed Action. However, the EIS/EIR is devoid of analysis explaining how these measures would reduce energy consumption over and above current programs in California or Oregon. In addition, "[m]itigation measures must be fully enforceable through permit conditions, agreements, or other legally binding instruments." CEQA Guidelines §15126.4(a)(2). Mitigation Measures CC-1 through CC-3 are lacking critical details such as which party is to implement the measure, how the measures would be implemented, at what point in time these measures would reduce the demand for energy, and any performance standards. Without such information, the alleged mitigation measures are meaningless and do not meet NEPA or CEQA requirements.

Comment 73 - Air Quality

Comment 74 - GHGs

An additional mitigation measure should be included for Alternatives 2 and 3. The additional mitigation measure is necessary to provide funding for the extra costs that Siskiyou County and other municipalities and agencies will incur to develop greenhouse gas emission reduction/climate action plans in light of the increase in emissions created by removal of clean hydroelectric power and replacement of such power with non-renewable, greenhouse gas-emitting sources.

Comment 75 - GHGs

To quantify the alleged effectiveness of the various GHG emission reduction measures discussed in the EIS/EIR, that document uses the California Air Pollution Control Officers Association publication. The specific example, EIS/EIR at 3.10-45, is related to efficiency of construction of a non-residential building using additional energy efficiencies compared to the 2008 Title 24 standards. But this example is irrelevant to the actual existing conditions and facts in the project area. The issue in the project area is impacts on existing communities and their existing residential and non-residential units. Providing an example of new development and the efficiencies that could be achieved does absolutely nothing to evaluate the impacts of the proposed project on existing communities.

Comment 76 - GHGs

Moving to the issue of methane gas, the treatment in the EIS/EIR of methane gas release from reservoirs has at least two flaws. First, as the Karuk Tribe 2006 comment letter acknowledges there is "a lack of KPH-specific data, [and] estimating its methane emissions precisely is not possible at this time." The Tribe went on to state that "site-specific studies of KPH reservoirs could be used to refine the estimate." The EIS/EIR does not inform the reader of these substantive qualifications to the results or that the so-called "calculations" are in reality nothing more than comparisons to other reservoirs with no actual site specific information. Rather than conduct the site-specific study called for by the Karuk Tribe, the EIS/EIR simply

Comment 76 cont.

inserts the 2006 information, making one small adjustment related to the global warming potential of methane, but not making any other attempt to link the EIS/EIR conclusions to existing conditions at the reservoirs. Second, the EIS/EIR completely ignores potential mitigation measures for the other alternatives. A fair and unbiased comparison of the impacts of the alternatives requires that reasonable and feasible mitigation measures be included for all of the alternatives, not simply for Alternative 2.

In that regard, Tables 3.10-17 and 3.10-18 of the EIS/EIR compare the GHG emissions of the alternatives with and without methane generation from the reservoirs. EIS/EIR at 3.10-45. As previously indicated, the methane generation from the reservoirs is speculative and unsubstantiated. The key point, which the EIS/EIR does not address, is that other alternatives such as Alternative 4 have a dramatically lower GHG emission level than Alternatives 2 or 3. CEQA requires that the Lead Agency "should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects" of the project. Pub. Res. Code §21002. Alternative 4 is the environmentally superior alternative relative to GHG emissions, and the Lead Agencies must demonstrate why Alternative 4 is not feasible in order to select Alternative 2.

Finally, it must be noted the EIS/EIR makes several statements and conclusions about free-flowing rivers as compared to systems with dams and the manner in which these two different systems respond to climate change. *See e.g.*, EIS/EIR at 3.10-9, 3.10-10, 3.10-13. These statements and conclusions are used to support dam removal. But the EIS/EIR ignores the fact that downstream of Iron Gate Dam the river is free flowing for 190 miles. The dams proposed to be removed are a small percentage of the Klamath River. The EIS/EIR does not provide a complete and unbiased comparison of alternatives because no mitigation measures or

Comment 77 - GHGs

Comment 77 cont.

design features are included for the No Action/No Project or Fish Passage at Four Dams alternatives. Without an evaluation of the manner in which those alternatives might adapt, respond to, or mitigate the effects of climate change, the analysis is incomplete and skewed to dam removal.

J. Transportation

Comment 78 - Transportation

Dam removal will result in tons of waste material that must be transported to disposal sites. In an understatement of reality, the EIS/EIR concludes "[s]ome of the roads in the area of analysis may not have been designed to sustain heavy roads." EIS/EIR at 3.22-15. The facts are that the roads and bridges were not so designed and cannot support the weights to which they will be subjected. Indeed, the EIS/EIR admits that for the Copco 2 Dam removal "[t]he existing access roads would require substantial upgrades to handle the hauling of the excavated concrete and provide access for a large, crawler-mounted crane." *Id.* at 2-26. For other roads at other dams the EIS/EIR concedes "[c]onstruction equipment could damage existing roads during deconstruction." *Id.* at 4-173. With respect to bridges, the EIS/EIR acknowledges that three bridges that will be important for the transport of dam removal waste "could be incapable of supporting and withstanding the weight of heavy deconstruction and hauling vehicles." *Id.* All of these structural problems are worsened to the extent heavy deconstruction traffic is using these roads and bridges during the wet months of the year.

Instead of conducting the analysis NEPA and CEQA require of these infrastructure issues, the EIS/EIR says "an in depth analysis of bridge and road capacity" will be done later. *Id.* For the EIS/EIR to meet NEPA and CEQA standards for adequacy, that analysis must be in the EIS/EIR. If the existing transportation infrastructure is inadequate to accomplish dam removal, it calls into question the feasibility of the Proposed Action. If it is DOI's position that this is a mitigatable issue, then it is incumbent that the EIS/EIR explain how.

Comment 79 - Transportation

In addition to these fundamental policy issues, the EIS/EIR has numerous factual errors. For example, the EIS/EIR describes Copco Road as a paved, two lane road in good condition, with a speed limit of 55 mph. EIS/EIR at 3.22-4-5. This description might be appropriate on the first three miles from Interstate 5 to the Klamathon Bridge. Beyond that point, 70%-80% of the road is in very poor to failed condition. Moreover, the EIS/EIR assumes construction traffic will be occurring between January and September and spreads construction traffic impacts to Copco Road over this time frame. Because of the documented poor condition of Copco Road, the County has greatly restricted truck traffic to the dry summer months. To the extent the Proposed Action contemplates using Copco Road for heavy machinery access and for waste hauling in months other than the dry summer months, the Proposed Action is inconsistent with applicable County requirements. Equally important, given that Copco Road is already in a state of serious disrepair, the EIS/EIR discusses neither the inevitable need to reconstruct Copco Road after dam removal nor the environmental impacts of that action.

Similarly, the EIS/EIR states Patricia Avenue and Ager Beswick Road would provide haul access from Copco 1 and Copco 2 dams. *Id.* at 3.22-5. However, Patricia Avenue is a residential street and neither road was designed for heavy loads. Furthermore, there is no road connecting Patricia Avenue to either dam. The EIS/EIR also ignores the fact that the "possible" closing of Copco and Topsy Grade Roads during dam deconstruction, *id.* at 3.22-13 n.4, is simply unacceptable given that there are private homes served by these roads.

Lastly, unaddressed are issues related to the maintenance of public roads in the project area. There are, according to information provided by the Siskiyou County Department of Public Works, over 200 culverts beneath the public roads in the project area. These culverts empty into the reservoirs. Many of these culverts have outflow that will have to travel from what is now

Comment 80 - Transportation

Comment 80 cont.

lake edge to the new channel. There is no examination of the potential for scour and erosion in these culverts as a result of the Proposed Action.

K. Noise

Comment 81 - General/Other

Like the discussion of transportation impacts, the evaluation in the EIS/EIR of noise impacts is woefully inadequate. It fails to meet the most basic requirements necessary to provide a meaningful review of the Proposed Action. Indeed, the typical review by the County of Siskiyou of the noise effects of much more limited projects provides significantly more detailed information and analysis. The absence of any meaningful analysis in the EIS/EIR of the existing noise environment and of how the Proposed Action will impact existing conditions precludes a decision maker from understanding the noise effects of the Proposed Action.

For example, the County of Siskiyou has a General Plan Noise Element ("GPNE") that identifies acceptable noise levels in open space areas, rural areas, etc. It is not possible to evaluate land use noise impacts for consistency with the County's requirements without providing an analysis of the noise levels that will be associated with the Proposed Action. Nowhere does the EIS/EIR provide these data.

Similarly, the EIS/EIR does not collect data on existing noise levels against which the noise from dam removal could be compared and contrasted. Instead, the EIS/EIR uses generalized assumptions from the U.S. Environmental Protection Agency and definitions from the Federal Highway Administration regarding acceptable noise levels in urban areas. There is no explanation of why it is appropriate to use an urban area, which has high background noise levels, as a baseline for rural Siskiyou County. The Thresholds of Significance: Criteria for Defining Environmental Significance, prepared by California's Office of Planning and Research indicate why that baseline is not valid. Therein, it is stated: "The significance of an activity may

Comment 82 - General/Other

Comment 82 cont.

vary with its setting. For instance, a subdivision which would create 10 new lots may not be significant in an urban area, but may be significant in an undeveloped rural area."

The rural character of the County is also important for tourists and local citizens using recreational and camping sites within the County of Siskiyou. Many recreational users enjoy sites in the County specifically because of their remote location and solitude. The effects on these people of increasing noise levels from the Proposed Action is never examined, in part because the increased noise levels are never quantified and compared to existing levels.

In that regard, it should also be noted that the EIS/EIR discusses noise questions based on typical residential construction standards. These generalized standards, applicable to urban areas, are inappropriate when applied to rural Siskiyou County. Many County residents live in mobile homes. Mobile homes have significantly different noise attenuation levels than do urban single family homes. The assumptions in the EIS/EIR regarding the applicable standards by which to judge noise impacts are, once again, incorrect.

Finally, in considering noise impacts, the EIS/EIR fails to take into account the conflict between the dam removal schedule and the County's regulations. For example, the EIS/EIR assumes construction traffic will occur between January and September. However, because of the well-documented poor condition of Copco Road, the County has placed significant restrictions on the use of this road by trucks outside of the dry summer months. The Proposed Action contemplates spreading the noise from the movement of heavy equipment and the hauling of tons of waste over nine months and assumes the total amount of new noise is divided by nine. However, these operations will have to be done in many fewer months because of road conditions and the County's Ordinance. Therefore, the EIS/EIR incorrectly analyzes the monthly impact of truck noise along Copco Road.

Comment 83 - General/Other

Comment 83 cont.

The discussion of noise mitigation measures suffers the same defects. For example, Mitigation Measure NV-1 provides that truck loading, unloading, and hauling operations will be scheduled so as to reduce noise impacts "to less than noticeable levels." EIS/EIR at 3.23-22. However, truck volumes will more than double along roads such as Copco Road. Given the enormity of the project and the doubling of traffic from heavy trucks, the proposed mitigation is simply not achievable. Noise and traffic levels cannot be reduced to less than noticeable amounts.

In sum, the evaluation of noise impacts from the Proposed Action is wholly inadequate. It proceeds from incorrect assumptions and fails to discuss, let alone examine, important aspects of the issue.

L. Waste Disposal

Comment 84 - Other/General

The EIS/EIR begins its discussion of waste disposal issues by stating that all concrete and earth waste resulting from dam removal will be disposed of onsite or near the existing dam sites. EIS/EIR at 3.18-21. That leaves 7,200 tons of metal, some of which would be recycled, and 4,500 tons of rebar for disposal offsite. *Id.* The EIS/EIR concludes the disposal of rebar and metals is not an issue with respect to landfill capacity because the combined remaining capacity of the Yreka Solid Waste Landfill and the Klamath Falls Landfill is 4.3 million cubic yards. *Id.* In addition, the Dry Creek Landfill is reported to have 165 million cubic yards of unused capacity. *Id.* The EIS/EIR asserts this is a sufficient capacity. However, the EIS/EIR does not analyze the effect of using this capacity for dam removal waste on the long-term plans of the affected Counties for landfill capacity. The affected Counties are the entities that will bear the long-term burdens and costs of finding new capacity if existing capacity is consumed by dam waste. In that regard, the EIS/EIR acknowledges the "population in Siskiyou and Klamath Counties is expected to increase" and as a consequence "the generation of solid waste would also

Comment 84 cont.

be expected to increase...." *Id.* at 4-173. Then, stating the obvious, the EIS/EIR concedes "[s]olid waste facilities have a finite amount of space and can only accept waste if space is available." *Id.* Having identified the problem the Counties will face, the EIS/EIR fails to examine the consequences of dam removal for the Counties' solid waste disposal plans.

The problem becomes even more severe when one considers the fact that the Proposed Action will also generate 1,241,500 cubic yards of earth and 126,000 cubic yards of concrete. EIS/EIR at 3.18-21. At one point, the EIS/EIR states all of this material will be disposed of at or near the dams. *Id.* Later, the EIS/EIR states "[t]he earth, concrete, and rebar waste that would be removed from the facilities under the Proposed Action would be sent to local landfills. The selected landfills in the region have adequate capacity to absorb the debris...." *Id.* at 4-173. So, which is it? How is a decision maker to evaluate the impacts of solid waste disposal when the EIS/EIR presents conflicting strategies and analyzes neither?

Assuming the idea is to bury 1,367,000 cubic yards of earth and concrete onsite, the EIS/EIR opines that "[p]ermanent disposal sites would be needed near the dams on lands currently designated open space and/or conservation." *Id.* at 3.1423. Conspicuously absent from the EIS/EIR is any discussion of the impacts on these protected open space and conservation areas of disposing of 1,241,500 cubic yards of earth and 126,000 cubic yards of concrete. Digging up and burying this enormous volume of waste will have effects on open space and conservation areas. But the EIS/EIR, in yet another failure of analysis, is silent as to these effects.

If, however, the plan is to dispose of 1,367,500 cubic yards of earth and concrete waste at the Yreka Solid Waste Landfill and the Klamath Falls Landfill, the EIS/EIR fails to discuss the impact on the Counties of using 32% of the remaining 4.3 million cubic yards of capacity at

Comment 84 cont.

these facilities. The EIS/EIR acknowledges the Counties will grow and will need landfill capacity, but ignores the consequential economic and environmental impacts of using one-third of the remaining capacity of these two landfills for dam removal, including the economic and environmental consequences to the Counties of having to site replacement capacity.

In other words, a decision maker reading the EIS/EIR and attempting to make a reasoned decision about environmental consequences does not know what is planned and does not know the consequences of the possible plans. This is hardly the stuff of informed decision making that satisfies NEPA or CEQA.

M. Socioeconomic, Land Use, and Related Issues

The County of Siskiyou comprises 6,340 square miles of which over 60% is owned and managed by federal and state agencies. EIS/EIR at 3.14-5. The County is home to 44,328 people. *Id.* Unfortunately, according to California's statistical reports, their income is only 73% of the State's average income and their median income is only 60% of the State's average. Currently, the County is experiencing in excess of 17% unemployment. The County and its citizens are suffering extreme economic hardship.

To enable it to serve its citizens, Siskiyou County receives tax revenues that are derived principally from property taxes and from sales and use taxes. *Id.* at 3.15-20. These taxes support essential governmental services such as education, health, public assistance, emergency services, and public recreation.

Comment 85 - Economics

The vast majority of the County's tax revenue comes from privately-owned property. The EIS/EIR states there are 668 parcels with an assessed land value of $9 million that will be affected by dam removal. *Id.* at 3.15-64. Beyond that statement, the EIS/EIR makes no effort to quantify the loss of revenue the County will experience due to land values adversely affected by dam removal. Nor does the EIS/EIR make any effort to assess the impact of lost revenues on the

Comment 85 cont.

County's ability to serve its citizens. The EIS/EIR only states that "the Proposed Action could cause a short- and long-term decline in tax revenue" and that "[l]ost tax revenues to Siskiyou County would be an adverse economic effect." *Id.* at 3.15-65 and 4-162.

After admitting adverse impacts, the EIS/EIR seeks to avoid any analysis of these impacts stating that the magnitude of any loss is unknown. *Id.* at 3.15-65. It is curious that the EIS/EIR characterizes the amount of lost revenue impact as unknown given that a study commissioned by DOI reported on March 22, 2011 that the assessed land value of the 668 parcels the EIS/EIR admits will be adversely affected by dam removal will drop by 26% from $8,570,030 to $6,350,785. Bender Rosenthal, Inc., Dam Removal Real Estate Evaluation Report Prepared for the Department of the Interior, March 22, 2011, at 51. However, this number is understated because this is an assessment of land value only and does not include any structures or other improvements on the land. *Id.* at 23.

It is not clear why DOI elected to ignore its own report in the EIS/EIR. It is also unclear why the EIS/EIR neglects to examine the direct and indirect effects of this revenue loss on the County and its ability to serve its citizenry, particularly when buried in another part of the EIS is the surprising admission that the "[r]eduction in the counties' budgets [from lost tax revenue] and resulting reductions or eliminations in social programs would disproportionately affect low income and minority residents and tribal people." EIS/EIR at 5-104.

The only thing the EIS/EIR has to say in response is that lost County income might be made up by revenue from new land uses and from payments from the State of California for payment-in-lieu of property taxes on PacifiCorp property. *Id.* at 3.15-65. But the EIS/EIR offers no analysis or facts to support this claim. Instead, the EIS/EIR says it will "not describe potential changes in land use" that might occur, *id.* at 3.14-1, and fails to explain how a cash

Comment 85 cont

starved state will find the money for the payments-in-lieu of taxes. In the end, the EIS/EIR admits "the Proposed Action would cause short-term and long-term declines in tax revenues to the counties ...", *id.* at 5-104, and that County revenues could be affected "indefinitely," *id.* at 4-160. The impacts of that are never analyzed.

Perhaps in an effort to minimize the significance of the expected revenue losses, the EIS/EIR has a table measuring the average tax revenues received by the County of Siskiyou 2000-2010. *Id.* at 3.15-21, Table 3.15-19. This figure, $16,447,000, might be of historic interest but it obscures the fact that the 2010 tax revenue to the County of Siskiyou was only $11,669,731. This number is 29% lower than the historic average and, in present economic conditions, shows no signs of significant change. Any revenue impact assumptions in the EIS/EIR are based on historic revenue data that are off by 29%.

Absent any facts and any analysis of the magnitude or effects of these tax revenue losses, a decision maker cannot assess the socioeconomic impacts of the Proposed Action on the County of Siskiyou. However, what we do know is that 64% of the land in the County of Siskiyou is in federal or state ownership and, therefore, the County has a very limited ability to make up for lost revenue from taxes on privately owned lands.

Compounding this failure of analysis is that the EIS/EIR effectively ignores other aspects of the long-term economic, employment, and revenue impacts of the Proposed Action. The EIS/EIR admits that under the Proposed Action "the regional economy would lose 49 jobs, $2.05 million in labor income and $5.19 million in output ..." due to dam operations. *Id.* at 3.15-54. Added to this is the loss of four jobs and $0.13 million from the loss of reservoir recreation and 14 jobs and $0.43 million from the loss of whitewater rafting opportunities. *Id.* at 3.15-58 and 3.15-61. None of these socioeconomic impacts are examined.

Comment 86 - Environmental Justice

Comment 86 cont.

Not only are none of these job loss impacts examined, but the EIS/EIR offers no recognition of the fact that county government is one of the principal employers in the County of Siskiyou. Already, the County has laid off dozens of valuable employees because of declining revenue. The EIS/EIR fails to consider these present and cumulative impacts when it says the County will experience a further decline in tax revenues because of the Proposed Action – a decline that could last "indefinitely."

Instead, the EIS/EIR pivots to claim significant benefits to commercial and recreational fishermen because of alleged increases in fish abundance. *Id.* at 3.15-56-60. However, as noted in Part II.C of these Comments, such claims are illusory.

In still another failure of analysis, the EIS/EIR says land uses will change but, as noted above, "does not describe potential changes in land use that would occur if the dams were removed." *Id.* at 3.14-1. For example, the EIS/EIR fails to examine the potential impact of converting farmland to non-agricultural use notwithstanding the fact that the impact could be huge. *Id.* at 3.14-27. New and different land uses resulting from dam removal will significantly change the socioeconomic landscape of the County of Siskiyou, and other counties. Yet, the EIS/EIR contains no analysis.

Comment 87 - Land Use

Furthermore, the area of analysis for land use effects of the Proposed Action is too limited, *id.* at 3.14-3, Figure 3.14-1, and should be expanded to include the area where reasonably foreseeable effects of the Proposed Action will occur. The magnitude of all the changes that will result from the Proposed Action, the construction and restoration activities, and the vast reach of the related programs are not addressed by the limited area of analysis. The area of analysis should include the entire Klamath Basin, as the effects of the Proposed Action will extend throughout the Klamath Basin.

Comment 88 - Land Use

Comment 89 - Economics

Finally, the EIS/EIR does not properly examine the socioeconomic impact of lost recreational opportunities for the local citizenry, tourists, and tourism. For example, Hells Corner Reach is the only Class V rapids in the region and it will be lost because of the Proposed Action. *Id.* at 3.20-46. The closest similar experience can only be had by traveling 80 miles. *Id.* The EIS/EIR also concedes that the lakes that will cease to exist because of dam removal provide important recreational opportunities for the people of the region. *Id.* at 3.20-38. However, the EIS/EIR does not examine the related socioeconomic and recreational effects of this loss. Rather, the EIS/EIR simply says people can go elsewhere. *Id.*

Comment 90 - Land Use

All of these failures of analysis are of particular note under NEPA and CEQA. CEQ's regulations implementing NEPA specifically provide that the effects to be analyzed in the EIS include "growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate...." 40 C.F.R. §1508.8(b). Here, however, the EIS/EIR "does not describe potential changes in land use that would occur if the dams were removed." EIS/EIR at 3.14-1. In a conspicuous failure of NEPA compliance, the EIS/EIR does not even begin to examine the effects of land use changes because the EIS/EIR does not describe changed land uses resulting from dam removal.

The problems for CEQA compliance are equally severe. An EIR must address a proposed project's "significant effects on the environment." Pub. Res. Code §21100(b)(l); *see also* CEQA Guidelines §15126.2(a) (the EIR "shall identify and focus on the significant environmental effects of the proposed project"). A significant effect on the environment is defined as "a substantial, or potentially substantial, adverse change in the environment." Pub. Res. Code §21068; *see also* Pub. Res. Code §21100(d). The EIR must identify both direct and indirect significant effects. CEQA Guidelines §15126.2(a). Where a project's economic or

Comment 91 - Economics

Comment 91 cont.

social effects will cause physical effects on the environment, those effects must be analyzed in the EIR. CEQA Guidelines §15131(a). Additionally, the "[e]conomic or social effects of a project may be used to determine the significance of physical changes caused by the project." *Id.* at §15131 (b). And in considering the feasibility of changing the project so as to reduce impacts, the agency must consider the project's impacts on economic, social, and housing factors. *Id.* at §15131 (c). The Proposed Action's negative impact on the County's tax base and revenue is a significant economic and social factor as are the anticipated changes in land use. The EIS/EIR has not adequately analyzed any of these factors or given them appropriate weight.

N. Energy Usage and Cost

Comment 92 - Hydropower

Closely related to the socioeconomic issues discussed in the preceding section is the issue of energy usage and costs. The Proposed Action "would result" in the loss of 169 MW, or 658,000 MWh" of power. EIS/EIR at 3.18-23. The EIS/EIR attempts to gloss over this power loss by asserting it is minimal when compared to the size of the Northwest Power Pool. *Id.* One is reminded of the unfortunate approach applied elsewhere in the EIS/EIR that the solution to pollution is dilution. If we increase the area in which we measure impacts, and the area is large enough, then there is no longer a harm – except of course to the people at the epicenter of the problem. Here, the people at the epicenter are those who depend on power from the dams. As to those people, the EIS/EIR is forced to admit "the loss of power generated may have some impact to the local area...." *Id.* To put this loss of power into perspective, 658,000 MWh is enough to power approximately 65,000 homes for one year. There are only 23,506 homes in the County of Siskiyou. *Id.* at 3.17-6. In other words, the "some impact to the local area" means that every household in the County of Siskiyou will be affected. In fact, the July 2008 report by Camp, Dresser and McKee Inc. prepared for DOI estimates the cost of replacing this lost power at approximately $172 million.

Comment 92 cont.

Beyond admitting there will be "some" local impact, the EIS/EIR says nothing more. There is no analysis of what the socioeconomic effects might be although the EIS/EIR does make two significant admissions. First, PacifiCorp will need to purchase "at least 42.7 MW" of replacement power. EIS/EIR at 3.17-6. Second, irrigators will be pumping more water under the Proposed Action than under the status quo and, therefore, "paying more for electricity under the Proposed Action...." *Id.* at 3.15-72.

The EIS/EIR contains no discussion of the effect of these increased costs on the approximately 550 irrigated farms in Siskiyou County. Nor does the EIS/EIR explain what additional economic costs the consumer will bear because PacifiCorp is having to purchase power after dam removal. DOI's disregard of these economic impacts must be considered in light of the fact that the citizens of the County of Siskiyou are already reeling from 17% unemployment and a flagging economy. Yet, the EIS/EIR is devoid of any analysis of this socioeconomic and human impact of dam removal.

Similarly, the EIS/EIR is devoid of any analysis of the long term environmental impacts of not having clean hydropower. The EIS/EIR dismisses these impacts with the assertion that the four dams provide only a small amount of the total power in the Northwest Power Pool and, besides, PacifiCorp will need to develop more power sources by 2018 in order to meet growing energy demands. *Id.* at 3.18-23-24. While the individual impact of dam removal may, or may not, be small, there is an impact, and it is an impact whose strength is multiplied when it is cumulated with the loss of other power sources and with increasing demands for power. The EIS/EIR contains no analysis of this cumulative effect – and no analysis of the environmental consequences of using other power sources, including the construction of power generating facilities and associated transmission lines.

Comment 93 - Hydropower

Comment 93 cont.

The reality is that replacing clean hydropower with virtually any other power source increases pollution emissions or otherwise adversely affects the environment. The EIS/EIR seeks to avoid these issues by pointing, for example, to wind power as a clean energy alternative. Even here, the EIS/EIR fails to note the high degree of environmental controversy surrounding wind power – a controversy that has caused DOI to develop new guidelines to reduce the number of birds killed by large wind power turbines. The EIS/EIR also points to coal with its well known environmental issues and to natural gas while noting that natural gas plants require a large amount of fuel. *Id.* at 3.18-23. The fact the EIS/EIR seeks to avoid is that replacing clean hydropower with other energy sources has consequences. But none of these consequences are examined in the EIS/EIR.

O. Water Rights

The discussion in the EIS/EIR regarding the Proposed Action's impacts on surface water supply availability and water rights compliance relies on incomplete data as to the water supplies, rights, and facilities the Proposed Action will affect. The EIS/EIR also impermissibly defers analysis of the Proposed Action's effects to some later time and fails to recognize and analyze important impacts.

Comment 94 - Water Supply/Rights

1. The EIS/EIR Fails to Analyze the Decreased Reliability of Yreka's Municipal Water Supply That Will Result From Implementation of the Proposed Action

The City of Yreka, which is filing separate and additional comments on the EIS/EIR, is dependent on the Klamath River watershed for its municipal water supply. Specifically, under California State Water Rights Permit No. 15379, the City may draw up to 9.7 million gallons of water per day from Fall Creek, a Klamath River tributary. This diversion has been in place for over forty years. Fall Creek water is transported to the City of Yreka via a 24-inch pipeline that passes under the Eastern (upstream) portion of Iron Gate Reservoir.

Comment 94 cont

This pipeline will have to be relocated before the Proposed Action can proceed. EIS/EIR at 3.18-14. Otherwise, the pipeline will be damaged by construction activities associated with dam removal, or damaged by the increased water velocities that may result once the dam reservoir is drawn down. *Id.* The EIS/EIR contemplates the pipeline will be rebuilt, either along a pipe bridge across the river or attached to the Lakeview Bridge, which is downstream of the Iron Gate Dam and Reservoir.

With no analysis whatsoever, the EIS/EIR concludes that the demolition and reconstruction of this important pipeline, a key part of the City of Yreka's municipal water supply infrastructure, will result in no change from existing conditions. There are six problems with the approach delineated in the EIS/EIR.

First, construction of the type necessitated by demolishing and moving the pipeline is not guaranteed to proceed smoothly. While the EIS/EIR seeks to assure us that the water supply for Yreka will be unaffected by pipeline relocation, it provides next to no discussion of why this is true. The EIR/EIR states the pipeline would be disconnected "for a short period of time" but does not state how short or long that period will be. It fails to specifically discuss the sources from which water for the City will come during the pipeline's disconnection and fails to analyze the environmental and economical effects of using those alternative sources.

Second, the EIS/EIR neglects to discuss whether its proposed new pipeline can survive natural disasters such as flooding, rockslides, and seismic events. A 100-year flood, for example, may carry uprooted trees and other debris that extend far above the water's surface. The new pipeline proposed in the EIS/EIR is an above-ground suspended pipeline bridge or a pipeline attached to the underside of Lakeview Bridge. There is no analysis of the ability of the proposed new structure to withstand natural forces. For example, there is no evidence the

Comment 94 cont.

EIS/EIR considered whether the height of the proposed pipeline above a 100-year flood level is sufficient to protect it from the water and floating debris. Equally important, the EIS/EIR omits any discussion of how an above-ground pipeline can be protected from malicious human interference in the form of vandalism or terrorism.

Third, and related to the first point, the EIS/EIR fails to consider the importance of the water supply to the citizens of the City of Yreka. Approximately 7,500 people depend on the existing pipeline for their water. The EIS/EIR is devoid of any discussion of how these people will receive water if there is a disruption in service caused by the problems discussed above. Given the City's Water rights Permit and the needs of its citizens, this is a conspicuous failure of analysis in the EIS/EIR.

Fourth, the proposed above-ground pipeline will be significantly longer than the existing pipeline. The Lakeview Bridge, for example, is located a significant distance from the current crossing location. Therefore, the installation of thousands of feet of additional pipeline becomes a necessity. This significantly changes the hydraulics of the system because there is always friction with the water along the pipeline wall. Increasing pipeline length increases the period of time this friction occurs and slows water speed/pressure, necessitating stronger pumps to maintain the same water pressure that would exist in a shorter pipeline. The EIS/EIR fails to consider whether the existing pump infrastructure can support a longer pipeline.

Fifth, the EIS/EIR fails to consider the economic impacts of building new pumping infrastructure and of maintaining a longer pipeline.

Sixth, the existing pipeline contains a cathodic system to protect it from rusting. The system uses electric energy to safeguard the pipeline from corrosion. The EIS/EIR fails to consider how its proposed above-ground pipeline will be connected to the existing cathodic

Comment 94 cont.

system, whether the existing system is sufficient to service a longer pipeline, and who bears the cost of installing and maintaining a larger system.

All these issues could be avoided if the replacement pipeline were constructed in the same way as the original pipeline, but the EIS/EIR refuses to analyze this alternative. *Id.* at 2-29. Instead, the EIS/EIR dismisses the idea of a replacement underground pipeline stating it "would likely require digging in bedrock, which would be complicated and expensive." *Id.* Not only is there no analysis to support this conclusory statement, but it is wrong. It is common in areas where rock geology occurs to bury pipelines. Numerous buried pipelines have been installed in bedrock throughout northern California using rock excavation equipment such as rock trenchers, rock saws, and rock wheels. Trenchless pipe installations using directional drilling or bore and jack methods have also been successfully completed in bedrock. There are many contractors in California who have this type of equipment. Despite these factors, the EIS/EIR rejects this option without any analysis.

The facts are that the existing pipeline was designed and constructed underground to protect it and to assure its long-term service to the City. The Proposed Action should not jeopardize this and any replacement pipeline should be constructed in a manner similar to the original. The demolition and permanent reconfiguration of the pipeline is likely to adversely affect the reliability of water supply to the City of Yreka and the EIS/EIR fails to consider the relevant issues.

This failure is even more glaring given that the California legislature has a clearly articulated policy that the reliability of water supplies, including municipal water supplies, is an important state goal, one that is consistent with the California Constitution. *See* Water Code,

Comment 94 cont.

§§10531 and 10610.2. This is especially true in the context of city water supplies. Water Code, §106.5, provides:

> It is hereby declared to be the established policy of this State that the right of a municipality to acquire and hold rights to the use of water should be protected to fullest extent necessary for existing and future uses[.]

Water use in California has to be reasonable and beneficial. Cal. Const. Art. X, §2. Reliability of water supplies is a key component of beneficial use: "Conservation and reliability of water supply fall within the parameters of the constitutional mandate of reasonable beneficial use. (Cal. Const., art. X, §2; Water Code, §§100, 102, 105.)" *Hillside Memorial Park & Mortuary v. Golden State Water Co.*, 199 Cal.App.4th 658, 671 (2011). Moreover, "[c]onservation of water and reliability of the water supply are matters of significant public interest and are of transcendent importance." *Central and West Basin Water Replenishment Dist. v. Southern Cal. Water Co.*, 109 Cal.App.4th 891, 903 (2003) (internal quotation omitted).

The deconstruction and relocation of the City of Yreka municipal water supply pipeline will have significant effects on the short- and long-term reliability of the water right represented by the City's permit. However, the EIS/EIR fails to analyze these effects, which is counter to the articulated policy and case law of the State of California, each of which place great priority on water supply reliability in the context of municipal water supplies.

Comment 95 - Water Supply/Rights

2. The EIS/EIR's Analysis of Impacts to Water Rights is not Based on Sufficiently Specific Data About Those Rights

Although the EIS/EIR makes an effort to identify water rights that will be affected by the Proposed Action, it wholly fails to consider the specific circumstances and physical facilities associated with the vast majority of those water rights and diversions. Accordingly, the evaluation of impacts is not tethered to actual facts.

Comment 95 cont.

The EIS/EIR explicitly concedes this shortcoming. In discussing the existing Klamath River water rights that are likely to be affected by the Proposed Action, the EIS/EIR states that although "each of these water rights listings will have associated intake facilities to draw water from the Klamath River … the specific type, location, and layout of each of these intake facilities is unknown at this time." EIS/EIR at 3.8-11. Without any specific knowledge about the location, layout, and construction of the intake facilities and diversion structures associated with the water rights being analyzed, it is hard to understand how the EIS/EIR can possibly analyze the Proposed Action's impacts on those water rights.

The Significance Criteria for the EIS/EIR regarding water rights are: (1) injury to existing water rights or adjudication claims, and (2) decreasing water supplies beyond what is needed for public health and safety (*i.e.*, needs for drinking water and fire suppression) for the current population. *Id.* at 3.8-13. Again, it is impossible to apply these criteria to the existing water rights in a vacuum; that is, without knowledge of how those rights are exercised and implemented.

For example, the EIS/EIR analyzes the potential sediment-caused impacts resulting from the Proposed Action and concludes that, although significant adverse impacts would result, Mitigation Measure WRWS-1 would reduce the impacts to a less than significant level. *Id.* at 3.8-17. However, as noted in previous sections, the EIS/EIR has seriously understated the amount of sediment at issue and, therefore, the effect of this mitigation measure is in doubt. Mitigation Measure WRWS-1 contemplates that *after* the dams are removed, and at the water rights holders' request, there will be an investigation of the impacts caused by the Proposed Action, at which time the Dam Removal Entity will modify the impact points as necessary so as to reduce the Action's effects. *Id.* at 3.8-26. This is an example of putting the cart before the

Comment 95 cont.

horse, wherein the environmental planning documents have improperly deferred the substantive environmental analysis of the Proposed Action's effects to some future time.

By failing to determine the actual scope and nature of the specific water rights and water intake facilities likely to be affected by the Proposed Action, the EIS/EIR has failed in its obligation to take a "hard look" at the environmental issues and effects that will result from the Proposed Action. Far from being "a thorough investigation into the environmental impacts of an agency's action and a candid acknowledgment of the risks that those impacts entail," the draft EIS/EIR instead impermissibly defers the analytical investigative work to the post-action future. *National Audubon Society v. Department of the Navy*, 422 F.3d 174, 185-186 (4th Cir. 2005) (citations omitted). Although "foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can." CEQA Guidelines §15144. Here, the EIS/EIR does not show that the agency has used its best efforts to find, disclose, and analyze all that it reasonably can about the actual scope and nature of the water rights and facilities that will be impacted by the Proposed Action.

Instead of relying on mitigation measures to provide post-hoc information about the specific environmental impacts of the Proposed Action on water rights, the EIS/EIR needs to establish specific information about the rights and water intake structures that will be affected. This is especially true in light of the EIS/EIR's conclusion that the release of sediment currently stored in the reservoirs will change Klamath River geomorphology and affect water intake pumps downstream from Iron Gate Dam. EIS/EIR at 3.8-17. There again, the EIS/EIR confirms that the "specific layout of the intake facilities is unknown." *Id.* Although these facilities represent important water rights for domestic, irrigation, and/or fire protection use, the EIS/EIR fails to articulate the scope and extent of the Proposed Action's impacts on those rights.

Comment 96- Water Supply/Rights

3. The EIS/EIR Fails to Articulate Why Actions Contained in the KBRA Will Not Have an Effect on Water Rights

In conclusory fashion, the EIS/EIR states that impacts from programs contained within the KBRA, which is a component of the Proposed Action, will not affect water rights and water supplies. These conclusions are premised in large part on the vague concept of "geographic separation" between the specific KBRA project components and the hydroelectric facility removal actions.

However, the EIS/EIR fails to articulate where these projects are in relation to the water rights and supplies being analyzed, and why the stated "geographic separation" is sufficient to ensure there are no effects. This lack of analysis is present for the Fisheries Reintroduction and Management Plan, *id.* at 3.8-19, the Wood River Wetland Restoration, *id.* at 3.8-20, the Water Diversion Limitations, *id.*, the Water Use Retirement Program, *id.* at 3.2-21, the Off-Project Water Reliance Program, *id.* at 3.8-22, and the Interim Flow and Lake Level Program, *id.* at 3.8-24. Without a description of the actual "geographic separation" and physical interrelation between these important aspects of the Proposed Action and water rights, the public has no way of critically evaluating the EIS/EIR's conclusion that no effects will result from these components of the Proposed Action.

P. Cultural and Historic Resources

Comment 97 - Cultural & Historic Resources

The EIS/EIR states DOI will use the NEPA process to comply with the requirements of section 106 of the National Historic Preservation Act ("NHPA"). EIS/EIR at 3.13-3. However, the EIS/EIR admits it fails to meet the requisite analytical standards. The EIS/EIR states: "The specific details of how the proposed undertaking or the alternatives might be implemented are not fully known at this time and cannot be fully analyzed in the EIS/EIR." *Id.* The EIS/EIR admits: "The identification of a potential effect on some historic properties cannot be fully

Comment 97 cont.

determined prior to approval of either the proposed undertakings or an alternative...." *Id.* at 3.13-4. It is hard to see how the EIS/EIR can be considered as complying with NEPA, CEQA, or the NHPA when the EIS/EIR admits it cannot undertake, and has not undertaken, the required NHPA analyses.

Nevertheless, the EIS/EIR persists in claiming it has done an adequate job of analysis. The EIS/EIR states it is integrating the NHPA requirements into the NEPA process "pursuant to the criteria identified in 36 CFR Section 800.8(c)(1)-(4)." *Id.* at 3.13-1. A closer look at the referenced section only serves to demonstrate that the EIS/EIR does not and cannot, comply with the NHPA. 36 C.F.R. §800.8(c)(4) provides:

> If an agency official has found during preparation of an ... EIS that the effects of an undertaking on historic properties are adverse, the agency official shall develop measures in the ... DEIS, or EIS to avoid, minimize, or mitigate such effects.

The regulations go on to say that the agency's responsibilities are "satisfied" when it has entered into a "binding commitment" to implement the identified mitigation measures or the Advisory Council on Historic Preservation has commented on the measures. *Id.* Here, the EIS/EIR cannot yet identify the adverse effects, let alone identify mitigation measures and enter into binding implementation agreements or consultations.

Even more stunning given that the EIS/EIR admits the effects of the Proposed Action and alternatives "are not fully known" and "cannot be fully analyzed" is the next statement that "DOI has developed measures to avoid, minimize or mitigate adverse effects to historic properties and historic resources...." EIS/EIR at 3.13-27. It stretches the outer bounds of credibility to claim that one has successfully mitigated for effects that are not even known. Indeed, there is no indication that the material provided by the County of Siskiyou on behalf of the Shasta Tribe

Comment 97 cont.

regarding potential cultural and burial sites currently in the project area was ever meaningfully examined.

Comment 98 - Cultural & Historic Resources

This leads to the question of exactly what type of mitigation is contemplated. In describing the mitigation plan, the EIS/EIR begins by stating that "adverse effects to known historic properties ... cannot be avoided. In addition, adverse effects to as yet unidentified or unevaluated historic properties expected to be identified ... may result from [the Proposed Action.]" *Id.* at 3.13-34. The EIS/EIR then gives the mitigation plan: "The adverse effects will need to be minimized or mitigated." *Id.* In other words, the mitigation plan is to decide later. This is not the type of concrete mitigation plan that complies with the NHPA.

The absence of any mitigation plan is amply demonstrated by the mitigation measures referenced in the EIS/EIR. These mitigation measures are comprised of (1) continuing to find out what is the problem, and (2) identifying ways to mitigate. *Id.* at 3.13-39-40. For example, mitigation measures CHR 1-4 all state that the first action is to identify cultural and historic resources that will be affected by the Proposed Action. After that process is complete, mitigation measures CHR 1-4 provide for the "identification and evaluation [of] alternatives to avoid, minimize, or mitigate ... adverse effects...." *Id.* at 3.13-39. The EIS/EIR's unsupported conclusion is that this so-called mitigation "would be effective." *Id.* at 3.14-40.

Try as it might, the EIS/EIR does not meet the NEPA or CEQA standards for a hard look at environmental effects. It is hard to look at effects when you are still trying to find out the effects. Further, the EIS/EIR will not substitute for the analysis and concrete mitigation required under the NHPA.

Q. Environmental Justice

Comment 99 - Envr. Justice

The EIS/EIR admits the Proposed Action will cause a short-term and long-term loss of revenues to the affected counties and that this loss "would disproportionately affect low income

Comment 99 cont.

and minority county residents and tribal people." EIS/EIR at 5-104. Neither the extent of the loss nor the impact on low income and minority residents and tribal people is examined, despite the fact the EIS/EIR admits these impacts could last "indefinitely." *Id.* at 4-160.

Comment 100 -Envr. Justice

The EIS/EIR also admits that tribal people depend on freshwater mussels for subsistence and for cultural and economic value and reducing mussel populations would have a "disproportionate adverse effect" on tribal people. *Id.* at 3.16-29. As discussed in Part II.C.10 of these Comments, freshwater mussels are likely to experience "substantial" mortality from the release of sediment following dam removal. The sum total of the analysis of these impacts on tribal people in the EIS/EIR is the statement that these affects cannot be "completely avoided."

The EIS/EIR claims tribal people will benefit from increased salmon and other fish populations. EIS/EIR at 3.16-29. As discussed in Part II.C of these Comments, those claimed benefits are illusory.

The EIS/EIR falls short of anything that approaches adequate analysis of environmental justice issues. Rather, the EIS/EIR makes claims of benefits belied by the facts and then fails to examine the effects of harms that even the EIS/EIR admits will occur.

R. Tributaries

Comment 101 - NEPA/CEQA

The Proposed Action is the removal of four dams along the Klamath River and implementation of the KBRA. EIS/EIR at 2-19 (the Proposed Action "would include ... the implementation of the KBRA"), 3.3-75 (the Proposed Action "includes the implementation of KBRA"), and 3.3-138. Appendix C-2 of the KBRA contains cost estimates for the various KBRA projects. Among those projects are habitat and aquatic restoration in and around six tributaries of the Klamath River, the Williamson River, Sprague River, Wood River, Shasta River, Scott River, and Salmon River. EIS/EIR at 2-43 citing KBRA, Appendix C-2. For five of those tributaries, there are also upland habitat projects included within the list of KBRA projects.

Comment 101 cont.

Id. In addition, there are four projects for tributaries in general. These projects address issues involving water quality, vegetation, physical habitat, and certain fish (listed suckers). KBRA, Appendix C-2 at C.8. Between 2012 and 2021, the expenditures on these tributary projects totals $177,045,000. *Id.* at C.7-C.8.

These are significant and large scale actions. The effects will be felt in the tributaries and in Klamath River. However, the environmental effects analysis in the EIS/EIR has no evaluation or analysis of these projects which are part of the Proposed Action and which impinge, for better or worse, on the Klamath River. The failure to conduct the required analyses is yet another example of the legal and substantive deficiency of the EIS/EIR.

III. THE MITIGATION ANALYSIS

A. The Legal Standard

1. NEPA

CEQ's regulations require that an EIS "[i]nclude appropriate mitigation measures" for the proposed action and its alternatives. 40 C.F.R. §1502.14(f). *See also* 40 C.F.R. §1502.16(h). Mitigation is defined as avoiding the impacts altogether, minimizing the impacts, rectifying the impacts by rehabilitating and restoring the environment, reducing or eliminating the impacts over time, and compensating for impacts by providing substitute resources. 40 C.F.R. §1508.20.

Although NEPA does not impose a substantive requirement that a complete mitigation plan be finalized in an EIS, a mere listing of mitigation measures is not enough. *Sierra Club v. Federal Highway Administration,* 715 F.Supp.2d 721 (S.D. Tex. 2010), *aff'd,* 2011 U.S. App. Lexis 16066 (5th Cir.)(Aug. 2, 2011). The courts have found impact statements that did no more than list mitigation measures to be inadequate because the discussion failed to fully discuss mitigation measures or to include measures that should have been discussed. *Navajo Nation v. United States Forest Service,* 479 F.3d 1024 (9th Cir. 2007), opinion adopted *en banc,* 535 F.3d

1058 (9th Cir. 2008), *cert. denied,* 129 S. Ct. 2763 (2009); *Davis v. Mineta,* 302 F.3d 1104 (10th Cir. 2002); *Neighbors of Cuddy Mountain v. United States Forest Service,* 137 F.3d 1372 (9th Cir. 1998); *Environmental Defense Fund, Inc. v. Froehlke*, 473 F.2d 346 (8th Cir. 1972).

Like other elements of an EIS, mitigation measures must be discussed in sufficient detail to ensure there has been a hard look at the environmental issues and their effects. Courts will not accept conclusory descriptions of mitigation measures and their alleged effectiveness. *Neighbors of Cuddy Mountain v. United States Forest Service,* 137 F.3d 1372 (9th Cir. 1998). *See also* Haugard, Perspectives on NEPA: Let's Bring a Bit of Substance to NEPA – Making Mitigation Mandatory, 30 Environmental Law Report 10638 (2009); Slotterback, Evaluating the Implementation of Environmental Review Mitigation in Local Planning and Development Processes, 28 Environmental Impact Assessment Review 546 (208). In *South Fork Band Council of Western Shoshone of Nevada v. United States Department of Interior,* 588 F.3d 718 (9th Cir. 2009), for example, the court held an EIS inadequate because it did not assess the effectiveness of mitigation measures but said their feasibility would depend on details to be developed later.

The critical importance of mitigation analysis as to both a proposed action and its alternatives is confirmed by CEQ's recent promulgation of a Guidance on the Appropriate Use of Mitigation and Monitoring ("Guidance"). 76 Fed. Reg. 3,843 (Jan. 21, 2011). The Guidance emphasizes CEQ's regulatory requirements that an EIS must analyze the environmental consequences of an action and its alternatives including the "means to mitigate adverse environmental impacts." Guidance §B. The EIS/EIR fails to meet these standards.

2. CEQA

CEQA requires agencies to implement alternative or mitigation measures if they are feasible and found to substantially lessen the significant environmental effects. It is California's

policy that public agencies "should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects[.]" CEQA Guidelines §21002. Accordingly, one of the EIR's fundamental purposes is to identify measures for mitigating the proposed project's significant environmental impacts. *Id.* at §§21002.1(a), 21061. The EIR must describe feasible project impact mitigation measures. CEQA Guidelines §§15121(a), 15126.4(a). These measures should be "pragmatic, concrete means to minimize the impacts and restore ecological equilibrium" *Environmental Council of Sacramento v. City of Sacramento,* 142 Cal.App.4th 1018, 1039 (2006). They should not be remote and speculative. *Federation of Hillside & Canyon Ass'ns v. City of Los Angeles,* 83 Cal.App.4th 1252, 1260 (2000).

The EIR must "describe feasible measures which could minimize significant adverse impacts[.]" CEQA Guidelines §15126.4(a)(1). CEQA requires that "[e]ach public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so." Cal. Pub. Res. Code §21002.1(b); *City of Marina v. Board of Trustees,* 39 Cal.4th 341, 360 (2006). CEQA Guidelines §15130(b)(3). *See also,* CEQA Guidelines §§15126.4(a)(1), 15130(b)(3) (the discussion of cumulative impacts must include a summary of the expected environmental effects to be produced by those projects, a reasonable analysis of the cumulative impacts, and full consideration of all feasible mitigation measures that could reduce or avoid any significant cumulative effects of a proposed project).

"Where several measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified." CEQA Guidelines §15126.4 (a)(1)(B). Where the mitigation measures themselves cause one or more significant

effects, the effects of the mitigation measure must be discussed. *Id.* at §15126.4 (a)(1)(D). *See also Stevens v. City of Glendale,* 125 Cal.App.3d 986 (1981).

The "mitigation" concept, is broad, and includes all of the following.

(a) Avoiding the impact altogether by not taking a certain action or parts of an action.

(b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

(c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.

(d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

(e) Compensating for the impact by replacing or providing substitute resources or environments.

CEQA Guidelines §15370.

Although the CEQA Guidelines permit agencies to make findings that some mitigation measures are infeasible, (§21081 (a)(3)), those findings must be sufficiently detailed and based "on substantial evidence in the record." CEQA Guidelines §21081.5. *See also Citizens for Quality Growth* v. *City of Mount Shasta,* 198 Cal.App.3d 433, 441 (1988) (agency's findings under §21081 as to mitigation must be sufficiently detailed).

The EIR must also respond to and address specific suggestions for mitigation measures of significant impacts, unless those suggested measures are "facially infeasible." *Los Angeles Unified School Dist. v. City of Los Angeles,* 58 Cal.App.4th 1019, 1029 (1997).

B. The Mitigation Analysis – The Alternatives

Comment 102 - Alternatives

The requirement for mitigation analysis applies to both the proposed action and its alternatives. However, the EIS/EIR is almost completely devoid of the required discussion of the mitigation measures for the alternatives. The only discussion of mitigation is with respect to the Proposed Action and to a significantly lesser degree the no action alternative. Absent is the

Comment 102 cont.

required mitigation analysis regarding alternatives 3, 4, and 5. On this basis alone, the EIS/EIR fails to meet NEPA's and CEQA's standards for adequacy. There is simply no way to examine and compare the environmental effects of the various alternatives because the EIS/EIR does not include a complete mitigation analysis.

Comment 103 - NEPA/CEQA

C. The Mitigation Analysis – Bifurcation

The EIS/EIR is also legally defective because it attempts to bifurcate the analysis of dam removal and mitigation, inappropriately leaving the second for a later day. This violates the requirement that the EIS/EIR take a hard look at the environmental effects of a proposed action.

The Proposed Action is the removal of four dams on the Klamath River, including the removal of all associated power generation facilities and "implementation of the KBRA." EIS/EIR at 2-19. To make certain everyone understands that the Proposed Acton includes the KBRA mitigation measures, the EIS/EIR goes on to state "the KBRA is a component of the Proposed Action." *Id.* at 3.3-138. *See also id.* at 3.3-75 (the Proposed Action "includes ... the implementation of the KBRA.") The environmental effects of the Proposed Action depend on the implementation of the KBRA mitigation measures.

Notwithstanding this, the EIS/EIR states it will provide "project-level analysis," *i.e.*, detailed analysis, of dam removal but, as for the KBRA mitigation measures, the evaluation will be "on a programmatic level" only. *Id.* at 3.1-4. The reason for this circumscribed review of the KBRA is that "[w]hile the general goals of the KBRA actions and programs are known, the specific actions that would occur are not yet defined...." *Id.* In other words, the KBRA cannot be evaluated because it is too general.

The preceding admissions render the EIS/EIR legally defective. NEPA and CEQA require that mitigation measures be discussed in sufficient detail to ensure a hard look has been taken at the environmental effects of a proposed action. To know the environmental impacts of

Comment 103 cont.

dam removal, the decision maker must know the effects of the planned mitigation. That has not been done, and cannot be done at this time, because the KBRA is only a statement of general goals. How those goals will be achieved is generally not known. The attempt to bifurcate the analysis of dam removal and the analysis of mitigation is a clear violation of NEPA's and CEQA's requirements to include mitigation analysis in the EIS.

In addition to violating the requirements for adequate mitigation analysis, the attempt to bifurcate dam removal from the KBRA mitigation plan also violates CEQ's regulations regarding how to define the federal action. CEQ's regulations define a "major federal action" as including "a group of concerted actions to implement a specific policy or plan" and as "systematic and connected agency decisions." 40 C.F.R. §1508.18(b)(4). Here, the EIS/EIR admits the KBRA is incorporated into the dam removal action – it is one "systematic and connected" action.

In that regard, CEQ's regulations state:

> Agencies shall make sure the proposal which is the subject of an environmental impact statement is properly defined.... Proposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement.

40 C.F.R. §1502.4(a). The EIS/EIR states the Proposed Action incorporates the KBRA. Yet, there cannot be any analysis because the KBRA is to ill-defined to permit proper analysis. In a vain attempt to avoid this legal failure, the EIS/EIR, for purposes of mitigation analysis, suddenly pretends the KBRA is not part of the federal action.

To justify this fiction, the EIS/EIR attempts to define the KBRA as a "connected action" to the dam removal that somehow can be examined later. EIS/EIR at 1-1. First, this is inconsistent with the statements in the EIS/EIR that the KBRA is not just connected to, but is incorporated into, the Proposed Action. Second, even if the EIS/EIR characterization of the

Comment 103 cont.

KBRA as a connected action is correct, CEQ's regulations provide that connected actions "should be discussed in the same impact statement." 40 C.F.R. §1508.25(a)(1). For example, in *Hammond v. Norton*, 370 F.Supp.2d 226 (D.D.C. 2005), the court held the Bureau of Land Management erred by not considering two natural gas pipeline projects in a single EIS because the two pipelines did not have independent and separate utility. Here, the EIS/EIR readily admits the KBRA does not have independent utility apart from dam removal. EIS/EIR at 1-26, including Table 1-1 at 1-26-27. A closer look at Table 1-1 further confirms that all the KBRA fisheries programs, for example, are directly linked to dam removal. And recall the EIS/EIR states the need for dam removal is to restore salmon fisheries.

The reality, admitted in the EIS/EIR, is that dam removal and the KBRA are one action, the Proposed Action. The environmental effects of dam removal depend on the specific actions in the KBRA. However, because those actions are unknown, the effects of dam removal are unknown and the EIS/EIR fails to meet the requisite legal standard for mitigation analysis and for a hard look at the environmental effects of the Proposed Action.

Furthermore, as discussed in the next section, DOI cannot attempt to run away from its statements that the KBRA is too general to be analyzed and instead argue that the KBRA's mitigation measures were fully reviewed and that the KBRA will be effective in mitigating the adverse effects of dam removal.

D. The Mitigation Measures of the KBRA

As noted in Part II of these Comments, the alleged benefits of the Proposed Action hinge on the full and effective implementation of the KBRA. However, as the Coho and Steelhead Expert Panel stated in assessing the benefits of the KBRA, "uncertainty is high because the KBRA plan is so unspecific." Coho and Steelhead Expert Panel Report at 47. The Panel found the KBRA is only "a list of possible actions without sufficient detail to estimate quantitatively

their effects on habitat...." *Id.* at 48. As to how the KBRA will impact overall ecosystem functions, the Expert Panel found "the details of the KBRA [are] insufficient to answer this question." *Id.* at 49.

In the same manner, the Resident Fish Expert Panel found that any level of improvement attributed to the KBRA "is uncertain, in part because details of most activities have not been described." Resident Fish Expert Panel Report at 77.

Even the EIS/EIR itself admits that the alleged benefits of the KBRA – benefits DOI relies on to justify the Proposed Action – cannot be determined because the KBRA is too ill defined and, furthermore, the claimed benefits may not exist even if the KBRA is implemented. A few examples suffice to illustrate the point.

- After admitting the Proposed Action will increase nutrient loads and the production of harmful river algae, the EIS/EIR states these effects "could" possibly be mitigated "if" the KBRA mitigation projects are well designed and implemented on a large enough scale. EIS/EIR at 3.4-15. Note there is not enough information about the KBRA projects to determine if the projects are well designed or on a large enough scale to address the problem. Note also that at the end of the day the EIS/EIR admits that even with the KBRA the Proposed Acton will make nutrient loads worse. *See* Part II.C.1.c of these Comments.
- After admitting that a habitat restoration plan is needed due to "the likelihood for invasive or weedy species to colonize newly exposed areas," the EIS/EIR admits the alleged benefits of the KBRA cannot be examined because the plan provided for in the KBRA will be developed later. EIS/EIR at 3.5-44.

Given that the Proposed Action incorporates the KBRA (EIS/EIR at 2-19, the Proposed Action "would include ... implementation of the KBRA ..."), an analysis of the effects of the Proposed Action is also an analysis of the KBRA. Again, a few examples regarding the Proposed Action suffice to illustrate that the mitigation analysis in the EIS/EIR is defective.

- To evaluate the effect of the Proposed Action on water temperatures "will require more detailed information" than is presented. Coho and Steelhead Expert Panel Report at 32.
- Regarding any improvement in ecosystem functions, there "is insufficient information available" to answer how the Proposed Action compares to the status quo. *Id.* at 51.
- Regarding the precise extent to which the Proposed Action differs from the status quo as to the incidence of fish disease, "[t]he information available is insufficient...." *Id.*
- It is uncertain if the Proposed Action together with the KBRA can improve the low oxygen issues in the river. Chinook Expert Panel Report at 14.
- Whether thermal refugia will benefit steelhead "is not known." Coho and Steelhead Expert Panel Report at 43.

Furthermore, it is unlikely the KBRA can be fully implemented or that it will be effective. The Chinook Expert Panel, for example, noted that based on "the Panel's past experiences with large rehabilitation projects in other streams, the stream rehabilitation literature [citations omitted], and increased uncertainty of KBRA funding, the Panel has strong reservations that KBRA will be implemented with sufficient effectiveness...." Chinook Salmon Expert Panel Report at 26-27. The Chinook Expert Panel then said that even if the KBRA is fully funded and implemented its proposed actions and their claimed benefits are "infeasible," "unlikely," "remote," "uncertain," "may not match the scope and extent" of the problems, and

Comment 104 - NEPA/ CEQA

could be subject to species interactions not considered in the EIS/EIR that result in "cancelling" the alleged benefits of the KBRA and the Proposed Action. *Id.* at 10, 11, 13, 14-15, 17.

Repeatedly, the EIS/EIR and the various Expert Panels established by DOI admit the KBRA is so lacking in specifics that its effectiveness cannot be evaluated. Repeatedly, where some details are present, the effectiveness of the KBRA is called into question. Repeatedly, the statement is made that "if" the KBRA is 100% funded and implemented, then it "could" have a mitigating effect. None of this is the type of analysis that passes legal muster. How can a decision maker evaluate the benefits of a plan so lacking in details? The resounding answer from the Expert Panels is he or she cannot. Furthermore, how can a decision maker consider a mitigation plan that experts and even the EIS/EIR admit is not feasible and unlikely to succeed? The answer is he or she cannot. To the extent the EIS/EIR relies on the KBRA as providing mitigation analysis, or mitigation, the EIS/EIR fails to meet NEPA's and CEQA's standards for mitigation analysis.

Furthermore, Appendix C to the KBRA lists 112 projects that are part of the KBRA. KBRA, Appendix C at C.7-C.9. The vast majority of those projects will have environmental effects. Since the KBRA is part of the Proposed Action, one would expect an analysis in the EIS/EIR of those 112 projects. There is virtually none.

E. Conclusion

NEPA and CEQA require a full and complete analysis of the mitigation measures that will be part of the proposed action and each alternative. Otherwise, the decision maker cannot truly compare the actual effects of the proposed action versus its alternatives. The EIS/EIR fails to meet this legal standard because there is no mitigation analysis as to the alternatives. As to the Proposed Action, the mitigation proposals contained in the KBRA are often so ill-defined that they cannot be evaluated. Where more detail is provided, the EIS/EIR and the Expert Panels

often conclude the KBRA is unlikely to succeed, not feasible, and too uncertain as to outcome. The EIS/EIR does not contain a legally adequate mitigation analysis.

IV. ALTERNATIVES ANALYSIS

Comment 105 - Alternatives

A. The Analysis of Alternatives

The analysis of alternatives is considered the "heart" of an EIS. 40 C.F.R. §1504.14. The alternatives analysis is the critical element of an EIS. In its famed Forty Questions Guidance, CEQ stated: "The degree of analysis devoted to each alternative in the EIS is to be substantially similar to that devoted to the 'proposed action.'" Memorandum for Federal NEPA Liaisons, Federal, State, and Local Officials and Other Persons Involved in the NEPA Process, 46 Fed. Reg. 18,026 (Mar. 16, 1981), Question 5b. This CEQ Guidance mirrors the NEPA implementing regulations that direct federal agencies to "[r]igorously explore and objectively evaluate all reasonable alternatives...." 40 C.F.R. §1502.14(a).

The EIS/EIR falls short of this standard. As noted in Part II.C of these Comments, DOI convened four expert panels to examine issues surrounding the various fish resources in the Klamath Basin, including Chinook and coho salmon. The reports of these Expert Panels are the foundational documents for the findings and conclusions in the EIS/EIR regarding whether the Proposed Action can, in fact, restore salmon and other fish resources. However, as noted in Part II.C of these Comments, DOI restricted each Expert Panel to an analysis of only two alternatives, no action and the Proposed Action. Not only does this demonstrate a closed mind on the part of DOI, but it violates NEPA and CEQA which require a robust analysis of all alternatives.

DOI cannot rescue its position by arguing the EIS/EIR dutifully examines all alternatives. This attempted defense only serves to document the failed analysis in the EIS/EIR. For example, as to aquatic resources, the EIS/EIR devotes 22 pages of discussion to the No Action alternative and 103 pages to the Proposed Action (Alternative 2), for a total of 125 pages. Alternatives 3, 4,

Comment 105 cont.

and 5 get a combined total of 50 pages of discussion. The attention and analysis given to each alternative is hardly comparable.

This pattern repeats itself throughout the EIS/EIR and a few examples suffice. As to the issue of algae production, the Proposed Action receives nine pages of discussion. Alternative 4 receives 14 lines of discussion compressed into one paragraph. For terrestrial resources, the Proposed Action is discussed over 28 pages. Alternative 4 is covered in just over one page. As to water quality, the Proposed Action is reviewed in 56 pages. Alternative 4 gets less than two pages. For air quality and climate change, there are 16 pages of discussion for the Proposed Action and six for Alternative 4. The EIS/EIR even admits it failed to treat the alternatives equally. For example, water temperature model results were "not developed for all the alternatives...." EIS/EIR at 3.3-49.

The EIS/EIR has failed to provide the robust alternatives analysis required by NEPA and CEQA. Instead, DOI instructed its Expert Panels to ignore three of the alternatives and the EIS/EIR then adopts the Expert Panel reports as justifying the selection of the Proposed Action. What discussion does occur regarding the orphaned three alternatives is cursory at best. The EIS/EIR fails to meet CEQA and NEPA standards for a rigorous and objective evaluation of alternatives.

B. The Purpose and Need Statement

Comment 106 - NEPA/CEQA

CEQ regulations require the agency to identify the purpose and need for the proposed action. 40 C.F.R. §1502.10(d). Here, DOI states the purpose of the Proposed Action "is to achieve a free flowing river condition...." EIS/EIR at 1-29. The need for the action "is to advance restoration of the salmonid fisheries in the Klamath Basin...." *Id.*

DOI's statement of the purpose of the Proposed Action preordains the selection of a dam removal alternative. No other alternative achieves the purpose of a "free flowing river." By

Comment 106 cont.

adopting such a limited purpose, DOI has dictated the result of its decision about how to restore salmon resources. DOI's selection of a purpose statement stands in contrast to the statement of purpose approved in *Westlands Water District v. United States Department of the Interior*, 376 F.3d 853, 866 (9th Cir. 2004), where the project's purpose was to restore anadromous fish runs. For the Klamath River, DOI has already selected the method to restore anadromous fish runs – dam removal. Not only does this demonstrate a closed mind in violation of the arbitrary and capricious standards of the Administrative Procedure Act, but it also violates NEPA. As the court said in *Simmons v. United States Army Corps of Engineers*, 120 F.3d 664, 666 (7th Cir. 1997), an agency cannot "contrive a purpose so slender as to define competing 'reasonable alternatives' ... out of existence...."

Because the range of alternatives that must be analyzed under CEQA is tied to the project's objectives, DOI's statement of purpose violates CEQA. CEQA requires that the project purpose help the agency develop and consider appropriate alternatives. DOI's use of the "free flowing river" objective preordains the outcome and thereby undermines CEQA's requirement that decision making occur after, not before, the environmental analysis is done.

Comment 107 - CEQA

V. CUMULATIVE IMPACTS ANALYSIS

A. The Legal Standard – NEPA

A discussion of the cumulative environmental effects of a proposed action is an essential part of the environmental review process. Otherwise, the actual impact of a proposed action cannot be fully understood. *Kern v. United States Bureau of Land Management*, 284 F.3d 1062 (9th Cir. 2002). A "cumulative impact" is defined as:

> the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future action.... Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

40 C.F.R. §1508.7. However, a discussion of the cumulative impact of alternatives to the proposed action is not required. *Soda Mountain Wilderness Council v. Norton,* 424 F.Supp.2d 1241 (E.D. Cal. 2006).

As to past impacts that must be analyzed, CEQ has stated there must be

> a concise description of the identifiable present effects of past actions to the extent that they are relevant and useful in analyzing whether the reasonably foreseeable effects of the agency proposal for action and its alternatives may have a continuing, additive and significant relationship to those effects.

Guidance on the Consideration of Past Actions in Cumulative Impact Analysis, 2005, at 1-2. This interpretation of an agency's responsibilities under NEPA has been upheld by the courts. *League of Wilderness Defenders v. United States Forest Service,* 549 F.3d 1211 (9th Cir. 2008).

As to what future impacts must be considered, courts have held that all "reasonably foreseeable" actions that have potential cumulative effects must be addressed. *Lands Council v. McNair,* 537 F.3d 981 (9th Cir. 2008) *en banc*. However, speculative impacts need not be considered. *Town of Marshfield v. F.A.A.,* 552 F.3d 1 (1st Cir. 2008). Some degree of certainty must exist as to project approval. *Habitat Education Center v. U.S. Forest Service,* 609 F.3d 897 (7th Cir. 2010).

The nature of other actions must also be considered. For example, a non-adjacent similar action having cumulative effects is to be considered. *See, e.g., Grand Canyon Trust v. Federal Aviation Administration,* 290 F.3d 339 (D.C. Cir. 2002) (where airport noise was at issue all sources of noise should be evaluated). Similarly, non-adjacent dissimilar projects should be considered where they have related impacts. *People of State of California v. United States Department of Transportation,* 260 F.Supp.2d 969 (N.D. Cal. 2003) (airport expansion project must address cumulative impacts of nearby projects including hotel construction); *League of*

Wilderness Defenders v. Marquis-Brong, 259 F.Supp.2d 1115 (D. Or. 2003) (timber sale must consider cumulative effects of fire and grazing on nearby land).

In addition to considering the nature of related actions, there are issues of proximity to consider. For example, an agency should consider the impact of a project on an adjacent area. *Earth Island Institute v. United States Forest Service,* 351 F.3d 1291 (9th Cir. 2003) (timber sale required consideration of cumulative impacts on spotted owls in a neighboring national forest). In addition, agencies must consider cumulative impacts even if they are not area specific. *Center for Biological Diversity v. National Highway Traffic Safety Administration,* 538 F.3d 1172 (9th Cir. 2008) (national corporate average fuel economy standards required an evaluation of the cumulative impact of the rule on greenhouse gas emissions in light of reasonably foreseeable similar standards for light trucks and passenger automobiles).

Assuming the scope of the cumulative impact analysis is appropriate, the next issue is what level of analysis is adequate. Here, courts have applied a "rule of reason" test to determine if the analysis is reasonably thorough such that the decision maker can make an informed decision. *Westside Property Owners v. Schlesinger,* 597 F.2d 1214 (9th Cir. 1979). Again, the standard is whether there is sufficient information to demonstrate the agency has taken a "hard look" at the cumulative impacts of the proposed action. *Environmental Protection Information Center v. Blackwell,* 389 F.Supp.2d 1174 (N.D. Cal. 2004). This standard requires "some quantified or detailed information" because general statements about possible effects and some risk "do not constitute a hard look absent a justification regarding why more definitive information could not be provided." *Klamath-Siskiyou Wildlands Center v. Bureau of Land Management,* 387 F.3d 989, 993-94 (9th Cir. 2004). Thus, conclusory statements absent analysis are inadequate. *Muckleshoot Indian Tribe v. U.S. Forest Service,* 177 F.3d 800 (9th Cir. 1999).

Further, a plaintiff need not show that cumulative effects will actually occur but only that such a potential exists. *Te-Moak Tribe of Western Shoshone of Nevada v. U.S. Department of Interior*, 608 F.3d 592 (9th Cir. 2010).

A requirement to consider cumulative impacts is, however, less rigorous in the case of a programmatic EIS when the agency can consider these impacts at the site and project specific stage. *Northern Alaska Environmental Center v. Lujan*, 961 F.2d 886 (9th Cir. 1992).

B. The Legal Standard – CEQA

While NEPA requires an analysis of environmental effects that may not be "significant" on their own but which may be "significant" when combined with similar effects over time, CEQA adopts a "considerable" effect standard. Environmental effects that may not be "considerable" on their own but which may be "considerable" when combined with similar effects over time require analysis. The CEQA Guidelines define a cumulative effect as:

> [T]wo or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.
>
> (a) The individual effects may be changes resulting from a single project or a number of separate projects.
>
> (b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

CEQA Guidelines §15355. Thus, a lead agency must discuss the cumulative impacts of a project when the cumulative effect is significant and the project's incremental contribution would be "cumulatively considerable." CEQA Guidelines §§15065(a)(3) and 15130(a).

If the combined cumulative impact of the effects of the proposed project and other projects is not considerable, an EIR must explain why that is so. CEQA Guidelines

§15130(a)(2). Further, if mitigation for the proposed project is determined to render the cumulative impacts less than considerable, the EIR must identify the facts supporting that conclusion. CEQA Guidelines §15130(a)(3). With respect to mitigation, however, CEQA requires an EIR to identify all reasonable and feasible mitigation options. CEQA Guidelines §15130. Further, no public agency can approve a project that has significant impacts unless feasible changes have been incorporated into the project to avoid or substantially lessen the significant environmental effects. CEQA Guidelines §15091. Thus, CEQA requires each agency to mitigate or avoid significant environmental effects whenever it is feasible to do so. Pub. Res. Code §21002.1(b).

C. The Cumulative Impact Analysis Comment 108 - NEPA/CEQA

As a threshold matter, the cumulative impact analysis in the EIS/EIR is per se deficient. The EIS/EIR relies on the environmental effects analysis in the EIS/EIR to establish the baseline effects caused by dam removal. These effects are then evaluated in the cumulative impact analysis. As discussed in Part II of these Comments, the EIS/EIR understates or fails to analyze the baseline effects. Consequently, the baseline, the foundation from which the cumulative effects analysis proceeds, is incorrect. That alone renders the cumulative impact analysis in the EIS/EIR legally insufficient. No more need be said. Nevertheless, these Comments will examine other weaknesses in the cumulative impacts section of the EIS/EIR.

1. Scope of Analysis Comment 109 - NEPA/CEQA

The cumulative impacts analysis must examine the cumulative effects of past, present, and reasonably foreseeable effects of other projects. Table 4-4 of the EIS/EIR lists the "Projects Considered in Cumulative Effects Analysis." EIS/EIR at 4.3-22-26. Sixty-two projects are listed, including multiple surface transportation projects, multiple housing developments and other housing facilities, mining projects, waterfront development, and energy production

Comment 109 cont.

facilities. Presumably, these projects would not be on the list if they were not past, present, or reasonably foreseeable projects. However, these projects are not analyzed for cumulative impacts in association with the Proposed Action. Here again, the EIS/EIR fails to meet the standards of legal adequacy.

Also conspicuously absent from this analysis are the KBRA projects proposed for Klamath River tributaries discussed in Part II.R of these Comments. These projects, which are both reasonably foreseeable and part of the Proposed Action, receive not a word of analysis in the cumulative impacts analysis. Since none of these projects were considered in the environmental effects section of the EIS/EIR, one would at least expect some mention of them in the cumulative impacts analysis. But that is not the case. Indeed, Appendix C to the KBRA lists 112 projects, and there is virtually no analysis in the EIS/EIR of the cumulative effects of these reasonably foreseeable actions.

2. Aquatic Resources

Comment 110 - NEPA/CEQA

The EIS/EIR claims that because of "increased habitat availability and improved habitat quality" the long-term cumulative effects of the Proposed Action will be beneficial. EIS/EIR at 4-78. As discussed in Part II.C of these Comments, the facts do not support this conclusion as to the baseline effects of the Proposed Action – a baseline that must be correct in order to properly assess cumulative impacts. Even the EIS/EIR admits that the starting point for cumulative impact analysis is the baseline environmental effects. EIS/EIR at 4-27. Curiously, the EIS/EIR states this baseline includes the effects of the KBRA, effects which, as noted in Part III of these Comments, have not been analyzed. *Id.*

The same lack of analysis, and the failure to have a proper baseline analysis of the effects of dam removal, also infects the cumulative effects discussion for Chinook salmon (*id.* at 4-73-76), coho salmon (*id.* at 4-76-78), steelhead (*id.* at 4-79-80), Pacific lamprey (*id.* at 4-80), green

Comment 110 cont.

sturgeon (*id.* at 4-81), Lost river and shortnose suckers (*id.* at 4-81), redband trout (*id.* at 4-83), bull trout ((*id.* at 4-83), eulachon and longfin smelt (*id.* at 4-83-84), and freshwater mussels and benthic macroinvertebrates (*id.* at 4-85-86).

For almost every fish species, the EIS/EIR has the same language. Because of alleged greater access to habitat, reduced fish disease and algae blooms, and improved water quality and temperature, the species will benefit and, therefore, the cumulative effect is beneficial. A review of the effects of dam removal on aquatic species set forth in Part II.C of these Comments shows that the facts belie any claim of beneficial impact. What the facts show is the impacts of the Proposed Action are unknown, negative, or not analyzed. Rather than repeat the contents of Part II.C, that Part is hereby incorporated into this Part V as if fully set forth herein.

Because the cumulative impacts analysis in the EIS/EIR fails to proceed from a correct baseline of effects and fails to consider the impacts of associated and related actions, the cumulative impacts discussion in the EIS/EIR does not meet the applicable legal standard.

3. Other Resources

Comment 111 - NEPA/CEQA

As is the case with the cumulative effects analysis of aquatic resources, the analysis regarding the cumulative effects of the Proposed Action on other resources is woefully inadequate and proceeds from an incorrect baseline of effects. A few examples suffice.

- The review regarding algae fails to consider the runoff from other planned projects. EIS/EIR at 4-93.
- For terrestrial resources, the EIS/EIR identifies timber harvesting, agriculture, recreation, residential development, water diversions, and mining as having past, present, and future impacts but fails to state what are those impacts relative to the added impacts from the Proposed Action. *Id.* at 4-95.

Comment 111 cont.

- Having identified residential and commercial development as adding impervious surfaces that can channel water into rivers, the EIS/EIR neglects to discuss those impacts relative to the Proposed Action.
- In discussing the existing Klamath River water rights that are likely to be affected by the Proposed Action, the EIS/EIR states that although "each of these water rights listings will have associated intake facilities to draw water from the Klamath River … the specific type, location, and layout of each of these intake facilities is unknown at this time." *Id.* at 3.8-11. Without specific knowledge about the location, layout, and construction of the intake facilities and diversion structures associated with the water rights being analyzed, it is hard to understand how the EIS/EIR can possibly analyze the Proposed Action's impacts on cumulative water rights, or the effectiveness of the proposed mitigation measure WRWS-1. Accordingly, the EIS/EIR conclusion that "With implementation of this mitigation, the Proposed Action's incremental contribution to the cumulative effects on water intake pumps from sedimentation associated with reservoir drawdown will not be cumulative considerable," *id.* at 4-20-21, is premised on conjecture, not on data and analysis. Without knowledge and information about the specific water rights and facilities that will be impacted by the sedimentation and changes in the river's geomorphology, the EIS/EIR cannot properly determine the Proposed Action's cumulative effects, or how those effects are to be mitigated.
- Not only does the EIS/EIR proceed from a wholly incorrect and grossly underestimated baseline regarding the effects of the Proposed Action on sedimentation, but it fails to examine the sedimentation effects of the activities and

Comment 111 cont.

projects that are acknowledged to contribute to sedimentation such as timber harvesting, mining, agriculture, livestock grazing, and road related erosion. *Id.* at 4-139.

- The EIS/EIR does not discuss the cumulative impact on the river, estuarine and ocean ecosystems of actions that increase sedimentation, increase water temperature, increase pH levels, increase nutrient concentrations, increase chemical concentrations, lower oxygen levels, and increase algae populations.
- The EIS/EIR does not discuss the cumulative effects of an increased demand for groundwater.
- As to land use issues, the EIS/EIR artificially limits the time frame to 18 months following dam removal as if all land use impacts will be over in 18 months. *Id.* at 4-151.
- The EIS/EIR artificially limits the time frame for analysis regarding solid waste disposal issues associated with dam deconstruction, ignoring the fact that using up to one-third of the existing disposal capacity at two facilities has long-term cumulative effects. *Id.* at 4-108.
- Although the EIS/EIR identifies the Northwest Forest Plan as an applicable authority and regulation, *id.* at 3.14-8, the EIS/EIR has no analysis of the past and continuing effects of this Plan on Siskiyou County. Timber harvests have declined from the 1978-1989 average of 180-250 million board feet to around 20 million board feet. The EIS/EIR fails to examine the associated economic impacts when these losses are added to the job and revenue loss of the Proposed Action.

Comment 111 cont.

- The past economic effects of a ban on mining and of reduced agriculture and cattle grazing that continue today are ignored.
- While the individual energy impact of dam removal may, or may not, be small, there is an impact whose strength is multiplied when it is cumulated with the loss of other power sources and with increasing demands for power. The EIS/EIR contains no analysis of this cumulative effect or of the cumulative effect of replacing clean hydropower with other energy sources.

As is the case with the cumulative impacts analysis for aquatic resources, the cumulative effects analysis as to other resources fails to meet the applicable standards.

VI. LOCAL REQUIREMENTS

Comment 112 - NEPA/ CEQA

The EIS/EIR consistently fails to analyze, and account for, the fact that the County of Siskiyou has laws and regulations that apply to the Proposed Action. The analysis starts with statutes such as the Federal Land Policy and Management Act of 1976, 43 U.S.C. §1701, and the Intergovernmental Cooperation Act, 31 U.S.C. §6501, that require coordination with local governmental authorities in land use planning and development. Dam removal falls within this category. Equally important, CEQ's regulations implementing NEPA provide that any EIS "shall discuss any inconsistency of a proposed action with any approved state or local plan and laws…." 40 C.F.R. §1506.2(d). The discussion of local requirements in the EIS/EIR also fails to meet the standards set forth in CEQA Guidelines section 15126 regarding impacts analysis. CEQA Guidelines §15126.

The EIS/EIR attempts to justify its lack of analysis as being due to questions that "remain over the ultimate applicability of local regulations depending on the selection of the Dam Removal Entity (DRE)" or Hydropower Licensee. EIS/EIR at 6-1. Regardless of who is

Comment 104 cont.

removing the dams, the County's Ordinances will apply. The EIS/EIR incorrectly defers future "environmental analysis and compliance documentation" to later. Under CEQA and NEPA, the time to analyze impacts of the project is in the Draft EIS/EIR, not later. In fact, the County of Siskiyou has consistently requested that DOI coordinate with the County so as to identify applicable County Ordinances and to discuss compliance. Unfortunately, such requests have been ignored.

The facts are that the EIS/EIR is barren of any substantive discussion of the provisions of the laws and regulations of the County of Siskiyou. A few examples are sufficient to establish the deficiency of the EIS/EIR. Chief among these examples is Title 10, Chapter 13 of the County's Code of Ordinances that makes the "demolition, deconstruction, or removal of major facilities" unlawful absent the issuance of "a permit granted by the County...." A major facility is defined to include dams. Nowhere are the provisions of this Ordinance, let alone compliance with the Ordinance, discussed in the EIS/EIR. The failure to do so is a clear violation of NEPA and CEQA.

The trucks and equipment used in dam deconstruction will bring enormous weights to bear on County roads. The applicable County Ordinances require that loads over 80,000 pounds GVW secure a transportation permit. The EIS/EIR has no discussion of this requirement.

The County of Siskiyou has a General Plan Noise Element ("GPNE") that recognizes the County's size makes it infeasible to have detailed noise contours throughout the County. Therefore, the GPNE provides a detailed process for conducting noise studies to ensure that projects do not individually or cumulatively create adverse noise impacts. The noise analysis in the EIS/EIR does not conform to this process.

Comment 112 cont.

The County of Siskiyou has restricted truck traffic along Copco Road to the dry summer months because of the roads substandard surface conditions. Ignoring this County regulation, the Proposed Action improperly contemplates increased heavy truck traffic during the restricted months.

Although the EIS/EIR admits the Proposed Action will increase the risk and severity of flooding, one searches the document in vain for any recognition of the fact that Section 10-10 of the County Code of Siskiyou County requires a flood damage prevention permit for activities affecting the floodplain. Not surprisingly, there is no discussion of whether and how the Proposed Action complies, or will comply, with the County's requirements.

Pursuant to the Klamath Hydroelectric Settlement Agreement ("KHSA") certain parcels of land are transferred to the state and federal government. As such, they would no longer be subject to local zoning and regulation. How these lands will be transferred and managed consistent with the applicable County Ordinances is a topic ignored in the EIS/EIR, again in violation of 40 C.F.R. §1506.2(d) and of CEQA.

As these few examples demonstrate, the EIS/EIR fails to consider the applicable Ordinances of the County of Siskiyou, instead choosing to disregard or ignore those Ordinances.

VII. COASTAL ZONE MANAGEMENT ACT

Comment 113 - General/Other

The Proposed Action will result in impacts between Siskiyou County and the Pacific Ocean, but the EIS/EIR does not address any impacts in Del Norte County nor does it address in a consistent and thorough manner project related impacts on areas downstream of the dams "that would be affected by the removal of the dams and loss of the reservoirs." EIS/EIR at 3.14-2. Specifically, the EIS/EIR does not address project consistency with the Coastal Zone Management Act. Chapter 6 of the EIS/EIR is the section on compliance with applicable laws, policies and plans, and Table 6-1 is titled "Related Federal Laws, Rules, Regulations, Executive

Comment 113 cont.

Orders, and Other Authorities." EIS/EIR at 6-1-6-9. Table 6-1 identifies the Coastal Zone Management Act as an applicable law. *Id.* at 6-2. However, the EIS/EIR fails to address coastal zone consistency and includes no analysis of the project relative to the Coastal Zone Management Act. The EIS/EIR also contains only passing references to the California Coastal Management Act, the State's coastal management program. Because of the likely adverse impacts of the Proposed Action on aquatic and other resources resident in the coastal zone, the EIS/EIR must document the consistency of the Proposed Action with the state and federal coastal zone management statutes. It has not done so.

VIII. CONCLUSION

NEPA and CEQA require that there be a "hard look" at the environmental effects of a proposed action. However, this hard look "must be taken objectively and in good faith, not as an exercise in form over substance, and not as a subterfuge designed to rationalize a decision already made[.]" *Western Watersheds Project v. Kraayenbrink,* 620 F.3d 1187, 1205 (9th Cir. 2010). Here, the EIS/EIR fails to take the requisite hard look, ignores key issues, uses incorrect facts, misstates the conclusions of expert review panels established by DOI, and glosses over adverse environmental effects or refuses to acknowledge them. For all intents and purposes, the EIS/EIR appears to be "a subterfuge designed to rationalize a decision already made."

- The EIS/EIR states the need for the Proposed Action is to advance the restoration of salmonid fisheries. DOI established four Expert Panels to study the likelihood of the Proposed Action achieving that goal. After reviewing the data, the Expert Panels called the results of the Proposed Action "small," "remotely possible," "uncertain," "unlikely," and "not feasible." In short, there is a very low likelihood the Proposed Action will achieve its goal.

Comment 114 - Fish

Comment 115 - Fish

- A recurring theme in the Expert Panel Reports is that the data and analyses necessary to support the conclusions in the EIS/EIR have not been done. The actual effects of the Proposed Action are simply not known despite claims to the contrary in the EIS/EIR. Because of the absence of data and analyses, one Expert Panel termed the Proposed Action an "experiment." Spending hundreds of millions of dollars on an "experiment" that will, at best, achieve "small" results is highly questionable.

- To justify the Proposed Action, the EIS/EIR makes fundamental errors of analysis. For example, the EIS/EIR examines the effects of the Proposed Action on fish as if each individual species is the only occupant of the ecosystem. However, these species share the same habitat, compete for the same space and food, and prey on each other. Failing to examine interspecies ecosystem relationships is a conspicuous and glaring omission in the EIS/EIR. This is especially true when one Expert Panel determined that interspecies conflicts, including predation on salmon by an expanded redband trout population, could result in "cancelling" the benefits to salmon claimed to result from the Proposed Action. Increased predation resulting from the Proposed Action also poses real threats to the bull trout, a species protected under the Endangered Species Act.

Comment 116 - Fish

- The benefits claimed for the Proposed Action in the EIS/EIR are illusory or negative. For example, an Expert Panel judged the net benefits of the Proposed Action for salmon to be "small." Among many other things, the Panel noted that salmon need spawning beds that are relatively free of silt and sediment. In concluding that the benefits to salmon would be "small," the Expert Panels based their analysis on an

Comment 117 - Fish

Comment 117 cont.

assumed sediment release of 200,000-400,000 tons after dam removal. The actual number, using data in the EIS/EIR, is 3,540,000 tons.

- An Expert Panel found the EIS/EIR's reliance on average daily mean temperatures to measure the temperature impacts of dam removal on fish was incorrect. Fish do not experience average temperatures. Fish experience hour-by-hour temperatures. If temperatures rise above a certain level, notwithstanding the average, fish are adversely affected. An Expert Panel concluded that dam removal will increase the highest temperatures experienced by fish.

Comment 118- Water Quality

- A key water quality problem in the Klamath River Basin is high nutrient loads that cause low dissolved oxygen and algae blooms. The EIS/EIR admits the Proposed Action will increase nutrient loads and, therefore, make water quality worse.
- Another key water quality problem is algae growth. The EIS/EIR admits the Proposed Action will make this problem worse.
- Water quality is adversely affected by elevated pH levels. The EIS/EIR admits the Proposed Action will make this problem worse.
- Low dissolved oxygen levels are yet another water quality problem. The EIS/EIR concedes this problem is likely to be worse because of the Proposed Action.

Comment 119 - Water Quality

- Disease is a major problem affecting fish populations. Because increased river algae biomass provides improved habitat for disease carrying worms, the Proposed Action will make the fish disease problem worse.

Comment 120 - Fish

- According to the EIS/EIR, freshwater mussels, an important subsistence and cultural species for tribal people, experience "substantial" mortality when buried for more

Comment 121 - Other Aquatic Life

Comment 121 cont.

Comment 122 - Sediment Transport

than four-five days. The EIS/EIR admits freshwater mussels, and all other filter feeders, will be buried under up to two feet of sediment for three-four months.

- The EIS/EIR is also riven with inconsistent statements and inadequate or non-existent analysis. For example, in at least four places the EIS/EIR states it need not examine the effects of dam removal on estuarine habitat, including the essential fish habitat in the Klamath River estuary, because sediment will not reach the estuary. In an equal number of places, the EIS/EIR says sediment will reach the estuary. Both assertions cannot be right. If sediment will reach the estuary, the EIS/EIR has failed to examine the effects of increased sedimentation. If sediment will not reach the estuary, the EIS/EIR has understated the effect of adding 3.5 million tons of sediment to salmon spawning beds and other river habitat. And nowhere does the EIS/EIR discuss the impacts on the ocean environment.

Comment 123 - Sediment Toxicity

- The EIS/EIR admits that dioxin and other chemicals are present in dangerous levels behind J.C. Boyle Dam. There is no analysis of the likely adverse impacts of these pollutants. Instead, the EIS/EIR says these hazardous pollutants will be diluted when the three dams below J.C. Boyle Dam are removed. The EIS/EIR ignores the habitat between the J.C. Boyle Dam and the next dams. The EIS/EIR also ignores the issue of whether these substances, even if diluted, remain harmful.

Comment 124 - Terrestrial

- After admitting there are special status invertebrates in the project area, one of which could be listed under the Endangered Species Act, the EIS/EIR completes its "hard look" analysis of the impacts of dam removal on invertebrates in just five lines.

- The EIS/EIR notes the presence of 174 bird species in the project area stating that buffer zones will be needed to protect many of them from activities undertaken as

Comment 125 - Terrestrial

Comment 125 cont.

part of dam removal. There is no discussion of whether the size of the buffer zones are adequate or why.

Comment 126 Hydrology

- The EIS/EIR admits dam removal will increase the risk of flooding and decrease the time people have to respond before the flood hits. There is no analysis of the effects of those increased risks.

Comment 127 - General/Other

- All the towns in the County of Siskiyou are "at risk" communities for wildfires. Dam removal will remove reservoirs that provide water to fight such fires. The EIS/EIR fails to properly examine the effects of this decreased fire fighting ability.

Comment 128 - Land Use

- The EIS/EIR first states that the concrete, earth, and other waste from dam removal will be disposed of on-site. Later, the EIS/EIR states this waste will be taken to local landfills. Both statements cannot be right. If the waste is disposed of on-site, the EIS/EIR says it will be placed in areas that are now protected open space and conservation areas. The EIS/EIR does not examine the impact on these areas of disposing of approximately 1.4 million cubic yards of waste. If the waste is sent to local landfills, the EIS/EIR does not examine the impact on the counties of using up almost one-third of the capacity remaining at two landfills.

Comment 129 Transportation

- The EIS/EIR acknowledges that roads and bridges in the project area were not designed to sustain the heavy loads associated with dam removal and could be incapable of supporting this weight. After these admissions, the EIS/EIR says an in-depth analysis will be done later.

- The EIS/EIR admits tax revenues to the County of Siskiyou will decline, perhaps indefinitely. There is no analysis of the effects of reduced revenues on the County's ability to serve its citizens.

Comment 130 - Economics

Comment 131 - Land Use

- The EIS/EIR admits land use changes will occur as a result of dam removal but decides it will "not describe potential changes in land use that would occur if the dams were removed."

Comment 132 - Costs

- The dams provide energy sufficient to power 65,000 homes for a year. The County of Siskiyou has approximately 23,500 homes. Every household in this and other counties will be affected. The EIS/EIR contains no analysis of the impact of increased energy costs on the citizens of Siskiyou County or of the environmental effects of replacing clean hydropower with other energy sources.

- The EIS/EIR uses incomplete data as to water supplies, rights, and facilities. While the EIS/EIR makes a limited effort to identify exiting water rights, it fails to consider the specific circumstances and physical facilities associated with those water rights and diversions and, therefore, how these water rights will be affected by the Proposed Action.

Comment 133 - Water Supply/Rights

- The deconstruction and relocation of the City of Yreka municipal water supply pipeline will have significant effects on the short-term and long-term reliability of the water rights granted to the City. These effects are not analyzed.

Comment 134 - Water Supply/Rights

- The EIS/EIR admits there are significant cultural and historic resources in the project area. The impacts "analysis" in the EIS/EIR is confined to stating DOI will identify affected cultural and historic resources later.

Comment 135 - Cultural Resources

- The EIS/EIR inappropriately attempts to analyze noise impacts on County residents by applying standards used for noisy urban settings to rural Siskiyou County. The EIS/EIR compounds its error by failing to take actual measurements of existing noise levels or of noise levels expected from dam deconstruction.

Comment 136 - General/Other

Comment 137 - Envir. Justice

- The EIS/EIR admits the loss of tax revenue to the affected counties raises significant environmental justice issues because the impacts of lost tax revenue will "disproportionately affect" low income, minority, and tribal people. The EIS/EIR then fails to examine those effects.

Comment 138 - KBRA

- The EIS states the KBRA and its planned actions are part of the Proposed Action. There are 112 such measures, virtually all of which have environmental effects. Virtually none are analyzed in the EIS/EIR. Curiously, among those projects are habitat and aquatic restoration actions on six tributaries of the Klamath River. Valued at over $177 million, these projects will have some effects on the Klamath River. One searches the EIS/EIR in vain for any analysis.

Comment 139 - NEPA/CEQA

- The EIS/EIR fails to comply with the legal requirement to identify and analyze the mitigation measures that would be associated with alternatives to the Proposed Action. There is simply no way to examine and compare the environmental effects of the Proposed Action with that of various alternatives without an analysis of the mitigation plan associated with the alternatives.

- As to the mitigation for the Proposed Action, the EIS/EIR inappropriately leaves the bulk of that analysis for a later day. Virtually all the mitigation measures for dam removal are in the KBRA. But the EIS/EIR admits those measures cannot be analyzed because "[w]hile the general goals of the KBRA actions and programs are known, the specific actions that would occur are not yet defined...." Where some definition does exist, the Expert Panels formed by DOI generally characterized the KBRA actions as "infeasible" and "not likely" to succeed.

Comment 140 - NEPA/ CEQA

- The heart of an EIS/EIR is a rigorous analysis of alternatives. Consistently, the EIS/EIR fails to meet this analytical requirement. The EIS/EIR examines its favored Proposed Action in dozens of pages while often confining the analysis of alternatives to mere paragraphs. A glaring example of this biased and incomplete analysis is that the four Expert Panels created to examine the effect of the Proposed Action on fish were instructed by DOI to limit their analysis to the Proposed Action and the status quo. They were told to ignore the other three alternatives in the EIS/EIR. Given that the stated need for dam removal is to restore salmon fisheries, and given that the EIS/EIR relies on the Expert Panels to justify its favorable view of dam removal regarding fish resources, this is a singular failure of NEPA and CEQA compliance.

Comment 141 - Alternatives

- The EIS/EIR violates the fundamental requirements of NEPA and CEQA to fairly and objectively compare alternatives. The EIS/EIR attributes all of the alleged environmental benefits of implementing the KBRA to the Proposed Action. This ignores the fact that many of the KBRA actions will proceed even if the dams are not removed. Therefore, the benefits of these KBRA actions, if any, must be included in the No Action and other Alternatives, including Alternative 4. The EIS/EIR violates applicable law by not doing so.

Comment 142 - KBRA

- In evaluating alternatives, the EIS/EIR fails to examine whether the adverse environmental effects of dam removal will inhibit or prevent achieving the benefits that are alleged to come from those KBRA actions that will be implemented even if the dams are not removed.

Comment 143 - KBRA

- The bias against any alternative except dam removal is amply demonstrated by the fact that the same pollutant releases considered to have an insignificant effect under

Comment 144 - Alternatives

Comment 144 cont.

the Proposed Action are considered to have a significant effect under the No Action Alternative.

Comment 145 - Land Use

- The EIS/EIR is devoid of any discussion of how the Proposed Action proposes to comply with the applicable Ordinances of the County of Siskiyou. Many of these Ordinances are never even mentioned. Equally important, in many cases, the Proposed Action violates, or is inconsistent with, the County's Ordinances. Conspicuously absent from the EIS/EIR is any discussion regarding how to address these issues.

The preceding is only a sampling of the myriad problems, failings, and issues associated with the EIS/EIR and with its conclusions. The EIS/EIR meets neither the spirit nor the letter of the law. A revised EIS/EIR must be prepared to address these deficiencies. Only by circulating a corrected and expanded document will the Lead Agencies provide adequate information on environmental impacts, alternatives, and mitigation measures with which stakeholders can evaluate the alternatives and decision makers can act.

Comment 146 - NEPA/CEQA

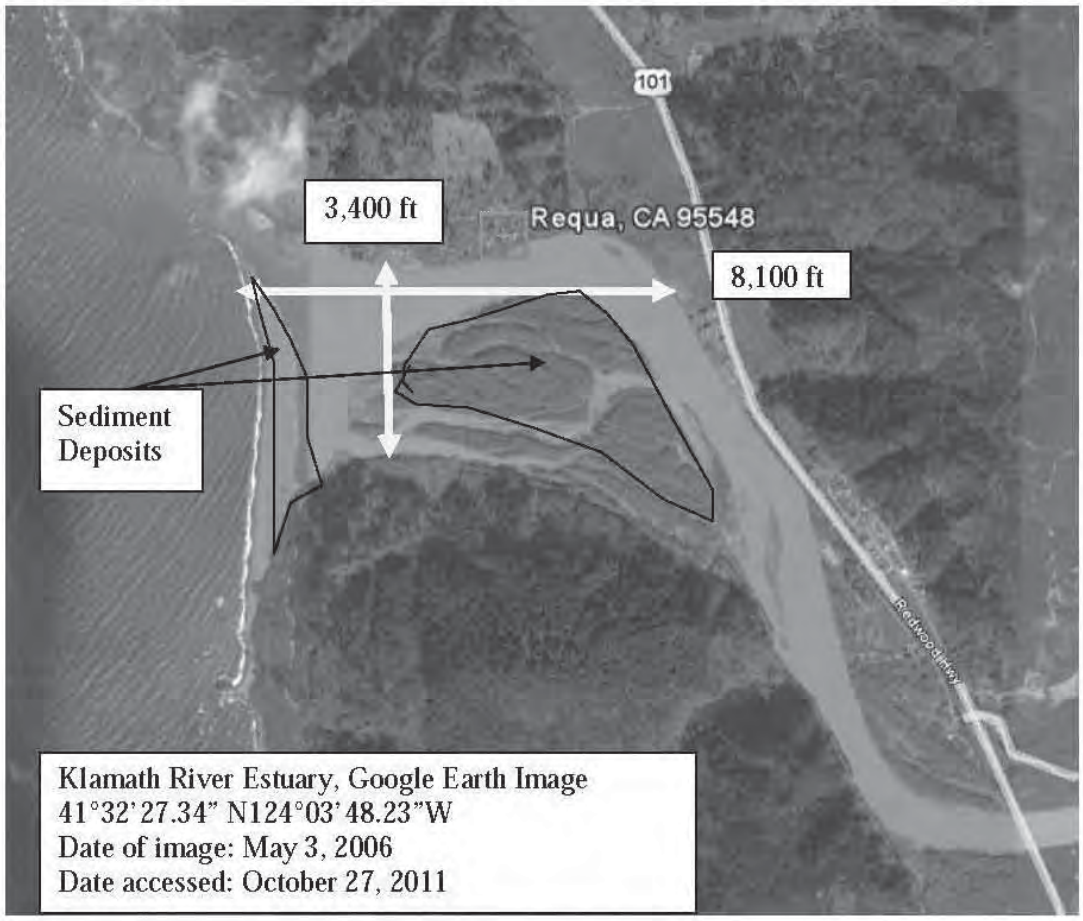

Figure 1. Aerial view of the mouth of the Klamath River.