

From: [Amanda Cranford - NOAA Federal](#)
To: [WB-DWR-SacDeltaComments](#)
Cc: [Cathy Marcinkevage - NOAA Federal](#); [Jennifer Quan - NOAA Federal](#)
Subject: Comment Letter – Sacramento/Delta Draft Staff Report
Date: Friday, January 19, 2024 2:42:08 PM
Attachments: [2024-01-19 SWB Bay-Delta Plan Phase II Draft Staff Report NMFS Comment Letter SIGNED 508.pdf](#)

EXTERNAL:

Good afternoon,

Attached you will find comments from NOAA's National Marine Fisheries Service (NMFS) regarding the State Water Resources Control Board's draft Staff Report/Substitute Environmental Document (Staff Report) in support of possible updates to the Water Quality Control Plan for the San Francisco Bay/SacramentoSan Joaquin Delta Estuary. We appreciate the opportunity to review and provide comments on the draft Staff Report.

If you have any questions regarding the comments provided, please don't hesitate to reach out.

Thank you,

Amanda Cranford
Natural Resource Management Specialist
California Central Valley Office
NOAA Fisheries | U.S. Department of Commerce
Office: (916) 930-3706
Mobile: (916) 251-8701



www.westcoast.fisheries.noaa.gov



January 19, 2024

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

Electronic Transmittal Only

Re: Comments on the Sacramento/Delta Draft Staff Report

NOAA's National Marine Fisheries Service (NMFS) appreciates the opportunity to submit comments on the State Water Resources Control Board's (Board) draft Staff Report/Substitute Environmental Document (Staff Report) in support of possible updates to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan). The updates are focused on the Sacramento River watershed, Delta eastside tributaries (including the Calaveras, Cosumnes, and Mokelumne Rivers), interior Delta, and Delta.

NMFS is responsible for the administration of the Endangered Species Act (ESA) of 1973, as amended [16 U.S.C 1531 *et seq.*] with regard to listed salmonids and green sturgeon. In the Sacramento River, Sacramento-San Joaquin Delta (Delta), and the Delta's eastside tributaries, the listed species include: Sacramento River winter-run Chinook salmon (*Oncorhynchus tshawytscha*), Central Valley spring-run Chinook salmon (*O. tshawytscha*), California Central Valley steelhead (*O. mykiss*), and the Southern Distinct Population Segment (sDPS) of North American green sturgeon (*Acipenser medirostris*). In addition, NMFS has jurisdiction over managed species pursuant to the Magnuson-Stevens Conservation and Management Act (MSA), which include all Chinook salmon runs in the Central Valley (including fall-run and late fall-run Chinook salmon).

NMFS understands that the purpose of the Staff Report is to address the California Environmental Quality Act (CEQA) requirements of an environmental document to describe a range of reasonable alternatives to a project that “would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.”

The Staff Report concludes that the “Proposed Plan Amendments” alternative is the current Environmentally Superior Alternative but that, based on hydrology and water supply, the proposed Voluntary Agreements (VAs) could be considered the Environmentally Superior Alternative.



The Proposed Plan Amendments include the following objectives and implementation measures for the protection of fish and wildlife.

1. Narrative and numeric inflows from the Sacramento River, its tributaries, and Delta eastside tributaries (the Cosumnes, Mokelumne, and Calaveras Rivers) that would require 55 percent unimpaired flow, with an adaptive range from 45 percent to 65 percent unimpaired flow to support salmonids and other native species within streams and contribute to Delta outflows.
2. Narrative and numeric inflow-based Delta outflows to support species migrating through and residing in the Delta. Delta outflows also support salinity control for agricultural and municipal uses.
3. Narrative cold water habitat provisions that would require reservoirs to be operated in a manner that provides needed cold water habitat for salmonids or other measures to provide cold water habitat.
4. Narrative and numeric interior Delta flows to reasonably protect native fish populations migrating through and rearing in the Delta from impacts related to Delta water export facilities, including export constraints, Old and Middle River reverse flow constraints, and additional Delta Cross Channel gate closure requirements.
5. Monitoring, reporting, and evaluation measures and other provisions.

The basic objectives of the project are further clarified in the Staff Report: “*Specifically, the project is a restoration project that is intended to provide for the reasonable protection of fish and wildlife beneficial uses through restoration of the Delta ecosystem over time.*” (pg. 7.2-4).

The following comments are focused on the proposed Bay-Delta Plan updates, including the proposed objectives, and potential impacts to NMFS’ trust resources referenced above.

Use of Best Available Scientific and Commercial Data

NMFS recommends the Board use the best scientific and commercial data available as part of the assessment of alternatives associated with the proposed Bay-Delta Plan updates.

- The majority of the data presented regarding salmonid species abundance is through 2015. While this timeframe shows that significant declines in the natural production of all four Chinook salmon runs within the Central Valley have occurred since the baseline period (1967-1991), it does not account for the recent years of severe drought and the resulting declines in abundance and productivity occurring since 2015. The current status of ESA-listed species within the Sacramento River and Delta should be considered when assessing the Environmentally Superior Alternative with respect to updating the Bay-Delta Plan. Please consider the latest Viability Assessment for Pacific Salmon and Steelhead Listed Under the Endangered Species Act completed by the NMFS Southwest Fisheries Science Center (SWFSC) in 2022.
- Recent publications, most notably work conducted by the SWFSC (Michel 2018, Notch et al. 2020, Michel et al. 2021), outline the important relationship between flow and the survival of juvenile Chinook salmon during their outmigration through the Sacramento River and Delta. NMFS suggests consideration of these publications, in addition to those by Perry et al. (2018), Hance et al. (2021), and Hassrick et al. (2022), as part of any

assessment of alternatives prior to making a decision associated with the proposed updates to the Bay-Delta Plan.

- There is very limited and terse consideration of future climate conditions and how they may be different from the period of evaluation (Section 2.6 Climate Change and Drought). The concern, acknowledged in the report, is whether current conditions (based on water years 1922-2015) provide a suitable baseline for alternatives to be compared given “that the next 94 years will likely be very different than the 94 years analyzed above (Null et. al. 2010; Milly et al. 2008; Barnett et al. 2008; Null and Viers 2013)” (pg. 2-114). A changing climate complicates the conservation of protected resources, due in large part to the uncertainty of the rate and magnitude of climate-related changes and the response of various organisms to those changes. Chinook salmon in California’s Central Valley are at the southern limit of their range and are currently restricted to low elevations as a result of impassable rim dams. Climate change is expected to further limit the suitability of available habitat by shortening the period in which the low elevation habitats used by naturally-producing Chinook salmon are thermally suitable. These impacts are of particular concern to the listed runs of Chinook salmon in the Central Valley which have a longer freshwater residency, and therefore require suitable water temperatures over a longer duration, than non-listed Chinook salmon runs.
 - In response to these challenges, NMFS adopted national ESA climate guidance to provide greater consistency, efficiency, and effectiveness in ESA decisions and help the agency make more scientifically defensible ESA-related management decisions in light of climate change (NMFS 2023). Please consider incorporation of relevant recommendations from this guidance and/or others to better address potential impacts resulting from climate change.
- Discussion of Fremont Weir does not include the Yolo Bypass Salmonid Habitat Restoration and Fish Passage (*i.e.*, “Big Notch”) project. All of the alternatives considered in the Staff Report (including the proposed VAs) have the potential to modify flow and stage in the mainstem Sacramento River, such that it would affect the frequency, timing and duration of bypass inundation. Consideration of the interaction between the alternatives considered and the proposed operation of the Big Notch project would help to improve the assessment of habitat effects in the Yolo Bypass.

Proposed Changes to the Bay-Delta Plan for the Sacramento/Delta

As stated in our December 16, 2016, letter to the Board regarding the Working Draft Scientific Basis Report on the Phase II Update of the 2006 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, NMFS supports the recommendations for year-round inflow requirements based on hydrology.

- Specifically, we suggest consideration of instream flows that embrace the unimpaired hydrologic flow regime to support all anadromous salmonid and sturgeon life history stages and the ecological function of critical and essential fish habitat. Instream flows should support upstream and downstream migration and rearing needs, including successful, unimpeded passage over critical riffles and other impediments. Flow regimes should also support effective inundation of important rearing habitats such as riparian zones, floodplains and side channels.

- Adoption of unimpaired flow is a useful approach to achieve a more natural flow pattern in the Sacramento River and Delta as it captures both within-year and between-year changes in hydrology.

Voluntary Agreements

Based on the information presented within the Staff Report, we observed a significant level of uncertainty associated with how the VAs would be implemented.

- A small percentage of the required funding will be provided by the VA parties. The remainder has not been secured and is expected to come from state and federal agencies.
 - The proposed VAs anticipate approximately \$925 million will be made available for water purchases, with approximately *\$708 million provided by public funding from the state and federal governments*, and the remaining approximately \$217 million generated by the VA parties. As the beneficiaries of additional flow under the VAs, we question whether this reliance on public funding by the VA parties is an appropriate approach for allocation of public monies.
 - The anticipated funding needed for currently-identified habitat restoration projects is *\$740 million, which is expected to be provided by state and federal agencies*. Since there are no funding contingencies identified within the Staff Report, it is unclear how the VAs would be implemented as proposed, until the funds needed to implement the VAs are appropriated and/or obligated by state and federal agencies.
- The Staff Report acknowledges the description of the proposed VAs is not complete. “By the end of 2023, the VA parties are planning to submit the following additional draft documents: draft Global Agreement, draft Enforcement Agreements, draft Implementing Agreements; draft Quantitative Flow Accounting Approach; draft Funding Plan; and draft Systemwide Governance Committee Charter.” Without these additional documents, the public has no assurances the VAs will be funded or implemented as proposed in the Staff Report.
- The VAs propose that, in the eighth year of implementation, the Board would consider the reports, analyses, information, and data from the VA Science Program, as well as recommendations from the VA Governance Committee and the Delta Independent Science Board, to decide the future of the VA Program. This proposed timeframe for assessing the effectiveness of the VAs is concerning, given the dire status of native fish species within the Sacramento River Basin and Delta and the urgency in improving conditions for these species to prevent further declines.
- The proposed VA flow assets will only be deployed in select years (dry, below normal, above normal), providing no benefits during years when ESA-listed species are most at risk of significant impacts (*i.e.*, critical water years). To ensure long-term survival of ESA-listed species, the proposed VAs should also address critical water years, particularly back-to-back critical water years such as those that occurred in 2021 and 2022.
 - In addition, the potential benefits of the proposed VA flow assets are further reduced in some watersheds by limiting the frequency of deployment. For

example, the description of the American River states, “These flows would be deployed in three out of eight years of the VA in the above year types.” This is not sufficient to provide necessary protections to ESA-listed species.

Based on the information in the Staff Report, we are highly uncertain that the VAs as currently proposed will provide for the reasonable protection of fish and wildlife beneficial uses through restoration of the Delta ecosystem over time.

- The proposed VAs identify the aquatic biological benefit of “Providing higher flows [to] support a connected and functioning ecosystem and benefit native fish in the Sacramento/Delta.” However, modeling in the Staff Report shows that the flow commitments identified in the VA Term Sheet would not provide a significant difference in average flow relative to the baseline (Alt 1). Additionally, while the VA Term Sheet outlines committed flow assets, that document is a non-binding agreement.
- The proposed deployment of VA flow assets during the spring months could improve conditions for some outmigrating juvenile Chinook salmon and steelhead. Because ESA-listed spring-run Chinook salmon and steelhead are likely to be present in certain freshwater habitats year-round, we recommend that flows provide benefits to, or be protective of, all life stages, particularly those with differing life history strategies such as yearling outmigration. Maintaining this diversity is essential for conserving species viability and reducing the overall extinction risk, and likely requires improved conditions at other times of the year.
- The VA physical habitat actions should not include habitat restoration actions required through other regulatory mechanisms or proposed as mitigation for existing projects. Those habitat restoration actions are expected to occur absent the proposed VAs, and therefore they should not be considered voluntary or new contributions to ecosystem lift.

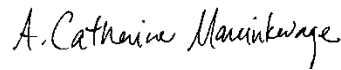
While comparison of the VAs and the Proposed Plan Amendments alternative is limited within the Staff Report, the information presented shows differences in the potential benefits under the two alternatives.

- Table 9.7-13 lacks the relative assessment of “Impact Compared to Proposed Plan Amendments” provided in Tables F-1 through F-3, without which it is difficult to compare the VAs to the No Project (Alt 1), Low-Flow (Alt 2), High-Flow (Alt 3) alternatives and the Proposed Plan Amendments alternative.
- While not directly compared within the Staff Report, assessment of the total flows that would be expected under the proposed VAs is much less (range of 1-43 percent, depending on location/source and water year type) than what would occur under the Proposed Plan Amendments alternative.

NMFS supports the proposed management of flows, including the consideration of magnitude, duration, frequency, timing, rate of change, quality, and spatial extent, in order to maintain viable native fish populations in the Sacramento River and Delta. NMFS also supports the discussed fish passage improvement projects and physical habitat restoration that would provide a host of benefits for anadromous salmonids in the Central Valley. We look forward to the opportunity to provide further technical assistance and commence ESA Section 7 consultation(s), as applicable,

as the Board proceeds with updates to the Bay-Delta Plan and seeks approval from the Environmental Protection Agency under Section 303(c) of the Clean Water Act. If you have any questions regarding this correspondence, please contact Amanda Cranford at (916) 930-3706 or via email at Amanda.Cranford@noaa.gov.

Sincerely,



Cathy Marcinkevage
Assistant Regional Administrator
California Central Valley Office

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