

From: "Howard, Tom" <Tom.Howard@waterboards.ca.gov>

Date: June 24, 2015 at 3:24:19 PM PDT

To: "RMILLIGAN@usbr.gov" <rmilligan@usbr.gov>, "parroyave@usbr.gov" <parroyave@usbr.gov>, "Murillo, D@USBR" <dmurillo@usbr.gov>, "Leahigh, John@DWR" <John.Leahigh@water.ca.gov>, "Cowin, Mark@DWR" <Mark.Cowin@water.ca.gov>, "Moon, Laura K.@DWR" <Laura.K.Moon@water.ca.gov>, "Rea, Maria@NOAA" <Maria.Rea@noaa.gov>, "Wilcox, Carl@Wildlife" <Carl.Wilcox@wildlife.ca.gov>

Subject: NDOI calculation

Attached is my approval of the amendment to the NDOI calculation.

Thomas Howard

Executive Director

State Water Resources Control Board

Attachment:

Ron,

I have reviewed your request to modify the [Dayflow Table 3](#) values for Delta-wide gross channel depletion (GDEPL) estimates [an input for the calculation of the Net Delta Outflow Index (NDOI)] for this summer. The GDEPL estimates were developed 50 years ago and are used, for simplification, in all year types. The estimates do not take into consideration voluntary in-Delta conservation measures or water-use savings from this year's in-Delta water diversion curtailments of junior and senior water rights. Based on these actions, water quality conditions in the Delta, and net channel velocities at key locations, which suggest a more outward net flow than this time last year, the Department of Water Resources (DWR) and the Bureau of Reclamation (Reclamation) have recommended a five percent reduction in the GDEPL estimate used to compute NDOI this summer, beginning in June. This adjustment will allow DWR and Reclamation to maintain current river releases below Oroville and Nimbus Dam for the remainder of June, and conserve more water in Project storage for critical purposes. The Department of Fish and Wildlife, National Marine Fisheries Service, and the U.S.. Fish and Wildlife Service have concurred with this recommendation.

In [D-1641](#) (Figure 3 Attached to Order, footnote 2) the SWRCB acknowledged that DWR was developing new channel depletion estimates, and provided that DAYFLOW channel depletion estimates shall be used until revised GDEPL estimates are developed. I agree that given current salinity conditions and agricultural conservation efforts, actual Delta outflow is likely to be higher than calculated NDOI, at least in the near term. Taking into consideration the need to conserve Project storage to the maximum extent possible, and the fact that the fishery agencies have concurred with this request, I approve the recommended adjustment to channel depletion estimates for the remainder of the month. A similar adjustment may be warranted for July and August, but I would like to review additional technical data before considering whether to approve this adjustment for the remainder of the summer.