

PRELIMINARY DATA: Assessment for Delta Operations on ESA and CESA-listed Salmonids

Last updated: *November 18, 2025*

Executive Summary

- DCC gates are currently closed and is the controlling factor. Gates will continue to operate in accordance to Table 3-6 in the Proposed Action.
- Winter-run catch is high at delta entry monitoring locations. No loss has yet to occur at export facilities.
- Central Valley Steelhead catch is low and no loss has yet to occur at export facilities.

Natural Winter-run Chinook

Current Status

Give update on migration, salvage, monitoring, and STARs patterns.

The Juvenile Production Estimate for winter-run has not been established for the current water year. Historically, as of Nov 17, 22.7% of length-at-date (LAD) winter-run have entered the delta based on Knights Landing RST catch, 0.9% have exited the delta based on Chipps Island Trawl Catch, and 0.0% of DNA confirmed winter-run have been salvaged.

Table 1: Average Percent of annual emigrating population for unclipped LAD winter-run captured at the following locations and LAD and DNA confirmed winter-run salvaged at SWP and CVP Delta facilities for the past 10 years.

Species	Red Bluff Diversion Dam	Tisdale RST	Knights Landing RST	Sac Trawl (Sherwood)	Chipps Island Trawl	Salvage
Chinook, LAD Winter-run, Unclipped	86.6%	21.5%	22.7%	8.9%	0.9%	0.0%

Species	Red Bluff Diversion Dam	Tisdale RST	Knights Landing RST	Sac Trawl (Sher- wood)	Chipps Island Trawl	Salvage
Chinook, DNA Winter-run, Unclipped (Water Year)						0.0%

Annual Loss

The Juvenile Production Estimate has not been established for the current water year so thresholds are absent or are included from the previous water year. As of November 17 cumulative loss of genetically confirmed winter-run is 0 or 0.00% of the annual loss threshold. Cumulative loss in the past 7 days has been 0.

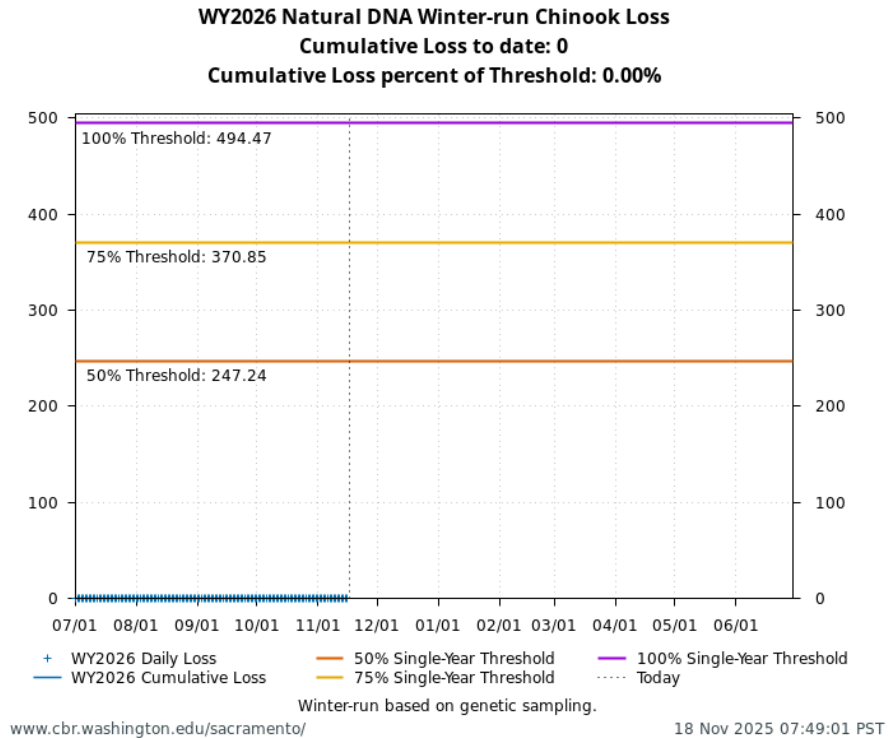


Figure 1: Cumulative loss of natural-origin winter-run for WY 2026. Cumulative loss is based on genetically confirmed winter-run captured in salvage or length-at-date winter-run in which genetic confirmation was unable to be obtained

Weekly Distributed Loss

STARs

The Delta STARs Model is an individual-based simulation model that predicts survival, travel time, and routing of juvenile salmon migrating through the Sacramento–San Joaquin River Delta. This model gives insight into survival and routing patterns of winter-run based on most current conditions.

As of November 16 overall through delta STARs estimated survival probability (with 80% credible intervals) is 0.27 (0.22-0.32). STARs estimated routing and survival probabilities (with 80% credible intervals) into the interior delta are 0.13 (0.1-0.16) and 0.09 (0.04-0.15) respectively.

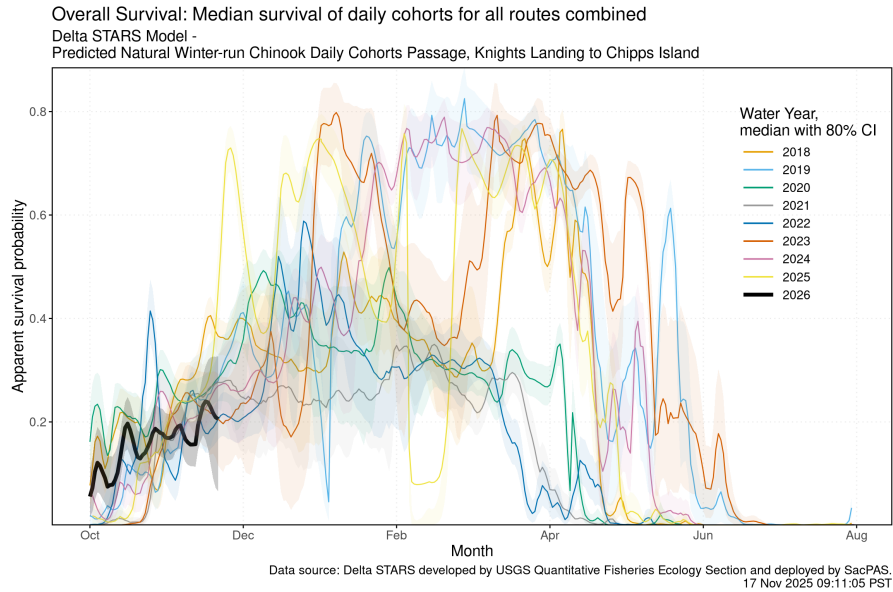


Figure 2: Estimated overall winter-run survival from Knights Landing to Chipps Island. Black line indicates the current water-year, and other colored lines correspond to past water years.

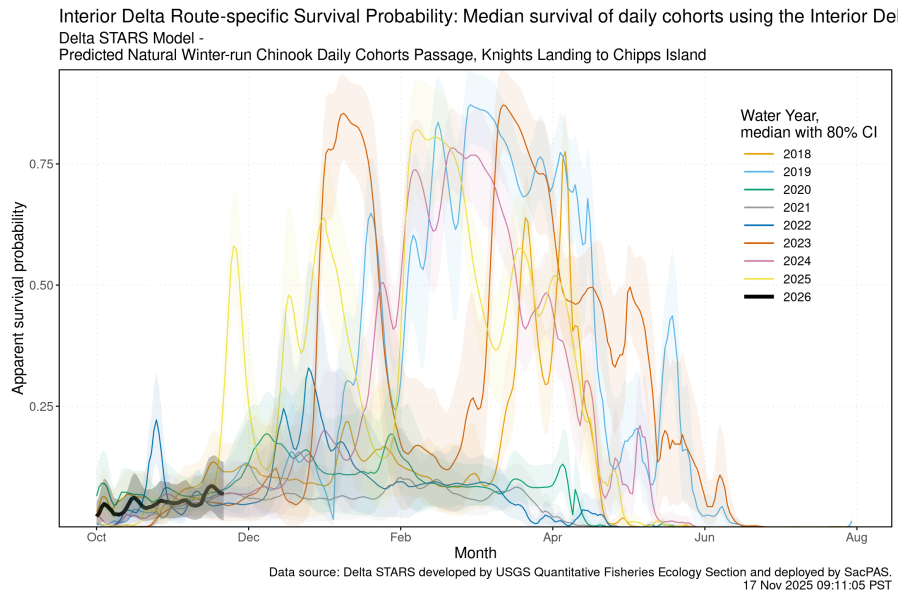


Figure 3: Estimated survival from Knights Landing to Chipps Island of simulate winter-run cohorts that route through the interior delta. Black line indicates the current water-year, and other colored lines correspond to past water years.

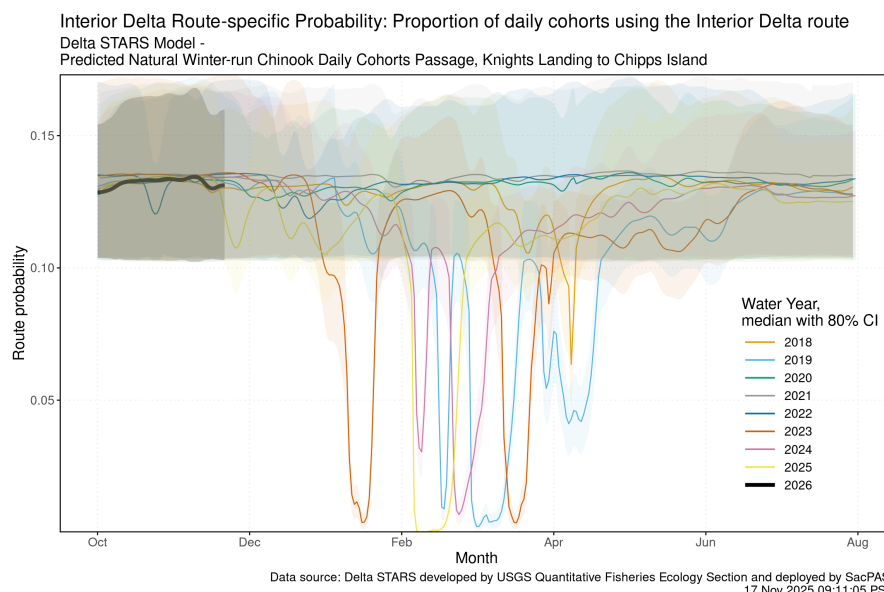


Figure 4: Estimated probability of winter-run routing into the interior delta. Black line indicates the current water-year, and other colored lines correspond to past water years.

Hatchery Winter-run Chinook

Current Status

The Juvenile Production Estimate for Livingstone Stone and Battle Creek hatchery winter-run has not been established for the current water year. To date, no winter-run hatchery releases have occurred in WY 2026

Annual Loss

The Juvenile Production Estimate has not been established for the current water year so thresholds are absent or are included from the previous water year. To date, no loss has occurred as no hatchery winter-run have been released.

Central Valley Steelhead

Current Status

Historically, as of Nov 17, 0% of CCV steelhead have entered the delta based on Knights Landing RST catch, 0% have exited the delta based on Chipps Island Trawl Catch, and 0.3% have been salvaged.

Table 2: Average Percent, with 95%CI, of annual emigrating population for unclipped CCV steelhead captured at the following locations and salvaged at SWP and CVP Delta facilities for the past 10 years.

Species	Red Bluff Diversion Dam	Tisdale RST	Knights Landing RST	Sac Trawl (Sherwood)	Chippis Island Trawl	Salvage
Steelhead, Unclipped						0.3%

Annual Loss

As of November 17 cumulative loss of unclipped steelhead is 0 or 0.00% of the annual loss threshold. Cumulative loss in the past 7 days has been 0.

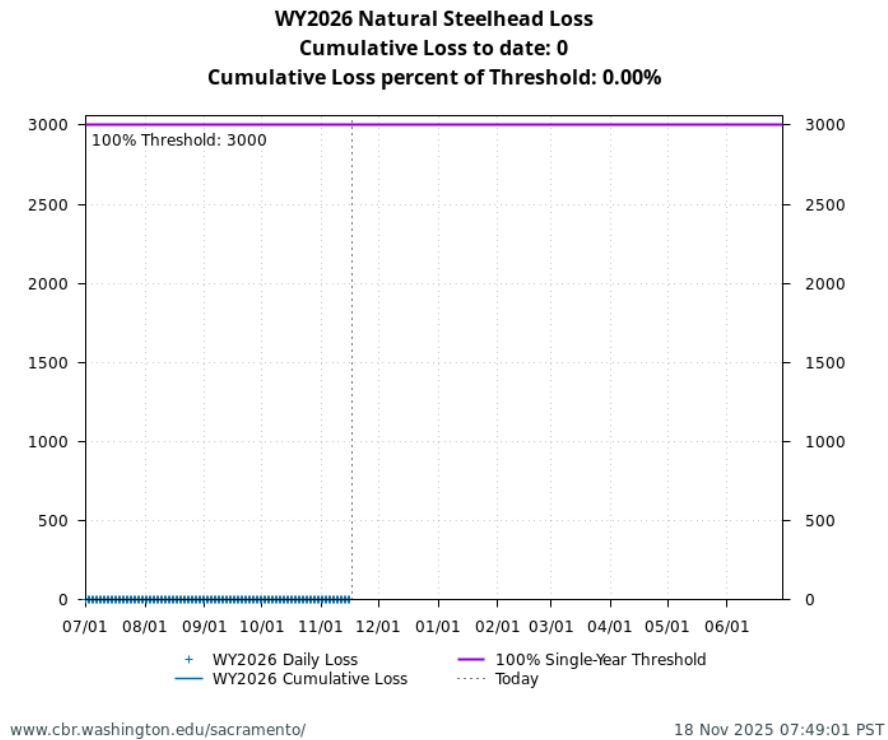


Figure 5: Cumulative loss of natural-origin and hatchery steelhead for WY 2026.

Spring-run

Current Status

Surrogate Releases and Current Loss

References