

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

**WATER YEAR 2010 FINAL ACCOUNTING
FISHERY AND WATER QUALITY CONTROL PLAN ACTIONS**

February 2011

BACKGROUND

Following three successive years of dry conditions, the Central Valley Project (“CVP”) began Water Year 2010 on October 1, 2009 with low storage levels in Trinity, Shasta, and New Melones reservoirs. However, subsequent precipitation in the winter and spring was above average and the system rebounded significantly. In the 2010 water year the Sacramento River basin was classified as below normal and the San Joaquin River basin was classified as above normal. Consistent with Section 3406(b)(2) of the Central Valley Project Improvement Act (“CVPIA”) and the Department of the Interior’s (“Interior”) May 2003 (b)(2) Policy, the total (b)(2) water allocation was 800,000 acre feet during the 2010 water year.

CVP operations during the 2010 water year were subject to implementation of two Biological Opinions: (1) the FWS Biological Opinion 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, and (2) the National Marine Fisheries Service’s (“NMFS”) Fisheries Biological Opinion on the Long-term Operations of the CVP and SWP for the protection of listed salmonids and Green Sturgeon, issued in June 2009.

Interior manages (b)(2) water consistent with the Ninth Circuit’s decision in Bay Inst. of San Francisco v. United States, 87 Fed. Appx 637 (2004), confirming Interior’s discretion to give effect to the “hierarchy of purposes” in Section 3406(b)(2), and the District Court for the Eastern District of California’s memorandum opinion in San Luis & Delta Mendota Water Authority v. Department of the Interior, 1:97-cv-6140, 1:98-cv-5261 OWW DLB (E.D. Cal. Sept. 19, 2008) (hereinafter “SLDMWA”), concerning Interior’s (b)(2) accounting for the 2004 water year.¹ Interior also continues to implement its May 9, 2003 (b)(2) policy and December 17, 2003 (b)(2) Guidance. Thus, Interior accounted for fishery actions, including Endangered

¹ In that opinion, 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). 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.

Species Act (“ESA”) and water quality control plan (“WQCP”) actions during the 2010 water year, consistent with relevant court decisions and existing Interior policies.

The purpose of this document is to explain Interior’s final accounting of actions covered by CVPIA Section 3406(b)(2) in water year 2010. The first attached table, “Water Year 2010 Final CVP Accounting of (b)(2) Actions in TAF,” summarizes the fishery actions, including WQCP and ESA actions, covered by CVPIA Section 3406(b)(2) in water year 2010. The second attached table, “Water Year 2010 Final CVP Accounting of WQCP Actions in TAF That Do Not Predominantly Contribute to CVPIA § 3406(b)(2) Primary Purpose,” summarizes WQCP actions taken during water year 2010 that did not predominantly contribute to the primary purpose of CVPIA Section 3406(b)(2) and were not accounted for as (b)(2) actions. 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 2010 and explains how Interior exercised its authority and discretion under CVPIA Section 3406(b)(2) during that same period.

Water Year 2010 Actions Covered By (b)(2) Water

October 2009:

Clear Creek releases were 250 cfs in early October to meet temperature requirements for spring-run Chinook egg incubation and rearing, pursuant to the NOAA Biological Opinion. As temperatures moderated, releases went down to 200 cfs. These releases totaled approximately 11.2 thousand acre feet (“TAF”) above the base case condition and were accomplished through project reoperation, so there were no (b)(2) cost.

In the first half of October Interior released approximately 41.9 TAF of (b)(2) water above base case conditions on the American River to meet WQCP Delta outflow requirements. Because this release did not predominantly contribute to the primary purpose of CVPIA Section 3406(b)(2), Interior had the discretion to refrain from accounting for it as a (b)(2) action. Nonetheless, Interior exercised its discretion and accounted for this increase as a (b)(2) action this year.

An additional 26.4 TAF of (b)(2) water above base case operations was released in the latter half of October on the American River to meet NOAA Biological Opinion flows to maintain suitable conditions for rearing steelhead and pre-spawning fall-run Chinook salmon. This release predominantly contributed to the primary purpose of Section 3406(b)(2) of the CVPIA and was accounted for as a (b)(2) action this year.

On the Stanislaus River, Interior used (b)(2) water in conjunction with CVPIA 3406(b)(3) acquired water² to provide a fall upstream migration flow for fall-run Chinook adult migration and spawning, pursuant to the NMFS Biological Opinion. The October portion of the (b)(3) flows represented the Stanislaus River's contribution towards the October San Joaquin River pulse flows at Vernalis. State Water Resources Control Board (SWRCB), , D-1641, Table 3, Footnote 15). In its May, 1995 Environmental Report (ER) for the 1995 WQCP (Appendix 1), the SWRCB described the purpose of the Vernalis pulse flow requirement in October as follows:

The purpose of the pulse flow standard is to attract adult fall-run Chinook salmon into the San Joaquin River. . . . A pulse of water down the mainstem San Joaquin River will provide additional velocity and olfactory cues which should direct salmon to the main river and facilitate passage through the lower Delta.

The release of approximately 13.5 TAF of non-acquired (b)(3) water predominantly contributed to the primary purpose of Section 3406(b)(2) of the CVPIA and was accounted for as a (b)(2) action. In the latter part of the month an additional 0.5 TAF was released to meet the NMFS Biological Opinion's instream temperature requirement. This also contributed to the primary purpose of Section 3406(b)(2) and was accounted as a (b)(2) action.

November 2009:

On the American River, Interior released approximately 53.4 TAF of (b)(2) water above base case operations to maintain suitable conditions for spawning fall-run Chinook salmon. This release was required by the NMFS Biological Opinion, predominantly contributed to the primary purpose of Section 3406(b)(2) of the CVPIA, and was accounted for as a (b)(2) action.

On the Stanislaus River, Interior released approximately 4.5 TAF of (b)(2) water above base case operations. Some of this water was used to meet the NMFS Biological Opinion's instream temperature requirements for steelhead, and some was to help meet AFRP objectives for fall-run Chinook salmon. This release contributed to the primary purpose of Section 3406(b)(2) and was accounted as a (b)(2) action.

In late November, Interior reduced CVP exports by approximately 4.8 TAF to help meet WQCP objectives, specifically net Delta outflow requirements (SWRCB, D-1641, Table 3). Because this export reduction did not predominantly contribute to the primary purpose of CVPIA Section 3406(b)(2), Interior had the discretion to refrain from accounting for it as a (b)(2) action. Nonetheless, Interior exercised its discretion and accounted for this export reduction as a (b)(2) action this year.

² 15 TAF of (b)(3) acquired water was obtained pursuant to CVPIA Section 3406(b)(3) in fall 2009.

December 2009:

Interior released water above base case operations on the following CVP-controlled streams:

- On Clear Creek approximately 0.6 TAF of (b)(2) water was released (not accomplished through modification of CVP operations) to help meet AFRP flow objectives for spring-run Chinook fry (ESA Threatened), fall-run Chinook spawning and emergence, and to benefit steelhead juveniles and pre-spawning adults (ESA Threatened).
- On the American River, approximately 60.1 TAF of (b)(2) water was released pursuant to the NMFS Biological Opinion to benefit steelhead juveniles and pre-spawning adults with concurrent benefits for fall-run Chinook spawning and egg incubation; and
- On the Stanislaus River, approximately 3.3 TAF of (b)(2) water was released pursuant to the NMFS Biological Opinion to improve conditions for steelhead and fall-run Chinook salmon spawning and emergence.

These releases predominantly contributed to the primary purpose of Section 3406(b)(2) of the CVPIA and were accounted for as (b)(2) actions.

In mid-December, Interior reduced CVP exports by approximately 7 TAF to help meet WQCP objectives, specifically salinity requirements in the Delta at Contra Costa pumping plant #1. (SWRCB, D-1641, Table 1). This export reduction was related to the Delta cross channel gate closure required by the NMFS Biological Opinion, which contributed to higher salinity levels in the Delta. The Delta cross channel gate closure was intended to benefit winter-run (ESA Endangered) and spring-run Chinook salmon outmigrants and other species. Consequently, this export reduction predominantly contributed to the primary purpose of CVPIA Section 3406(b)(2), and Interior accounted for it as a (b)(2) action this year.

January 2010:

In January, Interior released water above base case operations on the following CVP-controlled streams:

- On Clear Creek, approximately 2.4 TAF of (b)(2) water was released (not accomplished through modification of CVP operations) to help meet AFRP flow objectives for spring-run Chinook fry (ESA Threatened), fall-run Chinook spawning and emergence, and to benefit spawning steelhead;
- On the American River, Interior released approximately 38 TAF of (b)(2) water above base case operations pursuant to the NMFS Biological Opinion to benefit steelhead

spawning with concurrent benefits for fall-run Chinook spawning and egg incubation;
and

- On the Stanislaus River, approximately 3.1 TAF of (b)(2) water was released pursuant to the NMFS Biological Opinion to improve conditions for spawning steelhead and fall-run Chinook salmon spawning and emergence. This included a small pulse flow January 13-16 per the Opinion.

These releases predominantly contributed to the primary purpose of Section 3406(b)(2) of the CVPIA and were accounted for as (b)(2) actions.

NMFS Reasonable and Prudent Alternative (“RPA”) IV.2.3 took effect on January 1, 2010, limiting Old and Middle (“OMR”) flows to no more than -5,000 cfs. However, during the January 1 to 4 period, Interior reduced CVP exports by approximately 5.9 TAF to meet WQCP objectives, specifically salinity requirements in the Delta at Contra Costa pumping plant #1. (SWRCB, D-1641, Table 1). This export reduction was related to the Delta cross channel gate closure required by the NMFS Biological Opinion, as opposed to RPA IV.2.3, which contributed to higher salinity levels in the Delta. The Delta cross channel gate closure was intended to benefit winter-run (ESA Endangered) and spring-run Chinook salmon outmigrants and other species. Consequently, this export reduction predominantly contributed to the primary purpose of CVPIA Section 3406(b)(a2), and Interior accounted for it as a (b)(2) action this year.

From January 5 to 21, Interior reduced exports at the Federal Jones pumping plant for maintenance at the facility. Exports remained low through January 31 due to debris loads.

Concurrently, the Reasonable and Prudent Measures (RPA IV.2.3) in the NMFS Biological Opinion were triggered on January 20, 2010 and Old and Middle River flows were established at ≤ -5,000 cfs. Due to the maintenance and debris loading issues, the NMFS RPA did not impact CVP exports in January.

February 2010:

Interior released water above base case operations to help meet AFRP flow objectives for fall-run Chinook salmon rearing and steelhead spawning on the following CVP-controlled streams:

- Approximately 8.3 TAF of water on Clear Creek (not accomplished through modification of CVP operations); and

- Approximately 2.6 TAF on the Stanislaus River for a small pulse flow February 5-7 (pursuant to the NMFS Biological Opinion).

These releases predominantly contributed to the primary purpose of Section 3406(b)(2) of the CVPIA and were accounted for as (b)(2) actions.

An additional 9.3 TAF of (b)(2) water was used on the Stanislaus River to help meet the WQCP Vernalis flow objective in February. This release occurred prior to peak salmon outmigration (April and May) and therefore did not predominantly contribute to the primary purpose of CVPIA (b)(2).

Because this release did not predominantly contribute to the primary purpose of CVPIA Section 3406(b)(2), Interior had the discretion to refrain from accounting for it as a (b)(2) action. Nonetheless, Interior exercised its discretion and accounted for this increase as a (b)(2) action this year.

From February 5 through February 19, a District Court issued a temporary restraining order (“TRO”), enjoining implementation of NMFS RPA IV.2.3. However, From February 10 through February 17, the FWS Biological Opinion RPA controlled CVP exports by limiting OMR flows to no more than -4,000 cfs. From February 18 through February 20 the FWS Biological Opinion RPA controlled CVP exports by limiting OMR flows to no more than -5,000 cfs. Beginning on February 20, both Biological Opinions limited OMR flows to no more than – 5,000 cfs.

In all, Interior reduced CVP exports in February by approximately 24.7 TAF pursuant to the NMFS Biological Opinion for salmonids, as well as the FWS Biological Opinion for delta smelt (combined). Interior accounted for these export reductions as (b)(2) actions this year.

March 2010:

Interior released approximately 9.2 TAF of water above base case operations on Clear Creek to help meet AFRP flow objectives for fall-run Chinook salmon rearing and steelhead spawning and emergence. This release predominantly contributed to the primary purpose of Section 3406(b)(2) of the CVPIA and was accounted for as a (b)(2) action.

On the Stanislaus River, Interior released approximately 4.1 TAF of water above base case operations pursuant to the NMFS Biological Opinion for steelhead spawning and emergence and fall-run Chinook rearing. As this release predominantly contributed to the primary purpose of CVPIA 3406(b)(2), Interior accounted for it as a (b)(2) action.

In March, Interior also reduced CVP exports by approximately 26.5 TAF pursuant to the NMFS Biological Opinion for salmonids, as well as the FWS Biological Opinion for delta smelt

(concurrent restrictions). Interior accounted for these export reductions as (b)(2) actions this year.

In late March, Interior reduced CVP exports by approximately 26.7 TAF to help meet WQCP objectives, specifically D-1641's 35% export/inflow ratio requirement (SWRCB, D-1641, Table 3). Because this export reduction did not predominantly contribute to the primary purpose of CVPIA Section 3406(b)(2), Interior had the discretion to refrain from accounting for it as a (b)(2) action. Nonetheless, Interior exercised its discretion and accounted for this export reduction as a (b)(2) action this year.

April and May 2010:

In April and May, Interior released a total of 20.9 TAF of water above base case (not accomplished through reoperation) on Clear Creek. Approximately 15.6 TAF of that water was released to help meet AFRP flow objectives for fall-run Chinook rearing and steelhead juveniles. Approximately 5.3 TAF of that water was released in late May to provide an attraction flow for spring run Chinook salmon (per the 2009 NOAA Biological Opinion). These releases predominantly contributed to the primary purpose of Section 3406(b)(2) of the CVPIA and were accounted for as (b)(2) actions.

From April 1 – 24, Interior released approximately 41.8 TAF of water above base condition operations on the Stanislaus River to help meet the NMFS Biological Opinion flow requirement for San Joaquin flows at Vernalis. This release predominantly contributed to the primary purposes of CVPIA 3406(b)(2), and Interior accounted for it as (b)(2) actions this year.

Between April 1 – 24, Interior also reduced CVP exports by approximately 161.7 TAF pursuant to the NMFS Biological Opinion for salmonids. These export reductions predominantly contributed to the primary purpose of CVPIA 3406(b)(2), and Interior accounted for them as (b)(2) actions this year.

Vernalis Adaptive Management Program

From April 25 to May 25, Interior implemented the Vernalis Adaptive Management Program ("VAMP"). In April and May, fall-run Chinook smolts principally migrate down the lower San Joaquin River (SWRCB, ER for the 1995 WQCP, Appendix 1) and its tributaries (Stanislaus, Tuolumne, and Merced rivers). Thus, during April and May, the purpose of the San Joaquin objectives "is to improve survival of salmon smolts emigrating down the San Joaquin River and to improve habitat conditions in the central and southern Delta for numerous aquatic species." Id. Although these actions provide general benefits to Delta habitat conditions and numerous species, they help meet AFRP flow objectives, benefit fall-run Chinook and steelhead juveniles, and predominantly contributed to the primary purpose of CVPIA Section 3406(b)(2).

The Vernalis flow target was established at 4,450 cfs and the combined export target was 1,500 cfs. During VAMP Interior released approximately 26.1 TAF of water above base conditions on the Stanislaus River for spring pulse flow requirements required by the NMFS Biological Opinion, as well as to meet the flow requirement for San Joaquin River flows at Vernalis. This release predominantly contributed to the primary purpose of CVPIA 3406(b)(2), and was counted as a (b)(2) action.

Also during VAMP, Interior reduced CVP exports by approximately 142.3 TAF pursuant to the NMFS Biological Opinion for salmonids and to meet the VAMP target export level. These export reductions predominantly contributed to the primary purpose of CVPIA 3406(b)(2) and were counted as (b)(2) actions this year.

On May 26, a District Court issued a preliminary injunction, enjoining implementation of NMFS RPA IV.2.1 through the end of May. However, Interior reduced CVP exports by approximately 5.9 TAF between May 26 and 31, pursuant to the FWS Biological Opinion for the protection of federally-listed delta smelt. Consistent with the Ninth Circuit's 2004 decision, confirming Interior's discretion to give effect to Section 3406(b)(2)'s hierarchy of purposes, and Judge Wanger's September, 2008 opinion in SLDMWA, Interior accounted for these export reductions as (b)(2) actions this year.

June 2010:

On Clear Creek, Interior released approximately 5 TAF of water above base case operations to help meet the NMFS Biological Opinion's temperature requirements for steelhead juveniles and spring-run Chinook adults. In addition, approximately 5.3 TAF was released in early June to provide an attraction flow for spring run Chinook salmon (per the 2009 NOAA Biological Opinion). These releases predominantly contributed to the primary purpose of Section 3406(b)(2) of the CVPIA and were accounted for as (b)(2) actions.

Interior reduced CVP exports by approximately 6.5 TAF pursuant to the FWS Biological Opinion for the protection of federally-listed delta smelt. Consistent with the Ninth Circuit's 2004 decision, confirming Interior's discretion to give effect to Section 3406(b)(2)'s hierarchy of purposes, and Judge Wanger's September, 2008 opinion in SLDMWA, Interior accounted for these export reductions as (b)(2) actions this year.

July 2010:

On the Stanislaus River, Interior released approximately 1.5 TAF of (b)(2) water above base case operations pursuant to the NOAA Biological Opinion for steelhead temperature requirements. This release predominantly contributed to the primary purpose of Section 3406(b)(2) of the CVPIA and was accounted as a (b)(2) action this year.

August 2010:

No (b)(2) fish actions were taken in August.

September 2010:

On the Stanislaus River, Interior released approximately 6.7 TAF of (b)(2) water above base case operations to comply with the minimum flow and temperature objectives for rearing juvenile steelhead included in the 2009 NMFS Biological Opinion. This release predominantly contributed to the primary purpose of Section 3406(b)(2) of the CVPIA and was accounted for as a (b)(2) action this year.

Water Year 2010 WQCP Actions Not Covered By (b)(2):

(1) In February and March, Interior released an additional 39.5 TAF of water on the Stanislaus River in February and March to help meet the WQCP Vernalis flow requirements. As explained above, February and March Vernalis flow requirements occur prior to peak salmon outmigration and do not predominantly contribute to the primary purpose of CVPIA Section 3406 (b)(2). Due to limited (b)(2) water in the 2010 water year and to give effect to the hierarchy of purposes of Section 3406 (b)(2), Interior exercised its discretion and did not account for 30.2 TAF of the total WQCP Vernalis flow release as a (b)(2) action this year. As noted above (see February), however, Interior did account for 9.3 TAF of these releases as (b)(2) actions.

(2) From July through September, Interior reduced exports below base case operations by 201 TAF due to the elimination of replacement pumping from July through September pursuant to D-1641 and the current WQCP. Pursuant to SWCRB D-1485, under certain conditions during that period, Reclamation would have been able to export additional water at the SWP export facilities to make up for reduced CVP exports earlier in the year. In accordance with Interior's May 2003 Policy, Interior considers operations under SWRCB D-1485, including the ability to replace lost pumping, to be part of the base case condition. Thus, Interior counted the 201 TAF of foregone replacement in August and September of 2010 as WQCP actions that do not predominantly contribute to the primary purpose of CPIA 3406(b). Due to limited (b)(2) water in the 2010 water year and to give effect to the hierarchy of purposes of Section 3406 (b)(2), Interior exercised its discretion and did not account for the foregone replacement pumping as a (b)(2) action this year.