
State Water Resources Control Board

NOTICE OF LIMITED RECIRCULATION AND NOTICE OF AVAILABILITY AND OPPORTUNITY FOR PUBLIC COMMENT AND HEARING ON

REVISED DRAFT SACRAMENTO/DELTA UPDATES TO THE WATER QUALITY CONTROL PLAN FOR THE SAN FRANCISCO BAY/SACRAMENTO-SAN JOAQUIN DELTA WATERSHED AND SUPPORTING DRAFT STAFF REPORT

NOTICE IS HEREBY GIVEN that State Water Resources Control Board (State Water Board or Board) staff has released for public review and comment a revised draft of updates to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Watershed (Bay-Delta Plan or Plan).¹ The changes are focused on the portions of the Plan relevant to the Sacramento River watershed, Delta eastside tributaries (including the Calaveras, Cosumnes, and Mokelumne Rivers), and Delta (Sacramento/Delta) for the reasonable protection of fish and wildlife beneficial uses.

NOTICE IS ADDITIONALLY HEREBY GIVEN that the State Water Board is conducting a limited recirculation of the draft Staff Report/Substitute Environmental Document (Staff Report) in support of Sacramento/Delta updates to the Bay-Delta Plan by releasing a new chapter (Chapter 13) for public review and comment. Chapter 13, *Revised Proposed Plan Amendments*, provides an updated project description with supporting environmental and economic analyses and is summarized further below.

NOTICE IS ADDITIONALLY HEREBY GIVEN that the State Water Board will receive public comments on the December 2025 revised draft updates to the Bay-Delta Plan and Chapter 13 of the draft Staff Report, both in writing and orally at a Board hearing, in accordance with this notice.

¹ The Bay-Delta Plan was last amended in 2018 when the State Water Board adopted updates relevant to Lower San Joaquin River flows for the reasonable protection of fish and wildlife and southern Delta salinity for the reasonable protection of agriculture.

The public hearing will be held at the following times and locations:

January 28-30, 2026, beginning at 9:00 am

Joe Serna Jr. CalEPA Building
Coastal Hearing Room
1001 I Street, Second Floor
Sacramento, CA 95814

And via Video and Teleconference

BACKGROUND

State law requires that the State Water Board adopt water quality control plans to reasonably protect beneficial uses of water. The Board is required to periodically review its water quality control plans and to update those plans as needed through a public process. The Board protects water quality that affects beneficial uses of water in the Bay-Delta, in part, through its Bay-Delta Plan. The Bay-Delta Plan identifies: (1) beneficial uses of water in the Bay-Delta, which currently include municipal, industrial, agricultural, and fish and wildlife uses; (2) largely flow-based water quality objectives to reasonably protect the beneficial uses; and (3) a program of implementation to achieve the objectives, including monitoring and reporting requirements.

In September 2023, the State Water Board released a draft Staff Report (2023 Draft Staff Report) evaluating the potential environmental, water supply, and economic effects of different alternatives for the Sacramento/Delta updates to the Bay-Delta Plan. The draft Staff Report evaluated the following: proposed Plan amendments that were based on the 2018 Framework for possible Sacramento/Delta updates to the Bay-Delta Plan; proposed voluntary agreements (VAs), referred to as the Healthy Rivers and Landscapes (HRL) proposal; and Low Flow and High Flow alternatives; as well as several modular alternatives that would modify the other alternatives.

In October 2024, Board staff released a draft of potential updates to the Bay-Delta Plan that incorporated alternatives identified in the draft Staff Report with revisions based on public comments. Following a public comment period on the 2024 draft Plan, a revised draft of Plan updates was released in July 2025. The Board delayed public comment on the July 2025 revised draft Plan in order to make further revisions and to allow for comments on the revised draft Plan to be provided with the limited recirculation of the draft Staff Report as part of a new Chapter 13 to the draft Staff Report. Both of these documents reflect the updated proposed project, which brings together in the Bay-Delta Plan program of implementation a VA pathway that incorporates HRL commitments and would apply to HRL water rights and a regulatory pathway that would apply to other water rights and to HRL water rights in the event the VA pathway is discontinued. Chapter 13 provides a comparative analysis of the revised proposed Plan amendments based on the 2023 Draft Staff Report with any necessary modifications to ensure that the public has the opportunity for additional meaningful public review and comment.

With this notice, the Board is initiating a public comment period for the December 2025 revised draft Plan and Chapter 13 of the draft Staff Report. Attachment A includes a summary of the December 2025 revised draft Plan. Attachment B includes a more detailed summary of revisions contained in Chapter 13.

PROCEDURAL REQUIREMENTS

The draft Staff Report fulfills the requirements of the California Environmental Quality Act (CEQA) and the State Water Board's regulations (Cal. Code Regs., tit. 23, § 3775 et seq.), as well as the Porter-Cologne Water Quality Control Act and other applicable requirements. The Board's water quality control planning program is a certified regulatory program and is exempt from certain CEQA requirements, such as preparation of an environmental impact report (EIR). The draft Staff Report has been prepared in lieu of an EIR because it is recognized under CEQA and the regulations implementing CEQA as providing the functional equivalent.

CEQA Guidelines may be cited where appropriate and relevant to help guide or inform the CEQA analysis consistent with CEQA's goals and standards. California Code of Regulations, title 14, section 15088.5, subdivision (a) requires a lead agency to recirculate an EIR when significant new information is added, such as changes in the project or environmental setting as well as additional data or other information. If the revision is limited to a few chapters or portions of the EIR, the lead agency need only recirculate the chapters or portions that have been modified. (Cal. Code Regs., tit. 14, § 15088.5, subd. (c).) The portion of the draft Staff Report that is being recirculated is limited to Chapter 13.

DOCUMENT AVAILABILITY

The December 2025 revised draft updates to the Bay-Delta Plan and Chapter 13 of the draft Staff Report are available for review on the [Board's website](#). Parties who wish to make formal comments must do so in writing by the deadline specified below or orally at the public hearing.

WRITTEN PUBLIC COMMENTS

The State Water Board is accepting written comments on the December 2025 revised draft Bay-Delta Plan and Chapter 13 of the draft Staff Report. The Board is not accepting further comments on the remainder of the draft Staff Report that was previously released for public comment. In order to be fully considered, written comments must be received no later than **February 2, 2026**.

To support efficient review of written comments, commenters are encouraged to organize their letters using clear headings to distinguish between comments on the December 2025 revised draft Plan and Chapter 13 of the draft Staff Report. In addition, commenters are requested to identify and distinguish specific CEQA-related comments from other comments, where appropriate.

Comments should be submitted via email to SacDeltaComments@waterboards.ca.gov with the subject line "**Comment Letter – Revised Draft Sacramento/Delta Bay-Delta Plan Updates & Ch. 13 of Draft Staff Report.**" If comments exceed email file size limitations, please send an email to the above address at least 24 hours in advance of

the comment deadline for assistance with submitting documents via the Board's File Transfer Protocol (FTP) site.

Comments on the revised draft Bay-Delta Plan and Chapter 13 of the draft Staff Report will inform development of a final draft of the Plan and final Staff Report. The final Staff Report will contain responses to previously submitted comments on the 2023 Draft Staff Report (including responsive edits to the Staff Report) as well as any additional comments on Chapter 13. Both the final Staff Report and final draft of the Plan will be available for public review and comment before being considered for adoption by the Board at a future Board meeting.

HEARING INFORMATION

The State Water Board will conduct the public hearing in accordance with California Code of Regulations, title 23, section 649 et seq. There will be no sworn testimony or cross-examination of participants. Although a quorum of the Board is expected to be present at the hearing, the State Water Board will not take any formal action. The hearing will include both a physical meeting location and an option to participate remotely as described below.

The purpose of the public hearing is to receive input on the December 2025 revised draft updates to the Bay-Delta Plan and Chapter 13 of the draft Staff Report. The hearing days will include: (1) introductory remarks from the Board Chair and Board members; (2) a staff presentation; and (3) public comment with the opportunity for combined comments through panel presentations.

Speakers will have an opportunity to provide oral comments during the hearing. Speakers should provide oral comments at only one hearing date. Individual comments will be limited to 3 minutes. If you wish to make an individual comment, please fill out a [virtual speaker card](#) by the deadline noted below. For those who plan to participate virtually, the Clerk to the Board will respond to your form one business day before the hearing with the information needed to join the meeting.

For those who wish to provide a panel presentation, please email SacDeltaComments@waterboards.ca.gov by the deadline identified below with the following information: (1) the date of the hearing the panel is requesting to present at; (2) the names, affiliations, and email addresses of each member of the panel; (3) whether each panel member will present in person or remotely; and (4) a short description of the content the panel plans to present. Panel presentations will be limited to 20 minutes (depending on the number of panel requests) unless otherwise directed. Panels that would like to make a PowerPoint presentation must submit their PowerPoint presentation to SacDeltaComments@waterboards.ca.gov by the deadline identified below.

To ensure a well-organized and efficient hearing, please adhere to the following deadlines:

Hearing Dates	Deadline	Date
January 28-30, 2026	Panel presentation requests	January 21, 2026
	PowerPoint presentations	January 26, 2026
	Virtual speaker cards	January 27, 2026

For those who only wish to watch the hearing, a webcast will be available at youtube.com/user/BoardWebSupport/ and video.calepa.ca.gov/ (closed captioning available) and should be used unless you intend to comment.

FUTURE NOTIFICATIONS

To receive future email notifications about the Bay-Delta Plan processes, including to receive notice of future opportunity for public comment and hearing, [subscribe](#) to the “Bay Delta Notices” topic (listed under Water Rights).

AVAILABILITY OF LANGUAGE SERVICES

To request oral interpretation or sign language services, please submit your request at least 10 business days before the hearing by contacting the Office of Public Engagement, Equity, and Tribal Affairs at (916) 341-5254 or OPP-LanguageServices@waterboards.ca.gov.

Telecommunications device for the deaf (TDD) users may contact the California Relay Service at: TTY (800) 735-2929 or voice line at (800) 735-2922.

VISITING THE CALEPA BUILDING

All visitors to the CalEPA Building are required to sign in at the security guard station located just inside the main entrance. Visit the [CalEPA website](#) for additional information on traveling to the CalEPA Building.

CONTACT INFORMATION

For questions regarding this notice, email SacDeltaComments@waterboards.ca.gov.

December 12, 2025
Date

Courtney Tyler
Courtney Tyler
Clerk to the Board

State Water Resources Control Board

ATTACHMENT A

SUMMARY OF REVISED DRAFT SACRAMENTO/DELTA UPDATES TO THE WATER QUALITY CONTROL PLAN FOR THE SAN FRANCISCO BAY/SACRAMENTO-SAN JOAQUIN DELTA WATERSHED (BAY-DELTA PLAN)

ATTACHMENT B

SUMMARY OF CHAPTER 13 OF DRAFT STAFF REPORT IN SUPPORT OF SACRAMENTO/DELTA UPDATES TO THE WATER QUALITY CONTROL PLAN FOR THE SAN FRANCISCO BAY/SACRAMENTO-SAN JOAQUIN DELTA WATERSHED (BAY-DELTA PLAN)

See Attachment A and Attachment B below. To request a translation of Attachment A or Attachment B, please email OPP-LanguageServices@waterboards.ca.gov.

ATTACHMENT A

SUMMARY OF REVISED DRAFT SACRAMENTO/DELTA UPDATES TO THE WATER QUALITY CONTROL PLAN FOR THE SAN FRANCISCO BAY/SACRAMENTO-SAN JOAQUIN DELTA WATERSHED (BAY-DELTA PLAN or PLAN)

INTRODUCTION

On July 24, 2025, a revised draft of potential updates to the Bay-Delta Plan focused on the Sacramento River and Delta (Sacramento/Delta) was released for public review and comment. The July 2025 revised draft Bay-Delta Plan included changes to the draft Plan that was released in October 2024 based on public input and comments received throughout the planning process.

On September 16, 2025, the notice for public comment and hearing on the July 2025 revised draft Plan was rescinded and the State Water Board identified that an updated draft Plan would be released in December of 2025, along with a limited recirculation of the draft Staff Report in support of Sacramento/Delta updates to the Bay-Delta Plan. A revised draft Plan and the recirculated portion of the draft Staff Report (Chapter 13) were released on December 12, 2025.

This attachment summarizes: (1) the primary revisions to the revised draft Bay-Delta Plan since the 2024 draft was released; (2) background information on the Bay-Delta Plan and the development of the proposed changes; and (3) specific changes to the provisions included in the latest draft Plan.

Revisions to Draft Bay-Delta Plan

This section summarizes the primary revisions to the draft Bay-Delta Plan since the first draft was released in October 2024. For more details on these and other changes, see the sections below.

The 2024 draft included several notes to reader that identified options under consideration that the Board was seeking input on for updating the Bay-Delta Plan. The July 2025 revised draft identified specific provisions based on these options, as well as other refinements. The December 2025 revised draft includes additional refinements and addresses additional notes to reader.

The 2024 draft identified the inclusion of flow and cold water habitat related provisions that were based on the proposed Plan amendments and alternatives identified in the 2023 Draft Staff Report, as well as options for these provisions.

The 2024 draft also identified the possible inclusion of voluntary agreements (VAs) under the Healthy Rivers and Landscapes (HRL) proposal to provide flow and non-flow habitat commitments proposed by State and federal agencies, public water agencies, and other water users, as well as options associated with inclusion of these provisions. The July 2025 revised draft included an implementation pathway for water rights covered by the HRL commitments referred to as the VA pathway and a pathway referred to as the regulatory pathway for water rights not covered by the HRL commitments, with both pathways having regulatory effect upon Plan adoption. The December 2025 revised draft updates terminology associated with the HRLs and VA pathway.

The 2024 draft also identified that the Board was considering modifications to the inflow, cold water habitat, inflow-based Delta outflow, and interior Delta flow objectives identified in that version of the Plan. The July 2025 revised draft retained the narrative portions of the new objectives described in the 2024 draft with modifications, and incorporated the numeric portion of the inflow objective into the program of implementation. The July 2025 revised draft also retained the HRL proposed native fish viability objective. Under the regulatory pathway, these objectives would be implemented by flow, cold water habitat, and related requirements included in the program of implementation. Under the VA pathway, the objectives would be implemented by HRL flow and habitat commitments.

The 2023 Draft Staff Report identified inflows under the proposed Plan amendments of 55 percent of unimpaired flow, within an adaptive range of 45 to 65 percent based on the 2017 Scientific Basis Report in support of Sacramento/Delta updates to the Bay-Delta Plan. The 2024 draft Plan identified that the Board was considering changes to these flow levels and solicited comments on possible changes. In response to concerns that the proposed flow levels would have significant water supply impacts and could result in drawing down reservoir storage (with associated temperature impacts) under existing water rights that water users need time to plan for and adjust to, modifications to the starting point for the inflows under the regulatory pathway were incorporated in the July 2025 revised draft, referred to as water supply adjustments or WSAs, that reduce water supply impacts and allow more water to be stored in reservoirs. These WSAs would apply at the outset of Plan implementation but could be modified after initial implementation.

Specifically, the WSAs require a lower percent of unimpaired flow requirement during all but the wettest hydrologic conditions down to 45 or 35 percent of unimpaired flow, with additional tributary specific WSAs for specified rainfall dominated and municipal supply dominated tributaries. Further refinements to the WSAs are included in the December 2025 revised draft.

Changes to the VA pathway described in the 2024 draft Plan were also incorporated in the July 2025 revised draft, including refinements to: the description of the HRL flow commitments; the provisions for continuation, modification, or termination of the VA pathway; the provisions for addressing new water supply projects; the HRL habitat

accounting provisions; and other provisions. In addition, two new HRL proposals on the Bear River/Auburn Ravine from Nevada Irrigation District (NID) and South Sutter Water District (SSWD) were submitted to the Board after the 2024 draft Plan was released and their commitments were added in the July 2025 revised draft. One additional HRL proposal on Putah Creek from Yolo County Flood Control and Water Conservation District (YCFCWCD) was submitted to the Board after the July 2025 revised draft was released and its commitments were added in the December 2025 revised draft. A draft of the HRL flow accounting was first included in Appendix B.1 of the July 2025 revised draft, which has been further revised in the December 2025 revised draft. Appendix B.1 contains draft accounting for each tributary, the Delta, export reduction commitments, and water purchases. The July 2025 revised draft included notes to reader on issues still under development. Many of these notes to reader have been removed in the December 2025 revised draft.

In response to significant feedback from tribal representatives, the July 2025 revised draft Plan also incorporated tribal beneficial uses (TBUs) and the designation of Tribal Tradition and Culture (CUL) beneficial uses for the Bay-Delta watershed. The July 2025 revised draft also included provisions for a Tribal Advisory Group and other provisions to facilitate tribal participation and feedback in the Board's Bay-Delta planning and implementation efforts.

BACKGROUND

The Bay-Delta Plan, like other water quality control plans, identifies beneficial uses of water, water quality objectives to protect those uses, and a program of implementation to achieve the objectives, as well as monitoring and evaluation provisions. These provisions are required to be reviewed and updated periodically to provide for the reasonable protection of beneficial uses of water. In response to fishery and ecosystem declines in the Bay-Delta watershed and its tributaries, the State Water Board is in the process of updating the Bay-Delta Plan to provide for the reasonable protection of fish and wildlife beneficial uses. The Bay-Delta Plan is being updated and implemented in separate processes focused on two distinct portions of the Bay-Delta watershed. The first process, known as the Lower San Joaquin River/Southern Delta update, was completed in 2018 and is in the process of being implemented. The Lower San Joaquin River/Southern Delta portion established updated San Joaquin River and tributary flow requirements for the reasonable protection of fish and wildlife beneficial uses and also updated salinity requirements in the southern Delta for the reasonable protection of agricultural beneficial use. The second process, known as the Sacramento/Delta update, is focused on flows and other measures for the reasonable protection of fish and wildlife in the Sacramento River and its tributaries, Delta eastside tributaries, and the Delta.

In 2017, following public comment and peer review, the State Water Board completed a Scientific Basis Report (2017 Scientific Basis Report) for the Sacramento/Delta update that describes the science supporting possible Sacramento/Delta updates to the

Bay-Delta Plan that were under consideration at that time. The 2017 Scientific Basis Report supports the need for updates to the Bay-Delta Plan to provide for the protection of native fish and other aquatic species, including the need for updated flows and water project operations that work together in a comprehensive framework with other complementary actions to protect the Bay-Delta ecosystem.

Based on the 2017 Scientific Basis Report, in July 2018, a framework for possible Sacramento/Delta updates to the Bay-Delta Plan was released that identified possible changes to the Bay-Delta Plan, including narrative and numeric inflow requirements from the Sacramento River, its tributaries, and Delta eastside tributaries (the Cosumnes, Mokelumne, and Calaveras Rivers); narrative and numeric inflow-based Delta outflows that would require inflows from the Sacramento/Delta tributaries and San Joaquin River and tributaries be provided as Delta outflow; narrative cold water habitat provisions; and narrative and numeric interior Delta flow requirements, as well as associated monitoring, reporting, and evaluation measures and other provisions.

In March 2022, the State Water Board received a Memorandum of Understanding (MOU) for proposed voluntary agreements to update and implement the Bay-Delta Plan from signatories including state and federal agencies, local public water agencies, and other water users. The State Water Board received updates to the MOU in August and November of 2022, in August 2025 to include two additional agreements, and in October 2025 to include one additional agreement.

In support of the Board's process of evaluating and considering the HRL proposal as part of the Sacramento/Delta update to the Bay-Delta Plan, State Water Board staff, in collaboration with staff from the Department of Water Resources (DWR) and California Department of Fish and Wildlife (CDFW), drafted a Scientific Basis Report Supplement. The Scientific Basis Report Supplement is an addendum to the 2017 Scientific Basis Report that builds on the analyses in the 2017 report to document the science supporting anticipated benefits of the HRL flow and habitat commitments.

The Draft Scientific Basis Report Supplement was released for public comment in January 2023. Following receipt of public comments, the draft was revised and a Final Draft Scientific Basis Report Supplement was submitted for independent peer review. In February 2024, the State Water Board received the peer review responses. State Water Board staff are currently in the process of finalizing the Scientific Basis Report Supplement in collaboration with staff from CDFW and DWR in response to peer reviewers' comments. A Final Scientific Basis Report Supplement will be released with the Final Staff Report in support of the Sacramento/Delta update to the Bay-Delta Plan.

In September of 2023, the State Water Board released a draft Staff Report/substitute environmental document evaluating the potential environmental and economic effects of different possible alternatives for Sacramento/Delta updates to the Bay-Delta Plan (Staff Report). The 2023 Draft Staff Report identified and evaluated proposed Plan amendments based on the 2018 Framework and identified the possible inclusion of the

HRL commitments as part of the proposed Plan amendments, as well as other alternatives.

In October of 2024, the State Water Board released draft Plan amendments (2024 draft) for a nearly 80-day public review and comment period, that was based on public comments received at that time. Public comment and input on the 2023 Draft Staff Report and 2024 draft Plan include more than 700 comment letters, three staff workshop days, five Board workshop days, eleven working meetings, and continuing coordination with HRL participants. Those public comments informed the development of the July and December 2025 revised drafts of the Bay-Delta Plan and Chapter 13.

SUMMARY OF REVISED DRAFT UPDATES TO BAY-DELTA PLAN

The following sections summarize the substantive July and December 2025 revised draft updates to the Bay-Delta Plan, including updates to beneficial uses, water quality objectives for the reasonable protection of fish and wildlife beneficial uses, and updates to the associated program of implementation, including monitoring and reporting requirements. The updates are described in more detail below in the order they appear in the revised draft Plan.

Tribal Beneficial Uses

The 2024 draft included the incorporation of Tribal and Subsistence Fishing Beneficial Uses (TBUs) including: Tribal Tradition and Culture (CUL), Tribal Subsistence Fishing (T-SUB), and Subsistence Fishing (SUB) beneficial uses as they relate to the reasonable protection of fish and wildlife. The 2024 draft identified that the Board is considering designation of CUL in the Bay-Delta watershed as part of the current update to the Bay-Delta Plan. Based on information and input received, the revised draft Plan proposes to move forward with designating CUL in the Bay-Delta Plan. The CUL designation recognizes the centrality that vital fish populations and aquatic life have for cultural, spiritual, ceremonial, and traditional rights and lifeways. The CUL beneficial use designation is specifically responsive to tribal input expressing the cultural significance of salmon, which also defines the applicable extent of the Bay-Delta Plan, and anadromous fish species to tribal culture through the presence and role of salmon in origin stories, as a centerpiece in traditional ceremonies, and traditional belief systems that revere salmon as beloved ancestors and relations. The reasonable protection of CUL as it relates to salmon and ecological conditions overlaps with the reasonable protection of fish and wildlife. Accordingly, the objectives needed to protect both categories of beneficial uses overlap and are addressed by the proposed updates to the objectives and program of implementation.

Future water quality objectives or site-specific waste discharge or water right requirements for the protection of cultural uses may be considered through subsequent Regional Board or State Water Board actions. T-SUB and SUB are not designated by this Plan for any waterbodies in the Bay-Delta watershed. T-SUB and SUB beneficial

uses may be designated for water body segments as appropriate by the Regional Water Quality Control Boards.

Water Quality Objectives for Municipal, Industrial and Agricultural Uses

There are no substantive changes to the water quality objectives for the protection of municipal and industrial uses (Table 1) or agricultural uses (Table 2) or associated program of implementation provisions from the current (2018) version of the Bay-Delta Plan.

Water Quality Objectives for Fish and Wildlife Uses

There are no substantive changes to the fish and wildlife objectives and associated program of implementation provisions from the current version of the Bay-Delta Plan for Lower San Joaquin River flows, dissolved oxygen, or San Joaquin River salinity.

In the 2024 draft, the notes to reader explained that the new Sacramento/Delta tributary inflow, cold water habitat, Delta outflow, inflow-based Delta outflow, and interior Delta flow objectives may either remain as objectives in Table 3 or be incorporated in Chapter 4, Program of Implementation. The July 2025 revised draft Plan retained, with modifications, the new objectives identified in the 2024 draft in Table 3 for tributary inflows, cold-water habitat, Delta outflows, inflow-based Delta outflows, and interior Delta flows and incorporates the numeric portion of the Sacramento/Delta inflow objective to the program of implementation in Chapter 4. The 2024 draft also included a note to reader explaining that if the VA pathway was incorporated into the Bay-Delta Plan, a new narrative fish viability objective would be added in the Plan. In the revised draft Plan, the narrative fish viability objective is added to Table 3. Collectively, these objectives would apply to both the regulatory pathway and the VA pathway.

Under the regulatory pathway, these objectives would be implemented by flow, cold water habitat, and related requirements included in the program of implementation. Under the VA pathway, the objectives would be implemented by the flow, habitat, and other HRL commitments as described further below.

Program of Implementation

The program of implementation describes actions to implement and achieve the objectives. It also describes accounting, monitoring, reporting, and assessment provisions for compliance and effectiveness; provisions for public safety and drought; and complementary measures to protect fish and wildlife.

Regulatory Pathway Program of Implementation

Sacramento/Delta Tributary Inflows

- **Numeric inflow requirement:** As described above, the previous numeric portion of the inflow objective was relocated from Table 3 to the program of implementation. In addition, in response to concerns about water supply impacts and reservoir

storage impacts that could affect both supplies and temperatures, the July 2025 revised draft identified that the starting point for the required percent of unimpaired flow for existing water rights would be subject to water supply adjustments, or WSAs, to reduce water supply and reservoir storage impacts upon initial implementation. These water supply adjustments replace provisions in the 2024 draft Plan for specified reductions in percent of unimpaired flow required based on reservoir storage levels.

- **Water supply adjustments:** The July 2025 revised draft identified that at the outset of implementation, the inflow requirements would be lower than 55 percent of unimpaired flow watershed-wide except during the wetter third of conditions when water supply and reservoir storage concerns would be lower. During the intermediate third of conditions, inflow would be reduced to 45 percent and under the drier third of conditions, inflows would be reduced to 35 percent. In addition to these watershed-wide WSAs, additional tributary-specific WSAs are included for rainfall dominated tributaries and tributaries with majority municipal demands (including Putah Creek and the Mokelumne and Calaveras Rivers) that would allow reducing the flow requirements further and off-ramping the inflow requirements in the driest conditions based on reservoir storage conditions. The December 2025 revised draft includes refined reservoir storage conditions that would trigger the tributary-specific WSAs for the Mokelumne and Calaveras Rivers. The July 2025 revised draft identified that the WSAs could be modified as part of the periodic review process after initial implementation, as appropriate. The December 2025 revised draft identifies that the decision on whether to include WSAs for water rights issued after December 31, 2025, will be made as part of the processing of those applications.
- **Consideration of infrastructure limitations:** In the December 2025 revised draft, a provision was added to consider existing infrastructure limitations, including maximum reservoir release capacities, when determining reservoir release requirements to meet unimpaired flows as part of the development of the implementation methodology.
- **Adaptive implementation:** The July 2025 revised draft retained the adaptive implementation provisions, including provisions for local cooperative solutions, identified in the 2024 draft that would allow for shaping of flows and for flows to move within a range of 45 to 65 percent of unimpaired flow in tandem with the WSAs. The July 2025 revised draft identified that any adaptive implementation could not result in flows that would be lower during the January through June time period than allowed under the starting point for the inflows with the WSAs. In the December 2025 revised draft, additional clarification was added to flow shaping provisions. Additionally, clarification was added that the Bay-Delta Plan requirements are intended to be integrated with water quality certification requirements and other water right requirements.

- Flood flow exceptions: A provision was included in the July 2025 revised draft to clarify that the required percentage of unimpaired flow does not apply to an individual tributary during periods when flows from that tributary could cause or contribute to flooding or other related public safety concerns.
- Compliance points: In the 2024 draft, certain tributary branches on specific tributaries were included as compliance locations for the inflow requirement. In response to public comments that all tributaries, forks and branches should be treated similarly, the July 2025 revised draft included compliance points for the inflow requirement at the confluence of every major fork, branch, and tributary unless determined through the implementation process that they are not needed or appropriate.
- Trinity River: In the July 2025 revised draft, the requirement that Reclamation submit reports that demonstrate that implementation of the Sacramento/Delta updates to the Bay-Delta Plan do not result in redirected impacts to fish and wildlife resources in the Trinity River watershed was relocated to the section for general provisions.

Cold Water Habitat and Carryover Storage

The 2024 draft Plan included specific carryover storage requirements. In response to comments that the initial carryover storage requirements were too restrictive, the July 2025 revised draft included language that allows reservoir owner/operators to propose their own carryover storage levels for Board approval as part of their development of a long-term temperature management strategy. The July 2025 revised draft identified a range that carryover storage levels should fall within, with a lower range identified for drought years for most reservoirs. The July 2025 revised draft identified that if reservoir owners do not develop carryover storage levels, the Board would do so through a public process.

Additionally, language was added to the December 2025 revised draft clarifying that the Executive Director may require temperature management strategies and annual operations plans not only on additional Sacramento/Delta tributaries through the periodic review process, but on stream segments as well.

Delta Outflow-Lands Below Sea Level

The 2024 draft included a note to reader identifying consideration of an initial exemption to the inflow-based Delta outflow requirements for water rights that divert and use water to irrigate lands below sea level in the Legal Delta. The Board received comments identifying that additional analysis should be conducted before any such exception is considered. In response to these comments, the July 2025 revised draft proposed that the Board conduct additional analyses to further evaluate this possible exemption during development of the implementation methodology for the updates to the Plan instead of considering an initial exemption during this update process.

Implementation Methodology

In response to comments that there may be other ways to implement the regulatory pathway inflow and inflow-based Delta outflow requirements, the July 2025 revised draft identified that the Board may consider implementation procedures other than, or in addition to, curtailment regulations that are designed to achieve comparable protections.

The 2024 draft identified a possible provision to protect minimum base Delta outflows during declared drought emergencies in order to avoid the need for temporary urgency change petitions (TUCP) and cold water pool impacts during future droughts. Based on comments that such a provision required further consideration, instead of including specific curtailment provisions at this time, the July 2025 revised draft identified that the Board will consider the need for additional actions to address drought conditions and associated TUCPs during its periodic review processes.

HRL Implementation Under the VA Pathway

The July and December 2025 revised drafts explicitly propose to incorporate the VA pathway as a means to implement the HRL flow and non-flow habitat commitments.

The December 2025 revised draft includes the following additional updates:

- The introduction to the VA pathway includes edits to clarify that the VA pathway is intended to implement the Sacramento/Delta tributary inflow, Sacramento/Delta cold water habitat, narrative Delta outflow, inflow-based Delta outflow, salmon protection, and fish viability objectives.
- In the December 2025 revised draft, the start date for implementation of the VA pathway has been specified to be no later than January 1, 2027. Modifications to this schedule of up to one year could be approved by the Executive Director for good cause shown.
- After release of the July 2025 revised draft, the Putah Creek HRL participants submitted an updated list of HRL water rights covered by the Putah Creek HRL commitments to the Board. The new list has been expanded to cover over 500 water rights in the Putah Creek watershed.

HRL Participants

In the July 2025 revised draft, a new provision was included to allow minor modifications to the list of HRL water rights with Executive Director approval after a 45-day public comment period for water rights less than 100 acre-feet on a tributary with existing HRL water rights. Other modifications to the list of VA water rights, including water rights larger than 100 acre-feet, or water rights on a new tributary, would need to be considered for approval by the Board as part of the annual or periodic review process with additional scientific and environmental documentation as appropriate.

Protection of the Flow Base Applicable to New Water Supply Projects

The 2024 draft identified possible options for bypass flow provisions (identified in Box 4) for preventing new water supply projects from reducing the additive effect of HRL flows. These options were transformed to a new proposed narrative provision in the July 2025 revised draft identifying that in processing new water right applications or change petitions involving expanded use of water, the State Water Board would consider needed measures to protect the base flows and additive flows provided pursuant to the provisions of the plan update (i.e., HRL flows or unimpaired flows).

HRL Flow Commitments

As discussed above, in the July 2025 revised draft, two new HRL commitments were added to the VA pathway from NID and SSWD on the Bear River, Yuba River, and Auburn Ravine. The HRL commitments from NID and SSWD have been refined in the December 2025 revised draft to more accurately reflect the commitments.

The December 2025 revised draft includes new HRL commitments from YCFCWCD for Putah Creek flows to cover water rights on Cache Creek. This HRL provides for YCFCWCD to purchase or exchange water to increase Putah Creek flows with Putah Creek origin water or for YCFCWCD to use surface water from Cache Creek or recharged groundwater from Cache Creek to supplement flows on Putah Creek if, and when, YCFCWCD obtains a water right permit to do so. Flows could only be provided from Cache Creek to Putah Creek if required monitoring indicates that doing so does not have water quality impacts.

The December 2025 revised draft also includes the following additional updates:

- The table of flow commitments (Table 9) has been edited to separate public water agency (PWA) market price and fixed price purchase volumes for consistency with the description in the Plan text.
- The description of the Friant HRL commitment has been revised to more accurately reflect the Friant HRL commitments.
- The flow commitment for the PWA market price water purchase program has been increased by 1 TAF in below normal years and 2 TAF in above normal years to represent the Mokelumne River HRL commitment for those purchases.

The July 2025 revised draft included the following updates that remain unchanged in the December 2025 revised draft:

- To ensure the State Water Board has the ability to protect flows provided to meet HRL flow commitments consistent with water right priorities, including water purchases, the July 2025 revised draft included provisions requiring that HRL participants provide a list of water rights that could be dedicated instream to meet the HRL flow commitments within six months of adoption of updates to the Plan

in order to provide time to evaluate the rights and possible effects on other legal users of water. Modification to the water right lists could also be made provided those updates are submitted at least six months before the planned use of any new water rights.

- The 2024 draft would have required Executive Director approval of default HRL flow schedules that fall outside of the January through June time period. To accommodate default HRL flow schedules that include some flows outside the January through June time period, the approval process for HRL flows outside the flexibility brackets of January through June was altered to only require Executive Director approval for proposals to release HRL flows outside the flexibility brackets, or in a manner that would result in less HRL flows during January through June than the default schedule.
- The requirement that Reclamation submit reports that demonstrate that implementation of the HRL commitments does not result in redirected impacts to fish and wildlife resources in the Trinity River watershed has been relocated to the section for general provisions.
- Descriptions of the HRL flow commitments to inflow and Delta outflows were updated consistent with the HRL flow accounting measures.
- The flow flexibility brackets for the Feather River were updated based on input from DWR.
- The 2024 draft included a note to reader that more information was expected about New Water Projects Water Purchases identified in the MOU. These projects were removed based on input from DWR. These projects are still proceeding as part of the Water Storage Investment Program process and could possibly be integrated into the VA pathway in the future as appropriate.
- The HRL flow commitment for the Yuba River was changed from 60 to 50 thousand acre-feet (TAF). The original 60 TAF included 10 TAF of assumed contributions from NID and SSWD, which are now being provided through separate agreements on the Yuba River, Bear River and Auburn Ravine.

Flow Accounting: Bay-Delta Plan

The December 2025 revised draft includes the following updates:

- The requirement for HRL participants to bypass flows provided by water rights not covered by the VA pathway has been revised. The revised language would require HRL participants to bypass flows provided by water rights not covered by the VA pathway that are above base conditions.

The July 2025 revised draft included the following updates that are also carried through in the December 2025 revised draft with modifications as noted:

- The requirement that reservoir refill provisions avoid reductions in flows during the January through June time period except during wet years was removed. Instead, reservoir refill provisions are addressed individually for each relevant tributary involving reservoir reoperations.
- The requirement that groundwater substitution has no redirected impacts on stream flows was replaced with a provision requiring that any reduction in flow not be counted toward meeting the HRL flow commitment.

Appendix B.1 Flow Accounting Procedures

The December 2025 revised draft includes the following updates:

- Accounting for the Sacramento River HRL flow commitments allows for HRL flows to be carried over to another year under certain conditions. A note to reader was included in the July 2025 revised draft identifying that additional information was needed related to accounting for this provision. Based on updated information from HRL parties, Appendix B.1 has been modified to identify that carried-over water could be spilled if the reservoir fills or would be released in addition to the next year's flow commitments if not spilled. Accounting is required to identify when the carried-over HRL flows are released for the HRL flow commitments or spilled.
- Reservoir reoperation sources have been identified as with, or without, refill limitations to resolve notes to reader and related clarifications added.
- A note to reader was included in the July 2025 revised draft identifying that additional information was needed on how refill accounting would be conducted related to reservoir reoperation. To resolve the note to reader, provisions have been added for the American River, Yuba River, Feather River, Bear River (NID), and Bear River (SSWD) in the "Verification of Additive Flow" sections.
- The water year type determination provisions have been moved to a general provision section that applies to each HRL flow commitment, and a note to reader has been included based on a proposal to adjust the water year type determination used for selecting flow commitments.
- Language related to quantifying volumes provided by land fallowing has been updated. The language previously allowed HRL participants to select evapotranspiration rates for crops subject to Executive Director approval. Based on information received from HRL parties after release of the July 2025 revised draft, the language has been updated in the December 2025 revised draft to include a default table of evapotranspiration rates for crop-land fallowing and a

rice crop evapotranspiration and decomposition rate for Sacramento and Feather River HRL participants was added.

- Requirements for accounting of incidental Delta inflows have been removed from the Mokelumne River accounting.
- The flow commitment description, definition of reference conditions, and verification of additive flow sections have been updated to more accurately reflect their commitments. In addition, Friant water rights have been removed from the covered water rights list.
- New accounting sections have been added for the following three HRL flow commitments received after release of the July 2025 revised draft: (1) the Bear River, Yuba River, and Auburn Ravine (NID); (2) Bear River (SSWD); and (3) YCFCWCD. The YCFCWCD commitment is included as part of the Putah Creek HRL commitments.
- Language has been added to clarify that the VA pathway covers the water rights listed in Appendix B.1 as they are being exercised at the time of Plan adoption.

Non-Flow Habitat Restoration Actions and Accounting

The December 2025 revised draft includes the following updates:

- The requirement that projects cannot be used to fulfill other regulatory requirements has been revised to refer to any regulatory requirements that existed as of December 2018 or earlier.
- A provision was added to clarify that approval of the habitat verification step would constitute fulfillment of the approved habitat commitment.
- A new provision was added for HRL habitat commitments for screening and fish food production that do not have specific accounting provisions to require annual reporting on progress related to implementation of those actions.

The July 2025 revised draft included the following updates that remain unchanged in the December 2025 revised draft:

- The “Sutter Bypass, Butte Sink, and Colusa Basin” habitat category from the 2024 draft was renamed “Valley Floor” habitat and expanded to include floodplain rearing habitat in the Yolo Bypass, Tisdale Bypass, Sacramento River, and the Delta. Additional detail was added to clarify the accounting criteria that would apply to this habitat category to account for the expanded definition.
- The accounting requirement that projects restore habitat that was previously unsuitable was revised for clarity.

- The cover criteria included in the 2024 draft required 20 percent areal coverage, excluding cobble, with no buffer applied. Based on information from CDFW,² the language was revised to allow 5 percent of the habitat area (out of the total 20 percent required to be cover) to include cobble or a 2-foot buffer applied to larger cover features.
- Based in part on information from CDFW,² floodplain inundation criteria were revised and include new Suitable Inundation Event Credits based on the duration and inundation of modeled inundation events allowing for partial crediting of habitat acreage.
- A 30-day deadline was added to the Executive Director and CDFW approval of requests by HRL participants for modifications to habitat design criteria.
- The habitat accounting protocol in Appendix B.2 was revised to increase clarity, match changes to the accounting requirements, and add more detail for tidal wetland and bypass floodplain projects.

Supplemental Science and Monitoring

The July 2025 revised draft included the following updates that remain unchanged in the December 2025 revised draft:

- Text was added to clarify that the supplemental science and monitoring required for HRL participants would be incorporated within the Bay-Delta Monitoring and Evaluation Program (BDMEP).
- The deadline for HRL targets was extended to six months after Plan adoption, with the possibility for extension to nine months. A new requirement was added for HRL participants to solicit input from California Native American Tribes, non-governmental organizations (NGO), and other interested parties in the development of the targets.
- The pesticide monitoring requirements were updated for clarity, and an additional requirement was added for methylmercury.
- Requirements for harmful algal bloom monitoring on HRL tributaries were revised to clarify that they should follow a tiered monitoring approach and are only required May through October.

² Charlton H. Bonham. 2025. Healthy Rivers and Landscapes Habitat Restoration Design Criteria. Available at: https://www.waterboards.ca.gov/bay_delta/bay_delta_plan/docs/cdfw-va-memorandum-20250430.pdf

- New provisions were added to require that HRL monitoring coordinate with and maintain consistent methods to the extent practicable with other monitoring surveys.
- Text was added to acknowledge the science committee proposed by HRL participants, which would include participation from HRL participants and the State Water Board, as well as environmental NGOs, California Native American Tribes, and any other interested parties.

Reporting

The July 2025 revised draft included the following updates that remain unchanged in the December 2025 revised draft:

- The HRL reporting deadline was extended from January 31 to March 1 of each year.
- The requirement for reporting on expected HRL flows in the next year was clarified to specify that those expectations should be based on the 10 percent through 90 percent exceedance forecasts of the February preliminary water year index.

HRL Governance

Requirements for HRL participants to incorporate input from California Native American Tribes was updated in the July 2025 revised draft to require that their input be considered in decision-making affecting HRL governance.

Continuation, Modification or Termination of the VA Pathway

The July 2025 revised draft included a new provision requiring that State Water Board staff produce an addendum to the Scientific Basis Report Supplement synthesizing then-current scientific information concerning flows for the protection of fish and wildlife beneficial uses if termination of VA pathway is recommended at the end of the eight-year term. This addendum would be subject to review and comment and would be used to consider any necessary modifications to the regulatory pathway provisions. If the Board determines no modifications to the regulatory pathway provisions are needed, it will provide a new determination that the regulatory pathway provisions are legally and scientifically appropriate. The December 2025 revised draft includes edits to clarify that, if the draft recommendation is to terminate the VA pathway, only the inflow, cold water habitat, and inflow-based Delta outflow provisions would be re-evaluated for possible modification through this process.

Additionally, the December 2025 revised draft includes an update to the process for modifying or terminating the VA pathway for compliance reasons to clarify that it could occur before or after year eight and that the modification or termination could occur without a Bay-Delta Plan amendment.

The procedure for terminating the VA pathway due to the withdrawal of a party or parties from the VA pathway was updated in the July 2025 revised draft to add consideration of whether the withdrawal materially affects the ability of any remaining HRL participants to fulfill their HRL commitments. This addition was not substantively changed in the December 2025 revised draft.

General Provisions

The July 2025 revised draft included the following updates that remain unchanged in the December 2025 revised draft:

- As mentioned above, provisions pertaining to ensuring no redirected impacts to the Trinity River watershed were moved from the sections on inflow and the VA pathway to the general provisions.
- Text was added to encourage that habitat restoration or other ecosystem benefit actions taken by state, federal, local agencies, and other entities should consider and incorporate as appropriate input from California Native American Tribes.

Monitoring, Evaluation, Reporting, and Special Studies

The July 2025 revised draft included the following updates that remain unchanged in the December 2025 revised draft:

- The provisions for the Lower San Joaquin River flow and southern Delta salinity updates to the Bay-Delta Plan adopted in 2018 have been integrated into the BDMEP. No substantive changes were made to these provisions.
- A section was added to clarify that the initial BDMEP incorporates HRL supplemental science and monitoring.
- Provisions for review and revision of monitoring and special studies were revised to increase specificity, add coordination with the Delta Stewardship Council's Delta Science Program, and to specify special procedures for the revision of some monitoring surveys for Endangered Species Act (ESA) and/or California Endangered Species Act (CESA) purposes. Additional detail on the process for regular review of monitoring surveys was added to Appendix A.
- The BDMEP reporting deadline was extended to May 31 of each year.
- Harmful algal bloom monitoring provisions were revised to add additional detail on the required time period and methods for monitoring, and to specify a tiered monitoring approach.
- A new provision was added to Appendix A to clarify that the Projects share responsibilities for the required monitoring activities equally, except for activities

that are required by Decision 1422, which are the full responsibility of the Central Valley Project.

- The provision for the discontinued Striped Bass, Sturgeon, and Spring Kodiak Trawl surveys was revised to identify a Delta Science Program review of any necessary actions to fill any remaining monitoring gaps.
- Table A-1 was revised to add and remove monitoring stations based on public comment.
- Monitoring purposes were identified for each survey listed in Table A-2.
- A new provision was added to allow some monitoring surveys in Table A-2 to be revised if required to do so by CDFW, U.S. Fish and Wildlife Service, or National Marine Fisheries Service to comply with CESA or ESA requirements.
- A definition of best available science, based on Appendix 1A of the Delta Plan, was added to Appendix A.
- The provisions for Lower San Joaquin River biological goals were integrated with the provisions for the Sacramento/Delta biological goals. No substantive changes were made to these provisions.
- In the December 2025 revised draft, a new map (Figure A-1) was added for the locations of the monitoring locations specified in Table A-1.

Annual and Periodic Review

A new provision was included in the July 2025 revised draft to evaluate and consider methods to reduce the incidence of TUCPs to replace the provision for the protection of base Delta outflows during drought that was previously in section 4.4.4.1 of the 2024 draft. This language remains the same in the December 2025 revised draft.

ATTACHMENT B

SUMMARY OF CHAPTER 13 OF DRAFT STAFF REPORT IN SUPPORT OF SACRAMENTO/DELTA UPDATES TO THE WATER QUALITY CONTROL PLAN FOR THE SAN FRANCISCO BAY/SACRAMENTO-SAN JOAQUIN DELTA WATERSHED (BAY-DELTA PLAN)

INTRODUCTION

The portions of the draft Staff Report that are subject to limited recirculation and further public comment are included in a new Chapter 13 to the draft Staff Report in support of the Sacramento/Delta updates to the Bay-Delta Plan. Chapter 13, *Revised Proposed Plan Amendments*, evaluates the changes included in the December 2025 revised draft Plan and builds upon the analyses included in the 2023 Draft Staff Report. The 2023 Draft Staff Report described the previously proposed Plan amendments in Chapter 5, *Proposed Changes to the Bay-Delta Plan for the Sacramento/Delta*. The environmental analysis for the previously proposed Plan amendments and other project alternatives was provided in Chapter 7, *Environmental Analysis*. Because the State Water Board received the Healthy Rivers and Landscapes (HRL) proposal (referred to as proposed Voluntary Agreements in the 2023 draft Staff Report) after much of the 2023 Draft Staff Report had been prepared, it was analyzed separately in Chapter 9. Other chapters of the 2023 Draft Staff Report include additional analyses supporting the Sacramento/Delta update to the Bay-Delta Plan.

As described in Attachment A, the revised proposed Plan amendments described in the December 2025 revised draft Plan and evaluated in Chapter 13 include a regulatory pathway based on the previously proposed Plan amendments with modifications, and a VA pathway that would provide a means for implementation of the HRL flow and non-flow habitat commitments. The two pathways incorporate aspects of the other alternatives that were evaluated in the 2023 Draft Staff Report. The VA pathway would apply for the water rights included in the approved VA pathway, and the regulatory pathway would apply for water rights not included as part of the approved VA pathway, with both pathways having regulatory effect if adopted.

Chapter 13 provides the background for the planning process; a description of the revised proposed Plan amendments; analyses of the expected changes in hydrology and water supply, economic effects, and beneficial environmental effects; and an analysis of potential environmental impacts. Chapter 13 also includes Water Code section 13241 and public trust analyses. For efficiency and to avoid redundancy, Chapter 13 references the environmental analyses, impact determinations, and associated mitigation measures from the 2023 Draft Staff Report Chapters 7 and 9, and

the economic analyses from Chapters 8 and 9, where applicable. In some cases, implementation of the VA pathway may have a different impact significance compared to the regulatory pathway for the term of the VA pathway. Any differences in impacts between the regulatory pathway and VA pathway are discussed. The impact conclusions reference the highest impact determination with mitigation measures identified for both pathways as necessary and appropriate. A summary of impacts and mitigation measures is provided in Table 13.7.22-1, with an appendix of mitigation measures.

Chapter 13 includes discussion of Tribal Beneficial Uses (TBUs). Specifically, Chapter 13 describes the designation of Tribal Tradition and Culture (CUL) and incorporation of Tribal Subsistence Fishing Beneficial Uses and Subsistence Fishing Beneficial Uses, T-SUB and SUB, and includes an environmental analysis supporting CUL designation, including an overview of foreseeable actions that could be taken to reasonably protect TBUs and descriptions of sections in the Staff Report where environmental impacts have already been evaluated pursuant to other impact mechanisms.

Certain reasonably foreseeable methods of compliance and response actions categories for which the impact mechanisms and impact conclusions would not be changed under the revised proposed Plan amendments are not repeated in Chapter 13, including Other Water Management Actions, Habitat Restoration and Other Ecosystem Projects, and New and Modified Facilities. In addition, impact thresholds and sub-impact mechanisms with less-than-significant or no impact determinations that would not be changed under the revised proposed Plan amendments are not repeated in Chapter 13, although all impact conclusions and mitigation measures are referenced in the Impacts and Mitigations Measures Summary Tables 13.7.22-1, 13.7.22-2 and 13.7.22-3 with an appendix that includes the complete text of all mitigation measures referenced in the Staff Report (Appendix H3).

SUMMARY OF REVISIONS

Changes in Hydrology and Water Supply

Chapter 13 presents Sacramento Water Allocation Model (SacWAM) hydrologic and systems operations model results of the possible changes in hydrology and water supply under the regulatory pathway and VA pathway of the revised proposed Plan amendments compared to baseline. Chapter 13 also includes qualitative comparisons of the regulatory pathway to the Low Flow Alternative (35 and 45 flow scenarios) and 55 scenario evaluated in the 2023 Draft Staff Report Chapter 6, *Changes in Hydrology and Water Supply*.

SacWAM results are presented for two modeling scenarios compared to baseline:

1. The starting point for the regulatory pathway for existing water rights of 55 percent of unimpaired flow (UF) with watershed-wide water supply adjustments (WSA) and tributary-specific WSAs that apply to the Mokelumne and Calaveras Rivers and Putah Creek; refinements to reservoir carryover storage provisions under the proposed cold water habitat provisions of the Plan; and

changes to constraints on exports from the Delta. The scenario reflecting these changes is referred to as 55% UF with water supply adjustments (or 55 w/WSAs scenario); and

2. The VA pathway that is very similar to the HRL commitments evaluated in Chapter 9, referred to as the VA scenario or VA pathway.

Since the release of SacWAM version 2023.06.12 to support the 2023 Draft Staff Report, minor refinements have been made to SacWAM as part of SacWAM version 2025.08.28 to incorporate input from stakeholders during the public comment process and other refinements.

Ecological Benefits Analyses

The 2017 Scientific Basis Report, 2024 Final Draft Scientific Basis Report Supplement, and Chapter 3 and Chapter 9 of the 2023 Draft Staff Report provided the benefits analysis for 35 to 75 percent unimpaired flow and the HRL commitments. Chapter 13 includes updated benefits analyses for the starting point for the regulatory pathway (55 w/WSAs scenario) and the VA pathway. Both pathways are evaluated in combination with Delta outflows expected to result from implementation of the Lower San Joaquin River flow requirements from the 2018 Bay-Delta Plan and with the possible implementation of the Tuolumne River HRL commitments.

Quantitative results are presented for possible changes under the regulatory pathway and VA pathway relative to baseline for the following:

- tributary salmonid spawning and in-channel rearing habitat area, and floodplain inundation;
- estuarine habitat area;
- frequency of exceeding ecological flow thresholds; and
- abundance indices of key estuarine species.

In addition to the quantitative methods, a qualitative literature review was conducted to evaluate possible benefits of the regulatory and VA pathways.

The benefits analyses were conducted using the same methods as those used in the 2023 Draft Staff Report, except for minor updates to: incorporate new habitat data submitted by HRL participants, add new flow thresholds in response to public comments received on the 2023 Draft Staff Report, and use the Yuba River temperature model recently developed for the Staff Report.

The changes in hydrology and thus the expected benefits of the starting point for the regulatory pathway presented in Chapter 13 generally fall between those of the Low Flow Alternative (35 and 45 scenarios) and the 55 scenario that were evaluated in Chapter 3 and the 2017 Scientific Basis Report. During the term of the VA pathway, changes in hydrology and associated benefits would be expected to be similar to those under the VA pathway alone, even with the additional flows provided by non-HRL water rights under the regulatory pathway added to the VA pathway.

Environmental Analysis

The environmental analysis presented in Chapter 13 evaluates the potential impacts on resources that may result under the revised proposed Plan amendments, including the regulatory pathway and the VA pathway, which are evaluated as separate implementation pathways and together as co-occurring pathways. Impacts under the regulatory pathway are compared to the Low Flow Alternative (35 and 45 scenarios) and 55 scenario of the proposed Plan amendments. Generally, effects of the starting point for the regulatory pathway of the revised proposed Plan amendments (55 w/WSAs scenario) on changes in hydrology and water supply are more similar to the Low Flow Alternative than the 55 scenario evaluated in Chapter 7. Accordingly, Chapter 13 impact analyses generally find that the impacts of the starting point for the regulatory pathway would be less than those evaluated in Chapter 7, but because the water supply adjustments could be modified after initial implementation and flows could be higher in the range of unimpaired flow in the future on some or all tributaries, impacts could be as high as those identified in Chapter 7.

The environmental analysis presented in Chapter 13 contains a programmatic analysis of the types of activities associated with the designation of CUL. While not designed to directly protect fish population and aquatic life, the reasonable protection of CUL as it relates to the tribes' cultural ceremonies and spiritual lifeways to salmon overlaps with the reasonable protection of the aquatic life beneficial uses identified in the Bay-Delta Plan or designated in the applicable Regional Water Boards' water quality control plans, including EST, COLD, WARM, MIGR, SPWN, WILD, and RARE (also referred to as fish and wildlife beneficial uses). Implementation actions taken to protect aquatic life beneficial uses related to flow, water project operations, and physical habitat restoration, also support healthy fish populations which tribal cultural uses depend. Other tribal uses and activities encompassed within CUL may be directly supported by flow actions, including for example, navigation, gathering and consumption of natural resources, and immersion ceremonies. CUL uses may be adequately protected by water quality control measures also needed to reasonably protect REC-1 and COMM; however, new water quality control measures could include new water quality objectives or site-specific discharge requirements that could result in the new construction or modification of water treatment plants, conservation measures, and voluntary and enforcement actions that involve habitat restoration. The environmental analyses of the Staff Report are broad and already identify and evaluate the reasonably foreseeable water quality compliance measures and response actions resulting from a CUL designation. Chapter 13 identifies where these are evaluated in the Staff Report (primarily in Chapter 7, *Environmental Analysis*) and includes a summary of any adverse environmental effects associated with those means of compliance and response actions, and any mitigation measures to lessen those adverse environmental effects

Revised Impact Conclusions

The State Water Board received numerous public comments about existing water quality issues in the Trinity River and potential impacts to the Trinity River from the update to the Bay-Delta Plan. The Sacramento River receives imports from the Trinity

River system through operations of the Central Valley Project. Water is transferred to the Sacramento River from the Trinity River basin through a system of dams, reservoirs, tunnels, and power plants. The Trinity River is not included in the plan area because the new flow requirements would not apply to the Trinity River. The Trinity River watershed was previously not included in the defined study area in the 2023 draft Staff Report because it does not receive Sacramento/Delta supply, and therefore reductions in Sacramento/Delta supply would not affect the area. However, flows from the Trinity River to the Bay-Delta watershed are already incorporated into the existing analyses and as such, Chapter 13 explicitly acknowledges the inclusion of the Trinity River as part of the study area. The revised proposed Plan amendments include a provision that would require Reclamation to ensure that implementation of the Bay-Delta Plan, including HRL flow commitments, does not result in redirected impacts to native fish and wildlife resources in the Trinity River watershed, including temperature and instream flow impacts. Due to these provisions, streamflows in the Trinity River and storage levels are not expected to change under the regulatory or VA pathways. Accordingly, there would be no impacts on the Trinity River.

Some impact conclusions on aquatic biological resources related to changes in Delta outflows and interior Delta flows for the regulatory pathway and the VA pathway differ compared with the impact determinations in Chapters 7 and 9. For changes in Delta outflows during the January through June period, the impact conclusions were unchanged from the 2023 Draft Staff report for both pathways. Both pathways will cause increases in Delta outflow during January through June that would benefit native fish species. For changes in Delta outflows during the July through December period, the impact conclusion was unchanged for the VA pathway from the 2023 Draft Staff Report. The VA pathway will have less than significant impacts on native fish species due to decreases in Delta outflow during July through December. For changes in Delta outflows under the regulatory pathway during the July through December period, Chapter 7 found no impacts, whereas Chapter 13 identifies less than significant impacts due to decreases in Delta outflow during July through December of certain water year types. Chapter 13 also identifies that there could be increases in the frequency of negative Old and Middle River (OMR) flows under both the regulatory pathway and VA pathway compared to baseline. While the changes in operations that result in more negative OMR flows are the result of other non-State Water Board actions that have changed since the baseline for this project was established, Chapter 13 conservatively identifies the potential for impacts on native fish species.

The environmental analysis presented in Chapter 13 evaluates potential water quality impacts from the Yolo County Flood Control and Water Conservation District (YCFCWCD) HRL flow commitments that include the possible routing of surface water or banked groundwater from Cache Creek to Putah Creek to increase flows in Putah Creek. Chapter 13 identifies the YCFCWCD HRL commitments could have potentially significant impacts to native fish species and surface water quality that can be mitigated to less than significant due to the HRL commitments and Bay-Delta Plan provisions that would limit adverse effects to water quality in Putah Creek by requiring monitoring and

operations to ensure that any releases of Cache Creek water into Putah Creek do not impact water quality in Putah Creek.

The 2023 Draft Staff Report Section 7.18, *Recreation*, and Section 9.7.18, *Recreation*, identified less than significant impacts on recreation from increased HAB production in reservoirs and Delta channels. Increased HABs can interfere with contact recreation, including causing temporary closures to recreation in some waterbodies; however, potential increased frequency of closures is not expected to result in a substantial number of recreationists moving to alternate recreational locations to the extent that it would substantially physically deteriorate those alternate locations. In response to a substantial number of public comments received from tribal and environmental justice communities stating that HABs cause significant impacts to recreational users of water, this impact conclusion has been conservatively revised in Chapter 13 to potentially significant.

Some impact conclusions associated with changes in reservoir levels were modified from less than significant to potentially significant under the VA pathway to be consistent with other impact conclusions associated with changes in reservoir levels. As described in Section 13.4.3.2, effects of the VA pathway on Sacramento/Delta reservoir storage would be less than the effects of the regulatory pathway. SacWAM results show that the average annual change in water surface elevation under the VA pathway would be the same as or similar to baseline. SacWAM does not model the location of additional inflows from unspecified water purchases given the unknown origin of these water purchases and actual operation could vary from modeled outcomes with additional changes in reservoir levels beyond the modeled changes. Consistent with the generally conservative approach to the impact analyses, impacts identified for riparian and wetland habitats associated with reservoirs in the plan area and increased bioaccumulation of methylmercury in fish from increased fluctuations in reservoirs have been changed from less than significant to potentially significant. Because flows under the VA pathway would generally be lower than the regulatory pathway, the magnitude of these potential impacts would be less during the term of the VA pathway.

The cumulative impact analysis in Chapter 13 evaluates the potential effects on Delta outflow from new water supply projects or changes to operations of existing water supply projects. The revised proposed Plan amendments would have the effect of adding Delta outflows. However, new water supply projects and changes to existing projects could at the same time reduce Delta outflows. To address these issues, the revised proposed Plan amendments identify that the State Water Board will consider imposing requirements, based on the record established during the administrative proceeding for water right actions before the Board, including any hearing, to ensure that the use of water is consistent with and supports the salmon protection, fish viability, inflow, inflow-based Delta outflow, and interior Delta flow objectives. While these provisions are expected to reduce impacts related to reductions in Delta outflows from new water supply projects and changes to existing projects, the specific outcomes of future proceedings are not known at this time. In addition, there are other changes to existing water diversions that may not be fully addressed by the provisions described above (e.g., exercise of an existing water right more fully, changes to other regulatory

requirements, etc.). While the revised proposed Plan amendments would have the overall effect of adding flows and reducing possible future reductions in Delta outflows, they may not necessarily avoid future reductions in Delta outflows from other activities. Due to this uncertainty, Chapter 13 conservatively identifies a potentially significant cumulative impact on aquatic biological resources in the Delta.

Chapter 13 includes minor changes to the mitigation measures identified in the 2023 Draft Staff Report. Three new mitigation measures have been added to reduce or avoid impacts identified in the revised analyses for aquatic biological resources, surface water, and recreation. See Appendix H3 for the full text of the mitigation measures for the revised proposed Plan amendments.

The environmental analysis in Chapter 7 of the 2023 Draft Staff Report incorporated certain elements of the Bay-Delta Plan program of implementation as mitigation strategies to reduce or avoid potentially significant impacts on some environmental resources. In response to comments on the 2023 Draft Staff Report that cited *Lotus v. Dept. of Transportation* (2014) 223 Cal.App.4th 645, 657-658 (Lotus), the State Water Board has revised this approach and removed cold water habitat objective implementation measures and voluntary implementation plans (now called local cooperative solutions), from the list of mitigation measures.