BUREAU OF RECLAMATION

Weekly Fish and Water Operations Outlook

1/28/2025 – 2/3/2025

Water Project Operational Intent for Week

Both (CVP and SWP) water projects are operating to the following D-1641 standards for January:

1. monthly average Delta Outflow not less than 6,000 cfs,
2. E/I ratio no greater than 0.65, and
3. daily Chlorides at Contra Costa Intake (at Rock Slough) no greater than 250 mg/l.

In February, the standards change to:

1. Delta Outflow per X2 requirements, and
2. E/I ratio no greater than 0.35.

The 2025 OMR management season has begun, so the 14-day averaged OMR index cannot be more negative than –5,000 cfs according to both the Federal Biological Opinions and State ITP for joint project operations.

Last weekend, the (1) combined "catch" of Longfin smelt at Stations 809 and 812 in the latest Smelt Larval Survey being above 50 and, (2) the 7-day averaged QWEST falling below +1500 cfs "triggered" the Larval and Juvenile Longfin Smelt Entrainment Protection Action in the ITP and PA, resulting in a 7 day period where OMRI was to be no more negative than –3,500 cfs.

The last day of the 7-day period was Sunday, January 26th. So, beginning Monday, January 27th, the projects are back to operating to an OMRI no more negative than –5,000 cfs on a 14-day averaged basis.

Biological Context

OMRI shall not be more negative than –5,000 cfs on a 14-day averaged basis during the OMR Management Season. No other restrictions on operations are currently "active".

Forecasted Weather

Dry and cold low temperatures in the morning through mid-week. A more active weather pattern returns on Friday into the weekend with the potential for widespread rain and mountain snow.

Tables

Table 1: Anticipated weekly operational ranges by tributary. Environmental and fish conditions updated by respective watershed groups at varying intervals that may not coincide with the weekly range of Water Operations shown.

Tributary/Division	Anticipated Weekly Ranges	Related Environmental and Fish Conditions
Clear Creek	• Current Release: 300 cfs • Anticipated Weekly Range of Releases: 300 cfs.	• Fall-run Chinook Salmon eggs hatching, fry are emerging, and juveniles are rearing. • Late fall-run Chinook Salmon adults are spawning and their eggs are incubating • Spring-run Chinook Salmon juveniles are rearing and emigrating. • *O. mykiss* adults are migrating and spawning. (Updated 1/14/2025)
Sacramento River	• Shasta Storage: 3.487 MAF • Current Release: 5,000 cfs • Anticipated Weekly Range of Releases: 4,000 cfs to 5,000 cfs.	• Spring-run Chinook Salmon fry have all emerged and are migrating downstream. • Fall-run adults have completed spawning, fall-run fry downstream passage counts are increasing daily, although fry also remain in gravel • Late-fall adults are spawning and eggs are in gravel • Winter-run fry are still migrating past RBDD in relatively low numbers. (Updated 1/28/2025)

Tributary/Division	Anticipated Weekly Ranges	Related Environmental and Fish Conditions
Feather River	• Oroville Storage: 2.567 MAF • Current Release: 1,750 cfs • Anticipated Weekly Range of Releases: 1,750 cfs • Daily temperature maximum: 55 degrees F at Fish Hatchery	• Spring-run Chinook Salmon spawning is complete, juveniles are emerging and are migrating downstream. • Fall-run Chinook Salmon spawning is complete. Juveniles are emerging and migrating downstream. • Adult *O. mykiss* present and spawning. (Updated 1/28/2025)
American River	• Folsom Storage: 362 TAF • Current Release: 1,750 cfs • Anticipated Weekly Range of Releases: 1,750 cfs	• Fall-run Chinook Salmon adult spawning is complete. • Redds are being observed. • Eggs are in gravel and incubating. • Fry are beginning to emerge and migrate downstream. (Updated 1/27/2025)
Stanislaus River	• New Melones Storage: 1.865 MAF • Current Release: 200 cfs • Anticipated Range of Weekly Releases: 200 cfs.	• Juvenile and adult *O. mykiss* are present. • Adult fall-run Chinook Salmon spawning is complete. • Eggs are in gravel and incubating. (Updated 1/28/2025)

Tributary/Division	Anticipated Weekly Ranges	Related Environmental and Fish Conditions
Delta	• Freeport: 12,000 to 19,000 cfs • Vernalis: 1,000 to 1,200 cfs • Delta Outflow index: 12,000 to 16,000 cfs • Combined Exports: 4,000 to 6,000 cfs • JPP: 2,800 cfs to 4,200 cfs • CCF: 1,200 cfs to 3,500 cfs • Expected Daily OMR Index Values: -3,400 to -5,100 cfs • DCC Gates: Closed on 11/18. • X2 = 81 km • Tides: Transitioning from Spring to Neap; New Moon on 1/29	• Yearling and YOY Chinook Salmon are migrating into the Delta. • In the last 4 weeks adult Delta smelt have been detected in Cache Slough, the SDWSC, lower Sacramento and San Joaquin rivers, Suisun Marsh, and Suisun Bay. • One marked adult Delta smelt was detected in salvage at TFCF on 1/17/25, bringing cumulative salvage to 5. • A total of 108,426 individual adult Delta smelt have been released so far in WY2025. So far, there have been 36 confirmed detections of marked Delta smelt. • Larval longfin smelt have been detected in the Central and South Delta (72 larval longfin smelt at stations 809 and 812 during supplemental SLS sampling on 1/21), Sacramento River, Suisun Marsh, Suisun Bay, the Confluence, the Napa River, Carquinez Strait, and San Pablo Bay. • Juvenile longfin smelt have been detected in Suisun Marsh, Suisun Bay, Grizzly Bay, the Lower Sacramento River, and at Chipps Island. • Adult longfin smelt have been detected in Suisun Marsh and Bay, Central and South Delta, Sacramento River, and Chipps Island. Adult LFS have also been detected in salvage at TFCF. (Updated 1/27/2025)

Table 2: WY 2025 Salmonid Current Loss and Delta Smelt Abiotic Conditions. Additional Real-Time OMR Restrictions and Performance Objectives (4.10.5.10.2, 4.10.5.10.3) and Onset of OMR Management (4.10.5.10.1). Genetic identification of salmon is not used in calculating loss, but results are included in the Assessment as they become available.

Species/run	Threshold	Current Status	Weekly Trend	Updated
Green sturgeon	WY 2025 salvage = 74	WY 2025 salvage = (0%)	No change expected	1/28/2025
Natural winter-run Chinook Salmon	See Table 3a	See Table 3a	See Table 3a	1/28/2025
Natural Steelhead	50% threshold – 1500 75% threshold - 2250 100% threshold - 3000	WY 2025 loss = 17.32 (1.1% of 50% threshold)	Low likelihood of salvage	1/28/2025
Steelhead Weekly Loss Threshold	7-day rolling sum of steelhead salvage exceeds loss of 120 fish	No exceedances	Low likelihood of salvage	1/28/2025
Sacramento River Hatchery winter-run Chinook salmon	See Table 3a	See Table 3a	See Table 3a	1/28/2025
Battle Creek Hatchery winter-run Chinook salmon	See Table 3a	See Table 3a	See Table 3a	1/28/2025
Proposed Action Hatchery yearling spring-run Chinook salmon surrogates	See Table 3a	See Table 3a	See Table 3a	1/28/2025
Delta Smelt	See Table 3b	See Table 3b	See Table 3b	1/06/2025
Longfin Smelt	See Table 3c	See Table 3c	See Table 3c	1/06/2025

Table 3a-d: Relevant Water Year 2025 Fish Criteria and Status for Listed Fish under the SWP Long-Term Incidental Take Permit.

Table 3a: Chinook Salmon

* No draft WR JPE for WY 2025. Final JPE letter is expected in January. A JPE surrogate is currently being used for COA 8.4.4 until the final JPE is issued.

Action	Timeframe	Current Action Status	Threshold(s)	Current Relevant Data	Weekly Trend	Last Updated	Comments
Onset of OMR Management (8.3)	Jan. 1 - Jun. 30	In effect	Begins January 1 or earlier if COA 8.3.1, COA 8.3.2, or COA 8.3.3 are in effect (see Table 3b)	N/A	N/A	1/27/25	N/A
Winter-run Annual Loss (8.4.3)	July 1 - Jun. 30	In effect	-Natural-origin Winter-run Loss Threshold: 0.5% of JPE -Hatchery-origin Winter-run Loss Threshold: 0.12% of JPE	Confirmed Genetic WR Annual Loss = 2.54	Likely to observe salvage due to seasonal timing	1/28/25	1 LAD WR observed on 1/19, genetics has been confirmed as a fall run, NOT winter run
Natural-origin Winter-run Early Season Weekly Loss Thresholds (8.2.1)	Nov. 1- Dec. 31	Not in Effect	N/A	1 LAD WR was observed on 12/17/24 which counted towards the 7-day loss; however, genetics confirmed it as NOT a winter-run.	N/A	1/6/25	COA 8.2.1 was in effect beginning 12/22/24 but no longer in effect beginning 1/1/24.

Action	Timeframe	Current Action Status	Threshold(s)	Current Relevant Data	Weekly Trend	Last Updated	Comments
Natural-origin Winter-run Weekly Loss (8.4.4)	Jan 1 – June 30	In effect	Thresholds based on Table 4, Column E of 2024 SWP ITP: [Annual Loss Threshold (based on JPE surrogate) x 50% of Annual Loss Threshold x Winter-run in Delta (based on Column E)]	1/22/25-1/28/25 Threshold: 3.21 1/29/25-2/4/25 Threshold: 17.08	As of 1/23 7-day loss: 0 Total loss of 7 day rolling sum (includes both LAD and genetics: 0	1/28/25	No loss of genetic natural origin winter-run chinook this week. Fish observed on 1/19/25 was a genetic fall-run chinook.
Spring-run Protection Action and Surrogate Annual Loss (8.4.5)	Natural-origin: Oct. – June 30 Hatchery-origin: Nov. 1 – June 30	Natural-origin: In effect Hatchery-origin: In effect	Group 1: 1,747.23 (0.25% of 698,892 fish released) Group 2: 193.39 (0.25% of 77,355 fish released) Group 3: 186.10 (0.25% of 74,725)	Current Loss for Group #1 through 1/28/25: 988.93 (56.60% of the loss threshold) Current Loss for Group #2 through 1/5/24: 72.52 (37.50% of the loss threshold) Current Loss for Group #3 through 1/17: 0%	Likely to see more salvage	Group 1 & 2 updated 1/12/25 Group 3 updated 1/21/25	No natural-origin Chinook Salmon spring-run salmon have been salvaged yet in WY 2025. The second group was released on 12/13/24. The third group was released on 1/17/25.

Table 3b: Delta Smelt

Action	Timeframe	Current Action Status	Threshold(s)	Current Relevant Data	Weekly Trend	Last Updated	Comments
First Flush Action (8.3.1)	Dec. 1 – last day of February	Off ramped Action triggered on Dec. 16, implemented from Dec. 19 through Jan 1, 2025	- three-day Freeport (FPT) daily flow running avg>= 25,000 AND [three-day Freeport turbidity running avg >=50 NTU OR Smelt Monitoring Team recommendation]	FPT 3-day avg. Flow = Not relevant Turbidity = Not relevant	N/A	1/6/2025	N/A
Adult Delta Smelt Entrainment Protection ("Turbidity Bridge Avoidance") (8.3.2)	After IEWPP or Dec. 20 until 3-day average temperatures at Jersey Point (SJJ) or Rio Vista (RVB) exceed 12 °C (53.6 °F)	Active; not triggered Last triggered on 1/12 and implemented 1/15-1/17	Occurs after the Integrated Early Winter Pulse protection or December 20 (whichever comes first) until 3-day average temperature offramp at Jersey Point (SJJ) or Rio Vista (RVB) > 12 °C (53.6 °F) -OBI, OSJ, and HOL turbidity>12 FNU -Vernalis flow >10,000 cfs (temporary offramp); <8,000 cfs (reinstated)	OSJ Turbidity = 7.70 NTU HOL Turbidity = 7.97 FNU OBI Turbidity = 6.69 FNU 3-d SJJ temp = 9.56 °C 3-d RVB temp = 9.44 °C Vernalis Flow = 1,000 to 1,200 cfs	Turbidity low to moderate	1/28/25	N/A

Action	Timeframe	Current Action Status	Threshold(s)	Current Relevant Data	Weekly Trend	Last Updated	Comments
Larval and Juvenile Delta smelt Protection (8.4.1)	After Adult Delta smelt Entrainment Protection ends	Not active	SLS/20mm Secchi depth for 12 south delta stations <= 1m -Rio Vista flows: 12,000-16,000 -Vernalis flows: 1,000 – 1,200	Current 5-day salvage = Not relevant Secchi depth = Not relevant	N/A	N/A	N/A

Table 3c: Longfin Smelt

Action	Timeframe	Current Action Status	Threshold(s)	Current Relevant Data	Weekly Trend	Last Updated	Comments
Adult LFS Protection (8.3.3)	Dec. 1 - end of February	Active; not triggered	-Cum. salvage > (Age 1+ LFS Index/20) +1 = 181 fish	Cum LFS salvage greater than 60mm = 8	No change expected	1/7/25	N/A

Action	Timeframe	Current Action Status	Threshold(s)	Current Relevant Data	Weekly Trend	Last Updated	Comments
Larval and Juvenile Longfin Smelt Entrainment Protection (8.4.2)	Jan. 1 – Jun. 30	Active; triggered on 1/19/25 and implemented 1/20-1/26	-7-day average QWEST < +1,500 cfs, AND LFS larvae or juveniles in most recent SLS or 20 mm survey at 809 & 812 > 50; OR cumulative salvage > 50 or 75% avg annual salvage 2009-present -Rio Vista flows >55,0000 cfs or Vernalis flows >8,000 cfs (temporary offramp); <40,000 cfs (Rio Vista) or <5,000 (Vernalis) reinstated	7-day average QWEST = +100 cfs Larval/juvenile (>20mm) 809 + 812 catch (SLS 2) = 60 Cumulative juvenile (>20mm) salvage = 0 Rio Vista Flow = 15,928 cfs Vernalis Flow = 1,000 to 1,200 cfs	Likely to re-trigger with SLS 3	1/28/25	Catch from supplemental SLS sampling on 1/21/2025 = 72 SLS 3 on the water 1/27-1/29

Table 3d: OMR

Action	Timeframe	Current Action Status	Threshold(s)	Current Relevant Data	Weekly Trend	Last Updated	Comments
OMR Storm Flex (8.5)	Start of OMR – Onramp of Larval and Juvenile DS Protection Action (8.4.1) or last day of February (whichever occurs first)	Active	-Delta is in excess -QWEST is > +1,500 cfs -X2 is < 81 km - Daily average turbidity at OSJ, HOL, and OBI are <12 FNU -Higher level of outflow available for diversion due to storm flows -Measurable amount of precipitation has occurred -None of COA's are controlling operations (8.2.1, 8.3.2, 8.3.3, 8.4.2, 8.4.3, 8.4.4, 8.4.5, 8.4.7) -Cumulative loss at CVP and SWP of yearling CNFH LFR Chinook salmon (as yearling CHNSR surrogates) is < 0.5% with any of the release groups	N/A	N/A	1/6/25	Based on storm conditions

Action	Timeframe	Current Action Status	Threshold(s)	Current Relevant Data	Weekly Trend	Last Updated	Comments
End of OMR Management (8.6)	Jun. 1 – Jun. 30	Not in effect	Smelt: -Daily mean water temperature at Clifton Court Forebay (CLC) is > or equal to 25 C for 3 consecutive days Salmonids: -Current daily average water temperature is > 22.2 C at Mossdale and Prisoners Point for 7 days (can be non-consecutive).	N/A	N/A	11/12/24	N/A

Table 4: Fish monitoring gear efficiency and disruptions. Status Categories: [1] Active (ongoing sampling), [2] Partial Interruption (some sampling interruptions), [3] Interrupted (sampling fully suspended), [4] Not Active (sampling not scheduled)

Monitoring survey	Region	Notes (as of 1/28/2025)	Status
SWP regular counts, CWT reading	Delta	Active	2
SWP larval sampling	Delta	Not Active	4
CVP regular counts, CWT reading	Delta	Active	1
CVP larval sampling	Delta	Not Active	4
Smelt Larval Survey	Delta	Active	1
LES	Delta	Active	1
20mm Survey	Delta	Not Active	4
Fall Mid-water Trawl	Delta	Not Active	4
Summer Townet Survey	Delta	Not Active	4
Bay Study	Delta	Active	1
DJFMP- Chipps and Sacramento Trawls	Delta	Active	1
DJFMP- Seines	Delta	Active	1
EDSM	Delta	Active	1
EMP	Delta	Active	1
Mossdale	Delta	Active	1
USGS Flow monitoring	Delta	Active	1
Red Bluff Diversion Dam Rotary Screw Trap (RST)	Sacramento River	Active	1
Knights Landing RST	Sacramento River	Active	1
Tisdale RST	Sacramento River	Active	1
GCID RST	Sacramento River	Not Active	4
Mill Creek RST	Mill Creek	Active	1
Deer Creek RST	Deer Creek	Inactive	4
Yuba River (Hallwood) RST	Yuba River	Active	1
Butte Creek Carcass Surveys	Butte Creek	Not Active	4
Butte Creek RST	Butte Creek	Active	1
Redd dewatering and stranding surveys	Sacramento River	Active	1

Monitoring survey	Region	Notes (as of 1/28/2025)	Status
Sacramento Carcass and Redd Surveys (late fall-run Chinook Salmon)	Sacramento River	Active	1
Lower Sacramento RST	Sacramento River	Active	1
Feather River (upper DWR) RST	Sacramento River	Active	1
Feather River (lower CDFW) RST	Sacramento River	Active	1
Feather River Carcass Survey (fall-run Chinook Salmon)	Sacramento River	Active	1
SJRRP CDFW Field Monitoring	San Joaquin River	Active	1
SJRRP USFWS and USBR Field Monitoring	San Joaquin River	Active	1
Stanislaus Fish Weir	San Joaquin River	Active	1
Stanislaus River Carcass Survey (steelhead)	San Joaquin River	Active	1
American River Carcass Survey	Sacramento River	Not Active	4

Preference (i.e., a y-intercept of 0.5)