BDCP1667.

From: Kit Kubitz <mesondk@yahoo.com>
Sent: Tuesday, July 29, 2014 2:51 PM
To: BDCP.comments@noaa.gov
Subject: Comments on Draft EIR
Attachments: BDCP comments 729.doc

Enclosed are comments on the BDCP Project and DRAFT EIR/EIS

In general, these comments indicate
1. The proposed Project description is inadequate-must be modified to provide greater clarity about operational rules, decision tree, adaptive management and impacts based on possible variation in
daily and seasonal rules for north Delta, south Delta, and outflow from Delta levels. Concerns of the NMFS about modeling and rule specificity have not yet been resolved.
2. Cost escalation is not well defined. Despite modest contingencies of about $2-3 billion for tunneling, the undertaking of a $15-$20 billion project is not prudent in light of the
uncertainty of yet to be designed facilities including tunnels, lack of clarity of cost responsibility for cost escalation, and
ability of relatively small cost escalation of $4-5 billion to wipe out all net benefits.
3. Further consideration should be given to a smaller tunnel, on the order of 3,000 cfs, development of 1 MAF of South of Delta storage, and better water management in terms of recycling and interagency cooperation rather than the cost and risks of
this massive and environmentally dangerous project with the potential to cause reverse flows and stagnation conditions in the Sacramento delta.

Kermit R. Kubitz
415-412-4393
mesondk@yahoo.com

BDD1667

468 Lansdale Ave
San Francisco, CA 94127
7/29/2014
mesondk@yahoo.com

To:

RE: Comments on Draft Environmental Impact Report
Bay Delta Conservation Plan (BDCP)
and List of Deficiencies

Dear Sir:

Enclosed is a summary and detailed discussion of comments on, and a list of deficiencies in, the proposed Bay Delta Conservation Plan (BDCP). This set of comments and deficiencies is based upon the latest available information, including revisions to the EIR and BDCP as of mid-July, 2014, but as is apparent, there is still inadequate information provided to make an informed decision about either a proposed environmentally superior alternative or whether all present or future environmental impacts have been adequately mitigated or avoided. The list of major issues includes:

1. The proposed draft EIR does not adequately describe the proposed "Project." The Draft EIR mixes programmatic and project descriptions so that neither the overall program, or specific projects are adequately described. A specific example is the lack of adequate tunnel construction information. Another example is the lack of adequate description of how the "adaptive management" process will be subject to adequate review and limitation on environmental impacts, an alternative to which would be a smaller project with a lesser potential risky outcome in the

event of excessive water takes as the result of improper "adaptive management.

A better Project description would include

-Project facilities

Designed facilities
Yet to be designed facilities (tunnels)
Conservation measures
Restoration/mitigation measures
Operational rules known at this time
Limits on operation – flows, timing
Decision trees and processes for making seasonal
Or real time decisions (NMFS 4/4/13 p. 7)
Decision authority for making flow decisions and
Use or modification of Operational Rules
Estimated project costs and benefits
Uncertainty of project costs and benefits
Known species including critical species impacts
Modeling of flows and relationships to impacts
Uncertainty or disagreement about species impacts

2. The overall project costs are the subject of excessive uncertainty, especially in view of lack of the tunnel construction details. Meanwhile, the magnitude of the project costs is viewed as a "benefit" in view of jobs and dollars spent. This "bigger is better" philosophy pervades and biases the Draft EIR and precludes adequate consideration of smaller, less risky alternatives.
3. To the extent future environmental impacts of the proposed project are based upon an assumed limit and operational constraints on delta water diversion and pumping volumes, the future limits and operational constraints and their relationship to water delivery contracts for Southern California water users is inadequately described. See, for Example, below, the discussion of lack of specificity of

Operational rules for the new intakes to avoid reverse flows or provide "pulse protection" as required by NMFS comments in their 4/4/13 Progress Assessment.

4. The risks associated with Southern California water deliveries and their ability to pay for the project under all circumstances is inadequately described. Who is responsible for cost overruns, for whatever reason? Would a CVP storage capacity increase be a more Manageable cost in terms of uncertainty and clarity Of Southern California water user cost responsibility Rather than a vague standard for cost responsibility On a statewide basis for projects designed to increase the ability to export Northern California water to Southern California/South of Delta users?

Discussion

INADEQUATE PROJECT DESCRIPTION, UNCERTAIN "ADAPTIVE MANAGEMENT" AND LACK OF CANDOR AND DESCRIPTION OF WATER USERS RIGHTS AND DWR MANAGEMENT PROCESS AND OBLIGATIONS MAKE THE PROPOSED TWO-TUNNEL PROJECT RISKY AND THE ENVIRONMENTAL IMPACT REPORT UNACCEPTABLY VAGUE.

The draft EIR, and the underlying BDCP project description, do not fully describe the project because of an improper mixture of project and programmatic EIR features. There are two critical failures of the Draft EIR.

First, because there has been little or no investigation of the conditions to be faced by building deep large tunnels under the waterways and rivers, there has been no detailed design or description of those tunnels, their tunnel work, shoring, soil removal, maintenance or such other important construction

details. This lack of "Project" detail has important consequences. It leads to an lack of environmental impact description and assessment for the tunneling project, as well as creating substantial cost uncertainty.

Second, as noted by the comments of the National Marine Fisheries Service (NMFS) in their Progress Assessment and Remaining Issues Regarding the Adminstrative Draft BDCP Document (4/4/13) there is an "Overreliance on Real-time Operations and Adaptive Management (Important) noted at page 7 of the NMFS Progress Assessment. As specifically noted, "...there remains a need to more clearly describe how real-time operational adjustments will be implemented to achieve some of the stated objectives of the water operations."

These are not minor or easily remediable fixes. Lack of adequate project description affects both cost benefit analysis as well as environmental impacts. The most immediately comparable project, for a large below ground multi-year tunnel project is Boston's Big Dig. Readily available sources, indicate that the projects intial $2.6 billion cost estimate, while growing over time with inflation to about $5-6 billion, was dwarfed by the ultimate $14 billion cost, or about 3X the original cost estimate, even with inflated dollars.

"Leave it to Massachusetts, though, to turn the Big Dig's reputation from resounding success to humiliating failure—first in terms of the project's cost. From day one—even after accounting for politicians' erring on the low side to gain public approval—the Big Dig was fated to cost more than its 1982 price tag of $2.6 billion.

That number didn't include much of the project's mitigation, including big changes like the billion-plus extra to remake the Zakim Bridge. Nor did it include the real costs of staying on schedule. The Big Dig often let its contractors start work on pieces of the project before designs for other key parts were complete. This approach—part of the project's philosophy of getting things done now and asking questions later—meant expensive

changes to contracts. By the early 1990s, as the state added new work, and as its consultants and contractors looked underground to see what was actually there, the Big Dig's price tag had ballooned to nearly $8 billion.

> True, critics aren't being entirely fair when they compare the project's final cost, $14.8 billion, with the initial estimate; $2.6 billion in 1982 is $5.6 billion today, thanks to inflation. And inflation has similarly distorted the cost of the many expensive changes made to the project—because the more realistic cost estimates that accounted for those changes were also calculated in then-current dollars, rather than in the dollars that the state eventually had to pay. Still, there's a lesson here for managers of other infrastructure projects: be careful with that first number, because it can become a permanent benchmark against which to measure success or failure."

Source **Lessons of Boston's Big Dig** □*Nicole Gelinas City Magazine, 2007*

> *America's most ambitious infrastructure project inspired engineering marvels—and colossal mismanagement.*

In this case, the cost benefit analysis assumes that the costs, along with the jobs created, justify some significant environmental impacts, even if limitation and mitigation of those impacts are dependent upon some future management plan or real time decisions. The current preferred alternative could cost at a conservative current estimate $15-$20 billion. A cost overrun of half of the Big Dig in Boston would put that cost at $40 billion, wiping out virtually all the cost benefits. But an alternative to be considered is a smaller project, with both less inherent cost escalation risk, as well as smaller, more manageable environmental impacts, less dependent on future DWR or water contractor decisions. A limited size project, of no more than 3,000 CFS such as EIR/EIS alternative 5 (p. ES-29), with reduced tidal habitat restoration limited to 25,000 acres, would be a more fiscally prudent project-entailing both lesser basic cost, less potential cost escalation, and lower mitigation/restoration costs. According to table 9A-2 of the BDCP project description, a 3000 CFS tunnel

would provide more protection for Northern California water supplies and Delta outflows at a cost of around $10 billion, without the risk of a $15-20 billion project which could cost $30-40 billion. Even $5 billion of escalation in the Alternative 4 proposed project would wipe out the estimate $4.5-5.3 billion net benefit shown for the proposed project.

Likewise the NMFS comments about key issues like effects of real time water operations on flow reversal and key fish impacts make clear that little is really disclosed in the EIR about these significant environmental impacts.

With regard to the last, but most important of the project objectives for Southern California Water users, the ES2.1 Project Objectives statement at page ES-8 states that one of the "objectives of the project proponents" is

"Restore and protect the ability of the SWP and CVP to deliver up to full contract amounts, when hydrologic conditions result in the availability of sufficient water, consistent with the requirements of state and federal law and the terms and conditions of water delivery contracts and other existing applicable agreements."

This objective, and its inherent complexity, require a discussion in the EIR both of the extent to which this objective is met, and the relationship between this objective and the operational framework, DWR management process, and "adaptive management" assumption, but there is little or no information presented on the following items inherent in assessing how this objective is met by the various alternatives. This requires further information on

The current ability of SWP and CVP to deliver full contract amounts.

The reduction in the ability implied by the term "restore" the ability to deliver, and the associated implied desired or obligated levels.

The hydrologic conditions which would permit delivery of full contract amounts with and without the project, or alternatives.

The applicable requirements of state and federal law.

The applicable contracts, their history and the rights and obligaitos of various parties under those contracts under various conditions.

Other applicable agreements, which may pertain to water deliveries by SWP and CVP currently or in the future.

Some of these "applicable agreements" are described, but not in sufficient detail. Section ES5.2.2 Operational Components/Scenarios discusses current operation of SWP and CVP facilities based on two main sets of rules: maximum allowable exports and minimum required Delta outflow. Under the proposed Project intended to be justified by the Draft EIR,

> "The proposed BDCP north Delta intakes would require a third category of Delta rules governing maximum allowable north Delta diversions. "

These new rules in order to meet the biological objectives of the plan require addressing:

South Delta exports: How much of the Delta inflow can be exported at the south Delta CVP and SWP pumping plants

North Delta exports: How much of the Delta inflow can be exported at the BDCP north Delta intakes

Outflow: How much of the inflow is needed for Delta outflow.

Table ES-7 claims to provide a summary of the major

Delta objectives (rules) for determining maximum allowable exports and the minimum required outflow under each BDCP alternative. For the preferred project, Alternative 4 under Scenario H (According to page ES-29) the description of the applicable decision rules in quite complex:

"Outflow under Scenario H would be determined by the outcome under the decision tree process needed to account for scientific disagreement and uncertainties related to spring outflow and Fall X2 requirements for delta and longfin smelt , salmonids, and sturgeon. Thus there are different potential outflow requirements that could be used for spring and fall. Operational Scenario H was used in the CALSIM modeling for Alternative 4...." p. ES-36.

However, there are three major problems with this description of the operational rules and assumed impacts of the described Scenario H for the proposed Project Alternative 4 CEQA preferred project:

1. There is no closely related description of the impacts on SVP and SWP deliveries under current, "restored" or future deliveries under applicable "contract requirements.
2. The "Conservation Components" described in Table ES-5 are described as being included in a BDCP Steering Committee Handout, rather than being described in the text associated with the table and Scenario.
3. As noted by the NMFS in their 4/4/13 Progress Assessment " " the modeling analysis in the Admin Draft indicates that the Evaluated Starting Operations (ESO) will generally result in a reduction of flows below the north Delta diversions, but that those reductions will not result in increased duration or magnitude of reverse flows at the Georgiana slough junction. This conclusion is relatively Counter-intuitive and the concepts and mechanisms that

Support this conclusion, including the level of uncertainty Around it need to be very clearly explained in thorough detail." 4/4/13 NMFS p. 2

Likewise the NMFS recommends that

-the reverse flow analysis be submitted for independent peer review (4/4/13, p. 3)

-consider amending level 3 pumping/bypass criteria prior to resubmitting the section 10 application.

-include how the project would affect the "five attributes" of flow (magnitude, timing, frequency, duration, and rate of change) and how these changes would affect fish (4/4/13, p. 4)

-provide varied estimates of effectiveness of habitat conservation (4/4/13, p. 7) because alternative outcome scenarios have not been provided.

-thoroughly describe how the new intakes will be operated to: 1) avoid reverse flows at Georgiana slough; 2) implement pulse protection when monitoring indicates that winter-run Chinook at "riding" a flow pulse; and 3) determine when a sufficient percentage of winter-run Chinook have passed the intakes to end the pulse protection and initiate standard level 1 pumping procedures.

As discussed by other commenters, notably the Environmental Water Caucus in their Responsible Exports Plan, there has never been since 1998 information which would contradict the State Water Board's draft finding that maximum Delta pumping in wet years should be no more than 2.65 million acre feet. Consistent with general principles and state policy of reducing Delta supply reliance, a total export of no more than 3 million acre-feet in all water years except drought years is prudent.

Finally, there is the general question of prudent financial management for the State of California, the State Water Project, Central Valley Project and Southern California water users. The occurrence of any kind of fiscal emergency, for whatever reason, could cause delay in the project, cost escalation, and possible delay or deferral of payment by the claimed water users of Southern California. It would be far more prudent to consider contingencies such as financial emergencies requiring other State of California spending priorities, such as earthquake restoration or mitigation in Southern California, prior to embarking on a $15-20 billion water diversion project with substantial and highly uncertain environmental impacts in Northern California.

Conclusion and Recommendations

1. Revise the project description to include the Known and unknown design features, such As tunnels and pilings.
2. Explain and justify the cost escalation and Contingencies surrounding project cost estimates And why escalation will be less than other state Or national projects such as Boston's Big Dig or The Eastern Bay Bridge Span.
3. Include in the project description the Operational Rules, decision tree, and seasonal and real time Decision process and criteria, and explain who Will oversee this process to assure Delta outflow And habitat protection is maintained. Evaluate Uncertainty in known impacts from ESO and Future operation.
4. Review the financial feasibility of a $15 billion Project from the point of view of both the State Of California and users who are obligated to pay Certain costs including contingencies. Clarify

Responsibility for any cost escalation or overruns

5. Revise the discussion of alternatives to give more Serious consideration to a reduced project size, along With more Southern California CVP storage, and Water conservation, as proposed by the Environmental Water Caucus Responsible Exports Plan (May 2013) or the Portfolio Based BDCP Conceptual Alternative including one 3,000 CFS North Delta intake and a single tunnel sized for 3,000 CFS gravity flow, Investment in South of Delta Water Supplies, including water recycling, stormwater capture, conjunctive uses, and water Management agreements among agencies such as Metropolitan Water District, and a potential 1 MAF South of Delta storage facility.

The Preferred Alternative 4 is expensive, has not been fully described, and has uncertain impacts and complex, not adequately described operational rules and constraints. No decision to proceed with BDCP Alternative 4 should be undertaken without a substantially revised Project Description including consideration of The types of revised, smaller, less risky alternatives and water management approaches described in these and other cited comments.

Kermit R. Kubitz
mesondk@yahoo.coom