

Common Response 7.23

Cumulative Impact Analysis

Introduction

This introduction provides important context to this common response. A similar introduction is provided in each common response to ensure that the reader has the appropriate context when reviewing common responses. For ease of reference, a table of contents is included after this introduction to guide readers to specific subject areas.

Protecting the San Francisco Bay/Sacramento-San Joaquin Delta (Bay-Delta) watershed and its many beneficial uses of water is one of the State Water Resources Control Board's (State Water Board) primary responsibilities and top priorities. In response to declines of several native aquatic species since the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Watershed (Bay-Delta Plan or Plan) was last comprehensively updated, the State Water Board commenced a process to update the Bay-Delta Plan for the Sacramento River and its tributaries, Delta eastside tributaries (including the Calaveras, Cosumnes, and Mokelumne Rivers), and Delta for the reasonable protection of fish and wildlife beneficial uses, referred to as the Sacramento/Delta Update to the Bay-Delta Plan. The Bay-Delta Plan identifies beneficial uses of water to be protected in the Bay-Delta watershed, water quality objectives and program of implementation to achieve the reasonable protection of those beneficial uses, monitoring, evaluation, and special study provisions. The State Water Board's proposed action to update the Bay-Delta Plan is supported by a Staff Report/Substitute Environmental Document (Staff Report), which provides an evaluation of the environmental impacts and economic effects in support of consideration of different alternatives to update the Bay-Delta Plan to achieve reasonable protection of fish and wildlife beneficial uses in the Sacramento/Delta. The Staff Report is functionally equivalent to an Environmental Impact Report under the California Environmental Quality Act (CEQA) but also provides the additional analyses that support the State Water Board's consideration of the action under the Clean Water Act and Porter-Cologne Water Quality Control Act (Porter-Cologne Act).

Development of the final Staff Report and final draft Bay-Delta Plan were informed by several opportunities for public comment over multiple years. This common response may address issues that were raised during any of those public comment periods. In September 2023, the State Water Board released the 2023 draft Staff Report evaluating different alternatives for the Sacramento/Delta Update to the Bay-Delta Plan for public review and comment. Following release of the 2023 draft Staff Report, the State Water Board released draft amendments to the Bay-Delta Plan in October 2024 (2024 draft Plan) for public review and comment that incorporated alternatives identified in the 2023 draft Staff Report with revisions based on public comments. The State Water Board released revised draft Plan updates in July 2025 (July 2025 revised draft Plan) but delayed public comment on that version of the Plan pending further updates, though some parties did submit public comments on the July 2025 draft that are part of the State Water Board's response to comments. In December 2025, the State Water Board released Chapter 13, *Revised Proposed Plan Amendments*, as a limited recirculation of the 2023 draft Staff Report (2025 partially recirculated draft Staff Report) together with the December 2025 revised draft Plan for public review and comment. These documents reflect the updated proposed project, referred to as the revised proposed Plan amendments, which brings together in the Bay-Delta Plan program of

implementation a voluntary agreement (VA) pathway that incorporates commitments identified in the Healthy Rivers and Landscapes (HRL) proposal and would apply to specified HRL water rights, and a regulatory pathway based on the proposed Plan amendments that would apply to other water rights and to any HRL water rights no longer covered under the VA pathway. In August 2026, the State Water Board released a final draft Bay-Delta Plan that included refinements to the revised proposed Plan amendments based on public comments received on the December 2025 revised draft Plan. At the same time, the State Water Board released this final Staff Report, including responses to comments previously received on the draft Staff Report. The final Staff Report informs the State Water Board's consideration of adoption of the Sacramento/Delta updates to the Bay-Delta Plan.

With respect to the CEQA impact conclusions, it is important that they be understood in the context of the overall nature of the proposed project, which is intended to be an environmental restoration action. CEQA only considers changes that could negatively impact the existing environment and does not recognize or offset negative changes with improvements that could result from an environmentally beneficial project. Here, the impacts that could potentially result from implementation of the restoration action occur in a system that has been highly altered, and the project would be expected to improve conditions for native fish and wildlife in the Sacramento/Delta watershed over time. However, the project will also result in changes in hydrology and changes in water supply that could result in some potentially significant adverse environmental impacts at certain times and locations that must be analyzed under CEQA. These potentially significant environmental impacts should be viewed in light of the overall purpose and goals of the Sacramento/Delta update to the Bay-Delta Plan.

This common response addresses comments regarding the cumulative impact analysis, which is described in Section 7.23, *Cumulative Impact Analysis, Growth-Inducing Impacts, and Significant Irreversible Environmental Changes*; Section 9.7.21, *Cumulative Impacts, Growth-Inducing Effects, and Significant Irreversible Environmental Changes*; and Section 13.7.21, *Cumulative Impacts, Growth-Inducing Impacts, and Significant Irreversible Environmental Changes*.

The State Water Board reviewed all comments related to cumulative impacts and developed this common response to address recurring comments and common comment themes. This common response references related common responses, as appropriate, where recurring comments and common themes overlap with other subject matter areas. This common response addresses the following topics:

- Scope and adequacy of the cumulative impact analysis
- Consideration and analysis of the 2018 Lower San Joaquin River/Southern Delta (LSJR/SD) updates to the Bay-Delta Plan
- Consideration and analysis of the Delta Conveyance Project and Sites Reservoir Project
- Consideration and analysis of other past, present, and reasonably foreseeable probable future projects
- Scope and adequacy of mitigation measures

For more information about the water quality control planning process, please see Common Response 1.2, *Water Quality Control Planning Process*. For more information regarding CEQA process and requirements, please see Common Response 7.1, *General CEQA and Approach to the Analysis*.

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Scope and Adequacy of Cumulative Impact Analysis

The State Water Board has adopted CEQA regulations applicable to certified regulatory programs and preparation of a Substitute Environmental Document. (Cal. Code Regs., tit. 23, §§ 3720–3781.) These regulations provide the State Water Board’s exclusive procedural requirements for the Board’s certified regulatory programs, including the contents of the Substitute Environmental Document and the procedures for receiving and responding to comments. (Cal. Code Regs., tit. 23, §§ 3777, 3779, 3779.5.) The State Water Board’s certified regulatory program is “subject to the broad policy goals and substantive standards of CEQA.” (*City of Arcadia v. State Water Resources Control Bd.* (2006) 135 Cal.App.4th 1392, 1422; Cal. Code Regs., tit. 23, § 3720, subd. (c)(2).) The Staff Report also cites the State CEQA Guidelines where appropriate and relevant to help guide or inform the CEQA analysis consistent with CEQA’s goals and standards.

The State CEQA Guidelines define *significant cumulative impacts* as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” (Cal. Code Regs., tit. 14, § 15355.) The individual effects may be changes resulting from a single project or more than one project. (Cal. Code Regs., tit. 14, § 15355, subd. (a).) Cumulative impacts may result from individually minor but collectively significant projects taking place over a period of time. (Cal. Code Regs., tit. 14, § 15355, subd. (b).) A project with a less-than-significant individual impact can nonetheless contribute to a significant cumulative impact. “The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.” (*Ibid.*) The discussion of cumulative impacts should reflect the severity of the impacts and their likelihood of occurrence. Lead agencies need not provide a discussion of the cumulative impacts at the same level of detail as provided for the impacts attributable to the project alone. (*Ibid.*) Furthermore, the discussion should be guided by the standards of practicality and reasonableness. (*Ibid.*)

The Staff Report includes an adequate description and evaluation of potentially significant cumulative impacts that meet the substantive requirements of CEQA and help inform the planning process for Sacramento/Delta updates to the Bay-Delta Plan. Section 7.23, *Cumulative Impact Analysis, Growth-Inducing Impacts, and Significant Irreversible Environmental Changes*, describes the cumulative impacts associated with the proposed Plan amendments and Low Flow and High Flow Alternatives together with other projects (and programs) that could cause related impacts. Due to the size and complexity of Sacramento/Delta water supply and use, the environmental analyses are necessarily broad to cover the wide range of foreseeable compliance measures and responses that may result from implementation of the project. The evaluation of reasonably foreseeable methods of compliance and actions that may be taken in response to the Plan amendments are organized into the following categories:

- Changes in hydrology (e.g., changes in streamflows, changes in reservoir levels).
- Changes in water supply (e.g., reduced Sacramento/Delta supply for agricultural, municipal, and wildlife refuge use, increased groundwater pumping, other water management actions that do not involve construction [groundwater storage and recovery, water transfers, water recycling, and water conservation]).

- Habitat restoration and other complementary ecosystem actions (described in Section 7.21, *Habitat Restoration and Other Ecosystem Projects*).
- New or modified facilities that involve construction (e.g., new or modified dams/reservoirs and points of diversion; groundwater wells and groundwater storage and recovery projects; new or modified drinking water treatment plants, including desalination plants and wastewater treatment plants) (described in Section 7.22, *New or Modified Facilities*).

The cumulative project list includes relevant projects, programs, and categories of projects (referred to as *projects*); individual projects are detailed in Section 7.23.1.2, *Cumulative Project List*, Table 7.23-1. Project categories (e.g., Federal Energy Regulatory Commission [FERC] projects) group together similar types of projects that may interact with the Plan amendments in a way that could result in cumulatively significant impacts. This provides meaningful cumulative impact analyses on the same level and scale as the project analyses without the need to list every specific known project on every single tributary. In addition, individual projects are included and evaluated that do not fit into an obvious category or have particular relevance and interaction with the proposed Plan amendments (e.g., the Sustainable Groundwater Management Act [SGMA]). The cumulative project list is not intended to be exhaustive but rather represent the types of projects that may interact with the Plan amendments. Development of the list focused on projects that involve water supplies, actions in the Delta including restoration, projects that could affect agriculture or municipal water supply, and water quality projects. The list also focused on projects or project classes with similar goals, or that propose or have taken similar actions to achieve their goals, although some projects may have different goals for the same resources evaluated for the Plan amendments. There are some redundancies between the projects included in the cumulative project list and those that are discussed in the existing environmental analyses, including in Section 7.21, *Habitat Restoration and Other Ecosystem Projects*, and Section 7.22, *New or Modified Facilities*. Many of the projects or types of projects in the cumulative project list include reasonably foreseeable compliance methods and response actions to the Plan amendments but also are considered as past, present, and reasonably foreseeable probable future projects that need to be reviewed cumulatively.

The analysis in Section 7.23.1.3, *Cumulative Impacts*, describes and analyzes the potential cumulative impacts of changes in hydrology and water supply as appropriate for each resource area with the projects and project categories detailed in Table 7.23-1. In addition, impacts from construction and operation of habitat and other ecosystem projects and new or modified facilities evaluated in Section 7.21, *Habitat Restoration and Other Ecosystem Projects*, and Section 7.22, *New or Modified Facilities*, are described and analyzed in combination with the projects and project categories detailed in Table 7.23-1.

Due to the significant overlap of actions under the proposed VAs and the proposed Plan amendments, the cumulative impact analysis in Chapter 9, *Proposed Voluntary Agreements*, for the proposed VAs and Chapter 13, *Revised Proposed Plan Amendments*, for the revised proposed Plan amendments (that include both VA and regulatory pathways) rely extensively on the analysis in Section 7.23, *Cumulative Impact Analysis, Growth-Inducing Impacts, and Significant Irreversible Environmental Changes*, and focus on issues that require additional evaluation and any differences in impact conclusions.

Commenters generally expressed concerns regarding the scope and adequacy of the cumulative impact analysis and mitigation measures in Section 7.23, *Cumulative Impact Analysis, Growth-Inducing Impacts, and Significant Irreversible Environmental Changes*, of the 2023 draft Staff Report

and Section 13.7.21, *Cumulative Impact Analysis, Growth-Inducing Impacts, and Significant Irreversible Environmental Changes*, of the 2025 partially recirculated draft Staff Report. Specifically, commenters asserted that the analysis failed to consider certain past, present, or reasonably foreseeable probable future projects and plans, including but not limited to the 2018 LSJR/SD Plan Update, Sites Reservoir Project, the Delta Conveyance Project (DCP), and the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project; failed to adequately analyze, disclose, or accurately characterize the incremental and cumulative impacts associated with certain other past, present or reasonably foreseeable probable future projects; or failed to identify adequate mitigation measures for significant cumulative impacts.

As discussed further below, the Staff Report adequately discloses the cumulative impacts of the Plan amendments where the incremental effect is cumulatively considerable. The cumulative impact analysis considers relevant past, present, and reasonably foreseeable probable future projects, including but not limited to the 2018 LSJR/SD Plan Update, Sites Reservoir Project, the DCP, and the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project; accurately discloses potentially significant cumulative impacts; and identifies reasonable and feasible mitigation measures for significant cumulative impacts.

This section broadly addresses these concerns in the context of the approach used in the cumulative impact analysis and associated CEQA requirements. Further detail for specific projects and plans identified by commenters is provided in the subsections that follow. When evaluating cumulative impacts, CEQA Guidelines recommend either a list or a projection approach. (Cal. Code Regs., tit. 14, § 15130, subd. (b).) Consistent with these guidelines, the State Water Board employed the list approach to identify relevant projects, programs, and project categories, as presented in Section 7.23.1.2, *Cumulative Project List* (Table 7.23-1). The cumulative project list in Table 7.23-1 appropriately focuses on projects and programs that could cause related impacts to resource areas identified in the Staff Report, including projects and programs that affect hydrology and water supply. Table 7.23-1 also includes categories of projects, with examples, so that the cumulative effects of a general class of projects can be determined. The list of projects is sufficiently broad yet detailed enough to identify past, present, and reasonably foreseeable probable future projects with related effects in areas potentially affected by the proposed Plan amendments. This includes several major water supply and habitat restoration projects that certain commenters asserted were excluded from the cumulative project list and associated analysis, including the 2018 LSJR/SD Plan Update, Sites Reservoir Project, the DCP, and the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project.

In accordance with CEQA, the Staff Report adequately discloses potentially significant cumulative impacts and identifies reasonable, feasible mitigation measures where the incremental effect of the proposed Plan amendments is cumulatively considerable. (Cal. Code Regs., tit. 14, § 15130, subds. (a), (b); Section 7.23.1.3, *Cumulative Impacts*.) The Staff Report presents sufficient information to inform decision-makers and the public about potential cumulative impacts, guided by standards of practicality and reasonableness. (Cal. Code Regs., tit. 14, § 15130, subd. (b).) To ensure that the Staff Report is sufficiently inclusive in assessing environmental impacts, it not only includes a list of past, present, and reasonably foreseeable probable future projects producing related impacts, but also discloses related impacts associated with broad categories of actions that are likely to occur but lack specific details for inclusion in the list.

Given the unique character of the water quality control planning process, the broad geographic area under analysis, and the cumulative impact analysis already undertaken in the Staff Report, the

analyses of any additional projects that could contribute to cumulative impacts are unlikely to change determinations regarding the type or significance of cumulative impacts described in Section 7.23.1.3, *Cumulative Impacts*. The Staff Report adequately identifies the significant and cumulatively considerable impacts of the Plan amendments and has been prepared with a sufficient degree of analysis to provide decision-makers with information that enables them to make a decision that intelligently takes into account environmental consequences. (Cal. Code Regs., tit. 14, § 15151.)

Consideration and Analysis of 2018 LSJR/SD Plan Update

Several commenters asserted that the cumulative impact analysis presented in Sections 7.23 and 13.7.21, each titled *Cumulative Impact Analysis, Growth-Inducing Impacts, and Significant Irreversible Environmental Changes*, of the Staff Report does not consider or adequately discuss the 2018 LSJR/SD update to the Bay-Delta Plan, and that it does not adequately or quantitatively analyze and disclose the combined environmental impacts of the 2018 LSJR/SD Plan Update and this project (the Sacramento/Delta Plan amendments).

The 2018 LSJR/SD update to the Bay-Delta Plan are discussed in Section 7.23.1.2, *Cumulative Project List*, and potentially significant cumulative impacts are identified in the cumulative impact analysis that follows. Section 7.23.1.2, *Cumulative Project List*, provides a reasonable and practical discussion that appropriately focuses on elements of the 2018 LSJR/SD Plan Update that could affect hydrology and agriculture or municipal water supply, namely the flow requirements for the reasonable protection of fish and wildlife beneficial uses and revised salinity water quality objectives for the reasonable protection of southern Delta agricultural beneficial uses. In accordance with CEQA, the cumulative impact analysis focuses on the assessment and disclosure of cumulative impacts rather than the attributes of individual projects considered in the analysis. (Cal. Code Regs., tit. 14, § 15130, subd. (b).)

Implementation of the LSJR/SD Plan Update would result in flows from the Lower San Joaquin River to the Delta that contribute to Delta outflow, resulting in a cumulative beneficial effect on native anadromous, estuarine, and resident fish species, and winter-spring low-salinity habitat increases. To the extent that the Sacramento/Delta Plan amendments would increase freshwater outflow above the existing conditions, the impact could be beneficial to southern Delta salinity. Contributions to Delta outflow from the LSJR/SD Plan Update have been evaluated in Staff Report Chapter 9, *Proposed Voluntary Agreements*, and Chapter 13, *Revised Proposed Plan Amendments*. Implementation of the LSJR/SD Plan Update could reduce water supply annually between 149 thousand acre-feet (TAF) and 465 TAF on average at 30 percent unimpaired flow and 50 percent unimpaired flow, respectively. This corresponds to a 7-percent to 23-percent reduction in water supply (SWRCB 2018). This would affect water users that rely on supplies from the Lower San Joaquin River tributaries, such as agricultural lands on the east side of the San Joaquin Valley and municipal supplies to Stockton East Water District and the City and County of San Francisco.

The Sacramento/Delta Plan amendments would apply on the Sacramento River, its tributaries, and in the Delta and could affect water supplies in those watersheds as well as water supplies that are exported out of the watershed, including supplies to the west side of the San Joaquin Valley and Central Coast that rely upon Central Valley Project (CVP) exports, the State Water Project (SWP) service areas in southern California and Kern County, and the portions of the Bay Area that rely upon CVP and SWP export supplies. The SWP has no facilities on the lower San Joaquin River. The CVP has one facility, New Melones on the Stanislaus River (the CVP's Friant Unit is located on the upper San Joaquin River, which is not included in the LSJR/SD Plan Update). This means that, for the

most part, water users that rely on water supplies from the tributaries to the lower San Joaquin River do not receive supplies from the Sacramento/Delta; however, there are some exceptions. Specifically, Stockton East Water District receives water from both New Melones on the Stanislaus River and the Calaveras River, and the City of Tracy receives CVP water from the Delta-Mendota Canal and water from the Stanislaus River through a contract with South San Joaquin Irrigation District. Stockton East Water District and South San Joaquin Irrigation District provide surface water supplies for agricultural customers in the San Joaquin Valley (SEWD 2021; SSJID 2021). In addition, the Alameda County Water District receives some water supplies from Tuolumne River as a member of the Bay Area Water Supply & Conservation Agency (BAWSCA), which contracts with the San Francisco Public Utilities Commission but is also a contractor for SWP supplies from the Delta. Similarly, the Cities of Santa Clara, Mountain View, and Milpitas receive some water supplies from BAWSCA but also wholesale water supplies from Valley Water (previously known as the Santa Clara Valley Water District), which has contracts with both the CVP and SWP.

Implementation of the 2018 LSJR/SD Plan Update could be a further constraint on supplies for water users that receive water from both the lower San Joaquin River tributaries and the Delta. Therefore, the impacts of implementing the LSJR/SD Plan Update are potentially cumulatively considerable additions to the Sacramento/Delta Plan amendments in the resource areas of agricultural and forest resources, air quality, biological resources, cultural resources, energy and greenhouse gas (GHG) emissions, hydrology and water quality, recreation, and utilities and service systems. Both projects could result in similar construction-related impacts, which would be potentially cumulatively considerable in the areas of geology and soils, hazards and hazardous materials, noise, and transportation.

The Staff Report adequately discloses the combined environmental impacts of the 2018 LSJR/SD Plan Update and the Sacramento/Delta Plan amendments, and additional quantification or modeling is not required. The supply reductions on the LSJR would occur independent of the Sacramento/Delta updates to the Bay-Delta Plan with the exception of Stockton East Water District (SEWD) and the City and County of San Francisco. Impacts related to SEWD and City and County of San Francisco water supply are discussed in the main environmental analyses in Sections 7.3 through 7.20 as appropriate. There is more than one way to approach modeling and analysis, and many data sources are available, but CEQA does not require an exhaustive cumulative analysis using every approach, modeling tool, and data set available. Differing opinions, including expert opinions, regarding methodology do not render an analysis inadequate, and the State Water Board, as lead agency, has discretion to select the appropriate approach for the task. When a lead agency chooses to rely on specific studies, the legal question is not whether they “are irrefutable or whether they could have been better.” (*Town of Atherton v. California High-Speed Rail Authority* (2014) 228 Cal.App.4th 314, 350.) The Staff Report’s modeling and analysis are “sufficiently credible to be considered as part of the total evidence” supporting the revised proposed Plan amendments; they therefore meet CEQA’s standard. (*Ibid.*)

The Plan amendments were developed to improve flow and water quality conditions over a large geographic area, particularly for fish and wildlife beneficial uses in the Sacramento River watershed, Delta eastside tributaries, and Delta regions (Sacramento/Delta). The State Water Board recognizes that providing instream flows for the environment necessarily results in less water available for other uses. Providing balanced protection of all beneficial uses of water is incredibly important and requires careful consideration. For this reason, water supply, including supplies from the Sacramento/Delta watershed, is evaluated extensively throughout the Staff Report.

In accordance with CEQA, the Staff Report includes a qualitative assessment of cumulative impacts that considers the incremental impacts associated with the 2018 LSJR/SD Plan Update. (Cal. Code Regs., tit. 14, § 15130, subd. (b).) The analysis identifies potentially significant cumulative impacts for a wide range of environmental resources, including hydrology, agriculture, and water quality. Section 7.23, *Cumulative Impact Analysis, Growth-Inducing Impacts, and Significant Irreversible Environmental Changes*, presents sufficient information to inform decision-makers and the public about potential cumulative impacts, guided by standards of practicality and reasonableness. (*Ibid.*)

Consideration and Analysis of Delta Conveyance Project and Sites Reservoir Project

Several commenters asserted that the cumulative impact analysis presented in Staff Report Sections 7.23 and 13.7.21, each titled *Cumulative Impact Analysis, Growth-Inducing Impacts, and Significant Irreversible Environmental Changes*, does not consider or adequately discuss the incremental effects of possible new water supply projects, including DCP and the Sites Reservoir Project, including incremental effects on fish and Delta outflows, and that it does not adequately analyze or disclose the combined environmental impacts of these reasonably foreseeable probable future water supply projects and the Sacramento/Delta Plan amendments.

The Sites Reservoir Project and DCP are discussed along with other relevant new water supply projects in Section 7.23.1.2, *Cumulative Project List*, and are considered in the cumulative impact analysis which follows. Section 7.23.1.2 provides a reasonable description of these projects, appropriately focusing on project attributes that would most directly affect hydrology and water supply—namely proposed diversions. Section 13.7.21.1, *Cumulative Impact Analysis*, analyzes potential cumulative effects of water supply projects in the context of the revised proposed Plan amendments, including effects associated with the Sites Reservoir Project and DCP.

Impacts of new water supply projects would likely be similar to those discussed in Section 7.22, *New or Modified Facilities*. As indicated in Table 7.22-1, new and modified dams, reservoirs, and points of diversion have potentially significant impacts on a range of resource areas. New water supply projects could have varied effects on biological resources, including changes in the flow regime (timing and magnitude) and downstream temperature, changes in geomorphic processes, delaying or impeding the migration or movement of special-status fish species in surface waters influenced by reservoir operation, and loss of salmonid redds to riverbed scour and entombment in deposited sediment. Flow changes in tributaries to the Delta also could affect flow and currents, as well as alter temperature and salinity gradients in the Delta. This could have a cumulative effect on surface hydrology and water quality, aquatic biological resources, agricultural resources, and utilities. Additionally, construction-related impacts, such as noise, GHG emissions, and loss of sensitive tribal resources could be associated with construction of diversion structure(s), tunnels, dams, and other water supply project components. Although compensatory mitigation is proposed for many of these types of projects, these measures may not reduce impacts or the loss of habitat to less-than-significant levels.

The identification of impacts associated with new water supply projects should not be confused with State Water Board approval of any specific project. To the contrary, mitigation measures and existing law provide for State Water Board oversight and consideration of multiple factors before approval of any project. For example, consideration of whether to approve a new water right application to appropriate water by permit with the State Water Board is a discretionary action that requires a determination that unappropriated water is available, a review of potential impacts on

public trust resources, a determination that the appropriation of water is in the public interest, and review under CEQA. Section 401 of the Clean Water Act (33 U.S.C. § 1341) requires any applicant for a federal license or permit for an activity that may result in any discharge to waters of the United States to obtain certification from the state that the project will comply with the applicable water quality requirements, including water quality standards promulgated pursuant to section 303 of the Clean Water Act. (33 U.S.C. § 1313.) Section 401 additionally directs that certifications will prescribe effluent limitations and other conditions necessary to ensure compliance with the Clean Water Act and with any other appropriate requirements of state law, which includes the Porter-Cologne Act. (Wat. Code, § 13000 et seq.; Section 7.22, *Mitigation Measures*.)

In determining the amount of water available for appropriation, the State Water Board must take into consideration the public interest and the relative benefit to be derived from all beneficial uses of the water concerned (including irrigation, municipal, industrial, recreation, and preservation and enhancement of fish and wildlife resources) and the water quality needed to protect beneficial uses (including preservation of some portion of peak flows for ecosystem processes).

In addition, the revised proposed Plan amendments direct the State Water Board to consider imposing requirements on new water supply projects to ensure that future authorizations for the diversion and use of water are consistent with and support the salmon protection, fish viability, inflow, inflow-based Delta outflow, and interior outflow objectives. Further, these new water supply projects would be subject to the regulatory pathway without water supply adjustments unless future changes are made to the Plan to include new HRL proposal or water supply adjustments for new projects. Any consideration of new HRL proposals or water supply adjustments for new water supply projects must be supported by necessary scientific and environmental documentation evaluating effects on the expected benefits of the current Plan updates, analysis of environmental impacts, and other required evaluations. Please see Common Response 1.3, *Revised Proposed Plan Amendments*, for information on provisions for the protection of base flows under the VA pathway.

In accordance with CEQA, the cumulative impact analysis presented in the Staff Report focuses on the assessment and disclosure of cumulative impacts rather than the attributes of individual projects considered in the analysis. (Cal. Code Regs., tit. 14, § 15130, subd. (b).) The analysis presents a largely qualitative assessment of cumulative impacts that identifies the incremental impacts associated with the Sites Reservoir Project, DCP, and other past, present, and reasonably foreseeable future water supply projects while not being as detailed or quantitative as the impact analyses conducted for the project alone. (*Ibid.*; Sections 7.3 through 7.20.) Given the nature of the Plan amendments under evaluation, the high-level analysis of Section 7.22, *New or Modified Facilities*, and the cumulative impact analysis, and the broad geographic area under consideration, the analysis presents sufficient information to inform decision-makers and the public about potential cumulative impacts, guided by standards of practicality and reasonableness. (*Ibid.*) The analysis identifies potentially significant cumulative impacts stemming from the incremental contributions of new water supply projects for a wide range of environmental resources, including surface hydrology, water quality, aquatic biological resources, agricultural resources, and utilities.

Consideration and Analysis of Other Past, Present, and Reasonably Foreseeable Probable Future Projects

Several commenters asserted that the cumulative impact analysis does not consider San Luis Reservoir operations and certain other water supply, habitat restoration, and stand-alone project proposals described in the Staff Report, including but not limited to the Solano Project, Sacramento

Weir Widening Project, Upper Yolo Bypass Levee Widening Project, and Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project. One commenter further asserted that the Staff Report fails to disclose cumulative impacts resulting from reductions in water supply, particularly on a regional scale in areas serviced by the Solano Irrigation District.

The Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project is described in Section 7.23.1.2, *Cumulative Project List*, and is considered in the cumulative impact analysis. Certain other specific projects flagged by commenters, such as San Luis Reservoir operations, the Solano Project, the Sacramento Weir Widening Project, and the Upper Yolo Bypass Levee Widening Project, are not specifically discussed. However, as explained in Staff Report Section 7.23.1, *Cumulative Impact Analysis*, potentially significant impacts of many past, present, and reasonably foreseeable probable future projects are already incorporated into the analyses, either by being embedded within the baseline for the analyses or because they are a potential action in response to potential water-supply changes and are evaluated as such. Additionally, the cumulative project list is not intended to be exhaustive, but rather representative of the types of projects that may interact with the proposed Plan amendments. The cumulative project list in Table 7.23-1 includes categories of projects, with examples, so that the cumulative effects of a general class of projects are represented. This approach supports conclusions regarding the cumulative impacts of past, present, and reasonably foreseeable probable future projects in combination with the revised proposed Plan amendments.

The analysis presents sufficient information to inform decision-makers and the public about potential cumulative impacts, guided by standards of practicality and reasonableness. (Cal. Code Regs., tit. 14, § 15130, subd. (b).) The analysis identifies potentially significant cumulative impacts stemming from the incremental effects of water supply, habitat restoration, and stand-alone projects for a wide range of environmental resources, including cumulative impacts resulting from changes in water supply. The inclusion of additional projects on the cumulative project list, as suggested by several commenters, is unlikely to change any of the cumulative impact determinations.

Several commenters asserted that the cumulative impact analysis does not adequately consider various unspecified past, present, and reasonably foreseeable probable future water resource projects, but did not provide names or details of any specific projects for inclusion. Thus, the State Water Board cannot address whether it was reasonable and practical to include additional projects in the cumulative impact analysis when commenters did not provide relevant information. The programs and projects identified in the Staff Report represent a reasonable and practical assessment of programs and projects with related effects.

Scope and Adequacy of Mitigation Measures

Several commenters asserted that the mitigation measures included in the Staff Report fail to adequately mitigate potentially significant cumulative impacts, or that the Staff Report fails to identify a sufficient range of mitigation measures, with the latter allegedly stemming from a failure to identify cumulative impacts associated with the 2018 LSJR/SD Plan Update and mitigation measures that can be implemented on a local scale.

Substitute Environmental Documents prepared for California water quality control plans must include mitigation measures to avoid or reduce any significant or potentially significant adverse environmental impacts and an analysis of reasonably foreseeable mitigation measures that would minimize any unavoidable significant adverse environmental impacts of the reasonably foreseeable

methods of compliance. (Cal. Code Regs, tit. 23, § 3777, subds. (b)(3), (b)(4)(D).) CEQA further requires that cumulative impact analyses identify reasonable, feasible, and enforceable options for mitigating or avoiding a proposed project's contribution to any significant cumulative impacts. (Cal. Code Regs, tit. 14, §§ 15130, subd. (b)(5); 15126.4, subd. (a).)

Consistent with these requirements, and as discussed above, the Staff Report adequately discloses potentially significant cumulative impacts, including impacts stemming from implementation of reasonably foreseeable probable water supply projects that are likely to cumulatively affect hydrology and water supply, including the 2018 LSJR/SD Plan Update. The Staff Report identifies a wide range of reasonable, feasible, and enforceable mitigation measures that avoid or minimize the Plan amendment's incremental contributions to potentially significant cumulative impacts and impacts resulting from reasonably foreseeable response actions and compliance methods, and which can be applied on a regional or local scale (Chapter 1, *Executive Summary*, Tables 1-1, 1-2, and 1-3; Appendix H3, *Mitigation Measures for the Revised Proposed Plan Amendments*). The Staff Report further advises that the identified mitigation measures should also be considered for reasonably foreseeable probable future projects referenced in the cumulative impact analysis. The identified mitigation measures are largely within the responsibility and jurisdiction of agencies other than the State Water Board and/or depend on how water users respond to the project. As a result, the State Water Board cannot guarantee that measures will be fully adopted or applied to mitigate potentially significant cumulative impacts. Due to the wide range of possible response actions, sufficient information is not available to conclude with certainty that the response actions or associated mitigation measures will reduce all impacts to less-than-significant levels in all circumstances. The impact conclusions made in the Staff Report thus do not rely on the implementation of any particular water management actions. The range of measures identified in the Staff Report thus include many that will not be feasible or effective for a given specific agency or user. CEQA does not prohibit the identification of mitigation just because it may not be feasible in all cases. See also Common Response 7.1, *General CEQA and Approach to Analysis*, for further discussion of mitigation measures, and Common Response 6.3, *Water Supply and Other Water Management Actions*.

References Cited

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