



— BUREAU OF —
RECLAMATION

Weekly Fish and Water Operations Outlook

3/10/2026 - 3/16/2026

Water Project Operational Intent for Week

Both projects are operating so their total combined Delta exports do not cause OMRI to be more negative than -5,000 cfs on a 14-day average basis. Per D-1641, X2 requirements and a maximum E/I ratio of 0.35 are effective in March.

Biological Context

The DCC gates remain closed to protect migrating salmonids.

Forecasted Weather

Dry conditions with above normal temperatures for the week through the weekend.

Tables

Table 1: Anticipated weekly operational ranges by tributary. Environmental and fish conditions are 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 | <ul style="list-style-type: none"> • Current Release: 300 cfs • Anticipated Range of Weekly Releases: 300 cfs • Releases drop to 275 cfs on March 16 | <ul style="list-style-type: none"> • Spring run, fall run, and late fall run Chinook Salmon • juveniles are rearing and out-migrating • Adult <i>O. mykiss</i>/steelhead are spawning, their eggs are incubating, and juveniles are rearing and out-migrating • (Updated 03/09/2026) |
| Sacramento River | <ul style="list-style-type: none"> • Shasta Storage: 3.959 MAF • Current Release: 4,000 cfs • Anticipated Weekly Range of Releases: 4,000 cfs | <ul style="list-style-type: none"> • LAD juvenile spring-run Chinook salmon are emerging and migrating downstream • Most winter-run Chinook salmon have migrated downstream past RBDD. • Fall-run Chinook salmon are out-migrating in increasing numbers. • Late fall-run Chinook Salmon are migrating upstream. Some are preparing to spawn, while others are actively spawning. Early eggs are in the gravel. • (Updated 03/2/2026) |
| Feather River | <ul style="list-style-type: none"> • Oroville Storage: 2.996 MAF • Current Release: 9,000 cfs • Anticipated Weekly Range of Releases: 7,000 cfs to 9,000 cfs • Daily temperature maximum: 55 °F at Fish Hatchery | <ul style="list-style-type: none"> • Fall-run Chinook Salmon spawning is complete. Juveniles emerging and migrating downstream. • Spring-run Chinook Salmon juveniles are migrating downstream • Adult <i>O. mykiss</i> are migrating upstream. • Sturgeon are migrating into the river • (Updated 03/9/2026) |
| American River | <ul style="list-style-type: none"> • Folsom Storage: 731 TAF • Current Release: 2,500 cfs • Anticipated Weekly Range of Releases: 2,500 cfs | <ul style="list-style-type: none"> • Fall-run Chinook Salmon spawning has ended. • Fry are emerging and beginning to migrate downstream. • (Updated 03/2/2026) |

| Tributary/Division | Anticipated Weekly Ranges | Related Environmental and Fish Conditions |
|--------------------|---|--|
| Stanislaus River | <ul style="list-style-type: none"> • New Melones Storage: 1.860 MAF • Current Release: 200 cfs • Anticipated Range of Weekly Releases: 200 cfs | <ul style="list-style-type: none"> • Adult fall-run Chinook Salmon spawning has likely ended, carcass surveys are complete. • Eggs are incubating in the gravel. • Spring-run fry are emerging and moving downstream. • Fall-run fry are also likely moving downstream with the increases in flow. • (Updated 1/26/2026) |
| Delta | <ul style="list-style-type: none"> • Freeport: 30,000 cfs to 41,000 cfs • Vernalis: 4,000 cfs to 5,200 cfs • Delta Outflow index: 30,000 to 40,000 cfs • Combined Exports: 7,200 to 7,900 cfs • JPP: 4,200 cfs • CCF: 3,000 cfs to 3,700 cfs • Expected Daily OMR Index Values: - 3,500 cfs to - 5,000 cfs • Rio Vista Flows: 28,000 cfs to 38,000 cfs • DCC Gates: Closed • X2 at 60 km • Qwest daily: 4,946 cfs • Qwest 7-day (through 3/2): 7,200 cfs • Qwest Forecasted Range of 7-day: 3000 cfs to 7,200 cfs • JPF: 2,500 cfs to 6,000 cfs • Tides: Transition from Spring to Neap; First Quarter Moon on March 11. | <ul style="list-style-type: none"> • LAD spring-run and winter-run Chinook salmon juveniles are being observed by monitoring surveys. • 163,349 unmarked Delta smelt were released in fall 2025. A total of 41 adult and 30 juvenile Delta smelt have been observed in Suisun Marsh, the lower Sacramento River, the SDWSC, and at CVP salvage facilities. The most recent observations were of an adult in Suisun Marsh caught by EDSM on 03/09/2026 and an adult detected in salvage at the TFCF on 3/6/2026. • A total of 277 sub-adult and adult Longfin Smelt have been observed in the Chipps Island Trawl for WY2026, with the last detection being on 03/05/2026. • SLS 5 (2/23-2/27) preliminarily detected a total of 4 larval Longfin Smelt at the lower San Joaquin River station 809 and 812, plus 764 larval Longfin Smelt in San Pablo Bay, Napa River, Carquinez Strait, Suisun Bay and Marsh, the Confluence, and the Sacramento River. SLS 4 (2/9-2/12) detected 2,941 larval Longfin Smelt, primarily west of the Confluence. • (Updated 03/10/2026) |

Table 2: WY 2026 Salmonid Current Loss and Delta and Longfin Smelt Abiotic Conditions.

| Species/run | Threshold | Current Status | Weekly Trend | Updated |
|---|--|---|--|----------|
| Green sturgeon | Annual ITL= 14 3-year rolling average ITL= 5 | salvage = 6 | Occasional salvage possible | 1/20/26 |
| Winter-run Chinook Salmon juveniles (JPE= 1,057,452 (genetically confirmed unclipped); 130,096 (LSNFH Sacramento River); 5,186 (LSNFH Battle Creek)) | Genetically confirmed unclipped Annual ITL = 5,922; loss threshold= 10,575 LSNFH releases (Annual ITL and loss threshold) Sacramento River = 1,301 Battle Creek = 52 | Confirmed loss= 31.24 (0.03%) LSNFH loss = 8 (0.58%) | Continued salvage at increased rate *LAD WR was salvaged but genetically identified as Spring-Run | 3/10/26 |
| Central Valley Steelhead | ¹ Clipped = 3565 ² Unclipped = 5914 | Hatchery Loss = 1097 (17.79% of threshold) Natural-origin loss = 182 (3.43%) | Salvage of clipped and unclipped fish is likely to continue in the upcoming week. | 03/10/26 |
| Spring-run Chinook salmon surrogate releases | Yearling: Annual ITL: 0.5% of 75,119 = 376; 60,873 = 304; 57,109=286 Loss Threshold: 1% of 75,119 = 751 60,873 = 609 57,109 = 571 Young of Year= TBD | Yearling loss = 257.32 N/A | Salvage is possible in the upcoming week. | 03/02/26 |

| Species/run | Threshold | Current Status | Weekly Trend | Updated |
|--|---|--|--------------------------------------|----------|
| First Flush (onset of Entrainment Management Season) | Freeport flows \geq 25,000 cfs AND Freeport turbidity \geq 50 FNU | See Table 3b First flush conditions were met on 12/23/25 and implemented by CVP on 12/25/25-1/7/26. | N/A | 12/29/25 |
| Delta smelt adults | JPF < 0 AND daily average turbidity \geq 12 FNU in OMR corridor UNTIL Average water temperatures at Jersey Point or Rio Vista \geq 12°C (53.6°F) for 3 consecutive days | Not active Jersey Point temp: 12.05 °C on 2/10 12.09 °C on 2/11 12.13 °C on 2/12 | Turbidity is moderate | 3/9/26 |
| Delta smelt larvae and juveniles | After onset of spawning, if JPF < 0 AND turbidity is \geq 12 FNU in the south Delta | Active, not triggered Daily JPF: 9,820cfs Avg turbidity in south Delta: (as of 2/23/26) 12.5 FNU | Turbidity in south Delta is moderate | 3/3/26 |
| Longfin smelt adults | If JPF < 0 and assessment indicates annual loss will exceed 5% of adult population abundance | Active, not triggered Daily JPF: 5,588 cfs Annual loss of adult LFS: 0 | No WY26 salvage to date | 3/9/26 |
| Longfin smelt larvae and juveniles | If JPF < 0 and population model indicates need to reduce entrainment to avoid population decline | Active, not triggered Daily JPF: 5,588 cfs | No WY26 salvage to date | 3/9/2026 |

¹Based on combined releases and estimated survival across Coleman, Feather River, Nimbus, and Mokelumne hatcheries.

²No operational threshold for unclipped steelhead. Incidental Take Limit from NMFS 2024 Biological Opinion.

Table 3a-e: Relevant Water Year 2026 Fish Criteria and Status for Listed Fish under the SWP Long-Term Incidental Take Permit.

Table 3a: Chinook Salmon

| 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 | 3/9/26 | N/A |
| Winter-run Annual Loss (8.4.3) | July 1 - Jun. 30 | In Effect – JPE was finalized on 1/8/26. | Natural-origin Winter-run Loss Threshold: 5,287.26 Hatchery-origin Winter-run Loss Threshold: 156.12 Battle Creek Loss threshold: 6.22 | Confirmed Genetic WR Annual Loss = 31.24 Hatchery origin Winter-run Loss = 9.86 Battle Creek Winter-run Loss = 0 | Salvage of natural- and hatchery-origin winter-run is likely in the next week based on seasonal migration timing and loss over the previous week. | 3/9/26 | Awaiting genetic result from 1 LAD WR salvaged at CVP on 3/8/26. |
| Natural-origin Winter-run Early Season Weekly Loss Thresholds (8.2.1) | Nov. 1- Dec. 31 | Not in Effect | Dec 1-Dec 31 = 231.64 | N/A | N/A | 1/5/26 | N/A |

| 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 – JPE finalized on 1/8/26 | Week 10 (3/5-3/11): $0.0977 \times 0.5 \times 5,287.26 = 258.28$ Upcoming: Week 11 (3/12-3/18): $0.1549 \times 0.5 \times 5,287.26 = 409.50$ | 7 day rolling sum on 3/9/26: 0 | Salvage of natural winter-run is likely in the next week based on seasonal migration timing and loss over the previous week | 3/9/26 | Awaiting genetic result from 1 LAD WR salvaged at CVP on 3/8/26. |
| 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: 0.25% of 75,119 = 187.80 Group 2: 0.25% of 60,873 = 152.18 Group 3: 0.25% of 60,873 = 142.77 | Confirmed loss for Group 1: 0 Confirmed loss for Group 2: 261.65 Confirmed loss for Group 3: 35.08 | Yearling natural spring-run salvage possible in the next week | 3/9/26 | No salvage of clipped CHN from any of these groups at Delta Fish Facilities recently. |

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 | Not Active. (Triggered on 12/23/25, in effect 12/25/25 – 1/7/26) | three-day Freeport (FPT) daily flow running avg >= 25,000 AND [three-day Freeport turbidity running avg >=50 NTU OR Smelt Monitoring Team recommendation] | N/A | N/A | 1/20/26 | N/A |
| Adult Delta Smelt Entrainment Protection (“Turbidity Bridge Avoidance”) (8.3.2) | After First Flush or Dec. 20 until 3-day average temperatures at Jersey Point (SJJ) or Rio Vista (RVB) exceed 12 °C (53.6 °F) | Not Active | Occurs after First Flush 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) | N/A | N/A | 2/23/26 | 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 | COA 8.4.1: Active, temporarily off-ramped by high flows at Rio Vista and Vernalis | SLS/20mm Secchi depth for 12 south Delta stations ≤ 1 m Rio Vista flows $>55,0000$ cfs or Vernalis flows $>8,000$ cfs (temporary offramp); $<40,000$ cfs (Rio Vista) or $<5,000$ (Vernalis) action reinstated | SLS/20mm Secchi depth for 12 south Delta stations = 1.12 m (SLS 6) Rio Vista: 41,269 cfs Vernalis: 5,346 cfs | Flows expected to continue to decrease, ending temporary high flow off-ramp later this week | 3/10/26 | SLS 6 is on the water 3/9/26-3/11/26 |

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 | COA 8.3.3: Not Active to it being past the active time period. | Cum. salvage > (Age 1+ LFS Index/20) +1 = 125 | Cum. Salvage = 0 | No salvage expected | 3/2/26 | August – December Index = 2479.2 |
| Larval and Juvenile Longfin Smelt Entrainment Protection (8.4.2) | Jan. 1 – Jun. 30 | COA Active, temporarily off-ramped by high flows at Rio Vista and Vernalis | 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 >55,000 cfs or Vernalis flows >8,000 cfs (temporary offramp); <40,000 cfs (Rio Vista) or <5,000 (Vernalis) reinstated | 7-day avg QWEST = +7,949 cfs SLS 5 catch at: 809 = 4 812 = 0 Rio Vista: 41,269 cfs Vernalis: 5,346 cfs | QWest expected to decrease, ending temporary high flow off-ramp later this week | 3/9/26 | SLS 5 was on the water 2/23/26-2/25/26 SLS 6 is on the water 3/9/26-3/11/26 |

Table 3d: White Sturgeon

| Action | Timeframe | Current Action Status | Threshold(s) | Current Relevant Data | Weekly Trend | Last Updated | Comments |
|--|------------|---|--|--|--|--------------|--|
| White Sturgeon Entrainment Protection Action (8.4.7) | Year-round | Active; not triggered Flow Conditions: Not met Survey Conditions: Not Met | YOY WS detected in one of the listed north or central Delta survey stations in the last 90 days Mean total exports for the last 90 days $\geq 14,296.76 + (-0.41) \times (90\text{-day average Vernalis flow})$ | YOY WS detections= None in last 90 days 90-Day Avg Vernalis flows = 3,336cfs 90-Day Avg Exports = 6,085cfs | YOY detections possible Flow/ Exports conditions unlikely to meet criterion | 3/03/26 | Survey and Conditions not met WY 2026 salvage = 0 |

Table 3e: 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) | Not In Effect | <ul style="list-style-type: none"> • 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 | 7-day avg QWEST = 2,800 cfs X2 = 55 km Daily avg turbidity: OSJ: 7.85 FNU HOL: 5.52 FNU OBI: 5.59 FNU Cumulative Loss of yearling SR surrogates: 224.05 | N/A | 2/23/2026 | N/A |

| 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: Daily mean water temperature is > 22.2 C at Mossdale and Prisoners Point for 7 days (can be non-consecutive). | N/A | N/A | N/A | N/A |
| Spring Outflow (COA 8.12.1) | April 1 – May 31 | Not in effect | Critical year: ratio of Vernalis flow to SWP and CVP combined exports shall be 1 to 1. Dry year: ratio of Vernalis flow to SWP and CVP combined exports shall be 2 to 1. Below Normal year: ratio of Vernalis flow to SWP and CVP combined exports shall be 3 to 1. Above Normal/Wet year: ratio of Vernalis flow to SWP and CVP combined exports shall be 4 to 1 | N/A | N/A | N/A | 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), [5] Unknown (information unconfirmed).

| Monitoring survey | Region | Notes (as of 3/10/2026) | Status |
|---|------------------|-------------------------------|--------|
| SWP regular counts, CWT reading | Delta | Active | 1 |
| CVP regular counts, CWT reading | Delta | Active | 1 |
| Smelt Larval Survey | Delta | Active (ends March 11) | 1 |
| LES | Delta | Active | 1 |
| 20mm Survey | Delta | Not Active (begins March 16) | 4 |
| Fall Mid-water Trawl | Delta | Not Active | 4 |
| Summer Towntnet 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 (20mm begins March 30) | 1 |
| EMP | Delta | Active | 1 |
| Mossdale Trawls | Delta | Active (USFWS) | 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 | Active | 1 |
| Yuba River (Hallwood) RST | Yuba River | Active | 1 |
| Butte Creek Carcass Surveys | Butte Creek | Not Active | 4 |
| Butte Creek RST | Butte Creek | Active | 1 |
| Yolo Bypass Rotary Screw Trap | Yolo Bypass | Active | 1 |
| Yolo Bypass Beach Seine | Yolo Bypass | Active | 1 |
| Yolo Bypass Fyke Trap | Yolo Bypass | Active | 1 |

| Monitoring survey | Region | Notes (as of 3/10/2026) | Status |
|---|-------------------|--------------------------------|---------------|
| Redd dewatering and stranding surveys | Sacramento River | Active | 1 |
| Sacramento Carcass and Redd Surveys (fall-run Chinook Salmon) | Sacramento River | Active | 1 |
| Lower Sacramento RST | Sacramento River | Not Active | 4 |
| 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 |
| Sonar, telemetry (sturgeon) | Feather River | Active | 1 |
| Egg mats (sturgeon) | Feather 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 | Not Active | 4 |
| Tuolumne Carcass Survey | Tuolumne River | Not Active | 4 |
| Merced Carcass Survey | Merced River | Not Active | 4 |
| Tuolumne RST | Tuolumne River | Active | 1 |
| American River Carcass Survey | Sacramento River | Not Active | 4 |

*Qualitative larval sampling efforts for both the CVP and SWP have concluded and have been removed from the list as of 10/7/25.