

### 3. CVP Water Supply Impacts To CVP Wildlife Refuges And San Joaquin River Exchange Contractors Are Underestimated

The Draft also understates the CVP water supply impacts to wildlife refuges and the San Joaquin River Exchange Contractors ("Exchange Contractors"). First, as Reclamation is aware, section 3406(d) of the 1992 Central Valley Project Improvement Act ("CVPIA") requires Reclamation to deliver CVP water supplies to wildlife refuges. Section 3406(d) of the CVPIA describes two categories of refuge water supplies: "Level 2" and "Level 4." The refuges use water to provide needed habitat during waterfowl migration periods in the fall, winter, and spring. In critically dry hydrologic years, the refuge water supply contracts and section 3406(d) of the CVPIA authorize reductions in Level 2 water deliveries by no more than 25%. Shortages to the refuges are triggered when deliveries to agricultural contractors are reduced, a circumstance made more frequent and extensive due to the loss of supply from implementation of the reasonable and prudent alternatives in the biological opinions.

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Table 5.26 in the Draft EIS purports to identify the changes in CVP water deliveries under the No Action Alternative as compared to the Second Basis of Comparison for CVP refuges. For CVP refuges located south of the Delta, the table identifies *no* difference (0 acre-feet) over the long-term between the No Action Alternative and the Second Basis of Comparison. Draft EIS at 5-94. The chapter does not explain how it is possible that there will be no change in deliveries between the No Action Alternative and the Second Basis of Comparison, despite the admitted water supply loss due to the reasonable and prudent alternatives included in the No Action Alternative. The conclusion that this loss of supply makes no difference to refuge is unsupported and contrary to actual experience.

Between 1992, when the CVPIA was implemented, and 2008, when Reclamation began implementing the RPA in the Smelt BiOp, Reclamation delivered the minimum 75% of Level 2 supply to south-of-Delta wildlife refuges in just three years out of seventeen: 1992, 1993, and 1994. Reclamation, 2015 Summary of Water Supply Allocations. In contrast, since 2008, south-of-Delta wildlife refuges have been shorted to *less* than 75% in two years: in 2014, they received 65%, and in 2015, they anticipate receiving even less. While these shortages have occurred in drought years, Reclamation's ability to export water south of the Delta is adversely affected by limitations on CVP operations, which include implementation of the RPA actions. The Draft EIS must analyze how implementation of the alternatives may further limit exports, including during drought years, and then look at the real impact to south-of-Delta wildlife refuges. Receiving less than 100%, particularly less than 75%, has harmful effect on the refuges, including inability to provide habitat for local breeding wildlife and migratory shorebirds, growing food for migratory birds, and diminishing water quality. Impacts from these shortages are described in the August 21, 2015 declaration of Ricardo Ortega filed in *San Luis & Delta-Mendota Water Authority v. Jewell*, E.D. Cal. Case No. 1:15-cv-01290. Second, the Draft EIS makes the same error in estimating the difference in water supply impacts to the Exchange Contractors as it does for estimating impacts to the wildlife refuges. Table 5.26 identifies *no* difference (0 acre-feet) in annual average deliveries between the No Action Alternative and the Second Basis of Comparison for the Exchange Contractors. Draft EIS at 5-94. Again, Reclamation's Summary of Water Supply Allocations shows that the combination of RPA implementation and drought conditions have resulted in real impacts to the Exchange Contractors' water supply. Since 2008, the Exchange Contractors have been shorted to less than

their 75% contractual minimum supply in two years: 2014 and 2015. These shortages have caused the Exchange Contractors' member entities to reduce the allocation to their growers, and growers have in turn had to fallow land and increase groundwater use. The Exchange Contractors, like the south-of-Delta agricultural water service contractors discussed elsewhere in these comments, suffer significant adverse socioeconomic impacts as a result of such shortages.

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The water supply analysis should be corrected to address the very real likelihood of shortages to refugees and the Exchange Contractors resulting from project modifications, and the concomitant impacts of these shortages should be discussed in the final EIS's resource chapters.

**B. The Draft EIS Fails To Adequately Describe And Analyze The Impacts Of Increased Groundwater Use**

In addition to unreasonably assuming that increased groundwater use will fully compensate for lost surface supplies, the Draft EIS fails to adequately describe or analyze the impacts of increased groundwater use in response to diminished CVP and SWP supplies. The EIS briefly acknowledges that increased groundwater use will lead to declining groundwater levels, more land subsidence, and reductions in groundwater quality, but it fails to analyze the materiality or consequences of such impacts, let alone potential mitigation.

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**1. The Draft EIS Fails To Provide The Reduction In Availability Of SWP And CVP Water By Groundwater Basin**

The foundation for analysis of groundwater level impacts is the change in availability of SWP and CVP water within the area being analyzed (typically a groundwater basin). While the Draft EIS provides information about the aggregate change in availability of SWP and CVP water, Chapter 7 does not quantify (with the exception of the analysis for the Central Valley Region) the change in availability by groundwater basin. Without that quantification, the basis for analysis of groundwater level impacts in the Draft EIS is unclear, which prevents decision makers and interested parties from making a meaningful review of the impacts presented in the Draft EIS.

The Draft EIS does not employ any modeling at all to assess impacts to groundwater outside the Central Valley. Absent a quantified estimate of the change in SWP and CVP water available to groundwater basins, the "impacts analysis" essentially becomes limited to general observations about how a theoretical increase in groundwater production might impact groundwater levels. This appears to be the case in this Draft EIS – for example, page 7-123 discusses impacts of the No Action Alternative relative to the Second Basis of Comparison on groundwater use and elevations for the San Francisco Bay Area, Central Coast, and Southern California Regions as follows:

Under the No Action Alternative, it is anticipated that CVP and SWP water supplies in the San Francisco Bay Area, Central Coast, and Southern California regions would be reduced as compared to CVP and SWP water supplies under the Second Basis of Comparison, as discussed in Chapter 5, Surface Water Resources and Water Supplies. The reduction in surface water supplies could

result in increased groundwater withdrawals, decreased groundwater recharge, and decreased groundwater levels in areas with CVP and SWP water users. It may be legally impossible to extract additional groundwater in adjudicated basins without gaining the permission of watermasters and accounting for groundwater pumping entitlements and various parties under their adjudicated rights.

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The essence of this analysis is that increasing groundwater production results in lower groundwater levels. While there should be general agreement with this principle, it does not provide information that is specific to groundwater basins, and does not define the potential magnitude of the impacts.

The analysis of other topics, like subsidence and groundwater quality, are closely related to groundwater levels, and without quantification of the groundwater level impacts the analysis of these other topics also appears to be limited to general principles rather than quantified impacts. For example, the Draft EIS discussion of land subsidence impacts of the No Action Alternative relative to the Second Basis of Comparison on subsidence and groundwater quality for the San Francisco Bay Area, Central Coast, and Southern California Regions again is expressed in the form of general principles rather than quantified impacts. For example, the Draft EIS discusses the potential land subsidence as follows on page 7-124:

“Increased use of groundwater and reductions in groundwater levels would result in an increased potential for additional land subsidence under the No Action Alternative as compared to the Second Basis of Comparison in the Santa Clara Valley Groundwater Basin in the San Francisco Bay Area Region, and the Antelope Valley and Lucerne Valley groundwater basins in the Southern California Region”

While there may be general agreement with the principle that reductions in groundwater levels result in an increased potential for land subsidence, information is not provided on the reductions in SWP and CVP water available to these basins that cause these impacts, and the potential subsidence impact is not quantified.

**2. The Draft EIS Fails To Present Information On Changes In Groundwater Levels In A Form Useful To Decisionmakers And The Interested Public**

A fundamental purpose of NEPA is to ensure that decision makers and interested members of the public have enough information about impacts to make informed decisions about the project being analyzed. The information provided needs to be in a form that is understandable, and which can be effectively used as the basis for a decision about the project. The quantified information provided on groundwater level impacts in the Central Valley Region fails to achieve that purpose because it is unnecessarily difficult to understand and interpret. As discussed below, a reader must evaluate a discussion of “post processing” in a technical

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groundwater modeling appendix in order to understand the groundwater level impacts presented within the Draft EIS. That is not reasonable.

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A common method to summarize groundwater levels for alternatives is to show: (1) maps of groundwater levels at the end beginning and end of the study period, and the change in groundwater levels; and (2) hydrographs of groundwater levels at selected locations, which show the groundwater level trends. These types of presentations provide useful information that is relatively easy to understand. For example, the maps can provide a basis to understand what areas experience declines in groundwater levels and how large those declines are over the period analyzed. That helps show if a given groundwater basin is in overdraft, what areas might be susceptible to subsidence, and what the flow patterns are. This type of information has presumably already been developed using the model, and should be included in the Draft EIS.

Information about groundwater levels for each alternative can then be supplemented with quantified information that compares different alternatives (for example, maps of differences in groundwater levels at the end of the study period between alternatives, and hydrographs at selected locations showing the differences in groundwater levels over time).

The Draft EIS does not include information on groundwater levels for each alternative, and instead is limited to information that shows differences between alternatives. This does not give decision makers and interested parties a full understanding of groundwater conditions needed to evaluate the impacts of the project. For example, because only differences in groundwater levels are provided, there is no information about whether groundwater levels are rising or falling in any particular alternative, which may impact an assessment of the potential for subsidence.

The maps presenting differences between alternatives are not clearly explained within the Draft EIS. For example, Figure 7.15 (titled "Forecast Groundwater-Level Changes for Alternative 2 and No Action Alternative Compared to Second Basis of Comparison for Average July in a Future Wet Year") is difficult to interpret, leaving decision-makers and the interested public to attempt to interpret these results. Possible interpretations might include:

- Interpretation A - The difference in groundwater levels represents the difference that would occur between two scenarios for a single occurrence of a future wet year. Under this interpretation, the map can be read as showing in some areas might experience from 200 to 500 feet of lowering of groundwater levels in an individual year.
- Interpretation B - The difference in groundwater levels represents an average for all years classified as "wet." Under this interpretation, the map can be read as showing groundwater levels in some areas might be from 200 to 500 feet lower on average in years classified as "wet," but does not tell a reader anything about what happens in an individual year.

Because the Draft EIS does not include information about groundwater levels for each alternative individually, a reader cannot look at the groundwater levels for each alternative to try

and interpret what these differences might mean, which complicates the interpretation of information like Figure 7.15.

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The text of the Draft EIS also does not help a reader understand what the results are. For example on page 7-121 groundwater level impacts are described as follows:

Overall, under the No Action Alternative as compared to the Second Basis of Comparison, July average groundwater levels decrease approximately 2 to 10 feet in most of the central and southern San Joaquin Valley Groundwater Basin in all water year types. July average groundwater levels decline 10 to 50 feet in the Delta-Mendota, Tulare Lake, and Kern County subbasins; and 100 to over 200 feet in the Westside subbasin in all water year types. In critical dry years, groundwater levels decline by up to 200 feet in the Westside subbasin. Groundwater level changes in the Sacramento Valley are forecast to be less than 2 feet. The groundwater level change hydrographs show that in the central and southern San Joaquin Valley, groundwater levels can fluctuate up to 200 feet in some areas due to climatic variations under the No Action Alternative compared to the Second Basis of Comparison.

It is not clear whether the differences in groundwater levels between the two scenarios represent changes in levels that might be experienced in a single year, or if they are differences in groundwater levels which have been averaged over a number of years. This language can be read to be consistent with either Interpretation A or Interpretation B above.

Based on our review, to resolve this question a reader must make a close reading of Section 7A.3.1 (“Post-Processing and Results Analysis”) of Appendix 7A to understand what the results presented in the Draft EIS actually mean (and even then, it is complicated by the lack of results for individual alternatives that can be used to help confirm the interpretation). Our best judgment is that the interpretation in the second bullet above (Interpretation B) is the correct one, though we are not 100 percent certain of that interpretation.

The interpretation of the hydrographs presenting differences in groundwater levels over time at specific locations between alternatives (for example, Figure 7.21 which is titled “Forecast Groundwater-Level Change Hydrographs for Alternative 2 and No Action Alternative Compared to Second Basis of Comparison at Example Locations in the San Joaquin Valley”) has similar complications to the maps showing groundwater level changes. Based on our review of Section 7A.3.1 of Appendix 7A, our best judgment is that these graphs show the difference in the groundwater levels at a given location between two alternatives, though again we are not 100 percent certain of that interpretation.

**3. The Draft EIS Fails To Provide Information Regarding Long-Term Decline In Groundwater Levels Due To Implementation Of The RPAs**

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The Draft EIS fails to describe the aggregate impacts to groundwater levels due to the expected increase in groundwater pumping from now through 2030, and beyond. The Draft EIS

acknowledges that groundwater levels have experienced significant declines over the last few years, due to increased groundwater pumping in reaction to diminished supplies of surface water. For example, the Draft EIS states that “[r]ecent information indicates that between the spring 2010 and spring 2014, groundwater levels declined at some wells in the Delta-Mendota subbasin by up to 20 feet (DWR 2014c, 2014d). Draft EIS at 7-30 – 7-31. In addition, the Draft EIS acknowledges that “[r]ecent information indicates that between the spring 2013 and spring 2014, groundwater levels have declined at some wells in the Westside subbasin by up to 40 feet within the 1-year period (DWR 2014c, 2014d).” Draft EIS at 7-42. Yet, the Draft EIS does not discuss the implications of similar periods of groundwater draw down that are expected in the future due to implementation of the RPAs.

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The Draft EIS states that the reasonable and prudent alternatives in the biological opinions will result in declines in groundwater levels in the future. The Draft EIS states:

In areas of the Central Valley Region that use CVP water service contract and SWP entitlement contract water supplies, the CVP and SWP water supplies would be less under the No Action Alternative as compared to the Second Basis of Comparison. The differences would result in increased groundwater use and decreased groundwater levels in the San Joaquin Valley Groundwater Basin under the No Action Alternative as compared to the Second Basis of Comparison.

Draft EIS at 7-121. In particular, “July average groundwater levels decline 10 to 50 feet in the Delta-Mendota, Tulare Lake, and Kern County subbasins; and 100 to over 200 feet in the Westside subbasin in all water year types. In critical dry years, groundwater levels decline by up to 200 feet in the Westside subbasin.” Draft EIS at 7-121. Yet, the Draft EIS provides no analysis of the significance of such declines, nor does it analyze whether the affected groundwater basins can withstand the expected levels of decline. The Draft EIS fails to explain the consequences of such significant declines in groundwater levels in any meaningful detail. Critically, the Draft EIS fails to evaluate the aggregate impacts to groundwater levels if the RPAs are implemented from now until 2030. If the RPAs result in consistent declines in groundwater levels because of reductions in surface water supplies, what are the implications for groundwater availability, groundwater quality, and land subsidence? The Draft EIS fails to tell decision makers or the public what are the aggregate impacts to groundwater levels, or the expected consequences of a long-term trend of declining groundwater levels. This is a significant omission that must be remedied in the final EIS.

#### 4. The Draft EIS Omits The Modeling Results And Data Regarding Land Subsidence

While the Draft EIS acknowledges that certain areas are experiencing significant land subsidence as a result of increased groundwater use, the Draft EIS provides only a limited and qualitative analysis of expected land subsidence. In fact, the Draft EIS omits the land subsidence modeling results that show the expected total subsidence resulting from groundwater use, claiming that the results are “overly conservative.” The Draft EIS states:

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CVHM includes a module known as the SUB package that computes the cumulative compaction of each model layer during the model simulation. The cumulative layer compactions at the end of the simulation are summed into a total subsidence. However, this version of the SUB package does not consider the potential reduction in the rate of subsidence that would occur as the magnitude of compaction approaches the physical thickness of the affected fine-grained interbeds. Thus, subsidence forecasts from the predictive versions of CVHM were judged to be overly conservative. Therefore, a qualitative approach was used for the estimation of the potential for increased land subsidence in areas of the Central Valley that have historically experienced inelastic subsidence due to the compaction of fine-grained interbeds.

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Draft EIS at 7-112; *see id.* at 7A-17. Reclamation's decision to omit available land subsidence modeling results from the Draft EIS does not serve the informational purposes of NEPA. If Reclamation concluded that the results were overly conservative, it should explain why, but still provide the results to help inform the decision-makers and the public. In addition, Reclamation should identify what information, if any, supports the conclusion that the rates of subsidence would decline by 2030. Reclamation should also identify what information supports its conclusion that the subsidence estimated by the groundwater model is "overly conservative."

The Draft EIS's qualitative analysis of land subsidence impacts is effectively meaningless. Despite acknowledging the observed impacts of land subsidence, the Draft EIS does nothing more than tell the reader that the implementation of the reasonable and prudent alternatives will make land subsidence worse in the future. The Draft EIS confirms that in "areas adjacent to the Delta-Mendota Canal in this subbasin, extensive groundwater withdrawal has caused land subsidence of up to 10 feet in some areas. Land subsidence can cause structural damage to the Delta-Mendota Canal which has caused operational issues for CVP water delivery." Draft EIS at 7-31. Yet, in describing the expected land subsidence associated with implementing the reasonable and prudent alternatives, the Draft EIS only provides a "there will be more" conclusion. The Draft EIS states: "Under the No Action Alternative, potential for land subsidence due to groundwater withdrawals in the Delta-Mendota and Westside subbasins of the San Joaquin Valley Groundwater Basin would increase as compared to the Second Basis of Comparison due to the increased groundwater withdrawals." Draft EIS at 7-122. The Draft EIS also says: "increased groundwater pumping under the long-term average conditions may result in an additional increment of subsidence in those areas within the Central Valley. The additional amount of subsidence and the economic costs associated with it have not been quantified in this EIS. However, total subsidence-related costs have been shown to be substantial, as reported by Borchers et al. (2014) who estimated that the cost of subsidence in San Joaquin Valley between 1955 and 1972 was more than \$1.3 billion (in 2013 dollars). These estimates are based on the impacts to major infrastructure in the region including the San Joaquin River, Delta Mendota Canal, Friant-Kern Canal and San Luis Canal in addition to privately owned infrastructure. The incremental subsidence-related costs, expressed on an annual basis, could be an unknown fraction of that cumulative cost." Draft EIS at p. 19-49; *see also* p. 19-61. Thus, the Draft EIS confirms that increased land subsidence will result from implementation of the reasonable and

prudent alternatives, and will likely be a problem, but it leaves unanalyzed and unanswered how big a problem.

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**5. The Draft EIS Fails To Account For Or Analyze Expected Impacts To Groundwater Quality**

Likewise, the Draft EIS provides no meaningful analysis of expected impacts to groundwater quality. The “Groundwater Model Documentation” in Appendix 7A indicates that one of the modeling objectives was to evaluate “[c]hanges to groundwater quality based on a potential inducement of migration of poor quality groundwater because of groundwater flow changes.” Draft EIS at 7A-3. However, there is no further discussion of how the model would be used to make this evaluation.

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Despite extensive acknowledgement of existing groundwater quality issues, and the stated intent to use the groundwater model to evaluate groundwater quality, the Draft EIS merely provides a qualitative analysis of groundwater quality impacts associated with implementing the reasonable and prudent alternatives. For example, the Draft EIS states: “In areas that use CVP and SWP water supplies, groundwater quality under the No Action Alternative could be reduced as compared to the Second Basis of Comparison in the central and southern San Joaquin Valley Groundwater Basin due to increased groundwater withdrawals and resulting potential changes in groundwater flow patterns.” Draft EIS at 7-122. The Draft EIS makes no effort to describe the extent or magnitude of impacts to groundwater quality, nor does the Draft EIS consider the implications of degraded groundwater quality in areas that are already experiencing groundwater quality issues. At a minimum, the Draft EIS should provide informative examples of the types of groundwater quality degradation that may occur in particular regions and how the degradation may impact the ability to use that water for municipal or agricultural use. Simply stating that groundwater quality would be “reduced” does not provide the decision makers or the public with sufficient information to evaluate the impacts of implementing the existing reasonable and prudent alternatives, or to allow for meaningful comparison among the alternatives.

**C. The Draft EIS’s Analysis Of Effects On Surface Water Resources And Water Supplies Is Inadequate**

**1. The Draft EIS Presents Incomplete Modeling Information Regarding Surface Water Supplies**

Chapter 5 and its accompanying appendices present an incomplete picture of the modeling work that supports Reclamation’s conclusions regarding surface water supply. Revision is required.

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First, a partial set of CalSim II model results are reported in Appendix 5A, but the Draft EIS does not explain why these particular set of outputs or metrics have been selected and does not describe their importance. For example, the significance of flows through Steamboat Slough is not described. There is also no explanation of why results for Millerton Reservoir are presented in the comparative analysis when simulation of the CVP Friant Division is identical across all alternatives.



Second, the Draft EIS does not adequately explain its assumptions or its modeling of changed circumstances. For example, the reasonable and prudent alternative in the NMFS BiOp requires Reclamation to achieve certain end-of-September and end-of-April storage resulting from the operation of Lake Shasta for a percentage of years. Draft EIS at 3A-31. The Draft EIS states that no specific CalSim II modeling code is implemented to simulate these performance measures (Draft EIS at 5A-9) and there appears to be no check that these performance measures are being met. Indeed, figures presented in Appendix 5A (Draft EIS at 5A-159 and 5A-161) suggest these criteria are not being met. Reclamation should explain why it is not simulating performance measures, and its rationale for not ensuring that performance measures are being met.

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Reclamation should also revise the Draft EIS to explain its treatment of changing demands. For example, the Draft EIS provides: "By 2030, water demands associated with water rights and CVP and SWP contracts in the Sacramento Valley [are] projected to increase by 443,000 acre-feet per year, especially in the communities in El Dorado, Placer, and Sacramento Counties." Draft EIS at 5-66. The Draft EIS does not explain if or how these increased demands are represented in CalSim II.

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Third, the Draft EIS should provide further explanation of its treatment of modeling anomalies. For example, the Draft EIS states: "in very dry years, the model simulates minimum reservoir volumes (also known as 'dead pool conditions') that appear to prevent Reclamation and DWR from meeting their contractual obligations, including water deliveries." Draft EIS at 5-63. Further discussion of these anomalies in simulated reservoir operations should be included in the final environmental document. In real time operations reservoirs are operated to avoid dead pool conditions and measures taken could include relaxation of some flow criteria or changes to contract allocation procedures, impacting deliveries. Allowing simulated storage to fall to dead pool may result in an over-estimate of CVP delivery capability to CVP contractors south-of-the-Delta in dry years.

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**2. The Draft EIS Does Not Set Necessary Thresholds Of Significance**

Chapter 5 also fails to allow decisionmakers and the public to understand how the proposed modifications in the various alternatives will have different effects on surface water supply. The Draft EIS does not explain whether the reasonable and prudent alternatives and the proposed operation of the CVP and SWP would significantly affect the quality of the human environment. The Draft EIS Executive Summary includes a list of substantial beneficial and adverse impacts; however thresholds or levels of significance for metrics are not set.

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The Draft EIS states that "CalSim II model output includes minor fluctuations of up to 5 percent due to model assumptions and approaches. Therefore, if the quantitative changes between a specific alternative and the No Action Alternative and/or Second Basis of Comparison are 5 percent or less, the conditions under the specific alternative would be considered to be "similar" to conditions under the No Action Alternative and/or Second Basis of Comparison." Draft EIS at 5-60. While there is uncertainty associated with any model results, the selection of 5 percent as the level to define "similar" conditions is unsupported and is in conflict with other environmental projects and programs that have used CalSim II for impact analysis.

The Draft EIS defines an appropriate use of modeling results as identifying trends that differentiate alternatives and for quantifying specific levels of impacts. Applying the 5 percent threshold to average monthly or average annual values may result in not reporting significant trends. The 5 percent threshold would seem more appropriate when applied to individual monthly results, not averages.

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**3. The Draft EIS Improperly Treats Climate Change And Sea-Level Rise**

The Draft EIS’s modeling of climate change and sea level rise also warrants revision. As noted elsewhere in these comments, the Draft EIS analyzes future conditions projected for the year 2030. Assumptions regarding sea-level rise and climate change are included in all of the alternatives, including the No Action Alternative and Second Basis of Comparison. These assumptions are the same across all alternatives. Therefore, the effects of climate change and sea-level rise are assumed to be similar across all alternatives.

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The Draft EIS deviates from past practice by not also presenting an analysis of the future No Action Alternative *without* the effects of climate change. For example, the 2015 SWP Delivery Capability Report published by DWR presents model results for a “base” scenario and an “early long-term” scenario. The latter includes climate effects associated with a 2025 time horizon and a 15 cm sea-level rise, the former does not.

Model results for the No Action Alternative cannot be compared to current or recent historical CVP and SWP operations because the effects of climate change cannot be isolated from the effects of changing regulatory requirements, land use, and facilities.

The analysis of alternatives with climate change and sea-level rise appears to be consistent with past studies and reports produced by DWR and Reclamation. However, the Draft EIS fails to present or discuss any sensitivity analysis for climate change assumptions. Such an analysis could include climate change scenarios based on GCM results representing warmer and drier conditions rather than the Q5 scenario, which is derived from the central tending consensus of climate projections. Similarly, no sensitivity is presented for sea-level rise. For example, a 12 cm or 18 cm rise, which corresponds to the range of projections from the work conducted by Rahmstorf, could also be considered. There is little discussion of whether the use of more recent IPCC CMIP 5 climate projections would significantly change the analysis. More explanation is required.

**4. Additional Errors And Inconsistencies In Chapter 5 And Its Accompanying Appendices**

CalSim II model results are summarized in Chapter 5 of the Draft EIS and are presented in more detail in Appendices 5A through 5C. There are some errors and inconsistencies in these reported results. For example, south-of-Delta average annual CVP M&I deliveries under the No Action Alternative are reported as 15 TAF per year (Table C-19-1-2). This value is extremely low and inconsistent with the corresponding exceedance plot (Figure C-19-1-5). The geographical breakdown of M&I deliveries also appears to be incorrect; no CVP M&I deliveries are reported for the Tulare Lake Region (Table C-19-1-1). Some mislabeling of results adds to

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the confusion. For example, total CVP deliveries south-of-Delta are stated to include "Settlement" deliveries (Table C-19-1-2). Instead, results are the total of water service contract deliveries and refuge deliveries. Deliveries to the Exchange Contractors are not reported, although Settlement Contractor deliveries are reported under the Sacramento Valley. Reclamation should review the presentation of model results for correctness and consistency.

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**D. The Analysis Of Effects On Aquatic Species In Chapter 9 Is Inadequate**

Chapter 9 of the Draft EIS is intended to describe the fish and aquatic resources that occur in the portions of the project area that could be affected as result of implementing the alternatives evaluated in the EIS and to describe the potential impacts to those resources. However, Chapter 9 includes flaws in both its description of the affected environment and its analysis of impacts.

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**1. Chapter 9's Discussion Of Affected Environment Requires Revision**

The Draft EIS's discussion of affected environment in Chapter 9 requires revision because it contains a number of unsupported statements and includes a number of statements that are not based on the best and most current science. Such statements must be supported or revised in the Final EIS, at minimum to ensure the final environmental document complies with the requirement in the CEQ regulations that "[a]gencies . . . insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements" and "identify any methodologies used and . . . make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement." 40 C.F.R. § 1502.24.

Without revision, Chapter 9's conclusory statements made without support will run afoul of NEPA's requirements. For example, at page 9-57, lines 38-39, the Draft EIS states that "[spring-run Chinook Salmon] [y]earlings typically enter the Delta as early as November and December and continue outmigration through at least March." The Draft EIS does not explain how yearling spring-run are being identified, whether by length at date criteria or genetics. Reclamation cites NMFS 2009 in support, which in turn cites to Snider and Titus 2000. Snider and Titus 2000 describe using length at date criteria, and nowhere say that yearling spring-run typically enter the Delta in November through mid-March. In fact, under the length at date criteria there is no yearling spring-run sized Chinook in November and December; yearling spring-run ends in mid-October. In order to insure scientific integrity of this statement, it must be accurate, and it must be supported. There is a great deal of uncertainty when using length at date criteria to distinguish yearling spring-run from other juveniles that needs to be acknowledged.

The discussion regarding nonnative invasive species at page 9-80 provides another example. There, the Draft EIS states that "[n]ot all nonnative species are considered invasive or harmful. Some introduced species do not greatly affect the ecosystem, or have minimal ability to spread or increase in abundance. Others have commercial or recreational value (e.g., Striped Bass, American Shad, and Largemouth Bass)." *Id.* at 9-80. This statement is unsupported, and is contrary to the general understanding that *all* nonnative species increase competition and therefore are considered invasive or harmful where they prey on or compete with native species. That some may value these species for other reasons does not remove their adverse effect on

native species. Finally another example of an unsupported—and therefore problematic—statement in Chapter 9 is at page 9-97, in the discussion of predation. At lines 22-27, the Draft EIS notes NMFS made reference to predation studies regarding predation loss on the Tuolumne and Stanislaus rivers that showed significant loss in run-of-river gravel mining ponds and dredged areas. Yet, the Draft EIS also notes that NMFS’s statements were made *without citation*; without adding citation, Reclamation cannot now adopt NMFS’s observations wholesale. Doing so would lack “scientific integrity” and would be contrary to 40 C.F.R. § 1502.24. Revision of Chapter 9 is required to ensure that these, and similarly unsupported statements, identify and be consistent with scientific support.

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Additional portions of the affected environment section of Chapter 9 require revision to add references to the best and most recent science. In several places Chapter 9 cites outdated science in the face of more recent science. For example, at page 9-56, the Draft EIS uses Feyrer et al. 2007 to support the connection between X2 and hypothesized habitat, but does not support a connection between X2 and presence or absence of Delta Smelt. This discussion should be revised to add reference to the more recent Feyrer 2011 study, but that study also does not provide a connection between X2 and the presence or absence of Delta Smelt. And Kimmerer et al. 2013, at page 13, warrants discussion, as it explains that X2, or the volume of the low salinity zone, in the spring and fall are not a driver of Delta Smelt abundance, and notes that “[g]iven the difficulty in determining the controls on the delta smelt population, it is not surprising that such a simple descriptor of habitat is inadequate for this species.” Another example of a statement requiring revision to reference updated science is at page 9-92. The Draft EIS notes that “the cause of the mortality in the ship channel has not been studied,” and identifies possible causes for mortality. However, certain posited causes, i.e., low dissolved oxygen and water quality have been resolved by aeration and upgrades to the Stockton sewage treatment plant, respectively.

The comments submitted by the State Water Contractors identify additional examples of outdated or mis-cited scientific studies, or misstatements of the available data in Chapter 9. The Authority, Westlands, and the Exchange Contractors join in those comments.

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**2. Chapter 9’s Impact Analysis Discussion Is Flawed**

The resource chapters’ “Impact Analysis” sections are intended to allow the comparison of environmental consequences of the No Action Alternative and Second Basis of Comparison to the environmental consequences of the Action Alternatives. In Chapter 9, however, the Draft EIS fails to present the impacts of the alternatives in a manner that “sharply defin[es] the issues and provid[es] a clear basis for choice among options by the decisionmaker and the public.” 40 C.F.R. § 1502.14. With respect to impacts on fish and aquatic resources, the key issue is whether the proposed modifications in the various alternatives will avoid jeopardizing listed species—accordingly, Chapter 9 must enable a comparison among the alternatives that addresses jeopardy. To the extent possible, that analysis should be quantitative.

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In order to undertake a useful comparison among the alternatives, the final EIS must allow its readers to answer a number of questions: How many more fish are expected to survive and reproduce under one scenario as opposed to another? If reverse flows in Old and Middle rivers are limited by other existing non-ESA regulations but not by additional measures under the ESA, what are the expected effects on population abundance? If additional restrictions on such

flows are imposed under the ESA, what is the expected effect on abundance of listed species? Do other measures that do not involve restrictions on CVP and SWP operations, such as habitat restoration, offer greater promise of improving abundance? The Draft EIS does not answer any of these or similar questions.

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The synthesis and conclusion sections of Chapter 9’s impacts analysis are lacking. First, Chapter 9 contains a number of conclusory statements that seem to lack any analytic support at all. For example, in discussing changes in fish entrainment, the Draft EIS states that “[c]hanges in CVP and SWP operations can affect through-Delta survival of migratory (e.g., salmonids) and resident (e.g., Delta and Longfin smelt) fish species through changes in the level of entrainment at CVP and SWP export pumping facilities.” Draft EIS at 9-113. This statement is unsupported. There is no evidence that exports are negatively related to through-Delta survival based on CWT and acoustic tag experiments, and there is no support for concluding that entrainment is related to abundance. This conclusory statement is not based on scientific evidence.

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Another example comes in the Draft EIS’s discussion of the Second Basis of Comparison, the Draft EIS states that “[s]imilar to the No Action Alternative, reasonable and foreseeable non-CVP and –SWP water resources projects to provide additional water supplies would be implemented, in addition to restoration of more than 10,000 acres of intertidal and associated subtidal wetlands in Suisun Marsh and Cache Slough; and up to 20,000 acres of seasonal floodplain restoration in the Yolo Bypass.” *Id.* at 9-150. Yet, despite this significant restoration, the Draft EIS concludes “[i]t is not likely that operations of the CVP and SWP under the Second Basis of Comparison would result in improvement of habitat conditions in the Delta or increases in populations for these fish by 2030, and the recent trajectory of loss would likely continue.” *Id.* This conclusion specifically, and Chapter 9 generally, both elicit the same question—why? Why, if there will be significant habitat restoration, is the Second Basis of Comparison not expected to result in improvement of habitat conditions in the Delta? The Draft EIS fails to explain that factors other than habitat restoration may be more significant in affecting population loss, or to provide any explanation at all for its conclusion.

Second, Chapter 9 fails to contain any synthesis or conclusions that address the *significance* of effects from the different alternatives on listed species. Nowhere does the chapter identify whether one alternative as compared to another (or to the No Action Alternative or the Second Basis of Comparison) will have any population level effects. As stated repeatedly in these comments, it is crucial that decisionmakers and the public be able to determine whether an alternative avoids jeopardizing listed species. An assessment of any population level effects is important to that determination. The discussion in the Draft EIS does not enable such assessment. For example, in Chapter 9’s comparison of the No Action Alternative to the Second Basis of Comparison for Coho Salmon in the Trinity River Region, it states that long term average monthly water temperatures would be similar to, although slightly higher than temperatures under the No Action Alternative as compared to the Second Basis of Comparison. The discussion notes that the temperature model outputs indicate that the temperature threshold for coho “would be exceeded about 8 percent of the time in October, about 1 percent more frequently than under the Second Basis of Comparison.” *Id.* at 9-154. Here the Chapter identifies a quantitative difference, but does not explain what exceeding the threshold means for Coho Salmon—does the entire year-class die if the threshold is exceeded? If that is the case, is it

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possible that a 1 percent increase in the exceedance of the threshold may have a population level effect? Why or why not?

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Elsewhere, the Draft EIS notes that “[i]n the estimation of potential entrainment loss and comparison of the results for each of the alternatives, differences in entrainment estimates of greater than 5 percent between alternatives are considered biologically meaningful, with potential effects on Delta Smelt.” Draft EIS at 9-114. Again, this statement fails give any explanation as to why or how Reclamation determined that a 5 percent difference in calculated entrainment would be considered biologically meaningful; the statement begs the question—what is the effect of a 5 percent change in calculated entrainment on the Delta Smelt population as a whole? Is there population-level significance?

Chapter 9’s comparison of the No Action Alternative to the Second Basis of Comparison with respect to spring-run Chinook Salmon provides another example of the Draft EIS’s failure to address the significance of impacts. After discussing model results, the chapter notes that “overall, effects on spring-run Chinook Salmon could be slightly more adverse under the No Action Alternative than under the Second Basis of Comparison, with a small likelihood that spring-run Chinook Salmon production would be lower under the No Action Alternative.” *Id.* at 9-171. This statement does not explain what “slightly more adverse” means in the context of a jeopardy analysis. Is there a population level effect under the No Action Alternative versus Second Basis of Comparison? Why or why not? Similar questions exist with respect to the chapter’s summary of effects for other species, including steelhead, Green Sturgeon, and others. *See, e.g.*, Draft EIS at 9-190 (“overall, effects on steelhead could be slightly more adverse under the No Action Alternative than under the Second Basis of Comparison”), 9-193 (“Overall, the increased frequency of exceedance of temperature thresholds under the No Action Alternative could increase the potential for adverse effects on Green Sturgeon in the Sacramento and Feather rivers relative to the Second Basis of Comparison.”). The failure to explain the significance of impacts precludes decisionmakers from complying with their charge under NEPA.

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Third, Chapter 9’s Impact Analysis fails to appropriately note the relative significance of impacts from CVP and SWP operations compared to impacts from other stressors. Although modifications of CVP and SWP operations to adjust outflow and reduce entrainment have been the primary method of addressing problems with Bay-Delta ecosystem management, there is little evidence that such modifications have been effective for improving or protecting the health of listed species or their habitat.<sup>9</sup> The populations of the Delta Smelt and other listed species have declined in the more than six years since the RPAs from the 2008 and 2009 BiOps began being implemented. *See, e.g.*, Draft EIS at 9-63. Chapter 9 does not analyze one of likely reasons for this fact, e.g. the low relative importance of CVP and SWP operations on the status of the species in the context of multiple stressors. Chapter 9 acknowledges the existence of other stressors for listed species, but does not explain which of these stressors are of equal or greater significance to species’ population levels versus CVP and SWP projects, or explain the scale of flow variations resulting from such modifications versus the natural flow variations due to the Bay-Delta tidal system.<sup>10</sup> NMFS’s 2014 Recovery Plan for the Evolutionarily Significant Units

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<sup>9</sup> The Authority, Westlands, and the Exchange Contractors incorporate their September 2012 and July 2014 comments on related topics to provide further support for the points in these comments.  
<sup>10</sup> In addition to discussing the relative significance of fluctuations in flow due to CVP and SWP operations versus the tide, the final EIS should expressly acknowledge the limits in the available scientific data related to effects of

of Sacramento river Winter-Run Chinook Salmon and Central Valley Spring-Run Chinook Salmon and the Distinct Population Segment of California Central Valley Steelhead provides a helpful resource for such comparisons. NMFS 2014 (attached) at A-1 (showing relative significance of entrainment versus harvest, predation, and other stressors).

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Finally, Chapter 9 is problematic because it seems to purposefully avoid using recent science that would tend to show the reduced relative importance of CVP and SWP operations on listed species. For example, Chapter 9 contains the following discussion regarding X2 and Delta Smelt:

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The overlap of the low salinity zone (or X2) with the Suisun Bay/Marsh is believed to lead to more favorable growth and survival conditions for Delta Smelt in fall. (Baxter et al. 2010; Feyrer et al. 2011). To evaluate fall abiotic habitat availability for Delta Smelt under the alternatives, X2 values (in km) simulated in the CALSIM II model for each alternative were averaged over September to December, and compared for differences. There are uncertainties and limitations associated with this approach, e.g., it does not evaluate other factors that influence the quality or quantity of habitat available for Delta Smelt (e.g., turbidity, temperature, food availability), nor does it take into account the relative abundance of Delta Smelt that might benefit from the available habitat in the simulated X2 areas, in any given year. Other scientists have developed and described life cycle models to evaluate Delta Smelt population responses to changes in flow-related variables (e.g., Maunder and Deriso 2011; Rose et al. 2013 a, b; Reed et al. 2014), but these life cycle modeling approaches were not selected for use in the current study. In this study, simulated fall X2 values are used as a tool to compare the alternatives, as one of the factors that would indicate suitable habitat to benefit Delta Smelt.

Draft EIS at 9-115. This approach has acknowledged limitations, and is based on outdated science (e.g. Baxter et al. 2010, Feyrer et al. 2011). Yet, Reclamation announces that it does not use more recent life cycle modeling approaches in the Draft EIS, but does not explain why. Would the more recent studies produce different conclusions? More detail is required.

In sum, the Draft EIS's description of the affected environment of and impacts to fish and aquatic resources from the alternatives is flawed. Significant revision is required in order to enable readers of the final environmental document to understand and evaluate the real impacts of the alternatives on listed aquatic species.

additional outflow. Given the many stressors and changes in the Bay-Delta ecosystem, there is significant uncertainty about the potential benefits of increased outflow for Delta Smelt, longfin smelt, and several other species including white sturgeon and green sturgeon. (Delta Science Program 2014.) Numerous studies have concluded that more flow is not necessarily the solution in highly altered systems. (Poff et al. 1997; Hart and Finelli 1999; Bunn and Arthington 2002; Poff and Zimmerman 2010.) Efficient or targeted use of flow is more likely to attain specific ecological benefits, particularly when paired with additional actions to address non-flow stressors.

**III. RECLAMATION MUST SIGNIFICANTLY REVISE THE EIS TO MEET ITS NEPA OBLIGATIONS**

To date, Reclamation has failed to utilize the NEPA process for its intended purpose – to infuse environmental considerations into its decision and inform decision makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts to the human environment. As the Council on Environmental Quality’s regulations explain:

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The primary purpose of an environmental impact statement is to serve as an action-forcing device to insure that the policies and goals defined in the Act are infused into the ongoing programs and actions of the federal government. It shall provide full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment. . . . Statements shall be concise, clear, and to the point, and shall be supported by evidence that the agency has made the necessary environmental analyses. An environmental impact statement is more than a disclosure document. It shall be used by federal officials in conjunction with other relevant material to plan actions and make decisions.

40 C.F.R. § 1502.1. The Draft EIS fails to achieve this primary purpose.

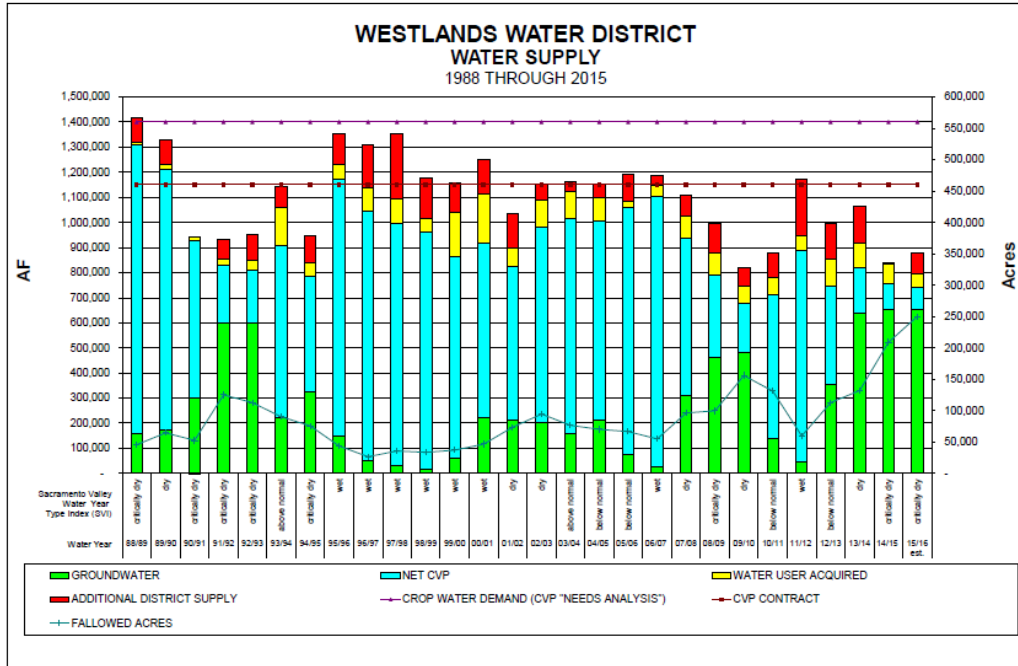
As detailed above, Reclamation must significantly revise the Draft EIS to satisfy its NEPA obligations. The Authority, Westlands, and the Exchange Contractors urge Reclamation to perform the requisite analyses and disclosures to inform decisionmakers and the public before a decision is made regarding possible modifications to CVP and SWP operations. Reclamation’s upcoming decision has the potential to have significant environmental consequences throughout California and exacerbate the impacts of the state’s on-going drought. In the face of such an important decision, it is critical the Reclamation perform a thorough NEPA analysis, one that critically examines alternatives and mitigation measures that can minimize or avoid impacts to the human environment.



EXHIBIT C

WESTLANDS WATER DISTRICT WATER SUPPLY GRAPH

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\\wld.local\freeno\Resources\Files\WS-Surface\Water Supply History\Total Historical Deliveries (NET CVP) Classification.xls

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**Cited References**

Auffhammer, M., Foreman, K., and Sunding, D. 2014. Turning Water Into Jobs: The Impact of Surface Deliveries on Farm Employment and Fallowing in California's San Joaquin Valley. Submitted for publication.

Bunn, S.E. and Arthington, A.H. 2002. Basic principles and ecological consequences of altered flow regimes for aquatic biodiversity. *Environmental Management* 30: 492-507.

California Department of Water Resources. 2014. Public Update for Drought Response, [http://www.water.ca.gov/waterconditions/docs/DWR\\_PublicUpdateforDroughtResponse\\_GroupdwaterBasins.pdf](http://www.water.ca.gov/waterconditions/docs/DWR_PublicUpdateforDroughtResponse_GroupdwaterBasins.pdf).

California Department of Water Resources. 2015. Drought Brochure, [http://www.water.ca.gov/waterconditions/docs/DWR\\_DroughtBroch\\_070815-web.pdf](http://www.water.ca.gov/waterconditions/docs/DWR_DroughtBroch_070815-web.pdf).

Delta Science Program. 2014. Workshop on Delta Outflows and Related Stressors - Panel Summary Report, <http://deltacouncil.ca.gov/sites/default/files/documents/files/Delta-Outflows-Report-Final-2014-05-05.pdf>.

Farr, T.G., Jones, C., and Liu, Z. 2015. Progress Report: Subsidence in the Central Valley, California. NASA, Jet Propulsion Laboratory California Institute of Technology, [http://water.ca.gov/groundwater/docs/NASA\\_REPORT.pdf](http://water.ca.gov/groundwater/docs/NASA_REPORT.pdf).

Feyrer, F., Newman, K., Nobriga, M., and Sommer, T. 2011. Modeling the effects of future outflow on the abiotic habitat of an imperiled estuarine fish. *Estuaries and Coasts* 34:120-128.  
Hart, D.D. and Finelli, C.M. 1999. Physical-biological coupling in streams: the pervasive effects of flow on benthic organisms. *Annual Review of Ecology and Systematics* 30: 363 -395.

Kimmerer, W.J., MacWilliams, M.L., and Gross, E.S. 2013. Variation of fish habitat and extent of the low-salinity zone with freshwater flow in the San Francisco Estuary. *San Francisco Estuary and Watershed Science* 11(4).

National Marine Fisheries Service. 2014. Recovery Plan for the Evolutionary Significant Units of Sacramento River Winter-Run Chinook Salmon and Central Valley Spring-Run Chinook Salmon and the Distinct Population Segment of California Central Valley Steelhead.

National Research Council. 2004. Endangered and threatened fishes in the Klamath River Basin: causes of decline and strategies for recovery. The National Academies Press.

National Research Council. 2010. A scientific assessment of alternatives for reducing water management effects on threatened and endangered fishes in California's Bay Delta. The National Academies Press.

Appendix 1C: Comments from Regional and Local Agencies and Responses

Ortega, Ricardo. 2015. Declaration of Ricardo Ortega in Support of Plaintiffs San Luis & Delta-Mendota Water Authority and Westlands Water District's Motion for Preliminary Injunction and Temporary Restraining Order, *San Luis & Delta-Mendota Water Authority v. Jewell*, E.D. Cal. Case No. 1:15-cv-01290.

Poff, N.L., Allan, J.D., Bain, M.B., Karr, J.R., Prestegard, K.L., Richter, B., Sparks, R., and Stromberg, J. 1997. The natural flow regime: a paradigm for river conservation and restoration. *BioScience* 47:769-784.

Poff, N.L. and Zimmerman, J.K. 2010. Ecological responses to altered flow regimes: a literature review to inform the science and management of environmental flows. *Freshwater Biology* 55: 194–205.

Salazar, K., and Looke, G. Letter to Sutley, N. 2010. California Bay-Delta Joint Initiative.

United States Department of the Interior, Council on Environmental Quality, United States Department of Agriculture, United States Department of Commerce, United States Environmental Protection Agency, United States Department of the Army. Interim Federal Action Plan Status Update for the California Bay-Delta: 2011 and Beyond, <https://www.doi.gov/sites/doi.gov/files/migrated/news/pressreleases/upload/Final-Status-Update-2010-12-15.pdf>.

United States Bureau of Reclamation. 2015. Summary of Water Supply Allocations.

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July 14, 2015

**BY EMAIL: GKRZYS@USBR.GOV**

Mr. Greg Krzys  
Bureau of Reclamation, Bay-Delta Office  
801 I Street, Suite 140  
Sacramento, CA 95814-2536

Re: Second Administrative Draft Environmental Impact Statement for the Coordinated Long-term Operation of the Central Valley Project and State Water Project

Dear Mr. Krzys:

The San Luis & Delta-Mendota Water Authority and Westlands Water District (together "Public Water Agencies") appreciate the opportunity to comment on the second Administrative Draft Environmental Impact Statement for the Coordinated Long-term Operation of the Central Valley Project and State Water Project ("Second Admin Draft EIS"). The Second Admin Draft EIS improves upon the last draft, which the Public Water Agencies commented on in 2013.<sup>1</sup> However, the Public Water Agencies have continuing, significant concerns, and suggestions for further improvements that are necessary to ensure compliance with the National Environmental Policy Act ("NEPA").

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In its coming Record of Decision, the United States Bureau of Reclamation ("Reclamation") will be making policy decisions on a matter of vital importance to the future of protected species and millions of people and acres of prime farm land. Those must be new and thoughtful decisions, not reflexive re-adoption of the decisions it made some seven years ago to implement the reasonable and prudent alternatives in the existing biological opinions. Those past policy decisions relied upon science that is now outdated, and were not informed by the critical social and environmental impacts realized over the past four years of drought and changes in regulatory approaches. And, those past decisions were illegal, because they were made without the benefit of any environmental review under NEPA.

<sup>1</sup> The Public Water Agencies submitted written comments on June 28, 2012 in response to the notice of intent and scoping, and on May 3, 2013 in response to an earlier version of an administrative draft environmental impact statement. The Public Water Agencies incorporate those prior comments, including all attachments, in these comments.

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The supporting analysis and justification for Reclamation’s new choices, now informed by NEPA review, must be thorough and transparent. To the fullest extent possible, the information and presentation in the final environmental impact statement should inform the public and policy makers of the necessity for and expected benefit of any changes to CVP and SWP operations to meet the requirements of the federal Endangered Species Act, the available alternatives, and the trade-offs among the available alternatives. As the Council on Environmental Quality’s regulations explain:

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The primary purpose of an environmental impact statement is to serve as an action-forcing device to insure that the policies and goals defined in the Act are infused into the ongoing programs and actions of the federal government. It shall provide full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment. . . . Statements shall be concise, clear, and to the point, and shall be supported by evidence that the agency has made the necessary environmental analyses. An environmental impact statement is more than a disclosure document. It shall be used by federal officials in conjunction with other relevant material to plan actions and make decisions. (40 CFR § 1502.1.)

The Public Water Agencies’ comments are intended to help Reclamation prepare an EIS that serves this purpose.

The Public Water Agencies were first provided access to the Second Admin Draft EIS on June 30, 2015. Reclamation has requested comments by July 14, 2015. Given the length of the document, including numerous supporting technical appendices, two weeks is insufficient time to complete a thorough review or provide detailed comments. Therefore, in this letter the Public Water Agencies provide only the following brief, general comments. The Public Water Agencies will provide more detailed comments by the deadline for public comment, which we understand will be September 29, 2015.

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First, the Public Water Agencies note that the No Action Alternative in the Second Admin Draft EIS includes implementation of the reasonable and prudent alternatives from the biological opinions. This is a serious defect, as we explained in comments on the prior draft. Reclamation’s decisions to implement the reasonable and prudent alternatives without doing any NEPA review were illegal. Reclamation cannot cure its violations of NEPA by doing an analysis that assumes its past decisions to adopt the reasonable and prudent alternatives were instead lawful, which it effectively does when it rationalizes that implementing the reasonable and prudent alternatives “represents a continuation of existing policy and management direction” and therefore should be included in the No Action Alternative. (Second Admin Draft EIS at 3-3.)

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The Second Basis of Comparison in the Second Admin Draft EIS is closer to an appropriate No Action Alternative, because it does not include implementation of the reasonable and prudent alternatives. However, the Second Admin Draft EIS does not use the Second Basis of Comparison as a No Action Alternative, and disregards it in much of its NEPA analysis. The Second Basis of Comparison is “included in [the] EIS for information purposes only.” (Second Admin Draft EIS at 4-1, 4-13). The document confirms that continued implementation of the

reasonable and prudent alternatives will cause huge reductions in CVP and SWP water deliveries compared to operations under the Second Basis of Comparison. (See *id.* at 5-91 – 5-94 [tables showing reduced water deliveries].) It estimates that on a long-term annual average, the reasonable and prudent alternatives will reduce CVP water deliveries by 332,000 acre-feet annually, and reduce SWP water deliveries by 773,000 acre-feet annually. (*Id.*) Yet, the Second Admin Draft EIS fails to identify even a single mitigation measure that could help mitigate these water supply impacts. Instead, it states: “Mitigation measures were not developed for reductions in surface water resources under the alternatives as compared to the Second Basis of Comparison because this analysis was included in this EIS for information purposes only.” (*Id.*, at 5-169.) This choice to not identify mitigation for the massive losses of water supply that will indisputably result from implementing the reasonable and prudent alternatives is inexplicable, and an obvious violation of NEPA. The Public Water Agencies again urge Reclamation to reconsider the definition of the No Action Alternative, because staying on the current path will not cure Reclamation’s NEPA violation.

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Second, the Second Admin Draft EIS does not allow for an easy comparison of the relative merits of the various alternatives analyzed, and the trade-offs involved in choosing one alternative over another. In its current form, it separately analyzes and summarizes the environmental consequences of each alternative for each resource category, in chapters 5 through 21. That separate treatment of resource categories may be fine for organizational purposes, but to better inform the public and policy makers the environmental impact statement should also have a section or chapter that synthesizes the overall results. The existing Chapter 3 describes each alternative considered, but it does not analyze or compare the relative environmental consequences and the trade-offs among alternatives. Table 22.1 provides a start on a comparison among alternatives, but is deficient because it does not include the Second Basis of Comparison, does not include any information regarding fish and aquatic resources, and is too brief and general to meaningfully inform decisions. Gathering up the overall consequences of each alternative and analyzing and highlighting the trade-offs involved would benefit both Reclamation and the public in understanding the choices to be made. The Second Admin Draft EIS should be revised to include an analysis and comparison among all the alternatives in a single section or chapter.

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Third, in at least some cases the Second Admin Draft EIS describes the “environmental consequences” of alternatives as differences in expected conditions without addressing the materiality of those differences. For example, Chapter 9 (regarding Fish and Aquatic Resources) describes differences in various parameters, e.g. water temperatures or flow, that are expected to result from alternative project operations. But Chapter 9 does not assess or describe the materiality of the projected differences for the populations of affected fish species. Are the differences in projected conditions material? What criteria will be used to determine whether a particular difference is material? If the expected relative benefit of a particular operation intended to protect fish populations is minimal, that information would usefully inform Reclamation’s ultimate decision on whether to adopt that measure, especially if that measure significantly impairs other project purposes. If the materiality of the differences in conditions is unknown, that absence of information should be expressly noted. A synthesis and presentation of information regarding the materiality of potential changes in operations for fish populations, or the lack of such information, would help inform the public and decision makers of the expected benefits or detriments of alternative operations.

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Fourth, the Second Admin Draft EIS is deficient because it lacks an analysis and explanation of the substantial scientific uncertainties underlying the conclusions and prescriptions in the biological opinions. (See 40 CFR § 1502.22.) The available science falls well short of dictating any particular decision or specific requirement, e.g., a particular limit on negative OMR flows for delta smelt, as essential to the continued survival of the species. As a National Research Council report explained about that OMR requirement: “there is substantial uncertainty regarding the amount of flow that should trigger a reduction in exports. In other words, the specific choice of the negative flow threshold for initiating the RPA is less clearly supported by scientific analyses. The biological benefits and the water requirements of this action are likely to be sensitive to the precise values of trigger and threshold values. There clearly is a relationship between negative OMR flows and mortality of smelt at the pumps, but the data do not permit a confident identification of the threshold values to use in the action, and they do not permit a confident assessment of the benefits to the population of the action. As a result, the implementation of this action needs to be accompanied by careful monitoring, adaptive management, and additional analyses that permit regular review and adjustment of strategies as knowledge improves.”<sup>2</sup> The Second Admin Draft EIS should be revised to acknowledge and define that gap in knowledge for decision makers, and the public. Even with the benefit of the most recent data available, Reclamation’s coming decisions will be predominantly policy choices made in the context of significant scientific uncertainty.

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Finally, the changes the Public Water Agencies recommend even in this brief comment letter will require substantial revision of the Second Admin Draft EIS, and more detailed comments during the public comment period will likely raise yet additional issues. Under the current remand schedule in the delta smelt case, Reclamation’s Record of Decision is due by December 1, 2015. That likely will not allow enough time to make needed revisions. The Public Water Agencies are open to an extension of the current remand deadline, which the court would of course have to approve. We invite further discussion with Reclamation on this issue. In the meantime, however, Reclamation should proceed with the release of the document for public comment.

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Thank you for your consideration of these comments.

Sincerely,



Daniel G. Nelson  
Executive Director  
San Luis & Delta-Mendota Water Authority



Thomas Birmingham  
General Manager  
Westlands Water District

<sup>2</sup> National Research Council (2012). *Sustainable Water and Environmental Management in the California Bay-Delta*. Washington DC: National Academies Press, at pp. 210-211.

Appendix 1C: Comments from Regional and Local Agencies and Responses

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May 3, 2013

BY EMAIL: BCNELSON@USBR.GOV

Mr. Ben Nelson  
Bureau of Reclamation, Bay-Delta Office  
801 I Street, Suite 140  
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Re: Administrative Draft Environmental Impact Statement for the Remanded  
Biological Opinions on the Coordinated Long-term Operation of the  
Central Valley Project and State Water Project

Dear Mr. Nelson:

The San Luis & Delta-Mendota Water Authority and Westlands Water District (together "Public Water Agencies") appreciate the opportunity to comment in response to the United States Bureau of Reclamation's ("Reclamation") request for interested parties to review and comment on the Administrative Draft Environmental Impact Statement for the Remanded Biological Opinions on the Coordinated Long-term Operation of the Central Valley Project and State Water Project ("Draft EIS").

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The Draft EIS suffers from fundamental and serious deficiencies, and requires substantial revision to provide meaningful environmental analysis for the benefit of the public and policy makers, and comply with the requirements of the National Environmental Policy Act ("NEPA"). At least in part, the deficiencies in the Draft EIS appear to be a result of Reclamation's judgment that it could not conduct a more robust and complete analysis within the time remaining for completion of the remand in the *Consolidated Delta Smelt Cases*, originally set for December 1, 2013. On April 9, 2013, however, the federal district court granted Reclamation an extension of time to complete the remand in that case, as well as in the related *Consolidated Salmon Cases*. The court provided that, so long as Reclamation shows progress with the Collaborative Science and Adaptive Management Process and the Endangered Species Act ("ESA") consultation, the court would allow Reclamation until December 1, 2016 in the *Consolidated Delta Smelt Cases*, and until April 29, 2019 in the *Consolidated Salmon Cases* to complete NEPA review and consultations under section 7 of the ESA.

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These extensions are welcome news, and provide Reclamation the time and opportunity to make the substantial revisions necessary to bring the Draft EIS into compliance with NEPA. It is vitally important that Reclamation's decision regarding what actions it must take to meet its obligations under the ESA be informed by a sound and complete environmental impact

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Appendix 1C: Comments from Regional and Local Agencies and Responses

statement. Such an environmental impact statement will assist Reclamation in achieving a balance between the actions Reclamation will undertake to comply with the ESA and the manner in which Reclamation will operate the Central Valley Project to meet its various purposes, including delivery of water to the Public Water Agencies.

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Given the additional time the Court has now granted Reclamation, we urge Reclamation to undertake the following actions:

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- Prepare a new Biological Assessment for the ESA consultation. A new Biological Assessment is necessary to reflect changes to project operations and new scientific data in the years since the last consultation.
- Exclude from the No Action Alternative under NEPA the major changes to project operations required by the existing biological opinions. Reclamation should do so both because many of those requirements have been invalidated, and because the environmental effects of those measures should be assessed as part of the NEPA analysis. Including the biological opinions in the No Action Alternative masks their impact, and is contrary to the district court's ruling that NEPA analysis must be completed before Reclamation may adopt those measures.
- Use NEPA review as an opportunity to better inform Reclamation's judgment about how it can meet its obligations under ESA section 7 with respect to Central Valley Project operations, including whether project operations are likely to jeopardize listed species. Assuming Reclamation concludes that changes to operations are necessary to comply with the ESA, it should explore alternatives that will minimize impacts to water supply. Reclamation should not begin its analysis by presuming that project operations jeopardize listed species, or that the existing reasonable and prudent alternatives are either necessary or efficacious.
- Consider and analyze what changes to Central Valley Project operations are necessary, as opposed to sufficient, to ensure that operations are not likely to jeopardize listed species. Reclamation should not be taking actions that reduce water supply unless those actions are necessary to meet the no-jeopardy mandate in ESA section 7.
- In the environmental impact statement, expressly acknowledge the high level of scientific uncertainty underlying the conclusions and requirements of the existing biological opinions, and factor that uncertainty into its analysis of alternatives. To the extent Reclamation proposes actions intended to benefit listed species despite that significant uncertainty, based on a precautionary approach, it should expressly acknowledge it is doing so and identify the trade-offs involved, including lost water supply and socioeconomic impacts.
- Conduct quantitative analyses of the potential impacts of each alternative. The entirely qualitative analysis in the Draft EIS is inadequate.
- Proceed concurrently with the ESA consultation and NEPA review; each process should inform the other.

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Appendix 1C: Comments from Regional and Local Agencies and Responses

Additional and more detailed comments are attached to this letter as Exhibit B. Please note that these comments should not be considered an exhaustive list of all the defects and problems we see in the Draft EIS. Instead, this is our effort, in the limited time allowed, to identify some basic needed changes to the Draft EIS as Reclamation reconsiders its approach in light of the extension of time for completing the remand.

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Also, the Public Water Agencies previously submitted a comment letter in response to Reclamation's Notice of Intent and Scoping which provides additional explanation of the NEPA analysis Reclamation should be doing on remand. The Draft EIS is inconsistent with many of the suggestions in that letter. As Reclamation re-evaluates its approach to the environmental impact statement, it should reconsider those scoping comments. For your ease of reference, a copy of that letter is attached as Exhibit C.<sup>1</sup>

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Finally, the Public Water Agencies hope to work in a cooperative manner with Reclamation to ensure that the final environmental impact statement addresses the significant issues that arise from potential modifications of Central Valley Project operations pursuant to the ESA, and that the environmental impact statement includes an appropriate range of alternatives and a robust and complete impact analysis.<sup>2</sup> As the ESA consultation progresses, including particularly preparation of a new biological assessment, Reclamation should be able to concurrently define a proposed action and additional alternatives to be included in its analysis. Reclamation's analysis ultimately must foster a workable, environmentally sound plan for continued operations of the Central Valley Project that protects and restores the socioeconomic vitality of, and minimizes the adverse environmental impacts in, the regions the Central Valley Project serves, while ensuring legally and scientifically supportable, reasonable, and effective protection mechanisms for the listed species.

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Thank you for your consideration of these comments.

Sincerely,



Daniel G. Nelson  
Executive Director  
San Luis & Delta-Mendota Water Authority



Thomas Birmingham  
General Manager  
Westlands Water District

<sup>1</sup> Exhibit C, Public Water Agencies, Comment Letter Regarding Notice of Intent and Scoping under the National Environmental Policy Act on Remanded Biological Opinions on the Coordinated Long-term Operation of the Central Valley Project and State Water Project (June 28, 2012).

<sup>2</sup> The Public Water Agencies recognize the close relationship between the NEPA process and the related ESA consultation process. As explained in the Reclamation Stakeholder Engagement Process for Section 7 ESA Consultation and NEPA Compliance on the Remanded Biological Opinions on the Coordinated Long-term Operation of the Central Valley Project and State Water Project, issued June 2, 2012 (p. 2), "Reclamation anticipates a free and complete flow of information between the NEPA and Section 7 consultation processes, with each informing the other."

**EXHIBIT A**

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**San Luis & Delta-Mendota Water Authority Member Agencies**

The Authority's members are: Banta-Carbona Irrigation District; Broadview Water District; Byron Bethany Irrigation District (CVPSA); Central California Irrigation District; City of Tracy; Columbia Canal Company (a Friend); Del Puerto Water District; Eagle Field Water District; Firebaugh Canal Water District; Fresno Slough Water District; Grassland Water District; Henry Miller Reclamation District #2131; James Irrigation District; Laguna Water District; Mercy Springs Water District; Oro Loma Water District; Pacheco Water District; Pajaro Valley Water Management Agency; Panoche Water District; Patterson Irrigation District; Pleasant Valley Water District; Reclamation District 1606; San Benito County Water District; San Luis Water District; Santa Clara Valley Water District; Tranquillity Irrigation District; Turner Island Water District; West Side Irrigation District; West Stanislaus Irrigation District; Westlands Water District.

**EXHIBIT B**

**DETAILED COMMENTS REGARDING DRAFT EIS**

**I. RECLAMATION NEEDS TO REEVALUATE ITS OBLIGATIONS ON REMAND**

The NEPA review provided in the Draft EIS is inconsistent with the district court’s rulings in the *Consolidated Smelt Cases* and *Consolidated Salmonid Cases* and with Reclamation’s obligations on remand. In recent years, changes to project operations that purportedly were “necessary” to comply with the ESA have severely impaired the water supply function of the two projects, with disastrous consequences. Reclamation’s present NEPA review should therefore be keenly focused on identifying actions it and the Department of Water Resources (“DWR”) can take to better serve the water supply purposes of the projects while still meeting the requirements of the ESA. Reclamation’s analysis must consider what effect the coordinated operations of the CVP and SWP actually have on species survival and recovery, what measures are proposed to reduce or compensate for such effects, what the data show about the likely efficacy of those measures, and what other effects those measures will cause including through reductions of water supply. That analysis should distinguish between actions that are necessary to comply with the mandates of the ESA (i.e., necessary to avoid jeopardy or adverse modification to critical habitat), and other actions that may provide some additional protection or benefit for listed species, but are not necessary to comply with the ESA.

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**A. Reclamation And The Fisheries Agencies Must Engage In A Fundamental Reanalysis In Performing Concurrent Consultation Under The ESA And Environmental Review Under NEPA**

The Draft EIS was prepared in response to rulings by the district court in the *Consolidated Delta Smelt Cases* and *Consolidated Salmonid Cases*. The court found that the existing biological opinions (“BiOps”) regarding continued operation of the CVP and SWP are unlawful, and that new biological opinions are required. The court further found that Reclamation violated NEPA when it adopted and implemented major changes to project operations pursuant to those unlawful biological opinions, changes that caused significant adverse effects on the quality of the human environment, without doing any NEPA review.

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The district court ordered a remand schedule that provides for concurrent re-consultation under the ESA and environmental review under NEPA. Under the remand schedule, the FWS and the National Marine Fisheries Service (“NMFS”) (collectively, “fisheries agencies”) are required to provide Reclamation with new draft biological opinions, which Reclamation can then use in performing its review under NEPA. This remand schedule is intended to allow an exchange of information between Reclamation and the fisheries agencies, to assist in preparing new biological opinions consistent with the requirements of the ESA and in performing NEPA review.

During remand, Reclamation, FWS, and NMFS must engage in a fundamental reanalysis of the effect of CVP and SWP operations on the listed species, and the necessity for and efficacy of any measures intended to address such effects. Reclamation must now reconsider whether

and how the continued operations of the CVP and SWP should be modified to ensure compliance with the ESA. Before it can finally decide that issue, Reclamation must complete a new consultation under section 7 of the federal ESA regarding each listed species affected by project operations. Such consultation will require Reclamation and the California Department of Water Resources ("DWR") to prepare a new biological assessment describing the proposed CVP and SWP operations. The proposed project operations will be materially different from the operations described in the 2008 biological assessment. The new biological assessment and new biological opinions must also reflect new scientific data that have become available since 2008.

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The fisheries agencies must provide new biological opinions regarding whether project operations are likely to jeopardize the listed species, to inform Reclamation's decision as action agency regarding whether its proposed operations meet the requirements of ESA section 7. Reclamation should not have any expectation that after reconsultation the next biological opinions will necessarily be similar to the last biological opinions in their conclusions or in any measures they may impose. The Public Water Agencies submit that a scientifically rigorous analysis of the effects of CVP and SWP operations in accordance with ESA section 7 may well conclude that operations are not likely to jeopardize the listed species or adversely modify their critical habitat.

If NMFS or FWS does issue a jeopardy biological opinion, then the biological opinion must provide a Reasonable and Prudent Alternative to the proposed action, recommending modifications to project operations that are necessary to avoid jeopardy to the species. Reclamation must consider those new opinions, and as action agency make a determination of its ESA obligations. In performing these tasks, all the federal agencies should carefully consider the data and analysis of impacts and alternatives produced through the NEPA process, including new available scientific data and other changes since 2008. The task on remand is not to simply analyze the RPAs of the invalidated BiOps, but rather to analyze anew what, if any, modifications to project operations necessary to avoid jeopardy to the species. Reclamation and the fish agencies must determine if any modifications to project operations are necessary to avoid jeopardy to the species and if so, Reclamation and the fish agencies must develop a reasonable range of modifications to project operations that would avoid jeopardy and also meet the goals of continued project operations.

**B. The Scope Of Reclamation's NEPA Review Necessarily Depends On The New ESA Consultation And Any Proposed Modifications To Project Operations**

In the *Consolidated Delta Smelt Cases* and *Consolidated Salmonid Cases*, the district court concluded that Reclamation failed to satisfy its obligations under NEPA because it failed to analyze the environmental impacts of proposed modifications to project operations before accepting and implementing those modifications. In the *Consolidated Delta Smelt Cases*, the district court ruled that Reclamation's provisional acceptance and implementation of the 2008 Delta Smelt BiOp and its RPA constituted "major federal action" because those actions represented a significant change to the operational status quo of the coordinated operations of the CVP and SWP. (Memorandum Decision re Cross Motions for Summary Judgment on NEPA Issues (Nov. 13, 2009), Doc. 399 at 33, 42.)

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The common thread in both decisions is that Reclamation must analyze under NEPA the potential impacts of any proposal or plan to modify the longstanding and ongoing coordinated operations of the CVP and SWP before making any such changes to CVP and SWP operations pursuant to an ESA section 7 consultation. Thus, the ultimate scope of Reclamation’s task under NEPA depends upon the initial outcomes of the ESA section 7 consultation among Reclamation, FWS and NMFS. If, after consultation with FWS and NMFS, Reclamation concludes that project operations will not jeopardize the listed species or adversely modify their critical habitat, then no major changes to the regime governing project operations should be required, and hence there would be no significant effects on the existing human environment triggering the need for an EIS. In that circumstance, an environmental assessment would likely suffice to meet NEPA’s requirements.

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The Draft EIS states that Reclamation:

prepared this EIS as ordered by the United States District Court for the Eastern District of California (District Court). The reason given by the District Court is to evaluate potential modifications to the continued long-term operation of the CVP, in coordination with the operation of the SWP, before Reclamation accepts and implements Reasonable and Prudent Alternatives (RPAs) included in the biological opinions on long-term operation of the CVP and SWP which will be issued by the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) pursuant to the Federal Endangered Species Act.

Draft EIS, at p. 1-1. The Draft EIS also states: “[t]he NEPA process analyzes the effects of modifications to the coordinated long-term operation of the CVP and SWP that are likely to avoid jeopardy to listed species and destruction or adverse modification of designated critical habitat.” *Id.* at p. 1-9.

These statements misconstrue Reclamation’s task on remand and also make presumptions regarding the results of the on-going section 7 consultation process. The FWS and NMFS have not made any new jeopardy determinations regarding the effects of project operations. Therefore, at this time, Reclamation, FWS, and NMFS have not yet completed the necessary analysis to evaluate the effects of project operations on listed species or to determine whether modifications to project operations are necessary to avoid jeopardy to listed species or adverse modifications to their critical habitat. Reclamation’s NEPA analysis should not presume at the outset the answer to the question it is supposed to address.

**C. Reclamation Should Consider How It Will Develop A Thorough And Complete Joint EIS Given The Different Remand Schedules**

Reclamation must complete its ESA consultation and NEPA review by the new deadlines ordered by the district court.<sup>1</sup> These deadlines differ between the two cases. The respective deadlines, assuming the agencies show the progress required by the Court, are:

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<sup>1</sup> See *Consolidated Smelt Cases*, Docs. 1106, 884; *Consolidated Salmonid Cases*, Docs. 739, 655.

Action Item	Consolidated Delta Smelt Cases	Consolidated Salmonid Cases
Draft BiOp	Transmitted Dec. 14, 2011	Oct. 1, 2017
Draft EIS/NEPA	No deadline set by Court	Within 6 months of receiving draft BiOp
Final EIS/NEPA	Within 61 months of Dec. 14, 2011 [Jan. 14, 2017]	Feb. 1, 2019
Final BiOp	Dec. 1, 2016	Feb. 1, 2019
Record of Decision	Within 61 months of Dec. 14, 2011 [Jan. 14, 2017]	April 29, 2019

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It appears from the Draft EIS that Reclamation intends to analyze the effects of any changes to CVP and SWP operations for both the delta smelt and salmonid species in a single EIS. The Public Water Agencies acknowledge there may be benefits to performing a joint NEPA review and analysis of the impacts associated with potential project operations to protect both delta smelt and salmonid species. However, the Public Water Agencies are concerned that the differences between the two remand schedules may make it difficult for Reclamation to prepare an adequate joint EIS. Under the remand schedules set by the court in the two cases, the entire remand process related to delta smelt must be completed by January, 2017, while a draft salmonid biological opinion is not due to be completed until October 1, 2017. Hence, unless Reclamation and NMFS complete the remand required by the judgment in the *Consolidated Salmonid Cases* more quickly than the court's schedule would require, a change in schedule would likely be necessary to accommodate a combined analysis integrating all the listed species. Under no circumstances should the January 2017 deadline in the *Consolidated Smelt Cases* be relied upon as an excuse for preparing a qualitative and superficial NEPA review and analysis related to salmonids.

The remand schedules allow Reclamation, FWS, and NMFS more than adequate time to complete the full analyses required under NEPA and the ESA. The court's requirement that the agencies meet dates certain does not excuse an abbreviated, out-dated or incomplete analysis. Integration of NEPA review and ESA consultation will require "close and careful coordination and cooperation between Reclamation" and the fisheries agencies. Reclamation's NEPA Handbook (Feb. 2012) ("NEPA Handbook"), at p. 3-22.

**II. THE "PROPOSED ACTION" NEEDS TO BE IDENTIFIED**

The Draft EIS does not clearly identify the "proposed action." The Department of Interior's regulations for implementation of NEPA ("Interior's NEPA Regulations") define the "proposed action" as "the bureau activity under consideration" and the regulations state that the "proposed action" must be "clearly described in order to proceed with NEPA analysis." 43 C.F.R. § 46.30. Interior's NEPA Regulations mandate that an EIS include a "description of the proposed action." 43 C.F.R. § 46.415(a)(2).

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Apparently, Reclamation has not yet decided upon a proposed action. The Draft EIS states:

Concurrent with preparation of this EIS, Reclamation initiated preparation of the consultation package to be submitted to USFWS and NMFS for the remand of the USFWS BO and the NMFS BO. Information presented in this Draft EIS will be used to inform Reclamation during the development of the Proposed Action that will be submitted as part of the consultation package, which will serve as a biological assessment for the purposes of Section 7 consultation.

Draft EIS, at p. 1-10. This statement suggests that the “proposed action” has yet to be defined because it is still in “development.” Reclamation must decide upon a proposed action for the NEPA process. For example, unless and until Reclamation identifies and describes the “proposed action” it is difficult to imagine how Reclamation can develop a reasonable range of alternatives to the proposed action.

The Draft EIS describes the development of the “2013 Project Description” but fails to include the “2013 Project Description.” Draft EIS, at pp. 3-4 – 3-6. Nor does the Draft EIS otherwise describe or define the “proposed action” that is being analyzed in the Draft EIS. Under the description of “Alternative 2”, the Draft EIS states: “[t]he Notice of Intent identified a “preliminary proposed action” that would include the 2013 Project Description actions and the operational components of the RPAs in the USFWS BO and NMFS BO.” Draft EIS, at p. 3-22. It is unclear from this statement whether “Alternative 2” is considered the “proposed action.” It would be improper to include the RPAs of the invalidated BiOps in the proposed action. Reclamation does not yet know the outcome of re-consultation, and should not presume at this point that *any* reasonable and prudent alternatives are needed to avoid jeopardizing the continued existence of listed species or the adverse modification of designated critical habitat. Furthermore, many of the specific components of the 2008 FWS and 2009 NMFS RPAs were found unlawful, and hence are poor candidates for inclusion in a proposed action.

The Public Water Agencies submit that a scientifically rigorous analysis of the effects of CVP and SWP operations may well conclude that those operations do not jeopardize the listed species or adversely modify their critical habitat. Accordingly, the Public Water Agencies suggest that for NEPA review Reclamation define the proposed action as the continued operation of the projects, including existing, valid regulatory requirements, subject to lawful requirements of the incidental take statements in new biological opinions, without major changes to project operations imposed under the ESA. Ultimately, of course, Reclamation’s decision regarding the action necessary to meet its ESA obligations must be informed by the outcome of the pending re-consultations.

### **III. THE STATEMENTS OF “PURPOSE” AND “NEED” SHOULD BE REVISED**

An environmental impact statement must contain a statement of “purpose and need” which briefly specifies “the underlying purpose and need to which the [lead] agency is responding in proposing the alternatives including the proposed action.” 40 C.F.R. § 1502.13. The purpose and need statement “is a critical element that sets the overall direction of the process

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and serves as an important screening criterion for determining which alternatives are reasonable.” NEPA Handbook at 8-5. This statement of purpose and need is important because it will inform the range of alternatives ultimately selected for analysis in the environmental impact statement and “[a]ll reasonable alternatives examined in detail must meet the defined purpose and need.” *Id.*

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The Department of the Interior’s NEPA regulations provide that in “some instances it may be appropriate for the bureau to describe its ‘purpose’ and its ‘need’ as distinct aspects. The ‘need’ for the action may be described as the underlying problem or opportunity to which the agency is responding with the action. The ‘purpose’ may refer to the goal or objective that the bureau is trying to achieve, and should be stated to the extent possible, in terms of desired outcomes.” 43 C.F.R. § 46.420(a)(1). The Public Water Agencies appreciate Reclamation’s efforts to develop separate “purpose” and “need” statements in the Draft EIS. However, the existing purpose and need statements should be revised, as described below.

**Statement of Purpose**

The Draft EIS describes the “purpose” of the action as follows:

to continue the operation of the Central Valley Project (CVP), in coordination with operation of the State Water Project (SWP), to meet the authorized purposes of the CVP and SWP in a manner that is similar to recent historical operations with certain modifications and that: [1] Is consistent with Federal Reclamation law; other Federal laws; Federal permits and licenses; State of California water rights, permits, and licenses; and contractual obligations; and [2] Avoids jeopardizing the continued existence of federally listed species and does not result in the destruction or adverse modification of designated critical habitat in accordance with the requirements of section 7(a) (2) of the Federal Endangered Species Act (ESA) and other applicable statutes.

Draft EIS, at p. 2-1.

Compliance with the ESA should not be included in the purpose of the proposed action. Instead, in the context here, providing water supply as fully as possible while still complying with the ESA gives rise to the *need* for the action. The “underlying problem” that Reclamation is responding to is the difficulty both projects have had in serving water supply and other project purposes while complying with the ESA. Here, the *purpose* of the action, the “goal or objective” expressed in terms of “desired outcomes,” should be to continue long-term operation of both the CVP and SWP in a manner that will enable Reclamation and the DWR to satisfy their contractual and other obligations to the fullest extent possible. Importantly, those obligations include optimizing water deliveries to CVP and SWP contractors up to contract amounts, to help meet the needs of 25 people and millions acres of agricultural land.<sup>2</sup>

<sup>2</sup> That obligation is typically found in Articles 11(a) and 12(a) of the CVP water service contracts.

**Statement of Need**

The Draft EIS describes the “need” for the action as follows:

Continued operation of the CVP is needed to provide river regulation, improvement of navigation; flood control; water supply for irrigation and domestic uses; fish and wildlife mitigation, protection, and restoration; fish and wildlife enhancement; and power generation. The CVP facilities also are operated to provide recreation benefits and in accordance with the water rights and water quality requirements adopted by the State Water Resources Control Board. *However, as was detailed in Chapter 1, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service concluded in their 2008 and 2009 biological opinions, respectively, that recent historical coordinated operation of the CVP and SWP does not comply with the requirements of section 7(a) (2) of ESA. Thus, modifications to the coordinated long-term operation of the CVP and SWP are required.* Modifications to be evaluated should be consistent with the intended purpose of the action, within the scope of the Department of the Interior, Bureau of Reclamation’s legal authority and jurisdiction, economically and technologically feasible, and in compliance with the requirements of section 7(a) (2) of ESA.

Draft EIS, at p. 2-1, italics added.

This statement of need presumes that “modifications to the coordinated long-term operation of the CVP and SWP are required,” based on the conclusions of the two biological opinions the district court found to be fundamentally defective, and which will be superseded by new biological opinions after completion of re-consultation. This is a serious and fundamental defect in the framework of the Draft EIS that renders it inadequate and unlawful. The Public Water Agencies reject any suggestion that the conclusions of the existing biological opinions regarding effects on listed species are a legitimate starting point for the NEPA process or the new consultations. Those biological opinions and their reasonable and prudent alternatives were remanded because they were not based on the best available science and were otherwise unsupported and unjustified. Therefore, it is contrary to the court’s prior rulings for Reclamation to rely on the conclusions and analyses of the invalidated BiOps for the presumption that modifications to project operations “are required.” The impacts of project operations on protected species and whether modifications of project operations are necessary to avoid jeopardy to those species are precisely the issues that must be reevaluated on remand and Reclamation cannot properly rely on the prior conclusions of the invalidated BiOps to frame its NEPA analysis.

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**IV. THE DEVELOPMENT AND DESCRIPTION OF POTENTIAL ALTERNATIVES  
NEEDS TO BE IMPROVED**

**A. The “No Action Alternative” Must Be Revised**

An environmental impact statement must “[i]nclude the alternative of no action.” 40 C.F.R. § 1502.14(d). According to Reclamation’s NEPA Handbook, “[n]o action’ represents a projection of current conditions and reasonably foreseeable actions to the most reasonable future responses or conditions that could occur during the life of the project without any action alternatives being implemented.” NEPA Handbook at 8-8. Moreover,

[t]he no action alternative should not automatically be considered the same as the existing condition of the affected environment because reasonably foreseeable future actions may occur whether or not any of the project action alternatives are chosen. When the no action alternative is different from the existing condition, as projected into the future, the differences should be clearly defined. Differences could result from other water development projects, land use changes, municipal development, or other actions. “No action” is, therefore, often described as “the future without the project.”

*Id.*

The Draft EIS states:

[f]or this EIS, the No Action Alternative is based upon the continued operation of the CVP and SWP in the same manner as occurred at the time of the publication of the Notice of Intent in March 2012. Thus the No Action Alternative consists of the 2013 Project Description as modified by the RPAs in the USFWS BO and NMFS BO because Reclamation provisionally accepted the BOs in 2008 and 2009, respectively, and is implementing the RPAs; and the District Court did not stay or vacate the implementation of the BOs.

Draft EIS, at p. 3-7. This description of the no action alternative is inconsistent with the district court’s rulings regarding Reclamation’s failure to comply with NEPA, and will result in an EIS that fails to comply with law.

The Draft EIS’s no action alternative essentially pretends that the litigation that resulted in the remand never happened. The district court ruled that Reclamation violated NEPA by significantly modifying project operations to meet ESA requirements without first performing NEPA analysis of the impacts of such modifications or alternatives to such modifications. To remedy the error found by the court, Reclamation must place itself back in the position it was in before that error occurred (i.e. before provisionally adopting the BiOps without performing any NEPA analysis). Accordingly, in order to respond to the court’s ruling on remand, here the “no

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action” alternative should be defined to include operations consistent with Reclamation’s and DWR’s obligations and all legal requirements *except* any ESA-related requirements that involve major changes to operations. Under this definition of “no action,” project operations would continue in compliance with other regulatory requirements (e.g., D-1641 as modified by applicable laws, including Wilkins Slough requirements, FERC license requirements, American River in-river flow requirements, etc.). Comparing this no action alternative to the action alternatives developed during the NEPA and ESA consultation processes will provide the most comprehensive and appropriate disclosure of the environmental impacts of the various action alternatives to comply with ESA requirements.<sup>3</sup>

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Treating the invalidated BiOps as any part of the “no action alternative” is a highly inadvisable course of action, because that would not cure the NEPA violation found by the district court. It would instead contradict the district court’s ruling, because the NEPA analysis then would not measure and disclose the impacts of changes to CVP and SWP operations to comply with the ESA. And it would defeat the purpose of the no action alternative—to provide a meaningful comparative scenario with which to gauge the impacts of the action alternatives. To comply with the judgments in the *Consolidated Smelt Cases* and *Consolidated Salmonid Cases*, the no action alternative must be revised.

**B. The “Second Basis Of Comparison” Needs To Be Revised**

The Public Water Agencies appreciate Reclamation’s efforts to provide a “Second Basis of Comparison” for comparing the environmental consequences of the alternatives, as a response to our concerns about the no action alternative. However, the true remedy is to correctly define the no action alternative in the first place. That would eliminate the need for a “second basis of comparison.”

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We found the description and use of the “Second Basis Of Comparison” in the Draft EIS somewhat confusing. It is not a remedy for the defects in the no action alternative, because it still includes actions based on the invalidated BiOps. As we understand it, it does not provide a basis for comparison to project operations consistent with Reclamation’s and DWR’s obligations and all legal requirements *except* requirements related to the ESA.

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The Draft EIS states:

[n]umerous scoping comments requested that the No Action Alternative not include the RPAs in the USFWS BO and NMFS BO. The comments indicated that the EIS should include a “basis of comparison” for the alternatives that was similar to conditions prior to implementation of the RPAs in the USFWS BO and

<sup>3</sup> The situation here is unlike most other circumstances where NEPA review is performed, because the CVP and SWP were constructed and operating before NEPA and the ESA were even enacted. Thus, the “no action” alternative, which usually serves as the baseline for evaluating the significance of environmental impacts of action alternatives, is more complicated. The existing projects including operations must be captured in the “no action” baseline so they are not included in the new effects of the action alternatives. For this reason, a hypothetical “no action” alternative that fails to account for current and previous operations of the projects would be an improper baseline for comparative analysis. See *American Rivers v. Federal Energy Regulatory Comm.*, 187 F.3d 1007 (9th Cir. 1999).

NMFS BO, and consistent with the 2011 Project Description. Scoping comments also indicated that a "No Action Alternative scenario" without implementation of the RPAs in the USFWS BO and NMFS BO could be used to analyze the effects of implementing the RPAs.

Because the RPAs were provisionally accepted and the No Action Alternative, by definition, represents a continuation of existing policy and management actions, the No Action Alternative must include the RPAs. However, in response to scoping comments and to provide a basis for comparison of the effects of implementation of the RPAs (per the District Court's mandate), this EIS includes a "Second Basis of Comparison" that does not include implementation of the RPAs. The Second Basis of Comparison can be used as a basis of comparison for the alternatives that do not include the RPAs. In this way, the action alternatives can be compared against both the No Action Alternative and the Second Basis of Comparison.

Draft EIS, at p. 3-21. For the reasons articulated above, the Public Water Agencies disagree that the no action alternative must include the invalidated RPAs. Instead, that would be inconsistent with the court's NEPA rulings.

If Reclamation adopts the "Second Basis Of Comparison" as its no action alternative, it should revise it to eliminate any actions taken in response to the invalidated BiOps and RPAs. The "Second Basis Of Comparison" includes the following existing "Fisheries and Aquatic Habitat Restoration Actions" that are "similar to actions identified in the RPAs for several ongoing programs:"

- Clear Creek flow management, gravel augmentation, Spring Creek Temperature Control Curtain, Clear Creek thermal stress reduction, and fisheries studies (similar to NMFS BO RPA Action I.1).
- Restore Battle Creek for winter-run and spring-run Chinook salmon and Central Valley steelhead (similar to NMFS BO RPA Action I.2).
- Funding for CVPIA Anadromous Fish Screen Program (similar to NMFS BO RPA Action I.5).
- Lower American River Flow Management, temperature management, temperature control devices in Folsom Lake and Lake Natoma, and minimization of flow fluctuation effects (similar to NMFS BO RPA Action II.1, II.2, II.3, and II.4).
- Measures to reduce the likelihood of entrainment or salvage at the Delta export facilities, modifications of the operation and infrastructure of the CVP and SWP fish collection facilities, and formation of a technical advisory team to address these issues (similar to NMFS BO RPA Action IV.3, IV.4, and IV.5).

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Draft EIS, at pp. 3-21 – 3-22. If the intent of the Second Basis Of Comparison is to provide a basis of comparison “that does not include implementation of the RPAs” then the Second Basis Of Comparison should not include actions under programs that are being implemented in response to, and in lieu of, the invalidated RPAs. Draft EIS, at p. 3-21. The purpose of the no action alternative is to inform the public and policy makers of what conditions would be like without major ESA-related restrictions on project operations. The existing Second Basis Of Comparison improperly assumes that modifications to project operations are necessary to avoid jeopardy and includes certain existing actions that are dependent on the invalidated BiOps’ jeopardy determination.

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**C. The Draft EIS Inadequately Describes The Criteria Used To Select The Alternatives And Fails To Present A Reasonable Range Of Alternatives**

**Criteria Used To Develop And Select Alternatives**

Reclamation’s NEPA Handbook recommends that presentation of alternatives begin with a “[g]eneral discussion of the basis for the selection of alternatives (linkage between underlying purpose and need for action and alternatives).” NEPA Handbook, at p. 8-7. NEPA requires that all federal agencies, to the fullest extent possible, “study, develop and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.” 42 U.S.C. § 4332(2)(E). Federal agencies must to the fullest extent possible “[u]se the NEPA process to identify and assess reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment” and to use all practicable means to “avoid or minimize any possible adverse effects of their actions upon the quality of the human environment.” 40 C.F.R. § 1500.2(e), (f). Agencies must “rigorously explore and objectively evaluate all reasonable alternatives” and explain why any alternatives were eliminated from detailed consideration. 40 C.F.R. § 1502.14. Reasonable alternatives are those that are “technically and economically practical or feasible and meet the purpose and need of the proposed action.” 43 C.F.R. § 46.420.

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“Each action alternative should address the purpose of and need for the action . . .” NEPA Handbook, at p. 8-9. Here, as discussed above, the purpose is to continue long-term operation of both the CVP and SWP in a manner that will serve the authorized purposes of the projects as fully as possible. Those purposes include supplying water to help meet the needs of 25 million people and millions acres of agricultural land. The need for the action arises from the difficulty both projects have had in serving the water supply and other purposes while complying with the ESA. Reclamation is required to rigorously explore a variety of alternatives. The alternatives should allow for adequate water deliveries and prevent significant impacts to public health and the human environment, and also explore various methods to sufficiently maintain and protect the listed species and their critical habitats.

The Draft EIS states:

[t]his EIS evaluates a range of alternatives for the coordinated long-term operation of the Central Valley Project (CVP) and the State Water Project (SWP). The alternatives were developed based upon comments received during the scoping process; review of the "2011 Project Description" submitted by Department of the Interior, Bureau of Reclamation (Reclamation) to the U.S. Fish and Wildlife Service (USFWS), as part of the consultation package and as described below; review of the 2008 USFWS Biological Opinion (USFWS BO) and the 2009 National Marine Fisheries Service (NMFS) Biological Opinion (NMFS BO) Reasonable Prudent Alternatives (RPAs); and comments received from stakeholders and interested parties on the "2011 Project Description."

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Draft EIS, at p. 3-1. This statement reveals that Reclamation has relied primarily on comments received from stakeholders and interested parties, along with the invalidated BiOps' RPAs, to develop the alternatives presented in the Draft EIS. Such an approach is inadequate. Reclamation must articulate the criteria used in developing the alternatives and provide a link between the purpose and need of the proposed action and the alternatives selected for detailed review.

The Draft EIS further describes the process employed for identifying a "reasonable range of alternatives" as follows:

The range of potential alternatives identified during the scoping process and through the review of the 2011 Project Description was compared to the purpose and need of the project and to whether the potential alternative would address one or more significant issues. As described above, due to the nature of the project to continue the coordinated long-term operation of the CVP and SWP, most of the comments addressed changes to portions of the RPAs or the 2011 Project Description and did not propose complete alternatives. Therefore, the range of potential changes was evaluated to define the reasonable range of alternatives to be evaluated in this EIS.

Draft EIS, at p. 3-7. While this statement appears to articulate the criteria employed by Reclamation in developing a "reasonable range" of alternatives, the Draft EIS fails to articulate whether and how the selected alternatives meet the purpose and need of the project. In addition, it is unacceptable for Reclamation to develop alternatives simply based on comments received because the alternatives are supposed to be developed based on a new analysis of project operations, the effects of project operations on listed species, and whether modifications to project operations are necessary. It is Reclamation's responsibility to develop such information and analysis and to develop a reasonable range of alternatives—not the responsibility of stakeholders and interested parties.

**Reasonable Range Of Alternatives**

The Draft EIS acknowledges that the "range of alternatives" required to be analyzed under NEPA "includes all reasonable alternatives, which must be rigorously explored and objectively evaluated." Draft EIS, at p. 3-1. The DOI adopted additional regulations which state that "[t]he range of alternatives includes those reasonable alternatives (43 CFR 46.420(b)) that meet the purpose and need of the proposed action, and address one or more significant issues (40 CFR 1501.7(a)(2-3)) related to the proposed action..." 43 C.F.R. 46.415(b). "When there are a very large number of potential alternatives, a reasonable number of alternatives covering the full spectrum of reasonable alternatives can be identified for detailed analyses in the NEPA document (43 CFR 46.420(c))." Draft EIS, at p. 3-6. Reclamation, as the lead agency for NEPA purposes, has "the ultimate responsibility to determine the appropriate range of alternatives." NEPA Handbook, at p. 8-9. "Where substantial controversy may exist concerning the range selected, the criteria used to limit the alternatives should be explicitly defined by Reclamation and logically supported." *Id.*

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The Draft EIS presents only four alternatives for "detailed" study. Draft EIS, at pp. 3-22 – 3-29.<sup>4</sup> "Alternative 1" is described as "identical to the Second Basis of Comparison." *Id.* at p. 3-22. "Alternative 2" includes the 2013 Project Description, the operational components of the RPAs of the invalidated BiOps, and existing fisheries and aquatic habitat restoration actions that "are similar to actions identified in the RPAs for several ongoing programs." "Alternative 2" does not include:

actions related to ecosystem restoration (NMFS BO RPA Actions I.6 and USFWS BO RPA Action 6) in the Yolo Bypass, Cache Slough, Delta, or Suisun Marsh except as may occur under ongoing projects not related to the BOs. Alternative 2 does not include actions to reduce migratory delays or losses in Yolo Bypass (NMFS BO RPA Actions I.7), ecosystem restoration in the Stanislaus River watershed (NMFS BO RPA Actions III.2), fish passage at CVP dams (NMFS BO RPA Action V), or genetic management at Nimbus and Trinity River Fish Hatcheries (NMFS BO RPA Action II.6) (**Same as Second Basis of Comparison and Alternative 1**).

Draft EIS, at pp. 3-22 -3-23. "Alternative 3" includes the 2013 Project Description and an "Expanded Period for Water Transfers through the Delta and Increased Annual Volume of Water." *Id.* at p. 3-23. In addition, "Alternative 3" is described as including "some of the actions included in the RPAs" in the invalidated BiOps "that would not effect Delta exports[.]" such as fisheries and habitat restoration actions. *Id.* at pp. 3-23 – 3-24. "Alternative 3" also includes the following restoration actions that are not addressed in the RPAs of the invalidated BiOps:

- Fish passage from the western Delta to the San Joaquin River using trap and haul techniques.

<sup>4</sup> For ease of reference, the Draft EIS's presentation of the Action Alternatives is attached hereto as Exhibit C.



- Establishment of high catch limits for bass and pike minnow.
- Acceleration of the completion of facilities to reduce nutrients discharged from wastewater treatment plants sooner than required under existing SWRCB requirements.

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Draft EIS, at p. 3-24 – 3-25. “Alternative 4” is described as providing changes “to long-term operation of the CVP and SWP that would reduce the frequency of reverse flows in the south Delta, increase Delta outflow, and reduce the amount of San Joaquin River flows diverted at the CVP and SWP south Delta intakes.” *Id.* at p. 3-25. The Draft EIS then describes how “Alternative 4” differs from the “No Action Alternative” with respect to CVP and SWP operations. *Id.* “Alternative 4” also includes the fisheries and aquatic restoration actions identified in the RPAs of the invalidated BiOps. *Id.* at p. 3-26.

These four action Alternatives do not represent a “reasonable range” of alternatives. The Draft EIS fails to explain how each of the alternatives meets the purpose and need for the action (i.e. continued project operations that avoid jeopardy and adverse habitat modification) and fails to articulate why these particular Alternatives were selected. Reclamation needs to develop a range of alternatives that meet the purpose and need for the action and that reduce one or more significant impacts as compared to the other alternatives. It is unreasonable for Reclamation to largely rely on the invalidated BiOps’ RPAs and the viewpoints of stakeholders as the primary basis for developing the range of alternatives. Cobbling and tweaking the RPAs of the invalidated BiOps will not suffice to meet Reclamation’s NEPA obligations on remand.

V. **THE “QUALITATIVE” ANALYSIS OF POTENTIAL ENVIRONMENTAL IMPACTS OF THE ALTERNATIVES IS FUNDAMENTALLY INADEQUATE**

An EIS’s discussion of environmental consequences “forms the scientific and analytical basis” for comparing the environmental impacts of the proposed action and the alternatives. 40 C.F.R. § 1502.16. One of the purposes of NEPA is to ensure that “environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality.” 40 C.F.R. § 1500.1(b). An EIS must provide “full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.” 40 C.F.R. § 1502.1. NEPA requires that all federal agencies, to the fullest extent possible, “utilize a systematic, interdisciplinary approach which will insure the integrated use of natural and social sciences” and “initiate and utilize ecological information in the planning and development of resource-oriented projects” 42 U.S.C. § 4334(2)(A), (H).

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A. **The Qualitative Analysis Is Unjustified And Contrary To NEPA**

The “qualitative” analysis provided in the Draft EIS fails to provide the information and analysis necessary to evaluate and compare the environmental consequences of the action alternatives. Reclamation’s NEPA Handbook states that the “impacts of each alternative should be quantified and analyzed separately in an organized and logical manner.” NEPA Handbook, at p. 8-14. The Draft EIS states: “[t]his EIS qualitatively assesses the potential impacts of changes on . . . resources which could result from implementation of each of the alternatives as compared

to the No Action Alternative and the Second Basis of Comparison.” Draft EIS, at pp. 4-2 – 4-3. Such a qualitative analysis fails to meet Reclamation’s obligations under NEPA.

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The Draft EIS’s justification for the “qualitative” analysis is as follows:

Many of the provisions of the RPAs, as set forth in the 2008 USFWS BO and the 2009 NMFS BO, or as they may be modified in the forthcoming biological opinions as required by the District Court’s remand, require further study, monitoring, further consultation, implementation of adaptive management programs, and subsequent environmental documentation for future facilities to be constructed and/or modified, as described in Chapter 3, Description of Alternatives. Because the results of these studies are not presently known, specific actions and specific responses to those actions also are not known at this time. Therefore, this EIS assumes the completion of future actions, including provisions of the RPAs, in a manner that would be consistent with ESA and does not address impacts during construction or start-up phases of these actions. The analysis of environmental consequences in this EIS is conducted in a qualitative manner with consideration of a range of probable long-term effects of the alternatives as compared to the No Action Alternative.

Draft EIS, at p. 1-9. This statement reveals that Reclamation made no effort to quantify the environmental consequences of the action alternatives, despite its obligation and ability to do so.

**B. Reclamation Must Obtain The Information Necessary To Analyze The Environmental Consequences Or Disclose Any Incomplete Or Unavailable Information That Cannot Be Obtained**

“The EIS analysis is not limited to readily available information. If information exists that is relevant to a potentially significant adverse impact, that information should be included in the analysis.” NEPA Handbook, at p. 8-16. Reclamation’s Handbook states “Reclamation will obtain the information necessary to fully evaluate all reasonably foreseeable, significant adverse impacts in NEPA documents, unless the information cannot be obtained because the costs are too great or the means of getting it are not available.” NEPA Handbook, at p. 3-15. It may be that despite more rigorous analysis there will still be substantial scientific uncertainty regarding the likely environmental consequences of various alternatives. When Reclamation is “evaluating the reasonably foreseeable significant adverse effects on the human environment in [the EIS] and there is incomplete or unavailable information,” it is required to “always make clear that such information is lacking.” 40 C.F.R. § 1502.22.

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The NEPA Handbook provides guidance regarding NEPA analysis in the absence of information, as follows:

When the agency is evaluating reasonably foreseeable adverse impacts, and there is incomplete or unavailable information, the

agency shall make clear that such information is lacking. Every effort should be made to collect all information essential to a reasoned choice between alternatives. If the information relevant to a reasoned choice cannot be collected because of exorbitant cost or because no means exists to gather the information (i.e., it does not exist, or there is no way to get it), the agency shall, in the EIS: [1] State that such information is incomplete or not available [2] Indicate the relevance of the incomplete or unavailable information to reasonably foreseeable adverse impacts [3] Include a summary of existing credible scientific evidence relevant to the foreseeable adverse impact [4] Include an evaluation of the reasonably foreseeable adverse impact, based upon theory or research methods generally acceptable to the scientific community[.]

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NEPA Handbook, at p. 8-16.

Thus, at a bare minimum, if the relevant incomplete information "cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known," Reclamation must include a statement in the EIS explaining the nature of such information, its relevance, a summary of existing credible scientific evidence, and Reclamation's evaluation of potential impacts based on approaches or methods generally accepted in the scientific community. 40 C.F.R. § 1502.22(b); NEPA Handbook, at p. 3-15. The Draft EIS does not meet these requirements.

**C. Reclamation Has Access To Sufficient Modeling Tools And Scientific Information To Perform A More Detailed Quantitative Analysis Of Environmental Impacts**

Complete and perfect information is not necessary to perform a more detailed quantitative analysis of the environmental consequences of the action alternatives. Reclamation is obligated to try to obtain new information, and use existing information, to evaluate the environmental consequences of the action alternatives. For example, with respect to water supply impacts, Reclamation can utilize the CALSIM II model to assess the water supply impacts associated with any proposed modifications to the CVP and SWP operations. In fact, many of the RPA actions in the invalidated BiOps are already incorporated into the CALSIM II model and the current CALSIM II model could be used to simulate water supply impacts associated with those RPA actions.<sup>5</sup> Reclamation must make every effort to disclose and quantify the water supply impacts associated with any project Alternatives which include modifications to project operations. This may require Reclamation to make certain assumptions regarding operational criteria, water year type, and periodic hydrology to generate information that represents the probable range of water supply impacts for a particular Alternative. However, perfect information should not be the guiding principle in seeking to disclose the likely environmental consequences of a particular action Alternative. More information to inform the public and policymakers of the choices and trade-offs among alternatives, even if it is not perfect

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<sup>5</sup> See Department of Water Resources, The State Water Project Reliability Report 2009 (Aug. 2010), Appendices A-1, A-2 [describing incorporation of BiOps' RPA actions into CALSIM II model].

information, should be the goal. A lack of perfect information is not a valid excuse for performing only a qualitative analysis.

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With respect to impacts to fisheries resources, Reclamation can use existing scientific information to establish parameters for measuring ecological effects and values. The CEQ Regulations require each agency to “[i]dentify environmental effects and values in adequate detail so they can be compared to economic and technical analyses.” 40 C.F.R. § 1501.2(b). For example, Reclamation could use existing scientific information to define habitat characteristics and ecological values that support fish populations and then evaluate how the project Alternatives impact those characteristics and values. The expected benefits or impacts of particular project Alternatives should then be described in detail so that they can be compared to other project Alternatives. In addition, to the extent Reclamation wishes to include Alternatives which rely on adaptive management, Interior’s NEPA Regulations provide a framework for analyzing the environmental consequences of an adaptive management approach.<sup>6</sup>

While the impacts to water supply resources and fisheries resources are particularly important, Reclamation should reevaluate its analytical approach for assessing environmental impacts to all of the resource categories.

**D. A More Detailed Quantitative Analysis Is Needed To Allow Meaningful Comparison Among Alternatives**

One of the key values of an environmental impact statement is its ability to inform the public and decision-makers of the relative environmental and socioeconomic costs and benefits of each alternative, including the no action alternative. An environmental impact statement does so by including information and analyses that allow and provide a comparative assessment of the environmental impacts or benefits among these alternatives. Accordingly, the Draft EIS must provide a comparison of the benefits and/or impacts of each alternative on all the various resource categories. Because part of the purpose and need entails ESA compliance by operating the projects to avoid jeopardizing the species or adversely modifying their critical habitats, it is critical that the Draft EIS at a minimum provide analyses and descriptions for the no action alternative and the various other alternatives of the estimated increase or decrease in: (1) the numbers of individuals of each species, (2) the estimated population viability of the listed species, and (3) the amount or quality of their critical habitats. This is not an exhaustive list, and Reclamation should determine if other biological metrics would also be useful and appropriate. Because maintaining the projects’ water supply reliability is a key aspect of the purpose and need, Reclamation should provide a commensurate level of analysis and detail regarding the degree to which each alternative would impair the ability of the CVP and SWP to serve their water supply functions. The alternatives analysis should allow a comparison that informs what

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<sup>6</sup> The Interior’s NEPA Regulations state: “Bureaus should use adaptive management, as appropriate, particularly in circumstances where long-term impacts may be uncertain and future monitoring will be needed to make adjustments in subsequent implementation decisions. The NEPA analysis conducted in the context of an adaptive management approach should identify the range of management options that may be taken in response to the results of monitoring and should analyze the effects of such options. The environmental effects of any adaptive management strategy must be evaluated in this or subsequent NEPA analysis.” 43 C.F.R. § 46.145.

Appendix 1C: Comments from Regional and Local Agencies and Responses

biological benefits are expected to be gained from proposed measures, and the relative costs of such benefits to other uses of the water resources involved.

In its current form, the Draft EIS fails to provide adequate information or analysis to evaluate and compare the environmental consequences of the project Alternatives.

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EXHIBIT C

PUBLIC WATER AGENCIES' NEPA SCOPING COMMENT LETTER

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June 28, 2012

BY U.S. MAIL, FAX TO (916) 414-2439, & EMAIL TO JPINERO@USBR.GOV

Janice Piñero  
Endangered Species Compliance Specialist  
Bureau of Reclamation, Bay-Delta Office  
801 I Street Suite 140  
Sacramento, CA 95814-2536

Re: Notice of Intent and Scoping under the National Environmental Policy Act on Remanded Biological Opinions on the Coordinated Long-term Operation of the Central Valley Project and State Water Project

Dear Ms. Piñero:

The State Water Contractors ("SWC"), San Luis & Delta-Mendota Water Authority ("SLDMWA"), and Westlands Water District ("Westlands") (collectively, "Public Water Agencies") appreciate the opportunity to comment in response to the Bureau of Reclamation's ("Reclamation") notice of intent to prepare an environmental impact statement ("EIS") and notice of scoping meetings, published in the Federal Register on March 28, 2012 ("NOI").

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The NOI comes in response to rulings by the United States District Court in the *Consolidated Delta Smelt Cases* and *Consolidated Salmonid Cases*. The court found that the existing biological opinions regarding continued operation of the Central Valley Project ("CVP") and State Water Project ("SWP") are unlawful, and that new biological opinions are required. The court further found that Reclamation violated the National Environmental Policy Act ("NEPA") when it adopted and implemented major changes to project operations pursuant to those unlawful biological opinions, changes that caused significant adverse effects on the quality of the human environment, without doing any NEPA review.

Reclamation must now reconsider whether and how the continued operations of the CVP and SWP should be modified to ensure compliance with the federal Endangered Species Act ("ESA"). Before it can finally decide that issue, Reclamation must complete a new consultation under section 7 of the federal ESA regarding each listed species affected by project operations. Such consultation will require Reclamation and the California Department of Water Resources ("DWR") to prepare a new biological assessment describing the proposed CVP and SWP operations. The proposed project operations will be materially different from the operations

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 June 28, 2012  
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described in the 2008 biological assessment. Among other changes, the description of operations must include implementation of the San Joaquin River Restoration Program, the Bay Delta Conservation Plan, and new Water Quality Objectives related to San Joaquin River flow. In addition, it should include operations allowing greater opportunities to "transfer" water through the Delta. The new biological assessment and new biological opinions must also reflect new scientific data that has become available since 2008. These data include information related to the adverse impacts caused by nutrients discharged from wastewater treatment plants, the adverse, extra-ordinary impacts of predation, the lack of identifiable adverse impact of pumping by the CVP and SWP, and the lack of identifiable adverse impact associated with changes in the location of X2 during the fall months. The changes in operations and additional scientific data will require new analyses of the effects of project operations. The Public Water Agencies submit that these new analyses should ultimately result in significantly different conclusions regarding the effects of CVP and SWP operations on listed species, and a different decision by Reclamation, than occurred in 2008 and 2009.

As far as we are aware, Reclamation has not yet prepared a biological assessment for the consultation. Reflecting the still incomplete ESA consultation process, the NOI does not define a proposed action for NEPA purposes. The NOI suggests that the proposed action may include unspecified specified "operational components" of the existing biological opinions. The proposed action should not, and presumably will not, include components of the existing opinions found to be unlawful. Since the NOI does not identify a proposed action, it logically could not and indeed does not identify any possible alternatives to such a proposed action.

Reclamation is now at the scoping stage of the NEPA process. Scoping is defined in the Council on Environmental Quality ("CEQ") regulations as "an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action." 40 C.F.R. § 1501.7. Reclamation has already conducted five public scoping meetings. We appreciate Reclamation's addition of the May 22, 2012 public meeting in Los Banos, which allowed interested parties in that region an opportunity to provide direct input regarding issues that should be addressed in any EIS. Likewise we appreciate Reclamation's action in extending the deadline for written comments in response to the NOI to June 28, 2012.

As part of the scoping process, Reclamation must "[d]etermine the scope (§1508.25) and the significant issues to be analyzed in depth in the environmental impact statement." *Id.* "Scope consists of the range of actions, alternatives, and impacts to be considered in an environmental impact statement." 40 C.F.R. § 1508.25. The Public Water Agencies hope to work in a cooperative manner with Reclamation to ensure that the planned EIS addresses the significant issues that arise from potential modifications of project operations pursuant to the ESA, and that the EIS document includes an appropriate range of actions, alternatives and related impacts.<sup>1</sup> The incomplete and preliminary information in the NOI regarding the proposed action

<sup>1</sup> The Public Water Agencies also recognize the close relationship between the NEPA process and the related ESA consultation process. As explained in the Reclamation Stakeholder Engagement Process ("RSEP") for Section 7 ESA Consultation and NEPA Compliance on the Remanded Biological Opinions on the Coordinated Long-term Operation of the Central Valley Project and State Water Project, issued June 2, 2012 (p. 2), "Reclamation anticipates a free and complete flow of information between the NEPA and Section 7 consultation processes, with each informing the other."

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 June 28, 2012  
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necessarily limits the ability of the Public Water Agencies to provide responsive scoping comments here. As the ESA consultation progresses, including particularly preparation of a new biological assessment, Reclamation should likewise be able to define a proposed action and possible alternatives to be included in its NEPA analysis. The Public Water Agencies request an opportunity to provide additional comments when and as Reclamation does so. Reclamation's NEPA analysis ultimately should help foster a workable, environmentally sound plan for continued operations of the CVP and SWP that will minimize adverse socioeconomic and environmental impacts while ensuring legally and scientifically supportable, reasonable, and effective protection mechanisms for the listed species.

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**I. THE STATE WATER CONTRACTORS, SAN LUIS & DELTA-MENDOTA WATER AUTHORITY, AND WESTLANDS WATER DISTRICT**

The SWC organization is a nonprofit mutual benefit corporation that represents and protects the common interests of its 27 member public agencies in the vital water supplies provided by California's SWP. Each of the member agencies of the State Water Contractors holds a contract with DWR to receive water supplies from the SWP. Collectively, the State Water Contractors' members deliver water to more than 25 million residents throughout the state and to more than 750,000 acres of agricultural lands. SWP water is served in the San Francisco Bay Area, the San Joaquin Valley and the Central Coast, and Southern California. The complete list of SWC member agencies is set forth in the attached Exhibit A.

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SLDMWA is a joint powers authority, established under California's Joint Exercise of Powers Act. Gov. Code, § 6500 *et seq.* SLDMWA is comprised of 29 member agencies, 27 of which held contractual rights to water from the federal CVP. SLDMWA member agencies have historically received up to 3,100,000 acre-feet annually of CVP water for the irrigation of highly productive farm land, primarily along the San Joaquin Valley's Westside, for municipal and industrial uses, including within California's Silicon Valley, and for publicly and privately managed wetlands situated in the Pacific Flyway. The areas served by SLDMWA's member agencies span portions of seven counties encompassing about 3,300 square miles, an area roughly the size of Rhode Island and Delaware combined. The complete list of the San Luis & Delta-Mendota Water Authority's members is set forth in the attached Exhibit A.

Westlands Water District is a member agency of SLDMWA. Westlands is a California water district formed pursuant to California Water Code sections 34000 *et seq.* Westlands holds vested contractual water rights to receive water from Reclamation, through the San Luis Unit of the CVP, for distribution and consumption within areas of Fresno and Kings Counties. Westlands' total contractual entitlement for CVP water under this contract is 1.15 million acre-feet per year. In addition, Westlands holds 43,500 acre-feet of water entitlement in the form of contract assignments from other districts including Broadview Water District, Centinella Water District, Widren Water District, and Oro Loma Water District. Most of this CVP water supply is used for irrigation. Westlands encompasses approximately 600,000 acres, including some of the most productive agricultural lands in the world.

Each of these entities, their member agencies, their customers, and others within their service areas may experience significant adverse impacts as a result of actions that may follow



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from the ongoing ESA consultations. Accordingly, the Public Water Agencies believe it is vital that they participate actively in the NEPA review process, to ensure that such the environmental and socioeconomic impacts its member agencies and customers could experience from any further water limitations are fully disclosed and analyzed, and that policy makers and the public be fully informed regarding the choices to be made.

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**II. COOPERATING AGENCIES**

The NOI states that Reclamation has identified State and local agencies "as potential cooperating agencies," and that it "will invite them to participate as such in the near future." In a letter dated August 19, 2011, Commissioner Mike Connor indicated that the SLDMWA and SWC will be deemed cooperating agencies for this NEPA process, with specific responsibilities to be set forth in a memorandum of understanding. In the same letter, Commissioner Connor indicated that the SLDMWA and SWC would be deemed designated non-Federal representatives in the related section 7 consultation. The SLDMWA and SWC look forward to working with Reclamation in these capacities. Including the SLDMWA and SWC in these roles will further the statutorily mandated policy of Section 2(c)(2) of the ESA, which requires federal agencies to "cooperate with State and local agencies to resolve water resource issues in concert with conservation of endangered species." 16 U.S.C. § 1531(c)(2). In addition, it may be appropriate for other local public agencies that are members of the SLDMWA or SWC to serve as cooperating agencies, including Westlands, The Metropolitan Water District of Southern California, the Kern County Water Agency, and Santa Clara Valley Water District.<sup>2</sup> Several member agencies will be contacting Reclamation regarding cooperating agency status.

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According to the CEQ's regulations, cooperating agencies, on request from the lead agency, assume responsibilities for developing information and preparing environmental analyses using the cooperating agency's funds. 40 C.F.R. § 1501.6(b)(3), (b)(5). This role is also recognized in Reclamation's NEPA Handbook (Feb. 2012) at section 8.10.2.

As recommended by Reclamation's NEPA Handbook, a Memorandum of Understanding ("MOU") should be negotiated concerning the roles of the Public Water Agencies and perhaps other agencies as cooperating agencies. We therefore request that a timely meeting be scheduled with you and/or other appropriate Reclamation representatives to clarify the scope of involvement in the environmental review as cooperating agencies.

**III. RECLAMATION'S TASK ON REMAND FROM THE DISTRICT COURT**

The NOI identifies and briefly describes the outcome of litigation as the reason Reclamation is now undertaking NEPA review. (See discussion under heading "II. Why We Are Taking This Action.") In order to frame the parameters of Reclamation's NEPA review, it is useful to briefly recount the district court's rulings and what they require.

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<sup>2</sup> The NOI states that the State and Federal Contractors Water Agency may be invited to participate as a cooperating agency. The SWC does not agree that SFCWA should serve as a cooperating agency.

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**A. The ESA Rulings**

First, with respect to the requirements of the ESA, the district court found that both the U.S. Fish and Wildlife Service (“FWS”) and the National Marine Fisheries Service (“NMFS”) BiOps were arbitrary, capricious, or contrary to law. These flaws were so fundamental that Reclamation should not have any expectation that after reconsultation the next biological opinions will necessarily be similar to the last biological opinions in their conclusions or in any measures they may impose. By way of example, in the *Consolidated Delta Smelt Cases*, the district court found the following errors:

- “The BiOp’s reliance on analyses using raw salvage figure to set the upper and lower OMR flow limits of Actions 1, 2, and 3 was arbitrary and capricious and represents a failure to use the best available science. Actions 1, 2, and 3 depend so heavily on these flawed analyses that this failure is not harmless.” *Consolidated Delta Smelt Cases*, 760 F. Supp. 2d 855, 968 (E.D. Cal. 2010).
- “Comparison of Calsim II to Dayflow model runs created potentially material bias in the BiOp’s evaluation of the impacts of Project operations on the position of X2 and related conclusions regarding population dynamics and habitat. FWS’s failure to address or explain this material bias represents a failure to consider and evaluate a relevant factor and violates the ESA and APA.” *Id.* at 968.
- “The flawed Calsim II to Dayflow comparison fatally taints the justification provided for Action 4.” *Id.* at 968.
- “The BiOp has failed to sufficiently explain why maintaining X2 at 74 km (following wet years) and 81 km (following above normal years), respectively, as opposed to any other specific location, is essential to avoid jeopardy and/or adverse modification.” *Id.* at 969.
- “[T]he analyses supporting the specific flow prescriptions set forth in the RPA are fatally flawed and predominantly unsupported. The BiOp does not justify or explain its attribution to Project operations adverse impacts caused by other stressors.” *Id.* at 969.
- “The BiOp completely fails to analyze economic feasibility, consistency with the purpose of the action, and consistency with the action agency’s authority demanded by § 402.02. Further analysis in compliance with § 402.02 is required on remand.” *Id.* at 970.

Similarly, in the *Consolidated Salmonid Cases*, the district court found, among other flaws:

- “It was clear error and inconsistent with standard practice in the field of fisheries biology for Federal Defendants to rely upon the raw salvage analyses set forth in Figures 6-65 and 6-66 to reach conclusions about the effect of specific levels of negative OMR flows on the Listed Species. None of the alternative record citations or analyses cited by Defendants, including the PTM Modeling Results, or Figures 6-71, 6-72, or 6-73, provide sufficient alternative bases for NMFS’s conclusions regarding the negative OMR flows below which loss of juvenile salmonids ‘increases sharply.’” *Consolidated Salmonid Cases*, 791 F. Supp. 2d 802, 955 (E.D. Cal. 2011).
- “Federal Defendants’ reliance on Figure 6-71 also suffers from the same unjustified use of raw salvage data. Federal Defendants must clarify on remand whether it is possible to scale the CV steelhead data used in Figures 6-72 and 6-73 to population size and, if not,

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