



Spring-Run Chinook Salmon Weekly Assessment

12/16/2025

Executive Summary

No loss of length at date (LAD) spring-run (SR) Chinook Salmon has occurred in the past week at the Federal fish salvage facility or at the State fish salvage facility. Young of Year (YOY) spring-run sized Chinook salmon, near the LAD separation point of spring-run and winter-run, have been observed in Delta entry rotary screw traps over the past several weeks. Salvage of LAD and genetic natural origin YOY SR is unlikely to occur over the next week based on seasonal timing and historical salvage trends. The first Spring Surrogate group (LF, n=75,119, tag code 05 68 10) was released on November 17, 2025, into Battle Creek.

Risk of routing into the central Delta, independent of OMR.

- Exposure level for routing into the central Delta is **low for young of year, medium for yearling**.
 - Seasonal timing, based on historical monitoring data and LAD, estimates that 4.0% have entered the Delta at Knights Landing, 1.2% have passed Sherwood Harbor, suggesting some LAD SR may be passing the Sacramento River-Georgiana Slough confluence this week.
 - Low catch of YOY LAD SR at Rotary Screw Trap (RST) Delta entry and in-Delta monitoring locations.
 - The STARS model predicts routing for Late-Fall CHN into Sutter and Steamboat sloughs is ~40%.
 - The first release of yearling spring-run surrogates occurred on 11/17/2025.
 - No releases of young-of-year spring-run surrogates have occurred.
 - CDFW believes that exposure level this week is estimated as **medium for yearlings** due to seasonal migration timing of yearling SR. The exposure level for routing in the Central Delta is **low** for young of year based on seasonal timing.

- Routing probability is **low**.
 - The DCC gates are closed.
 - Freeport flows are expected to range from 9,500 to 16,000 cfs.
 - Predicted routing of Late-Fall CHN into Georgiana Slough, based on the STARS model, is ~22%. Routing into G.S. from the first G.S. release group (12/2) is 21.7%.
 - Georgiana Slough Migratory Barrier began operations on Monday, 11/03.
 - CDFW believes that routing probability this week is estimated as **low** due to DCC gates being closed and the operation of the Georgiana Slough Migratory Barrier.
- Overall potential (i.e., Exposure level*Routing Probability) for routing into the central Delta is **low-medium**.
 - The risk of routing into the south Delta is expected to be low but increasing over the next week due to the DCC being closed, the Georgiana Slough Salmon Migratory Barrier (GSSMB) operating, and small numbers of natural origin spring-run (LAD) that have entered the Delta and would potentially be in the vicinity of Georgiana Slough. The release of the first SR surrogate group, and seasonal timing, may increase the number of natural origin yearling SR entering the Delta.
 - CDFW believes that overall entrainment risk for the central Delta is **medium** due to seasonal migration timing of yearling SR and the presence of LAD YOY SR in monitoring surveys in the Delta.

Risk of loss in Central Valley Project/State Water Project (CVP/SWP) facilities:

- Exposure risk for entrainment (i.e., number of juveniles present in the interior Delta) is **low**.
 - Delta entry of LAD YOY SR has occurred and is increasing.
 - No salvage of SR (LAD or confirmed) or the first SR surrogate group, released on 11/17, has occurred.
 - Based on historical salvage records, the risk for loss of Yearling spring-run is **low**.
- Entrainment potential (likelihood of spring-run entrainment into export facilities for ones entering the Delta) is **low**.
 - OMRI is -2,200 to -2,600 cfs.
- Overall risk (i.e., Exposure*Entrainment potential) of loss at CVP/SWP facilities is **low**.

- Risk of natural origin spring-run loss at CVP and SWP facilities is low over the next week based on historic salvage trends.

Spring-run Distribution

Historical migration timing

Table 1. Average percent captured, with 95 percent confidence intervals, of annual emigrating LAD spring-run Chinook Salmon at monitoring locations and SWP and CVP salvage facilities for today's date ([updated 12/15/2025](#)). LAD is less certain below Red Bluff, with decreasing confidence entering the Delta, at Salvage and passing Chipps Island.

Location (BY)	Average Percent Captured	(95% C.I.)
Red Bluff Diversion Dam (2014–2024)	9.0%	(2.8%, 15.3%)
Tisdale RST (2014–2024)	4.0%	(0.0%, 8.0%)
Knights Landing RST (2014–2024)	11.8%	(-3.6%, 27.2%)
Sac Trawl Index (2014–2024)	1.2%	(-0.6%, 3.0%)
Chipps Island Trawl Index (2014–2024)	0.0%	(0.0%, 0.0%)
Salvage (2016–2025)	0.0%	(0.0%, 0.0%)

Spring-run catch in juvenile monitoring

Table 2. Upper Sacramento River monitoring for spring-run (LAD, unless noted) Chinook Salmon this season. LAD is less certain below Red Bluff, with decreasing confidence entering the Delta, at Salvage and passing Chipps Island.

Date	Clear Creek RST	Battle Creek RST	Red Bluff Diversion Dam RST	Mill Creek RST	Deer Creek RST	Butte Creek RST	Butte Creek Diversion
(11/24-11/30)	NA	NA	NA	NA	NA	8	NA
(12/01-12/07)	NA	NA	NA	NA	NA	3	NA
(12/08-12/14)	NA	NA	NA	NA	NA	NA	NA

Table 3. Lower Sacramento River monitoring for spring-run (LAD, unless noted) Chinook Salmon this season. LAD is less certain below Red Bluff, with decreasing confidence entering the Delta, at Salvage and passing Chipps Island. RST data is through 12/08 for Tisdale, 12/14 for KL, 12/13 for Delta Entry; Trawl data is through 12/12, Beach Seine data through 12/12.

Date	Tisdale RST	Feather at Eye-Side RST	Feather at Herringer RST	Lower Feather RST	Knights Landing RST	Delta Entry RST
(11/24-11/30)	2	NA	NA	5	4	NA
(12/01-12/07)	2	NA	NA	0	4	1
(12/08-12/14)	1	NA	NA	NA	6	4

Table 4. Seine and trawl monitoring for spring-run (LAD, unless noted) Chinook Salmon this season. LAD is less certain below Red Bluff, with decreasing confidence entering the Delta, at Salvage and passing Chipps Island.

Date	Sac Trawl	Beach Seines	Mossdale Trawl	EDSM Trawls	Chipps Island Midwater Trawls
(11/24-11/30)	1	75	0	NA	0
(12/01-12/07)	0	49	0	NA	0
(12/08-12/14)	1	16	0	NA	0

Spring-run salvage and loss for WY 2026

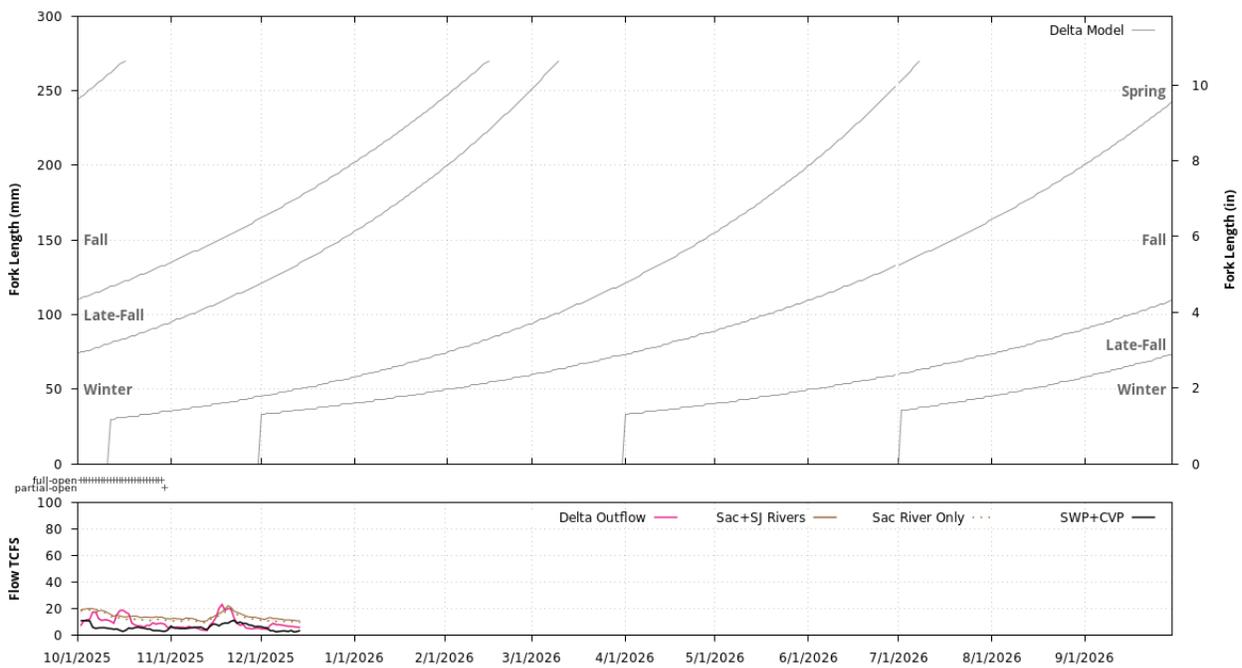
Table 5. Cumulative YOY LAD and genetic spring-run Chinook Salmon salvage and loss for WY 2026 (updated 12/15/25, data through 12/14/25). Feather River spring-run lineage may originate from wither the Sacramento River (protected) or San Joaquin Basin (experimental).

Spring-run Type	Week	Weekly # Fish	Weekly Salvage	Weekly Loss	Season # Fish	Season Salvage	Season Loss
Length-at-Date (LAD)	12/08-12/14	0	0	0	0	0	0
Genetically Confirmed	12/08-12/14	0	0	0	0	0	0
Pending Genetics	12/08-12/14	0	0	0	0	0	0

Table 6. Genetically confirmed (and LAD or “older juvenile” pending analysis) spring-run Chinook Salmon salvage and loss for WY 2026. # Fish, Salvage, and Loss values in Table 6 are not included in Table 5. Feather River spring-run lineage may originate from within the Sacramento River (protected) or San Joaquin Basin (experimental).

Date/Time	Facility	LAD Race	DNA Race	Lineage	Length	# Fish	Salvage	Loss
Year to Date (12/14/2025)	CVP and SWP	NA	NA	NA	NA	0	0	0

Observed Chinook Salvage at SWP and CVP Delta Fish Facilities
Chinook Observed 10/1/2025 to 9/30/2026



Preliminary data from CDEC, CDFW, CDRW, and BOR; subject to revision. Key: Location-Observation Type (#total estimate:#released for observed). www.cbr.washington.edu/sacramento/
Chinook not measured for length and Chinook outside of the length-at-date criteria (Delta model) are not included. 15 Dec 2025 08:15:01 PST

Figure 1. Observed Chinook Salmon salvage at SWP and CVP facilities for WY26, showing LAD spring-run ([from SacPAS on 12/15/2025](#))

Figure 1 is a scatterplot and line graph showing observed Chinook salmon salvage at the State Water Project and Central Valley Project Delta Fish Facilities from October 1, 2025 to September 30, 2025. The top panel is a scatterplot displaying a fork length in millimeters on the y-axis and observation date on the x-axis. Each point represents an individual Chinook salmon, color-coded by run type or hatchery origin, including Fall, Late-Fall, Winter, and Spring runs. Gray lines indicate approximate fork length ranges used to identify each run type. The lower panel is a line graph showing daily flow in thousand cubic feet per second from October 2025 through September 2025. Delta outflow is shown as a solid pink line, Sacramento River flow as a brown line, and combined State Water Project and Central Valley Project exports as a thin dotted line. The hash marks along the x-axis indicate periods when export facilities were partially or fully open.

Surrogates, Late Fall Yearling, and SR/FR Young of Year (YOY)

Table 6. Spring-run Chinook Salmon surrogate release groups (updated 11/17/2025). Group 1 Loss Threshold = 187.80

Release Start	Release End	CWT Tag Race	Hatchery	Release Site	Release Type	First Loss	Last Loss	Loss	% of .25% Trigger Threshold
11/17/2025	11/17/2025	Late-Fall	Coleman NFH	Battle Creek at CNFH	Experimental	NA	NA	NA	NA

Routing and Population Status

STARS Model Results

Table 7. STARS Model ([Delta STARS Model](#)). Current data taken from SacPAS [San Francisco Bay Delta Survival, Travel time, and Routing Simulation \(STARS\)](#).

Date of model run: 12/18/2025, for Delta entry on 12/17/2025	DCC Gates	Georgiana Slough	Sacramento River	Sutter and Steamboat	Yolo Bypass
Late Fall-Run Routing Probability	NA	0.20	0.40	0.40	NA
Late Fall-Run Survival Probability	NA	0.22	0.56	0.44	NA
Winter-run Routing Probability	NA	0.13	0.60	0.27	NA
Winter-run Survival Probability	NA	0.14	0.37	0.37	NA

Georgiana Slough Bio-Acoustic Fish Fence (BAFF) Testing

While the Georgiana Slough BAFF official start date for operations of the BAFF is November 15, operations began on Monday, November 3, 2025, due to early entry of juvenile winter-run Chinook salmon and that KLCI and/or SCI have been exceeded daily since October 29. This early start is a condition-based action, not intended to set a precedent for future years. Releases of acoustic-tagged hatchery fish will occur from December through March to study BAFF effectiveness. Routing probability into Georgiana Slough from these studies will be summarized in Table 8.

Table 8. Georgiana Slough barrier releases for WY 2026 ([CalFishTrack](#)). DCC gates are currently closed. Data from 12/18/2025.

Routing probability into Georgiana Slough	# Fish Released	% Routing into Georgiana Slough	SE	95% lower C.I.	95% upper C.I.
12/02/2025	239	21.7%	3.5	15.6%	29.4%

Spring-run Population Status

The Pacific Fisheries Management Council (PFMC) published its annual review of ocean salmon fisheries, which includes preliminary escapement estimates for spring-run Chinook Salmon (Figure 2). Preliminary adult estimates in 2025 for Mill Creek was 246 fish, and for Deer Creek 343 fish. This graph will be updated with a new figure once all 2025 data is available.

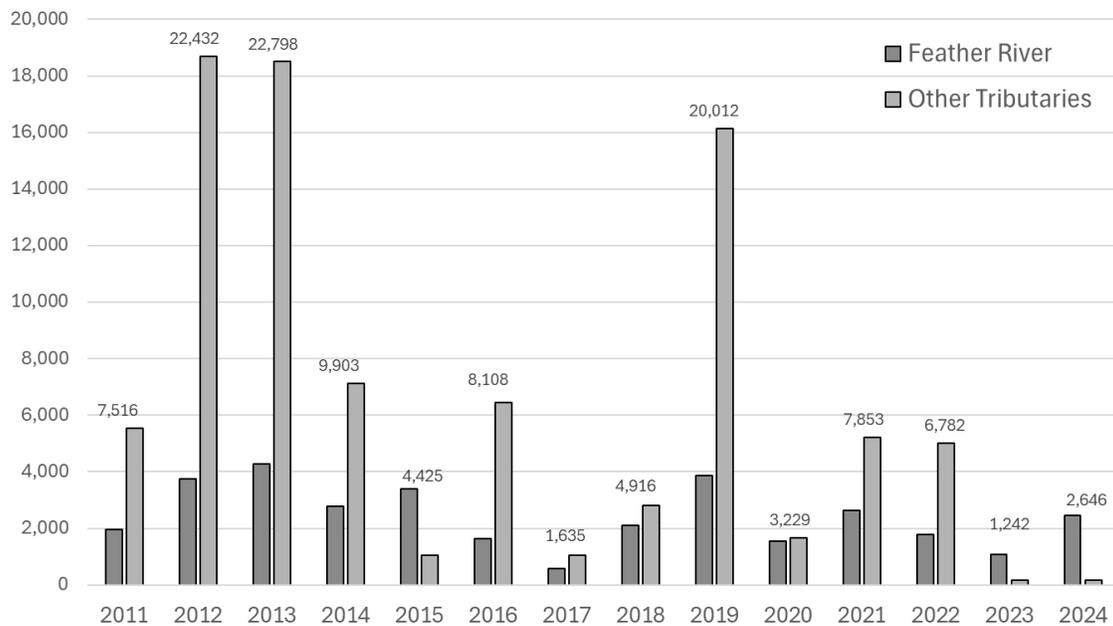


Figure 2. Annual spring-run Chinook Salmon escapement estimates. (2024 values are preliminary; [PFMC 2025](#))

Figure 2 is a bar chart showing the number of Chinook salmon returning to the Feather River and other tributaries from 2011 through 2024. The y-axis shows the number of fish, ranging from 0 to 20,000. The x-axis lists years from 2011 to 2024. Two bars are shown for each year: dark gray for the Feather River and light gray for other tributaries. Returns to other tributaries were highest in 2012 and 2013 at 22,432 and 22,798 fish, respectively, and again in 2019 at 20,012 fish. Feather River returns were lower each year, peaking around 4,100 fish in 2013. The lowest total returns occurred in 2017 and 2023, with both categories below 2,000 fish.