D E L T A W E T L A N D S P R O J E C T

Public Comment
Bay-Delta Plan Supplemental NOP
Deadline: 04/25/12 by 12 noon

April 24, 2012

Via U.S. mail and email at commentletters@waterboards.ca.gov

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

Subject: Comment Letter—Bay-Delta Plan Supplemental NOP—Comprehensive Review

Dear Ms. Townsend:

Delta Wetlands Properties ("Delta Wetlands"), proponent of the in-Delta storage project commonly referred to as the Delta Wetlands Project, appreciates the opportunity to provide input to the State Water Resources Control Board ("SWRCB") regarding its comprehensive review of the 2006 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (the "2006 WQCP"). These comments are provided in response to the SWRCB's Supplemental Notice of Preparation and Notice of Scoping Meeting for Environmental Documentation for the Update and Implementation of the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary: Comprehensive Review. Our comments address export/inflow objectives and the manner in which in-Delta storage releases are accounted for by the export/inflow ("E/I") ratio of the 2006 WQCP.

Delta Wetlands requests that the SWRCB address the application of the E/I ratio to future in-Delta storage and conveyance facilities, including the Delta Wetlands Project and other potential in-Delta conveyance facilities and regulating reservoirs being evaluated as part of the Bay Delta Conservation Plan. Releases from in-Delta storage and conveyance facilities are not currently included in the Delta inflow calculation used to determine the E/I ratio because they were not contemplated during preparation of the 1995 Bay-Delta Water Quality Control Plan (the "1995 WQCP") and the SWRCB did not address the issue in its triennial review of the 1995 WQCP in 2005. The issue of including in-Delta storage releases in the E/I ratio was raised during the Delta Wetlands Project water rights hearing before the SWRCB but was not addressed at that time because the 1995 WQCP could not be considered (or modified) in the context of a water rights

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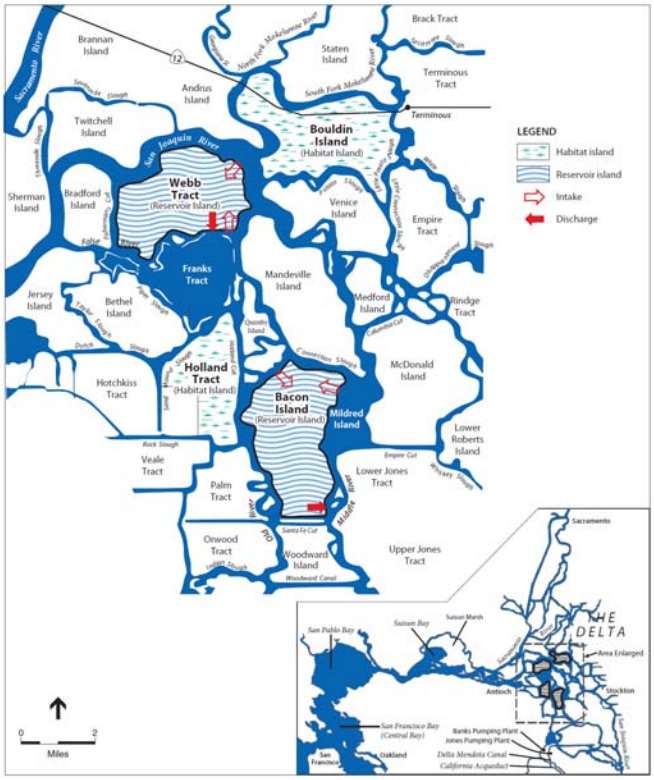
hearing. However, with the water resources planning underway by the Delta Stewardship Council and in the Bay Delta Conservation Plan, releases from in-Delta storage and conveyance facilities are likely to represent a significant new source of inflow to the Delta and the E/I ratio should incorporate in-Delta storage and conveyance releases into the Delta hydrology accounting standards.

For your convenience, we attached a copy of the current E/I ratio and export limits contained in the 2006 WQCP (see Attachment 1). We also attached our suggested revisions to the Delta inflow calculations which simply entail adding in-Delta storage and conveyance releases as a component of Delta inflow in the E/I ratio (see Attachment 2).

It is important to accurately account for Delta inflow in the E/I ratio because Delta exports at the Harvey O. Banks Pumping Plant ("Banks") and C.W. "Bill" Jones Pumping Plant ("Jones") are often controlled by this operational constraint. The E/I ratio was established to protect the habitat of estuarine-dependent species by reducing entrainment at the major export pumps in the southern Delta. The E/I ratio limits the quantity of water exported *from* the Delta relative to the volume of water *entering* the Delta, effectively protecting fishery resources, including delta smelt and Chinook salmon, during low flow periods when cross-Delta flows from the Sacramento River make their way through the Delta to the Banks and Jones pumping plants in the southern Delta.

FIGURE 1: In-Delta Storage (Intake and Discharge)



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In-Delta storage was not contemplated in the E/I ratio of the 1995 WQCP. As can be seen above in Figure 1, the Delta Wetlands Project reservoir islands (Bacon Island and Webb Tract) are located in the central Delta about halfway between the Sacramento River of the northern Delta and the Banks and Jones pumping plants of the southern Delta. The Project would divert surplus Delta flows to storage on the reservoirs between December and March using new screened intakes. The Project would discharge the stored water for export from the Banks and Jones pumping plants when export conveyance capacity is available, typically July to October. Stored water that cannot be exported will be discharged to enhance Delta outflow and water quality between September and November. Because the E/I ratio could not be addressed in the Delta Wetlands water right hearing, diversions to the reservoir islands are treated as exports subject to the E/I ratio, even though the water never actually leaves the Delta and has little of the transport and entrainment impacts of exports at the Banks and Jones pumping plants. When this same water is later released for export, it is again included as export in the E/I ratio despite the close proximity of the Banks and Jones pumping plants. In essence, Delta Wetlands is hit twice by the E/I ratio, once during diversions to storage and then again during export of the same water. Furthermore, releases from in-Delta storage and conveyance facilities are not included as sources of inflow in calculating the E/I ratio when the water is released. Therefore, export limits and the E/I ratio should be updated to include consideration for in-Delta storage and other conveyance operations.

In-Delta releases represent a significant source of new water for the Delta and should be included as inflow in the E/I ratio. Under the 1995 WQCP and the 2006 WQCP, Yolo Bypass flows, Stockton Diverting Canal flows, and even the Sacramento Regional Treatment Plant discharges are included as Delta inflow in the E/I ratio. In-Delta releases are the reasonable equivalent of river flows and are certainly more akin to main-stem river flow than many of the other flows defined in the 1995 WQCP and the 2006 WQCP as Delta inflow. More importantly, if in-Delta releases are not defined as inflow to the Delta, the opportunities to make beneficial use of this water could be unduly restricted.[1]

The absence of in-Delta releases from the E/I ratio is easily corrected. The equation for Delta inflow simply needs to be revised to include in-Delta storage and other conveyance releases. Delta Wetlands suggests revisions to Figure 4 (page 20) of the 2006 WQCP, as follows:

DELTA INFLOW = SAC + SRTP + YOLO + EAST + MISC + SJR **+ IDSC**[2]

This proposed change is consistent with Water Right Decision 1643 and biological opinions for the Delta Wetlands Project, which contemplate the revision of the E/I ratio to include in-Delta

[1] Both the California Department of Water Resources and the United States Bureau of Reclamation (as part of the SWRCB's triennial review of the 1995 WQCP) opined that including in-Delta storage releases as Delta inflow in the E/I ratio was reasonable and would result in the reasonable use of water.
[2] "IDSC" stands for in-Delta storage and conveyance releases.

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storage releases.[3] Including in-Delta releases in the E/I ratio, as indicated above, will result in an appropriate and logical modification of the 2006 WQCP. For more complete details of our suggested revision, see Attachment 2.

Thank you for your time and consideration of these comments. If you have any questions, please contact me at (925) 932-0251.

Sincerely,

David A. Forkel
Assistant General Manager
Delta Wetlands Project

cc: Cathy Crothers, Chief Counsel (DWR)

[3] Delta Wetlands' water rights permits acknowledge that the SWRCB may amend the E/I ratio provided that Delta Wetlands diversions to storage are accounted for in the net Delta outflow calculation. (SWRCB Decision 1643, p. 92, Special Condition 15(b).) In the Delta Smelt Biological Opinion, the U.S. Fish & Wildlife Service agreed to not take a position or impose a condition in the biological opinion that would preclude releases of stored water from being considered as Delta inflow under the E/I ratio should the SWRCB make such a determination. (Delta Smelt Biological Opinion for the Delta Wetlands Project, May 6, 1997, p. 3.)

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FIGURE 4
NDOI and PERCENT INFLOW DIVERTED [1]

The NDOI and the percent inflow diverted, as described in this figure, shall be computed daily by the DWR and the USBR using the following formulas (all flows are in cfs):

NDOI = DELTA INFLOW - NET DELTA CONSUMPTIVE USE - DELTA EXPORTS

PERCENT INFLOW DIVERTED = (CCF + TPP) ÷ DELTA INFLOW

where *DELTA INFLOW = SAC + SRTP + YOLO + EAST + MISC + SJR*

SAC	=	Sacramento River at Freeport mean daily flow for the previous day; the 25-hour tidal cycle measurements from 12:00 midnight to 1:00 a.m. may be used instead.
SRTP	=	Sacramento Regional Treatment Plant average daily discharge for the previous week.
YOLO	=	Yolo Bypass mean daily flow for the previous day, which is equal to the flows from the Sacramento Weir, Fremont Weir, Cache Creek at Rumsey, and the South Fork of Putah Creek.
EAST	=	Eastside Streams mean daily flow for the previous day from the Mokelumne River at Woodbridge, Cosumnes River at Michigan Bar, and Calaveras River at Bellota.
MISC	=	Combined mean daily flow for the previous day of Bear Creek, Dry Creek, Stockton Diverting Canal, French Camp Slough, Marsh Creek, and Morrison Creek.
SJR	=	San Joaquin River flow at Vernalis, mean daily flow for the previous day.

where *NET DELTA CONSUMPTIVE USE = GDEPL - PREC*

GDEPL	=	Delta gross channel depletion for the previous day based on water year type using the DWR's latest Delta land use study.[2]
PREC	=	Real-time Delta precipitation runoff for the previous day estimated from stations within the Delta.

and where *DELTA EXPORTS* [3] *= CCF + TPP + CCC + NBA*

CCF	=	Clifton Court Forebay inflow for the current day.[4]
TPP	=	Tracy Pumping Plant pumping for the current day.
CCC	=	Contra Costa Canal pumping for the current day.
NBA	=	North Bay Aqueduct pumping for the current day.

1 Not all of the Delta tributary streams are gaged and telemetered. When appropriate, other methods of estimating stream flows, such as correlations with precipitation or runoff from nearby streams, may be used instead.

2 If up to date channel depletion estimates are available they shall be used. If these estimates are not available, DAYFLOW channel depletion estimates shall be used.

3 The term "Delta Exports" is used only to calculate the NDOI. It is not intended to distinguish among the listed diversions with respect to eligibility for protection under the area of origin provisions of the California Water Code.

4 Actual Byron-Bethany Irrigation District withdrawals from Clifton Court Forebay shall be subtracted from Clifton Court Forebay inflow. (Byron-Bethany Irrigation District water use is incorporated into the GDEPL term.)

ATTACHMENT 2

Suggested Revision to Figure 4 of the 2006 WQCP

The E/I ratio should be modified to include in-Delta storage and conveyance releases as Delta inflow. Specifically, the equation for Delta Inflow should be revised to include in-Delta storage and conveyance releases. Delta Wetlands suggests the following revisions to "Figure 4" (page 20) of the 2006 WQCP (see highlighted text below):

DELTA INFLOW = SAC + SRTP + YOLO + EAST + MISC + SJR **+ IDSC**

Where:

SAC = Sacramento River at Freeport mean daily flow for the previous day; the 25-hour tidal cycle measurements from 12:00 midnight to 1:00 am may be used instead.

SRTP = Sacramento Regional Treatment Plant average daily discharge for the previous week.

YOLO = Yolo Bypass mean daily flow for the previous day, which is equal to the flows from the Sacramento Weir, Fremont Weir, Cache Creek at Ramsey, and the South Fork at Putah Creek.

EAST = Eastside Streams mean daily flow for the previous day from the Mokelumne River at Woodbridge, Cosumnes River at Michigan Bar, and the Calaveras River at Bellota.

MISC = Combined mean daily flow for the previous day of Bear Creek, Dry Creek, Stockton Diverting Canal, French Camp Slough, Marsh Creek, and Morrison Creek.

SJR = San Joaquin River flow at Vernalis mean daily flow for the previous day.

IDSC = In-Delta storage and conveyance release mean daily flow from the previous day.