



NATURAL RESOURCES DEFENSE COUNCIL

July 28, 2004

By Federal Express and Facsimile to (916) 414-6714

Mr. Wayne White
Field Supervisor
U.S. Fish and Wildlife Service
2800 Cottage Way
Sacramento, CA 95825

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Re: Endangered Species Act Consultation on the Coordinated Operations of the Central Valley Project, State Water Project, and Long Term Central Valley Project Operations Criteria and Plan

Dear Mr. White:

We write of behalf of the 550,000 members of the Natural Resources Defense Council ("NRDC"), more than 100,000 of whom live in California, to express concern over the ongoing Endangered Species Act ("ESA") consultation between the U.S. Bureau of Reclamation ("Bureau") and the U.S. Fish and Wildlife Service ("FWS") on the coordinated operations of the Central Valley Project ("CVP"), State Water Project ("SWP"), and the June 30, 2004 Long-Term Central Valley Project Operations Criteria and Plan ("OCAP"). We appreciate your consideration of our comments.

The Bureau and the Department of Water Resources ("DWR") are proposing one of the most sweeping suites of changes in CVP and SWP operations in decades. These changes include both those features that the Bureau has itself acknowledged as major "future actions" (such as increased exports from the Delta; permanent barriers in the South Delta; and an intertie between the California Aqueduct and the Delta-Mendota Canal), and certain significant "operational changes" that can be discerned, if at all, only by plowing through the fine print of the voluminous OCAP and BA. We are dismayed that the Bureau initiated formal consultation long before finalizing its OCAP and BA, and has insisted on breakneck consultations rather than a thoughtful and thorough dialogue regarding the impacts of these proposed changes. We are also concerned that, perhaps due to time pressure from the Bureau, the FWS has not offered the broadly affected public an opportunity to review and comment on a draft biological opinion. The net result of this process seems to be that important analytic assumptions regarding

significant operational changes – assumptions that could well affect the health of the San Francisco Bay-Delta estuary and its watershed for decades, such as the size and stability of any future Environmental Water Account – have been largely hidden from public view. Nevertheless, in an effort to encourage more thorough and fully informed consultations, we will provide what comments we can at this time, reserving our rights with respect to any additional concerns that may become clear once the Biological Opinion is released.¹

It is important to note that many of the decisions proposed in the OCAP, such as implementation of the Napa Agreement, are currently being addressed by the CALFED process. Unfortunately, to date, the OCAP has been prepared largely outside of the CALFED framework. For example, the implications of the OCAP have not been adequately presented to the BDPAC or the BDA. The decisions proposed in the OCAP may render moot many of the issues currently being discussed in the CALFED process.

The hallmarks of CALFED are interagency cooperation, transparency and full stakeholder involvement. However, the Bureau has taken the opposite approach with regarding to OCAP. It has failed to coordinate adequately with other agencies (e.g. by clarifying to what extent OCAP is legally a joint state-federal document). It has failed to lay out a clear regulatory roadmap regarding this plan. And finally, OCAP has been developed with remarkably little stakeholder involvement, or even comment. Simply put, CALFED cannot succeed if the Bureau continues to bypass the program in making such important decisions.

I. Status of the Delta Smelt

Several months ago, the FWS completed its five-year status review of the Delta smelt (*Hypomesus transpacificu*). That status review reached troubling conclusions regarding the future of this species, even under the status quo. In particular, the status review noted that:

¹ The Bureau's Biological Assessments ("BA") raises considerable concern both with respect to the effect of the Bureau's proposed operations on fish, wildlife, and plant species under the FWS' jurisdiction and with respect to the adequacy of the ongoing consultations. By letter dated July 11, 2003, NRDC provided the Bureau with initial comments on the 2003 draft OCAP and draft Biological Assessment that circulated in June 2003. As it does not appear that the Bureau's final Biological Assessment addresses our concerns, we enclose a copy of our July 2003 letter.

- the Delta smelt “is at risk of falling below an effective population size and therefore in danger of becoming extinct” (p. 29);
- “[t]he threats of the destruction, modification, or curtailment of [Delta smelt’s] habitat or range resulting from . . . the operations of the State and Federal water projects could result in the extinction of the delta smelt” (p. 28);
- “[t]he California Department of Fish and Game (CDFG) (2003g) is concerned that entrainment at the CVP and SWP may be a major source of *population* impacts under certain conditions” (p. 23; emphasis added);
- it is “unclear how effective . . . water management tools [including Delta water quality standards, the Vernalis Adaptive Management Plan, and the Environmental Water Account] will be over time based on available funding and future water demands for water (p. 24), and “the effectiveness of these [CALFED] measures remains to be seen” (p. 28);
- notwithstanding CALFED and other existing environmental regulatory standards, “there is little compelling information which would suggest that delta smelt populations are increasing over pre-decline levels” (p. 17), and indeed “[t]he two year running average of the Delta Smelt Recovery Index for 2003 is the second lowest since the species was listed” (p. 16); and
- “threats of other natural or manmade factors affecting the delta smelt’s continued existence . . . remain and will increase” (p. 27).

It is against this baseline – which recognizes a significant risk of jeopardy to Delta smelt even with existing regulatory and non-regulatory safeguards – that the Bureau and DWR are proposing to significantly increase Delta exports.²

II. The Biological Opinion Must Consider the Best Available Science, Including the Science Concerning Global Climate Change, Which Is Not Discussed in the Biological Assessment

In formulating its biological opinion and any reasonable and prudent alternatives or measures, the FWS is required to consider and rely on the best scientific and commercial data available. 40 C.F.R. § 402.14(g)(8). The best scientific data available today establishes that global climate change is occurring and will affect western hydrology. At least half a dozen models predict warming in the western United States of several degrees Celsius over the next 100 years (Redmond, 2003).

² To ensure full consideration of the FWS’ recent conclusions regarding the Delta smelt’s status, we request that the status review itself, as well as all of the references cited in that status review, be included in the administrative record on the present consultation.

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Such sophisticated regional climate models must be considered as part of the FWS' consideration of the best available scientific data.

Unfortunately, the Biological Assessment provided by the Bureau to the FWS entirely ignores global climate change and existing climate change models. Instead, the BA projects future project impacts in explicit reliance on seventy-two years of *historical* records. In effect, the Biological Assessment assumes that neither climate nor hydrology will change. This assumption is not supportable.

In California, a significant percentage of the annual precipitation falls as snow in the high Sierra Nevada mountains. Snowpack acts as a form of water storage by melting to release water later in the spring and early summer months (Minton, 2001). The effects of global climate change are expected to have a profound effect on this dynamic. Among other things, more precipitation will occur as rain rather than snow, less water will be released slowly from snowpack "storage" during spring and summer months, and flooding is expected to increase (Wilkinson, 2002; Dettinger, 2003). These developments will make it more difficult to fill the large reservoirs in most years, reducing reservoir yields, and will magnify the effect of CVP operations on downstream fishes (Roos, 2001). These developments will also dramatically increase the cost of surface storage relative to other water supply options, such as conservation.

While the *precise* magnitude of these changes remains uncertain, judgments about the likely range of impacts can and have been made. See, e.g., U.S. Global Climate Action Report – 2002: Third National Communication of the United States of America Under the United Nations Framework Convention on Climate Change, at 82, 101 (2002).³ The Service can and must evaluate how that range of likely impacts would affect CVP operations and impacts, including the Bureau's ability to provide water to contractors while complying with environmental standards. We therefore request that the Service review and consider the work cited above, as well as the background and Dettinger presentation at a recent climate change conference held in Sacramento, June 9-11, 2004 (http://www.energy.ca.gov/global_climate_change/2004_conference/index.html) and climate change reports at http://www.energy.ca.gov/pier/energy/energy_reports.html.

We appreciate that the FWS' discharge of its consultation responsibilities has been made considerably more difficult by the Bureau's failure to provide an adequate

³ Available at [yosemite.epa.gov/OAR/globalwarming.nsf/UniqueKeyLookup/SHSU5BNQ7Z/\\$File/ch6.pdf](http://yosemite.epa.gov/OAR/globalwarming.nsf/UniqueKeyLookup/SHSU5BNQ7Z/$File/ch6.pdf).

and timely Biological Assessment addressing this issue. The FWS would be well within its authority to demand the Bureau provide additional information on these issues, and we urge the FWS to do so. Should the Bureau not provide the necessary data and analysis, the FWS has an independent obligation to identify and consider this information itself. *See* 50 C.F.R. § 402.14(g)(8).

III. The Biological Opinion Must Address the Effects of All Interrelated and Interdependent Activities, Including the Effects of Long-Term Contract Renewals and Planned Future Construction Activities

While the Bureau has not requested consultation on its imminent planned execution of CVP long-term renewal contracts, construction of facilities such as permanent South of Delta barriers and the DMC-California Aqueduct intertie, the Bureau has repeatedly made clear – both in public meetings concerning the OCAP and in documents and correspondence before the FWS – that these planned activities are part of the larger action at issue in this consultation. Indeed, the Bureau has specifically stated that its plan to renew long-term CVP contracts this year is driving its desire to complete the present OCAP consultation quickly. And the modeling used in this OCAP consultation assumes operations of facilities, such as the DMC intertie, that have not yet been built.

The Endangered Species Act and its implementing regulations require the Bureau and FWS to consult on the “effects of the action,” which include not just those activities on which the Bureau has specifically initiated consultations, but also actions that are either “part of a larger action and depend on the larger action for their justification” or have “no independent utility apart from the action under consideration.” *See* 50 C.F.R. § 402.02. Failure to consider the effects of interrelated and interdependent activities renders the consultation inadequate and invalid.

The Bureau is planning to execute long-term CVP water service renewal contracts that would authorize the delivery of far more water than the Bureau has, in the past, actually delivered. The Bureau has also acknowledged that one of the purposes of OCAP is to facilitate the renewal of CVP contracts. Certain out-of-Delta effects of existing deliveries have not been analyzed or even discussed by the Bureau in its BA, let alone the effect of any increase in deliveries. Nor have the storage and diversion activities that would be necessary to deliver full quantities authorized under the contracts, or the effects of construction activities associated with the future actions on which the Bureau has sought consultation. Yet these are all plainly interdependent and interrelated effects, within the

meaning of FWS' regulations. Those effects must therefore be analyzed in the FWS' biological opinion.⁴

IV. The Biological Opinion Must Consider Species Impacts that Are Inadequately Addressed by the Bureau's Biological Assessment

a. Species Marginally Addressed in the Biological Assessment

The Bureau's BAs contain an extraordinarily truncated assessment of the effects, direct and indirect, of joint CVP and SWP operations on numerous species other than steelhead, winter- and spring-run Chinook salmon, and Delta smelt. Yet the proposed action is "to continue to operate the CVP and SWP," writ broadly, as well as to make significant operational changes that can reasonably be expected to significantly alter and expand the intensity of project impacts. BA at 1-10. The effects of CVP and SWP operations on other species are extensively documented in the FWS' files, including its files from previous Bureau consultations on particular CVP facilities and operations. Unfortunately, those previous consultations do not, and could not have, addressed the effects of the Bureau's newly proposed operations. Nor did those prior consultations address the best scientific data available on these species today. Accordingly, the present consultation cannot simply reference those prior consultations but must, at a minimum, address how the existing and planned future operations of the CVP and SWP affect these species, in light of the best current scientific knowledge.

To take just one important example, the Fish and Wildlife Service should address the effects of the CVP on the federally threatened giant garter snake, *Thamnophis gigas*. The giant garter snake is a semi-aquatic/aquatic-dependent species that occurs in both the Sacramento and San Joaquin Valley portions of the proposed project. This population is critical to the recovery of the species, and represents a significant portion of its range. The best scientific data and data from prior FWS documents indicates, among other things, that the giant garter snake population in and around the Bureau's West San Joaquin Division is at risk from selenium

⁴ Although the Biological Assessment does discuss certain proposed operations of the State Water Project, the BA does not identify the State of California as an applicant and does not explain how or whether the State "requires formal approval or authorization from a Federal agency as a prerequisite to conducting the action." 50 C.F.R. § 402.02 (defining "applicant"). If the State is deemed an "applicant" an explanation of that treatment should be provided. If the State is *not* an applicant, as seems apparent on the face of the BA, it is unclear what authority the FWS would have to grant the State incidental take coverage in a section 7 consultation. See, e.g., 16 U.S.C. § (b)(4); 50 C.F.R. § 402.15(i)(1)(iv), (3).

contamination from project operations and project water contracts in and downstream of areas with selenium-laden soils. An increase in Delta-exports of irrigation water to such selenium-laden areas is likely to directly increase selenium runoff and therefore to directly increase threats to the giant garter snake. The Service should also consider whether salinization, other contaminants, and other project effects may adversely affect or jeopardize the giant garter snake.

b. Delta Smelt

In its analysis of effects of increased pumping on Delta smelt, the Bureau's BA essentially ignores the impact of changes in Delta flows and circulation, caused by the pumps, drawing smelt into low-quality habitat or high-predation areas, or removing them from population spawning or rearing areas for the species. The FWS should address these effects.

c. Contaminants

The word "mercury" does not occur in the Biological Opinion, notwithstanding that a considerable portion of the Bay-Delta watershed is impaired by mercury pollution and that much of the mercury is mobilized and transported by Project operations. The FWS should address the effects of the Project on mercury mobilization, transport, and availability, and the resulting impacts to listed species and critical habitat. The FWS should also address the impacts of other contaminants, including selenium, pesticides, herbicides, PCBs, and other organic contaminants on listed species, critical habitat, and EFH – and specifically including how the proposed project will affect water quality with respect to contaminants and the cumulative impact of Project-related and other contributions to contaminant threats to listed species.

d. Dissolved Oxygen

The San Joaquin River suffers from a well-known dissolved oxygen (DO) problem in the Stockton deep-water ship channel. At times, DO levels are so low that they pose a substantial barrier to salmon migration, including steelhead migration. That the operations of Central Valley Project in diverting freshwater flows out of the River and increasing agricultural runoff and pollution contribute to this problem is clear. The proposed action would perpetuate, and almost certainly exacerbate, these conditions, yet the BA contains essentially no discussion and absolutely no analysis of the issue. It is not sufficient to say, as the BA does, that compliance with D-1641 will obviate the DO concern, for compliance with state water quality standards is at best uncertain (the Bureau's operating plans *assume* frequent violations of Vernalis standards) and, to date, has not eliminated the

problem. Fish kills associated with this DO problem provide graphic illustration of the effects of this problem.

V. The FWS May Not Rely on Uncertain Future Mitigation Measures

The Bureau's BA speaks glowingly (chapter 15) of several water management and habitat restoration projects that may benefit listed species; some of these are existing projects that are not fully funded and some of these are planned future projects. The future status of many of these projects is uncertain and their effects, even if fully implemented, uncertain. For example, the status of CALFED funding presents a clear illustration of the uncertainty of future CALFED programs. The state bond funds that have supported much of the CALFED program for the past several years are nearly exhausted. Another water bond in the near future is unlikely. Water users appear to have succeeded in eliminating from the 2005 state budget proposed user fees designed to support CALFED activities. And finally, congressional appropriations committees have clearly indicated that they will not provide funding for CALFED until an authorizing bill is signed into law. At the moment, the fate of proposed authorizing bills are far from clear. In short, within the coming year or two, funding for much of the CALFED program may be exhausted, requiring much of the program, including ecosystem restoration and the Environmental Water Account, to be shut down. The FWS explicitly recognized the uncertain future of CALFED programs in its recent Delta smelt status review. The FWS may not rely on these speculative benefits to reach a "no jeopardy" opinion.

VI. The Bureau Has Repeatedly Violated Existing Legal Requirements in Its Operation of the Central Valley Project

The BA disingenuously attempts to portray Bureau's CVP operations as highly constrained by existing legal requirements. The Bureau has, however, a long record of repeatedly failing to comply with a wide array of legal obligations, including water quality-related requirements imposed by the California State Water Quality Control Board;⁵ federal statutory requirements;⁶ state statutory

⁵ See, e.g., *Central Delta Water Agency v. United States*, 306 F.3d 938, 947-48 (9th Cir. 2002) (recognizing that existing Bureau operational plan would essentially guarantee periodic violations of Vernalis standard).

⁶ See Rivers and Harbors Act of 1937 (making "improvement of navigation" and "river regulation" Project purposes that are *primary* to irrigation supply); see also *State Water Resources Control Board v. United States*, 182 Cal. App. 3d 82, 136 (Cal. Ct. App. 1986) (holding that "river regulation" means Delta salinity control).

requirements applicable to the Bureau pursuant to Section 8 of the Reclamation Act of 1902;⁷ and numerous terms and conditions of existing biological opinions. *See, e.g.*, NRDC's 60 Day Notice Letter on Friant Contracts (May 15, 2003) (in FWS files; incorporated herein by reference). Such violations of federal and state requirements are, of course, generally illegal. *See, e.g.*, CVPIA § 3406(b) (requiring the Bureau to "operate the Central Valley Project to meet all obligations under state and federal law").

The Bureau and the Department of the Interior have also failed to carry out a number of mandatory duties imposed by Congress more than a decade ago. For example, Interior has not improved and replaced the fish screens at the Tracy Pumping Plant (CVPIA § 3406(b)(4)); has not "ensure[d] that, by the year 2002, natural production of anadromous fish in Central Valley rivers and streams will be sustainable, on a long-term basis, at levels not less than twice the average levels attained during the period of 1967-1991" (CVPIA § 3406(b)(1)); eliminated, to the extent possible, loss of anadromous fish due to flow fluctuations attributable to CVP facilities; or developed any plan to "to reestablish where necessary and to sustain naturally reproducing anadromous fisheries from Friant Dam to its confluence with the San Francisco Bay/Sacramento-San Joaquin Delta Estuary" (CVPIA § 3406(c)(1)). The Department of the Interior has similarly failed to provide sufficient funding to fulfill its share of the obligations under the CALFED program.

Given this track record, the FWS' consideration of the likely effects of the Bureau's proposed operations cannot assume that the Bureau will suddenly become a model actor, fully implementing every existing environmental protection or restoration requirement. Rather, the Service must take into account the very real likelihood that the Bureau will continue its history of unlawful disregard for a wide variety of statutory and regulatory authorities.

We understand that FWS may attempt to address this issue by requiring, in the Biological Opinion, a self-styled "adaptive management" process in the event of violations of regulatory requirements. We are unaware of any legal authority that would support a no jeopardy finding based on the uncertain results of indefinite future interagency processes that are *substantively unconstrained* by any certain regulatory standard. While adaptive management may often be a helpful tool, standing alone it provides no guarantee of protection against current or future threats to listed species.

⁷ *See, e.g.*, Calif. Fish & Game Code § 5937.

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VII. The Bureau's Proposed Operations Fail to Ensure Compliance With the Bureau's Resource Management Obligations Under Federal and State Law

The Bureau's proposed operations fail to ensure compliance with its resource management obligations under the Central Valley Project Improvement Act; other reclamation law, including the congressional authorization of the CVP for the primary purposes of improving irrigation and salinity control and the requirement under Section 8 that the Bureau ensure reasonable and beneficial use of all irrigation deliveries; section 7(a) of the Endangered Species Act; section 5937 of the California Fish and Game Code; and other state and federal requirements. These issues are generally discussed in our earlier-filed comments on the Bureau's June 2003 draft Biological Assessment. To the extent that the Bureau's modeling and analysis rest on an assumption that the Bureau will continue to violate these obligations, that modeling and analysis should not be relied upon.

VIII. Conclusion

We appreciate your consideration of our concerns. For reasons including those articulated above and documented in the FWS' files, we believe that the Bureau's proposed operations and facilities could well jeopardize listed species and would adversely modify any critical habitat. We ask the FWS to analyze these effects fully and to consider reasonable and prudent alternatives and measures in formulating its biological opinion.

Should you have any questions, please do not hesitate to call me or Hal Candee, NRDC Senior Attorney, on (415) 875-6100.

Sincerely,



Michael E. Wall
Senior Attorney
Western Water Project

encl.

cc: Chester V. Bowling, Operations Manager, U.S. Bureau of Reclamation
Cay Goude, Assistant Field Supervisor, U.S. Fish & Wildlife Service

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