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December 18, 2008

Bay-Delta Conservation Plan Steering Committee
c/o Hon. Karen Scarborough, Undersecretary of Resources
Resources Agency
1416 Ninth Street, Ste 1311
Sacramento, CA 95814

Subject: December 17, 2008 Draft of "An Overview of the Draft Conservation Strategy for the Bay-Delta Conservation Plan"

Dear Members of the Steering Committee:

Contra Costa Water District (CCWD) appreciates the opportunity to comment on the Draft of "An Overview of the Draft Conservation Strategy for the Bay-Delta Conservation Plan (BDCP)" (Overview) dated December 17, 2008. I would also like to thank all the members of the Steering Committee as well as staff and consultants who worked very hard and put in a great deal of effort in a short period of time to produce the document. The current draft is much improved over previous versions, and has addressed a large number of the comments from all parties, including CCWD.

Below are CCWD's comments on this document. The following are three issues that are the most important:

1) The Overview does not address the order of actions, nor assurances and linkages, nor the timeframe in which actions can take place. CCWD is extremely concerned that it will take a decade or longer to fully implement many elements of the Plan, and that we have an existing crisis that cannot wait. CCWD's experience in Delta construction projects with *no significant opposition* is that it takes two years of planning, permitting and design for each year of construction. Even with credit for the past two years of planning, Plan implementation is a decade away if everything were to function smoothly. However, given the substantial uncertainty in many elements, and the lack of universal consensus, a decade may be very optimistic. There is a need to begin some actions, such as Interim Barriers and positive-barrier fish screens immediately.
2) The Overview fails to consider water quality and its implications to affected parties completely. CCWD appreciates the additions to the

document that have begun to recognize the issue for in-Delta water users, but the assumption that appears to be made in the document that degrading water quality to maximum allowable levels or standards is acceptable is incorrect. At a minimum, the document needs to include a description of how water quality effects on in-Delta water users will be assessed and addressed in the studies that will be done.

3) The Overview incorrectly continues to view an isolated facility as a future primary diversion point, and seems to assume that its capacity of 15,000 cubic feet per second is determined. CCWD appreciates the new language that correctly states that the studies may show a different size to be optimal. CCWD does not believe that it has been demonstrated whether north or south Delta diversions are "primary" or "preferential", nor that any optimal size been established. Both diversion locations will have the potential to impact covered species and the amount of water that can be safely diverted at the north Delta facility (Hood Bypass flows) has not yet been determined. CCWD has demonstrated that facilities of a far smaller size can produce the same level of benefits, given the uncertainties involved, and that such facilities are less likely to be stranded or non-performing assets (the BDCP studies show that the capacity of a large facility is rarely used). A small facility is much more likely to be implementable and more able to provide the necessary reliability in seismic and flood events at a reasonable cost. The Overview (page 17) suggests that a larger facility would be used more with additional storage, but storage is not part of the BDCP. This suggests a piecemealed approach is being taken. If the reason for the large assumed size is for use with some future, undetermined projects that will greatly alter the assumed operations, then what is the reason for a long-term assurance of an HCP that does not consider those future conditions?

CCWD's detailed comments follow below.

Page 7, top

The text states: The north Delta diversion facilities are an integral part of the Conservation Strategy and are expected to enable covered fish species to gain maximum benefits from other conservation measures, while meeting the water supply reliability goals of the BDCP.

The Steering Committee has not agreed yet that the isolated facility is a conservation measure. Diversions from the Sacramento River, a key migratory pathway for salmon, has the potential to adversely impact "upstream passage of salmon" (see Figure 2 on the bottom of page 12) and impact other covered species. In combination with other actions, these impacts might be able to be mitigated, but the isolated facility in and of itself does not benefit salmon.

Page 7, top

The text states: In addition to the expected ecological benefits, water supply reliability will substantially improve with the north Delta diversion and isolated facility because these facilities will be constructed to be more resilient to catastrophic events (e.g., levee breaching

from earthquakes and floods) and sea level rise than the existing through-Delta conveyance system.

While this is a valid goal, it has not been demonstrated that an open-water, earth-lined canal constructed over liquefiable soils in the Delta can be constructed with sufficient strength to withstand large earthquakes and to withstand wind-wave action along the lengthy reaches of the open-water canal (either from within the canal or from flooded islands that the canal bisects) without becoming unreasonably costly. The document recognizes that dealing with drainage and irrigation on the bisected islands will be a challenge; so will constructing a facility that will survive seismic activity, floods and wind-waves. Language that addresses this should be added.

Page 9, top
Planning principle 2, **Divert More Water in the Wetter Periods and Less in Drier periods,** is described as "an approach that shifts diversions away from sensitive ecological periods and locations (that) would provide an opportunity to avoid the existing need to divert all water in excess of minimum regulatory requirements in drier periods, and would reduce conflicts between water supply and species conservation."

This supports the need to initially err on the side of larger Hood Bypass requirements to ensure the plan that is implemented protects rather than impacts migrating Sacramento salmon. The Bypass requirements could be modified later based on an adaptive management approach if there is certainty that covered species are sufficiently protected.

Statements later in the Overview (page 17) suggest that additional storage is needed to reduce diversions in drier periods, but storage is not part of this plan.

Pages 14-15
The draft BDCP biological goals and objectives include the following:

8. Increase the survival of juvenile Chinook salmon passing through the Delta.
9. Increase the growth of juvenile Chinook salmon that pass through and rear in the Delta to increase the likelihood for survival of juvenile Chinook salmon in San Francisco Bay and ocean habitats.
10. Maintain or increase life history diversity of all runs of Chinook salmon.
11. Increase the proportion of all runs of adult Chinook salmon that successfully migrate upstream through the Delta to upstream spawning habitats.
12. Increase the survival of juvenile steelhead passing through the Delta.
13. Increase the growth of juvenile steelhead that pass through and rear in the Delta to increase the likelihood for survival of juvenile steelhead in San Francisco Bay and ocean habitats.
14. Maintain or increase life history diversity of Central Valley steelhead.
15. Increase the proportion of adult Central Valley steelhead that successfully migrate upstream through the Delta to upstream spawning habitats.

New diversion facilities in the North Delta will reduce flows, delay passage, and increase the likelihood of predation of salmon and steelhead and therefore directly impact the ability of the BDCP to meet these goals and objectives. Operation of the north Delta facilities will need to be carefully regulated to minimize these impacts.

Page 14 and Page 20
Item number 2 in the ***List of Core Elements*** is "Move primary diversion point to north Delta diversion facilities with fish screens to reduce S. Delta entrainment" on page 14. This is different from the title on page 20, and CCWD believes that "Add a diversion point with north Delta diversion facilities, with fish screens to reduce entrainment at all facilities and expanded opportunities to achieve planning and conservation goals" is more accurate and appropriate. It has not yet been decided that north Delta facility diversions should have priority. CCWD has proposed a Balanced Dual Facility approach that attempts to balance diversions from both the north and south Delta to minimize the impacts caused by both diversions at both locations on covered species. This proposal needs to be given serious consideration.

As recognized on page 23, the size has not been determined and assuming a large capacity that is largely unused (except with the addition of storage not a part of the plan) is not justified. The studies will determine the correct size and preference *for this plan.*

Page 16, Lessons Learned re Interaction of Core Elements
The text states that "The BDCP Steering Committee and consultants participated in a series of modeling analyses to evaluate these interactions and identify synergies and trade-offs both between Core Elements and other factors including upstream reservoir levels, Delta inflows, and S. Delta water quality. The analyses mostly relied on the CalLite and DSM2 models to characterize hydrologic, hydrodynamic, water quality, and water supply responses to various rules for operating the export of water from the Delta, assuming a constant demand for water."

The most focused modeling to date has relied only on the CalLite model. The water quality has not been modeled using DSM2. Instead, water quality has been simulated by CalLite using an internal simulation based on DWR's Artificial Neural Network model. This ANN model is intended to simulate the DSM2 model results but is not as accurate or detailed as DSM2. CCWD's review of DSM2 simulations suggest that DSM2 underestimates the salinities at the entrance to Rock Slough (which represents a key SWRCB D-1641 municipal and industrial water quality compliance point) and overestimates salinities in Victoria Canal. This needs to be corrected to allow accurate assessments.

Page 16
The text in the second bullet states: "Increases in the Hood Bypass flow requirement results in increased diversions from the South Delta to meet water demand."

Although water supply is a key consideration of the BDCP process, the choice of the north Delta (Hood) Bypass flow requirements needs to be based on the needs of covered fish species, in particular, migrating salmon. Similarly, the limits on south delta exports should be

independently based on the need to eliminate salvage of Delta smelt and other covered species, avoid indirect impacts from south Delta exports, etc. The resulting total exports from the Delta will be the result of water demand, availability of south Delta storage, the Hood Bypass requirements, the south Delta export limits, the D-1641 water quality standards, etc.

The current language incorrectly states the causes and effects. The second bullet should state:

> In order to meet export water demand, diversions will generally need to be made at both the north and south Delta facilities because of the need to limit diversions at both locations to protect covered species.

Page 23, last bulleted item

Governance mechanisms to ensure adequate water supply and *quality* should be developed to protect against excessive diversions of water from the new facility to the detriment of the ecosystem *and other legal water users, in the Delta and upstream of the Delta*

Page 24, second to last bulleted item

This item is confusing and it is not clear what the message is.

Page 29-32, Core Element No. 4

This discussion is much improved and CCWD appreciates the work of the co-chairs and members of the Integration Team (including staff and consultants) to produce this version. CCWD believes the following concepts should be included in this section.

1) Old and Middle River separated corridors, which offer both water supply and ecosystem advantages, along the lines of those proposed by several parties, including the Delta Vision Stakeholder Committee. This offers the advantage of an early implementation action that could alleviate conditions of the current crisis well before other elements are fully implemented.
2) Positive barrier fish screens for at least a portion of the export pumping capacity. When combined with the separated corridors (that allow fish to move into the Old River corridor without being entrained into the export pumps), this is a viable concept that can be implemented quickly without stranding assets. It is hard to imagine a justification for not screening a substantial portion of south Delta diversions: if south Delta exports are substantially reduced, then screening is not costly; if they remain moderate to large, then screening is absolutely necessary. Screening will also decrease the conflict between bypass flows and water supply goals.
3) Delta water quality in the Central and South Delta needs to be adequately addressed. Addressing this issue must be added to the section on Next Steps.

Page 33 (DCC closures)

Closures in the September through October period are not explained or justified. There needs to be a clearer justification for this proposal.

Page 40 (Interim Tidal Gates)
While clearly an early implementation action, these may be permanent, not just interim measures. This section should reflect this.

Page 44 X2
This section should recognize that salinity intrusion (larger X2) will promote *Corbula*, which is likely to work against restoration efforts for listed species.

I look forward to working with the Steering Committee to incorporate these comments into the Overview and to continuing a constructive dialogue.

Sincerely,

Greg Gartrell
Assistant General Manager