From: Martinez, Josh@DWR
To: WB-DWR-SacDeltaComments
Cc: Loboschefsky, Erik@DWR; Steffenson, David@DWR; Conrad, Jessica (Louise)@DWR; Banuelos, Veronica@DWR
Subject: Comment Letter - Sacramento/Delta Draft Staff Report
Date: Monday, January 22, 2024 3:31:16 PM
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DWR Comment Letter on SWB Staff Report_01_22_2024.pdf

EXTERNAL:

Dear Ms. Tyler,

Attached is a comment letter from the California Department Water Resources on the Draft Staff Report/Substitute Environmental Document in Support of Sacramento/Delta Update to Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (PROJECT) SCH# 2012012053.

Questions regarding this letter or further coordination should be directed to Erik Loboschefsky, Executive Manager for the Voluntary Agreements at 916-606-4383 or erik.loboschefsky@water.ca.gov.

Sincerely,

-Josh Martinez

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Supporting Healthy Rivers and Landscapes

DEPARTMENT OF WATER RESOURCES
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LATE

January 22, 2024

State Water Resources Control Board
Division of Water Rights
Attn: Bay-Delta & Hearings Branch
P.O. Box 100
Sacramento, CA 95812-2000

Subject: Staff Report/Substitute Environmental Document in Support of Potential Updates to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary for the Sacramento River and its Tributaries, Delta Eastside Tributaries, and Delta

Dear Division of Water Rights,

The Department of Water Resources (DWR) appreciates the opportunity to submit the below comments on the Staff Report/Substitute Environmental Document in Support of Potential Updates to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary for the Sacramento River and its Tributaries, Delta Eastside Tributaries, and Delta (Staff Report; September 2023). DWR recognizes the Staff Report as a significant milestone in the process of updating the San Francisco Bay/Sacramento-San Joaquin Delta Estuary Water Quality Control Plan (Bay-Delta Plan). We submit the below comments in support of the State Water Board's ongoing effort to update and implement the Bay-Delta Plan.

Program of Implementation

The Staff Report does not include the State Water Board's draft Program of Implementation (POI) for the proposed updates to the Bay-Delta Plan, which DWR understands is in development and presently anticipated for release in the summer. The ability of DWR to analyze the magnitude of potential impacts of the proposed updates, including the Staff Report's proposed inflow and outflow objectives, on the State Water Project (SWP), and to operationalize the proposed flow requirements, is highly dependent on the intended POI. The Staff Report raises significant concerns regarding anticipated impacts to SWP agricultural and municipal and industrial (M&I) supplies (e.g., Staff Report, p.A1-289, p.A1-436, p.A1-538), and additional impacts to power generation, agricultural, and M&I supplies could occur depending on the details and mechanisms of POI implementation.

Similarly, a key component of the proposed Voluntary Agreements1 (VA), if adopted, is the

1 The Voluntary Agreements program is now entitled the "Healthy Rivers and Landscapes Program" but are referred to herein as Voluntary Agreements for consistency with the terminology used in the Staff Report.

process by which the State Water Board will evaluate whether VAs are achieving their intended objectives and the potential for implementation of a "Regulatory Implementation Pathway" in regions where a VA is discontinued (See Staff Report, section 9.4). The draft POI should specify a process that aligns with the proposed VAs2 for potential imposition of the Regulatory Implementation Pathway in regions where VAs do not exist or are discontinued.

In the absence of the draft POI, it is challenging to understand how the proposed alternatives in the Staff Report can be operationalized while also achieving compliance with existing and anticipated future regulatory requirements, including SWP compliance with the Federal Endangered Species Act (ESA), California Endangered Species Act (CESA) and Federal Energy Regulatory Commission license obligations. For example, the proposed "Modifications to Existing Delta Outflow Objectives" (Staff Report, pp.5-30 – 5-39) are not consistent with the latest State and Federal Proposed Actions for the re-initiation of ESA and CESA Consultation for Long-Term Operations of the SWP and the U.S. Bureau of Reclamation's (Reclamation) Central Valley Project (CVP). Additionally, the Staff Report does not clarify how it aligns with the 2018 Bay-Delta Plan update for Lower San Joaquin River flow objectives and southern Delta salinity.
The intended draft POI should provide sufficient detail to allow DWR to determine how the Bay-Delta Plan update will impact SWP water supplies and compliance with other regulatory requirements. DWR welcomes future engagement with the State Water Board to inform the efforts to develop the POI.

Sustainable Groundwater Management Act

The Staff Report generally recognizes the interrelationship of the Bay-Delta Plan with groundwater but does not fully assess the groundwater level and groundwater quality impacts on Groundwater Sustainability Agencies (GSA) implementing projects to comply with the Sustainable Groundwater Management Act (SGMA). The impacts will limit potential GSA projects intended to achieve sustainability and avoid a significant loss of agricultural production. Further clarity on potential impacts to GSA project implementation would benefit stakeholders that need to navigate prospective Bay-Delta Plan implementation with achievement of SGMA goals.

Head of Old River Barrier

Staff Report Alternative 4b would require installation by DWR and Reclamation of the "Head of Old River Barrier" (HORB) during April and May to prevent juvenile Chinook salmon and steelhead from being entrained into the interior Delta. However, when HORB is installed, it results in greater hydrodynamic pull from Old and Middle River (OMR) flow from the western Delta, which is likely to increase entrainment risk of longfin smelt and delta smelt, especially from the San Joaquin River.3 Additionally, studies to date have been on acoustic-tagged hatchery steelhead and Chinook juvenile salmon, and benefits for wild salmonids remain highly uncertain. Due to the lack of scientific support for the HORB, DWR and Reclamation are not proposing to install HORB in ongoing consultations with fisheries agencies on the Long-Term Operations of the SWP and CVP, and DWR recommends that the State Water Board not further pursue Alternative 4b at this time.

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2 Memorandum of Understanding Advancing A Term Sheet For The Voluntary Agreements To Update And Implement The Bay-Delta Water Quality Control Plan, And Other Related Actions, March 2022, as amended.

3 Relevant studies conducted include (1) Salmonid survival studies that occurred prior to and throughout the Vernalis Adaptive Management Program period(2) HORB alternatives investigations in 2009 and 2010; (3) South Delta survival studies in 2014 (Buchanan et al) and 2016 (Buchanan et al); and (4) survival synthesis efforts in 2006 (Brown and Schwartz), 2008 (Newman), 2012 (Buchanan et al.), 2016 (Salmon Scoping Team), 2016 (Hinkelman and Cavallo) 2018 (Buchanan et al) and 2022 (Dodrill et al).

Modular Alternative 6a (Protection of Voluntary Agreement Flows Alternative)

DWR recognizes and supports the State Water Board's intention to utilize its legal authorities to protect VA flows against diversion for other purposes, and for inclusion of measures to protect the baseline for VA flows in the Bay-Delta Plan. However, DWR also recognizes the need for development of new water projects, focused on capturing water during wet periods, to adapt to changing climate and sea level rise. The specifics of proposed Modular Alternative 6a (Alt 6a) would seriously limit the effectiveness of these types of projects. The Alt 6a would significantly reduce the viability of the Delta Conveyance Project (and other proposed water projects) by reducing water supply yield and increasing the cost per acre-foot. If implemented, Alt 6a is anticipated to reduce the yield of the DCP over all water year types by an average of 55%. DWR has initiated and looks forward to continued communications with the State Water Board staff on other potential approaches that reflect the importance of baseline flows in the VA framework, but that would allow for increased diversions for new projects during periods of high flow. Some potential concepts could limit diversions for new projects based on different considerations of unimpaired flows, Delta outflow criteria, a buffer over the determination of excess flows before diversions could begin, monthly or seasonal criteria, or scaled diversions based on instream flow or Delta outflow. DWR looks forward to additional coordination in identifying alternative flow bypass threshold criteria that maximize species protection and diversion yield using the best available science.

Incorporation of Relevant Scientific Literature

Chapters on the available science informing fish and wildlife flow recommendations with considerations of other ecosystem stressors to native species in the Bay-Delta watershed provide an essential foundation for developing recommendations for the Bay-Delta Plan update. DWR appreciates the coverage of these essential topics. The Staff Report would benefit from the additional incorporation of the recent relevant peer-reviewed literature in several areas, including the role of managed agricultural floodplains for juvenile salmon rearing habitat, entrainment risks for smelt species in the south Delta SWP and CVP facilities, and species abundance and flow relationships. Several examples of this additional peer reviewed literature include:

- Risk of entrainment at CVP and SWP facilities and population-level impacts of entrainment for Longfin Smelt (Section 3.5.4.2) and Delta Smelt (Section 3.8.4.4) should include recent hydrodynamic and particle-tracking modeling work estimating proportional entrainment of larval Longfin Smelt based on estimated locations and timing of hatching (Gross et al. 2022) and proportional entrainment with recent larval trawl surveys 2009 – 2020 (Kimmerer and Gross 2022), which show low to negligible population impacts of CVP and SWP diversions. The discussion of Delta Smelt entrainment risk does not reflect the most recent analyses, in particular Grimaldo et al. 2021, which develops a more refined approach to analyze the SWP and CVP export effects separately.
- The description of the loss and function of floodplains for native fish species (Section 4.2.3) should be expanded and include updates to recent studies and Yolo Bypass management. For example, available recent peer-reviewed literature describing how managed agricultural inundation supports rapid growth for juvenile salmon and provides rearing opportunities for Chinook salmon (e.g., Sommer et al. 2020, Holmes et al. 2021, and Katz et al. 2017) should be included. The section (and others, see Sacramento Splittail, Section 3.7.1) should include planned near-term changes (water year 2025) to the Fremont Weir management with implementation of the "Big Notch" project that will increase the frequency and

duration of Yolo Bypass flooding. Finally, literature on the importance of floodplains for supporting life history diversity in Chinook salmon while still allowing for their ability to leave floodplain habitat upon its drainage should be included to support the role of floodplain habitat in salmon life history (e.g., Takata et al. 2017, Goertler et al. 2018, Sturrock et al. 2018).

- Additional topic areas that would benefit from the incorporation of recent literature include additional sections on Chinook salmon, sturgeon, climate change, zooplankton abundance relationships with flow, and tidal wetlands. We have provided a starting list of references that may be useful to State Water Board staff (included below). DWR staff are willing and available to discuss any of the topic areas in Chapters 3 and 4 of the Staff Report that do not yet reflect recent published information.

Proposed Changes to Monitoring Assessment, Special Studies, and Reporting

The Staff Report proposes an evaluation of reporting requirements for environmental monitoring (Section 5.1.6.3). DWR agrees that the data collected, and assessments made must align with priority management questions. The Environmental Monitoring Program (EMP), which DWR has operated jointly with USBR since 1975, fulfills numerous biological and water quality monitoring requirements from D-1641. DWR has been consistently providing annual reports and working with collaborators to maintain relevant, consistent, and comprehensive datasets for this program. When evaluating future changes to mandated reporting, it will be helpful for the State Water Board to provide greater detail regarding the format, scope, and timing of any review requirements. For thorough reviews, a frequency of every five years is more realistic than the proposed frequency of every three years.

In addition to the above comments, DWR remains committed, in coordination with other VA parties, to further developing the proposed VAs for future consideration by the State Water Board as a pathway, in conjunction with other actions, to implement the Bay-Delta Plan. If you have any questions on the above, please contact Erik Loboschefsky at erik.loboschefsky@water.ca.gov.

Sincerely,

Karla A. Nemeth

Karla A. Nemeth, Director
CA Department of Water Resources

Additional References for Consideration

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