Master Response 1.2

Water Quality Control Planning Process

Overview

This master response addresses comments raised regarding the water quality control planning process generally and also specifically in connection with the plan amendments to the 2006 Water Quality Control Plan for the San Francisco/Sacramento–San Joaquin Delta Estuary (2006 Bay-Delta Plan) (located in Appendix K, *Revised Water Quality Control Plan*). This master response describes the regulatory framework under which the State Water Resources Control Board (State Water Board) adopts and implements the Bay-Delta Plan, as well as other considerations.

The State Water Board is responsible for orderly and efficient administration of the state's water resources, including the coordinated consideration of water rights, water quality, and drinking water. (Wat. Code, § 174.)¹ It performs dual functions in both ensuring water quality and allocating water rights. (*United States v. State Water Resources Control Bd.* (1986) 182 Cal.App.3d 82, 112.) In joining these dual functions under the State Water Board, the Legislature recognized that water diversions could adversely affect water quality and fishery resources, and similarly, water quality could adversely affect the ability to operate the state's largest water projects' facilities in the Delta.

The State Water Board protects water quality that affects beneficial uses of water in the Bay-Delta through the water quality control plan for the area, the Bay-Delta Plan, pursuant to its authorities under the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) (§ 13000 et seq.) and the federal Clean Water Act (33 U.S.C. § 1313). Water quality control plans designate the beneficial uses of water that are to be protected (such as municipal and industrial, agricultural, and fish and wildlife beneficial uses), water quality objectives for the reasonable protection of the beneficial uses or the prevention of nuisance, and a program of implementation to achieve the water quality objectives. (§§ 13241, 13050, subds. (h), (j).) The beneficial uses, together with the water quality objectives contained in the water quality control plans, and applicable federal anti-degradation requirements, constitute California's water quality standards for purposes of the Clean Water Act.

The 2006 Bay-Delta Plan currently includes flow objectives for the protection of fish and wildlife objectives on the San Joaquin River (SJR) at Vernalis and salinity objectives for the protection of agricultural uses in the southern Delta (see Appendix K, Table 2 and Table 3, respectively). Since the adoption of the 1995 Bay-Delta Plan objectives for the protection of fish and wildlife beneficial uses, however, the health of Bay-Delta ecosystems has continued to decline precipitously (see Chapter 19, *Analyses of Benefits to Native Fish Populations from Increased Flow between February 1 and June 30*; Appendix C, *Technical Report on the Scientific Basis for Alternative San Joaquin River Flow and Southern Delta Salinity Objectives;* and Master Response 3.1, *Fish Protection*). Over the past 10 years, several species of fish have been listed as protected species under the state or federal Endangered Species Act (see Master Response 3.1 for scientific information regarding the need for the Lower San Joaquin River [LSJR] flow objective). Further, scientific information indicates that the current southern Delta salinity objectives are more stringent than needed to reasonably protect the agricultural beneficial use (see Master Response 3.3, *Southern Delta Water Quality*, for information

¹ All further statutory references are to the Water Code unless otherwise indicated.

regarding the need to update the southern Delta salinity objective). The plan amendments would update these two elements of the 2006 Bay-Delta Plan, as described in the *Executive Summary*, ES1, *Introduction*, and Chapter 3, *Alternatives Description*. The scientific basis for the plan amendments is contained within peer-reviewed Scientific Basis Report (Appendix C). The plan amendments also update the program of implementation to achieve the objectives, including monitoring and special studies to fill information needs, and a framework for accepting voluntary agreements with alternative methods for enhancing fish and wildlife in the tributaries, including non-flow measures (see Appendix K; Master Response 1.1, *General Comments*; Master Response 2.1, *Amendments to the Water Quality Control Plan*; and Master Response 2.2, *Adaptive Implementation*). Responsibility for implementing LSJR flow objectives will be assigned through water right actions and water quality actions, such as conditioning of water rights, adoption of regulations, and water quality certification associated with Federal Energy Regulatory Commission (FERC) hydropower licensing processes.

The State Water Board reviewed all comments related to the water quality control planning process and legal authorities governing this process and developed this master response to address recurring comments and comment themes. This master response references related master responses, as appropriate, where recurring comments and common comment themes overlap with other subject matter areas. This master response provides general information and addresses comments related to the water quality control planning process, the legal authorities governing the process, and the State Water Board's considerations in adopting and implementing the plan amendments. For ease of reference, a table of contents is provided after this *Overview* to help guide readers to specific subject areas. In particular, this master response addresses, but is not limited to, the following topics.

- Legal authorities related to the water quality control planning process, including the Porter-Cologne Act; the Clean Water Act; the Administrative Procedure Act; the California Constitution, Article X, section 2; and the topic of due process.
- Implementation of the plan amendments, including through water right proceedings such as adjudications and regulations, and consideration of water right priority.
- Implementation of the plan amendments through the water quality certification proceedings associated with FERC hydropower licensing processes.
- The update of the Bay-Delta Plan through independent proceedings, including the regulation of exports.
- The State Water Board's consideration of beneficial uses through the water quality control planning process, including public trust uses and domestic and municipal uses.
- The relationship between the 2010 Delta Flow Criteria Report and the plan amendments.
- The peer review process for the scientific basis of the rule contained in the plan amendments being considered by the State Water Board (SED Appendix C).
- The consultation process with agencies and the public.

For discussions of the water quality control planning process and the State Water Board's authorities, please refer to the *Executive Summary*, Section ES10, *Intended Uses of this SED*, and Chapter 1, *Introduction*, Section 1.4, *State Water Board Authorities*. For responses to comments regarding elements of changes to the plan amendments, please see Master Response 2.1, *Amendments to the Water Quality Control Plan*. For responses to comments regarding adaptive implementation, please see Master Response 2.2, *Adaptive Implementation*.

Table of Contents

Master Response 1.2 Water Quality Control Planning Process	ated to the Water Quality Control Planning Process
Overview	
Authorities Related to the Water Quality Control Planning Process	2
The Porter-Cologne Water Quality Control Act and the Clean Water Act	∠
Administrative Procedure Act	8
California Constitution, Article X, Section 2	8
Bay-Delta Plan Implementation and Water Rights	g
Program of Implementation	11
Implementation through Water Right Proceedings	12
Water Right Priority	12
Water Quality Certification and the Federal Energy Regulatory Commission Process	13
Scope of Bay-Delta Plan Proceedings	16
Consideration of Beneficial Uses	20
Public Trust Resources	22
Domestic and Municipal Uses of Water	23
2010 Delta Flow Criteria Report	24
Peer Review Process	25
Consultation Process	26
References Cited	28

Authorities Related to the Water Quality Control Planning Process

Some commenters expressed concern regarding the State Water Board's compliance with legal requirements governing the water quality control planning process and with other laws, with some making claims that the State Water Board lacks authority to undertake the proposed action. For example, some commenters asserted that the plan amendments are in violation of a variety of laws and regulations, including: the Porter-Cologne Act; the Administrative Procedure Act; article X, section 2 of the California Constitution; laws governing established water rights and water right priority; and federal constitutional rights to due process, equal protection, and separation of powers. In many instances, commenters did not provide evidence, analysis, or supporting information to support their contentions. This master response provides a response to such comments and other general comments on various legal authorities. In addition, readers should refer to Master Response 1.1, *General Comments*, for a discussion of State Water Board authorities. As discussed herein, the State Water Board has acted appropriately and in accordance with applicable legal requirements governing the water quality control planning process in connection with the proposed amendments to the 2006 Bay-Delta Plan.

The Porter-Cologne Water Quality Control Act and the Clean Water Act

A complex federal and state regulatory scheme under the Clean Water Act and the California Porter-Cologne Act governs the quality of California's waters. The goal of the Porter-Cologne Act, which was enacted in 1969 prior to the Clean Water Act, is "to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible." (§ 13000.) Under the Porter-Cologne Act, the State Water Board and Regional Water Quality Control Boards (Regional Water Boards) regulate activities and factors that may affect the quality of the waters of the state. (§ 13050, subd. (i).) The State Water Board and the Regional Water Boards develop water quality control plans that specify beneficial uses of the state's waters, water quality objectives, and a program of implementation to achieve the water quality objectives. (§§ 13050, subd. (j), 13240, 13170.) In doing so, the State Water Board implements comparable provisions of the Clean Water Act. (See § 13160 [designating State Water Board as the state water pollution control agency for all purposes under the federal act]; 33 U.S.C. § 1313 [requiring the development of water quality standards to protect the nation's navigable waters]².) Once the State Water Board adopts the Bay-Delta Plan amendments, the board will submit them to the California Office of Administrative Law (OAL) for approval and transmit them to the U.S. Environmental Protection Agency (USEPA). (See the *Administrative Procedure Act* section in this master response.)

"In formulating a water quality control plan, the [State Water] Board is invested with wide authority" to attain the highest reasonable water quality. (*United States v. State Water Resources Control Bd., supra,* 182 Cal.App.3d at p. 109; § 13000.) The State Water Board is required to

² Under the terminology of the Clean Water Act, water quality standards include designated uses and water quality criteria based on those uses.

...establish such water quality objectives in water quality control plans as in its judgment will ensure the reasonable protection of beneficial uses and the prevention of nuisance; however, it is recognized that it may be possible for the quality of water to be changed to some degree without unreasonably affecting beneficial uses. (§ 13241.)

Beneficial uses of water that may be protected against degradation include "domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves." § 13050, subd. (f).) The State Water Board establishes water quality objectives at a level that will reasonably protect the beneficial uses, after considering a number of societal, economic, and environmental factors. (§ 13241.) "Thus, in carrying out its water quality planning function, the [State Water] Board possesses broad powers and responsibilities in setting water quality [objectives]." *United States v. State Water Resources Control Bd., supra,* 182 Cal.App.3d at p. 110.) This specifically includes "the power and duty to provide water quality protection to the fish and wildlife that make up the delicate ecosystem within the Delta." (*Id.,* at p. 98.)

Under the Porter-Cologne Act, water quality control plans must be "periodically reviewed and may be revised." (§ 13240.) Clean Water Act section 303(c) (33 U.S.C. § 1313(c)) requires a triennial review of state water quality "standards," which is ordinarily combined with any review under state law. The Bay-Delta Plan was most recently revised in 2006. The State Water Board initiated its periodic review of the Bay-Delta Plan in 2008 and adopted the *Staff Report on the Periodic Review of the 2006 Water Quality Control Plan for the San Francisco Bay/Sacramento–San Joaquin Delta Estuary* in August 2009.³ Through this review, the State Water Board identified a priority list of water quality objectives and plan amendments that it would consider for further review as part of the Bay-Delta Plan Update, including Delta outflow objectives, export/inflow objectives, and other changes. The August 2009 report also identified two issues that the State Water Board previously had committed to review: the southern Delta salinity objectives and SJR flow objectives. At the time of the report's release, the State Water Board had already begun the water quality control planning process for those objectives.

Some commenters appear to suggest that the narrative objective proposed as part of the LSJR flow objectives is not an appropriate means of protecting the fish and wildlife beneficial use. To the contrary, the narrative objective is an entirely appropriate means of protecting the beneficial uses. Under the Clean Water Act, water quality criteria may be narrative or numeric. (40 C.F.R. § 131.11(b).) "Criteria are elements of state water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports a particular use." (40 C.F.R. § 131.3(c).) The Porter-Cologne Act defines "water quality objectives" as meaning "the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area." (§ 13050, subd. (h).) Water quality refers to the "chemical, physical, biological, bacteriological, radiological, and other properties and characteristics of water which affect its use." (§ 13050, subd. (g); see also State Water Resources Control Bd. Cases (2006) 136 Cal.App.4th 674, 696-697.) The 2006 Bay-Delta Plan already includes a narrative objective for the protection of salmon. It is consistent with state and federal water quality law for the plan amendments to include a narrative inflow objective that represents water quality conditions from the SJR Watershed to the Delta that will support fish and wildlife beneficial uses. Please refer to Master Response 2.1,

³ State Water Board Resolution No. 2009-0065, available: https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2009/rs2009_0065.pdf.

Amendments to the Water Quality Control Plan, for more information regarding the narrative flow objective.

Some commenters alleged that the State Water Board failed to consider factors identified in section 13241 of the Porter-Cologne Act. As discussed in the *Executive Summary*, Section ES10, *Intended Uses of This SED*, section 13241 identifies certain factors that must be considered when establishing water quality objectives. These factors include: (1) past, present, and probable future beneficial uses of water; (2) environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto; (3) water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect water quality in the area; (4) economic considerations; (5) the need for developing housing within the region; and (6) the need to develop and use recycled water. Contrary to certain commenters' suggestions, section 13241 does not require precise quantification of the water involved or of the benefits conferred. "Section 13241 does not specify how a water board must go about considering the specified factors. Nor does it require the board to make specific findings on the factors." (*City of Arcadia v. State Water Resources Control Bd.* (2010) 191 Cal.App.4th 156, 177.) Further, section 13241 requires consideration of the listed factors only when establishing water quality objectives. (*Ibid.*) Water quality "objectives are only one element of a water quality control plan" (*Ibid.*) § 13050, subd. (j).)

The State Water Board will appropriately consider the factors listed in section 13241 in determining whether and how to establish the LSJR flow and SDWQ objectives. The information supporting the State Water Board's determination is contained in the SED. The factors listed in section 13241 are an inherent part of the analyses in the SED for decision makers to understand the impacts of the plan amendments not only on the environment, but also on other beneficial uses, economics, and other important considerations. Table ES-27 summarizes the primary locations in the SED where information regarding the section 13241 factors may be found.

Commenters asserted that the plan amendments' reliance on unimpaired flows, as opposed to nonflow measures, to address fish and wildlife beneficial uses fails to consider "the water quality conditions that could be reasonably achieved through the coordinated control of all factors which affect water quality in the area." (§ 13241, subd. (c).) The State Water Board's ability to compel nonflow measures now is limited (see Master Response 5.2, Incorporation of Non-Flow Measures). Assuming, for the sake of argument, non-flow measures are factors that affect water quality and could be coordinated and implemented to improve water quality conditions for fish and wildlife, increased flow from the LSJR flow objectives would still be necessary because flow is foundational for fish survival. (See Appendix C, Technical Report on the Scientific Basis for Alternative San Joaquin River Flow and Southern Delta Salinity Standards; Chapter 19, Analyses of Benefits to Native Fish Populations from Increased Flow between February 1 and June 30; and Master Response 3.1, Fish Protection.) The State Water Board recognizes the importance of non-flow measures to support and maintain different habitat needs and, therefore, includes them as recommendations in the Bay-Delta Plan (see Master Response 5.2, Incorporation of Non-Flow Measures). In addition, the numeric flow objectives are set as a range so that they may be adaptively implemented. Adaptive implementation includes the ability of non-flow measures to inform adaptive adjustments to the percentage of unimpaired flows. Thus, in proposing the flow objectives, the State Water Board is considering the water quality conditions that could be reasonably achieved through the coordinated control of all factors that affect water quality, as required under section 13241.

Certain commenters questioned the basis for the State Water Board's ultimate determination regarding the reasonableness of the protection afforded by the proposed water quality objectives,

with some commenters taking the position that the costs involved in meeting the objectives are not reasonable. The State Water Board will make its determination of reasonableness when it establishes the water quality objectives; in other words, this decision is made once when the State Water Board adopts the plan amendments. It is not revisited as the objectives are implemented. Section 13241 "grants the [State Water] Board broad discretion to establish reasonable standards consistent with overall statewide interest." (*United States v. State Water Resources Control Bd., supra,* 182 Cal.App.3d at p. 116.) There is no set formula in determining reasonableness. Environmental characteristics of the area, beneficial uses, and economic considerations, for example, are all necessary parts of the determination of reasonableness. When establishing the water quality objectives, the State Water Board will consider the section 13241 factors and relevant information in the SED, including the impacts and benefits of the proposed water quality objectives, to determine what will ensure reasonable protection of the beneficial uses.

Some commenters suggest that section 13241, subdivision (c), requires the State Water Board to consider non-water quality factors in establishing water quality objectives. This provision identifies "[w]ater quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area" as a factor to be considered. This particular factor, however, expressly focuses on "water quality;" in other words, the properties and characteristics of water that affects its use. (§ 13050, subd. (g).) Water quality conditions to protect fish and wildlife in the LSJR Watershed could be reasonably achieved through the coordinated control of all factors that affect water quality. The water quality conditions that could be reasonably achieved through the coordination of these factors include increased flows, temperature improvements beneficial to salmonids, and increased floodplain inundation for salmonids in the Stanislaus, Tuolumne and Merced Rivers. Each of these conditions is analyzed in the SED and summarized in the *Executive Summary*. (See, e.g., Chapter 7, *Aquatic Biological Resources*, for analyses of temperature and floodplain conditions.)

Some commenters also made general allegations that the State Water Board failed to consider other provisions of the Water Code in developing the water quality objectives. For example, some of these commenters cite to section 13000, which contains the Legislature's precatory declaration of intent regarding the Porter-Cologne Act and the state's regulation of its water quality, and to section 174, which contains the Legislature's declaration of intent in creating the State Water Board. As discussed previously, however, section 13241 establishes the substantive requirements for establishing water quality objectives. Other statutes containing general statements of legislative intent do not independently create a substantive duty in addition to those imposed by section 13241. (*City of Arcadia v. State Water Res. Control Bd.*, supra, 191 Cal.App.4th at p. 176 [concluding that § 13000 does not create additional substantive duties].) Nonetheless, in this proceeding, the State Water Board strives to "attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible." (§ 13000.)

Without explanation, support, or analysis, some commenters alleged that the State Water Board have violated due process, equal protection and separation of powers, as they relate to the water quality control planning process. These allegations have no basis. While due process principles require reasonable notice and opportunity to be heard before governmental deprivation of a significant property interest, only adjudicative decisions, and not legislative actions, are subject to procedural due process principles. (*Horn v. County of Ventura* (1979) 24 Cal.3d 605, 612.) Moreover, as described in the *Public Outreach Process* section of Master Response 1.1., *General Comments*, and

in this response, the State Water Board has complied with all notice and consultation requirements required by law in this proceeding. Similarly, the general allegations about violations of equal protection and separation of powers are unsubstantiated and without merit. It is the responsibility of the State Water Board to exercise the regulatory and adjudicatory functions of the state in the field of water resources and to attain the highest water quality that is reasonable. (§§ 174, 13000.) In carrying out this responsibility, the State Water Board has developed plan amendments that have a rational basis and further the state's regulatory interests.

Administrative Procedure Act

The adoption or revision of water quality control plans under the Porter-Cologne Act is exempt from the general rulemaking requirements of the Administrative Procedure Act (APA) (Gov. Code, § 11340 et seq.). Pursuant to Government Code section 11353, however, the State Water Board must submit the regulatory provisions of water quality control plan amendments to OAL for approval before the amendments become effective. OAL reviews the regulatory provisions for compliance with certain APA standards and public participation requirements under the Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.). On approval, a summary of the regulatory provisions is sent to the Secretary of State for filing.

Some commenters alleged that the plan amendments violate the APA but did not provide any support for their allegations. Some comments appeared to address administrative adjudications conducted pursuant to Chapter 4.5 of the APA (commencing with Gov. Code section 11400), which governs certain aspects of adjudicative proceedings before the State Water Board. As explained in this master response, however, amending the Bay-Delta Plan is a quasi-legislative action, and not an adjudicative one; thus, provisions of the APA governing adjudicative proceedings do not apply to the Bay-Delta Plan Update.

Without support or explanation, some commenters alleged a failure to provide public notice in either this planning proceeding or in implementation proceedings described in the plan amendments. The State Water Board, however, has conducted this planning proceeding in accordance with applicable state and federal notice requirements and will continue to comply with applicable requirements in future proceedings. For a summary of the public review and consultation processes associated with this SED, please refer to the *Executive Summary*, Section ES10.2, *Past Public Review and CEQA Noticing*. Please also see Master Response 1.1, *General Comments*, for further information regarding the public outreach process associated with this SED.

California Constitution, Article X, Section 2

All water rights are subject to the overriding constitutional limitation that water use must be reasonable. (See Cal. Const., Art. X, § 2 ["right to water... shall be limited to such water as shall be reasonably required for the beneficial use to be served, and such right does not and shall not extend to the waste or unreasonable use or unreasonable method of use...of water."]; see also § 100; Environmental Defense Fund, Inc. v. East Bay Municipal Utility Dist. (1980) 26 Cal.3d 183.) There is no set definition of what constitutes an unreasonable use. (Light v. State Water Resources Control Bd. (2014) 226 Cal.App.4th 1463, 1479 (Light).) Rather, "[w]hat constitutes reasonable use is dependent upon not only the entire circumstances presented but varies as the current situation changes...[and] cannot be resolved in vacuo from statewide considerations of transcendent importance." (Joslin v. Marin Municipal Water Dist., (1967) 67 Cal.2d 132, 140; see also 5) 25 Cal.3d

339, 354.) Thus, what may have been reasonable at one time, may become unreasonable as time passes. Water right permits are "subject to the continuing authority of the [State Water] Board to prevent unreasonable use." (*United States v. State Water Resources Control Bd., supra*, 182 Cal.App.3d at p. 129.) This includes preventing deterioration of water quality that impairs beneficial uses. (*Id.*, at p. 130.)

Thus, the State Water Board has the authority to prevent unreasonable methods of diversion and uses that have deleterious effects on water quality. The State Water Board considers the important public interests at stake in evaluating the proper balance between water supply and water quality, and determining what is reasonable. (*United States v. State Water Resources Control Bd., supra,* 182 Cal.App.3d at p. 130.) "The decision is essentially a policy judgment requiring a balancing of the competing public interests, one the [State Water] Board is uniquely qualified to make in view of its special knowledge and expertise and its combined statewide responsibility to allocate the rights to, and to control the quality of, state water resources. (§ 174.)" (*Ibid.*) In revising the Bay-Delta Plan, and as discussed in the *Executive Summary*; Appendix C, *Technical Report on the Scientific Basis for Alternative San Joaquin River Flow and Southern Delta Salinity Objectives*; Master Response 3.1, *Fish Protection*; and throughout the SED, the State Water Board has concluded that changed circumstances and updated scientific information necessitate revising the water quality objectives for the protection of fish and wildlife beneficial uses.

Bay-Delta Plan Implementation and Water Rights

The State Water Board performs dual functions in both ensuring water quality and allocating water rights. (*United States v. State Water Resources Control Bd., supra,* 182 Cal.App.3d at p. 112.) In performing these functions, the State Water Board's powers include both quasi-legislative rulemaking authority and quasi-adjudicative authority. "In performing its regulatory function of ensuring water quality by establishing water quality objectives, the Board acts in a legislative capacity. The Water Quality Control Plan is itself a quasi-legislative document." (*Ibid.*) As a quasi-legislative action, the Board's promulgation of the water quality objectives in the Bay-Delta Plan is subject to deference and findings of fact are not required. (*Id.*, at p. 150.) When implementing the water quality objectives through a water right decision, however, the State Water Board acts in a quasi-judicial, or adjudicatory, capacity and findings of fact are required to show the underlying factual bases. (*Ibid.*; *State Water Resources Control Bd. Cases*, supra, 136 Cal.App.4th at p. 721.)

For Bay-Delta water quality control, since 1978, the State Water Board has used its combined water quality and water rights authorities to develop and update a water quality control plan for the Bay-Delta and to implement the plan's flow-related objectives through a companion water right decision. The State Water Board, however, is not limited to implementing the water quality objectives through a quasi-adjudicative water right proceeding. As described in Appendix K, *Revised Water Quality Control Plan*, Chapter IV, *Program of Implementation*, the State Water Board will exercise its quasi-legislative or quasi-adjudicative power involving water rights and water quality to require implementation of the water quality objectives. The State Water Board may implement the objectives by conducting water right proceedings, which may include adopting regulations, conducting quasi-adjudicative proceedings, or both. The State Water Board may also use its Clean Water Act section 401 water quality certification authority or take other water quality actions to implement the water quality objectives in the Bay-Delta Plan.

Commenters asserted that the State Water Board has no authority to impose responsibility to implement the water quality objectives on riparian water users and pre-1914 appropriate water right holders who are not subject to the State Water Board's permitting authority. "California maintains a 'dual system' of water rights, which distinguishes between the rights of 'riparian' users, those who possess water rights by virtue of owning the land by or through which flowing water passes, and 'appropriators,' those who hold the right to divert such water for use on noncontiguous lands." (*Light, supra,* 226 Cal.App.4th at p. 1478.) Since 1914, all appropriative surface water rights must be acquired by application to the State Water Board (or its predecessors) for a permit to appropriate water. (*California Farm Bureau Federation v. State Water Resources Control Bd.* (2011) 51 Cal.4th 421, 429.) (For additional information regarding California water rights, please refer to Chapter 1, *Introduction*, Section 1.4.2, *Water Rights.*) Thus, the State Water Board does not have permitting or licensing authority over riparian or pre-1914 appropriative rights. The State Water Board's regulatory authority over water users, however, is greater than the scope of its permitting authority over post-1914 appropriative water right holders.

The State Water Board has broad authority under article X, section 2, of the California Constitution and the public trust doctrine to implement the plan amendments through water right actions, including actions involving riparian users and senior appropriators. All water rights, regardless of the basis of right, are subject to the constitutional reasonableness doctrine. (Cal. Const., art X, § 2; Light, supra, 226 Cal.App.4th at p. 1479.) The public trust doctrine prevents water users from acquiring a vested right to appropriate water in a manner harmful to public trust interests. (National Audubon Society v. Superior Ct. (1983) 33 Cal.3d 419, 445 (National Audubon).) The State Water Board may exercise its regulatory powers through either quasi-legislative or quasi-judicial proceedings. (See e.g., Light, supra, 226 Cal.App.4th at pp. 1472-1473 [in regulating the unreasonable use of water, the State Water Board can weigh the use of water for the protection of wildlife habitat against the commercial use of water by riparian users and early appropriators].)

The State Water Board has authority to enforce the public trust (see the *Public Trust Resources* section below), and to prevent the waste or unreasonable use of water, regardless of the basis under which the water right is held. As discussed above, the State Water Board's authority to prevent the waste or unreasonable use of water extends to all users. This principle was affirmed in the *Light* decision, *supra*, which upheld a State Water Board regulation intended to protect salmon that was likely to limit water diversions for frost protection of crops. In responding to a challenge on the grounds that the State Water Board lacked "the regulatory authority to limit water use by riparian users and early appropriators, whose diversion is beyond the permitting authority of the [State Water] Board," the court concluded the following.

Although the [State Water] Board has no authority to require such users to obtain a permit to divert, there is no question it has the power to prevent riparian users and early appropriators from using water in an unreasonable manner. We conclude that, in regulating the unreasonable use of water, the [State Water] Board can weigh the use of water for certain public purposes, notably the protection of wildlife habitat, against the commercial use of water by riparian users and early appropriators. Further, the [State Water] Board may exercise its regulatory powers through the enactment of regulations, as well as through the pursuit of judicial and quasi-judicial proceedings.

(*Light, supra*, 226 Cal.App.4th at pp. 1472–1473; see also *Imperial Irrigation District v. State Water Resources Control Bd.* (1986) 186 Cal.App.3d 1160 [concluding that the State Water Board has jurisdiction to conduct administrative proceedings applying the reasonableness doctrine to all water rights, including pre-1914 water rights].) Thus, regardless of the scope of the State Water Board's

permitting authority over post-1914 appropriative water users, the limiting principles of reasonableness and the public trust doctrine apply to all water rights, regardless of their legal basis.

Program of Implementation

As the 2006 Bay-Delta Plan currently explains and the plan amendments in Appendix K further clarify, the State Water Board will take actions under its water right and water quality authority to require implementation of the water quality objectives. Commenters expressed concern about the State Water Board's implementation of the plan amendments through such future actions. Some commenters questioned the State Water Board's authority to implement the objectives through a water right proceeding. For example, some commenters objected to the plan amendments on the grounds that the State Water Board lacks authority and jurisdiction to amend water rights to implement the objectives, or that it cannot adversely affect water rights. Other commenters argued that the plan amendments violate rules of priority under California water law. Commenters also questioned whether and to what extent the State Water Board could impose conditions through water quality certifications associated with FERC licensing of hydropower projects.

As discussed in the following section, *Implementation through Water Right Proceedings*, the State Water Board has broad authority to impose responsibility for implementation of the water quality objectives. The Porter-Cologne Act requires a program of implementation to include the following: (1) a description of the nature of actions that are necessary to achieve the objectives, including recommendations for appropriate action by any entity; (2) a time schedule for the actions to be taken; and (3) a description of "surveillance" to be undertaken to determine compliance with the objectives. (§ 13242.) These factors, "particularly the provisions for recommended action and time schedule, reflect the Legislature's recognition that an implementing program may be a lengthy and complex process" (*United States v. State Water Resources Control Board, supra,* 182 Cal.App.3d at p. 122; see also, *State Water Resources Control Bd. Cases, supra,* 136 Cal.App.4th at p. 776 ["timely completion of a water rights proceeding" suffices for purposes of section 13242 "as long as the proceeding was, in fact, timely completed"].)

Implementation through Water Right Proceedings

Some commenters confused the Bay-Delta Plan's program of implementation to achieve the water quality objectives—a component of the plan required by the Porter-Cologne Act—with the future implementation of the plan in a water right or water quality proceeding. These processes are distinct. Through the Bay-Delta Plan's program of implementation, the State Water Board establishes a framework for achieving the plan objectives, including specific measures or recommendations for appropriate action by certain entities. (§ 13242, subd. (a).) This may include recommended actions by agencies other than the State Water Board, experimental studies, or voluntary measures. (See State Water Resources Control Bd. Cases (2006) 136 Cal.App.4th at p. 705 [recommending measures by fish agencies to improve fish and wildlife habitat].) Adoption of the plan amendments, including the program of implementation, however, does not impose enforceable requirements on any entities, even though state agencies are generally obligated to comply with water quality control plans. (§ 13247.) As explained in Appendix K, Chapter IV, Program of Implementation, the State Water Board will exercise its quasi-legislative or quasi-adjudicative power involving water rights and water quality to require implementation of the water quality objectives. Thus, the State Water Board will impose enforceable obligations to implement the water quality objectives in future proceedings involving the specific exercise of the State Water Board's water right or water quality authority. (See generally, State Water Resources Control Bd. Cases, supra, 136 Cal.App.4th at pp. 703-706 [discussing the 1995 Bay-Delta Plan's program of implementation and the State Water Board's Water Right Decision 1641 (revised March 15, 2000) water rights proceeding implementing certain aspects of the 1995 Plan].) Implementation through water right proceedings may include water right hearings (administrative adjudicative proceedings), the adoption of regulations, or both.

The plan amendments establish the desired condition of water quality in a specific area consistent with state and federal law. The plan amendments neither modify nor determine water rights. Any commenter's assertion that the SED implies or tacitly acknowledges that the plan amendments are determinations of water rights is not correct. In fact, the 2006 Bay-Delta Plan (Appendix K, Chapter I., *Introduction*, Section B., *Purpose and Applicability*.) expressly states that the plan should not

...be construed as establishing the responsibilities of water right holders. Nor is this plan to be construed as establishing the quantities of water that any particular water right holder or group of water right holders may be required to release or forego to meet the objectives in this plan. The State Water Board will consider, in a future water rights proceeding or proceedings, the nature and extent of water right holders' responsibilities to meet these objectives.

This principle is unchanged by the plan amendments.

Water Right Priority

Some commenters objected to the plan amendments on the basis that they violate the rules of priority under California water law. (See Chapter 1, *Introduction*, for a discussion of water rights in California.) As discussed previously, the plan amendments have not yet been implemented by a water right decision amending specific water right permits and licenses, or by regulation. Thus, adjustments to water right priorities have not occurred, and any challenge that the plan amendments violate the rules of priority is, therefore, unripe. The plan amendments identify future State Water Board processes, potentially both quasi-adjudicative and quasi-legislative, for implementing the water quality objectives in the Bay-Delta Plan. These future processes will be

dependent on the individual circumstances found in various stream systems covered by the Bay-Delta Plan (see Appendix K, Chapter IV, *Program of Implementation*). Until the water quality objectives are implemented, any objection based on an alleged violation of the rules of priority is mere speculation. The State Water Board intends to fully meet all legal requirements when it implements the water quality objectives.

The State Water Board agrees that the priority system is a critical component of California water law. However, the rules of priority are not absolute. Certain overarching legal principles can override strict adherence to the water right priority system. (*El Dorado Irrigation District v. State Water Resources Control Board* (2006) 142 Cal.App.4th 937, 965–966 [citing reasonable use, public trust, and legislative declarations of priority as examples].) Any change in priority is constrained, however: "the subversion of a water right priority is justified only if enforcing that priority will in fact lead to the unreasonable use of water or result in harm to values protected by the public trust." (*Id.* at p. 967.) Thus, to the extent the comments are based on the argument that the State Water Board cannot impose conditions on water right permits requiring instream flows to meet water quality objectives that affect the order of priority, that argument is inconsistent with *El Dorado Irrigation District*. In *El Dorado Irrigation District*, the Court found a subversion of the rule of priority precisely because the State Water Board, in that case, did not treat all diverters with similar restrictions, and because the State Water Board failed to provide sufficient justification for the subversion of priority. (*Id.* at pp. 969–971.)

A water right proceeding to implement the plan amendments would generally follow the water right priority system and in accordance with applicable law. This could, for example, result in adding conditions to existing water rights or taking other water right actions that would prohibit some water right holders from diverting water when flows are required to meet the LSJR flow objectives (*Executive Summary*, ES5.4, *Effects of the Flow Proposal*). Again, however, the State Water Board has yet to make any concrete decisions about which water right permits will be modified and what conditions will be attached. In the implementation process, the State Water Board will carefully examine and balance the competing uses of water in reaching its decisions about how to implement the water quality objectives.

Water Quality Certification and the Federal Energy Regulatory Commission Process

The Bay-Delta Plan provides that the State Water Board will exercise its legislative or adjudicative powers involving water rights and water quality, including using its Clean Water Act section 401 water quality certification authority associated with FERC hydropower licensing processes, to implement the water quality objectives. FERC issues licenses for non-federal hydroelectric power projects that affect navigable waters, occupy federal lands, use water or water power at a government dam, or affect interstate commerce. (16 U.S.C. § 797(e).)

As part of the FERC licensing process and pursuant to Clean Water Act section 401, a facility that discharges into navigable waters must first receive a state certification that the discharge will not violate state water quality requirements before the federal license can be issued. (Section 401(a), 33 U.S.C. § 1341(a).) The release of water from hydropower facilities constitutes a discharge under the Clean Water Act. (S.D. Warren Co. v. Maine Board of Environmental Protection (2006) 547 U.S. 370, 376–377, 385–386.) Once the State Water Board receives a certification request, it must act on the

request within a "reasonable period of time" not to exceed one-year; otherwise, the certification requirement is waived. (33 U.S.C. § 1341 (a)(1).) To avoid the potential denial of certification if the federal period for certification cannot be met, an applicant may withdraw and refile its request for certification, thus allowing the state sufficient time to process the request. (See Cal. Code Regs., tit. 23, §§ 3837, subd. (b)(2), 3838, subd. (c) [providing for denial without prejudice].) The state's certification may set conditions implementing Clean Water Act requirements, including the requirements of section 303 of the Clean Water Act for water quality standards and implementation plans, or to implement "any other appropriate requirement of State law." (33 U.S.C. § 1341(d).) These conditions "shall become a condition of any Federal license or permit" subject to 401 certification. (*Ibid.*)

Through Clean Water Act section 401 certification, a state may regulate a hydropower facility's activities, not just its discharge, to ensure compliance with applicable water quality standards. (*PUD No. 1 v. Washington Dept. of Ecology* (1994) 511 U.S. 700, 711–712 (PUD No. 1).) Thus, Clean Water Act section 401 grants states broad authority to impose any conditions on a certification necessary to assure compliance with water quality standards or other appropriate requirement of state law. (33 U.S.C. § 1341(d); *PUD No. 1, supra,* 511 U.S. at pp. 711–713.) Under this provision, the flow objectives and related requirements provide a basis for appropriate certification conditions that will ensure compliance with water quality standards. (*PUD No. 1, supra,* 511 U.S. at pp. 714–715.)

The conditions of water quality certification become a condition on the federal permit or license. (33 U.S.C. 1341(d).) In other words, a federal agency such as FERC has no authority to review or reject the conditions a state agency includes in a timely issued Clean Water Act section 401 certification. (*American Rivers, Inc. v. Federal Energy Regulatory Comm'n* (2d Cir. 1997) 129 F.3d 99, 110–111.) This mandate was enacted, in part, to ensure that a federal agency could not "override State water quality requirements." (*Deschutes River Alliance v. Portland General Electric Co.* (D. Or. 2017) 249 F.Supp.3d 1182, 1190 [discussing legislative history of section 401(d)].)

Commenters expressed a variety of concerns regarding implementation of the water quality objectives through water quality certifications. Some commenters suggested that the plan amendments could not be effectuated because the Clean Water Act section 401 certification process was not the appropriate procedure to implement the water quality objectives. Commenters also suggest that water quality certification is an impractical means of implementing the water quality objectives, citing to such factors as alleged incompatibility with the FERC licensing process, the length of the water quality certification process, and potential additional delays with certification that could be associated with implementation of the plan amendments. As noted above, however, the Porter-Cologne Act provides the State Water Board with broad discretion in designing its program of implementation, including the time schedule for actions to be taken. (§ 13242.) The State Water Board proposes to implement the plan amendments through both water right actions and water quality actions, which the courts have recognized may be lengthy and complex. As previously explained, the Clean Water Act section 401 certification process is a water quality action that is appropriate for ensuring compliance with state water quality requirements. (PUD No. 1, supra, 511 U.S. at pp. 714–15.) Further, it is but one tool that the State Water Board has to require implementation of the plan amendments. As stated previously, the State Water Board will consider water right actions in separate, future proceedings.

Some commenters also suggested that the State Water Board's use of the Clean Water Act section 401 certification process is an attempt to evade public input. Any application for certification, however, must be publicly noticed. (Cal. Code Regs., tit. 23, § 3858, subd. (a).) In addition, a public

hearing may be held on any certification application. (*Id.*, at subd. (b).) Thus, the public will have an opportunity to raise issues related to the certification.

Other public comments addressed the scope of a state's certification authority under Clean Water Act section 401. For example, some commenters suggested that the Clean Water Act section 401 certification process cannot be used to include geographic areas and activities that are not tied to or based on point source discharges involving the licensed facility. Some commenters asserted that the plan amendments would not alleviate the water quality issues caused by a specific hydropower facility, in part, because the amendments are related to a geographic area beyond the reach of the facility's impacts. It is premature, however, to object to the water quality certification process as a means of setting conditions for the protection of beneficial uses and attainment of water quality objectives. The State Water Board has not developed certification conditions in this planning proceeding, nor has it suggested that it would establish certification conditions in a watershed unaffected by the hydropower facility's activities. Instead, the State Water Board will consider appropriate conditions to protect water quality in a future project-specific certification proceeding.

Further, the United States Supreme Court has addressed the scope of a state's certification authority, concluding that a state is not limited to regulating the discharge. "Section 401(a)(1) identifies the category of activities subject to certification—namely, those with discharges. And § 401(d) is most reasonably read as authorizing additional conditions and limitations on the activity as a whole once the threshold condition, the existence of a discharge, is satisfied." (*PUD No. 1, supra*, 511 U.S. at pp. 711–712.) In that case, the Court concluded that Washington State's minimum stream flow requirement was a permissible condition of a section 401 certification to enforce a designated use contained in the state's water quality standard. (*Id.*, at p. 723.) Thus, the State Water Board may consider the activity as a whole when imposing conditions in a water quality certification, including conditions implementing water quality standards. In doing so, the state is not limited to implementing numeric water quality criteria, but may also set conditions to protect designated uses (such as cold water fishery) and apply the state's antidegradation policy. (*Id.*, at pp. 714–719.)

Some commenters claimed that the plan amendments are too broad or ill-defined. Water quality standards can be expressed in terms of numerical criteria, but can also be based on broadly defined goals expressed through narrative standards or designated uses of a water body. (*PUD No. 1, supra*, 511 U.S. at pp. 714–716 [noting that CWA permits enforcement of "open-ended criteria" such as "the use designated of the river as a fishery" or ensuring that the "aesthetic values [of the river] shall not be impaired"].) However, those goals must be translated into specific limitations for individual projects. (*Id.* at p. 716.) The plan amendments are expressed in narrative and numeric terms to protect designated uses. Therefore, imposing certification conditions to meet the objectives is appropriate under Clean Water Act section 401.

Other commenters questioned whether the State Water Board may revise a water quality certification after it has been issued. As noted above, it is premature to object to the water quality certification process as a means of implementing the water quality objectives, and it is also speculative to consider whether the State Water Board would seek to modify any certification conditions under a reservation of authority. Nonetheless, in general, a state agency cannot unilaterally add new conditions on the federal licensee until the license is renewed or the project has been amended in a way that would have a material adverse impact on water quality and therefore require a new certification. (*See Karuk Tribe v. California Regional Water Quality Control Bd.* (2010) 183 Cal.App.4th 330, 340 fn. 6; *Alabama Rivers Alliance v. FERC* (D.C. Cir. 2003) 325 F.3d 290, 299.) Under Clean Water Act section 401, subdivision (d), however, the State Water Board has

authority to attach "any conditions that are necessary to ensure compliance with" applicable water quality requirements. (*S.D. Warren Co. v. Bd. of Environmental Protection* (2005) 868 A.2d 210, 218.) This includes attaching open-ended conditions as a precaution to ensure compliance with state water quality requirements. (See *ibid.* [upholding reopener that allowed amendment of conditions following notice and hearing]; see also *Port of Seattle v. Pollution Control Hearings Bd.* (2004) 151 Wash.2d 568, 605–606 [upholding adaptive management conditions].)

Scope of Bay-Delta Plan Proceedings

Some commenters asserted that the State Water Board did not fully evaluate the environmental impacts of the plan amendments because it is considering updates to the Bay-Delta Plan in independent proceedings that address for different watersheds, sometimes referred to as Phases I and II of the Bay-Delta Plan Update. (As the *Executive Summary*, Section ES1, *Introduction*, makes clear, the use of the term "Phase" to describe different processes is solely used for administrative convenience to distinguish the different proceedings.) Some commenters contended that the State Water Board failed to consider the whole of the action. They also contended that performing separate environmental reviews for these different watersheds is improper "piecemealing" or "segmenting" prohibited under the California Environmental Quality Act (CEQA). Other commenters suggested that the State Water Board should have defined the scope of the project more broadly to better protect flows through the Delta, for example, by addressing exports in this proceeding.

Pursuant to CEQA, the State Water Board must prepare an environmental impact report (EIR) or, in this case, an SED, whenever it proposes to approve or to carry out a project that may have significant impacts on the environment. (Pub. Resources Code, §§ 21100, 21080.5.) CEQA defines a "project" in part as "an activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment " (Id., § 21065.) A lead agency must analyze the entire project, or the "whole of an action which has a potential for physical impact on the environment," and cannot "piecemeal" its review of the project's significant environmental impacts. (Natural Resources Defense Council, Inc. v. Arcata Nat. Corp. (1976) 59 Cal.App.3d 959, 969, italics omitted; Berkeley Keep Jets Over the Bay Com. v. Board of Port Comrs. (2001) 91 Cal.App.4th 1344, 1358.) This principle ensures that "environmental considerations do not become submerged by chopping a large project into many little ones—each with a minimal potential impact on the environment—which cumulatively may have disastrous consequences. [Citation omitted.]" (Laurel Heights Improvement Assn. v. Regents of University of California (1988) 47 Cal.3d 376, 396; Cal. Code Regs., tit. 14, § 15378, subd. (a).)

In other words, there may be improper piecemealing when: (1) "the purpose of the reviewed project is to be the first step toward future development;" or (2) "the reviewed project legally compels or practically presumes completion of another action." (Banning Ranch Conservancy v. City of Newport Beach (2012) 211 Cal.App.4th 1209, 1223 (Banning Ranch).) "On the other hand, two projects may properly undergo separate environmental review (i.e., no piecemealing) when the projects have different proponents, serve different purposes, or can be implemented independently." (Ibid.)

CEQA does not mandate a single environmental document for two projects simply because they are being contemplated by the same agency at the same time. (*Aptos Council v. County of Santa Cruz* (2017) 10 Cal.App.5th 266, 282, fn. 4.) As discussed in the *Executive Summary*, the State Water Board is addressing the ecological crisis in the Bay-Delta and protect beneficial uses in the Bay-Delta and tributary watersheds through several approaches. This SED evaluates the proposed amendments to

the Bay-Delta Plan involving the LSJR flow objectives and southern Delta salinity objectives, referred to as the Lower San Joaquin River/Southern Delta watershed proceeding or Phase I of the Bay-Delta Plan Update. In a separate process, the Sacramento/Delta watershed proceeding, sometimes referred to as the Phase II Update of the Bay-Delta Plan, the State Water Board is reviewing and considering updates to other elements of the Bay-Delta Plan, including requirements for Delta outflows, Sacramento River and Delta inflows (the Mokelumne, Cosumnes, and Calaveras Rivers), coldwater habitat, and interior Delta flows (State Water Board 2017a). In considering two separate projects in this manner, the State Water Board has not "chopp[ed] a large project into many little ones" in an attempt to "submerge environmental considerations." (*Laurel Heights, supra*, at p. 396.)

It is appropriate for the State Water Board to define the scope of each independent update and consider amendments to the objectives in the LSJR and its three tributaries first. The environmental conditions in the LSJR are different than those in the Sacramento River and Delta tributaries, with fish populations generally doing worse in the LSJR watershed as described in Chapter 7, the Executive Summary, and Master Response 3.1, Fish Protection. Environmental cues, most notably olfactory cues, are the primary method used by adult fall-run Chinook salmon to locate and return to natal streams (see Appendix C Technical Report on the Scientific Basis for Alternative San Joaquin River Flow and Southern Delta Salinity Objectives). The Sacramento River is the largest source of fresh water for the Delta and contributes approximately 18.3 million acre-feet per year; in contrast, the three LSJR tributaries contribute an average of 1.9 million acre-feet of freshwater to the Delta per year (Chapter 2, Water Resources, Section 2.12). These separate water quality proceedings are both large in scale, involve different water quality objectives and largely different geographic areas, each has its own purpose, and each can be developed and implemented independently of each other. If the State Water Board adopts the SJR flow objectives, the southern Delta salinity objectives and associated plan amendments, these amendments, and any increased contribution of flows to the Delta will take regulatory effect, and will be taken into account in the Sacramento/Delta watershed proceeding. Thus, the Bay-Delta Plan will remain a coherent and comprehensive document.

In the 2009 Notice of Preparation (NOP) and 2011 Revised NOP, the State Water Board indicated that, given the broad scope of its water quality control planning efforts, it was initially focusing its review of the Bay-Delta Plan on the southern Delta salinity and LSJR flow objectives and their implementation. The 2009 NOP stated that the State Water Board anticipated the need for additional environmental documentation to evaluate other components of the Bay-Delta Plan and one or more EIRs to support any water right decision or order to implement the plan's requirements. The 2012 Supplemental NOP indicated that the State Water Board would prepare a separate SED for other elements of the Bay-Delta Plan Update.

The State Water Board's ultimate decision to evaluate different amendments to the 2006 Bay-Delta Plan in separate proceedings reflects the independent and segregable nature of the planning activities. Although the State Water Board is evaluating flow-based objectives for the protection of fish and wildlife in both water quality control planning proceedings, one proceeding is not a reasonably foreseeable consequence of the other. (*Aptos Council, supra*, at p. 282.) The proceedings serve different purposes and involve different water quality objectives and largely different geographic areas. As such, the LSJR flow objectives are not dependent on the adoption and

⁴ The State Water Board will consider implementing changes to the Bay-Delta Plan through water right actions in a future water right proceeding. Any reference to a future water right proceeding should not be construed as a limitation on the type, scope, or number of water right or water quality actions necessary to achieve the water quality objectives.

implementation of the Sacramento River and Delta tributary objectives. Moreover, unlike in previous Bay-Delta water quality planning, the State Water Board in this proceeding is considering objectives on the individual tributaries to the LSJR that provide habitat and downstream flows for anadromous fish species. This new approach is more complex, and specific to these watersheds, and thus, lends itself more readily to separate projects. (*Banning Ranch*, *supra*, 211 Cal.App.4th 1223-1226.)

The State Water Board's watershed-based planning strategy accounts for the unique and distinct characteristics of the San Joaquin River watershed relative to the Sacramento River watershed and other Delta tributaries. Chinook salmon are an important ecological, cultural, subsistence, recreational, and commercial fish species in California historically found in both the Sacramento and SJR Watersheds. However, while the Sacramento River watershed historically supported four Chinook salmon runs: winter-, spring-, fall-, and late fall-run; the SJR Watershed historically (prior to 1940) only supported large spring-run and fall-run (and possibly late fall-run) Chinook salmon populations. Unlike the Sacramento River watershed, which continues to support all four Chinook salmon runs, albeit in smaller populations, the SJR Watershed now only supports fall-run Chinook salmon. (See Appendix C, *Technical Report on the Scientific Basis for Alternative San Joaquin River Flow and Southern Delta Salinity Objectives*, Section 3.2, *Fall-Run Chinook Salmon*). While fall-run Chinook salmon are present in both the Sacramento River and SJR, the general timing of important life stages of the fall-run Chinook Salmon differ as migration timing, residence times, and habitat use by juvenile Chinook salmon are highly variable and reflective of the differences in their juvenile habitat (including temperature) in the different watersheds (Table 1.2-1).

Table 1.2-1. General Timing of Important Life Stages of San Joaquin River and Sacramento River Watershed Chinook Salmon

	Adult Migration Period	Adult Peak Migration	Adult Spawning Period	Adult Peak Spawning Period	Juvenile Emergence Period	Juvenile Stream Residency (Months)	
San Joaquin River Basin							
Fall-run	Sept-Dec	Nov	Nov-Jan	Nov-Dec	Dec-Mar	2-5	
Sacramento River Basin							
Winter-run	Dec-Jul	Mar	Late Apr–mid Aug	May-Jun	July-Oct	5-10	
Spring-run	Feb-Sept	May-Jun	Late Aug-Nov	Oct-Nov	Dec-Mar	12-16	
Late-fall-run	Oct-Apr	Dec–Jan	Early Jan–Apr	Feb-Mar	Apr–Jun	7–13	
Fall-run	Jun-Dec	Oct	Late Sep-Jan	Oct	Dec-Apr	1-5	
Sources: Modified from Yoshiyama et al. 1998; NMFS 2014.							

As discussed in the Executive Summary, Section ES4.1, Need for Flow Objectives; and Chapter 19, Analyses of Benefits to Native Fish Populations from Increased Flow between February 1 and June 30; Appendix K, Revised Water Quality Control Plan; and Master Response 3.1, Fish Protection, while both the SJR and Sacramento River Watersheds have seen declines in Chinook salmon populations, the State Water Board prioritized and allocated resources to address the LSJR flow objectives because the LSJR's three eastside tributaries—the Stanislaus, Tuolumne, and Merced Rivers—(individually or combined) have had larger reductions in the natural production and

returns for the ocean of adult fall-run Chinook salmon than any of the other tributaries (or combination of tributaries) to the Sacramento or SJR, when comparing the 1967–1991 and 1992–2011 time periods (Figure 1.2-1).

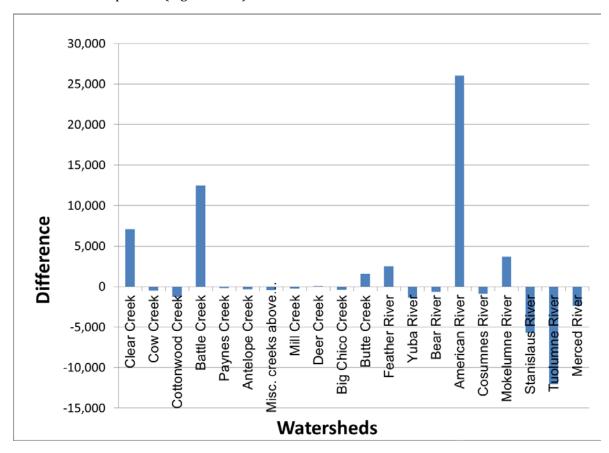


Figure 1.2-1. Difference in Natural Production of Adult Fall-Run Chinook Salmon when Comparing the 1967–1991 Average and the 1992–2011 Average in Tributaries to the Sacramento or San Joaquin Rivers, Showing that Salmon Declines in the Tributaries to the San Joaquin River (the Stanislaus, Tuolumne, and Merced Rivers) are Greater Compared to other Watersheds in Recent Decades. (Difference = [1992–2011 time period average of estimated yearly natural production as reported in USFWS 2013] minus [1967–1991 time period average of estimated yearly natural production as reported in USFWS 2013] (repeated for each watershed).

For these reasons, the State Water Board prioritized and allocated resources to address the significant fishery declines since the SJR objectives were adopted in the 1995 Bay-Delta Plan. Moreover, the LSJR flow objectives fill the void left by the Vernalis Adaptive Management Plan (VAMP), an experimental program that included provisions for adaptive pulse flows in the SJR during the critical April and May period, which ended in 2011. For a further discussion of the current fish decline in the SJR Basin and the need for increased flow, please see Master Response 3.1, *Fish Protection*.

Moreover, in Chapter 17, *Cumulative Impacts, Growth-Inducing Effects, and Irreversible Commitment of Resources*, the SED evaluates the potential cumulative environmental effects associated with the LSJR flow and SDWQ objectives together with other projects and programs that could cause related impacts, including the Sacramento/Delta watershed update to the Bay-Delta Plan (Phase II). A 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 reasonable foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." (Cal. Code Regs., tit. 14, § 15355, subd. (b).) Chapter 17 recognizes that the environmental impacts of the export/inflow objectives and reverse flow objectives for Old and Middle River, in combination with the plan amendments in this proceeding, could have cumulative effects on surface hydrology, water quality, aquatic biological resources, agricultural resources, and service providers. Thus, to the extent feasible and without engaging in unnecessary speculation, the potential cumulative environmental effects of the different proceedings are evaluated in the SED.

Some commenters suggested that the State Water Board should have addressed Delta exports in this proceeding, rather than in the Sacramento/Delta watershed proceeding, to better protect fish and wildlife beneficial uses. The State Water Board recognizes the importance of the continuity of flows out to the ocean, but for the reasons already discussed in this master response, is focusing on the eastside tributaries and LSJR in this proceeding. Further, as discussed in Master Response 2.1, Amendments to the Water Quality Control Plan, the program of implementation in Appendix K provides for protection of the migratory corridors in the larger watershed. Appendix K states that the State Water Board will exercise its water right and water quality authority to ensure that flows required to meet the LSJR flow objectives are used for their intended purpose and not diverted for other purposes. Commenters also suggested that by addressing exports in a different proceeding, the State Water Board has predetermined that flows, and not exports, are the problem. The importance of flows as a key factor in aquatic ecosystem health is well supported in this proceeding. Flow increases in the LSIR at Vernalis provided by the LSIR flow objectives are high enough to improve migratory corridors through the Delta (Appendix F.1 and Master Response 2.1). As described throughout the SED, nearly every feature of habit that affects fish and wildlife flow beneficial uses is, to some extent, determined by flow (e.g., temperature, water chemistry, and physical habit complexity). For the reasons explained in this section and in the SED, it is reasonable for the State Water Board to focus on flow objectives on the LSJR, and the Stanislaus, Tuolumne, and Merced Rivers in this proceeding.

Consideration of Beneficial Uses

The Bay-Delta Plan lays out water quality protections to ensure the various beneficial uses of water—drinking, irrigation, fisheries, and more—are protected. In establishing the water quality objectives, the State Water Board must consider a number of factors in determining how to reasonably protect particular uses, including beneficial uses of water, the environmental characteristics of the hydrographic unit being considered, water quality conditions that could reasonably be achieved through the coordinated control of all factors affecting water quality in the area, and economic considerations, and other factors. (§ 13241, subd. (a)–(f).) (See *The Porter-Cologne Water Quality Control Act and the Clean Water Act* section of this master response for more information regarding section 13241 factors.)

Some commenters expressed concern about the State Water Board's consideration of beneficial uses and stated that the SED provides an extensive analysis of the potential ecological benefits of the flow requirements but that it generalizes or de-emphasizes the potential adverse impacts on other beneficial uses, including water supplies. Some commenters also suggested that the State Water Board should more clearly explain how it considered other beneficial uses in establishing the LSJR

flow objectives. While setting the LSJR flow objectives with regulatory effect, the State Water Board reviews and considers all the effects of LSIR flow objectives through a broad evaluation into public trust and public interest concerns including, but not limited to, aquatic resources, economics, reservoir storage, power production, and groundwater resources. A precise quantification of potential water uses and impacts on these uses, or a cost-benefit analysis, is not required to meet the State Water Board's water quality planning obligations. (United States v. State Water Resources Control Bd., supra, at 182 Cal. App. 3d at pp. 118–119.) As summarized in the Executive Summary and discussed in detail throughout the SED, however, the SED provides such an evaluation. In accordance with CEQA and the Porter-Cologne Act, the SED identifies and evaluates the potential significant adverse environmental effects of the plan amendments, as well as economic and other impacts. This includes, for example, analyses of impacts on agricultural resources (Chapter 11, Agriculture Resources, and Appendix G, Agricultural Economic Effects of the Lower San Joaquin River Flow Alternatives), service providers (Chapter 13, Service Providers), and other economic analyses (Chapter 20, Economic Analyses). The SED's analyses provide a sufficient and credible assessment of the environmental impacts and other considerations that will inform the State Water Board's decision regarding the plan amendments. For a summary of the resource impacts analyzed in the SED, please refer to Chapter 18, Summary of Impacts and Comparison of Alternatives, and Master Response 1.1, General Comments.

In consideration of the section 13241 factors, including consideration of beneficial uses, the plan amendments recommend a range of between 30 and 50 percent of unimpaired flow, with a starting point of 40 percent. The SED analysis shows that this range of unimpaired flow would provide reasonable protection of fish and wildlife while moderating impacts on water supply for agriculture, drinking water, and other uses. The plan amendments recognize that although flow levels are unsustainably low at significant times on the three major eastside tributaries, flow levels are not the only factor affecting fish survival and that a number of other factors degrade conditions for native fish, such as nonnative species, predation, high water temperatures, barriers to fish passage, and habitat loss. Thus, the plan amendments as presented in Appendix K, Revised Water Quality Control *Plan*, include recommendations to other agencies for non-flow actions (e.g., habitat improvement) that are complementary to the LSJR flow objectives for the protection of fish and wildlife. Implementing non-flow actions may support a change in the required percent unimpaired flow, within the range specified by the LSJR flow objectives, if certain criteria are met. These considerations, together with the evaluation of impacts on other beneficial uses, are explained in a level of detail in the SED that is appropriate for a programmatic analysis and provides a factual basis for the State Water Board's ultimate determination. For more information regarding the programlevel analysis of the SED in evaluating environmental impacts of the plan amendments, please see Master Response 1.1, General Comments.

The State Water Board is complying with section 13241 by proposing the LSJR flow objectives to ensure the reasonable protection of fish and wildlife beneficial uses. Commenters appear to interpret this section as requiring each water quality objective to protect all beneficial uses, claiming that proposing water quality objectives that fail to protect all beneficial uses is a violation of section 13241. Putting aside the difficulty of developing a water quality objective that simultaneously protects all beneficial uses, such interpretation is at odds with the requirements of section 13241 and the Clean Water Act.

Section 13241 has two main requirements. First, it requires water quality objectives in water quality control plans that in the State Water Board's judgment will ensure the reasonable protection of

beneficial uses and the prevention of nuisance. The existing 2006 Bay-Delta Plan and regional water quality control plans encompassing the plan area accomplish that for beneficial uses other than fish and wildlife. Second, it requires the State Water Board to consider factors such as past, present, and probable future beneficial uses of water when establishing water quality objectives. When it considers adoption of the flow objectives, the State Water Board will consider all beneficial uses of water as identified and analyzed in the SED. Nowhere does section 13241 require each water quality objective by itself to protect all beneficial uses.

The Clean Water Act similarly conceives of a water quality standard as protecting a particular use, not all uses. For example, water quality criteria are defined as "elements of water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports *a* particular use. When criteria are met, water quality will generally protect the designated use." (40 C.F.R. § 131.3, subd. (a) (emphasis added).)

Public Trust Resources

The public trust doctrine provides another basis for the State Water Board's authority to regulate the allocation and use of water. Originally, the public trust extended to tidelands and the protection of navigable waterways. In California, the doctrine has been extended to protect not only navigation, commerce, and fisheries, but also recreation and ecological purposes. (See *National Audubon, supra,* 33 Cal.3d at pp. 434-435 (quoting *Marks v. Whitney* (1971) 6 Cal.3d 251); *Light, supra,* 226 Cal.App.4th at p. 1480 ["Although, the doctrine originally protected navigable waterways for the purposes of navigation, commerce, and fishing, *National Audubon* extended the geographic scope of the doctrine to non-navigable streams that feed navigable waterways, and it expanded the purpose of the doctrine to the preservation of water's function as natural habitat"].)

Under National Audubon, the State Water Board "has an affirmative duty to take the public trust into account in planning and allocation of water resources, and to protect the public trust uses whenever feasible." (National Audubon, supra, 33 Cal.3d at p. 446.) While "[a]s a matter of practical necessity the state may have to approve appropriations despite foreseeable harm to public trust uses," the State Water Board, as trustee, must exercise its authority "so far as consistent with the public interest." (Id. at pp. 446–47.) This duty also requires "continuing supervision" of water resources. (*Id.* at pp. 447.) But the public trust doctrine does not create an affirmative duty to protect public trust uses in a particular manner. It requires balancing and measures for protection where feasible. "[T]he public trust permits—indeed requires—the balancing of competing uses." (Center for Biological Diversity, Inc. v. FPL Group, Inc. (2008) 166 Cal.App.4th 1349, 1369; National Audubon, supra, 33 Cal.3d at pp. 446-47; State Water Resources Control Bd. Cases, supra, 136 Cal.App.4th at p. 778.) "What is 'feasible,' however, is a matter for the Board to determine." (State Water Resources Control Bd. Cases, supra, 136 Cal.App.4th at p. 778.) "[I]n determining whether it is 'feasible' to protect public trust values like fish and wildlife in a particular instance, the Board must determine whether protection of those values, or what level of protection, is 'consistent with the public interest." (Ibid.) When considering the public trust in water, the adoption and implementation of a water quality control plan generally satisfies the State Water Board's public trust duty. (Id. at p. 778.)

In short, "[i]t [is] for the Board in its discretion and judgment to balance all of these competing interests in adopting water quality objectives and formulating a program of implementation to achieve those objectives." (*Id. at p. 778.*) As discussed throughout the SED, the State Water Board identified the need to protect fish and wildlife beneficial uses, a means to provide that protection through the development of the water quality objectives and their implementation, and considered

the impacts of the plan amendments on various resources, including groundwater resources (see Chapter 9, *Groundwater Resources*, and Master Response 3.4, *Groundwater and the Sustainable Groundwater Management Act*), recreational resources (see Chapter 10, *Recreational Resources and Aesthetics*) water supply (see Chapter 13, *Service Providers*; Master Response 3.6, *Service Providers*; and Master Response 2.7, *Disadvantaged Communities*), aquatic resources (see Chapter 7, *Aquatic Biological Resources*; Master Response 3.1, *Fish Protection*) and economic resources (see Chapter 20, *Economic Analyses*; Master Response 8.1, *Local Agricultural Economic Effects and the SWAP Model*; Master Response 8.2, *Regional Agricultural Economic Effects*; *and* Master Response 8.4, *Non-Agricultural Economic Considerations*). Please also see Master Response 3.1, *Fish Protection*, for more information on the need for increased flow and the purpose of the Bay-Delta Plan Update.

Domestic and Municipal Uses of Water

Section 106 expresses the policy of the state "that the use of water for domestic purposes is the highest use of water and that the next highest use is for irrigation." Section 106.5 further declares the policy of the state that municipal water rights should be protected to the fullest extent necessary for existing and future uses. Some commenters suggested that it is improper to prioritize fish and wildlife beneficial uses in light of these provisions.

The priorities in section 106 are important; however, they are not absolute. Section 106 must be considered in the context of other statutory declarations of policy that also establish policies for the administration and protection of the state's water resources. While the State Water Board has relied on section 106 to condition water right permits to protect water for domestic uses, the policy is not conclusive because section 1257 states that, in acting on water right applications, the relative benefit to be derived from all beneficial uses of the water concerned, including the preservation and enhancement of fish and wildlife, shall be considered. Importantly, section 107 additionally provides: "The declaration of the policy of the State in this chapter is not exclusive, and all other or further declarations of policy in this code shall be given their full force and effect." Among the other declarations of policy is section 13000, which establishes state policy that the "quality of the waters of the state shall be protected for use and enjoyment by the people of the state" and "activities and factors which may affect the quality of the waters of the state be regulated to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved " (§ 13000.) The State Water Board is thus required to formulate and adopt water quality control plans consistent with this policy (§ 13240) and which contain water quality objectives that will ensure the reasonable protection of beneficial uses (§ 13241). This includes the reasonable protection of fish and wildlife beneficial uses. (§ 13050, subd. (f).)

Moreover, the State Water Board as trustee of the public trust "retains supervisory control over the state's waters such that no party has a vested right to appropriate water in a manner harmful to the interests protected by the public trust," which includes the protection of fish and wildlife. (*United States v. State Water Resources Control Bd., supra,* 182 Cal.App.3d at p. 149, citing *National Audubon, supra,* 33 Cal.3d at p. 445.) To the extent an appropriation for domestic or agricultural use is harming the public trust, the State Water Board has a duty of continuing supervision over the appropriation and is not limited by past allocation decisions. (*National Audubon, supra,* 33 Cal.3d at pp. 445-447.) As explained above, however, the State Water Board has yet to make any decisions about which water right permits may be modified and what conditions may be attached. The State

Water Board will carefully examine applicable factors when considering the assignment of responsibility for implementing the Bay-Delta Plan in future water right proceedings.

For responses to comments regarding the human right to water as set forth in section 106.3, please see Master Response 2.7, *Disadvantaged Communities*.

2010 Delta Flow Criteria Report

Some commenters sought clarification on the relationship between the 2010 *Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem* (2010 Delta Flow Criteria Report) (State Water Board 2010) and the Bay-Delta Plan while other commenters argued that the State Water Board must approve flow objectives similar to the criteria and geographic scope identified in the report. As discussed below, the flow criteria identified in the 2010 Delta Flow Criteria Report do not have regulatory effect, but instead reflect the State Water Board's determination as to the flows that protect public trust resources in the Delta under certain narrow analytical constraints.

In November 2009, California enacted comprehensive water reform legislation intended to ensure a reliable water supply for the state and to restore the Delta and other ecologically sensitive areas. As part of this legislation, the Sacramento–San Joaquin Delta Reform Act of 2009 (Delta Reform Act) established the Delta Stewardship Council. The council is tasked with developing a management plan for the Delta, known as the Delta Plan, and providing direction to multiple agencies that take actions related to the Delta. section 85086 of the Delta Reform Act established an accelerated process to determine the instream flow needs of the Delta for purposes of facilitating planning decisions to achieve the Delta Plan's objectives. It also required the State Water Board to develop new flow criteria for the Delta ecosystem to protect public trust resources in the Delta. In carrying out this task, section 85086 required the State Water Board to review existing water quality objectives and use the best available scientific information and to develop the flow criteria in a public, informational proceeding. The State Water Board was required to develop the flow criteria within 9 months of enactment of the statute and to submit its flow criteria determinations to the Delta Stewardship Council within 30 days of their development.

Accordingly, in August 2010, the State Water Board adopted the 2010 Delta Flow Criteria Report that identified the volume, timing, and quality of flows under different hydrologic conditions that protect public trust resources in the Delta. The flow criteria were developed through an informational proceeding conducted pursuant to the State Water Board's regulations, and not through a regulatory or adjudicative proceeding. The 2010 Delta Flow Criteria Report presented a technical assessment of flow and operational requirements to provide fishery protection under existing conditions. The report determined, among other things, that 60 percent of unimpaired SJR inflow at Vernalis from February through June, to be provided generally on a proportional basis from SJR tributaries, was necessary to preserve the attributes of a natural, variable system to which native fish species are adapted. The report also pointed to the need for flows that reflect a more natural frequency, duration, timing, and rate of change to provide adequate conditions for spawning and rearing of juvenile salmon as well as for essential migration.

The Delta Reform Act does not supersede the State Water Board's water quality planning obligations under the Porter-Cologne Act. The State Water Board was not obligated to establish a water quality objective for the SJR that requires 60 percent of unimpaired flow or provides the same level of benefit, nor was the State Water Board obligated to focus on the identical geographic area evaluated

in the 2010 Delta Flow Criteria Report. As discussed in the *Executive Summary*, this master response, and in Master Response 3.1, *Fish Protection*, regarding the purpose of the plan update and narrative objective, when setting water quality objectives with regulatory effect, the State Water Board considers, among other factors, the beneficial uses to be protected by the proposed water quality objectives in addition to other beneficial uses of water. Although the 2010 Delta Flow Criteria Report reviewed the scientific basis for developing SJR inflow criteria, it was not designed to look, nor did it look, at the effect that the increased level of unimpaired flow would have on other competing uses of water or the environment. For example, the 2010 Delta Flow Criteria Report did not take into account the effect that dedicating the level of unimpaired flow for the protection of fish resources would have on other uses of water or on other fishery needs such as coldwater habitat. The report also did not consider public interest needs for water. In fact, the report expressly identifies its limitations and recommends that water supply modeling and temperature analyses be conducted. (State Water Board 2010, p. 6.)

As discussed in the *Executive Summary* and throughout the SED, the myriad factors to be considered by the State Water Board in establishing the water quality objectives are an inherent part of the analyses in the SED that allows decision makers and the public understand the impacts of the proposed objectives not only on the environment, but also on other beneficial uses, economics, and other important considerations. The LSJR flow objectives differ from the flow criteria analyzed in the 2010 Delta Flow Criteria Report based on a broad evaluation of these factors.

Peer Review Process

California Health and Safety Code section 57004 requires organizations within the California Environmental Protection Agency (CalEPA) to submit for external scientific peer review the scientific basis for, or scientific portion of, any rule proposed for adoption. The State Water Board is subject to the peer review requirement because it is an agency within CalEPA, and the plan amendments meet the definition of rule under section 57004(a)(1)(B), which includes policies adopted by the State Water Board pursuant to the Porter-Cologne Act that have the effect of a regulation. Before adopting a final rule, the State Water Board is required to submit for the external scientific peer review entity's evaluation the scientific portion of the proposed rule together with "a statement of the scientific findings, conclusions, and assumptions on which the scientific portions of the proposed rule are based and the supporting scientific data, studies, and other appropriate materials." (Health & Saf. Code, § 57004, subd. (d)(1).) Section 57004 (a)(2) defines scientific basis and scientific portions to mean "those foundations of a rule that are premised upon, or derived from, empirical data or other scientific findings, conclusions, or assumptions establishing a regulatory level, standard, or other requirement for the protection of public health or the environment." The external scientific peer review entity, which must be qualified, objective, and neutral, then prepares an evaluation of the scientific basis of the proposed rule.

Accordingly, in August 2011, the State Water Board, Division of Water Rights, submitted a request for the peer review of the State Water Board's *Technical Report on the Scientific Basis for Alternative San Joaquin River Flow and Southern Delta Salinity Objectives* (Appendix C of the SED) (State Water Board 2011) in accordance with established peer review guidelines (State Water Board 2017b). The information and analytical tools described in Appendix C provide the State Water Board with the scientific basis and tools needed to consider potential changes to the water quality objectives in the 2006 *Water Quality Control Plan for the San Francisco Bay/Sacramento–San Joaquin Delta Estuary*

(2006 Bay-Delta Plan) and their associated program of implementation. The purpose of the peer review was to ensure that the plan amendments were based upon sound scientific knowledge, methods, and practices.

The peer review request identified six specific issues related to the SJR flows for the protection of fish and wildlife beneficial uses and three specific issues related to the water quality objectives for the protection of southern Delta agricultural beneficial uses, as well as two broad overarching questions regarding the scientific portion of the draft objectives and program of implementation taken as a whole. The six issues related to the SJR flows generally focused on the existing impairment of the three eastside tributaries, the appropriateness of the approach used to develop the LSJR flow objectives, and the appropriateness of using a percent of unimpaired flow as part of the LSJR flow objective. They also focused on the appropriateness of the tool presented in Chapter 5 of Appendix C, the Water Supply Effects (WSE) model, for evaluating potential water supply impacts associated with LSJR flow objective alternatives. The three issues related to the SDWQ objective generally focused on the sufficiency of the statistical approach to characterize the salinity conditions, sufficiency of the mass balance analysis used in Appendix C, and the methodology and conclusion used in the Hoffman Report (Appendix G of the SED, *Agricultural Economic Effects of the Lower San Joaquin River Flow Alternatives: Methodology and Modeling Results*).

Attachment 2 of Appendix C provides the list of the five peer reviewers selected to comment on the technical report, their comments, and State Water Board responses to their comments. The peer reviewers' comments indicated that they understood the intent of their review, were qualified to conduct the review, and that their reviews were adequately supported by the materials provided to them. In general, the peer reviewer comments indicated an overall agreement with the scientific basis and methodology presented in Appendix C. For more information regarding the peer review as it relates to unimpaired flow and the scientific basis for the plan amendments, please see Master Response 3.1, *Fish Protection*. For more information regarding the peer review as it relates to the WSE model, please see Master Response 3.2, *Surface Water Analyses and Modeling*. For more information regarding the justification for the SDWQ objective, please see Master Response 2.1, *Amendments to the Water Quality Control Plan* and Master Response 3.3, *Southern Delta Water Quality*. For information regarding the program of implementation and the responsibilities of USBR and DWR please see Master Response 3.3.

Consultation Process

As described in the *Executive Summary*, ES10.4, *Review and Consultation Requirements*, the State Water Board consulted with public agencies and the public on the update of the 2006 Bay-Delta Plan and the potential environmental effects of the plan amendments. Consulting agencies included the U.S. Bureau of Reclamation (USBR), National Marine Fisheries Service (NMFS), California Department of Water Resources (DWR), California Department of Fish and Wildlife (CDFW), USEPA, the Central Valley Regional Water Quality Control Board, the San Francisco Bay Regional Water Quality Control Board, California Department of Parks and Recreation, the State Lands Commission, and local public agencies. CDFW, the California Department of Parks and Recreation, and the State Lands Commission are Trustee Agencies, state agencies with jurisdiction over natural resources affected by the plan amendments (Cal. Code Regs., tit. 14, § 15386). Because the State Water Board is the only public agency with discretionary approval over the plan amendments, there are no responsible agencies as defined in State CEQA Guidelines section 15381. Please see Master Response

2.5, *Baseline and No Project*, for a summary of the CEQA noticing associated with the plan amendments.

The State Water Board is the lead agency for this project. Public Resources Code section 21067 defines "lead agency" as "the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment." Public Resources Code section 21069 defines "responsible agency" as "a public agency, other than the lead agency, which has responsibility for carrying out or approving a project." The State CEQA Guidelines provide further clarity to the respective roles of lead and responsible agencies. Lead agencies are tasked with deciding whether an EIR or negative declaration shall be prepared, and are responsible for preparing the document. (*Id.*, § 15367.) Responsible agencies include "all public agencies other than the lead agency which have discretionary approval power over the project." (*Id.* § 15381.)

Some commenters questioned whether the State Water Board failed to properly identify and consult with responsible agencies. Specifically, they argued that the State Water Board should have consulted with agencies that the commenters identified as responsible agencies, including state agencies (e.g., DWR and CDFW), federal agencies (e.g., USBR, FERC, and the U.S. Fish and Wildlife Service), and local agencies (e.g., irrigation districts). Because none of these agencies has discretionary authority for "carrying out or approving" the project—the amendments to the 2006 Bay-Delta Plan—there are no responsible agencies with whom the State Water Board was obligated to consult.⁵

Here, the State Water Board is the only state agency with authority for carrying out or approving the plan amendments. The regulation of other state and local agencies through the adoption and implementation of the plan's requirements does not bestow them with approval power over the project. Rather they are regulated entities, not responsible agencies, who must comply with the Bay-Delta Plan. Further, federal agencies are not responsible agencies because they are not public agencies within the meaning of CEQA. (Cal. Code Regs., tit. 14, § 15379.) Lastly, it should be noted that the requirement to consult with state fish and wildlife agencies under Section 2081 under CESA and the requirement to consult with federal fish and wildlife agencies under the Federal Endangered Species Act, Section 7, applies when an action would take or otherwise harm endangered species. The plan amendments are to protect fish and wildlife beneficial uses and therefore consultation requirements under CESA Section 2081 and ESA Section 7 are not applicable.

⁵ This conclusion is supported by *Lexington Hills Ass'n v. State of Cal.* (1988) 200 Cal.App.3d 415. *Lexington Hills* involved the approval of timber harvest plans by the California Department of Forestry, under its certified regulatory program, and posed the question of whether the California Department of Transportation (Caltrans) was a responsible agency. The court held that Caltrans was not a responsible agency even though Caltrans had a role in implementing mitigation measures for the timber harvest plans, and approving encroachment permits for deceleration lanes, warning signs, and other safety devices for logging trucks. (*Id.* at p. 433.) The court found that because Caltrans did not have discretionary decision-making power regarding access to the timber area, it therefore had no approval power that would have made it a responsible agency. (*Ibid.*) Likewise, the court rejected the petitioner's argument that Caltrans' expertise over roadways implicitly delegated approval authority to Caltrans. (*Id.* at p. 434.) Rather, the court held that it was the lead agency's responsibility to analyze the environmental impacts, because CEQA is designed to prevent the subdivision of projects by component or by agency. (*Ibid.*)

References Cited

- National Marine Fisheries Service (NMFS). 2014. Recovery Plan for the Evolutionarily Significant Units of Sacramento River Winter-Run Chinook Salmon and Central Valley Spring-Run Chinook Salmon and the Distinct Population Segment of California Central Valley Steelhead. West Coast Region, Sacramento, CA.
- State Water Resources Control Board (State Water Board). 2010. Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem. August 3. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/deltaflow/docs/final_rpt080310.pdf. Accessed on: December 19, 2017.
- ——. 2011. Request for Scientific Peer Review of the Technical Report on the Scientific Basis for: 1) Alternative San Joaquin River Flow Objectives for the Protection of Fish and Wildlife Beneficial Uses and Program of Implementation; and 2) Alternative Water Quality Objectives for the Protection of the Southern Delta Agricultural Beneficial Uses and Program of Implementation. Available: https://www.waterboards.ca.gov/ water_issues/programs/peer_review/docs/sanjoaquin_river_flow/081211_peer_request_ltr.pdf . Accessed: December 28, 2017.
- ——. 2017a. Phase II Update of the Bay-Delta Plan: Inflows to the Sacramento River and Delta and Tributaries, Delta Outflows, Cold Water Habitat and Interior Delta Flows Fact Sheet. Available: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/docs/2017 10_phaseII_factsheet.pdf. Accessed: January 4, 2018.
- ——. 2017b. *Water Boards Peer Review*. Last revised: August 2, 2017. Available: https://www.waterboards.ca.gov/water_issues/programs/peer_review/. Accessed: December 28, 2017.
- U.S. Fish and Wildlife Services (USFWS). 2013. *Central Valley Project Improvement Act Doubling Graphs*. January 1. Available: http://www.fws.gov/lodi/afrp/. Accessed: June 18, 2015.
- Yoshiyama, R. M., F. W. Fisher, and P. B. Moyle. 1998. Historical abundance and decline of Chinook salmon in the Central Valley region of California. *North American Journal of Fisheries Management* 18:487–521.