

Tech
5-12-98

DFG Comments on the CALFED Draft Environmental Impact Statement/Environmental Impact Report (DEIS/R) and Technical Appendices.

Comments by Document

Draft Environmental Impact Statement/Environmental Impact Report (DEIS/R)

Page 2-25:

CVPIA 800 taf and level IV refuge water supplies included in the No Action alternative. Does this include Delta actions under AFRP that might be supported by 800 taf? Which interpretation of b2 water is applied? Where does the level IV refuge supply come from?

Page 2-35:

The text suggests a SWRCB decision could result in instream flows being provided by water right holders in addition to the SWP and CVP and that these flows could satisfy some of the ERP environmental flows and reduce the need for water acquisition. If contributions by other water right holders to meet the Bay-Delta objectives were required, they would largely be in summer months and, consequently would not coincide with the ERP flow augmentation prescribed mostly for the fall, winter, and spring. Furthermore, such a requirement for Bay-Delta may in fact reduce the amount of water available for sale to CALFED on a willing seller basis.

Page 2-37:

Paragraph 3 indicates VAMP is included in the No Action alternative. This is not consistent with description of model assumptions for No Action and the other alternatives as they have been explained to us. Vamp has a twelve year time frame and no certainty beyond that. Hence it does not necessarily apply in a 2020 No Action scenario.

Page 6.1-3

It isn't clear why the text states that there are no difference between Alternative (2A and 2B) and Alternative 3 (3A, 3B, 3E and 3I) for drinking water effects. Alternative 3 appears to provide substantially better drinking water. This should be clarified in the final EIR/EIS.

Table 6.1-1

This table, in its present form, does not provide an effective tool to compare alternatives 2 and 3 regarding impacts to surface water resources. The only differences we could find are as follows under Surface Water Quality:

	2B	3B	3E	3I
Salinity and Bromides	0/+	-/+	-/+	-/+

(The - shown is the equivalent to the darkened half circle shown in the table).
 The DEIS/EIR text and Phase II report suggest much greater differences.
 Alternative 3 should be rated significantly higher than any version of Alternative 2. This should be clarified in the final EIR/EIS.

Page 6.1-11:

For the No Action alternative, water deliveries are said to increase by 400,000 af in wetter years and very little increase in critical years, as described in the text. They are described differently in the box - increased demand, no additional supply and increased allocation to stream flows from CVPIA results in increased unmet agricultural and urban demand. This appears to be a substantial discrepancy and raises the question about what Department of Interior policy regarding b(2) water management is reflected in this DEIS/EIR.

Page 6.1-14:

An increase in water transfers is said to have no substantial effect on river hydraulics. This would seem to depend on the details of the transfer, including the amount and timing of water involved. The effects on stream flow need not be large in order to have a substantial impact on stream resources at certain times.

Page 6.1-18; Paragraph four; Left column:

The text states that Delta hydrodynamic modeling of existing conditions was not available in time for the DEIS/EIR. This information is critical for an adequate CEQA and CESA review. It should be included in any recirculated draft and in the final EIS/EIR.

Table 6.1, 2-2:

This table, in its present form, does not allow an adequate comparison among alternatives. It obscures differences among alternatives that the DFG believes are significant. This deficiency should be corrected in the final EIR/EIS.

Page 6.1-48; Paragraph two; Right column:

The comparisons among alternatives described in this section are of limited use. For example, Delta outflow changes occur because Alternative 3 modeling increases exports and reduces net Delta outflow in the spring. This makes a balanced assessment difficult because exports are not held constant among alternatives. If they had been, the benefits among alternatives would have been

more fairly described. This issue should be addressed in the final EIR/EIS.

Page 6.1.48; Delta Region; Storage and Conveyance; Ecosystem Restoration:

The DEIS/EIR fails to disclose impacts to Bay-Delta hydrodynamics from the various alternatives, particularly their effects on meeting the ERP targets for this important ecosystem process. Describing impacts on Delta outflow targets represents only some of the relevant ERP targets. A clear and concise comparison of how effective an alternative restores Bay-Delta hydrodynamics should be provided in the final EIS/EIR.

Page 6.1-70; Figure 6.1,4-2:

This figure is distorted and is an ineffective tool for assessing changes in annual SWP and CVP deliveries for the alternatives. The table should be revised in any recirculated draft and the final EIS/EIR to improve its utility.

Page 6.2 - 2; Table 6.2-2:

The ratings given alternatives 2B, 3B, 3E and 3I for the net decline in water levels makes no sense when, for example, the text is reviewed on page 6.2-1. This should be clarified in the final EIS/EIR.

Page 6.3-2; Table 6.3-1:

We could find no relevant discussion in the text to support the significant adverse impact ratings given to Alternative 3 in the Delta for Levee Susceptibility to Seismicity. This should be clarified in the final EIS/EIR.

Page 6.3 - 19; Paragraph two; Left column:

Soil selenium is not a concern in the Delta Region. Reference to it should be deleted in the final EIS/EIR.

Page 7.1-1:

Impact to Fisheries and Aquatic Ecosystems box states that Alternative 3 would include the beneficial and adverse impacts under Alternative 1. This is a gross oversimplification and does not come close to explaining the consequences of the respective alternatives. Given the propensity of readers to rely on summary boxes to form their impressions and reach conclusions about the alternatives, greater care must be taken in writing these summaries. The last bullet in the box claims to describe the benefits of water use efficiency AND water transfers, however, the potential adverse impacts of water transfers on carryover storage, river flows and water temperature in key seasons, and increased Delta exports are not mentioned. The effects are primarily those associated with conservation and reclamation of water.

Page 7.1-2:

Tables 7.1-1 and 7.1-2 uses three levels of adverse impacts and only one level of beneficial impacts. The former are necessary in a NEPA/CEQA document. Recognizing the varying degrees of certainty and probably of significant effects associated with the ecosystem restoration and other actions, some attempt should be made to indicate the variation in relative certainty and likely magnitude of benefits. For example, an action with a high probability of making a large change that will positively affect a wide area and/or many species should be distinguishable from an action which lacks either the certainty of outcome or the breadth of potential benefit. This comment also is related to Section 7.1.2.3, Significance Criteria.

Page 7.1-8 and 9:

Table 7.1-2 inappropriately attributes specific beneficial effects of some actions to "all (listed and proposed) species". For example, creating inundated wetlands and open water areas will not increase salmon and steelhead spawning habitat. Actions related to artificial production goals are not applicable to delta smelt or splittail. Table 7.1-2 identifies and ERP actions to include "management recommendation to reduce harvest-related impacts on self-sustaining natural fish populations." This issue has many nuances, however, it is not logical to propose reducing harvest of self-sustaining populations. This should be revised to indicate that potential harvest management actions may be recommended to achieve and then appropriately exploit sustainable fish populations.

Page 7.1-14:

Water use efficiency measures is assumed to, among other consequences, make new water available for ecosystem purposes through water transfers. The analysis should consider the fact that in an open market, water for the environment may not be affordable. Conditions such as the "right of first refusal" by the export contractors for transferable supply from the Yuba River in their proposed settlement agreement for Bay Delta Plan implementation suggest that negotiations for affordable water could be thwarted and the transferable supply becomes available for environmental use only after ag/urban needs have been met or at a price higher than ag/urban users are willing to pay. Using the Yuba River as an example, this reality highlights the need for the Department to pressure the SWRCB to make water right decisions related to instream water requirements to protect public trust resources. Ongoing analysis of the fishery effects of alternatives shows that there are positive and negative aspects of certain facilities configurations and the outcome of an alternative for fish depends on how these various impacts balance out. Selection of the best alternative for fish may be difficult since our ability to weigh the relative gains

and losses is limited, however, some attempt should be made to rank the positive effects of action, as is required for the negative effects, and to display these differences in these tables.

Page 7.1-27:

Recognizing that our purpose is not to wordsmith the DEIS/EIR, the other wise reasonable discussion of the effects of ERP actions should be modified to make it clear that "incomplete knowledge of species needs and unpredictable responses to actions" will not adversely impact some species. Rather, it is the actions that when implemented produce an undesired result because they were predicated on incomplete knowledge of target species needs or generated unanticipated responses of prey or predator species populations or other unintended consequences, that may cause an adverse impact. This phrasing is repeated several times in different sections, including the second to last paragraph on page 7.1-45. A better discussion of this issue is found in the last paragraph of Section 7.1.2.6 on Page 7.1-42.

Page 7.1-32:

San Joaquin River region with No Action... what is assumed regarding CVPIA, VAMP, and compliance with the Bay-Delta Plan flow and water quality objectives for the San Joaquin? There is a discrepancy between what the DEIS/EIR says about VAMP and what was assumed in state-wide operations modeling.

Page 7.2-33, Mitigation Strategies, left column, 3rd bullet:

Any impact associated with implementing alternative components other than the ERP should not be mitigated by the ERP, whether those impacts are temporary or permanent. Phasing described as mitigation is confusing in the context of mitigating adverse impacts of the ERP. Full implementation of the ERP for wetland, riparian, and wintering waterfowl habitat is needed to offset impacts of habitat shifts described in the ERP such as conversion of wintering wildlife habitat to tidal perennial aquatic habitat.

Pages 7.1-36 and 37; Last paragraph; Right column continuing onto the first paragraph - left column:

The opportunities to restore tidal action to shallow habitat with accompanying channel complexity is also significant in the south Delta. Depending on the alternative selected, significant areas of tidal emergent wetland in the south Delta would contribute significantly to Delta and Suisun Marsh and Bay production. This should be clarified in the final EIS/EIR.

Page 7.1-42:

The discussion of mitigation strategies treats diversion/conveyance elements of Alternative 3 as potential mitigation for southern Delta fish entrainment impacts of Alternative 1. This becomes a circular argument: alternative 1 is better than alternative 3 when its impacts are mitigated by alternative 3. Subsequently, entrainment impacts of Alternative 3 are potentially mitigated by diverting from the Delta for export as under the No Action alternative. The sense is that there is a departure from the analysis of specific alternatives.

Shifting of timing of exports is repeatedly mentioned as a means to avoid impacts. This approach has some potential (and in fact is currently part of operations decision making) but it should be acknowledged that shifting the season of exports often involves tradeoffs between and among species. As yet there has been little discussion of these types of tradeoffs or any recognition that, regardless of the conveyance facilities constructed or how they are operated, some impacts will be unavoidable. If it is not going to be feasible to protect all life stages of all species, a plan to guide decisions involving tradeoffs is needed. This topic is critical to establishing assurances from both a water supply and environmental perspective. If we have unrealistic expectations about what can be achieved, it seems doubtful that adequate assurances can be crafted.

The text speaks of "mortality thresholds" that would be set and of mitigation to avoid mortality in excess of the thresholds. Monitoring to determine mortality attributable to fish screens, increased cross Delta flow, reduced Sacramento River flow or movement of X2 is mentioned but methods are not described. Based on past experiences (failures) in trying to quantify fish mortality or to establish cause and effect linkages of mortality to environmental conditions in the Delta, we should be skeptical of our ability to implement this mitigation strategy. Results of recent discussions on ecological indicators and how the Program would be adaptively managed may not be reflected in the DEIS/EIR. This is a significant shortcoming at this time.

Page 7.1-44:

The inclusion of a CVP/SWP intertie raises a question regarding joint points of diversion and changes to the SWP and CVP water rights. Are any assumptions made that would indicate increased CVP exports via the common intake to Clifton Court forebay would be allowed?

Regarding south Delta barriers, if a major contributing factor to water supply problems for southern Delta irrigators is channel aggradation, why is the proposed solution to increase water surface elevations. If siphons and pumps suck air because they have had to be raised above a continually rising channel bottom, the long-term solution should be to reduce the sediment input and

remove the sediment that has been deposited over the recent decades, not continually try to raise water surface elevations. Water circulation should also improve, enabling acceptable water quality to be maintained even with local agricultural drainage returning to the source channels. If aggradation continues, higher barriers will be needed and eventually, higher levees will be needed to protect the islands. The barriers approach seems misguided as a long-term solution, regardless of where most Delta exports occur in the future.

Section 8.3:

A discussion of impacts on commercial fishing, according to page 7.1-1, was suppose to be in section 8.3. Unfortunately, the discussion is inadequate especially for coastal fisheries which could be affected by regulation changes associated with implementing the ERP. A more complete description should be included in the final EIS/EIR. Mitigation measures should also be proposed to address impacts to commercial fishermen who may be affected during periods of reduced harvest for the purposes of achieving the goals of the CALFED Bay-Delta Program.

Page 8.3-2 and 3; Table 8.3-1:

There is no clear explanation in the text for the rating given for "Increase in population without an appropriately sized recreation base" and "Recreation and Fishing Employment and Revenue" for the Delta Region. Particularly since significant unavoidable impacts are described for alternatives like 3B, that have the highest potential for restoring fishery resources to support fishing. Furthermore on page 8.3-31, Section 8.3.2.7 states there are no potentially significant unavoidable impacts associated with recreation.

Executive Summary

Page 16 and 17, Groundwater:

We suggest that a brief discussion of coordinated watershed management be included in this section since the implementation of such a policy would increase groundwater recharge by slowing surface runoff and improving soil water retention

Program Goals and Objectives

Page A-2

We suggest you add the following problem statement under Problem Statement A - Important Aquatic Habitats:

Lack of rearing habitat for salmonids that are dependent on adequate year-round habitat conditions (e.g. steelhead and spring-run chinook salmon) is a major factor in their decline. This has resulted from dam construction that has eliminated access to 82% to 95% of historical spawning and rearing habitat. Because steelhead and spring-run chinook salmon are now relegated to spawning and rearing in habitats that are frequently suboptimal (particularly water temperatures) these species have declined to a greater degree than other salmonids in the system.

Page A-8

We suggest you add the following Ecosystem Quality Objective under Objective Statement A - Improve and Increase Aquatic Habitats:

A3. Restore access to historical habitats above presently impassable dams for anadromous salmonids, where feasible. This will allow species that are dependent on adequate year-round habitat conditions to access habitats where this occurs naturally. This will remove a significant factor causing their decline, and in turn, will alleviate the need to expend water, money, and efforts to artificially maintain these conditions in the lower reaches.

No Action Alternative

Project Alternatives

Ecosystem Restoration Program Plan Volume I

Page 1, Left Column, Paragraph 1 -

Two new Program Elements, Water Transfers and Watershed Management, have been added to the original four. These two additional elements have not been adequately developed with input from the Upper Sacramento watershed groups. This was abundantly expressed at the meeting of the Spring-Run Workgroup held in Maxwell, on April 16. A CALFED representative gave a presentation to yhr group, particularly focused upon the Watershed Management Program. Virtually all of the Upper Sacramento River watershed groups were represented at the meeting, and none was aware, or had been consulted regarding the new program. It would be very appropriate to bring each of the watershed groups in on program development.

Page 4, column 1, paragraph 1, last sentence:

What are some of the broader issues? Give specific examples in order to reach clearer understanding.

Page 4:

Long-term studies should be initiated in addition to the immediate focused research suggested under item #5. There is a need for long term studies to evaluate the dynamics of restoration sites which change considerably over time (i.e. different successional stages have different values to different species).

Page 5:

“Ecological Process:” This document should include changes in successional stages in riparian habitat as an ecological process. All riparian habitat does not have the same value. Species will use different successional stages in different ways.

Page 5:

Add “urban development adjacent to riparian areas” as a major stressor.

Page 6:

Include the specific definitions for nontidal and tidal perennial aquatic habitat.

Page 8, Natural Sediment Supply; and Page 36, Vision:

Explain how a natural sediment supply will be reestablished when dams, which cause much of a stream’s sediment load to drop out, are still in place.

Page 10:

Agricultural land issues should also include reductions in the introduction of pesticides, herbicides and fertilizers into aquatic systems.

Pages 12 and 119, Additional species for ecological elements:

As currently drafted, the DERPP omits ecological elements which we believe are crucial to meeting the stated CALFED ecological goal. The DERPP identifies criteria by which species elements will be included for evaluation of program success and monitoring for achieving identified targets.

Yellow Warbler: Considered a Species of Special Concern (SSC) in California, the Yellow Warbler is experiencing significant breeding

population declines in the DERPP problem and solution zones.

Salt Marsh Common Yellowthroat: Also a SSC due to loss of breeding habitat and concomitant breeding population declines. The range of this population extends into the Suisun Marsh/North San Francisco Bay zone and Delta region.

Tricolored Blackbird: Virtually endemic to California, this species is a SSC and a federal Species of Special Management Concern (SMC) (USFWS Region 1, 1995). Tricolored Blackbirds appear to be experiencing long-term, significant population declines and are currently the focus of research by the Department and the U.S. Fish and Wildlife Service. The species breeds in the ERPP zone and, perhaps even more significantly, winters in great numbers in the Sacramento and San Joaquin Valleys.

The burrowing owl and mountain plover, both of which are SSC and SMC, are associated with upland habitats (grasslands, agricultural zones) and should be addressed in the DERPP.

Southwestern Willow Flycatcher and Least Bell's Vireo, (both are State and Federally-listed endangered species) although not now known to nest in the ERPP area, occurred historically and may still be encountered during migration. The possibility of creating appropriate migratory resting areas and future breeding habitat should be evaluated and discussed in the DERPP.

Species and Species Group Visions should include all major species guilds (i.e. raptors, divers). The DERPP currently overlooks these important guilds and should include waterbirds such as grebes, loons, cormorants, and non-endangered rails. In addition, resident landbirds should receive the same level of consideration as migratory songbirds.

Pages 13,264-265:

Neotropical migratory bird guild should be included in all ecological zones and the goal of increasing riparian habitat in all ecological zones (pg. 75).

Page 14, Table 1:

I would suggest adding a section after Non-Native Wildlife, entitled Non-Native Fish, and include the same vision summary.

Page 20:

The "San Francisco Bay Region" appears to be incorporated as an "ecological zone" on the map (Figure 1) but is not included in this table. To alleviate confusion, it should be labeled "San Francisco Bay Watershed Region" or another designation to denote its exclusion from the "zone list."

Page 24, Left Column, Paragraph 4:

Under the discussion of the SWRCB and administration of water rights should be a comment that the SWRCB is understaffed and often does not have the capability to administer/enforce water rights, particularly in over-appropriated watersheds.

Page 24, Right Column, Paragraph 2:

The last sentence discusses the fact that Butte Creek is formally managed by a State Watermaster. That is only true within the adjudicated area down to the Western Canal, approximately one half of the total length of Butte Creek.

Page 25, Right Column -

The SWRCB should be included in the list of agencies with management responsibility for streamflows.

Page 26, Column 2, under "Species directly linked to streamflow include":

This section should be reworded as "Groups directly linked..." and not "Species directly linked..." and the second bullet should be deleted since it does not fit in with the other broad based categories. It might be advisable to list example of representative species in parentheses next to groups.

Page 31, Left Column, Paragraph 3:

Discussion of Daguerre Dam and Red Bluff Dam being major sediment barriers seem questionable. Red Bluff Dam is out of the water eight months of the year, particularly during high flow events. Daguerre Dam is a relatively low-head dam and was filled in early in its' existence, thus allowing most sediments to pass.

Page 32, Right Column -

In the section discussing protection and enhancement of sediment supplies and coordination with other programs, hard points created for fish screens should also be included.

Pages 36, 44, 264:

Linkage with other restoration programs should include coordination with the RHJV. The RHJV, developed through the auspices of California Partners in Flight, will provide coordinated development of riparian restoration plans with primary focus on conservation of migrant landbirds.

Page 37, Column 2, Paragraph 1:

Agriculture should be added to the list of stressors that impair the health of stream meander corridors. Page 35, column 1, last paragraph even states that, "Natural meander belts tend to be the least affected ... on rivers that have high flow stage during frequent flood peaks, thereby discouraging land conversion to urban or agricultural uses..."

Page 38, Column 2:

Dam Release Schedules During Wet Years: Some flows during wet years currently are higher than those during dry years so this is not an action that can be claimed as an ERP benefit as it is written.

Page 39, Dam Release Schedules During Wet Years, continued; Page 111, Column 2, Paragraph 2:

The discussion of the releases on the Colorado River below Glen Canyon Dam is misleading. The magnitude of the flows which that area saw are not anywhere near what could be duplicated here, mainly because development or agriculture occur so close to the river banks.

Page 41, Right Column, Last Paragraph -

Discussion of prolonged inundation of floodplains being beneficial with natural flood tolerance of seasonal wetland and riparian vegetation and animal life, should be qualified to exclude man-made structures which increase stranding of fish and other aquatic organisms.

Page 50 - Left Column, Paragraph 2:

The last sentence discusses "...Temperature Control Device, when operational...". It is operational.

Page 54, Left Column, Last Paragraph:

In the middle of the paragraph is a comment which reads in part "...above 56 F and total mortality above 68 percent". What is really meant?

Page 56, Left Column, Paragraph 4:

"Unfavorable hydraulic conditions decrease juvenile chinook salmon survival as they migrate from the Sacramento River through the Delta." Are unfavorable hydraulic conditions the source of mortality, or perhaps the associated predation opportunity?

Page 56, Right Column, Paragraph 3:

DCC gate closure is for up to 45 days during the period November - January. The way the sentence reads implies, 15 days each during November, December and January.

Page 58:

The last statement, "Such levels [of chlorophyll] have not been achieved in Suisun Bay since 1986", is incorrect. According to the graphic, it was achieved in 1995 and 1996.

Page 68, Left Column, Paragraph 4:

The second sentence discusses that existing and obsolete roads continue to supply large volumes of sediment. While such is true, in many cases it is only a small proportion of the roads that contribute a majority of sediments. A recent study of road related sediment in the upper watersheds of Mill and Deer Creeks, showed that 50% of the erosion was occurring on 5 % of the roads, which were located within 10% of the land area.

Pages 70-71:

Implementation Objectives listed are too vague. If these are "objectives," they should be measurable.

Page 71, Add another bullet under Implementation Objective, Targets, and Programmatic Actions:

Implement grazing practices that improve native plant growth to reduce erosion and recharge groundwater.

Page 74, Table 5, Under the column Ecosystem Habitat Element:

One of the categories should specifically include a general description of backwater sloughs, and small tributary estuarine systems which are being shown as valuable non-natal rearing areas for juvenile salmonids.

Page 75:

We think that the program should be expanded to protect, enhance, restore and manage both fresh emergent wetlands and seasonal wetlands throughout the ERPP study area, not just the Delta, for the reasons given. We also think that it should preserve and restore perennial grasslands throughout the study area for the reasons given and groundwater recharge and erosion control.

Page 79:

Add fresh emergent wetland and perennial grassland to all or nearly all ecological zones. Add appropriate sections to Volume II.

Page 86:

The Introduction states sloughs are important for "breeding, feeding, resting and roosting waterfowl". This is too narrowly defined since many other bird species (i.e. shorebirds, waders, neotropical migratory birds, and other listed "landbirds") use this habitat extensively as well.

Page 104, Under Integration with Other Restoration Programs:

Add a bullet: ■ Wildlife Conservation Board's Inland Wetland Conservation Program.

Page 106, Riparian and Riverine Aquatic Habitats:

It might be appropriate to include a more specific discussion of the value of backwater sloughs and small tributary estuarine systems and their potential value as non-natal rearing areas for juvenile salmonids.

Page 109, Under Integration with Other Restoration Programs:

First bullet: is this still "proposed"? Seventh bullet: Change "Joint Venture" to "Conservation Program". Add another bullet: "■ ongoing efforts to develop conservation plans for birds under the Partners In Flight initiative (especially the Riparian Habitat Joint Venture)."

Page 111, Column 1, Opportunities for Reducing Riparian Habitat Stressors:

Delete bullet 6 (large woody debris in stream channels and rivers).

Page 116:

Add erosion control and groundwater recharge advantages of perennial

grasslands.

Page 116, Column 2, Vision, Sentence 2:

It is not understood why the vision for perennial grassland is only a component of wetland and riparian habitats. This vision should be one that stands alone.

Page 118, Last Paragraph:

This paragraph is not necessary. If this paragraph is to remain explain how and which of the other restored ecological processes and habitats will create opportunities for the reestablishment of perennial grasslands.

Page 119:

Stressors should include pesticide and herbicide applications and also practices which encourage mobilization of salts and selenium in agricultural waste water. Leaching salts from the soils is mentioned as a benefit to agricultural stakeholders (page 115), but this also creates problems downstream and in the Delta where these salts concentrate.

Page 119, Column 2, Paragraph 1, Sentence 4:

This sentence reads as if vernal pools are found in flat, leveled agricultural lands. This is not the case and the sentence should be rewritten to avoid this impression.

Page 119, Column 2, Paragraph 2:

Also give an example or two of agricultural lands that provide little to no wildlife value, e.g. vineyards.

Page 120, under Integration with Other Restoration Programs, Under the voluntary landowner incentive programs section, the sixth bullet should read:

"Wildlife Conservation Board's Inland Wetland Conservation Program and California Riparian Habitat Conservation Program." Add "Wildlife Conservation Board" to the list of governmental and private agencies.

Page 123, Table 8:

Is it really possible to restore and/or maintain populations of striped bass, white catfish, largemouth bass at the same time as Sacramento perch?

Pages 125, 246:

Suisun Song Sparrow is a Species of Special Concern and is not at present under consideration for listing under the California Endangered Species Act.

Page 126, Table 9:

The discussion of salmon and trout should include updated information on the CESA/ESA listing status.

Pages 130, 131 and 132:

It seems that listed species and communities on this list should be added to other ecological zones; for example, Special-status Plant Species and Plant Community Groups are not listed in any zone and shorebirds and wading birds would benefit whenever waterfowl habitat is improved. If these are expanded, add to the appropriate sections of Volume II.

Page 146, Right Column, Paragraph 3:

The first sentence reads in part "...relative to other species, the percentage of the sturgeon population caught in diversions is low." The important point is not relative to other species, but relative to the impacts on the sturgeon population. There is virtually no information available to provide such an evaluation, however the velocity and mesh criteria for larval sturgeon are thought to be significantly more restrictive than the standard for salmon and steelhead which is currently in use.

Page 152, Right Column:

The DFG Central Valley Action Plan should be included in the list of major programs to restore salmon populations in the Central Valley.

Page 153, Right Column:

Included in the list of stressors that adversely affect chinook salmon is "Predation and competition". It might be appropriate to take a stab at naming the predators.

Page 156, Introduction, First sentence in the 2nd paragraph:

This information is not represented correctly and it should be noted that this figure is the total number of adults (hatchery plus natural fish) for the entire system, as stated in the Steelhead Restoration and Management Plan for California (see pg. 43 and 45). The total number of natural spawners is undoubtedly much less, and is probably no more than a few thousand fish.

The California Fish and Wildlife Plan estimated that there were 40,000 adult steelhead in the Central Valley drainages in the late 1950's. This is probably a more accurate estimate than the 30,000 that is stated in the document. Hallock et al. (1961) estimated the average annual steelhead run size in the Sacramento River system above the mouth of the Feather River in the 1950's was 20,540 adults. The above two cited documents are more reliable indicators of run size than the two documents that are cited in this paragraph. We note that one of the documents cited (Mills and Fisher 1994) is a draft that was never finalized, and it contains a very large error in its calculation of steelhead abundance.

A description of historical and present distribution should be included.

Note: Steelhead ranged throughout the Sacramento River system (both east- and west-side tributaries) and the San Joaquin River system. Historical documentation exists that show that steelhead were widespread throughout the San Joaquin River system, and there is substantial documentation that remnant steelhead populations are extant in some tributaries in this system (see comments on Ecosystem Restoration Program Plan, Volume 2, San Joaquin River Ecological Zone for more detail)

Page 156, Resource Description:

Information regarding Endangered Species Act Status Review and listing decisions needs to be updated. Also, it should be noted in this section that the single-most limiting factor for steelhead populations in the Central Valley is lack of access to an estimated 82% to 95% of the historical spawning and rearing habitat (Reynolds et al. 1993; Yoshiyama et al. 1996) because of dams. Consequently, steelhead are relegated to spawning and rearing in low elevation reaches that were historically only used as migration corridors, and this document should acknowledge that this is the greatest stressor for steelhead on a system-wide basis.

Page 157, 2nd paragraph:

This paragraph needs to be updated with new information.

Note: NMFS performed a genetic analysis of additional steelhead samples collected by the Department from the Stanislaus River, the American River, Nimbus Hatchery, and Feather River Hatchery. This analysis augmented the previous analysis done on samples from Coleman National Fish Hatchery and Mill and Deer creeks. This new analysis found that *all of the Central Valley samples, except for those from the American River, cluster closely together and form a genetic group distinct from all coastal samples. In contrast, the American River

samples [wild fish and those from Nimbus Hatchery]...are genetically most similar to a sample from the Eel River* (NMFS 1997) Thus, the last sentence of the paragraph should be modified to state *Recent data from genetic studies show that samples of steelhead from Deer and Mill creeks, the Stanislaus River, and Coleman and Feather River hatcheries are well differentiated from all other samples of steelhead from California.

On March 13, 1998, NMFS made a final ESA determination for the Central Valley steelhead ESU. The ESU includes all anadromous waters of the Sacramento and San Joaquin river systems (excluding that portion of the San Joaquin River system upstream of the confluence of the Merced River). It should be noted that the NMFS Biological Review Team concluded, based on biological, abundance, and population trend information, that this ESU warranted endangered status (NMFS 1997). However, after consideration of state and federal conservation efforts, NMFS concluded that this ESU warranted listing as a threatened species. This underscores the fact that Central Valley steelhead populations are severely depressed, and we believe that management efforts should treat this stock as a de facto endangered species.

Page, 157, Vision:

This section is weak and contains very little that is specific to steelhead. Much of the information is generic and reflects a lack of understanding of the differences in life history between salmon and steelhead and the resultant management and restoration implications. It is our opinion that none of the general conservation measures identified in this section will achieve substantial or long-term restoration of Central Valley steelhead populations. If CALFED is to be successful in its objectives for steelhead, it must address the fact that nearly all of the historical spawning and rearing habitat is presently inaccessible, and provide specific measures for steelhead restoration that address this issue. We believe that there are only two restoration scenarios that have the potential to be successful in restoring Central Valley naturally spawning steelhead populations: 1) restore access to historical habitat above the large dams on some major tributaries; and 2) dedicate more water in storage to provide adequate tailwater habitat conditions (primarily water temperatures) year-round below the dams.

Page 158, last paragraph:

The statement *juvenile salmonid passage at large dams in the Columbia River basin has had little success...* is not correct and should be deleted and replaced with the following:

It should be stated that a smolt collection facility above the major reservoirs will probably need to be implemented to ensure that

emigration is successful.

Page 164, Left Column, Last Paragraph:

The last sentence reads in part "Habitat improvements are expected to also increase the abundance of shrimp and small fish that are important prey of young and adult striped bass ...". It might be appropriate to name some of the "small fish", salmonids perhaps?

Page 220:

The DERPP identifies and discusses stressors which may limit or otherwise impact ecological elements. Although the DERPP attempts to identify major environmental stressors, key stressors or potential population limiting factors are not currently addressed or impacts associated with targets are not identified. Land use conversion, particularly conversion that results in loss of native or natural habitats are not addressed. This omission is particularly significant in light of a focus in the DERPP on habitat restoration and, in some cases, habitat creation and since habitat conversion fits the DERPP's definition of a stressor. In addition, the DERPP encourages production of crop types that provide high wildlife habitat value, without recognizing that certain water policies may promote conversion of grain and vegetable crops to permanent crops such as orchards and vineyards, which have diminished value to wildlife.

Page 221, Column 2, Last Paragraph, Sentence 2:

It is not understood what is meant by *juvenile and bullfrogs*.

Page 228, Column 1, Bulleted Items:

The loss of nesting habitat (for pond turtles) because of agricultural practices such as discing needs to be added either to the first bullet or as a stand alone item.

Pages 237-8, 240, 242:

Most of the "targets" are too vague. There is a need for firmer targets, such as maintaining populations at current (or other target) levels.

Page 254, Linkage with Other Ecosystem Elements:

Delete the reference to grasslands. Adjacent grasslands have no value for the riparian brush rabbit as this species needs dense cover in adjacent escape habitats.

Page 265:

Implementation objectives for the Neotropical Migratory Bird Guild should include long term population monitoring and assessment (i.e. mist-netting, point-counts, and breeding bird surveys) to track population trends in order to assess the effects of the DERPP actions.

Page 269:

We question why habitat conversion is not listed as a major stressor in Vol. I, especially since protection of existing habitat and restoration of land to various habitat types appear ubiquitously throughout the DERPP as programmatic actions and restoration targets. Habitat conversion also fits the DERPP's own definition of a "stressor." Additionally, this stressor is also implicitly recognized in the vision summary for the ecosystem element of agricultural lands (Vol. I, p. 119). The DERPP encourages production of crop types that provide high wildlife habitat value, without recognizing that certain water policies may promote conversion of grain and vegetable crops to permanent crops such as orchards and vineyards, which are inherently of less habitat value to wildlife. We support the vision statement that discourages development of ecologically important agricultural lands for urban or industrial uses. Again, land use factors are explicitly recognized as stressors (Vol. I, p. 121).

It should be clearly recognized that flooding can be essential to maintain the diversity of riparian plant communities. The disturbance caused by normal spring flooding increases plant diversity and the regeneration of a thick understory that nesting birds rely upon. Extensive research conducted throughout the Central Valley (Point Reyes Bird Observatory and others) has documented the highest diversity and productivity of birds in areas with a thick multispecies vegetative understory.

Grazing should also be added as an important stressor. Grazing in the understory reduces cover and nesting opportunities for birds. Loss of vegetation dramatically reduces the nesting success of riparian dependent birds through increased nest predation and parasitism.

Page 270, Table 11:

The Stressor Type, Invasive Aquatic Organisms Implementation Objective reads "reduce introductions of non-native species in order to protect and provide sustainable populations of native species". The following Stressor Type, Non-Native Wildlife reads "reduce the abundance of non-native wildfire species to maintain and expand the diversity or abundance of native species or the

ecological stability of native habitats". Is there a basic contradiction in the two, and is there a lack of logic on this issue throughout the ERPP?

Pages 275-276:

The "water diversions" vision only concerns itself with screening issues and needs to be expanded to include amount and timing of water diversions.

Page 276, Left Column, Paragraph 1:

The GCID fish screen is under construction.

Page 279:

The "Dam et al. Vision" should be expanded to include water quality issues (i.e. water temperature) and amount and timing of releases.

Page 280, Left Column, Reword Action:

Where feasible and consistent with other uses, reconstruct diversions or remove dams", the first action. The best option is generally removing a barrier.

Page 301, column 1, last Paragraph:

Include information from recent reports elaborating the correlation of the decline of certain phytoplankton and zooplankton and the delta smelt. Reports presented at asilomar by Jenni Lott and Matt Norbriga.

Page 302, Vision:

Include education of sports fishermen in order to minimize the introduction of none native fish.

Page 302, Left Column, Paragraph 2:

Include a discussion of black bass or striped bass as invasive non-native species?

Page 314, Non-Native Wildlife -

Would it be appropriate to have similar section on "Non-Native Fish"?

Page 314, Column 2, Bullet 1:

Include San Joaquin kit fox with the California clapper rail as species that are threatened by the red fox.

Page 321, Left Column, Paragraph 1:

The new GCID fish screen is under construction at the site of the old fish screen, located on the oxbow. The intake and bypass sections of the oxbow are, or will be constructed to reduce/eliminate predation.

Page 321, Right Column, Paragraph 2:

The last sentence discusses Nimbus Hatchery steelhead being large enough to prey on winter-run salmon. Coleman Hatchery steelhead are also large enough and co-occupy winter-run habitat for a longer period than Nimbus Hatchery fish.

Page 326:

Contaminants also pose a significant human health problem.

Page 326:

Include refineries and boat traffic as major contaminant issues.

Page 349:

The "Disturbance" section should be expanded to include commercial boat traffic. Further, "unmanaged recreational uses" can have disturbance impacts on wildlife, especially some of the sensitive species such as Swainson's Hawk and Yellow-billed Cuckoo.

Page 349, Right Column, Paragraph 3:

Stressor descriptions should include in-water activities such as tubing on small tributaries like Butte Creek.

Page 350:

"Disturbance associated with pets of people who live near wildlife habitat" should be expanded to include predation from cats (and dogs to a lesser degree).

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Page 2, left column, last paragraph:

The recognition that human intervention, manipulation and management will be required appears to conflict with the new goals being developed by the indicators group or "friends of the ERPP". These goals should have more

agency input and review and need to be integrated with the ERPP and its targets as it currently stands to remove potential conflicts.

Page 4:

DERPP "Steps" should also include provisions for long term studies to evaluate the effects of specific actions; also, provisions should be made in key areas for long term monitoring on a consistent basis.

Page 5, "Species and Species Groups" item #2:

This item emphasizes "economic importance" only in terms of sport or a commercial fishery. The item should be expanded to include recreational values (i.e., bird-watching). Bird-watching is one of the fastest growing hobbies in America, rivaling even the popularity of golf. Between 1982 and 1995, the number of people participating in bird-watching grew by 155% compared to 93% and 72% for hiking and backpacking, respectively, while participation in fishing and hunting decreased by 3% and 11% respectively. Nationwide there are over 63 million people who feed birds and 25 million people who will travel to watch birds. Bird-watching has become a cottage industry in some towns, with annual bird festivals drawing large crowds and "ecotourist" income to local businesses. In California alone, there are currently eight annual bird festivals that contribute to local economies, including the Lodi Crane Festival launched this year (G. Elliott, pers. com.).

Page 5:

"Stressors" category should include habitat loss.

Page 14 Table:

Clapper Rail is not found in the Delta, only in the brackish or saline wetlands of Suisun or San Francisco Bay.

Page 43, Right Column, Program Action 1D:

It might be appropriate to discuss the CALFED Ops. Group Sacramento River Protection Plan which was implemented on a short-term basis to provide real-time migration cues to trigger DCC gate closures.

Page 52; Riparian:

The acreage targeted for riparian should be expanded. Additional acreages of up to 5,000 acres should be added to provide a more complete mosaic of habitats in the Delta.

Page 54; Perennial Grasslands:

The acreage targeted for perennial grasslands should be expanded so it serves as a suitable buffer for the other habitats restored through implementation of the ERPP and as an appropriate upland transition zone to ensure the long-term viability of the restored habitat.

Page 61, Right Column, Target 2:

It might be appropriate to suggest a "focused research project" to evaluate the source of mortality of juvenile salmonids as they cross the interior Delta.

Page 66, Right Column, Paragraph 1:

Restoring chinook salmon populations, particularly spring-run should include restoring Delta inflow and outflow during October, November, and December.

Page 71:

Objectives and targets for Swainson's Hawk should be included. Furthermore, objectives and targets for additional species as recommended above should be included. (See comments under Vol. I, pp 19, 112.)

Page 74:

The target for the Neotropical Migratory Birds is too vague. Measurable population standards need to be set.

Pages 74,436:

Rationale for Neotropical Migratory Birds should be expanded to include migrants as well as breeding species. Pure migrant landbirds use various habitats, but especially riparian, for feeding and shelter during migration. These stopover sites are of critical importance during passage to and from wintering areas. A landbird is able to meet its energy needs during migration only if it encounters habitat of suitable quality enroute. We recommend expanding the rationale to include a discussion of pure migrants and extending the period of use from May until September to April until October.

Page 93 Seasonal Wetlands:

The definition of "Vision" for seasonal wetlands should be expanded. Because they are important to a wide variety of wildlife including waterfowl, shorebirds, river otters, etc., they should receive further emphasis.

Page 96:

The Salt Marsh Common Yellowthroat should be included in the list of animals adversely affected. This particular ecological zone contains some of the most important breeding habitat for this sensitive taxon.

Page 98 Suisun Marsh Management and Protection Plans:

As referenced in the first sentence, the "Plan" is correctly titled "Plan of Protection for the Suisun Marsh." The goals of this Plan are much more far reaching than "...to maximize waterfowl food production while maintaining..." The basic goal of this Plan is to provide water of adequate quality at the correct times of the year to enable land managers to produce the habitat beneficial to waterfowl and a wide variety of other wildlife. The statement, "Though the plan's focus is to manage diked wetlands, plan elements are consistent with ERPP objectives and targets," is not correct. Page 105 states under "Rationale," Target 1 "The intent of the ERPP is to remove levees of some managed wetlands to allow the restoration of tidally influenced habitats and expand the acreages..." There are other references to more tidal wetlands. Increasing the amount of tidal wetlands in the Suisun Marsh is not the focus of the Protection Plan.

Page 104 Saline Emergent Wetlands Rationale:

One of the justifications for increasing Saline Emergent Wetlands is to reverse subsidence where peat oxidation has lowered land elevations to more than 15 feet below sea level. There are no places in the Suisun Marsh 15 feet below sea level. The situation described occurs in the Delta but not in the Suisun Marsh because the soils in the Suisun are not farmed and are not left barren. Oxidation is a very slow process.

Page 104 and 105; Seasonal Wetlands:

A key target originally contained in the July 28, 1997 draft of Volume II was the restoration and management of additional seasonal wetland habitat in the Suisun Bay and Marsh Ecological Unit and Ecological Units to the north of San Pablo Bay. These targets were up to 3,000 acres and 2,000 acres respectively. The DFG believes this target is achievable and necessary to offset impacts of converting managed wetlands to tidal action. The other targets listed on page 105 related to NAWCA and efforts facilitated by DWR and USBR through amendment 3 of the SMPA are also needed.

Page 105 Rationale Target 1:

The stated intent is to increase the acreage of tidal wetlands by removing levees from managed wetlands. This section states "This may result in a need to replace any losses of managed wetlands by creating additional wetland areas.

However, there may not be area for any additional acres of managed wetlands..." Both the State and Federal governments have wetlands policies that basically state "no-net-loss of wetlands." All of the agencies involved in CALFED must live by these policies and any loss of wetlands or values by converting one type to another must be fully mitigated. This mitigation cannot be dismissed by the statements in this Volume.

Page 119:

Regarding the "Black Rail Vision," only one programmatic action (restoration of tidal emergent wetland habitat) is identified for implementation-yet in Volume I, pp 237-238, 10 programmatic actions are identified to achieve the target and implementation objectives for this species. It is difficult to assess whether the implementation of additional programmatic actions is warranted, as there is no quantitative assessment of current habitat suitability for the Black Rail nor information on how habitat suitability would change over time under the proposed action. We recommend the inclusion of quantitative assessments of effects to species and species group ecosystem elements.

Page 121:

Add a paragraph describing the neotropical migratory bird guild.

Page 126:

Yellow Warbler should be addressed in paragraph 6.

Page 126, Table of Listing Status:

Steelhead are federally listed as threatened.

Page 129, Right Column, Paragraph 6:

The first two sentences (striped bass) don't fit the rest of the paragraph (yellow-billed cuckoo).

Page 130, Left Column, Paragraph 3:

This paragraph should be updated to reflect the current construction of a new screen.

Right Column, Paragraph 2:

In the middle of the paragraph which reads "This also provides unimpaired

upstream and downstream migration for all anadromous fish in the river." This is in reference to the current operation scheme for the RBDD gates. Spring-run adults are still affected after May 15, and fry winter-run prior to September 15.

Page 133 last pgph

The vision for this zone of maintaining a flow pattern that emulates the seasonal hydrologic regime to the extent possible reflects a lack of understanding of the habitat requirements of juvenile steelhead and how the system has been modified to the detriment of steelhead populations. Restoring and maintaining natural flow patterns may benefit chinook salmon but emulating natural flow conditions will not benefit natural steelhead populations and will cause severe impacts to these populations. Because of the placement of impassable dams on all major tributaries, approximately 82% to 95% of historical Central Valley steelhead habitat is inaccessible (Yoshiyama et al. 1996) hence natural populations are mostly relegated to spawning and rearing in low elevation habitats that were historically used only as migration corridors. Because of increased summer and fall hypolimnetic releases from reservoirs, flow and temperature conditions in the late summer and fall periods in these reaches can be more beneficial to steelhead than before the dams were built, and small numbers of natural steelhead are able to sustain themselves in these tailwater habitats because of this (at least in wet years when there is adequate releases of cold water). Inhospitable conditions in the lower reaches in the pre-dam years was not an overriding impact to steelhead because they had access to the cooler water habitats of the mid and high elevation tributaries. Mimicking of natural flows, and resultant minimal flows in the late-summer and fall period, without providing access to historical habitat, will most likely eliminate naturally spawning steelhead from the mainstem and major tributaries.

The AFRP's targets of 3,200 to 5,500 cfs releases from October through April will not provide any great benefit to steelhead in this reach unless adequate releases of cold water are made that will sustain juvenile rearing habitat through the summer and fall.

Page 133-137:

Target widths for riparian habitat are too narrow. The RHJV will provide data to the planning team on habitat needs of riparian associated bird species as it becomes available. We would like to emphasize the need to examine each site on its own merits and develop restoration criteria dependent on the qualities of the site.

Page 137, Right Column, Paragraph 3:

The second sentence reads in part "The meander belt of the upper portion of the

river above Chico Landing is reasonably healthy and functioning,...". Above Red Bluff the meander belt is largely controlled by natural geologic formations. Below Red Bluff, it is facing many of the same problems as in the reach below Chico Landing, such as private rip-rap and agricultural encroachment. The major difference is lack of project levees.

Page 138, 2nd paragraph:

It should be stated in this section that summer and fall stream temperatures are more critical for steelhead than they are for most races of chinook salmon because steelhead juveniles must rear for more than one year in fresh water, hence adequate temperatures must be maintained year-round.

Page 138, Eliminating or Reducing Stressors:

Why is there no mention of reducing or eliminating high water temperatures? As stated correctly in the document, this is a very important stressor, especially for steelhead.

Page 139, Right Column, Paragraph 2:

Would it be appropriate to provide some discussion of all predators, particularly introduced species like black bass, catfish, and striped bass.

Pages 145-146, Implementation Objectives, Targets, and Programmatic Actions, Central Valley Streamflows

Target 1 is to more closely emulate seasonal streamflow patterns and Target 2 specifies maintenance of base flows of 6,000 to 8,000 cfs during the fall period. The focus of these actions is to provide suitable baseflows to benefit chinook salmon. This will not provide necessary conditions to restore steelhead because there are no targets or actions specified to maintain suitable flows for rearing steelhead during summer and fall. Statements on page 146 appear to argue against making adequate releases in the fall period: "the chinook salmon and steelhead that spawn in the fall have eggs in the river that...can be severely damaged when wintertime releases...are dropped below the fall release levels...The fall flow needs to consider the need for carryover storage to provide temperature control in the following year." Given that steelhead do not spawn in the fall as stated, this argument is true only for chinook salmon. This management practice of sacrificing steelhead rearing habitat to maintain adequate cold water storage for chinook salmon has been prevalent on major tributaries, such as the American River below Nimbus Dam, and has been one reason for the decline of Central Valley steelhead.

Page 149, Central Valley Stream Temperatures, 7th paragraph

The bias towards chinook salmon restoration is apparent in the statement "With [the Shasta temperature control device], warm water could be withdrawn from the upper lake levels when needed, while conserving the deeper, cold water for release when it would most benefit chinook salmon." If this device is used only to provide benefits to chinook salmon, then further impacts to the steelhead population could result from inadequate releases of cold water.

Page 149, Target 1:

The last part of the sentence reads in part "...Keswick Dam and RBDD in above normal and wet years, and between Keswick and RBDD in other year types". Should the second reference to RBDD be Bend Bridge?

Page 152, Left Column, Paragraph 2:

In the middle of the paragraph is the sentence which reads "Alternatives to screening will be considered." This sentence should be qualified with the requirement that the alternative meets DFG and NMFS standards. The last sentence should include a requirement for operation monitoring to insure consistent operation to design standards.

Page 161, Left Column, Target 2:

Prior to rebuilding the Sacramento fall-run salmon stock, it might be appropriate to determine through "focused research" the extent and or condition of any natural (non-hatchery) stock in the Sacramento River.

Page 163, Left Column, Paragraph 3:

It might be appropriate to qualify this paragraph as it discusses population recovery levels for spring-run salmon, with a statement that recovery numbers may change as the result of the ESA/CESA actions.

Pages 163-164, Implementation Objectives, Targets, and Programmatic Actions, Species, Steelhead Trout:

This section is very weak, contains no specific measures for steelhead restoration, and is repeated verbatim in the corresponding sections for the other Ecological Zones. "Maintain the cohort replacement rate for steelhead trout above 1.0" is a generic, meaningless statement that can be made for all species/stocks that are targeted for recovery. There are no measures in this section that support the statement that "Actions in the Sacramento River Ecological Zone have been designed to specifically restore steelhead or their

habitat” All of the programmatic actions that are listed on page 164 2nd paragraph are generic, repeated verbatim in the other species’ descriptions and for all the other Ecological Zones, and will not result in significant restoration of Central Valley steelhead. Unless specific measures are identified that will address the issue of steelhead rearing habitat loss and provisions are made to provide suitable conditions, primarily water temperature, for juvenile steelhead significant restoration of steelhead populations will not be achieved.. The reliance on other measures that are proposed to be implemented as stated on page 164, 6th paragraph reflects a lack of understanding of steelhead life history characteristics, how these differ from other species, and the measures necessary to recover steelhead populations. For example, steelhead use the mainstem Sacramento River below Red Bluff as a migration corridor only, hence restoration of riparian woodlands along the Sacramento River, as stated, will not result in significant recovery of steelhead populations.

Page 164, 5th paragraph:

This paragraph needs to be updated with new information. NMFS performed a genetic analysis of additional steelhead samples collected by the Department from the Stanislaus River, the American River, Nimbus Hatchery, and Feather River Hatchery. This analysis augmented the previous analysis done on samples from Coleman National Fish Hatchery and Mill and Deer creeks. This new analysis found that “all of the Central Valley samples, except for those from the American River, cluster closely together and form a genetic group distinct from all coastal samples. In contrast, the American River samples [wild fish and those from Nimbus Hatchery]....are genetically most similar to a sample from the Eel River” (NMFS 1997) Thus, the last sentence of the paragraph should be modified to state “Recent data from genetic studies show that samples of steelhead from Deer and Mill creeks, *the Stanislaus River*, and Coleman and *Feather River* hatcheries are well differentiated from all other samples of steelhead from California

Page 168, North Sacramento Valley Ecological Zone:

It would be appropriate to have some general discussion in this section regarding non-natal salmonid rearing potential relative to small tributaries and backwater areas.

Page 173, Right Column, Paragraph: 3

The last sentence discusses flows being increased by a factor of 10. It would seem more relevant to state the flows.

Page 174, Right Column, Paragraph 3:

This paragraph should also discuss the need for improved fish ladders, if dam removal is not possible.

Page 185 - Eliminating or Reducing Stressors

Why is there no mention of reducing or eliminating high water temperatures? As stated correctly in the document, this is a very important stressor, especially for steelhead

Page 187 - Artificial Propagation of Fish

An Objective/Programmatic Action that could be added would be to determine if a founding broodstock of steelhead could be derived from native Central Valley resident rainbow trout that may exist in the headwaters of some tributaries. If genetic analysis determines that a suitable population exists in the headwaters, then a founding population could be captured and placed in a hatchery for captive breeding purposes. Experiments could be undertaken to determine if anadromous steelhead could be derived from the experimental hatchery population. If this is successful, then restoration of native Central Valley steelhead may be achievable.

Pages 190-191, Implementation Objectives, Targets, and Programmatic Actions - Species, Steelhead Trout

see comment, page 163-164 - Implementation Objectives, Targets, and Programmatic Actions - Species: Steelhead Trout

Page 191 3rd paragraph

see comment, page 164, 5th paragraph

Page 199, Right Column, Programmatic Action 1A:

Prior to augmentation of flows, focused research on instream flow needs, as stated in the last paragraph, should be initiated.

Page 207, Colusa Basin Ecological Zone:

There should be a discussion of non-natal tributary rearing of juvenile salmon in such tributaries as McClure, Jenner and Burch and Stony Creeks.

Page 208, Right Column, Paragraph 1:

What is the reference for there being no riparian vegetation along Stony Creek below the site of Black Butte Dam. Certainly the area within the influence of the Sacramento River flood plain, at least up to Highway 45 had riparian

vegetation.

Page 210, Vision for the Ecological Zone:

Where are the previous references to the limited potential for fall-run salmon in Stony and Thomes Creeks? Also the discussion of the RBDD/TCC enhancement facility requirements?

Page 219, Butte Basin Ecological Zone:

Several recent observations of juveniles and adults, would indicate some remnant population of late fall-run salmon at least in Big Chico and Butte Creeks.

Page 225, Right Column, Paragraph:

This paragraph should include discussion of the proposed water exchange with the Deer Creek Irrigation District and the Stanford Vina Irrigation Co. The exchange is still being explored and would provide a potential for 50 cfs at key times.

Page 227, left Column, Paragraph 2:

The last sentence regarding restoring flows in Big Chico Creek is no longer relevant. With the relocation of the M&T pumps flows have been restored.

Page 234, Eliminating or Reducing Stressors:

Why is there no mention of reducing or eliminating high water temperatures? As stated correctly in the document, this is a very important stressor, especially for steelhead.

Page 235, Right Column, Paragraph 2:

The Deer Creek Watershed Conservancy also has an MOU Signed by many of the same signatories, and additionally has developed a very comprehensive existing conditions report and watershed management strategy report that is nearing final form. It is anticipated by the conservancy that both reports will be combined and released as a watershed management plan prior to summer 1998.

Page 236, Left Column, Paragraph. 2:

The Butte Creek Conservancy also has a signed MOU similar to those in Mill and Deer Creeks. Additionally, the Butte Creek Conservancy, through the

CSUC Foundation, is in the process of development of a comprehensive existing conditions report to be completed by September 1998.

Page 236, Left Column, Paragraph. 3:

The Big Chico Creek Task Force has been reconstituted as the Big Chico Creek Alliance, with the same goals and objectives.

Page 241, Right Column, Target 1:

As stated in the general comments, managed flooding of agriculture lands during the non-growing season for the benefit of waterfowl, should include a need to identify an appropriate and legal water source.

Page 242, Right Column, Programmatic Action 1E:

Include Programmatic Action 1E-1, which would read "Increase the survival of juvenile salmon and steelhead in the Butte Sink by evaluating the need to install positive barrier fish screens on diversions."

Page 243, Right Column, Target 2:

It appears that the sentence should read "...100% of habitat located below the natural barriers above Higgins Hole."

Page 244 Target 4:

Why is the proposed restoration of access for steelhead restricted to the reach below Centerville Head Dam? Before water development, steelhead likely ascended Butte Creek as far upstream as Butte Meadows (Yoshiyama et al. 1996). It appears that this is yet another measures designed for chinook salmon restoration, given that the Centerville Head Dam area is the likely historical upstream terminus of chinook salmon distribution in Butte Creek (Yoshiyama et al. 1996), with little thought given to steelhead restoration measures.

Page 245, Left Column, Target 1:

This target discusses minimizing straying of Coleman Hatchery salmon and steelhead. This should also include Feather River Hatchery and potentially all Central Valley salmon hatcheries.

Page 247, 9th paragraph:

see comment, page 164, 5th paragraph

Page 247, Left Column:

It would be appropriate to initiate "focused research" relative to late fall-run salmon in the various Upper Sacramento River east side tributaries. Anecdotal and recent sightings suggest there may be a small remnant or sporadic population.

Pages 247-248, Implementation Objectives, Targets, and Programmatic Actions, Species, Steelhead Trout

see comment, page 163-164 - Implementation Objectives, Targets, and Programmatic Actions - Species: Steelhead Trout

Page 260, Left Column, Sutter Bypass Ecological Unit:

Generically, bypasses and overflow weirs/basins should be configured to eliminate lethal stranding of migratory salmonids and other aquatic organisms. It would be appropriate to develop "focused research" into the extent of the problem in the entire ERPP area, and then to develop consistent prioritized remedies.

Page 262, Right Column, Paragraph 2:

It might be appropriate to mention potential for Englebright Dam removal.

Page 272, Left Column, Programmatic Action 1A:

The concept of flooding fields for winter/spring habitat needs to be qualified with need for legal water source that doesn't have other detrimental effects.

Page 272, Eliminating or Reducing Stressors:

Why is there no mention of reducing or eliminating high water temperatures? As stated correctly in the document, this is a very important stressor, especially for steelhead.

Page 272, Programmatic Action 1A:

This action must include providing adequate funds and personnel to staff the Hallwood-Cordua fish screening facility year-round. Currently, because of lack of funds, the Department ceases operation of the fish screening facility on June 1 (after the chinook salmon emigration period), and significant numbers of juvenile steelhead are entrained into the diversion after this time (Nick Villa, Fishery Management Supervisor, DFG Region 2. pers comm).

Page 274, Artificial Propagation of Fish:

see comment page 187 - Artificial Propagation of Fish

Pages 277-278, Implementation Objectives, Targets, and Programmatic Actions, Species, Steelhead Trout

This section is very weak, contains no specific measures for steelhead restoration, and is repeated verbatim in the corresponding sections for the other Ecological Zones. "Maintain the cohort replacement rate for steelhead trout above 1.0" is a generic, meaningless statement that can be made for all species/stocks that are targeted for recovery.

Page 294, Eliminating or Reducing Stressors:

Why is there no mention of reducing or eliminating high water temperatures? As stated correctly in the document, this is a very important stressor, especially for steelhead.

Pages 305-307, Implementation Objectives, Targets, and Programmatic Actions, Central Valley Stream Temperatures:

We are pleased to see specific objectives, programmatic actions, and targets for providing suitable summer and fall water temperatures in the lower American River for juvenile steelhead rearing. This level of detail and analysis for steelhead restoration measures is lacking in the other Ecological Zone sections.

Page 311, Artificial Propagation of Fish:

see comment page 187 - Artificial Propagation of Fish

Pages 313-314, Implementation Objectives, Targets, and Programmatic Actions, Species, Steelhead Trout:

This section is very weak, contains no specific measures for steelhead restoration, and is repeated verbatim in the corresponding sections for the other Ecological Zones. "Maintain the cohort replacement rate for steelhead trout above 1.0" is a generic, meaningless statement that can be made for all species/~~stocks that~~ are targeted for recovery.

Page 373, 2nd paragraph:

On March 13, 1998, the National Marine Fisheries Service (NMFS) listed the Central Valley Steelhead Evolutionarily Significant Unit (ESU) as threatened under the federal Endangered Species Act. This ESU includes the anadromous

reaches of the Stanislaus, Tuolumne, and Merced rivers and the San Joaquin River downstream of its confluence with the Merced River. Despite this, the draft ERPP states that "the presence of a distinct anadromous run of steelhead in the [San Joaquin] basin has not been confirmed". Presently, the draft EIR/EIS is deficient because this document fails to acknowledge the presence of a federally listed threatened species in the affected area. Given the fact that the National Marine Fisheries Service has stated that a steelhead run exists in the San Joaquin River system (NMFS 1998) and has listed them under the federal Endangered Species Act, this is a serious deficiency.

The Department has provided CALFED with sufficient evidence documenting the existence of steelhead in the San Joaquin River system. The Department has gone on record stating that a self-sustaining steelhead population still exists in the Stanislaus River (DFG 1997). We are perplexed by the reluctance of CALFED to acknowledge that a steelhead run still exists in this system.

We do not agree with the statement that "the presence of a distinct anadromous run of steelhead in the basin has not been confirmed". We agree that the number of captured smolts has been relatively few, but, it should be kept in mind that the number captured does not represent the entire juvenile outmigration because the sampling equipment only samples a small portion of the river flow. A better indicator of a presence of a run, as we have stated in previous comment letters, is the fact that steelhead smolts have been documented in the system consistently for the past four years. This indicates that natural production is still occurring and the run is still extant.

The statement that "genetic studies are under way to determine whether the steelhead and rainbow trout in the San Joaquin River basin are a distinct anadromous run, a resident population, or stray steelhead originating from the Sacramento River basin" is partially incorrect. Of the numerous genetic analysis that have been done, none have been able to find markers differentiating resident rainbow trout from the anadromous forms. This is a good indication that the two forms comprise a single interbreeding population in specific stream systems.

The genetic analysis that you refer to has been completed. NMFS performed a genetic analysis of additional steelhead samples collected by the Department from the Stanislaus River, the American River, Nimbus Hatchery, and Feather River Hatchery. This analysis augmented the previous analysis done on samples from Coleman National Fish Hatchery and Mill and Deer creeks. This new analysis found that the Stanislaus River population is very similar to the Coleman, Feather River Hatchery, Deer Creek and Mill Creek populations and together they form a genetic group distinct from all coastal samples of steelhead. In contrast, the American River samples (wild fish and those from Nimbus Hatchery) are genetically most similar to a sample from the Eel River (NMFS

1997). Given that Nimbus Hatchery steelhead from the American and Mokelumne rivers (steelhead reared at Mokelumne River Hatchery are obtained from Nimbus Hatchery) are the closest populations in proximity to the Stanislaus River, one could surmise that if the Stanislaus River population was derived from straying, it would most likely have a similar genotype to Nimbus Hatchery steelhead. However, the Stanislaus River population is most similar to other Central Valley populations, which are also distinct from all other west coast steelhead populations examined (including Nimbus Hatchery steelhead), indicating that this population could be representative of native Central Valley steelhead. In this regard, they could be highly "distinct".

The question of "distinctness" is highly subjective, and determining whether a San Joaquin steelhead run is "distinct" before acknowledging that a run exist holds it to a higher standard than for other basins; i.e. we know that a steelhead run exists in the American River, and we know that it probably is not "distinct", yet CALFED acknowledges that a run still exists here and has recommended programmatic actions for restoration.

Page 374, Mendota Pool to Gravelly Ford Ecological Unit:

The vision for this ecological unit should not come at this point in the document. Place it later, under the Vision section.

Page 375, Bullet 2:

Give an example of what is meant by *poor land use*.

Page 379, Land Use:

This paragraph is too vague. Do changes in land use mean the cessation of some current land uses or the start of other land uses not currently in practice? Please provide examples.

Pages 390, Implementation Objectives, Targets, and Programmatic Actions, Species:

The draft EIR/EIS is deficient because it does not identify any implementation objectives, targets, and programmatic actions for steelhead, a federally listed threatened species.

Page 400, last paragraph:

On March 13, 1998, the National Marine Fisheries Service (NMFS) listed the Central Valley Steelhead Evolutionarily Significant Unit (ESU) as threatened under the federal Endangered Species Act. This ESU includes the anadromous

reaches of the Stanislaus, Tuolumne, and Merced rivers and the San Joaquin River downstream of its confluence with the Merced River. Despite this, the draft ERPP states that a “distinct anadromous run of steelhead on the lower Stanislaus River has not been confirmed but is suspected”. Presently, the draft EIR/EIS is deficient because this document fails to acknowledge the presence of a federally listed threatened species in the affected area. Given the fact that the National Marine Fisheries Service has stated that a steelhead run exists in the Stanislaus River system (NMFS 1998) and has listed them under the federal Endangered Species Act, this is a serious deficiency.

We do not agree with the statement that “the presence of a distinct anadromous run of steelhead on the lower Stanislaus River has not been confirmed...”. The Department has provided ample evidence to CALFED demonstrating that steelhead exist in the Stanislaus River and we are disappointed that the information was not incorporated into this draft. Further, the above statement is contradicted by the succeeding statements that “every year a small number of juvenile rainbow trout are caught in rotary screw traps at the mouth of the river. These fish show signs of smolting and appear to be migrating out of the system”. What further evidence is needed that a naturally-spawning steelhead population exist, other than the presence, over consecutive years, of juvenile rainbow trout that have obvious smolt characteristics and are actively emigrating?

The statements that “a small number of steelhead smolts are also caught each year in the trawl surveys at Mossdale [and] it is unknown if they these fish are ...resident rainbow trout or strays from another basin” does not make sense. Rainbow trout that exhibit smolt characteristics and are actively migrating are steelhead and cannot be “residents” by definition, and juvenile steelhead do not “stray” between basins.

Most of the fish captured at the rotary screw traps didn't just “show signs of smolting” but were obvious smolts. These traps were operated by personnel from S.P. Cramer and Associates, and they assign a “smolt index” value from 1 to 3 for all salmon and steelhead captured, 1 being an obvious parr and 3 being an obvious smolt. Most of the juvenile steelhead captured were assigned a value of 3.

Other evidence that a steelhead population is extant in the Stanislaus River includes:

- ▶ Department fishery biologists have documented successful reproduction (juvenile out-migrants) since 1988.
- ▶ Anglers in the Oakdale area report occasional steelhead from 2 to 10 pounds and creel census information obtained by the Department

documents the catch of rainbow trout greater than 20 inches (DFG data).

- ▶ Examination of limited scale samples from these larger trout by Department biologists show an accelerated growth period typical of estuary or ocean residence (Bill Loudermilk, DFG Senior Biologist, pers. comm.).
- ▶ An illegally harvested 28-inch steelhead was confiscated by Fish and Game Wardens in 1995.

In our opinion, the presence of smolting juveniles and the above statements provide ample evidence that a self-sustaining steelhead population exists in the Stanislaus River. Further, adequate habitat conditions, primarily flows and water temperatures, exist year-round below Goodwin Dam to support a steelhead population, hence the Stanislaus River represents the greatest potential for steelhead recovery in the San Joaquin River system.

The genetic analysis that you refer to has been completed. NMFS performed a genetic analysis of additional steelhead samples collected by the Department from the Stanislaus River, the American River, Nimbus Hatchery, and Feather River Hatchery. This analysis augmented the previous analysis done on samples from Coleman National Fish Hatchery and Mill and Deer creeks. This new analysis found that the Stanislaus River population is very similar to the Coleman, Feather River Hatchery, Deer Creek and Mill Creek populations and together they form a genetic group distinct from all coastal samples of steelhead. In contrast, the American River samples (wild fish and those from Nimbus Hatchery) are genetically most similar to a sample from the Eel River (NMFS 1997). Given that Nimbus Hatchery steelhead from the American and Mokelumne rivers (steelhead reared at Mokelumne River Hatchery are obtained from Nimbus Hatchery) are the closest populations in proximity to the Stanislaus River, one could surmise that if the Stanislaus River population was derived from straying it would most likely have similar a genotype to Nimbus Hatchery steelhead. However, the Stanislaus River population is most similar to other Central Valley populations, which are also distinct from all other west coast steelhead populations examined (including Nimbus Hatchery steelhead), indicating that this population could be representative of native Central Valley steelhead.

Page 403, 1st paragraph:

The draft EIR/EIS is deficient because the draft ERPP fails to acknowledge the presence of a federally listed threatened species in the Tuolumne River and does not identify programmatic actions to mitigate for other actions or restore populations of steelhead.

Page 406, 7th paragraph:

The draft EIR/EIS is deficient because the draft ERPP fails to acknowledge the presence of a federally listed threatened species in the Merced River and does not identify programmatic actions to mitigate for other actions or restore populations of steelhead.

Page 421, 5th paragraph:

What is the rationale for the statement that “Salmon flows will likely continue to form the core of flow needs...” for the Stanislaus, Tuolumne, and Merced rivers, given that steelhead in these rivers are a listed species and chinook salmon are not?

Page 426, Central Valley Stream Temperatures:

We note that Target 1 specifies temperature targets for the fall, winter, and spring periods. Notably absent are programmatic actions that would provide suitable temperatures to sustain juvenile steelhead through the summer. Worse, the language in the *Rationale* suggests that significant releases *should not* be made during the summer so that there is sufficient cold water in reservoir storage to provide for fall migration of chinook salmon, despite the acknowledgment in previous sections that “steelhead depend on cool summer water temperatures” for juvenile rearing. This management practice of sacrificing steelhead rearing habitat to maintain adequate cold water storage for fall-run chinook salmon has been prevalent on major tributaries, such as the American River below Nimbus Dam, and has been one reason for the decline of Central Valley steelhead. It is disturbing to see this practice advocated in this document.

Page 429, Dams, Reservoirs, Weirs, and Other Structures:

An implementation objective to examine the feasibility of restoring access to habitats above New Melones, New Don Pedro, and Lake McClure reservoirs should be included.

Page 430, Artificial Propagation of Fish:

see comments page 187, Artificial Propagation of Fish

Pages 432, Implementation Objectives, Targets, and Programmatic Actions, Species:

This section is very weak, contains no specific measures for steelhead restoration, and is repeated verbatim in the corresponding sections for the other Ecological Zones. “Maintain the cohort replacement rate for steelhead trout

above 1.0" is a generic, meaningless statement that can be made for all species/stocks that are targeted for recovery.

Page 433, paragraph 2:

The statement "steelhead use of the streams in this ecological zone is uncertain" is contrary to the aforementioned ESA decision on steelhead, hence the draft EIR/EIS is deficient.

Page 433, paragraph 4:

The statement "*If* steelhead are included as a restorable species..." (emphasis added) fails to acknowledge CALFED's requirement to mitigate for federally listed species, hence the draft EIR/EIS is deficient.

Page 435, Riparian Brush Rabbit, Target 1:

The target should be to establish 5 self-sustaining populations of the brush rabbit. 210 to 310 individuals in one area are still susceptible to catastrophic events.

Page 440, Column 1, Paragraph 3:

The discussion of the stands of Sycamore Alluvial Woodland stands along Los Banos and Orestimba Creeks is inadequate. In the report The Definition and Location of Sycamore Alluvial Woodland in California, dated May 1994, it states that Los Banos Grandes stand is indisputably the highest ranking site. If this site was inundated by a reservoir, over 20% of the entire acreage of this community would be destroyed; additionally, the, "... single best quality site would be gone." The analysis of the sycamore alluvial woodlands showed that Los Banos Grandes had a much higher score than any other stand and was the only stand that ranked high in all six categories scored. Orestimba Creek ranked second.

Water Quality Program

Page 20, Indicator of Success:

Add an indicator of success that correlates to the performance measure of reducing tissue concentrations of selenium in aquatic organisms.

Water Use Efficiency Component

Page 1-3, Water Use Efficiency in the Bay-Delta System Today:

In regards to the last sentence in this section, a reference to the concept of net benefit analysis or incentive payments (described in Agricultural Water Use

Efficiency Action # 4) would clarify how CALFED agencies could work successfully toward implementing conservation measures that are cost effective from a statewide perspective, but not necessarily cost effective from the perspective of the water user or supplier.

Page 2-3, Implementation Objectives:

General program objectives, as well as separate urban and agricultural water use efficiency improvement objectives are presented in bulleted lists, however there are no diverted environmental water use efficiency improvement objectives. Later in the document (Page 2-19) it is stated that the five general program objectives are applicable to environmental diversions, without reference to more specific objectives. If there are not specific objectives for water management plans and efficiency improvements being carried out by Federal, State, and private wetland managers throughout the Central Valley, it should be stated why. Similar to agriculture and urban objectives, existing opportunities for wetland managers to improve local water use management to achieve multiple benefits include coordination of spring releases to correspond with fishery needs and water quality compliance programs.

Page 2-9, Agricultural Water Use Efficiency Approach:

In the third paragraph of this section, there is a statement that correlates excess water application for agricultural use to fish entrainment and water quality degradation. Fish entrainment is assumed to be occurring in-Delta as a result of pumping facilities, but the intended effect area for water quality degradation is not clear, and should be further qualified (i.e groundwater, in-Delta, local surface runoff).

Page 2-19, Paragraph 3:

The Grassland Resource Conservation District has authority over only a fraction of the total 'Central Valley' wetlands, located in the southern San Joaquin Valley. Without clarification regarding the extent of involvement of other agencies in the Interagency Coordinated Program, it is assumed that the four agencies listed are the only agencies involved in this Valley-wide program; the perception is one of under-representation of local Valley-wide interests.

Long-Term Levee Protection Plan

Page 10, Program Elements:

After each program element add in which appendix this is described.

Appendix C, Attachment 1. Information Matrix, Ecosystem Tables

The Ecosystem attribute data (both "Island Totals" and "Interior to Levee" tables) shows "0.0" in the "Wetland" column for Van Sickle Island, Reclamation District 1607. DFG file information shows that nearly the entire interior of the island (2193 acres) is freshwater wetland.

All tables in the Ecosystem section contain known special status plant and wildlife occurrences for 1995. This information should be updated if possible.

The last five "Known Special-Status" occurrence tables contain a unmarked column just after the "Island" column with "f" and "g" in two of the rows. Both the column and the "f" and "g" designations should be defined.

The last two tables in Appendix C labeled "USGS 1" and "USGS 2" should have full titles.

Appendix C, Pages 12 and 13:

The tables use the term "CALFED planning horizon." This term should be defined.

Appendix D

Table 1 columns should be aligned.

Appendix E, Page E-i

It is stated the Delta Levee Emergency Management Plan will build upon existing emergency management systems. We suggest, wherever possible, identifying both the existing systems and estimated timelines to integrate these systems with the CALFED process.

Appendix G

This appendix consists of a short Foreward, Introduction, Cost Estimate, and Assumptions section. We suggest adding title pages and introductory information to the two sections which follow (the six pages of "Table 4-1", and the individual Reclamation District maps).

Watershed Management Strategy

Page 6. Consider adding the following objectives as criteria for qualifying project types.

1. Channel structure and habitat composition projects that benefit fish passage and

instream habitats supporting fish life history needs.

2. Channel structure projects compatible with fish life history needs that restores natural water passage profiles (slow water down and keep soils in place).

CALFED Phase II Storage Conveyance Refinement Process Overview

Page 7, Last Paragraph:

“Red flagged” sites, those with higher mitigation costs, are mentioned. We suggest that included in this section is a brief discussion of U.S. Fish and Wildlife Service’s concerns that two of the sites (Los Banos Grandes and Auburn), “...could not be easily be mitigated given the value of existing resources at the sites...”. These comments can be found in a letter to Lester Snow from the U.S. Fish and Wildlife Service dated September 18, 1997. Additionally, a letter to Lester Snow from the U.S. Fish and Wildlife Service dated August 20, 1997 discussed that eight sites (Shasta Lake Enlargement, Auburn Dam and Reservoir, Columa Reservoir, Lake Berryessa Enlargement, Freeman’s Crossing Reservoir, Kosk Reservoir, Squaw Valley Reservoir, and Nashville Reservoir) were eliminated due to the presence of extensive, high quality and irreplaceable terrestrial habitat values and that the Service asked that Los Banos Grandes be added to the list for the same reasons.

Phase II Interim Report

Page vi, Executive Overview, Paragraph 1:

Each alternative has the same sentence listed first, “*Includes programs for ecosystem restoration, water quality, levee and channel integrity, water use efficiency, water transfers, and watershed management coordination.*” These programs are stated as being common to all the alternatives on the previous and subsequent pages and therefore could be deleted from the description. If it is desired to have these listed, then this sentence should come after it’s following sentence since the alternative will determine how much of these elements will be incorporated.

Page vii: Paragraph 2.

This paragraph outlines criteria used to qualify the 18 distinguishing characteristics presented in the table as ‘more critical’ or ‘less critical’ and should be combined with paragraph 1, preceding the presentation of the table.

Page vii, Executive Overview, Paragraph 3, Sentences 4 and 5:

These two sentences should either be deleted, as it appears the reader is being

prepped for a selection of Alternative 3, or statements should be made regarding Alternatives 1 and 2.

Developing a Strategic plan for Ecosystem Restoration

Pages 2, 6, and 7, Scientific Review Panel:

Define who and what agencies do or will participate in the Scientific Review Panel.

Page 3, Preparation of the Strategic Plan, Sentence 3:

It is not clear if the Ecosystem Science Program has been formed. The confusing sentence is, "...working...to coordinate an Ecosystem Science Program..." Clarify and list who and what agencies will participate in the Ecosystem Science Program.

Page 14, Funding:

It states that Proposition 204 money will be available for implementing the ERP. It goes on to say that, "These funds *will be* used to provide..." This implies, and is incorrect, that none of the Proposition 204 money has been spent.

Implementation Strategy

Page 8, Bullet 5:

It is not clear what is meant by, "*minimally dependent upon discretionary actions by actors outside the solution framework.*"

Page 9, Issues, Paragraph 2:

Give examples of what is being considered as potential "new entities" and describe how the entity would be funded, describe its authority, and to whom this entity would report.

Page 11, Last Bullet:

It may not be possible to see each stage to completion (which implies success criteria have been reached), prior to beginning another stage. An example would be riparian habitat restoration, specifically riparian forest, which can take 30 years to reach the stage where it can be considered successfully restored.

Page 12, Bullet 2:

We do not understand what is meant by, "*program elements which are outside the control of the CALFED agencies...*" Give an example or explain how a CALFED program element not be under the control of CALFED.

Page 13, Stage III:

Is the section under which the program element *Water Supply Reliability* is to be implemented? Item C is completion of site-specific analysis and permit application but there is no reference to construction of alternative.

Page 30, Storage and Conveyance Facilities:

It is stated that the issue of funding for storage and conveyance facilities is related to the ERP baseline issue. Storage and conveyance facilities should not be tied to the ERP for funding purposes but if it is, it then needs to also be tied to funding sources for water use efficiency, watershed management, levee system integrity, water transfers, and water quality.

California and Federal Endangered Species Act Compliance

Page 15, Top of Page Add New Section:

CALFED should consider adding a separate section should be added that address limitations to what DFG can do in the event of a jeopardy situation. Suggested language; "CDFG may not authorize, by permit, the take of endangered species, threatened species, and candidate species if issuance of the permit would jeopardize the continued existence of the species."

The issuance of a incidental take permit pursuant to Fish and Game code section 2081(b) requires compliance with CEQA. It is unclear in this document if CALFED intends that the programmatic EIR/EIS will be specific enough to be used to cover the issuance of any incidental take permits that might be necessary. The document states that the Conservation Strategy will be the vehicle used to assure compliance with the California and Federal ESAs. This is a good idea, but if the programmatic EIR/EIS is not specific enough to serve as the basis for DFG issuance of an incidental take permit, then CALFED should create a CEQA/NEPA document for the Conservation Strategy itself.