

**U.S. FISH AND WILDLIFE SERVICE AND U.S. BUREAU OF RECLAMATION**

**WATER YEAR 2018 FINAL ACCOUNTING  
FISHERY AND WATER QUALITY CONTROL PLAN ACTIONS**

**September 30, 2019**

**BACKGROUND**

Pursuant to section 3406(b)(2) of the Central Valley Project Improvement Act (CVPIA), the Secretary of the Interior must:

dedicate and manage annually eight hundred thousand acre-feet of Central Valley Project yield for [1] the primary purpose of implementing the fish, wildlife, and habitat restoration purposes and measures authorized by this title; [2] to assist the State of California in its efforts to protect the waters of the San Francisco Bay/Sacramento-San Joaquin Delta Estuary; and [3] to help meet such obligations as may be legally imposed upon the Central Valley Project under State or Federal law following the date of enactment of this title, including but not limited to additional obligations under the Federal Endangered Species Act.

The Department of the Interior (Interior) manages (b)(2) water consistent with its May 9, 2003 (b)(2) Policy and December 17, 2003 (b)(2) Guidance and relevant case law, including the Ninth Circuit Court's decision in Bay Inst. of San Francisco v. United States, 87 Fed. Appx 637 (2004) (hereinafter "2004 Decision"), confirming Interior's discretion to give effect to the "hierarchy of purposes" in Section 3406(b)(2), and the Ninth Circuit's recent decision in San Luis & Delta Mendota Water Authority v. United States, 672 F.3d 676 (2012) (hereinafter "2012 Decision"), affirming the District's Court's memorandum opinion in San Luis & Delta Mendota Water Authority v. Dept. of the Interior, 1:97-cv-6140, 1:98-cv-5261 OWW DLB (E.D. Cal. Sept. 19, 2008) (hereinafter SLDMWA).

In SLDMWA, Judge Wanger stated that the "primary purpose" of CVPIA Section 3406(b)(2) "includes all those fish and wildlife restoration activities specifically described in section 3406(b)," including "water dedicated to accomplish the anadromous fish doubling goal set forth in section 3406(b)(1)" and "water needed to accomplish any of the other specifically enumerated programs listed in section 3406(b)(2). SLDMWA, at 43 (underline in original). Judge Wanger also recognized that some WQCP and/or ESA actions "may serve the primary purpose of the CVPIA." Id. at 47. Thus, "if an action taken under the WQCP and/or ESA predominantly contributes to one of the primary purpose programs (e.g., fish doubling), it must be counted toward the 800,000 AF limit." Id. at 48. In so doing, Judge Wanger recognized that there may be some "primacy" to section 3406(b)(1) in relation to other stated purposes of section 3406(b), but he did not rule on that question. Id. at 45.

As explained in Interior's May 2003 policy, "actions" in the context of (b)(2) accounting are computed increases in Central Valley Project (CVP) releases and decreases in CVP exports relative to hypothetical baseline operations. The hypothetical baseline operations reflect how the CVP would have been

operated experiencing WY 2018's hydrology under the regulatory environment that existed at the time CVPIA was passed.

The CVP began Water Year 2018 on October 1, 2017 with high storage levels in Trinity, Shasta, Folsom, and New Melones reservoirs, ranging from 126% to 158% of the 15-year average. Subsequent precipitation in the winter and spring was below average, and annual inflows to the CVP reservoirs ranged from 45% to 95% of the 15-year average. In the 2018 water year, the Sacramento River basin and the San Joaquin River basin were both classified as Below Normal, using D-1641 year type classifications. Consistent with Section 3406(b)(2) of the CVPIA and Interior's May 2003 (b)(2) Policy, the total (b)(2) water allocation was 800 thousand acre feet (TAF) during the 2018 water year.

CVP operations during the 2018 water year were subject to implementation of two biological opinions: (1) the United States Fish and Wildlife Service (FWS) Biological Opinion (BO) on the Coordinated Operations of the CVP and the State Water Project (SWP) for the protection of federally-listed delta smelt, issued in December 2008 (FWS BO), and (2) the National Marine Fisheries Service (NMFS) BO on the Long-term Operations of the CVP and SWP for the protection of listed salmonids and Green Sturgeon, issued in June 2009 (NMFS BO). Both biological opinions included a reasonable and prudent alternative (RPA) to avoid jeopardy to the subject species.

In water year 2018, the 800 TAF (b)(2) allocation was utilized for primary purpose fish actions, Endangered Species Act (ESA) requirements, and/or Water Quality Control Plan (WQCP) requirements. An additional 273.5 TAF of "actions" were taken to comply with additional WQCP requirements, which did not predominantly contribute to the primary purposes of CVPIA 3406(b)(2) and were not accounted for as (b)(2) actions this year.

The purpose of this document is to explain Interior's final accounting of fish actions covered by CVPIA Section 3406(b)(2) in water year 2018. The first attached table, "Water Year 2018 Final CVP Accounting of (b)(2) Actions in TAF," summarizes the fishery actions, including WQCP and ESA actions (relative to the hypothetical baseline operations) covered by CVPIA Section 3406(b)(2) in water year 2018. The second attached table, "Water Year 2018 Final CVP Accounting of Actions in TAF Not Covered with (b)(2) Water", summarizes WQCP and ESA actions taken during water year 2018 that were not accounted for as (b)(2) actions. Both of those tables are based on the final daily accounting for water year 2018. This narrative, together with the two attached tables, constitutes Interior's final accounting of fishery actions, including ESA and WQCP actions, covered by CVPIA Section 3406(b)(2) during water year 2018 and explains how Interior exercised its authority and discretion under CVPIA Section 3406(b)(2) during that same period.

**Water Year 2018 Fish Actions Covered By (b)(2) Water**

**October 2017:**

On Clear Creek, flows were augmented above the hypothetical baseline using approximately 9.2 TAF of (b)(2) water. Approximately 200 cfs was maintained to help meet AFRP flow objectives for spring-run Chinook egg incubation and rearing, and improved instream conditions for spawning fall-run Chinook salmon. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

**November 2017:**

On Clear Creek, flows were augmented above the hypothetical baseline using approximately 6.0 TAF of (b)(2) water. Approximately 200 cfs was maintained to help meet AFRP flow objectives for spring-run Chinook egg incubation and rearing, and improved instream conditions for spawning fall-run Chinook salmon. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

**December 2017:**

On Clear Creek, flows were augmented above the hypothetical baseline using approximately 6.1 TAF of (b)(2) water. Approximately 200 cfs was maintained to help meet AFRP flow objectives to benefit spring-run Chinook fry, steelhead juveniles and pre-spawning adults, and instream conditions for fall-run Chinook salmon spawning and egg incubation. These releases predominantly contributed to the primary purpose of Section 3406 (b)(2).

**January 2018:**

On Clear Creek, flows were augmented above the hypothetical baseline using approximately 9.2 TAF of (b)(2) water. Approximately 200 cfs was maintained to help meet AFRP flow objectives to benefit spring-run Chinook fry, steelhead juveniles and pre-spawning adults, and instream conditions for fall-run Chinook salmon spawning and egg incubation. These releases predominantly contributed to the primary purpose of Section 3406 (b)(2).

**February 2018:**

On Clear Creek, flows were augmented above the hypothetical baseline using approximately 6.2 TAF of (b)(2) water. Approximately 200 - 225 cfs was maintained to help meet AFRP flow objectives to benefit spring-run Chinook fry, steelhead juveniles and spawning adults, and instream conditions for fall-run Chinook salmon egg incubation and juvenile rearing. These releases predominantly contributed to the primary purpose of Section 3406 (b)(2).

On the American River, flows were augmented above the hypothetical baseline using approximately 16.8 TAF of (b)(2) water. Approximately 2300-3000 cfs was maintained to help meet AFRP flow objectives for fall-run Chinook salmon emergence and rearing and to benefit steelhead spawning adults, egg incubation, and juvenile rearing consistent with the NMFS BO and the American River FMS. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

**March 2018:**

On Clear Creek, flows were augmented above the hypothetical baseline using approximately 9.2 TAF of (b)(2) water. Approximately 200 cfs was maintained to help meet AFRP flow objectives for fall-run Chinook salmon rearing and steelhead spawning and emergence. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

On the American River, flows were augmented above the hypothetical baseline using approximately 2.7 TAF of (b)(2) water. Approximately 2500-3000 cfs was maintained to help meet AFRP flow objectives for fall-run Chinook salmon emergence and rearing and to benefit steelhead spawning adults, egg incubation, and juvenile rearing consistent with the NMFS BO and the American River FMS. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

On the Stanislaus River, flows were augmented above the hypothetical baseline using approximately 2.1 TAF of (b)(2) water. Approximately 768 cfs was maintained as specified in the flow schedule contained in the NMFS BO RPA III.1.3 for steelhead juvenile outmigration and to help meet AFRP flow objectives for fall-run Chinook rearing and outmigration. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

**April 2018:**

On Clear Creek, flows were augmented above the hypothetical baseline using approximately 8.9 TAF of (b)(2) water. Approximately 200-250 cfs was maintained to help meet AFRP flow objectives for fall-run Chinook, late fall-run Chinook, and steelhead juvenile rearing and outmigration, as well as for spring-run Chinook attraction flows in accordance with NMFS RPA I.1.1. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

On the Stanislaus River, flows were augmented above the hypothetical baseline using approximately 61.2 TAF of (b)(2) water. Approximately 1500 cfs was maintained as specified in the flow schedule contained in the NMFS BO RPA III.1.3 for steelhead juvenile outmigration and to help meet AFRP flow objectives for fall-run Chinook rearing and outmigration. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

In the Delta, CVP exports were curtailed to an average of approximately 990 cfs to assist in meeting the San Joaquin Inflow to Export ratio contained in the NMFS BO RPA IV.2.1. During that period, CVP exports were reduced below hypothetical baseline pumping levels by approximately 14.4 TAF to reduce the vulnerability of emigrating juvenile fall-run Chinook salmon and steelhead within the lower San Joaquin River to entrainment into the channels of the South Delta and at the pumps. These export reductions predominantly contributed to the primary purpose of CVPIA 3406(b)(2).

**May 2018:**

On Clear Creek, flows were augmented above the hypothetical baseline using approximately 6.4 TAF of (b)(2) water. Approximately 150-200 cfs was maintained to help meet AFRP flow objectives for fall-run

Chinook, late fall-run Chinook, and steelhead juvenile rearing and outmigration, as well as for spring-run Chinook attraction flows in accordance with NMFS RPA I.1.1. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

On the American River, flows were augmented above the hypothetical baseline using approximately 15.5 TAF of (b)(2) water. Approximately 2000-3500 cfs was maintained to help meet AFRP flow objectives for fall-run Chinook salmon rearing and outmigration and to benefit steelhead spawning egg incubation and juvenile rearing consistent with the NMFS BO and the American River FMS. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

On the Stanislaus River, flows were augmented above the hypothetical baseline using approximately 68.9 TAF of (b)(2) water. Approximately 2000-3000 cfs was maintained as specified in the flow schedule contained in the NMFS BO RPA III.1.3 for steelhead juvenile outmigration and to help meet AFRP flow objectives for fall-run Chinook rearing and outmigration. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

In the Delta, from May 16-31, CVP exports were curtailed to an average of approximately 1,661 cfs to assist in meeting the San Joaquin Inflow to Export ratio contained in the NMFS BO RPA IV.2.1. During that period, CVP exports were reduced below hypothetical baseline pumping levels by approximately 82.3 TAF to reduce the vulnerability of emigrating juvenile fall-run Chinook salmon and CV steelhead within the lower San Joaquin River to entrainment into the channels of the South Delta and at the pumps. These export reductions predominantly contributed to the primary purpose of CVPIA 3406(b)(2).

**June 2018:**

On Clear Creek, flows were augmented above the hypothetical baseline using approximately 2.4 TAF of (b)(2) water. Approximately 700 cfs was peak released to help meet AFRP flow objectives for fall-run Chinook, late fall-run Chinook, and steelhead juvenile rearing and outmigration, as well as for spring-run Chinook attraction flows in accordance with NMFS RPA I.1.1. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

On the American River, flows were augmented above the hypothetical baseline using approximately 71.0 TAF of (b)(2) water. Approximately 3417 cfs was maintained to primarily help meet WQCP NDOI requirements in the Delta. These releases also contributed to help meet AFRP flow objectives for fall-run Chinook salmon rearing and outmigration and to benefit steelhead juvenile rearing consistent with the NMFS BO and the American River FMS. Consistent with the Ninth Circuit's 2004 Decision, confirming Interior's discretion to give effect to Section 3406(b)(2)'s hierarchy of purposes,<sup>1</sup> and 2012 Decision, Interior exercised its discretion and accounted for these WQCP actions as (b)(2) actions this year.

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<sup>1</sup> In the 2004 Decision, 87 Fed. Appx. at 639-40, the Ninth Circuit concluded:

The district court erred in concluding that Interior lacks discretion to refrain from crediting the amount of Project yield actually used for any (b)(2) purpose against the designated 800,000 acre

On the Stanislaus River, flows were augmented above the hypothetical baseline using approximately 36.1 TAF of (b)(2) water. Approximately 2000-3000 cfs was maintained as specified in the flow schedule contained in the NMFS BO RPA III.1.3 for steelhead juvenile outmigration and to help meet AFRP flow objectives for fall-run Chinook rearing and outmigration. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

In the Delta, CVP exports were curtailed to an average of approximately 2,348 cfs. Exports were reduced below hypothetical baseline pumping levels by approximately 24.6 TAF to primarily help meet WQCP NDOI requirements. These export reductions also contributed to help reduce the vulnerability of emigrating juvenile fall-run Chinook salmon and CV steelhead within the lower San Joaquin River to entrainment into the channels of the South Delta and at the pumps. Consistent with the Ninth Circuit's 2004 Decision, Interior exercised its discretion and accounted for these WQCP actions as (b)(2) actions this year.

**July 2018:**

On Clear Creek, flows were augmented above the hypothetical baseline using approximately 6.1 TAF of (b)(2) water. Approximately 150 cfs was released to help meet AFRP flow objectives for fall-run Chinook, late fall-run Chinook, and steelhead juvenile rearing and outmigration. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

On the Sacramento River, flows were augmented above the hypothetical baseline using approximately 52.6 TAF of (b)(2) water. Approximately 13,000 cfs was maintained to primarily help meet WQCP NDOI requirements in the Delta. These releases also contributed to help meet AFRP flow objectives for steelhead juvenile rearing and outmigration. Consistent with the Ninth Circuit's 2004 Decision, Interior exercised its discretion and accounted for these WQCP actions as (b)(2) actions this year.

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feet of Project yield. To hold otherwise would defeat the primary purpose for which the 800,000 acre feet were designated — fish, wildlife, and habitat restoration. Section 3406(b)(2) provides that the "primary purpose" to which the 800,000 acre feet should be dedicated is the implementation of "fish, wildlife, and habitat restoration purposes authorized by this title ... [sic]" Section 3406(b)(2) also provides that the 800,000 acre feet may be used to "help" meet obligations under the Endangered Species Act and to "assist" in meeting water quality standards. If Interior were required to deduct some or all the water it uses for water quality and Endangered Species Act purposes from the (b)(2) dedication, the water needed for implementation of the Improvement Act's restoration mandate could be relegated to a secondary role, or perhaps no role at all. Such a scenario would directly conflict with the Interior's mandate to give effect to the hierarchy of purposes established in Section 3406(b)(2).

Interior's discretion to count, or to refrain from counting, an ESA or WQCP action as a (b)(2) action was confirmed by the Ninth Circuit in 2012. Under the 2012 Decision, 672 F.3d at 705, actions taken to comply with the ESA or WQCP need only count as (b)(2) actions if they predominantly contribute to one of the express primary purposes of CVPIA 3406(b)(2).

On the American River, flows were augmented above the hypothetical baseline using approximately 70.8 TAF of (b)(2) water. Approximately 4818 cfs was maintained to primarily help meet WQCP NDOI requirements in the Delta. These releases also contributed to help meet AFRP flow objectives for fall-run Chinook salmon rearing and outmigration and to benefit steelhead juvenile rearing consistent with the NMFS BO and the American River FMS. Consistent with the Ninth Circuit's 2004 Decision, Interior exercised its discretion and accounted for these WQCP actions as (b)(2) actions this year.

On the Stanislaus River, flows were augmented above the hypothetical baseline using approximately 5.0 TAF of (b)(2) water. Approximately 300 cfs was maintained as specified in the flow schedule contained in the NMFS BO RPA III.1.3 for steelhead juvenile rearing. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

In the Delta, CVP exports were curtailed to an average of approximately 3,859 cfs. Exports were reduced below hypothetical baseline pumping levels by approximately 51.1 TAF to primarily help meet WQCP NDOI requirements. These export reductions also contributed to help reduce the vulnerability of emigrating juvenile fall-run Chinook salmon and CV steelhead within the lower San Joaquin River to entrainment into the channels of the South Delta and at the pumps. Consistent with the Ninth Circuit's 2004 Decision, Interior exercised its discretion and accounted for these WQCP actions as (b)(2) actions this year.

**August 2018:**

On Clear Creek, flows were augmented above the hypothetical baseline using approximately 0.8 TAF of (b)(2) water. Approximately 139 cfs was released to help meet AFRP flow objectives for spring-run Chinook spawning and egg incubation and for steelhead juvenile rearing and outmigration. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

On the Sacramento River, flows were augmented above the hypothetical baseline using approximately 4.0 TAF of (b)(2) water. Approximately 9,000 - 13,000 cfs was maintained to primarily help meet WQCP NDOI requirements in the Delta. These releases also contributed to help meet AFRP flow objectives for steelhead juvenile rearing and outmigration. Consistent with the Ninth Circuit's 2004 Decision, Interior exercised its discretion and accounted for these WQCP actions as (b)(2) actions this year.

On the American River, flows were augmented above the hypothetical baseline using approximately 80.2 TAF of (b)(2) water. Approximately 2,000 – 5,000 cfs was maintained to primarily help meet WQCP NDOI requirements in the Delta. These releases also contributed to help meet AFRP flow objectives for steelhead juvenile rearing consistent with the NMFS BO and the American River FMS. Consistent with the Ninth Circuit's 2004 Decision, Interior exercised its discretion and accounted for these WQCP actions as (b)(2) actions this year.

On the Stanislaus River, flows were augmented above the hypothetical baseline using approximately 5.0 TAF of (b)(2) water. Approximately 300 cfs was maintained as specified in the flow schedule contained in

the NMFS BO RPA III.1.3 for steelhead juvenile rearing. These releases predominantly contributed to the primary purpose of Section 3406(b)(2).

In the Delta, CVP exports were curtailed to an average of approximately 4,282 cfs. During that period, CVP exports were reduced below hypothetical baseline pumping levels by approximately 31.5 TAF to primarily help meet WQCP NDOI requirements. These export reductions also contributed to help reduce the vulnerability of emigrating juvenile CV steelhead within the lower San Joaquin River to entrainment into the channels of the South Delta and at the pumps. Consistent with the Ninth Circuit's 2004 Decision, Interior exercised its discretion and accounted for these WQCP actions as (b)(2) actions this year.

#### **September 2018:**

In the Delta, CVP exports were curtailed to an average of approximately 5,060 cfs, including approximately 500 cfs SWP Banks wheeling for CVP. Exports were reduced below hypothetical baseline pumping levels by approximately 33.7 TAF to primarily help meet WQCP NDOI requirements. These export reductions also contributed to help reduce the vulnerability of migrating fall-run Chinook salmon to diversion into the channels of the Central and South Delta. Consistent with the Ninth Circuit's 2004 Decision, Interior exercised its discretion and accounted for these WQCP actions as (b)(2) actions this year.

### **Water Year 2018 Actions Not Covered with (b)(2) Water**

#### **February 2018:**

On the Stanislaus River, flows were augmented above the hypothetical baseline using approximately 49.1 TAF of water to assist in meeting the WQCP requirements for San Joaquin River flows at Vernalis. "The stated purposes of the Vernalis flow requirements are to 'provide attraction and transport flows and suitable habitat for various life stages of aquatic organisms, including delta smelt and Chinook salmon.'" SLDMWA, at 51 (quoting 1995 WQCP). Although these standards provide some benefit to anadromous fish species, they do "not specifically identify an intent to support the fish doubling goal (or any other specifically-enumerated 3406 program). . . . Actions taken to comply with the . . . Vernalis flow requirement do not 'predominantly' contribute to primary purpose programs." Id. at 51-52.<sup>2</sup> Because these releases did not predominantly contribute to the primary purpose of CVPIA Section 3406(b)(2), Interior exercised its discretion and refrained from accounting for these releases as (b)(2) actions.

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<sup>2</sup> In SLDMWA, the challenged actions taken to comply with Vernalis flow objectives took place in late June of 2004. Some actions taken to meet Vernalis flow objectives during other times of the year (e.g., April and May) also help to meet AFRP flow objectives and benefit anadromous fish, so they predominantly contribute to the primary purpose of CVPIA Section 3406(b)(2). In February of 2018 – as in late June of 2004 – the actions taken to meet Vernalis flow objectives did not predominantly contribute to the primary purpose of CVPIA Section 3406(b)(2).



In the Delta, from February 13-28, CVP exports were curtailed to an average of approximately 1,168 cfs to assist in meeting the Net Delta Outflow requirements in the WQCP. During that period, CVP exports were reduced below hypothetical baseline pumping levels by approximately 93.8 TAF. Actions taken to meet WQCP Net Delta Outflow requirements do not predominantly serve the primary purpose of CVPIA Section 3406(b)(2), SLDMWA, at 51-52.<sup>3</sup> Consistent with the Ninth Circuit's 2004 Decision, Interior exercised its discretion and refrained from accounting for these export reductions as (b)(2) actions.

**June 2018:**

On the American River, flows were augmented above the hypothetical baseline using approximately 71.0 TAF of (b)(2) water. Approximately 3500-4000 cfs was maintained to help meet WQCP NDOI requirements. Because these releases did not predominantly contribute to the primary purpose of CVPIA Section 3406(b)(2), Interior exercised its discretion and refrained from accounting for these releases as (b)(2) actions.

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<sup>3</sup> The May 1995 ER for the 1995 WQCP (Appendix 1) confirms that Net Delta outflow requirements are intended to improve habitat conditions in the Delta for a host of species and fortifies Judge Wanger's conclusion that they "do not predominantly contribute to primary purpose programs." The SWRCB described the purpose of the Delta outflow objectives during the spring (February through June) as:

The purpose of the Delta outflow standards are to increase outflow and restore some of the natural hydrologic patterns that historically occurred in the system and in which native fish and invertebrate species likely evolved and proliferated. The provision of late winter and spring river flow and Delta outflow promotes conditions conducive for spawning and dispersal of delta smelt, longfin smelt, Sacramento splittail, and other estuarine and anadromous species.

The SWRCB described the purpose of net Delta outflow objectives during the summer (July and August) as:

The purpose of these standards is to provide outflow during summer months for maintenance of biological communities in preparation for the fall transition period, described below. The intended benefits are to sustain suitable habitat in the Delta for continued rearing of juvenile and maintenance of adult fish (delta smelt, striped bass, and others) and to reduce seawater intrusions into the estuary to prevent the colonization of undesirable organisms in the Delta (e.g., *Potamocorbula*, *Mya* sp., and others).

The SWRCB described the purpose of the net Delta outflow standard during the fall (September and October) as:

The purpose of this standard is to provide outflow for maintaining conditions conducive to growth and maintenance of resident and anadromous adult and juvenile fish populations utilizing the Bay-Delta Estuary during this period and to provide attraction flows for fall-run Chinook salmon.

The SWRCB also described the purpose of net Delta outflow objectives during the winter (November through January) as:

The purpose of the standards are to provide net Delta outflow for continued rearing of juvenile and maintenance of adult fish, and to provide conditions conducive for maturation of adult fish in preparation for spring spawning.

### **Replacement Pumping (July – September):**

Under Condition 3 of D-1485<sup>4</sup> and Article 10(b) of the “Agreement Between the United States of America and State of California for the Coordinated Operation of [CVP] and State Water Project” (COA), Interior would have been able to replace up to about 195 TAF of exports foregone in May and June due to D-1485 requirements later in the year (generally July through September).<sup>5</sup> This ability to make up for reductions in exports during May and June of any year under D-1485 is commonly referred to as “replacement pumping” and is considered part of the base case operation for CVPIA 3406(b)(2) purposes, consistent with Interior’s 2003 (b)(2) Policy. If base case CVP exports are less than 3,000 cfs in May or June due to other regulatory requirements such as the Delta Outflow Index, the incremental amount of exports below 3,000 cfs is subtracted from the nominal 195 TAF of replacement pumping allowed under D-1485 and the COA. In water year 2018, in the base case operation under D-1485, the CVP would have been entitled to a replacement pumping volume of 95.7 TAF.

However, Condition 8 of SWRCB Decision 1641 (D-1641) eliminated Interior’s ability to make up for export reductions later in the year by rescinding Condition 3 of D-1485.<sup>6</sup> The SWRCB’s decision to rescind Condition 3 and eliminate replacement pumping is a WQCP requirement mandated through D-1641 and, therefore, any replacement pumping foregone in the 2018 water year due to Condition 8 of D-1641 was considered a WQCP action. Additionally, as explained above, Interior considers operations under D-1485, including the ability to replace foregone CVP pumping in May and June, to be part of the base case condition, consistent with Interior’s May 2003 (b)(2) Policy.

In water year 2018, Interior distributed the 95.7 TAF of replacement pumping foregone due to D-1641 throughout July, August, and September. In July, CVP exports were less than base case exports under D-1485, which included approximately 31.9 TAF of foregone replacement pumping. In August, CVP exports were less than base case operations under D-1485, which included approximately 31.9 TAF of foregone replacement pumping under D-1641 and the current WQCP. In September, CVP exports were less than base case operations, which included about 31.9 TAF of foregone replacement pumping under D-1641 and the current WQCP. Interior considered the 95.7 TAF of foregone replacement pumping to

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<sup>4</sup> Condition 3 of D-1485 states, “To the extent that operational constraints on the Central Valley Project to minimize diversion of young striped bass from the Delta during May and June reduce project exports, permittee, the United States Bureau of Reclamation, shall be allowed through coordinated operations to make up such deficiencies during later periods of the year by direct diversion or by redirection of releases of stored water through State Water Project facilities.”

<sup>5</sup> Generally, the 195 TAF of replacement pumping allowed under D-1485 and the COA is calculated as the difference between the designed pumping capacity of the Jones Pumping Plant (4,600 cfs) and allowable exports under D-1485 (3,000 cfs) during the 61 days in May and June.

<sup>6</sup> Condition 8 of SWRCB Water Rights Decision 1641 (D-1641) rescinded Condition 3 of D-1485 stating, “SWRCB Decision 1485 (D-1485) ordered that certain terms and conditions in this license/permit be added or amended. Except as amended or deleted herein, the terms and conditions set forth in D-1485 remain in this license/permit. The terms and conditions in D-1485 numbered 2, 3, 4, 5, and 8 are rescinded.”

be a WQCP action that did not predominantly contribute to the primary purpose of CVPIA 3406(b)(2) and exercised its discretion to not account for it as (b)(2) actions.