



Weekly Assessment for Delta Operations on ESA and CESA-listed Salmonids and Osmerids including Current Delta Hydrologic Conditions

Last updated: Monday, March 02, 2026 at 8 AM

Executive Summary

ESA and CESA-listed Salmonids

- Entrainment management season is active.
- Annual Loss: 4 (0.03% of annual loss threshold) natural winter-run, 0 (0.00% of annual loss threshold) hatchery winter-run, 164 natural steelhead, 828 (13.55% of annual loss threshold) hatchery steelhead, and 1055 (48.00% of annual loss threshold) spring-run surrogates.
- Single-year Incidental Take Limit (ITL) Status: 4 (0.07% of 5,922 ITL) natural winter-run; 0 (0.00% of 1,301 ITL) hatchery winter-run; 164 (3.10% of 5,294 ITL) natural steelhead.
- Spring-run surrogate yearlings (0.5% ITL per experimental release group): Group 1: 0 (0% of 376 ITL); Group 2: 257 (84.64% of 304 ITL); Group 3: 35 (12.26% of 286 ITL).
- LAD winter-run presence in the Delta is high based on historical monitoring.
- Steelhead presence in the Delta is high based on historical monitoring.

ESA and CESA-listed Osmerids

- Entrainment management is currently active.
- Delta smelt were most recently detected at Suisun Marsh.
- No Delta smelt or longfin smelt salvage has been observed this water year.
- Turbidity in the central/south Delta is low to moderate.

Current Delta Hydrologic Conditions

Operational and Regulatory Conditions

The current controlling factor is OMRI restrictions to no more negative than -5,000 cfs. See most recent weekly outlook for more information.

Current Conditions

Most recent inflow at Freeport in the Sacramento River and Vernalis in the San Joaquin River is 59,435 and 6,955 cfs respectively. Most recent Jersey Point Flow (JPF) is 9820 cfs. Most recent 1-day, 5-day, and 14-day OMRI measurements were -5,000, -4,966, and -5,061 cfs, respectively, and most recent export data were 3,551 cfs for Jones Pumping Plant and 1,734 cfs for Henry O. Banks Pumping Plant.

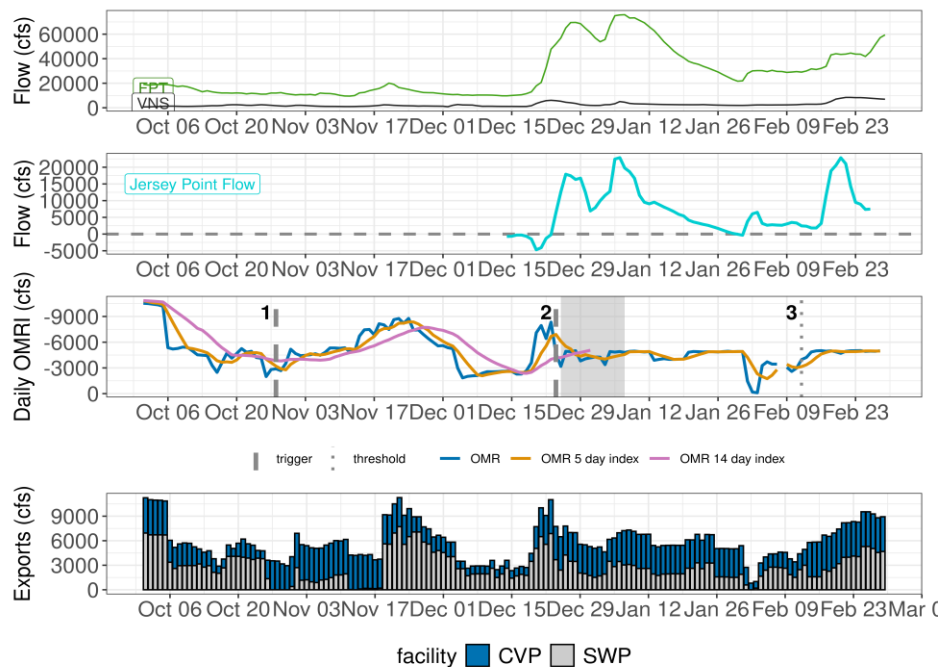


Figure 1: Operations and Action Summary, WY 2026. The numbers and lines in the OMRI plot indicate different triggers and thresholds (see Table 1), with shading representing specific action periods. Dashed and dotted vertical lines represent triggered actions and thresholds, respectively. OMRI data (colored lines) calculated by SacPAS, Freeport (FPT) and Vernalis (VNS) flow data from CDEC, Jersey Point Flow (JPF) from DWR, and CVP (TRP) and SWP (HRO) exports data from CDEC.

Figure 1 depicts three stacked graphs. The first two are line charts depicting flow and daily OMRI in cfs for OMR, and OMR 5- and 14-day indexes. The last chart is a bar graph depicting exports in cfs through the Central Valley Project and State Water Project facilities. The x-axis for all three graphs list October 6 – late February.

Table 1: Summary of Actions and Triggers, WY 2026

Label	Action	Date Triggered	Date Implemented	Number Days Implemented	Regulation
1	DCC Gate Closure	10/28/2025	2025-10-30	Ongoing	DCC gates
2	First Flush	12/24/2025	2025-12-25	14 days	Entrainment Management
3	Offramp temperature threshold	2/12/2026	N/A	3 consecutive days	Delta Smelt Adult Entrainment, no action taken WY26

Zone of Influence

Zone of Influence (ZOI) analysis is discussed in detail in the December 22 assessment. Current conditions were queried from most recent Freeport flow data on the Sacramento River and Vernalis flow data on the San Joaquin river from [SacPAS](#). Forecasted flows were queried from short range deterministic flows provided by the [California Nevada River Forecast Center](#).

Current conditions at Freeport and Vernalis indicate that delta hydrology falls within the 'hihi' category. Forecasted conditions averaged across the next 7 days falls within the 'hihi' category.

The altered channel length for the current "hihi" hydrology is 99, 100, 119 and 114 kilometers (km) across OMR bins of -2000, -3500, -5000 and <-5500 respectively. The altered channel length for forecasted "hihi" hydrology is 99, 100, 119 and 114 kilometers (km) across OMR bins of -2000, -3500, -5000 and <-5500 respectively.

Change in altered channel length between OMR levels is 15 km for current conditions and 15 km for forecasted conditions indicating that ZOI impacts across OMR scenarios would not change between current and forecasted conditions. Across the nine hydrology bins, changes in altered channel length across OMR scenarios are low (<25th percentile) for both current and forecasted hydrology.

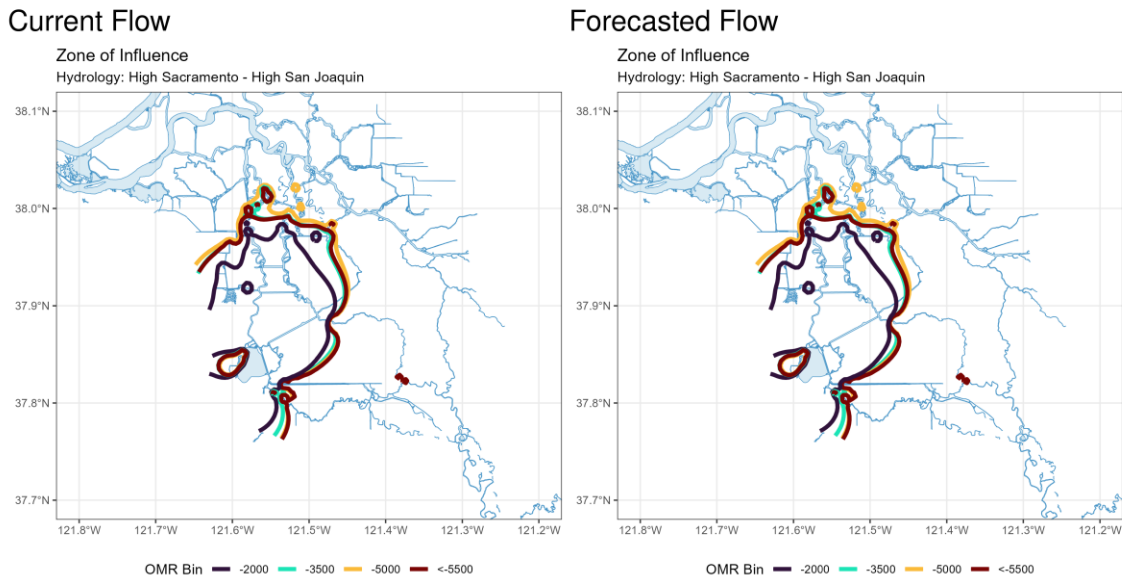


Figure 2: Modeled Zone of Influence at different OMRI scenarios based on current inflow hydrology (left) and forecasted inflow hydrology (right) from the Sacramento River and San Joaquin River

Figure 2 contains two maps of current and forecasted flow for the zone of influence. Each map contains lines of different colors depicting OMR Bin -2000, -3500, -5000, and less than -5500 modeling scenarios.

Assessment for Delta Operations on Salmonids

For more detailed data on salmonid conditions in the Delta see corresponding webpage on [SacPAS](#).

Natural Winter-run Chinook

Juvenile Production Estimate

The Juvenile Production Estimate for winter-run is 1,057,452 for the current water year.

Current Status

Delta Entry Timing - Historically, as of Mar 01, 58% of length-at-date (LAD) winter-run have entered the Delta based on Knights Landing RST catch, 12% have exited the Delta based on Chipps Island Trawl Catch, and 40% of DNA confirmed winter-run have been salvaged.

Table 2: Average percent of annual emigrating population for unclipped LAD winter-run captured at monitoring locations and salvaged at Delta facilities for the past 10 years.

Species	Red Bluff Diversion Dam	Tisdale RST	Knights Landing RST	Sac Trawl (Sherwood)	Chippis Island Trawl	Salvage
Chinook, LAD Winter-run, Unclipped	99%	98%	98%	58%	12%	42%
Chinook, DNA Winter-run, Unclipped (Water Year)	N/A	N/A	N/A	N/A	N/A	40%

Red Bluff Diversion Dam Passage Estimate - As of Feb 23 estimated passage to date of LAD winter-run at Red Bluff Diversion is approximately 4.17 million fish. Note that outmigration timing overlaps with spring-run migrating fish, and true winter-run abundance likely differs from these estimates.

Delta Monitoring - Total catch of LAD winter-run at RSTs at Delta Entry (Tisdale, Knights Landing, Lower Sacramento River) between Feb 15 and Feb 22 is 11 individuals. Total catch at Sacramento Trawl and Beach Seines in the delta between Feb 17 and Feb 27 is 38 individuals. Total catch at Delta Exit at Chippis Island between Feb 17 and Feb 27 is 11 individuals.

Annual Loss

The annual loss threshold for natural winter-run is 1% of the JPE or 10,575 fish. The single-year incidental take limit (ITL) is 0.56% of the JPE (5,922 fish) or 0.36% on a 3-year rolling average (BiOp Table 184). As of March 01, cumulative loss of genetically confirmed winter-run is 4 or 0.03% of the annual loss threshold. Cumulative loss in the past 7 days has been 0.

WY2026 Natural DNA Winter-run Chinook Loss
Cumulative Loss to date: 3.52
Cumulative Loss percent of Threshold: 0.03%

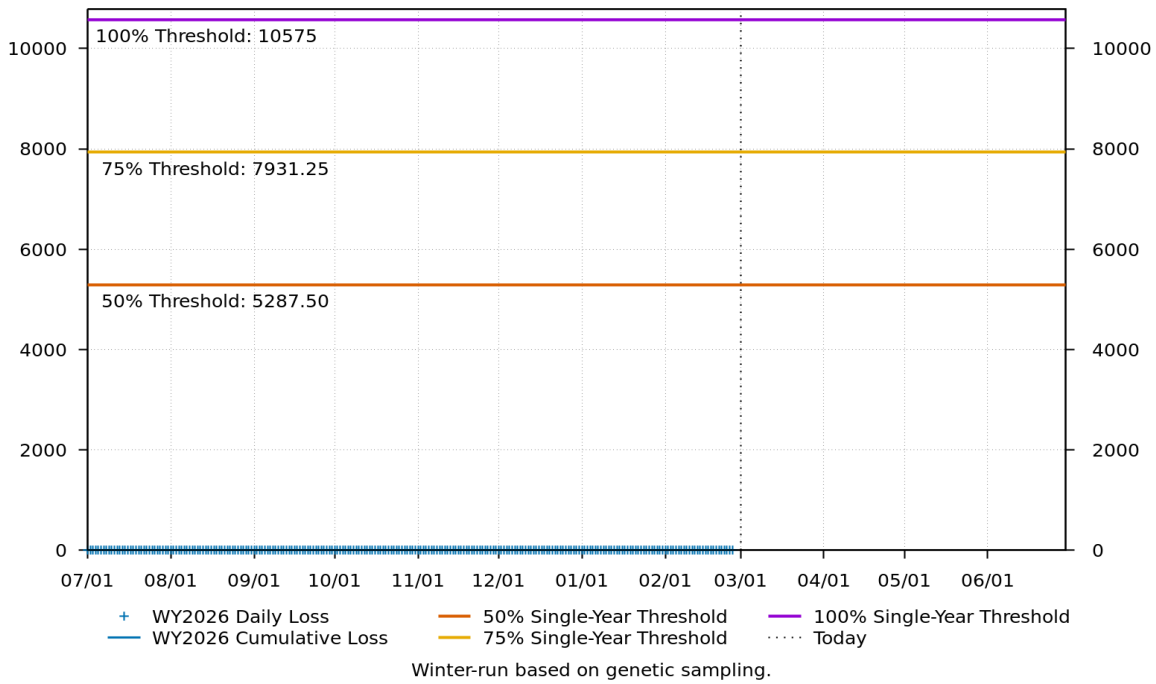


Figure 3: Cumulative loss of natural-origin winter-run for WY 2026. Cumulative loss is based on genetically confirmed winter-run captured in salvage or length-at-date winter-run in which genetic confirmation was unable to be obtained.

Figure 3 displays daily and cumulative winter-run Chinook loss based on genetic sampling for Water Year 2026. Points represent daily estimated loss and the line shows cumulative loss over time, with a vertical dashed line indicating the current date. The 100% threshold: 10575, 75% threshold: 7931.25, and 50% threshold: 5287.50 are shown as horizontal lines. As of March 2, 2026, the cumulative loss to date is 3.52, and the cumulative loss percent of the threshold is 0.03%.

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 February 28, overall through delta STARS estimated survival probability (with 80% credible intervals) is 0.72 (0.65-0.79) placing it in the 75th percentile of historical STARS survival estimates for the month of March (WYs 2018-2025). STARS estimated routing and survival probabilities (with 80% credible intervals) into the interior delta are 0.05 (0.04-0.07) and 0.72 (0.62-0.81), respectively, corresponding to the 12th and 79th percentiles of historical March estimates (WYs 2018-2025).

Overall Survival: Median survival of daily cohorts for all routes combined
Delta STARS Model -
Predicted Natural Winter-run Chinook Daily Cohorts Passage, Knights Landing to Chipps Island

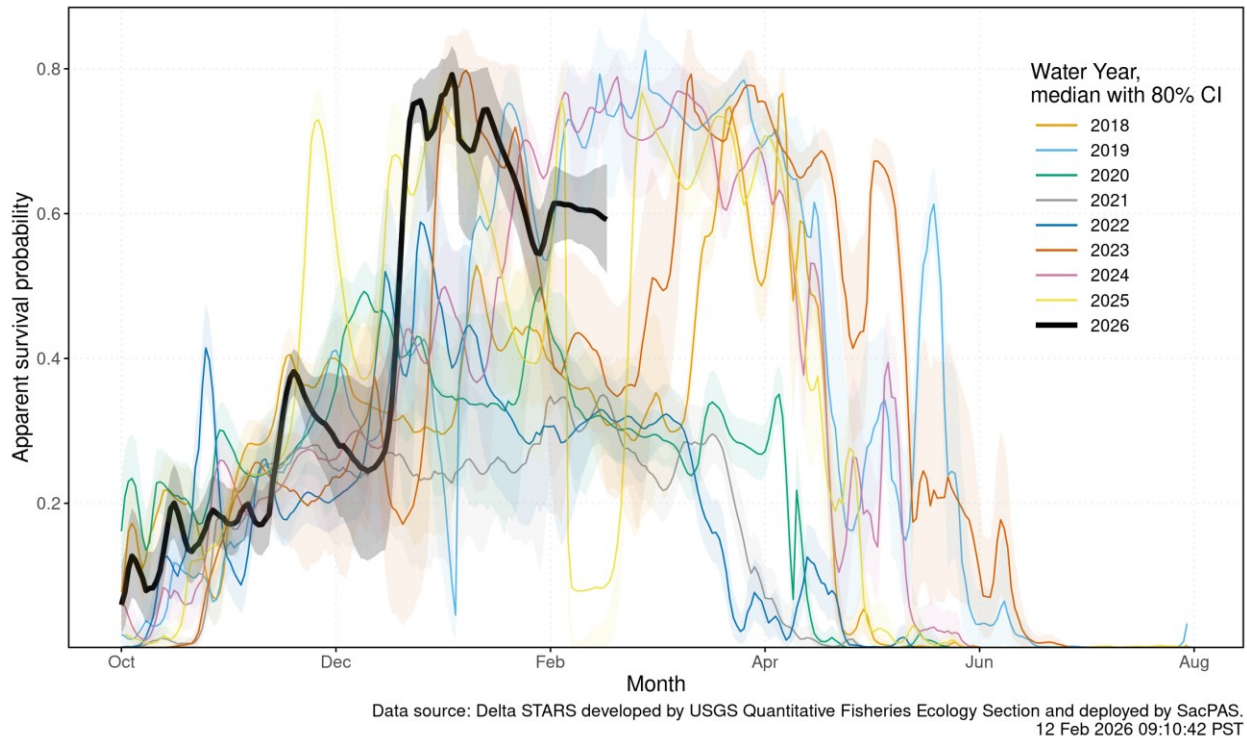


Figure 4: Estimated overall winter-run survival from Knights Landing to Chipps Island. Black line indicates the current water-year, and other colored lines correspond to past water years.

Figure 4 is a line graph depicting median survival of daily cohorts for all routes combined from Knights Landing to Chipps Island. Survival is shown by water year for 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, and 2026, with different-colored lines from October to August and an 80% confidence interval.

Interior Delta Route-specific Survival Probability: Median survival of daily cohorts using the Interior Delta STARS Model - Predicted Natural Winter-run Chinook Daily Cohorts Passage, Knights Landing to Chipps Island

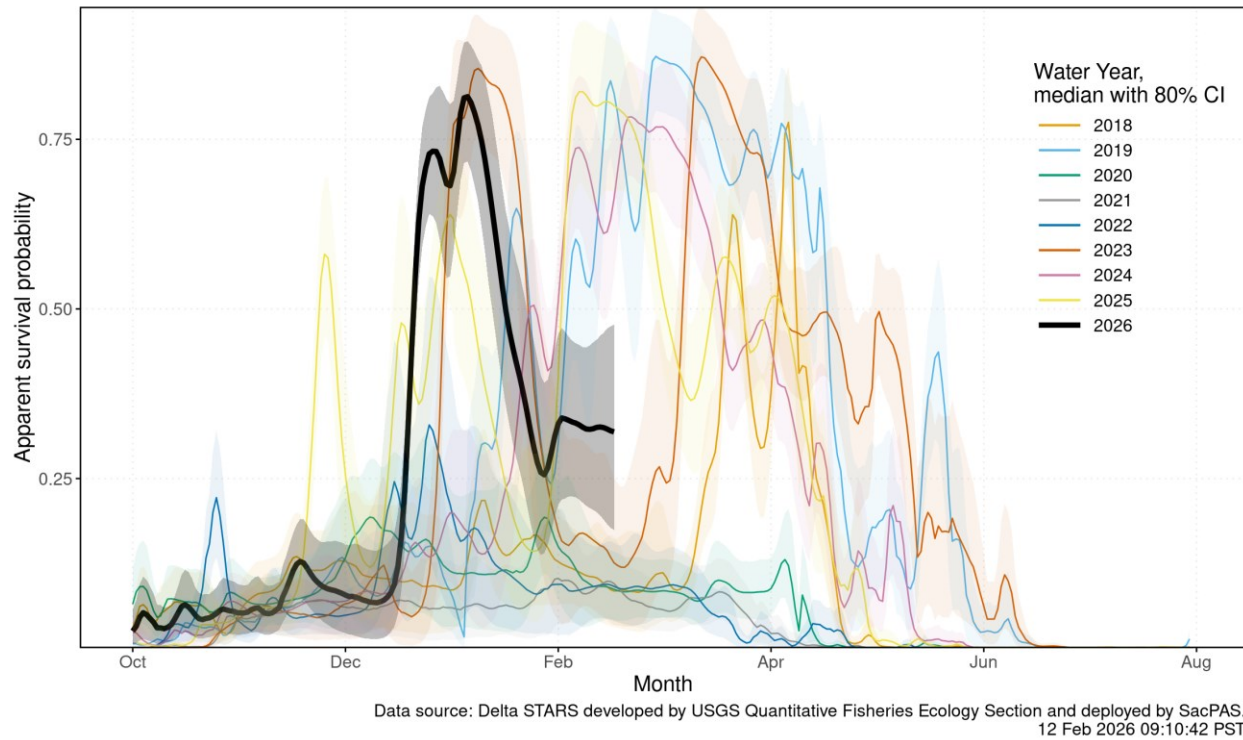
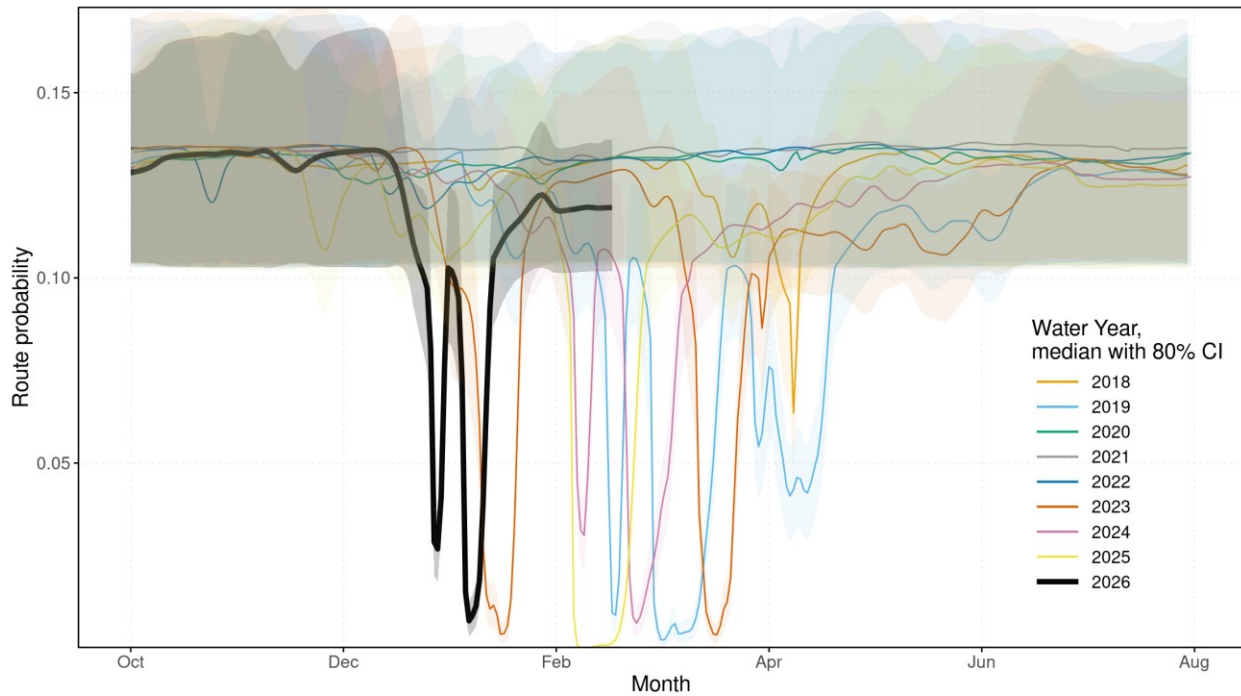


Figure 5: Estimated survival from Knights Landing to Chipps Island of simulated winter-run cohorts that route through the interior Delta. Black line indicates the current water-year, and other colored lines correspond to past water years.

Figure 5 is a line graph depicting median survival of daily cohorts using the Interior Delta routes from Knights Landing to Chipps Island. Survival is shown by water year for 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, and 2026, with different-colored lines from October to August with an 80% confidence interval.

Interior Delta Route-specific Probability: Proportion of daily cohorts using the Interior Delta route
Delta STARS Model -
Predicted Natural Winter-run Chinook Daily Cohorts Passage, Knights Landing to Chipps Island



Data source: Delta STARS developed by USGS Quantitative Fisheries Ecology Section and deployed by SacPAS.
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Figure 6: 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.

Figure 6 is a line graph depicting survival probability for winter-run Chinook daily cohorts using the Interior Delta routes from Knights Landing to Chipps Island. The survival is shown by water year for 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, and 2026, with different-colored lines from October to August with an 80% confidence interval.

ECO-PTM

ECO-PTM (Ecological Particle Tracking Model)

ECO-PTM Results Evaluation Period: 02/24/2026 – 03/16/2026

Particles Injected: 02/24/2026

Injection Location: Sacramento River at Freeport

Table 3: Salmon Particle Route Ratio After 3 Weeks (Ending 03/16/2026)

OMR Flow Bin	Sutter Slough Route	Steamboat Slough Route	Sacramento River (SS) Route	Sacramento River (GEO) Route	Georgiana Slough Route
-6,500	0.13	0.28	0.59	0.81	0.19
-5,000	0.13	0.29	0.58	0.82	0.18
-3,500	0.13	0.29	0.58	0.81	0.19
-2,000	0.13	0.28	0.59	0.82	0.18

Table 4: Salmon Particle Route-Specific Survival After 3 Weeks (Ending 03/16/2026)

OMR Flow Bin	Sutter Slough Route	Steamboat Slough Route	Sacramento River Route	Georgiana Slough Route	All Routes Combined
-6,500	55%	66%	63%	45%	61%
-5,000	54%	67%	64%	35%	60%
-3,500	54%	66%	63%	35%	60%
-2,000	55%	64%	62%	34%	59%

Notes:

- Salmon particle route ratio for the Sacramento River (SS) Route reflects particles inserted at Freeport that are not routed through either Sutter Slough or Steamboat Slough.
- Salmon particle route ratio for the Sacramento River (GEO) Route reflects particles inserted at Freeport that are not routed through either Sutter Slough, Steamboat Slough, Georgiana Slough, or the Delta Cross Channel (when operational).

Hatchery Winter-run Chinook

Hatchery Releases

Livingston Stone National Fish Hatchery released a total of 466,344 winter-run Chinook salmon (February 18). All fish were 100% CWT-marked production fish released at the Sacramento River at John F. Reginato River Access. Release details are shown in the table below and available on SacPAS.

Table 5: Livingston Stone NFH winter-run Chinook salmon releases in Water Year 2026. Data sourced from SacPAS.

Release Date	Hatchery	Release Site	Release Type	Fish Released	% CWT Marked	CWT Tagcodes
February 18, 2026	Livingston Stone NFH	Sacramento River at John F. Reginato River Access	Production	466,344	100%	053800 056770 056788 056789

Juvenile Production Estimate

The Juvenile Production Estimate for hatchery winter-run is 130,096 for Livingston Stone releases. The annual loss threshold is 1% of the JPE (1,301 fish), which is the same as the single-year ITL (BiOp Table 184).

Annual Loss

As of March 02, cumulative loss of Livingston Stone hatchery fish is 0 or 0.00% of the annual loss threshold (which equals the single-year ITL). Cumulative loss in the past 7 days has been 0.

Natural-origin Central Valley Steelhead

Current Status

Delta Entry Timing - Historically, as of Mar 01, 47% of CCV steelhead have entered the Delta based on Knights Landing RST catch, 36% have exited the Delta based on Chipps Island Trawl Catch, and 28% have been salvaged.

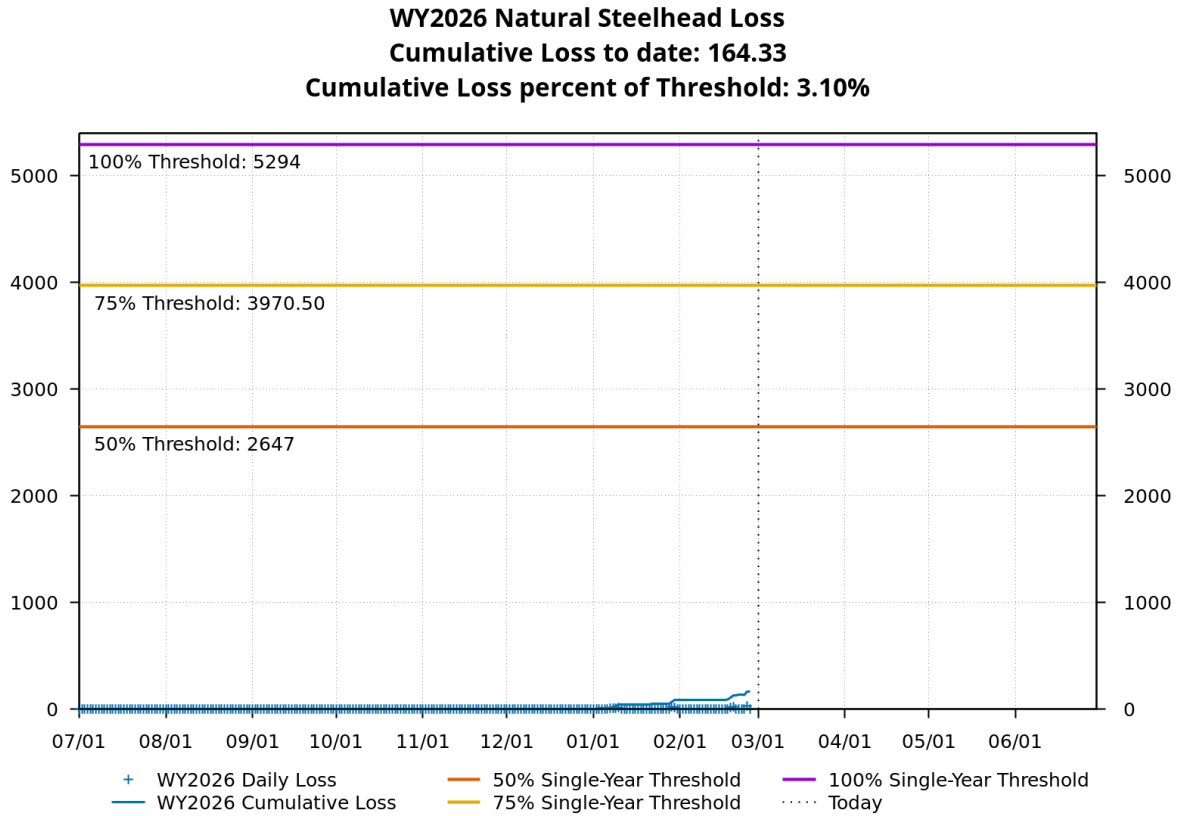
Table 6: Average percent of annual emigrating population for unclipped CCV steelhead captured at monitoring locations and salvaged at Delta facilities for the past 10 years.

Species	Chipps Island Trawl	Knights Landing RST	Red Bluff Diversion Dam	Sac Trawl (Sherwood)	Salvage	Tisdale RST
Steelhead, Unclipped	36%	45%	2%	47%	28%	44%

Delta Monitoring - Total catch of unclipped steelhead at RSTs at Delta Entry (Tisdale, Knights Landing, Lower Sacramento River) between Feb 15 and Feb 22 is 6 individuals. Total catch at Sacramento Trawl and Beach Seines in the delta between Feb 17 and Feb 27 is 0 individuals. Total catch at Delta Exit at Chipps Island between Feb 17 and Feb 27 is 0 individuals.

Annual Loss

As of March 01, cumulative loss of unclipped steelhead is 164 or 3.10% of the single-year incidental take limit (ITL). There is no annual loss threshold for natural steelhead. The single-year ITL is 5,294 juveniles or 2,319 juveniles as a 3-year rolling average (BiOp Table 184). Cumulative loss in the past 7 days has been 40.



www.cbr.washington.edu/sacramento/

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Figure 7: Cumulative loss of natural-origin steelhead for WY 2026. The 5,294 line represents the single-year incidental take limit (ITL), not a loss threshold.

Figure 7 displays daily and cumulative natural steelhead loss based on genetic sampling for Water Year 2026. Points represent daily estimated loss and the line shows cumulative loss over time, with a vertical dashed line indicating the current date. Horizontal lines represent the 100% single-year threshold of 5,294, 75% threshold of 3970.50, and 50% threshold of 2647. As of March 2, 2026, cumulative loss to date is 164.33 fish, representing 3.10% of the threshold.

Hatchery-origin Central Valley Steelhead

Surrogate Releases

There have been a total of 7 releases totaling 1,451,464 steelhead in Water Year 2026. JPE for the hatchery releases as of today is 610,752 based on estimated survivals using forecasted water year types (see details in table below). The annual loss threshold, equal to 1% of the JPE, is currently 6,108, but is subject to change with additional steelhead releases.

Table 7: Summary of steelhead hatchery releases in Water Year 2026. JPE calculated using hatchery-specific survival estimates to Delta entry from release location.

Hatchery	Date of Release	Number Released	Estimated Survival	Juvenile Production Estimate
NIM	2025-11-10	233,109	72%	167,838
Coleman	2025-12-15	555,720	38%	211,174
Coleman	2025-12-17	90,019	38%	34,207
FRH	2026-01-06	376,640	36%	135,590
FRH	2026-01-09	117,715	36%	42,377
MOK	2026-02-17	39,130	25%	9,783
MOK	2026-02-18	39,131	25%	9,783

Table 8: Hatchery-specific survival estimates used for JPE calculations.

Hatchery	Survival Estimate	Source
Coleman NFH	0.205 – 0.433	Sandstrom et al. 2020
Feather River Hatchery	0.09 – 0.45	Kurth 2013
Nimbus Hatchery	0.62 – 0.83	Brodsky et al. 2020
Mokelumne River Hatchery	0.25 – 0.33	Del Real et al. 2012

Total loss of hatchery-origin steelhead is 828 or 13.55% of the annual loss threshold. Note that hatchery origin of salvaged fish cannot be determined at this time and salvage is based on the assumption of similar routing and survival probabilities of individual hatchery releases.

WY2026 Hatchery Steelhead Loss
Cumulative Loss to date: 827.66
Cumulative Loss percent of Threshold: 13.55%

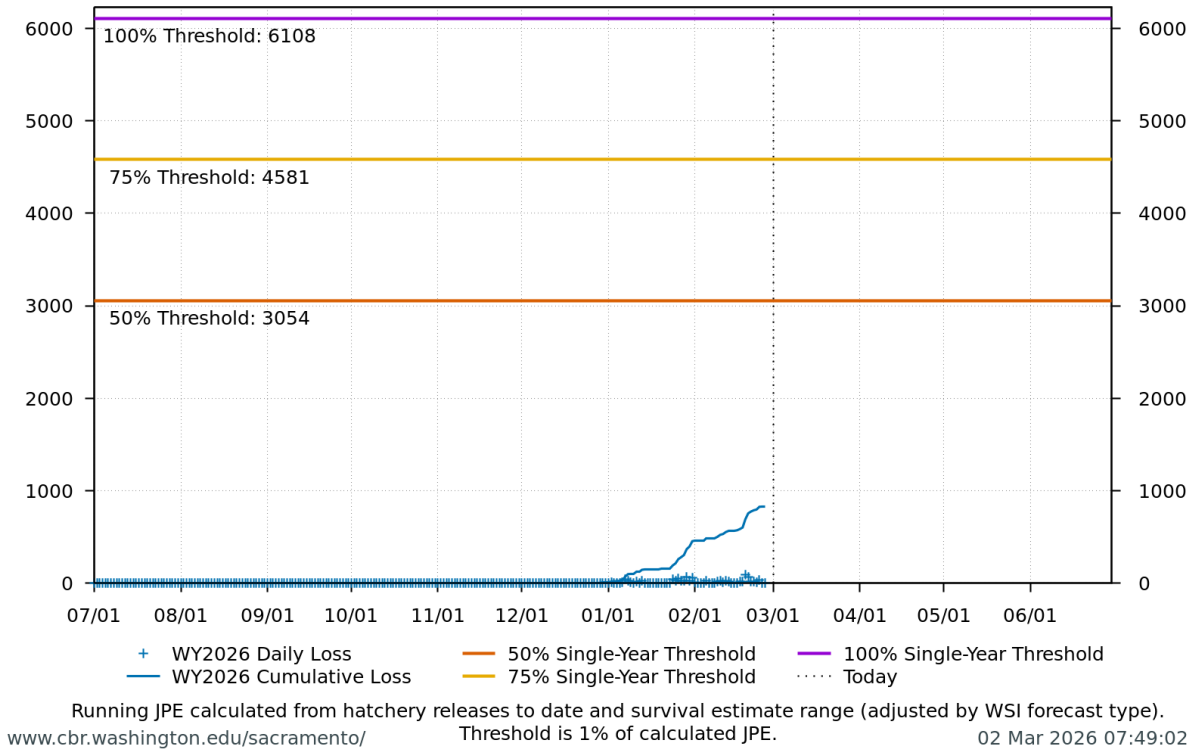


Figure 8: Cumulative loss of hatchery steelhead for WY 2026.

Figure 8 displays daily and cumulative hatchery steelhead loss for Water Year 2026. Points represent daily estimated loss and the line shows cumulative loss over time, with a vertical dashed line indicating the current date. Horizontal lines represent the 100% single-year threshold of 5,914, 75% threshold of 4,435.50, and 50% threshold of 2,957. As of March 2, 2026, cumulative loss to date is 827.66 fish, representing 13.55% of the threshold.

Spring-run Chinook

Current Status

Delta Entry Timing - Historically, as of Mar 01, 5% of LAD spring-run have entered the Delta based on Knights Landing RST catch, 0% have exited the Delta based on Chipps Island Trawl Catch, and 1% have been salvaged.

Table 9: Average percent of annual emigrating population for LAD spring-run Chinook salmon captured at monitoring locations and salvaged at 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 Spring-run, Unclipped	16%	18%	32%	5%	0%	1%

Red Bluff Diversion Dam Passage Estimate - As of Feb 23 estimated passage to date of LAD spring-run at Red Bluff Diversion is approximately 0.03 million fish. Note that outmigration timing overlaps with winter-run and fall-run outmigration, and true spring-run abundance likely differs from these estimates.

Delta Monitoring - Total catch of LAD spring-run at RSTs at Delta Entry (Tisdale, Knights Landing, Lower Sacramento River) between Feb 15 and Feb 22 is 82 individuals. Total catch at Sacramento Trawl and Beach Seines in the delta between Feb 17 and Feb 27 is 70 individuals. Total catch at Delta Exit at Chipps Island between Feb 17 and Feb 27 is 0 individuals.

Spring-run Surrogate Releases

A total of 805,323 spring-run surrogate fish have been released in Water Year 2026, with an estimated Juvenile Production Estimate (JPE) of 219,852 fish entering the Delta. This includes 805,323 Coleman Late-Fall Run Chinook (JPE: 219,852) released from Coleman National Fish Hatchery across 12 coded-wire tag groups. See details in table below.

Table 10: Spring-run Chinook salmon surrogate releases (all Coleman Late-Fall releases, both production and experimental).

Hatchery	Release Date	Type	# of CWT Fish Released	JPE	ITL (0.5%)	Confirmed Loss	CWT Codes
Coleman NFH	2025-11-13	Production	143,346	39,134		9	056808, 056809
Coleman NFH	2025-11-17	Experimental	75,119	20,507	376	0	056810
Coleman NFH	2025-12-17	Production	468,876	128,002		754	053700, 056806, 056811, 056812, 056814, 056815, 056817
Coleman NFH	2025-12-22	Experimental	60,873	16,618	304	257	056813
Coleman NFH	2026-01-08	Experimental	57,109	15,591	286	35	056816

Annual Loss

The annual loss threshold is 1% of the JPE entering the Delta, which equals 2,199 fish. As of March 01, cumulative loss is 1,055 fish or 48.00% of the annual loss threshold. The single-year incidental take limit (ITL) is 0.5% of the estimated number of each surrogate release group (BiOp Table 184). ITL status by experimental release group: Release Group 1 (2025-11-17): 0 loss of 376 ITL (0%); Release Group 2 (2025-12-22): 257 loss of 304 ITL (84.64%); Release Group 3 (2026-01-08): 35 loss of 286 ITL (12.26%)

Loss Prediction and Trajectories

The following figures display the current loss predictor model outputs for winter-run Chinook salmon and steelhead.

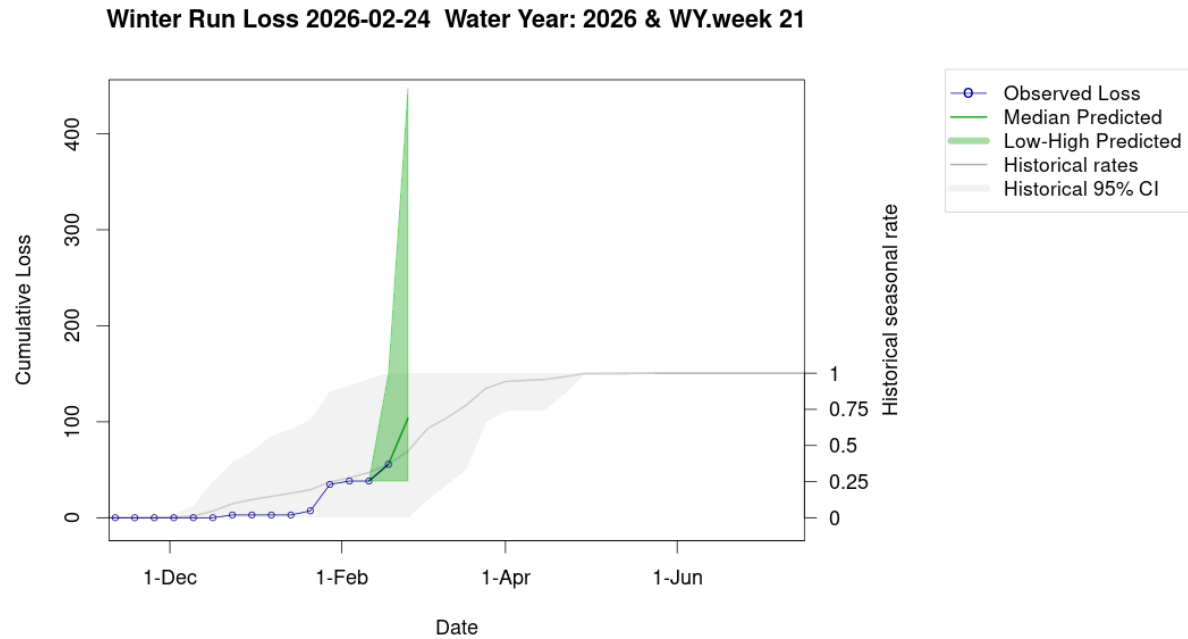


Figure 9: Estimates of winter-run Chinook loss generated by Loss and Salvage Predictor tool.

Figure 9 displays observed cumulative winter-run Chinook loss for Water Year 2026 through February 24, 2026, compared with predicted and historical loss patterns. Points represent observed cumulative loss, while the green line shows the median predicted loss and the shaded green band represents the low-high predicted range. Historical seasonal loss rates and the historical 95% confidence interval are shown in gray for comparison. Observed cumulative loss remains within the predicted and historical ranges during this early portion of the water year.

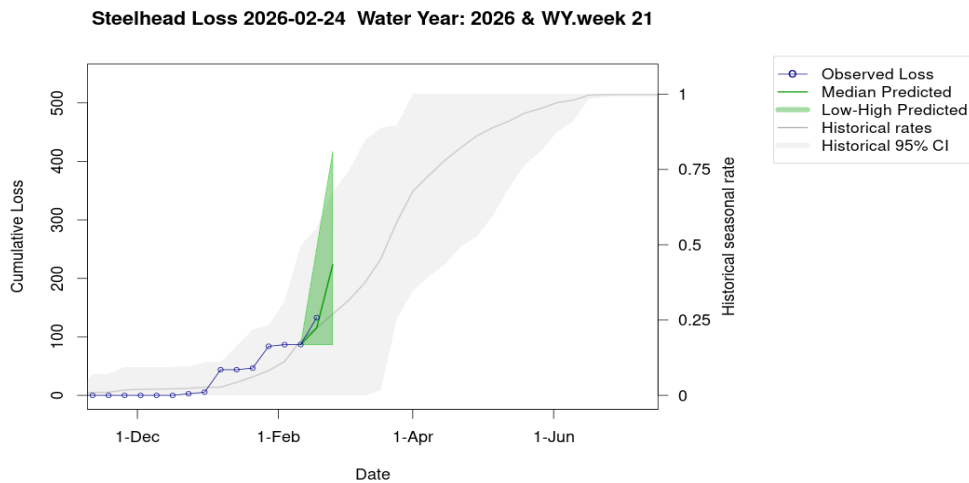


Figure 10: Estimates of steelhead loss generated by Loss and Salvage Predictor tool.

Figure 10 displays observed cumulative winter-run steelhead loss for Water Year 2026 through February 24, 2026, compared with predicted and historical loss patterns. Points represent observed cumulative loss, while the green line shows the median predicted loss and the shaded green band represents the low-high predicted range. Historical seasonal loss rates and the historical 95% confidence interval are shown in gray for comparison. Observed cumulative loss remains within the predicted and historical ranges during this early portion of the water year.

Evaluation

1. What is the probability of exceeding natural or hatchery winter-run Chinook salmon loss thresholds in the upcoming week?
 - a. **LOW RISK:** Natural winter-run cumulative loss is currently 0.03% of the threshold.
 - b. **LOW RISK:** Hatchery winter-run cumulative loss is currently 0.00% of the threshold.
2. What is the probability of exceeding spring-run Chinook salmon surrogate yearling loss thresholds in the upcoming week?
 - a. **LOW RISK:** Spring-run surrogates cumulative loss is currently 48.00% of the threshold.
3. What is the probability of exceeding natural or hatchery steelhead loss thresholds in the upcoming week?
 - a. **LOW RISK:** Natural steelhead cumulative loss is currently 3.10% of the threshold.
 - b. **LOW RISK:** Hatchery steelhead cumulative loss is currently 13.55% of the threshold.

Weekly Assessment for Delta Operations on ESA and CESA-listed Osmerids

Operational and Regulatory Conditions

- See current Weekly Fish and Water Operations Outlook document.
- Additional information also available on the [SacPAS SMT page](#).

Delta smelt

Biological

- **Delta smelt life stages:** Juvenile, Adult
- **Abundance estimate:** 9,901 (95% CL: 1,407 to 35,401) as of the week of February 23–27, 2026
- **Releases:** A total of 163,349 cultured Delta smelt have been released for WY 2026. The most recent release of 24,606 fish occurred in Sacramento River at Rio Vista on Dec 16, 2025.
- **Delta smelt count:** 40 adult Delta smelt and 30 juvenile Delta smelt have been detected this water year. See Table 1 for recent detections, Figure 1 for spatial distribution, and Figure 2 for temporal distribution.
- **Delta smelt salvage:** 0 Delta smelt have been salvaged, and the cumulative seasonal salvage is 0.

Notes

- Since there are few recent detections of Delta smelt, estimation of distribution within the Delta is limited.
- As mentioned in EDSM reporting, fork length ranges reported for Delta smelt and longfin smelt life stages are defined by permit reporting purposes and are not intended to delineate cohorts or distinguish from hatchery or wild origin. See Table 9 caption for fork-length ranges for age groups of Delta smelt.
- See [SacPAS SMT Page](#) for additional details on releases and detection in surveys and salvage.
- Historical salvage trends can be found at: [SacPAS Salvage Timing](#).

Table 11: Delta smelt detections in the last 2 weeks. Fork Length > 58mm = Adult, Fork Length 20-58mm = Juvenile, Fork Length < 20mm = Larva.

Survey	Date	Region	Stratum	Life Stage	Catch
EDSM	2026-02-25	West	Suisun Marsh	Adult	3
EDSM	2026-02-25	West	Suisun Marsh	Juvenile	1
EDSM	2026-03-02	West	Suisun Marsh	Adult	1

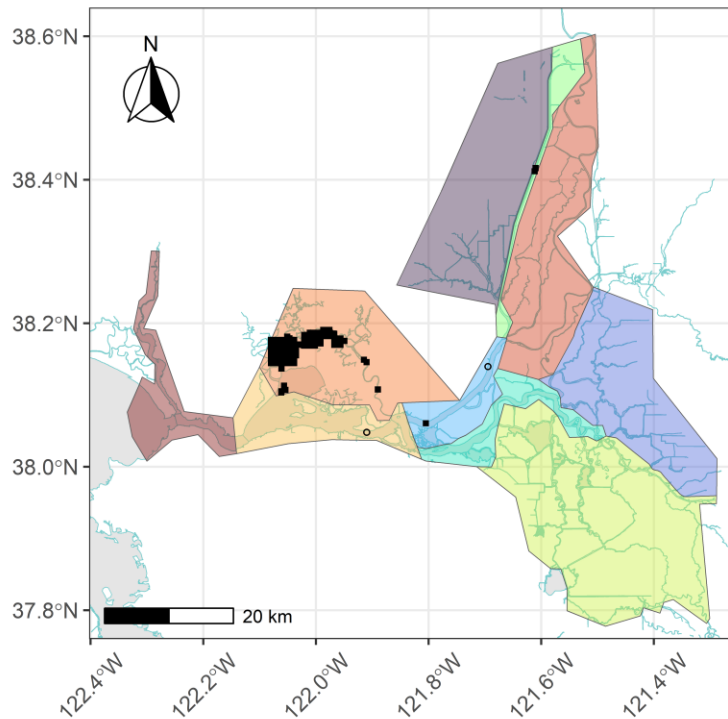
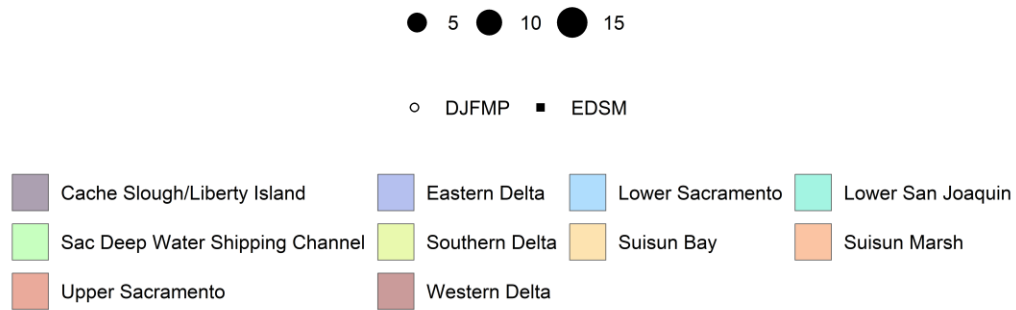


Figure 11: Delta smelt distribution for WY 2026

Figure 11 shows monitoring locations across the Sacramento–San Joaquin Delta. Colored polygons represent Delta regions, including Cache Slough/Liberty Island, Eastern Delta, Lower Sacramento, Lower San Joaquin, Sacramento Deep Water Shipping Channel, Southern Delta, Suisun Bay, Suisun Marsh, Upper Sacramento, and Western Delta. Symbols indicate sampling locations for DJFMP and EDSM monitoring programs, with symbol size representing relative sample counts.

Table 12: Delta smelt water year totals by life stage

Survey	Region	Life Stage	Total
DJFMP	N/A	Adult	1
DJFMP	North	Juvenile	1
EDSM	North	Adult	2
EDSM	West	Adult	37
EDSM	West	Juvenile	29

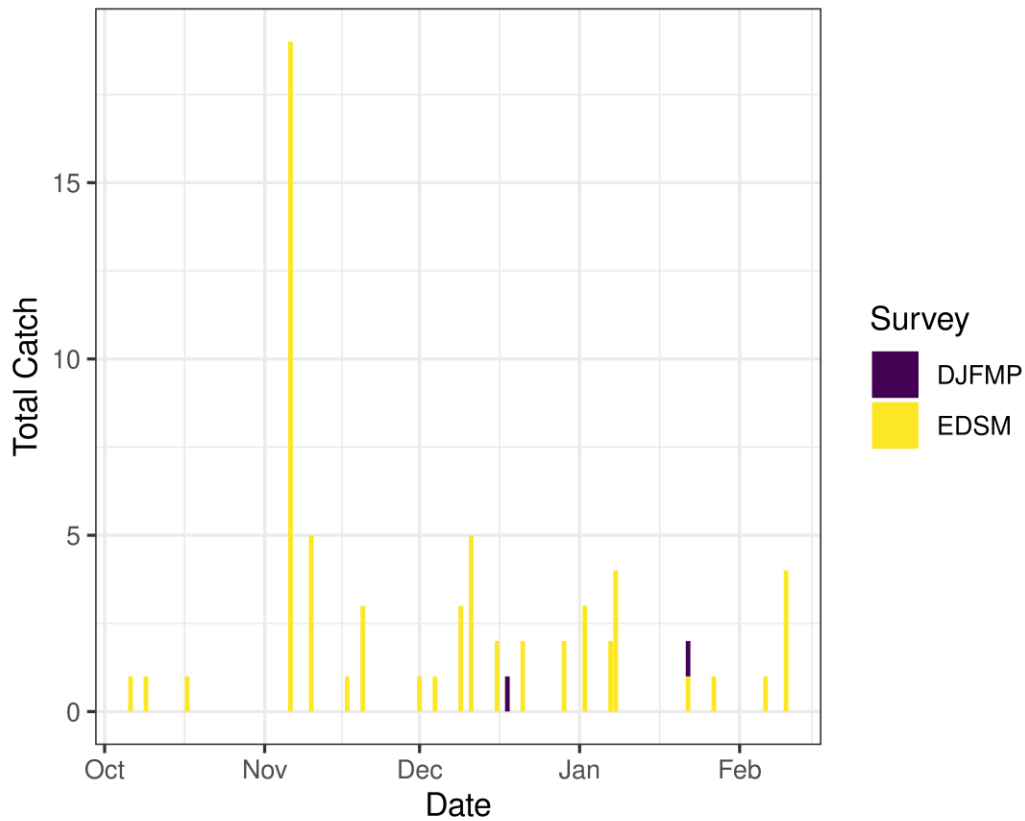


Figure 12: Time series of Delta smelt catch, WY 2026

Figure 12 displays total catch observations over time from October through January for two survey programs: DJFMP and EDSM. Bars represent total catch recorded on individual sampling dates, with colors distinguishing the survey type. The figure shows that most detections occurred during EDSM surveys, with relatively few observations from DJFMP sampling.

Environmental

First Flush

- Implemented 12/25/25-01/7/26

Real-time Assessment Thresholds

Adult Delta smelt

- Adult Delta smelt action offramped on 02/12/2026
- No adult Delta smelt action was taken in WY26
- See Bay-Delta Live for recent Delta-wide turbidity conditions.

Larval/juvenile Delta smelt

- **Threshold:** After the onset of spawning, if JPF < 0 cfs AND turbidity is ≥ 12 FNU in the south Delta AND PTM modeling indicates the action would avoid $\geq 5\%$ entrainment of Delta smelt population after 30 days
 - **12-station South Delta Turbidity:** The most recent average turbidity was 12.5 FNU as of Feb 23, 2025

Evaluation

Delta smelt:

1. After the start of entrainment management, is JPF < 0, is daily average turbidity ≥ 12 FNU in the OMR corridor (stations OBI, HOL, and OSJ)? Has the average water temperature at Jersey Point or Rio Vista not exceeded 53.6°F (12°C) for 3 consecutive days and/or has this action already been taken during WY 2026?
 - a. The adult Delta smelt entrainment action is not active and no action was taken in WY26. Temperature at Jersey Point exceeded the threshold on February 12th, 2025. Jersey Point 3-day average temperature was 12.05°C on February 10th, 12.09°C on February 11th, and 12.13°C on February 12th.
2. What is the evidence for the onset of Delta smelt spawning?
 - a. Upstream migration for Delta smelt occurs between December and March and in response to “first flush” conditions (Sommer et al., 2011; Grimaldo et al. 2009; 2021). Historically, detections of ripe Delta smelt began in January and peaked in February and March and the majority of Delta Smelt spawning occurs at 11-15°C (but can occur from 8-18°C) (Damon et al. 2016). Based on [historical monitoring data](#) from the past few years, first detection of larvae in the Central and South Delta has typically occurred by mid to late March. The

large majority of Delta smelt recaptures continue to be from Suisun Marsh, close to where supplemental fish were released in the fall.

3. After the onset of spawning, have the following conditions occurred: JPF < 0 cfs, average turbidity is ≥ 12 FNU in the south Delta, and PTM modeling indicates the action would avoid $\geq 5\%$ entrainment of the Delta smelt population at facilities after 30 days?
 - a. Although spawning may be occurring, JPF is above 0 cfs. SLS 5 was on the water last week, and the most recent 12 station average turbidity in the south delta was 12.5 FNU on 2/23/26. Due to JPF > 0 this week, the conditions required to trigger larval and juvenile Delta smelt entrainment management will not be met. No Delta smelt larvae have been captured in SLS surveys in WY26 to date.

If a Storm Flex operation were implemented during the forecast week ending March 9, 2026, particle fate modeling at Chipps Island and Cache Slough would be most relevant, as these locations are closest to recent adult distribution.

For particles injected at Chipps Island, Particle Tracking Model (PTM) results indicate 0% entrainment at both CVP and SWP across all evaluated OMRI levels (-6,500, -5,000, -3,500, and -2,000 cfs) for both the week ending March 9, 2026, and the week ending March 16, 2026.

For particles injected at Cache Slough, low levels of entrainment are modeled at more negative OMRI levels. For the week ending March 9, 2026, entrainment is 0.0% at CVP across all evaluated OMRI levels, and SWP entrainment is 0.1% at OMRI -6,500 cfs and 0.1% at OMRI -5,000 cfs, with 0.0% at OMRI -3,500 cfs and -2,000 cfs. For the forecast week ending March 16, 2026, entrainment is again 0.0% at CVP across all evaluated OMRI levels, and SWP entrainment is 0.3% at OMRI -6,500 cfs and 0.1% at OMRI -5,000 cfs and -3,500 cfs, with 0.0% at OMRI -2,000 cfs (see Appendix A for details).

These results indicate that if Delta smelt larvae were present, the risk of entrainment under potential Stormflex operations would be low.

Longfin smelt

Biological

- **Longfin smelt life stages:** Juvenile, Adult, Larva
- **Longfin smelt count:** 420 adult, 1008 juvenile, and 3195 larval longfin smelt have been detected this water year. See Table 3 for recent detections, Figure 3 for spatial distribution, and Figure 4 for temporal distribution.

- **Longfin smelt salvage:** 0 longfin smelt have been salvaged, and the cumulative seasonal salvage is 0.

Table 13: Longfin smelt detections in the last 2 weeks. Fork Length > 84mm = Adult, Fork Length 20-84mm = Juvenile, Fork Length < 20mm = Larva.

Survey	Date	Region	Stratum	Life Stage	Catch
DJFMP	2026-02-25	N/A	Chipps Island	Adult	3
DJFMP	2026-02-25	N/A	Chipps Island	Juvenile	1
DJFMP	2026-02-26	N/A	Chipps Island	Adult	1
DJFMP	2026-02-26	N/A	Chipps Island	Juvenile	1
DJFMP	2026-02-27	N/A	Chipps Island	Adult	1
DJFMP	2026-03-02	N/A	Chipps Island	Adult	1
DJFMP	2026-03-03	N/A	Chipps Island	Adult	1
DJFMP	2026-03-03	N/A	Chipps Island	Juvenile	1
EDSM	2026-02-20	Far West	Western Delta	Adult	2
EDSM	2026-02-20	Far West	Western Delta	Juvenile	15
EDSM	2026-02-23	Far West	Suisun Bay	Adult	4
EDSM	2026-02-23	Far West	Suisun Bay	Juvenile	9
EDSM	2026-02-24	West	Suisun Bay	Juvenile	1
EDSM	2026-02-25	West	Suisun Marsh	Juvenile	3
EDSM	2026-02-26	Far West	Western Delta	Juvenile	2
EDSM	2026-03-03	Far West	Suisun Bay	Juvenile	1
sls	2026-02-23	Far West	Suisun Bay	Larva	65
sls	2026-02-23	South	Lower San Joaquin	Larva	4
sls	2026-02-23	West	Suisun Bay	Larva	31
sls	2026-02-23	West	Suisun Marsh	Larva	15
sls	2026-02-24	North	Cache Slough/Liberty Island	Larva	3
sls	2026-02-24	North	Lower Sacramento	Larva	3
sls	2026-02-24	West	Lower Sacramento	Larva	3
sls	2026-02-24	NA	NA	Larva	26
sls	2026-02-25	West	Suisun Bay	Larva	91

Real-time Assessment Thresholds

Start of Entrainment Management (Adult Longfin Smelt)

- This action was not taken in WY26

Adult longfin smelt

- **Threshold:** JPF < 0 cfs, annual loss is on a trajectory to exceed 5% of the adult population abundance, and reduced exports will reduce entrainment in the south Delta
 - Daily average JPF: 10,009 cfs as of Mar 02, 2026

- Adult abundance (Age 1+ LFS index): 2479.2 fish
- 5% of abundance + 1: 125.0
- Water year total adult longfin smelt salvage = 0

Larval/juvenile longfin smelt

- **Threshold:** JPF < 0 cfs AND population model demonstrates need to reduce entrainment to avoid population decline
 - Daily average JPF: 10,009 cfs as of Mar 02, 2026

Evaluation

Longfin smelt:

1. If JPF < 0, what is the trajectory of annual loss of adult longfin smelt and is it likely to exceed 5% of the adult population estimate? Is South Delta entrainment expected to decrease due to a reduction in export pumping?
 - a. JPF is > 0 cfs and no adult longfin smelt have been detected in salvage, indicating annual loss has not begun to approach the 5% regulatory threshold.
2. For larval and juvenile longfin smelt, if JPF < 0 cfs, do particle tracking models show a moderate to high difference in particle fates across different OMRI scenarios? Does Zone of Influence modeling show moderate to high changes in hydrodynamic footprint across different OMRI scenarios? Are these effects anticipated to cause a population decline?
 - b. JPF is currently not less than 0 cfs and is not predicted to drop below 0 cfs this week. Zone of Influence modeling indicates low differences in the hydrodynamic footprint across OMRI scenarios, with no change between current and forecasted conditions.
 1. If a Stormflex action were implemented, population-based PTM results, summarized in Appendix A, project low larval entrainment relative to estimated abundance the week ending 03/09/2026, projected larval entrainment is 1.3% at OMRI -6,500 cfs, 0.9% at OMRI -5,000 cfs, 0.6% at OMRI -3,500 cfs, and 0.4% at OMRI -2,000 cfs. For the forecast week ending 03/16/2026, projected larval entrainment is 1.7% at OMRI -6,500 cfs, 1.2% at OMRI -5,000 cfs, 0.8% at OMRI -3,500 cfs, and 0.5% at OMRI -2,000 cfs. These projected losses remain below levels suggesting significant population decline.
3. Is there additional information or other analyses that should be considered in this evaluation?

c. Please see Appendix A for additional information.

End of smelt Entrainment Management

- Not relevant

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Appendix A: Delta Real-Time Forecast Summary

Date: 03/02/2026

Forecast Period: 02/24/2026 – 03/16/2026

Forecast Week 1: 02/24/2026 – 03/02/2026

Forecast Week 2: 03/03/2026 – 03/09/2026

Forecast Week 3: 03/10/2026 – 03/16/2026

Contents

- Common Assumptions
- Reclamation Forecast Flow and Export Data
- Delta Export Zone of Influence
- PTM (Particle Tracking Model)
 - Neutrally Buoyant Particles (NP)
 - Surface Oriented Particles (PP)
- ECO-PTM (Ecological Particle Tracking Model)
- Longfin Smelt Larval Population and PTM Analysis

Common Assumptions

The model run results cover the period February 24, 2026 through March 16, 2026 and are based on the following assumptions established by DWR:

1. CCFB Gates are operating to Priority 3.
2. The Delta Cross Channel gates are closed.
3. Suisun Marsh Salinity Control flashboards are in. Two gates are in tidal operation.
4. San Joaquin River flow at Vernalis is at 8270 cfs at the beginning of the forecast period and is estimated to decrease to 6000 cfs by the end of the forecast period.
5. San Joaquin River EC at Vernalis is at 209 umhos/cm at the beginning of the forecast period and is estimated to increase to 263 umhos/cm at the end of the forecast period.

6. Sacramento River flow at Freeport is at 49428 cfs at the beginning of the forecast period and is expected to decrease to 27850 cfs by the end of the forecast period.
7. CCFB inflow is at 5395 cfs at the beginning of the forecast period and is expected to decrease to 3900 cfs by the end of the forecast period.
8. Export at Jones Pumping Plant is at 4234 cfs at the beginning of the forecast period and is expected to decrease to 4200 cfs to the end the forecast period.

As shown in the next section, assumptions 4 and 6 have been updated based on Reclamation forecast data, and assumption 8 and exports at Banks Pumping Plant have been modified to include four different forecast scenarios at an Old and Middle River (OMR) index of -6,500 cfs, -5,000 cfs, -3,500 cfs, and -2,000 cfs.

Reclamation Forecast Flow and Export Data

Table 1: Weekly Averaged Forecasted Flow Data and Flow Bins:

Forecast Week	Sacramento River at Freeport (cfs)	Sac Flow Bin	San Joaquin River at Vernalis (cfs)	SJR Flow Bin	Delta Inflow Bin
Week 1 02/24/2026 - 03/02/2026	57,912	hi	7,260	hi	hihi
Week 2 03/03/2026 - 03/09/2026	38,457	hi	3,543	med	himed
Week 3 03/10/2026 - 03/16/2026	25,000	hi	1,500	lo	hilo

Table 2: Weekly Averaged CVP and SWP Exports by OMR Bin:

Week	OMR Bin (cfs)	CVP Exports (cfs)	SWP Exports (cfs)	Total Exports (cfs)	CVP Exports (% of total)	SWP Exports (% of Total)
Week 1: 02/24/2026 - 03/02/2026	-6,500	4,208	6,655	10,862	39%	61%
Week 1: 02/24/2026 - 03/02/2026	-5,000	4,208	5,037	9,245	46%	54%
Week 1: 02/24/2026 - 03/02/2026	-3,500	4,208	3,363	7,571	56%	44%
Week 1: 02/24/2026 - 03/02/2026	-2,000	3,706	2,232	5,939	62%	38%
Week 2: 03/03/2026 - 03/09/2026	-6,500	4,208	4,866	9,073	46%	54%
Week 2: 03/03/2026 - 03/09/2026	-5,000	4,208	3,249	7,456	56%	44%
Week 2: 03/03/2026 - 03/09/2026	-3,500	3,606	2,175	5,782	62%	38%
Week 2: 03/03/2026 - 03/09/2026	-2,000	2,447	1,703	4,150	59%	41%
Week 3: 03/10/2026 - 03/16/2026	-6,500	4,208	3,807	8,014	53%	47%
Week 3: 03/10/2026 - 03/16/2026	-5,000	4,208	2,204	6,412	66%	34%
Week 3: 03/10/2026 - 03/16/2026	-3,500	3,506	1,202	4,708	74%	26%
Week 3: 03/10/2026 - 03/16/2026	-2,000	1,803	1,303	3,106	58%	42%

Notes:

- One pumping unit is currently out of service at Jones Pumping Plant until August 2026. The current maximum pumping rate at Jones Pumping Plant (CVP Exports) is 4,200 cfs.

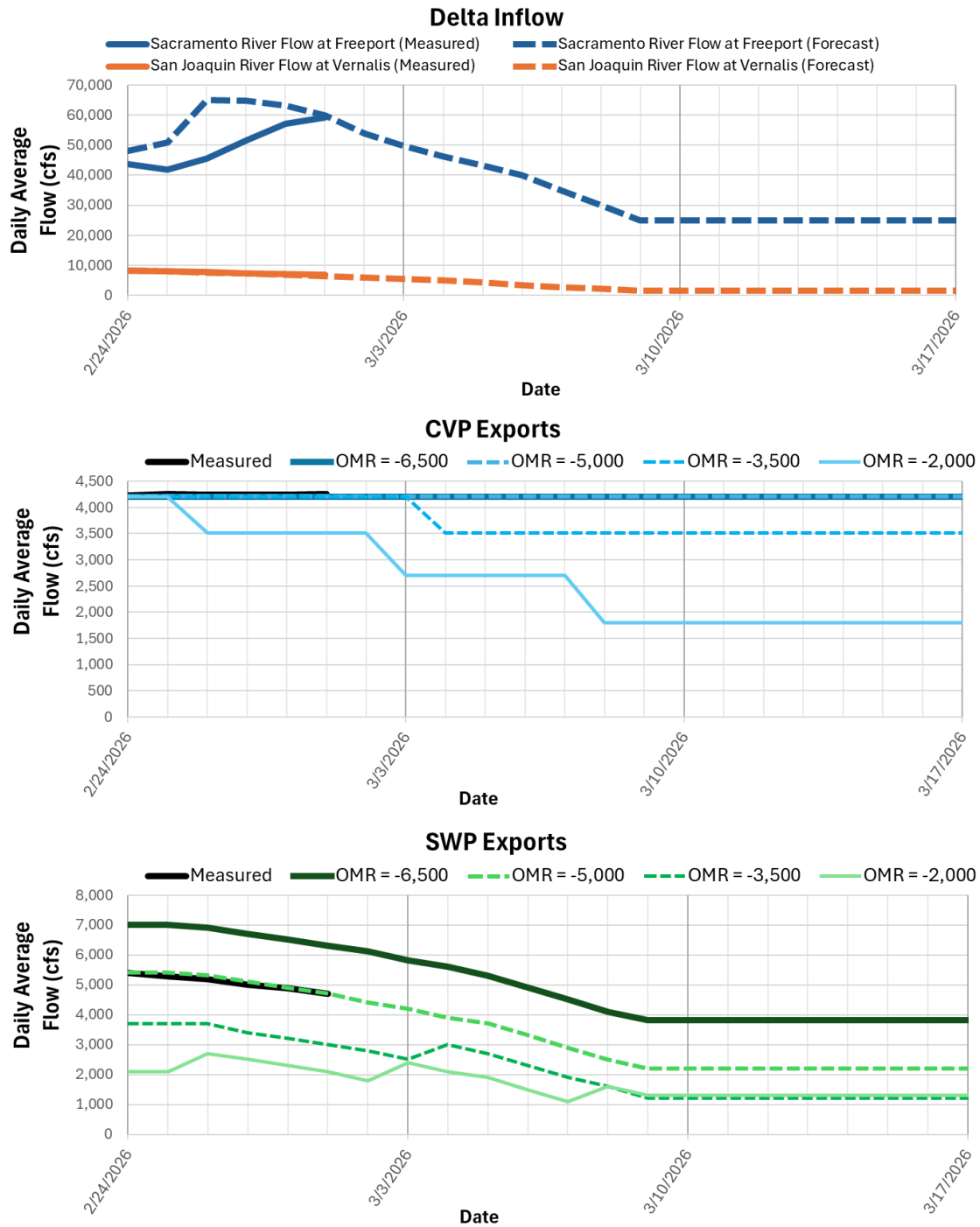


Figure 1: Delta Inflow, CVP Exports, and SWP Exports Summary

Figure 1 is a collection of three line graphs. The top graph shows measured and forecasted Sacramento River flows at Freeport and Vernalis from February 24 to March 17, 2026. The bottom two graphs show CVP and SWP exports in daily average flow (cfs) for OMR flow scenarios -6,250, -5,000, -3,500, and -2,000 in different colors and line styles for February 10 to March 17, 2026.

0.75 Contour
 Week 1 (02/24/2026 - 03/02/2026)
 Sacramento Flow = 57,912 cfs
 San Joaquin Flow = 7,260 cfs
 Inflow bin = hihi

OMR Flow (cfs) -2000 -3500 -5000 -6500

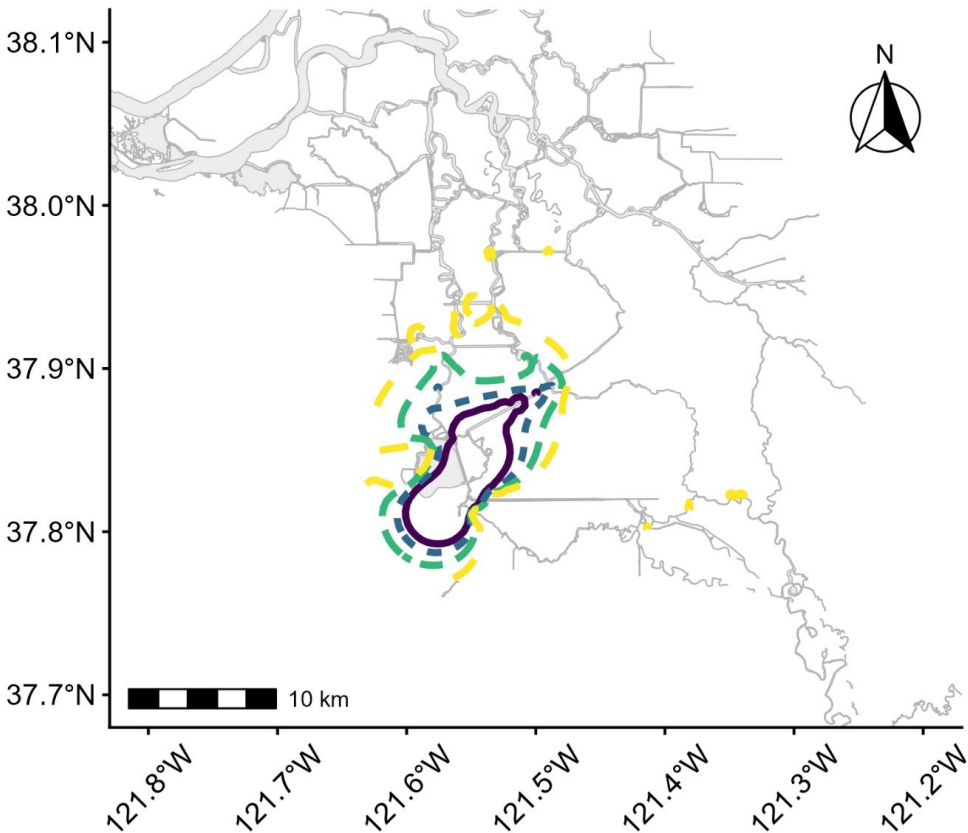


Figure 2: Delta Export Zone of Influence Week 1

Figure 2 is a map of the Delta showing different zone of influences at different OMR flow rates: 2,000, 3,500, 5,000, and 6,250 in different colors and line styles. The map was developed using a 0.75 contour during week 1 (February 24, 2026 – March 2, 2026) with Sacramento River flow at 57,912 cfs, San Joaquin River flow at 7,260, and hihi inflow bin.

Notes:

- Contours indicate the proportional overlap of hourly average velocity Gaussian KDEs for a 1week period from DSM2 hydro simulations with and without Delta exports active
- DSM2 nodes that were sufficiently different from neighboring nodes to create isolated contours at several OMR flows were removed (nodes 146, 147, 148, 206, 242, 246, 432, 433, 434)

0.75 Contour
 Week 2 (03/03/2026 - 03/09/2026)
 Sacramento Flow = 38,457 cfs
 San Joaquin Flow = 3,543 cfs
 Inflow bin = himed

OMR Flow (cfs) — -2000 — -3500 — -5000 — -6500

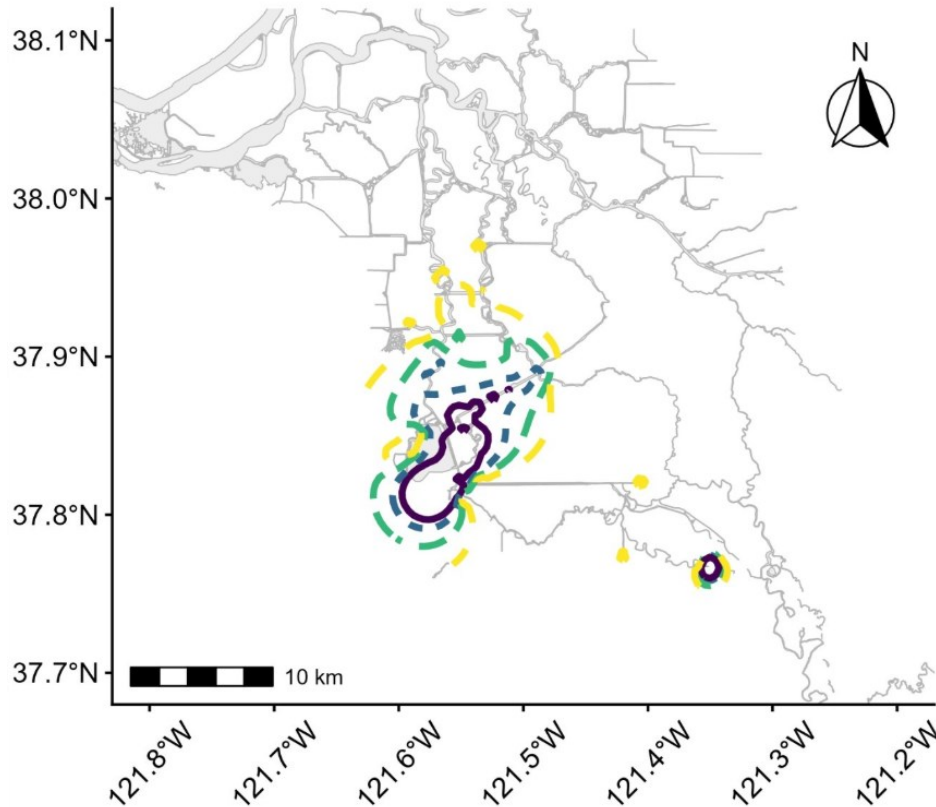


Figure 3: Delta Export Zone of Influence Week 2

Figure 3 is a map of the Delta showing different zones of influence at four OMR flow rates: -2,000, -3,500, -5,000, and -6,500 cfs, represented by different colors and line styles. The map was developed using a 0.75 contour during Week 2 (March 3, 2026 – March 9, 2026) with Sacramento River flow at 38,457 cfs, San Joaquin River flow at 3,543 cfs, and himed inflow bin.

Notes:

- Contours indicate the proportional overlap of hourly average velocity Gaussian KDEs for a 1week period from DSM2 hydro simulations with and without Delta exports active
- DSM2 nodes that were sufficiently different from neighboring nodes to create isolated contours at several OMR flows were removed (nodes 146, 147, 148, 206, 242, 246, 432, 433, 434)

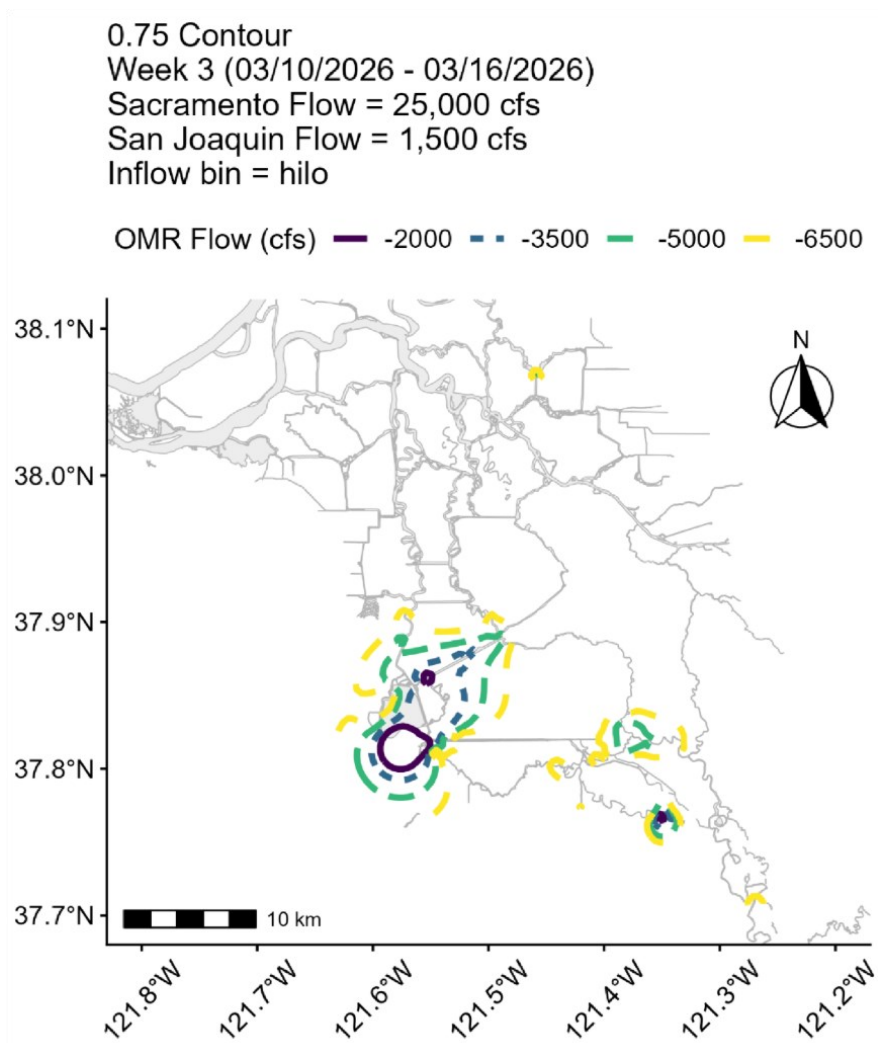


Figure 4: Delta Export Zone of Influence Week 3

Figure 4 is a map of the Delta showing different zones of influence at four OMR flow rates: -2,000, -3,500, -5,000, and -6,500 cfs, represented by different colors and line styles. The map was developed using a 0.75 contour during Week 3 (March 10, 2026 – March 16, 2026) with Sacramento River flow at 25,000 cfs, San Joaquin River flow at 1,500 cfs, and hilo inflow bin.

Notes:

- Contours indicate the proportional overlap of hourly average velocity Gaussian KDEs for a 1week period from DSM2 hydro simulations with and without Delta exports active
- DSM2 nodes that were sufficiently different from neighboring nodes to create isolated contours at several OMR flows were removed (nodes 146, 147, 148, 206, 242, 246, 432, 433, 434)

Table 3: Proportion of DSM2 Channel Length Altered from Pumping by Hydrologic Influence Overlap Range (Low > 0.75, Medium 0.25–0.75, High <0.25)

Weekly Model Run	OMR Bin (cfs)	Sum Channel Length (miles) Low	Channel Length (%) Low	Sum Channel Length (miles) Medium	Channel Length (%) Medium	Sum Channel Length (miles) High	Channel Length (%) High
Week 1: 02/24/2026 – 03/02/2026	-6,500	627.5	93.4%	43.7	6.5%	0.9	0.1%
Week 1: 02/24/2026 – 03/02/2026	-5,000	645.5	96.1%	25.6	3.8%	0.9	0.1%
Week 1: 02/24/2026 – 03/02/2026	-3,500	653.2	97.2%	17.9	2.7%	0.9	0.1%
Week 1: 02/24/2026 – 03/02/2026	-2,000	658.3	98.0%	12.8	1.9%	0.9	0.1%
Week 2: 03/03/2026 – 03/09/2026	-6,500	627.3	93.4%	42.9	6.4%	1.7	0.3%
Week 2: 03/03/2026 – 03/09/2026	-5,000	644.9	96%	25.3	3.8%	1.7	0.3%
Week 2: 03/03/2026 – 03/09/2026	-3,500	650.8	96.8%	20.3	3.0%	0.9	0.1%
Week 2: 03/03/2026 – 03/09/2026	-2,000	660.5	98.3%	10.6	1.6%	0.9	0.1%
Week 3: 03/10/2026 – 03/16/2026	-6,500	620.9	92.4%	49.4	7.3%	1.7	0.3%
Week 3: 03/10/2026 – 03/16/2026	-5,000	634.7	94.4%	35.6	5.3%	1.7	0.3%
Week 3: 03/10/2026 – 03/16/2026	-3,500	654.5	97.4%	16.6	2.5%	0.9	0.1%
Week 3: 03/10/2026 – 03/16/2026	-2,000	667.9	99.4%	3.2	0.5%	0.9	0.1%

Notes:

- Sum channel length includes the length of channels within the Delta that have a calculated hydrologic alteration level falling within each category

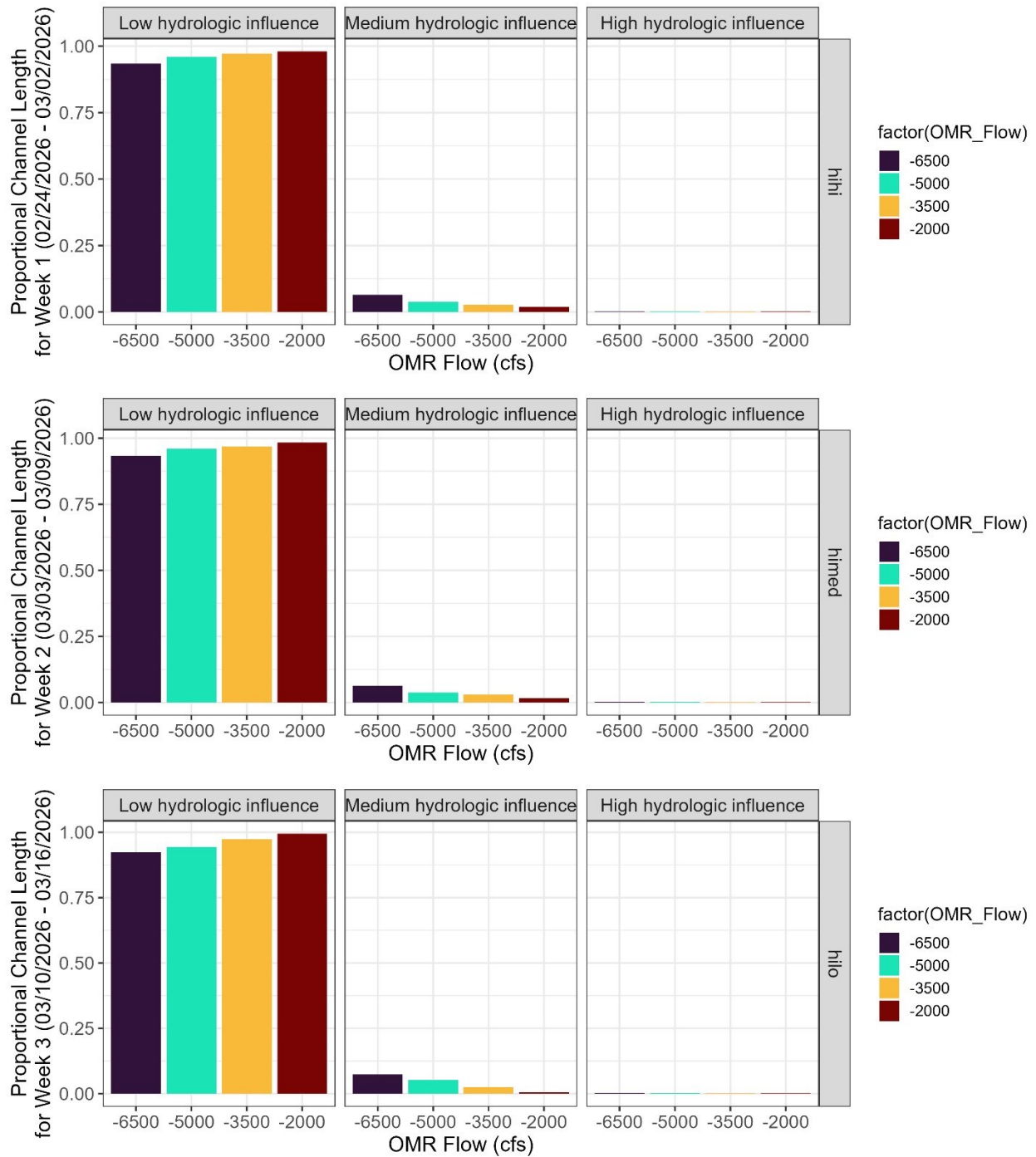


Figure 5: Proportional DSM2 Channel Length Altered from Pumping by Hydrologic Influence Category, Weeks 1-3

Figure 5 is a collection of three grouped bar charts, one for each weekly model run from February 24 to March 16, 2026. Each chart is divided into three panels by hydrologic influence category (Low, Medium, and High) and shows the proportional DSM2 channel length altered from pumping for OMR flow scenarios -6,250, -5,000, -3,500, and -2,000 cfs. Across all three weeks, nearly all channel length falls in the Low hydrologic influence category, with minimal proportional alteration shown in the Medium panel and negligible alteration in the High panel.

PTM (Particle Tracking Model) Results

PTM Flux Evaluation Period: 02/24/2026 – 03/16/2026

Particles Injected: 02/24/2026

PTM Injection and Flux Locations

- = Injection Point (DSM2 node)
- ▬ = Flux Location
- ← = Reference Flux Direction

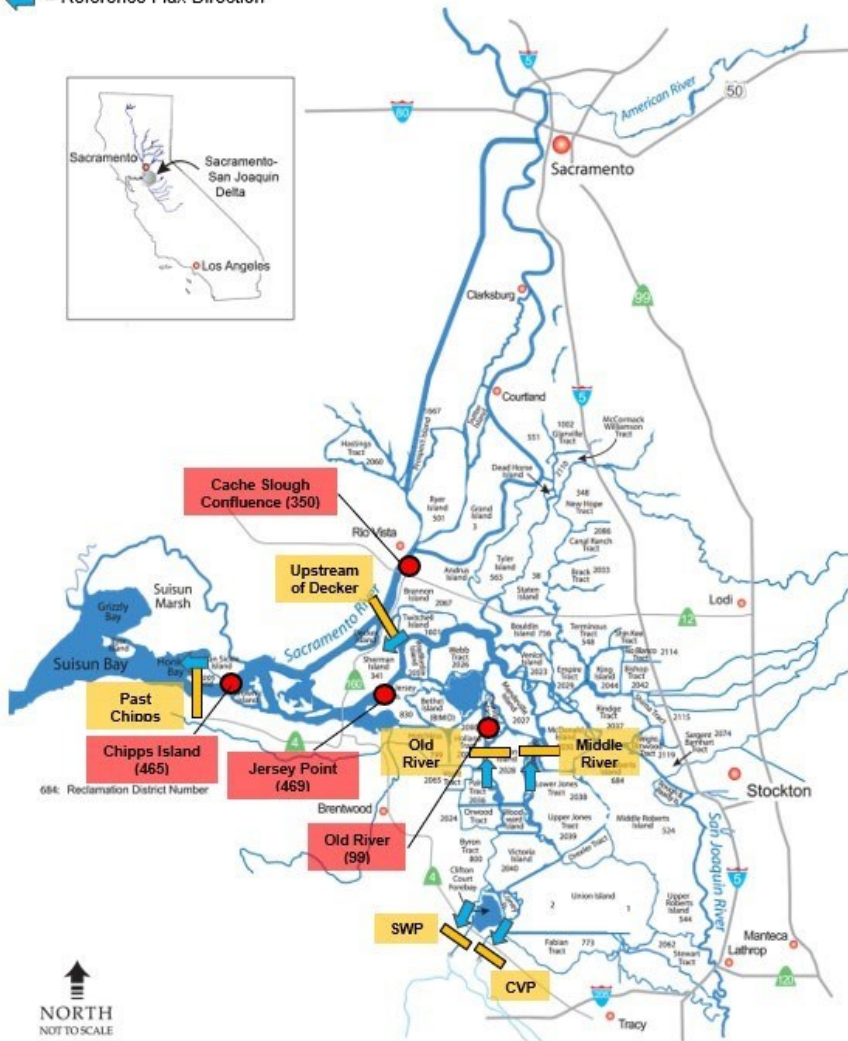


Figure 6: PTM Injection and Flux Locations in the Sacramento-San Joaquin Delta

Figure 6 is a map of the Sacramento-San Joaquin Delta showing PTM injection points (DSM2 nodes) and flux locations used for the February 24 – March 16, 2026 evaluation period, with particles injected on February 24, 2026. Five injection points are marked with red circles and five flux locations with yellow bars, with blue arrows indicating reference flux direction. An inset shows the Delta's location within California.

Neutrally Buoyant Particles (NP)

Table 4. Neutral Particle Fate (percent flux across boundary) for Particles Injected at Chipps (DSM2 Node 465)

Week	OMR Flow Bin	Past Chipps	Upstream of Decker	Unresolved in Central Delta	Unresolved in OMR corridor	CVP Entrainment	SWP Entrainment
Week 1 End: 03/02/2026	-6,500	98.7	0.0	1.3	0.0	0.0	0.0
Week 1 End: 03/02/2026	-5,000	98.1	0.0	1.9	0.0	0.0	0.0
Week 1 End: 03/02/2026	-3,500	98.6	0.0	1.4	0.0	0.0	0.0
Week 1 End: 03/02/2026	-2,000	98.9	0.0	1.1	0.0	0.0	0.0
Week 2 End: 03/09/2026	-6,500	98.7	0.0	1.3	0.0	0.0	0.0
Week 2 End: 03/09/2026	-5,000	98.1	0.0	1.9	0.0	0.0	0.0
Week 2 End: 03/09/2026	-3,500	98.6	0.0	1.4	0.0	0.0	0.0
Week 2 End: 03/09/2026	-2,000	98.9	0.0	1.1	0.0	0.0	0.0
Week 3 End: 03/16/2026	-6,500	98.7	0.0	1.3	0.0	0.0	0.0
Week 3 End: 03/16/2026	-5,000	98.1	0.0	1.9	0.0	0.0	0.0
Week 3 End: 03/16/2026	-3,500	98.6	0.0	1.4	0.0	0.0	0.0
Week 3 End: 03/16/2026	-2,000	98.9	0.0	1.1	0.0	0.0	0.0

Note: values between 0.0 and 0.1 are indicated with <0.1

Table 5. Neutral Particle Fate (percent flux across boundary) for Particles Injected at Cache Slough (DSM2 Node 350)

Week	OMR Flow Bin	Past Chipps	Upstream of Decker	Unresolved in Central Delta	Unresolved in OMR corridor	CVP Entrainment	SWP Entrainment
Week 1 End: 03/02/2026	-6,500	87.3	86.4	12.7	0.0	0.0	0.0
Week 1 End: 03/02/2026	-5,000	87.6	85.7	12.4	0.0	0.0	0.0
Week 1 End: 03/02/2026	-3,500	89.8	87.3	10.2	0.0	0.0	0.0
Week 1 End: 03/02/2026	-2,000	90.6	87.2	9.4	0.0	0.0	0.0
Week 2 End: 03/09/2026	-6,500	94.7	86.8	5.7	0.3	0.0	0.1
Week 2 End: 03/09/2026	-5,000	95.8	86.5	4.3	0.0	0.0	0.1
Week 2 End: 03/09/2026	-3,500	95.5	87.5	4.6	0.1	0.0	0.0
Week 2 End: 03/09/2026	-2,000	96.1	87.6	3.9	0.0	0.0	0.0
Week 3 End: 03/16/2026	-6,500	95.7	86.9	4.7	<0.1	0.0	0.3
Week 3 End: 03/16/2026	-5,000	96.0	86.5	4.1	0.0	0.0	0.1
Week 3 End: 03/16/2026	-3,500	95.8	87.6	4.3	0.0	0.0	0.1
Week 3 End: 03/16/2026	-2,000	96.2	87.6	3.8	0.0	0.0	0.0

Note: values between 0.0 and 0.1 are indicated with <0.1

Table 6. Neutral Particle Fate (percent flux across boundary) for Particles Injected at Jersey Point (DSM2 Node 469)

Week	OMR Flow Bin	Past Chipps	Upstream of Decker	Unresolved in Central Delta	Unresolved in OMR corridor	CVP Entrainment	SWP Entrainment
Week 1 End: 03/02/2026	-6,500	68.1	11.5	32.0	0.1	0.0	0.0
Week 1 End: 03/02/2026	-5,000	77.8	9.9	22.2	0.0	0.0	0.0
Week 1 End: 03/02/2026	-3,500	81.6	8.2	18.4	0.0	0.0	0.0
Week 1 End: 03/02/2026	-2,000	86.1	8.9	13.9	0.0	0.0	0.0
Week 2 End: 03/09/2026	-6,500	92.2	11.8	8.8	0.5	0.1	0.4
Week 2 End: 03/09/2026	-5,000	94.3	10.1	6.1	0.3	0.0	0.1
Week 2 End: 03/09/2026	-3,500	95.5	8.2	4.8	0.3	0.0	0.0
Week 2 End: 03/09/2026	-2,000	96.1	8.9	4.0	0.1	0.0	0.0
Week 3 End: 03/16/2026	-6,500	93.5	12.0	7.6	0.2	0.3	0.6
Week 3 End: 03/16/2026	-5,000	95.1	10.1	5.4	0.2	0.0	0.3
Week 3 End: 03/16/2026	-3,500	96.1	8.3	4.3	<0.1	0.2	0.1
Week 3 End: 03/16/2026	-2,000	96.6	8.9	3.6	0.1	0.0	0.1

Note: values between 0.0 and 0.1 are indicated with <0.1

Table 7. Neutral Particle Fate (percent flux across boundary) for Particles Injected at Old River (DSM2 Node 99)

Week	OMR Flow Bin	Past Chipps	Upstream of Decker	Unresolved in Central Delta	Unresolved in OMR corridor	CVP Entrainment	SWP Entrainment
Week 1 End: 03/02/2026	-6,500	0.9	0.4	11.7	26.8	14.3	46.3
Week 1 End: 03/02/2026	-5,000	1.1	0.6	15.6	39.8	17.3	26.2
Week 1 End: 03/02/2026	-3,500	3.6	2.0	26.9	46.6	17.9	5.0
Week 1 End: 03/02/2026	-2,000	4.1	1.5	51.5	43.2	1.1	0.1
Week 2 End: 03/09/2026	-6,500	4.5	1.1	4.8	10.2	17.1	63.4
Week 2 End: 03/09/2026	-5,000	5.1	1.4	7.2	14.3	22.9	50.5
Week 2 End: 03/09/2026	-3,500	14.5	2.9	9.1	22.6	30.4	23.4
Week 2 End: 03/09/2026	-2,000	19.9	3.4	23.4	31.6	18.6	6.5
Week 3 End: 03/16/2026	-6,500	6.0	1.3	2.8	7.0	18.6	65.6
Week 3 End: 03/16/2026	-5,000	6.2	2.1	5.1	9.7	25.2	53.8
Week 3 End: 03/16/2026	-3,500	17.4	3.4	5.7	15.8	32.6	29.5
Week 3 End: 03/16/2026	-2,000	28.7	5.0	12.9	21.6	22.7	14.1

Note: values between 0.0 and 0.1 are indicated with <0.1

PTM Results for Neutral Particles. OMR Scenario = -6,500. Particles Injected 2/24/2026 at DSM2 Node 465 (Chipps).

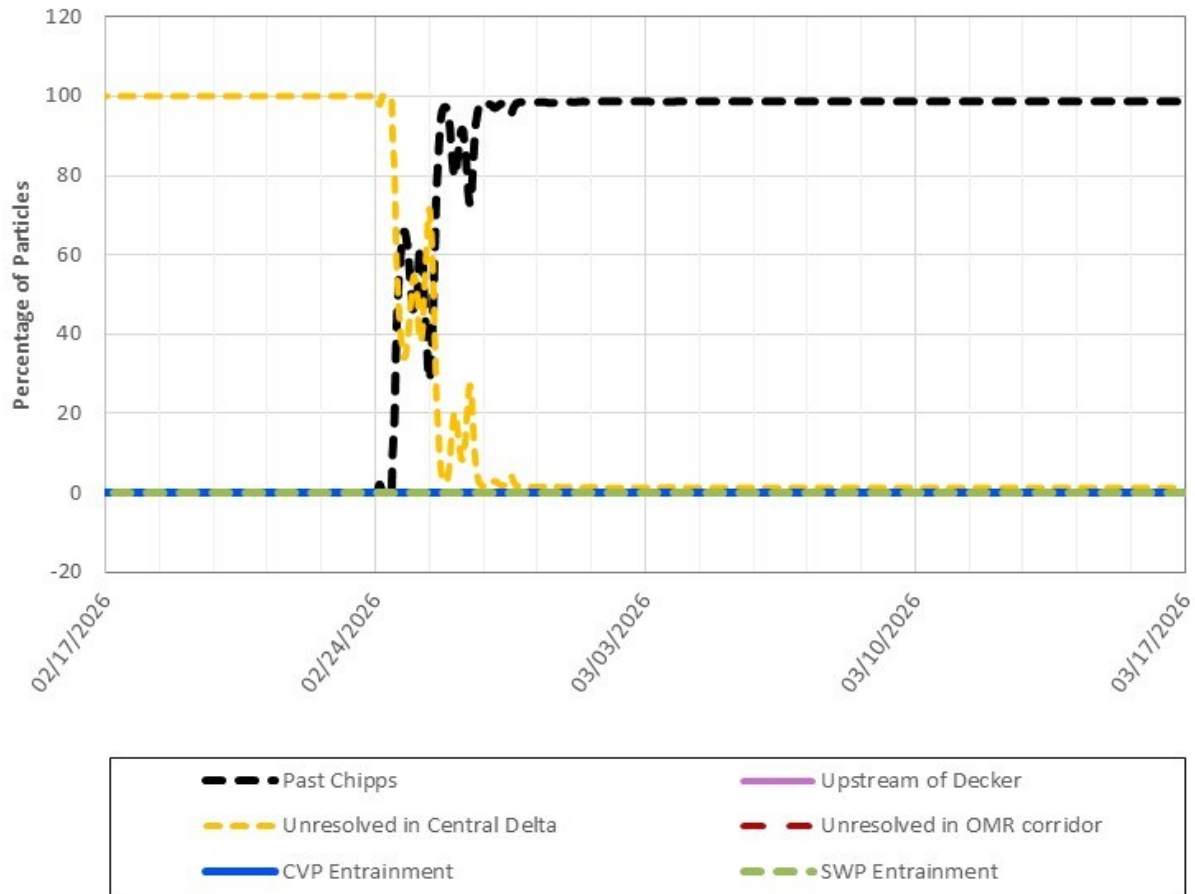


Figure 7: PTM Results for Neutral Particles at Chipps Island, OMR Scenario -6,500

Figure 7 is a line graph showing the percentage of neutral particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 465 (Chipps). Six flux locations are represented by different colored dashed lines, with Past Chipps (black) and Unresolved in Central Delta (yellow) showing the most notable particle percentages across the evaluation period.

PTM Results for Neutral Particles. OMR Scenario = -5,000. Particles Injected
2/24/2026 at DSM2 Node 465 (Chipps).

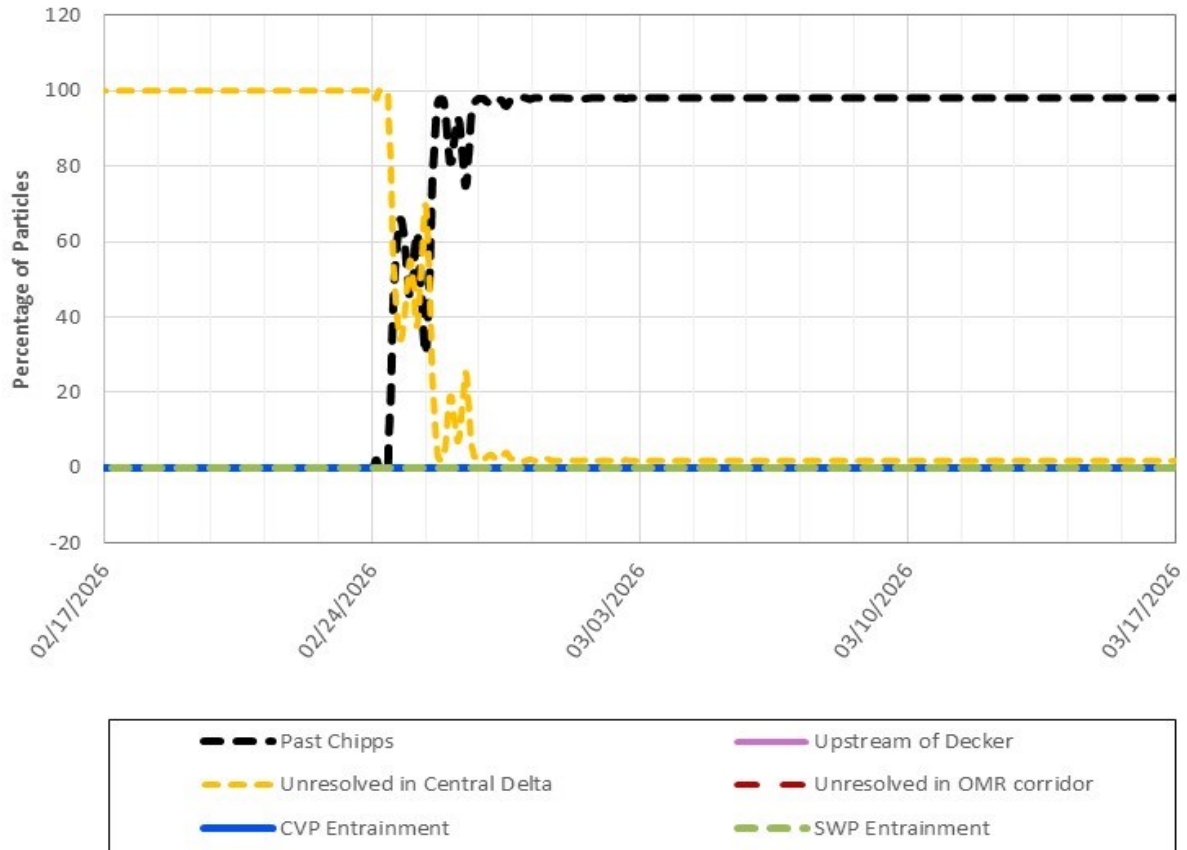


Figure 8: PTM Results for Neutral Particles at Chipps Island, OMR Scenario -5,000

Figure 8 is a line graph showing the percentage of neutral particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 465 (Chipps) under the OMR scenario of -5,000 cfs. Six flux locations are represented by different colored dashed lines, with Past Chipps (black) rising to near 100% shortly after injection and Unresolved in Central Delta (yellow) peaking around 100% before declining to near zero by early March.

PTM Results for Neutral Particles. OMR Scenario = -3,500. Particles Injected
2/24/2026 at DSM2 Node 465 (Chippis).

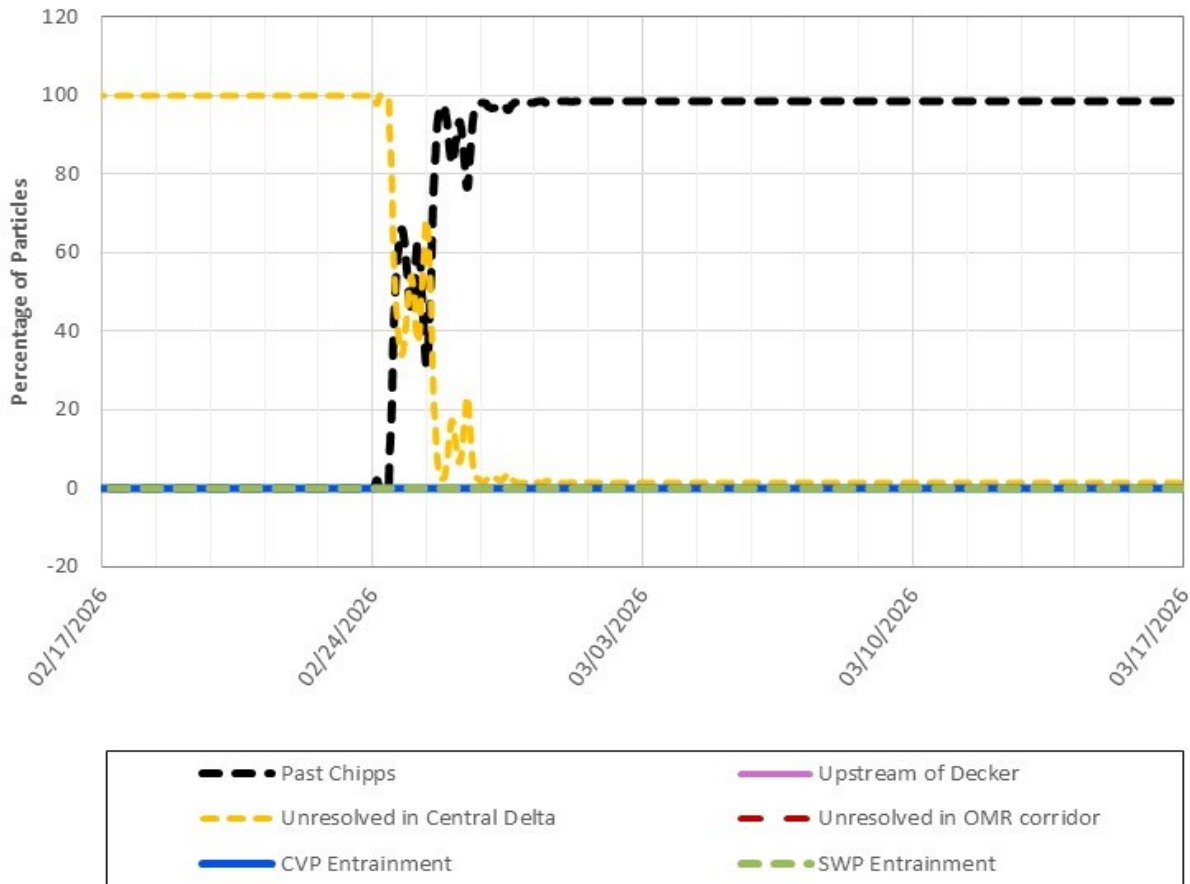


Figure 9: PTM Results for Neutral Particles at Chippis Island, OMR Scenario -3,500

Figure 9 is a line graph showing the percentage of neutral particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 465 (Chippis) under the OMR scenario of -3,500 cfs. Six flux locations are represented by different colored dashed lines, with Past Chipps (black) rising to near 100% shortly after injection and Unresolved in Central Delta (yellow) peaking around 100% before declining to near zero by early March.

PTM Results for Neutral Particles. OMR Scenario = -2,000. Particles Injected
2/24/2026 at DSM2 Node 465 (Chippis).

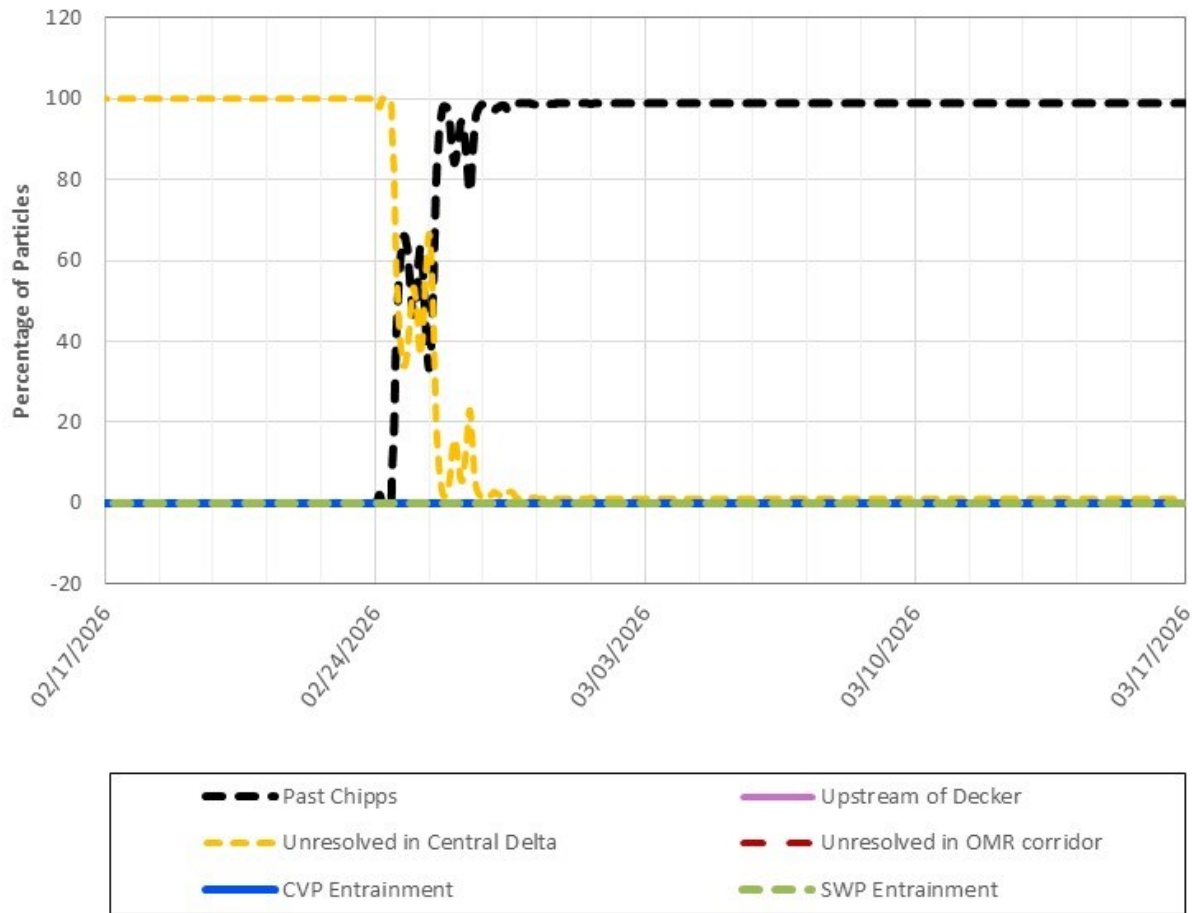


Figure 10: PTM Results for Neutral Particles at Chippis Island, OMR Scenario -2,000

Figure 10 is a line graph showing the percentage of neutral particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 465 (Chippis) under the OMR scenario of -2,000 cfs. Six flux locations are represented by different colored dashed lines, with Past Chippis (black) rising to near 100% shortly after injection and Unresolved in Central Delta (yellow) peaking around 100% before declining to near zero by early March.

PTM Results for Neutral Particles. OMR Scenario = -6,500. Particles Injected 2/24/2026 at DSM2 Node 350 (Cache Slough).

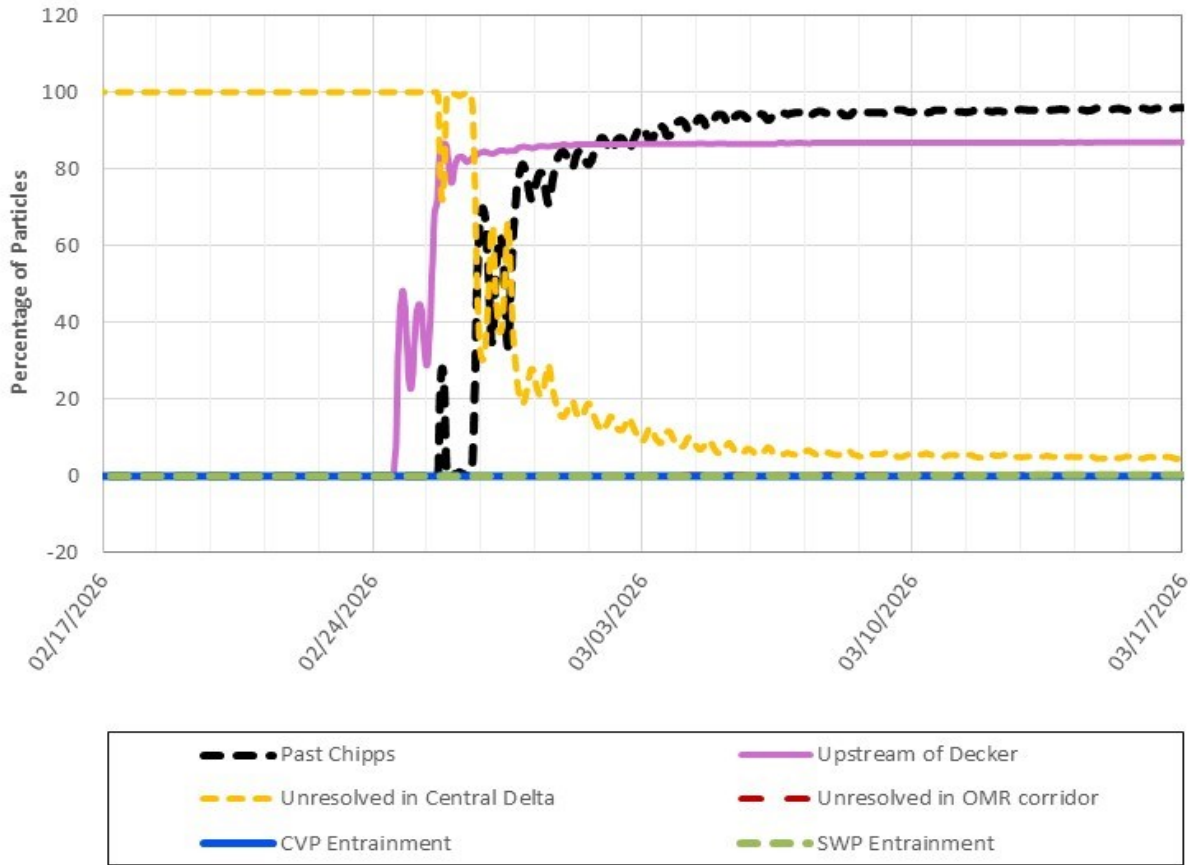


Figure 11: PTM Results for Neutral Particles at Cache Slough Confluence, OMR Scenario -6,500

Figure 11 is a line graph showing the percentage of neutral particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 350 (Cache Slough) under the OMR scenario of -6,500 cfs. Upstream of Decker (pink) rises sharply to near 85% shortly after injection and remains elevated through the end of the period, Past Chipps (black) gradually increases to roughly 97% by mid-March, and Unresolved in Central Delta (yellow) peaks near 100% before declining to around 5% by the end of the period.

PTM Results for Neutral Particles. OMR Scenario = -5,000. Particles Injected 2/24/2026 at DSM2 Node 350 (Cache Slough).

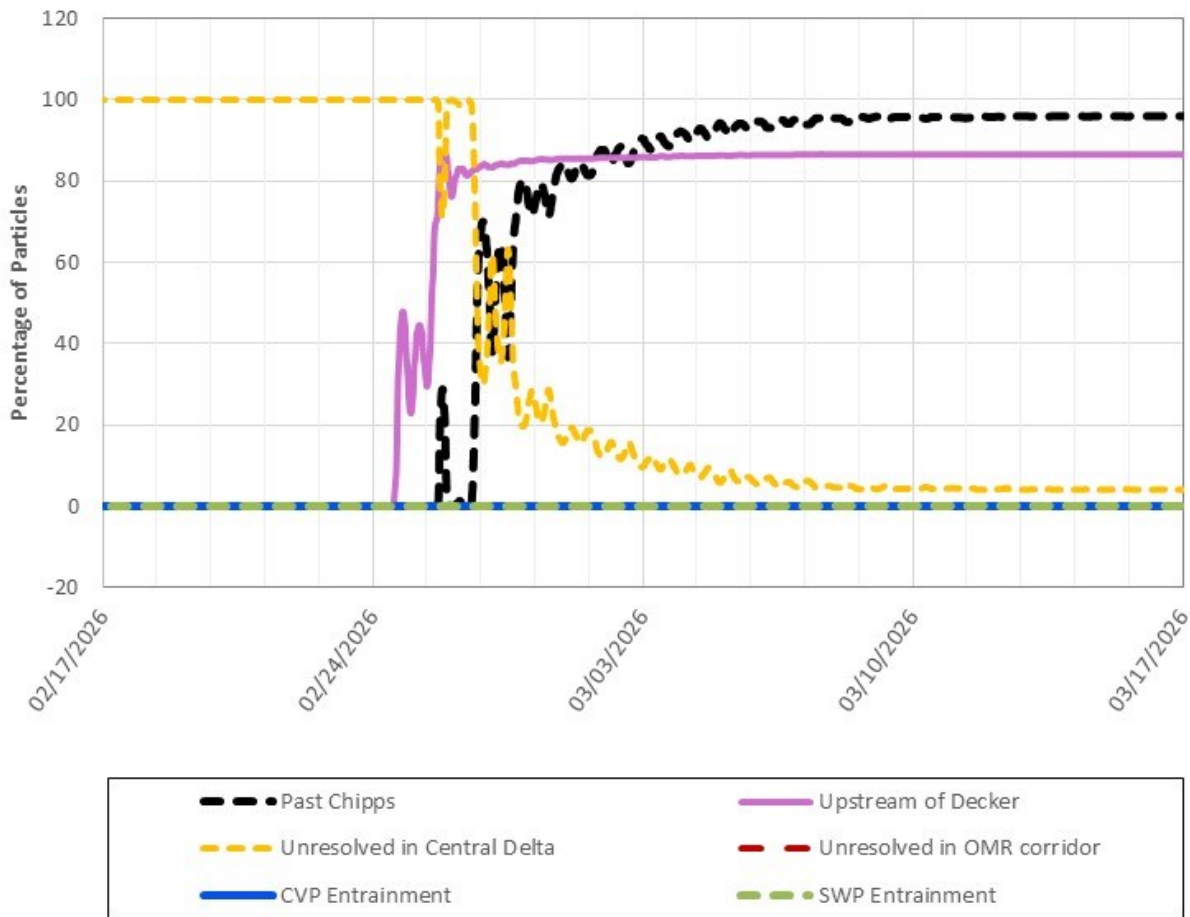


Figure 12: PTM Results for Neutral Particles at Cache Slough Confluence, OMR Scenario -5,000

Figure 12 is a line graph showing the percentage of neutral particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 350 (Cache Slough) under the OMR scenario of -5,000 cfs. Upstream of Decker (pink) rises sharply to near 85% shortly after injection and remains elevated through the end of the period, Past Chipps (black) gradually increases to roughly 96% by mid-March, and Unresolved in Central Delta (yellow) peaks near 100% before declining to around 4% by the end of the period.

PTM Results for Neutral Particles. OMR Scenario = -3,500. Particles Injected 2/24/2026 at DSM2 Node 350 (Cache Slough).

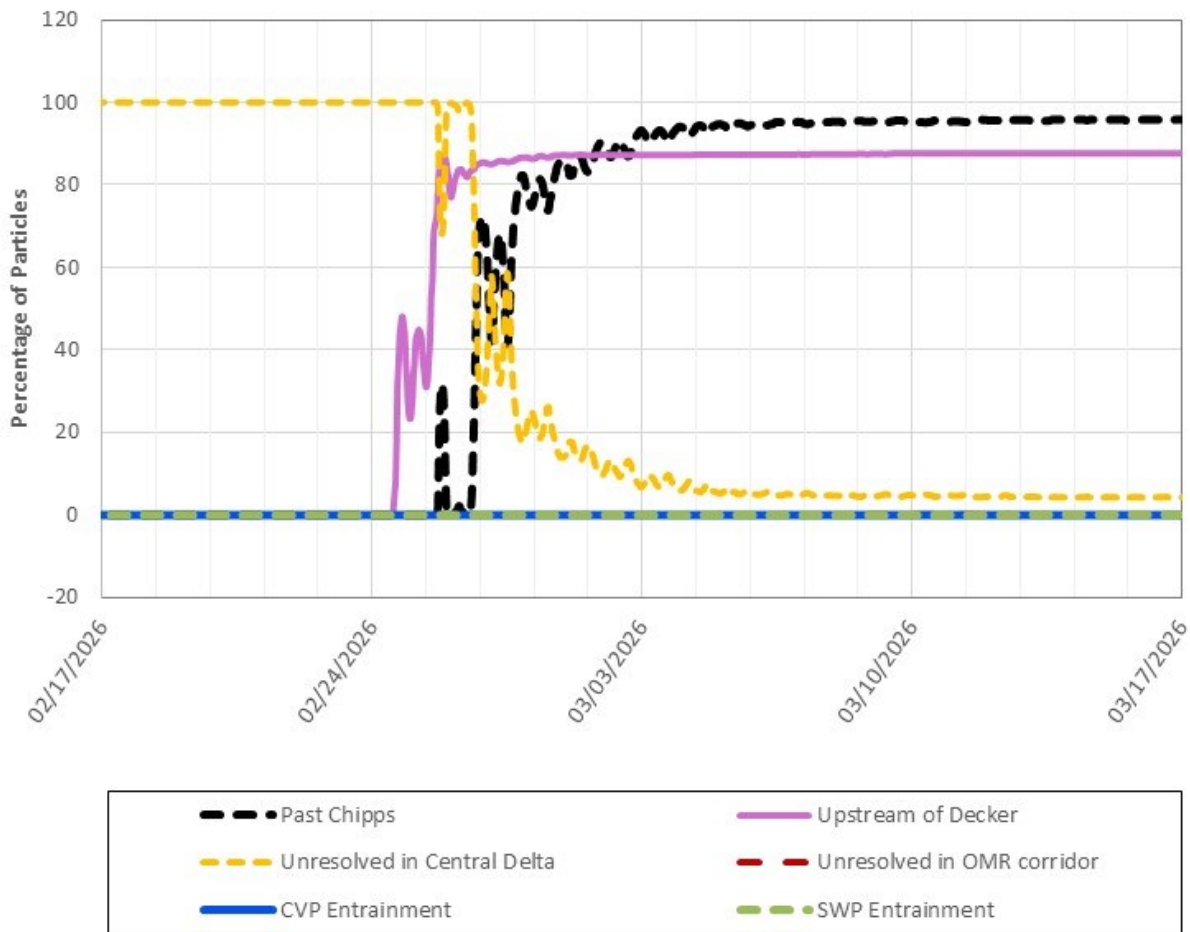


Figure 13: PTM Results for Neutral Particles at Cache Slough Confluence, OMR Scenario -3,500

Figure 13 is a line graph showing the percentage of neutral particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 350 (Cache Slough) under the OMR scenario of -3,500 cfs. Upstream of Decker (pink) rises sharply to near 85% shortly after injection and remains elevated through the end of the period, Past Chipps (black) gradually increases to roughly 96% by mid-March, and Unresolved in Central Delta (yellow) peaks near 100% before declining to around 5% by the end of the period.

PTM Results for Neutral Particles. OMR Scenario = -2,000. Particles Injected 2/24/2026 at DSM2 Node 350 (Cache Slough).

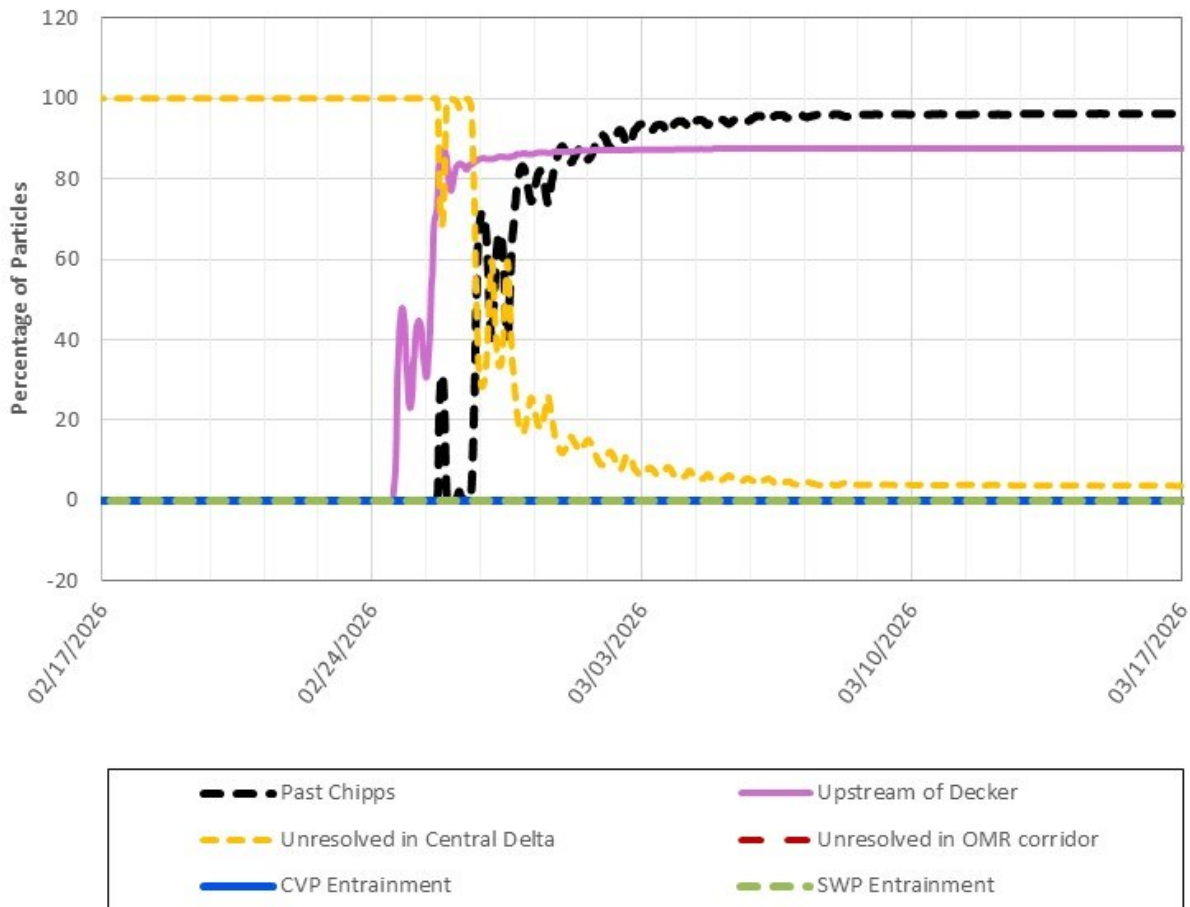


Figure 14: PTM Results for Neutral Particles at Cache Slough Confluence, OMR Scenario -2,000

Figure 14 is a line graph showing the percentage of neutral particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 350 (Cache Slough) under the OMR scenario of -2,000 cfs. Upstream of Decker (pink) rises sharply to near 85% shortly after injection and remains elevated through the end of the period, Past Chipps (black) gradually increases to roughly 96% by mid-March, and Unresolved in Central Delta (yellow) peaks near 100% before declining to around 3% by the end of the period.

PTM Results for Neutral Particles. OMR Scenario = -6,500. Particles Injected
2/24/2026 at DSM2 Node 469 (Jersey Point).

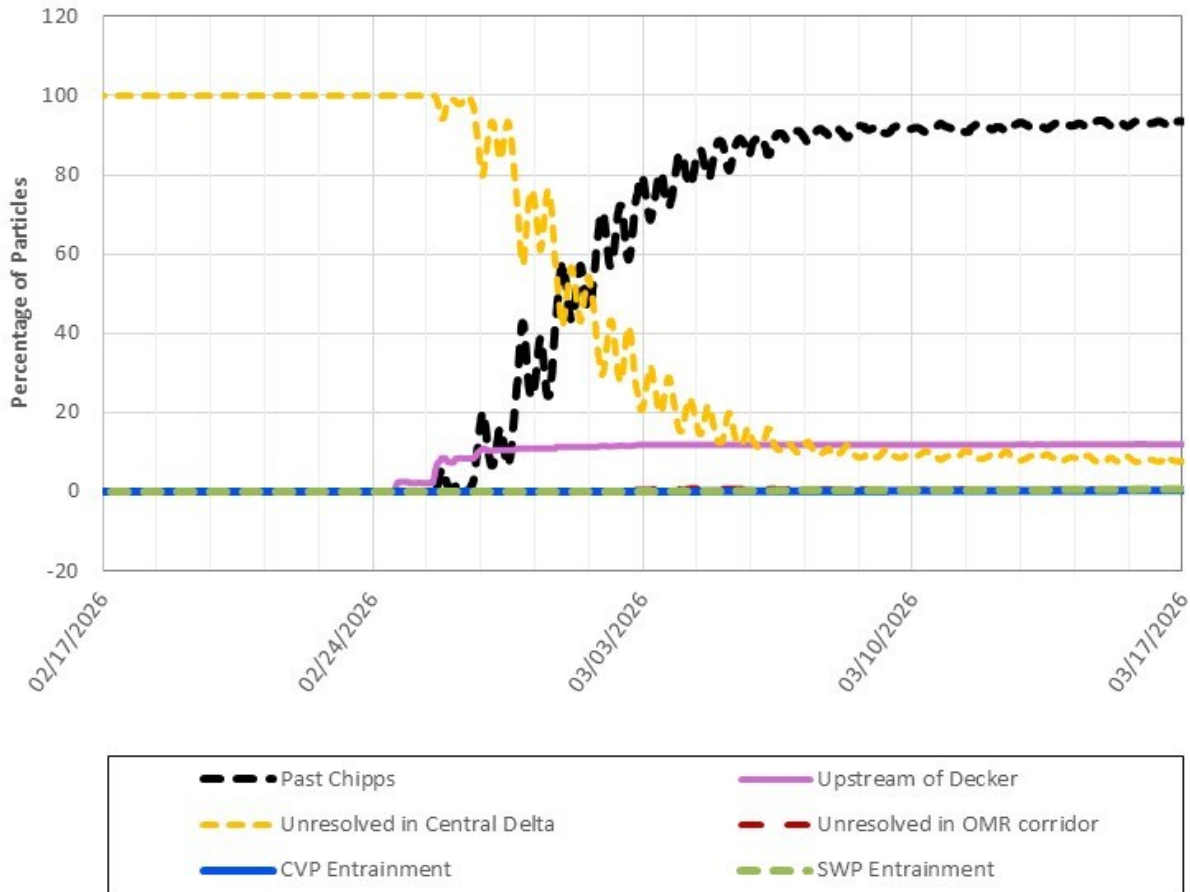


Figure 15: PTM Results for Neutral Particles at Jersey Point, OMR Scenario -6,500

Figure 15 is a line graph showing the percentage of neutral particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 469 (Jersey Point) under the OMR scenario of -6,500 cfs. Past Chipps (black) rises gradually to roughly 94% by mid-March, Unresolved in Central Delta (yellow) peaks near 100% before declining to around 10% by the end of the period, and Upstream of Decker (pink) rises modestly to near 11% and remains relatively stable through the end of the period.

PTM Results for Neutral Particles. OMR Scenario = -5,000. Particles Injected 2/24/2026 at DSM2 Node 469 (Jersey Point).

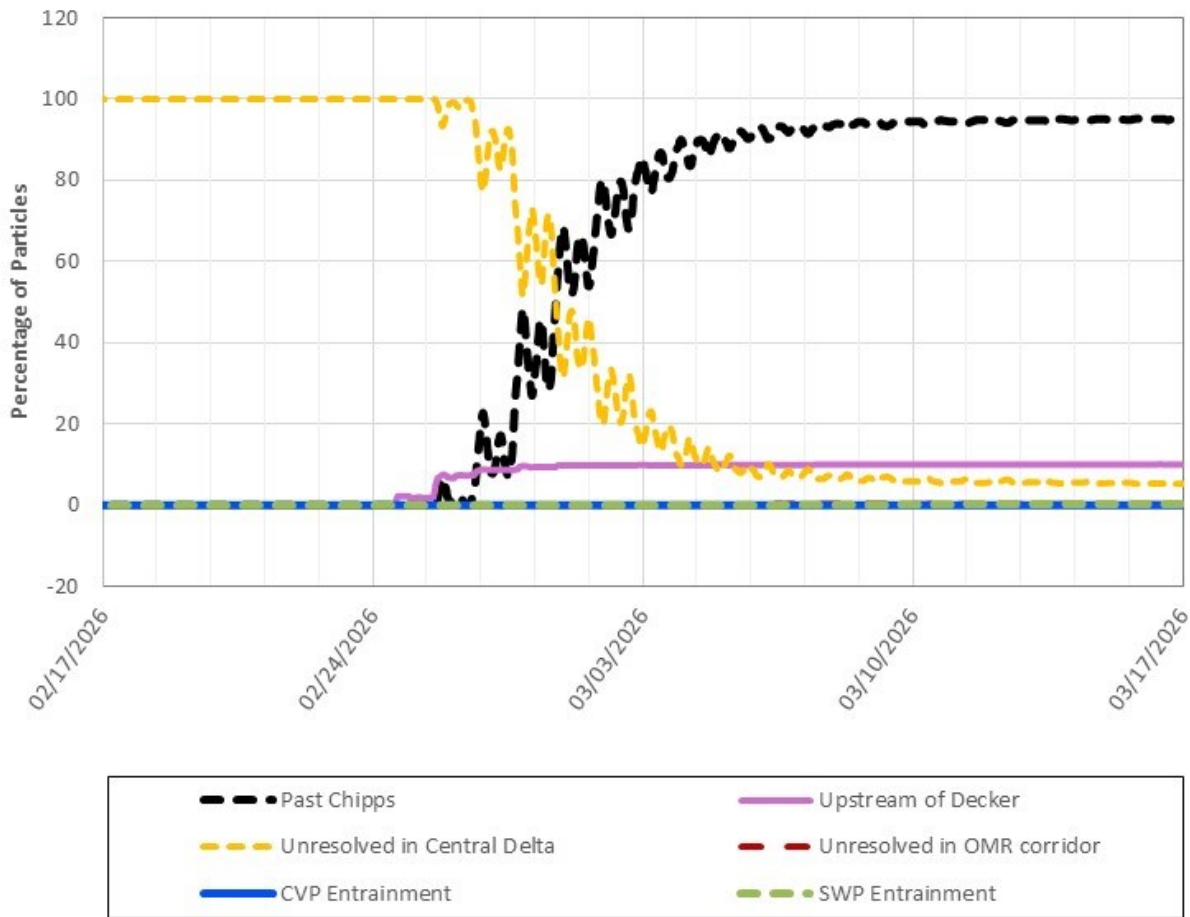


Figure 16: PTM Results for Neutral Particles at Jersey Point, OMR Scenario -5,000

Figure 16 is a line graph showing the percentage of neutral particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 469 (Jersey Point) under the OMR scenario of -5,000 cfs. Past Chipps (black) rises gradually to roughly 95% by mid-March, Unresolved in Central Delta (yellow) peaks near 100% before declining to around 5% by the end of the period, and Upstream of Decker (pink) rises modestly to near 10% and remains relatively stable through the end of the period.

PTM Results for Neutral Particles. OMR Scenario = -3,500. Particles Injected
2/24/2026 at DSM2 Node 469 (Jersey Point).

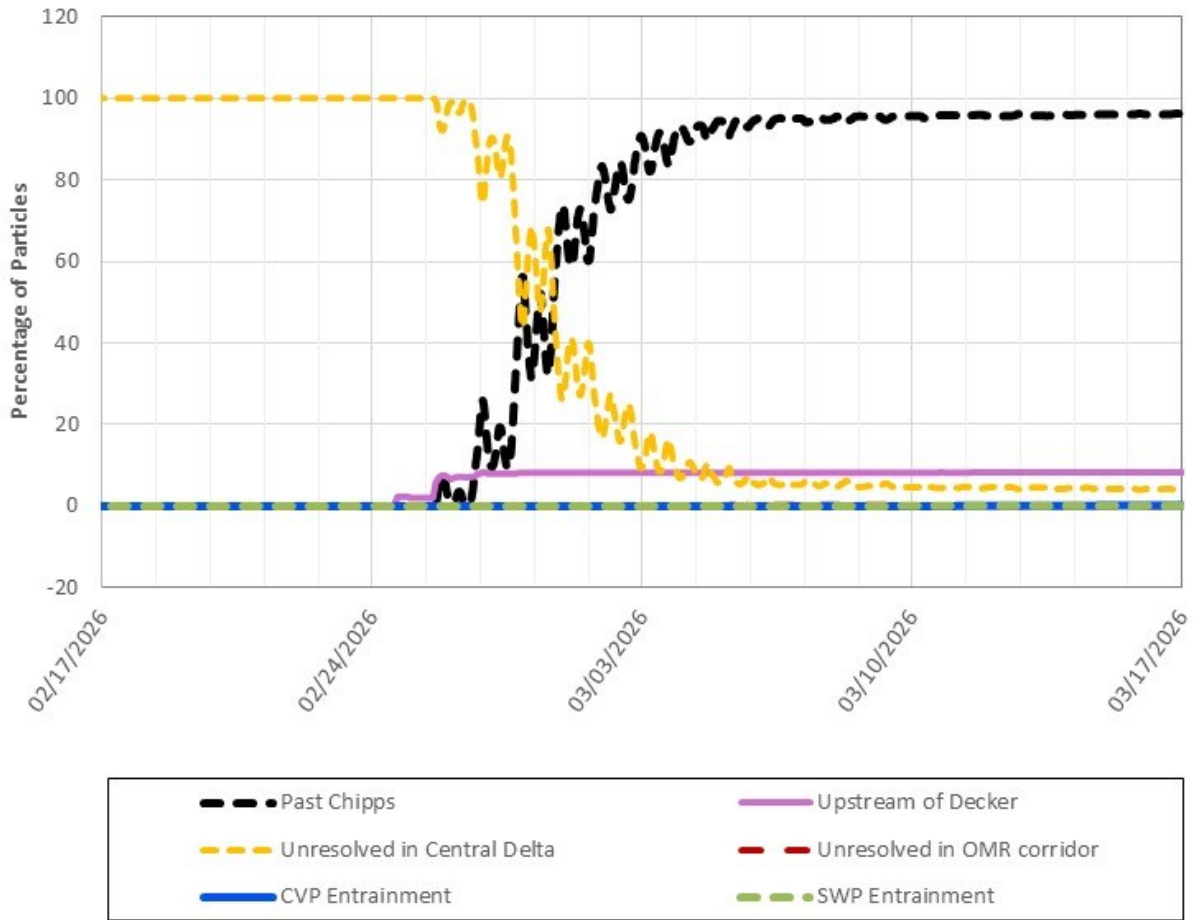


Figure 17: PTM Results for Neutral Particles at Jersey Point, OMR Scenario -3,500

Figure 17 is a line graph showing the percentage of neutral particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 469 (Jersey Point) under the OMR scenario of -3,500 cfs. Past Chipps (black) rises gradually to roughly 96% by mid-March, Unresolved in Central Delta (yellow) peaks near 100% before declining to around 7% by the end of the period, and Upstream of Decker (pink) rises modestly to near 8% and remains relatively stable through the end of the period.

PTM Results for Neutral Particles. OMR Scenario = -2,000. Particles Injected
2/24/2026 at DSM2 Node 469 (Jersey Point).

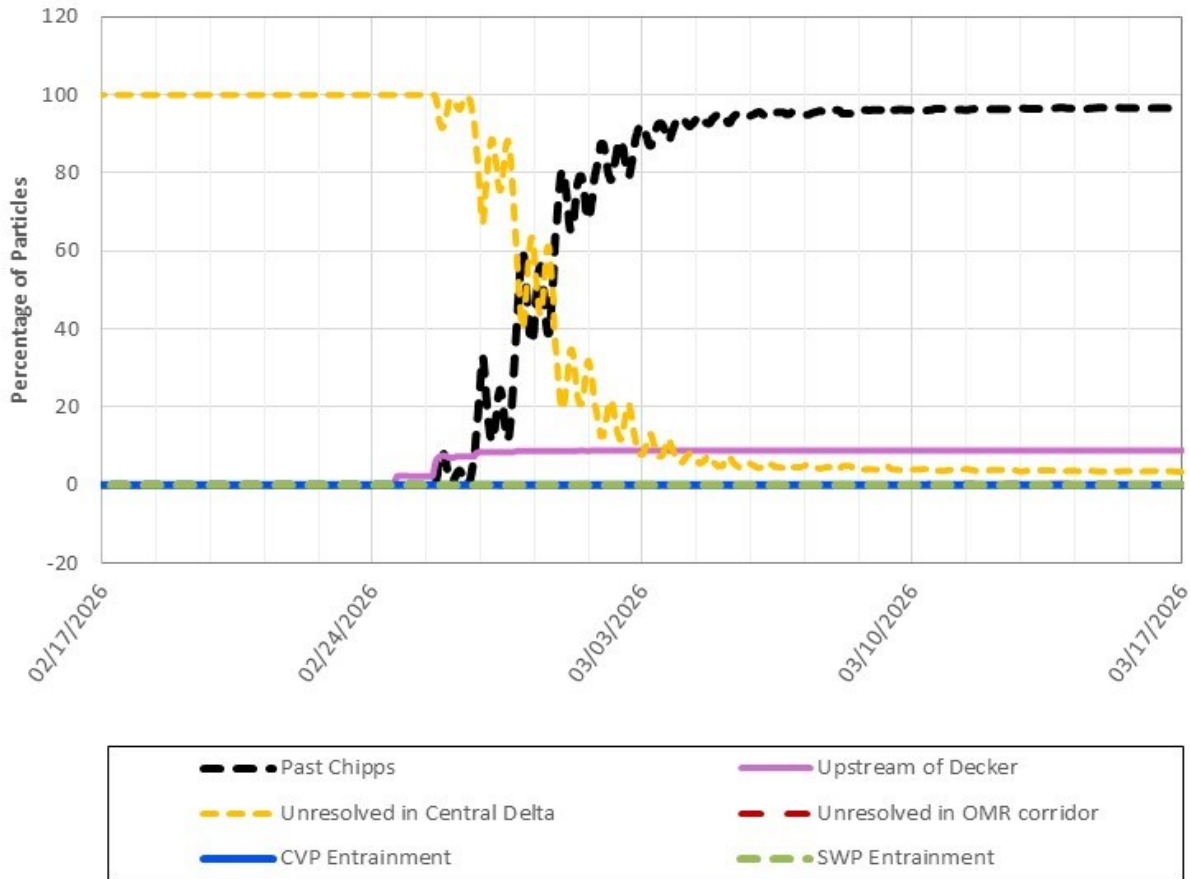


Figure 18: PTM Results for Neutral Particles at Jersey Point, OMR Scenario -2,000

Figure 18 is a line graph showing the percentage of neutral particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 469 (Jersey Point) under the OMR scenario of -2,000 cfs. Past Chipps (black) rises gradually to roughly 97% by mid-March, Unresolved in Central Delta (yellow) peaks near 100% before declining to around 3% by the end of the period, and Upstream of Decker (pink) rises modestly to near 9% and remains relatively stable through the end of the period.

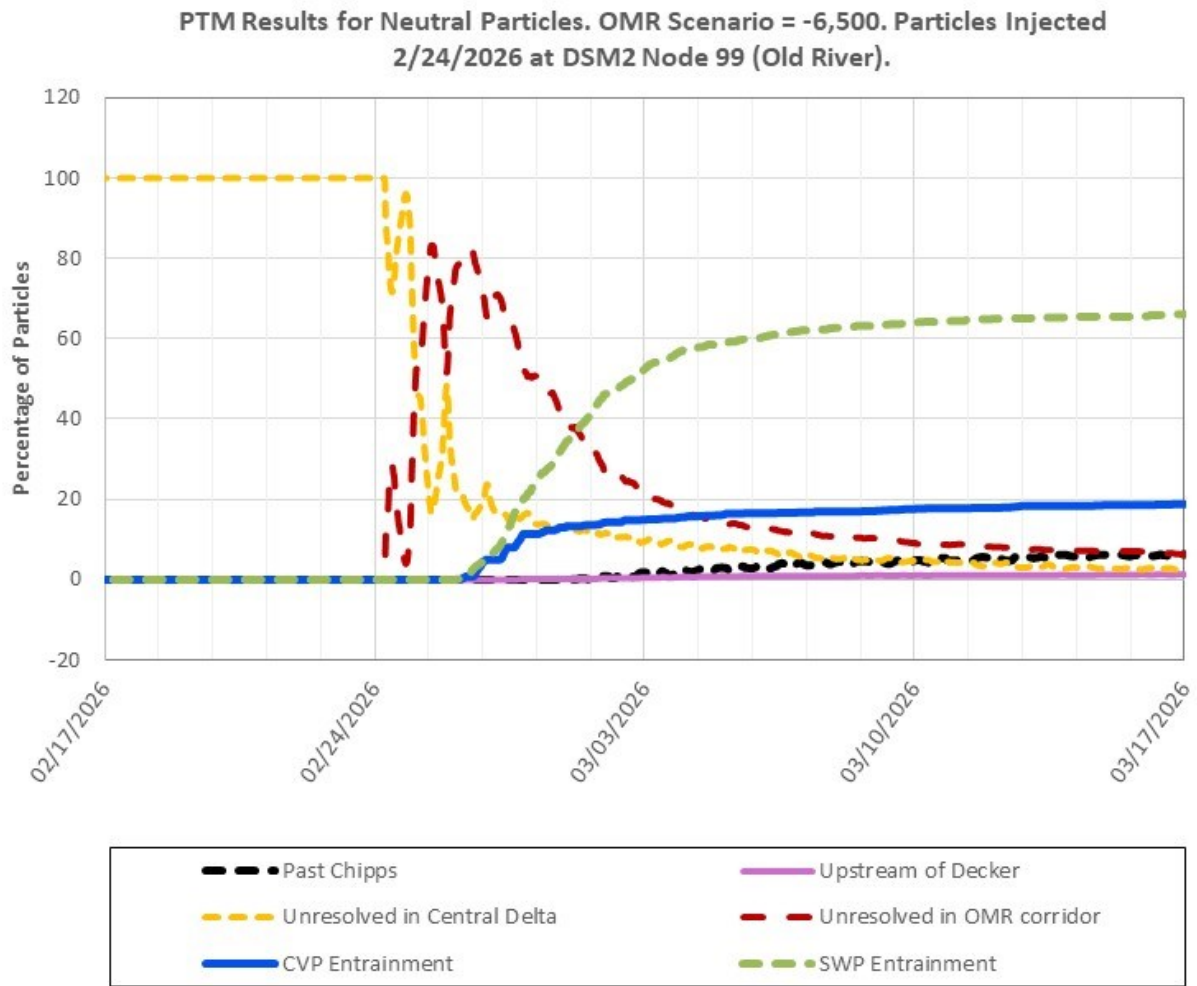


Figure 19: PTM Results for Neutral Particles at Old River, OMR Scenario -6,500

Figure 19 is a line graph showing the percentage of neutral particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 99 (Old River) under the OMR scenario of -6,500 cfs. SWP Entrainment (green) rises steadily to roughly 67% by mid-March, CVP Entrainment (blue) rises to near 19% shortly after injection and remains stable through the end of the period, Unresolved in OMR corridor (red) peaks near 82% before declining to around 7% by mid-March, and Unresolved in Central Delta (yellow) peaks near 100% before declining to near zero by early March.

PTM Results for Neutral Particles. OMR Scenario = -5,000. Particles Injected
2/24/2026 at DSM2 Node 99 (Old River).

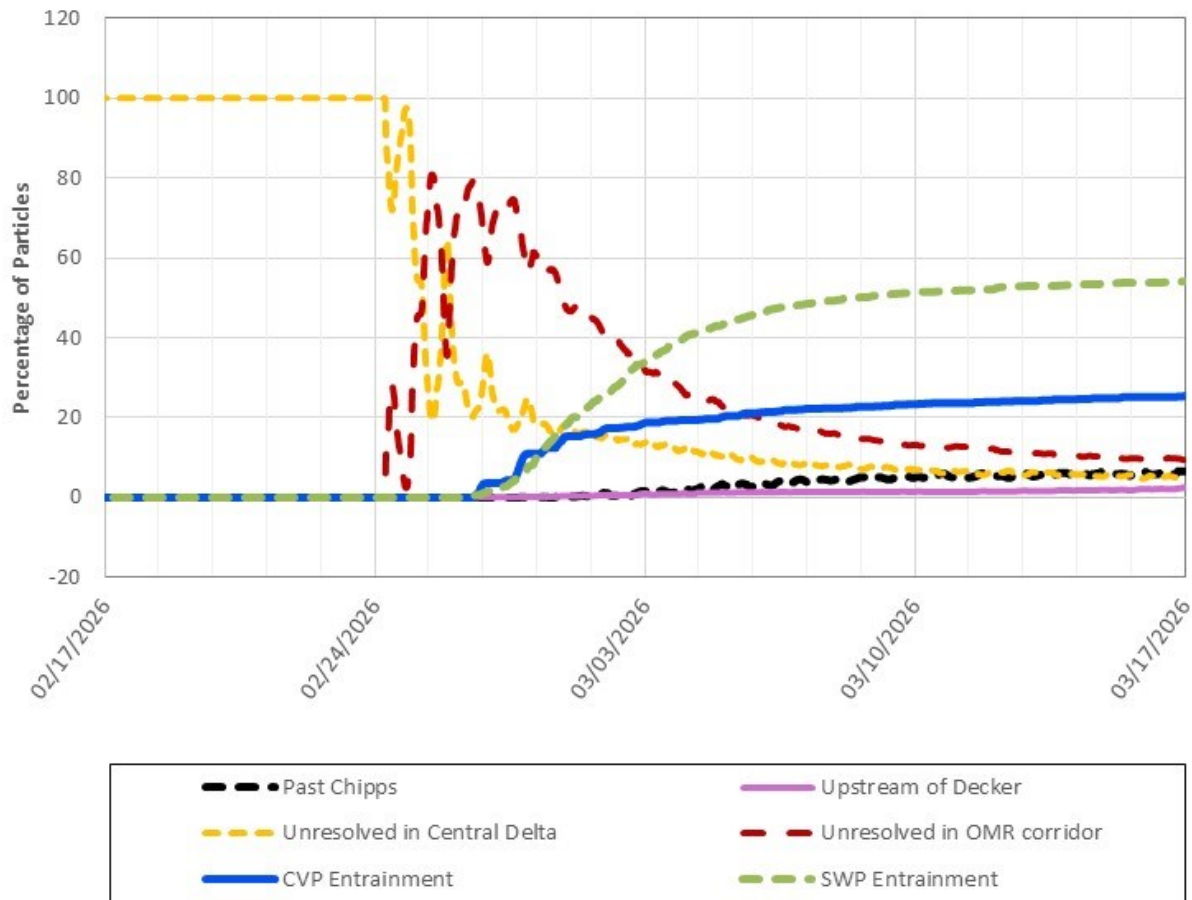


Figure 20: PTM Results for Neutral Particles at Old River, OMR Scenario -5,000

Figure 20 is a line graph showing the percentage of neutral particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 99 (Old River) under the OMR scenario of -5,000 cfs. SWP Entrainment (green) rises steadily to roughly 54% by mid-March, CVP Entrainment (blue) rises to near 26% by early March and remains stable through the end of the period, Unresolved in OMR corridor (red) peaks near 80% before declining to around 9% by mid-March, and Unresolved in Central Delta (yellow) peaks near 100% before declining to near zero by early March.

PTM Results for Neutral Particles. OMR Scenario = -3,500. Particles Injected 2/24/2026 at DSM2 Node 99 (Old River).

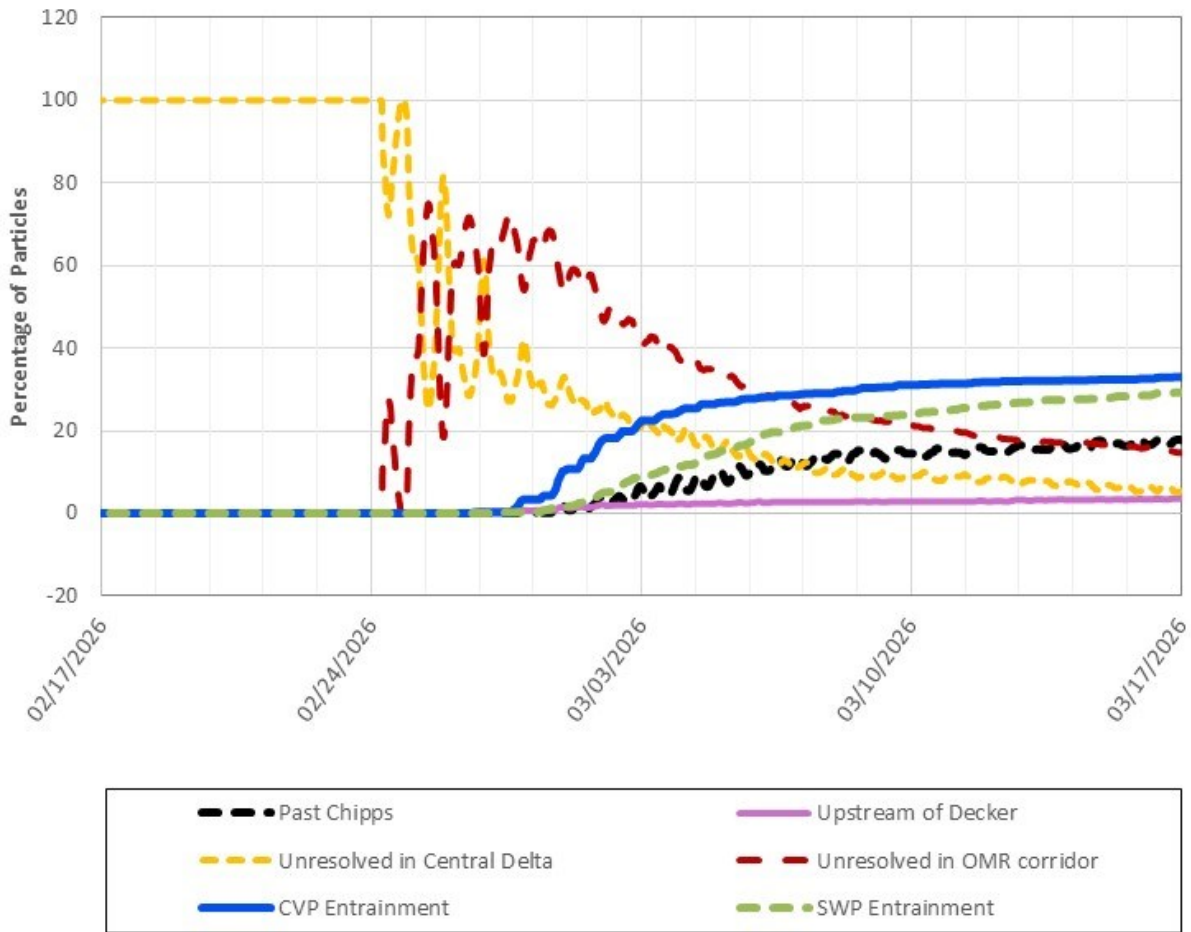


Figure 21: PTM Results for Neutral Particles at Old River, OMR Scenario -3,500

Figure 21 is a line graph showing the percentage of neutral particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 99 (Old River) under the OMR scenario of -3,500 cfs. CVP Entrainment (blue) rises steadily to roughly 32% by mid-March, SWP Entrainment (green) rises to near 29% by mid-March, Unresolved in OMR corridor (red) peaks near 70% before declining to around 3% by mid-March, Unresolved in Central Delta (yellow) peaks near 100% before declining to around 5% by mid-March, and Past Chipps (black) rises gradually to near 17% by the end of the period.

PTM Results for Neutral Particles. OMR Scenario = -2,000. Particles Injected 2/24/2026 at DSM2 Node 99 (Old River).

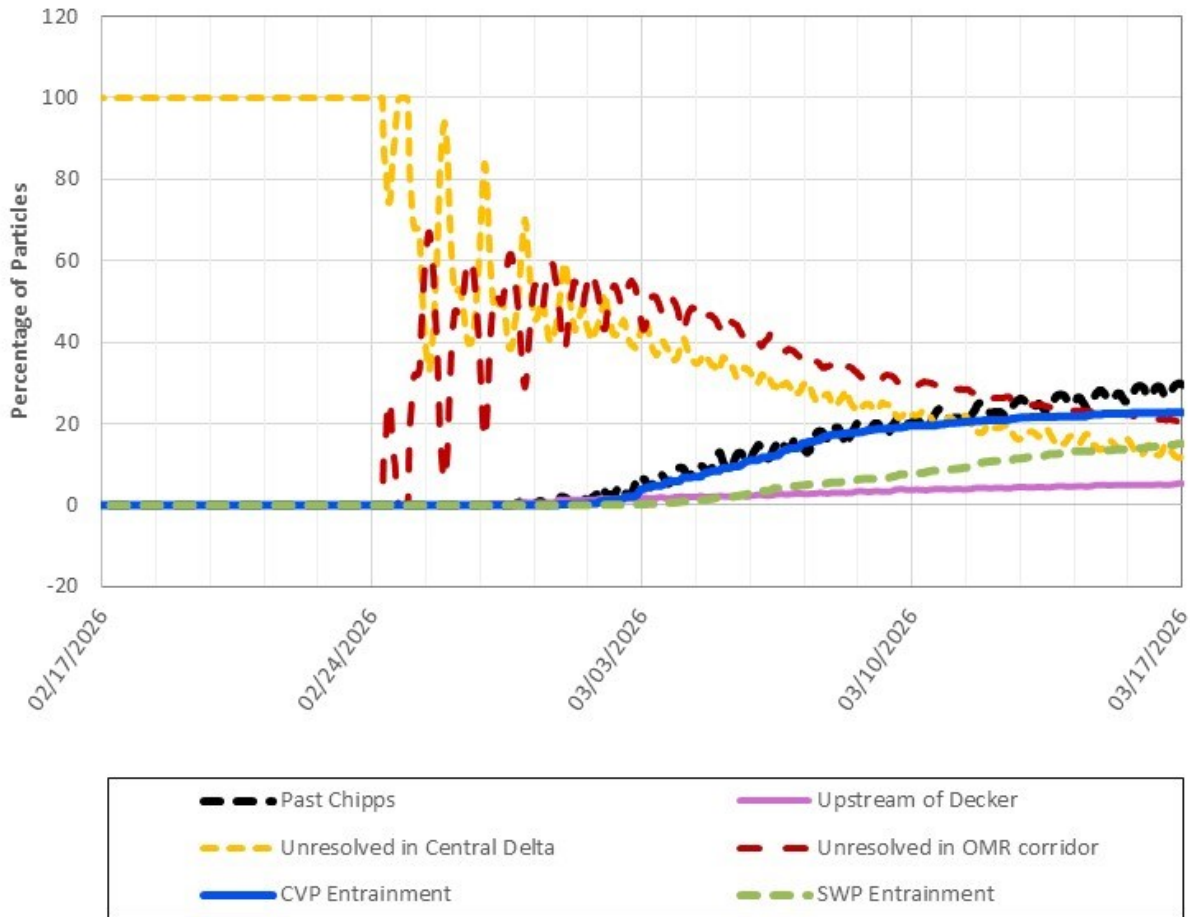


Figure 22: PTM Results for Neutral Particles at Old River, OMR Scenario -2,000

Figure 22 is a line graph showing the percentage of neutral particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 99 (Old River) under the OMR scenario of -2,000 cfs. Unresolved in Central Delta (yellow) peaks near 100% before declining to around 13% by mid-March, Unresolved in OMR corridor (red) peaks near 85% before declining to around 20% by mid-March, Past Chipps (black) rises gradually to near 30% by the end of the period, CVP Entrainment (blue) rises steadily to roughly 24% by mid-March, and SWP Entrainment (green) rises modestly to near 13% by the end of the period.

Surface Oriented Particles (PP)

Table 8. Surface Oriented Particle Fate (percent flux across boundary) for Particles Injected at Chipps (DSM2 Node 465)

Week	OMR Flow Bin	Past Chipps	Upstream of Decker	Unresolved in Central Delta	Unresolved in OMR corridor	CVP Entrainment	SWP Entrainment
Week 1 End: 03/02/2026	-6,500	98.9	0.0	1.1	0.0	0.0	0.0
Week 1 End: 03/02/2026	-5,000	98.7	0.0	1.3	0.0	0.0	0.0
Week 1 End: 03/02/2026	-3,500	99.1	0.0	0.9	0.0	0.0	0.0
Week 1 End: 03/02/2026	-2,000	98.9	0.0	1.1	0.0	0.0	0.0
Week 2 End: 03/09/2026	-6,500	98.9	0.0	1.1	0.0	0.0	0.0
Week 2 End: 03/09/2026	-5,000	98.7	0.0	1.3	0.0	0.0	0.0
Week 2 End: 03/09/2026	-3,500	99.1	0.0	0.9	0.0	0.0	0.0
Week 2 End: 03/09/2026	-2,000	98.8	0.0	1.1	0.0	0.0	0.0
Week 3 End: 03/16/2026	-6,500	98.9	0.0	1.1	0.0	0.0	0.0
Week 3 End: 03/16/2026	-5,000	98.7	0.0	1.3	0.0	0.0	0.0
Week 3 End: 03/16/2026	-3,500	99.1	0.0	0.9	0.0	0.0	0.0
Week 3 End: 03/16/2026	-2,000	98.9	0.0	1.1	0.0	0.0	0.0

Note: values between 0.0 and 0.1 are indicated with <0.1

Table 9. Surface Oriented Particle Fate (percent flux across boundary) for Particles Injected at Cache Slough (DSM2 Node 350)

Week	OMR Flow Bin	Past Chipps	Upstream of Decker	Unresolved in Central Delta	Unresolved in OMR corridor	CVP Entrainment	SWP Entrainment
Week 1 End: 03/02/2026	-6,500	88.9	89.8	11.1	0.0	0.0	0.0
Week 1 End: 03/02/2026	-5,000	90.0	90.1	10.0	0.0	0.0	0.0
Week 1 End: 03/02/2026	-3,500	90.5	9.5	0.0	0.0	0.0	0.0
Week 1 End: 03/02/2026	-2,000	91.1	89.8	8.9	0.0	0.0	0.0
Week 2 End: 03/09/2026	-6,500	94.6	92.0	5.5	0.0	0.0	0.0
Week 2 End: 03/09/2026	-5,000	94.8	91.7	5.2	0.0	0.0	0.0
Week 2 End: 03/09/2026	-3,500	95.0	92.0	5.0	0.0	0.0	0.0
Week 2 End: 03/09/2026	-2,000	95.0	92.1	5.0	0.0	0.0	0.0
Week 3 End: 03/16/2026	-6,500	95.3	92.5	4.8	0.0	0.0	0.0
Week 3 End: 03/16/2026	-5,000	95.6	92.1	4.4	0.0	0.0	0.0
Week 3 End: 03/16/2026	-3,500	95.5	92.2	4.5	0.0	0.0	0.0
Week 3 End: 03/16/2026	-2,000	95.7	92.5	4.3	0.0	0.0	0.0

Note: values between 0.0 and 0.1 are indicated with <0.1

Table 10. Surface Oriented Particle Fate (percent flux across boundary) for Particles Injected at Jersey Point (DSM2 Node 469)

Week	OMR Flow Bin	Past Chipps	Upstream of Decker	Unresolved in Central Delta	Unresolved in OMR corridor	CVP Entrainment	SWP Entrainment
Week 1 End: 03/02/2026	-6,500	81.6	12.3	18.9	0.5	0.0	0.0
Week 1 End: 03/02/2026	-5,000	84.1	12.4	16.5	0.4	0.1	0.1
Week 1 End: 03/02/2026	-3,500	87.4	12.0	12.8	0.2	0.0	0.0
Week 1 End: 03/02/2026	-2,000	89.1	10.2	10.9	0.0	0.0	0.0
Week 2 End 03/09/2026	-6,500	91.4	12.9	10.5	0.5	0.8	0.6
Week 2 End: 03/09/2026	-5,000	93.9	12.7	7.4	0.7	0.3	0.3
Week 2 End: 03/09/2026	-3,500	94.6	12.3	6.0	0.3	0.1	0.2
Week 2 End: 03/09/2026	-2,000	94.8	10.7	5.5	0.2	0.0	0.1
Week 3 End: 03/16/2026	-6,500	92.8	13.2	9.3	0.2	1.0	0.9
Week 3 End: 03/16/2026	-5,000	94.4	12.7	7.0	0.2	0.5	0.7
Week 3 End: 03/16/2026	-3,500	95.0	12.3	5.7	0.2	0.3	0.2
Week 3 End: 03/16/2026	-2,000	95.6	10.9	4.7	0.1	0.0	0.2

Note: values between 0.0 and 0.1 are indicated with <0.1

Table 11. Surface Oriented Particle Fate (percent flux across boundary) for Particles Injected at Old River (DSM2 Node 99)

Week	OMR Flow Bin	Past Chipps	Upstream of Decker	Unresolved in Central Delta	Unresolved in OMR corridor	CVP Entrainment	SWP Entrainment
Week 1 End: 03/02/2026	-6,500	2.3	1.1	10.0	23.1	16.6	48.0
Week 1 End: 03/02/2026	-5,000	3.7	1.7	15.5	33.7	17.2	29.9
Week 1 End: 03/02/2026	-3,500	3.7	1.4	27.1	36.5	26.0	6.7
Week 1 End: 03/02/2026	-2,000	6.0	2.1	50.0	39.6	4.1	0.3
Week 2 End 03/09/2026	-6,500	6.3	1.7	2.8	8.4	18.2	64.3
Week 2 End: 03/09/2026	-5,000	11.1	2.3	5.0	10.8	21.1	52.0
Week 2 End: 03/09/2026	-3,500	14.5	3.3	10.4	17.5	34.8	22.8
Week 2 End: 03/09/2026	-2,000	24.1	4.7	20.7	27.0	19.4	8.8
Week 3 End: 03/16/2026	-6,500	7.2	1.8	1.3	5.3	19.6	66.6
Week 3 End: 03/16/2026	-5,000	13.4	2.3	2.1	7.4	22.4	54.7
Week 3 End: 03/16/2026	-3,500	18.8	4.2	4.9	12.2	37.5	26.6
Week 3 End: 03/16/2026	-2,000	33.4	6.0	9.7	19.6	22.4	14.9

Note: values between 0.0 and 0.1 are indicated with <0.1

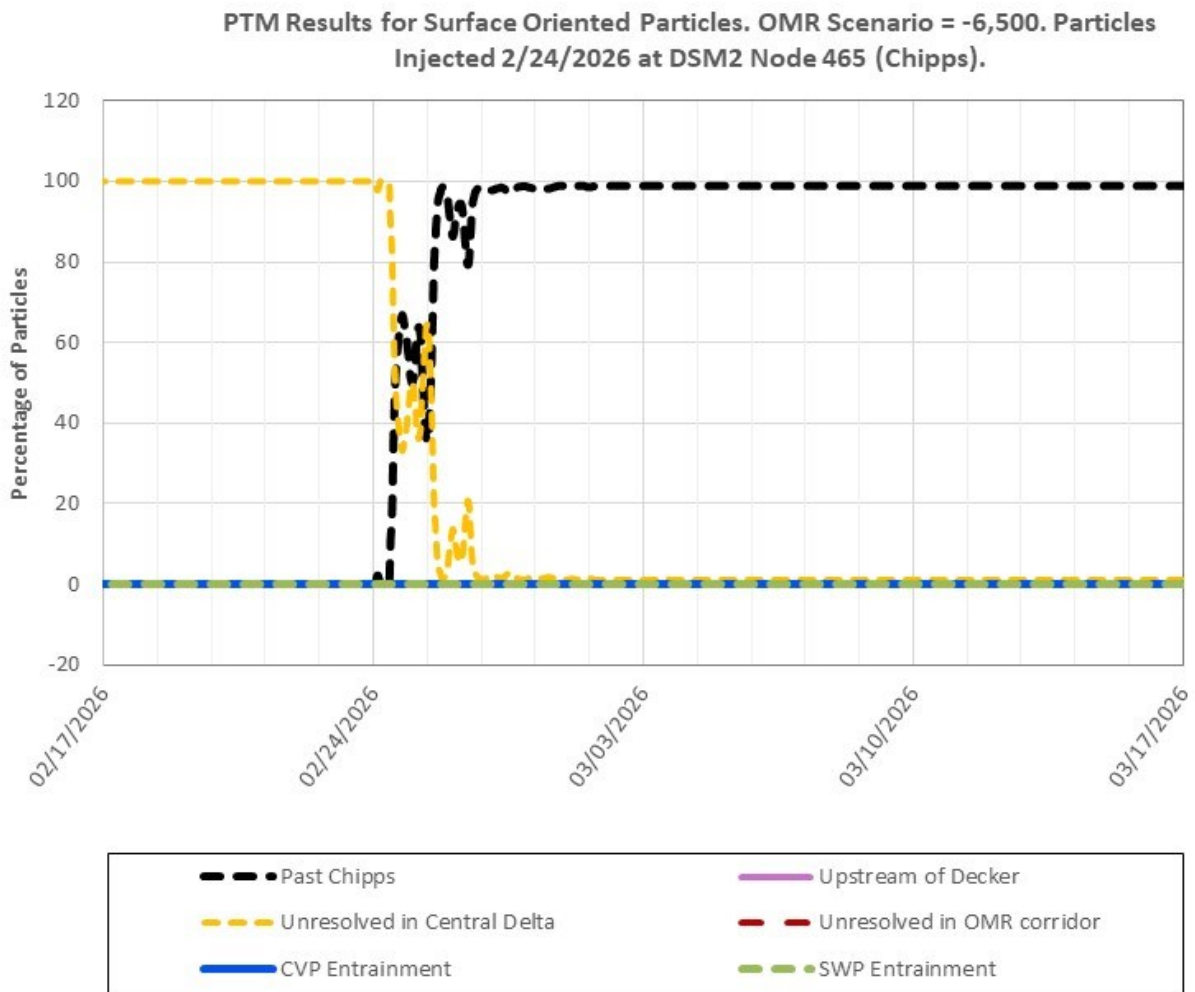


Figure 23: PTM Results for Surface Oriented Particles at Chipps Island, OMR Scenario -6,500

Figure 23 is a line graph showing the percentage of surface oriented particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 465 (Chipps) under the OMR scenario of -6,500 cfs. Six flux locations are represented by different colored dashed lines, with Past Chipps (black) rising to near 100% shortly after injection and Unresolved in Central Delta (yellow) peaking around 100% before declining to near zero by early March.

PTM Results for Surface Oriented Particles. OMR Scenario = -5,000. Particles Injected 2/24/2026 at DSM2 Node 465 (Chippis).

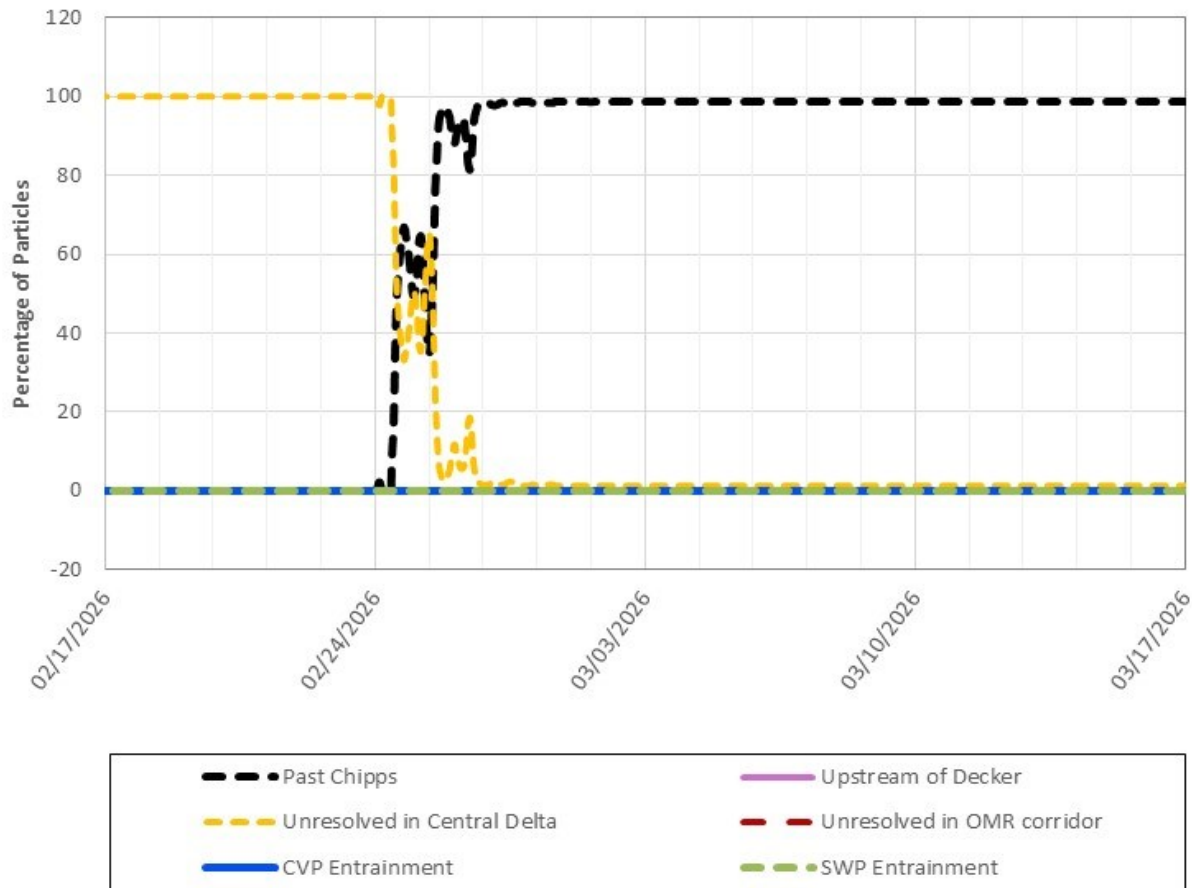


Figure 24: PTM Results for Surface Oriented Particles at Chipps Island, OMR Scenario -5,000

Figure 24 is a line graph showing the percentage of surface oriented particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 465 (Chippis) under the OMR scenario of -5,000 cfs. Six flux locations are represented by different colored dashed lines, with Past Chipps (black) rising to near 100% shortly after injection and Unresolved in Central Delta (yellow) peaking around 100% before declining to near zero by early March.

PTM Results for Surface Oriented Particles. OMR Scenario = -3,500. Particles Injected 2/24/2026 at DSM2 Node 465 (Chipps).

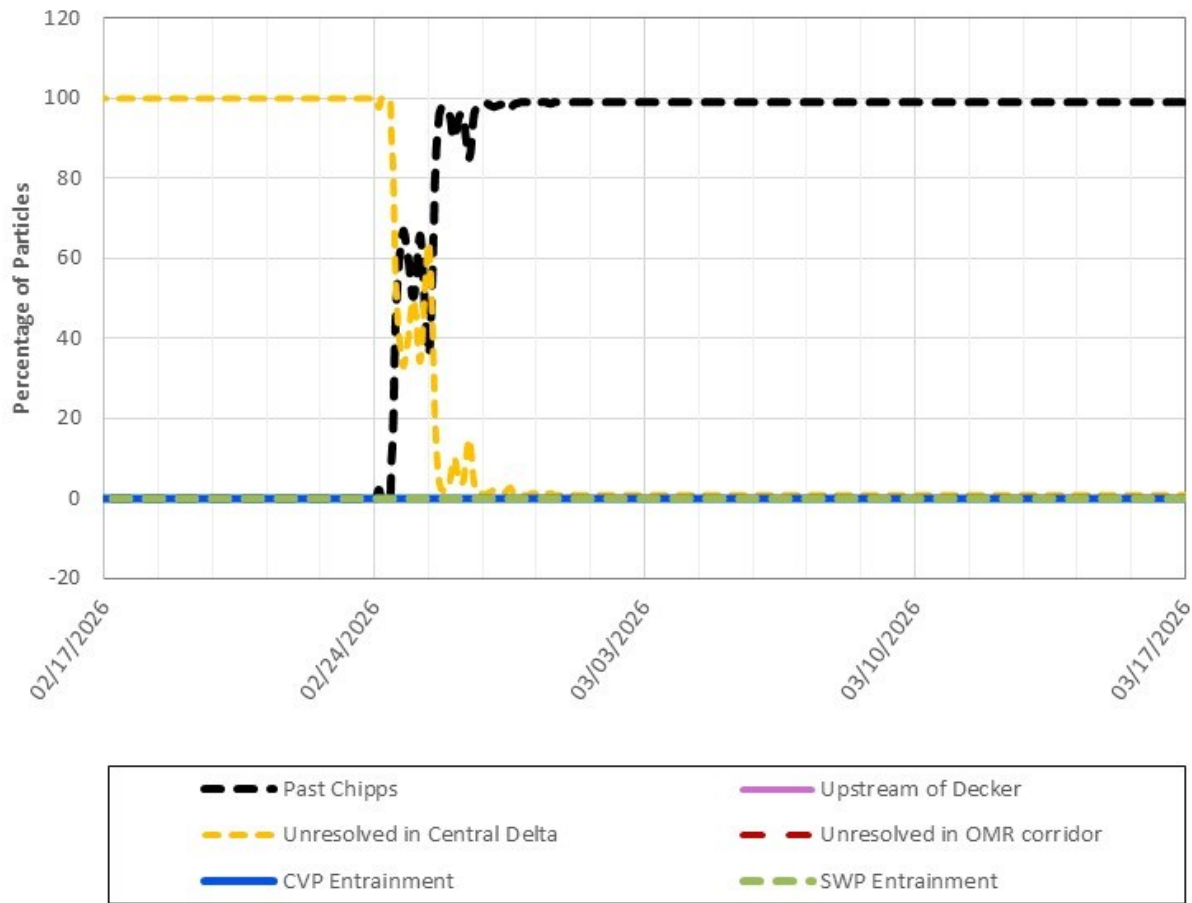


Figure 25: PTM Results for Surface Oriented Particles at Chipps Island, OMR Scenario -3,500

Figure 25 is a line graph showing the percentage of surface oriented particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 465 (Chipps) under the OMR scenario of -3,500 cfs. Six flux locations are represented by different colored dashed lines, with Past Chipps (black) rising to near 100% shortly after injection and Unresolved in Central Delta (yellow) peaking around 100% before declining to near zero by early March.

PTM Results for Surface Oriented Particles. OMR Scenario = -2,000. Particles Injected 2/24/2026 at DSM2 Node 465 (Chippis).

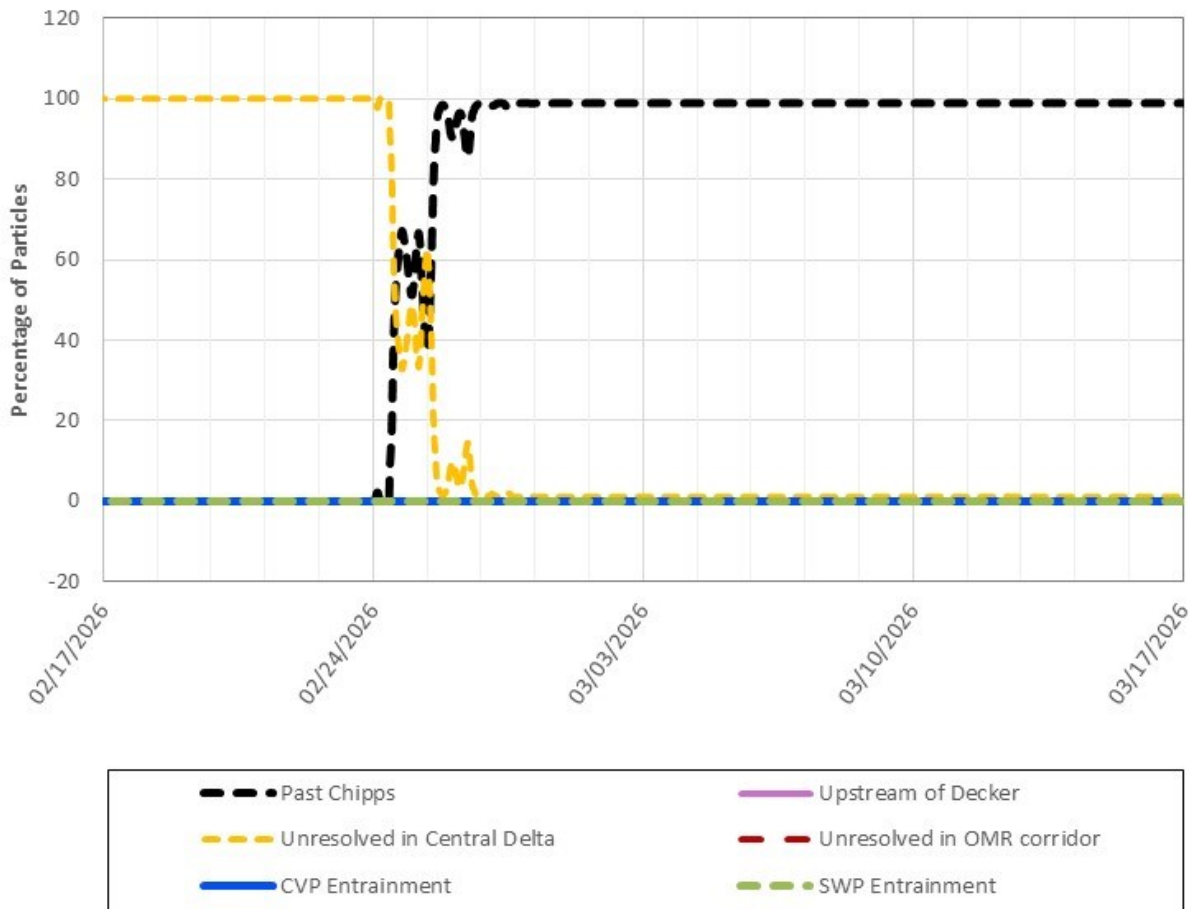


Figure 26: PTM Results for Surface Oriented Particles at Chippis Island, OMR Scenario -2,000

Figure 26 is a line graph showing the percentage of surface oriented particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 465 (Chippis) under the OMR scenario of -2,000 cfs. Six flux locations are represented by different colored dashed lines, with Past Chippis (black) rising to near 100% shortly after injection and Unresolved in Central Delta (yellow) peaking around 100% before declining to near zero by early March.

PTM Results for Surface Oriented Particles. OMR Scenario = -6,500. Particles Injected 2/24/2026 at DSM2 Node 350 (Cache Slough).

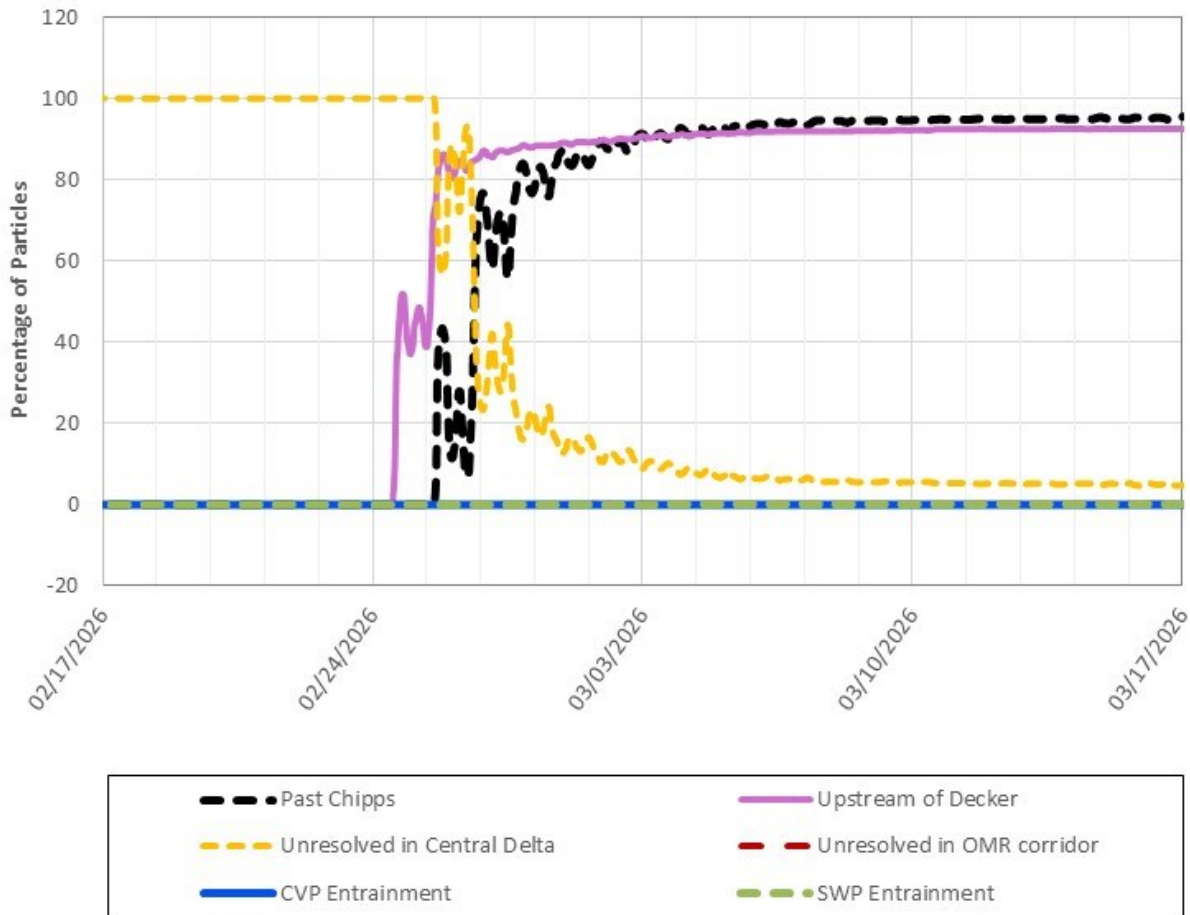


Figure 27: PTM Results for Surface Oriented Particles at Cache Slough Confluence, OMR Scenario -6,500

Figure 27 is a line graph showing the percentage of surface oriented particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 350 (Cache Slough) under the OMR scenario of -6,500 cfs. Upstream of Decker (pink) rises sharply to near 90% shortly after injection and remains elevated through the end of the period, Past Chipps (black) gradually increases to roughly 95% by mid-March, and Unresolved in Central Delta (yellow) peaks near 100% before declining to around 5% by the end of the period.

PTM Results for Surface Oriented Particles. OMR Scenario = -5,000. Particles Injected 2/24/2026 at DSM2 Node 350 (Cache Slough).

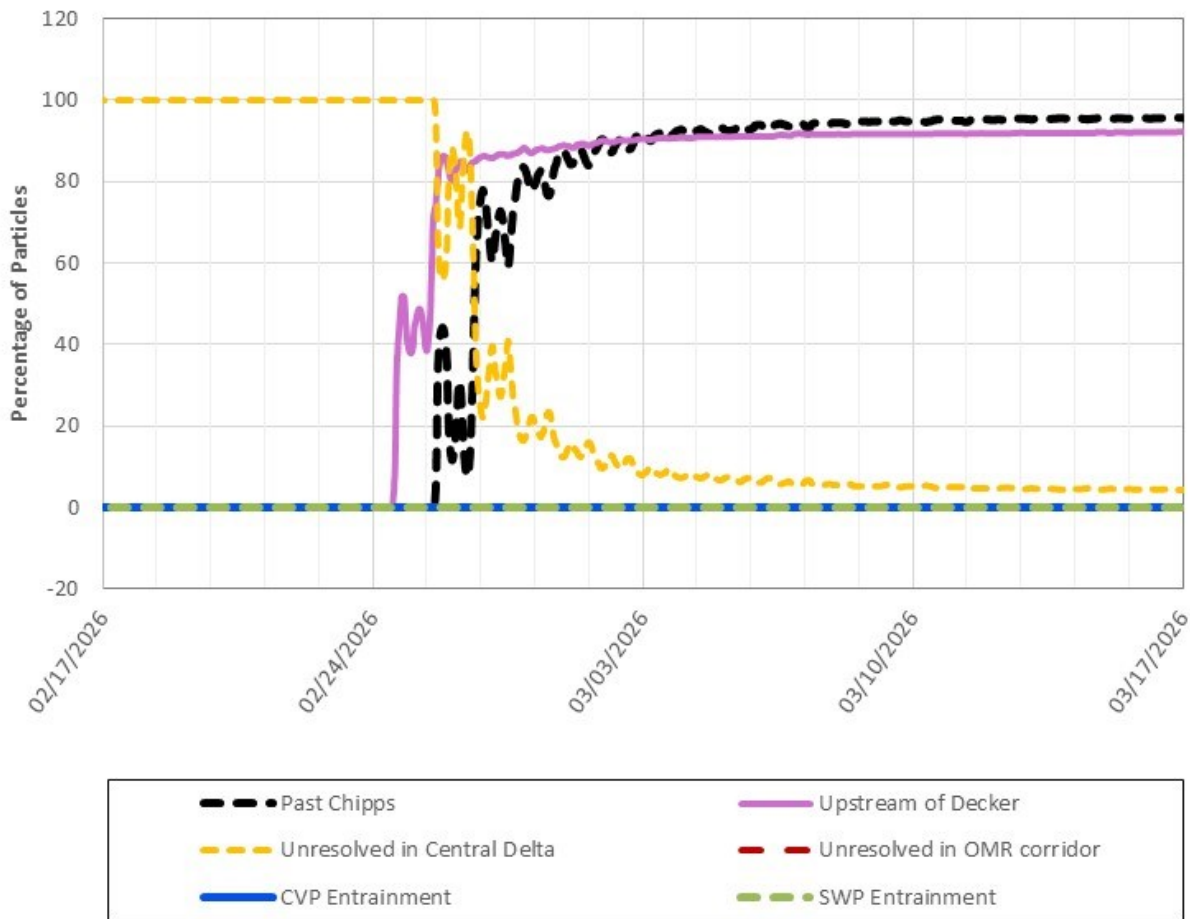


Figure 28: PTM Results for Surface Oriented Particles at Cache Slough Confluence, OMR Scenario -5,000

Figure 28 is a line graph showing the percentage of surface oriented particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at D...Figure 28 is a line graph showing the percentage of surface oriented particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 350 (Cache Slough) under the OMR scenario of -5,000 cfs. Upstream of Decker (pink) rises sharply to near 90% shortly after injection and remains elevated through the end of the period, Past Chipps (black) gradually increases to roughly 95% by mid-March, and Unresolved in Central Delta (yellow) peaks near 100% before declining to around 4% by the end of the period.

PTM Results for Surface Oriented Particles. OMR Scenario = -3,500. Particles Injected 2/24/2026 at DSM2 Node 350 (Cache Slough).

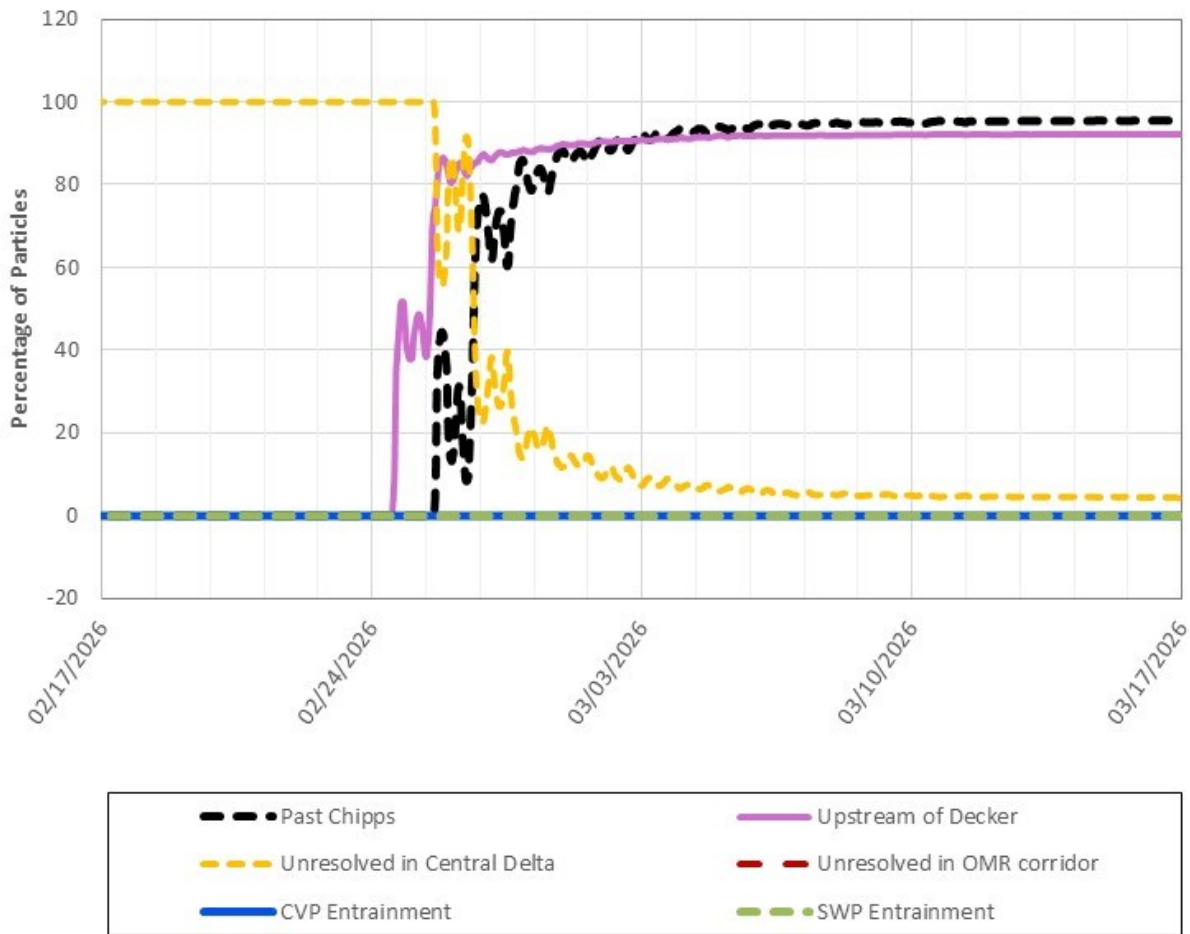


Figure 29: PTM Results for Surface Oriented Particles at Cache Slough Confluence, OMR Scenario -3,500

Figure 29 is a line graph showing the percentage of surface oriented particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 350 (Cache Slough) under the OMR scenario of -3,500 cfs. Upstream of Decker (pink) rises sharply to near 88% shortly after injection and remains elevated through the end of the period, Past Chipps (black) gradually increases to roughly 95% by mid-March, and Unresolved in Central Delta (yellow) peaks near 100% before declining to around 5% by the end of the period.

PTM Results for Surface Oriented Particles. OMR Scenario = -2,000. Particles Injected 2/24/2026 at DSM2 Node 350 (Cache Slough).

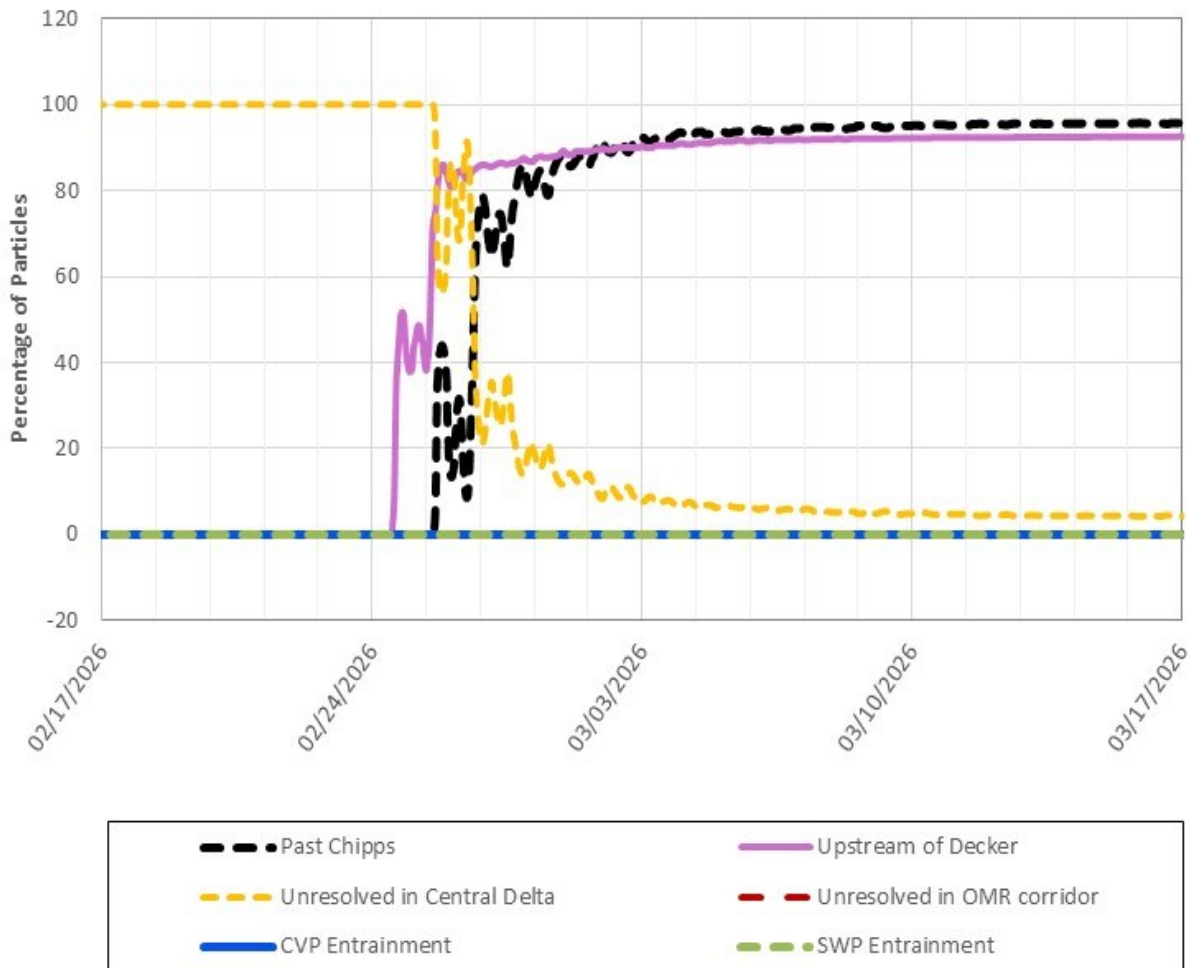


Figure 30: PTM Results for Surface Oriented Particles at Cache Slough Confluence, OMR Scenario -2,000

Figure 30 is a line graph showing the percentage of surface oriented particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 350 (Cache Slough) under the OMR scenario of -2,000 cfs. Upstream of Decker (pink) rises sharply to near 88% shortly after injection and remains elevated through the end of the period, Past Chipps (black) gradually increases to roughly 95% by mid-March, and Unresolved in Central Delta (yellow) peaks near 100% before declining to around 4% by the end of the period.

PTM Results for Surface Oriented Particles. OMR Scenario = -6,500. Particles Injected 2/24/2026 at DSM2 Node 469 (Jersey Point).

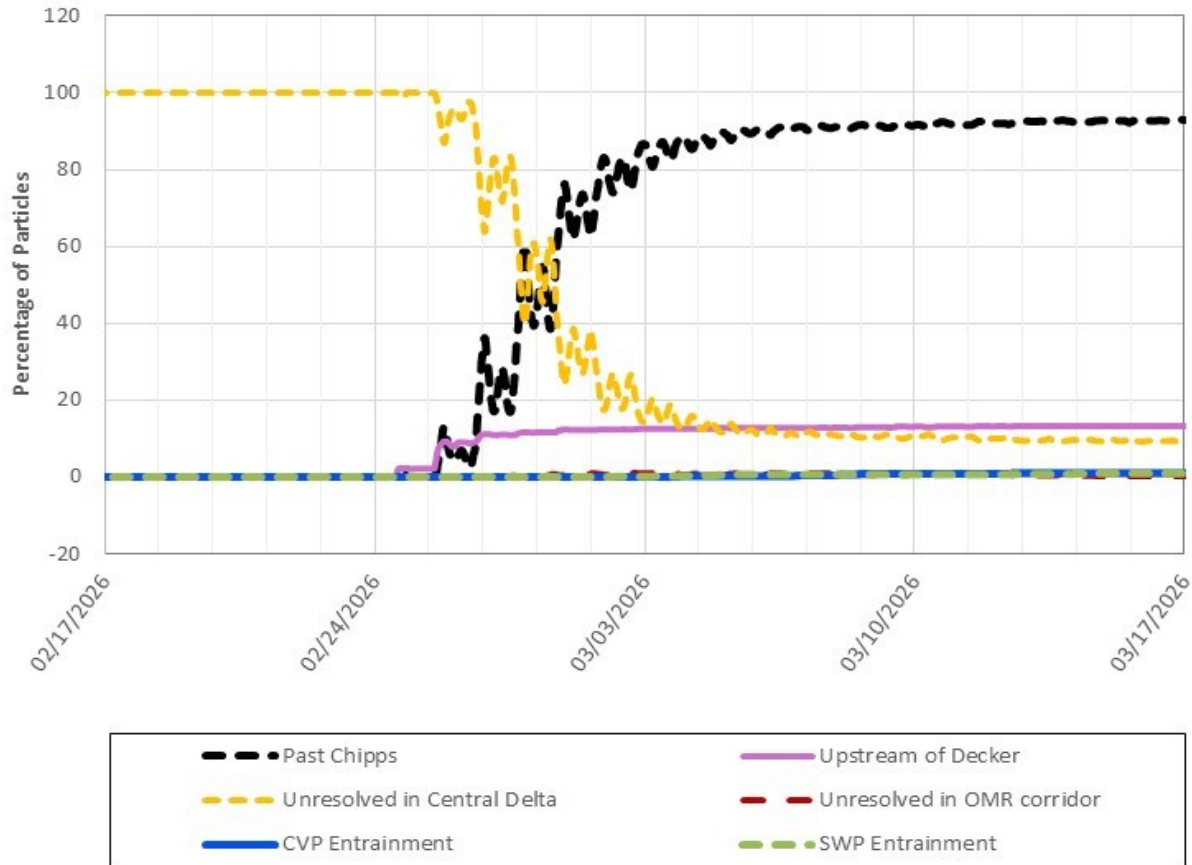


Figure 31: PTM Results for Surface Oriented Particles at Jersey Point, OMR Scenario -6,500

Figure 31 is a line graph showing the percentage of surface oriented particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 469 (Jersey Point) under the OMR scenario of -6,500 cfs. Past Chipps (black) rises gradually to roughly 93% by mid-March, Unresolved in Central Delta (yellow) peaks near 100% before declining to around 10% by the end of the period, and Upstream of Decker (pink) rises modestly to near 12% and remains relatively stable through the end of the period.

PTM Results for Surface Oriented Particles. OMR Scenario = -5,000. Particles Injected 2/24/2026 at DSM2 Node 469 (Jersey Point).

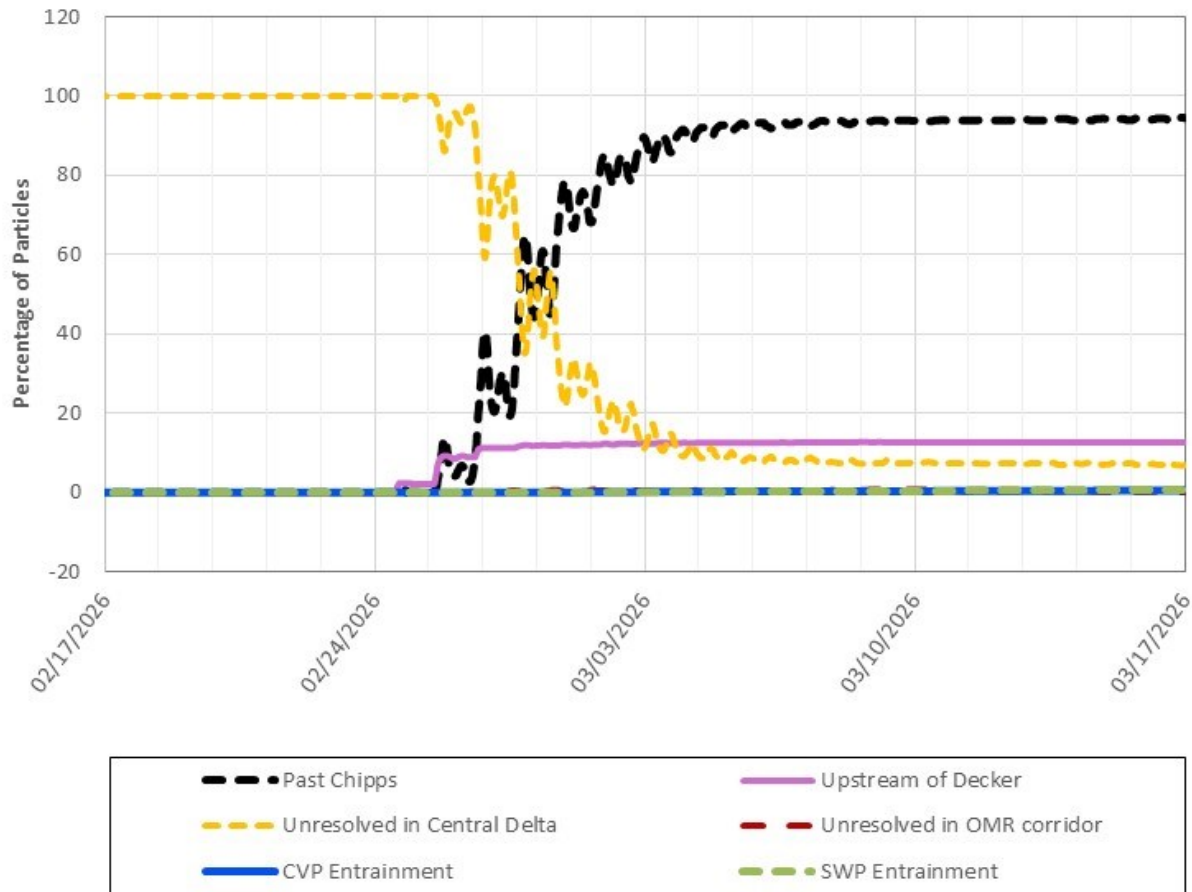


Figure 32: PTM Results for Surface Oriented Particles at Jersey Point, OMR Scenario -5,000

Figure 32 is a line graph showing the percentage of surface oriented particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 469 (Jersey Point) under the OMR scenario of -5,000 cfs. Past Chipps (black) rises gradually to roughly 95% by mid-March, Unresolved in Central Delta (yellow) peaks near 100% before declining to around 10% by the end of the period, and Upstream of Decker (pink) rises modestly to near 12% and remains relatively stable through the end of the period.

PTM Results for Surface Oriented Particles. OMR Scenario = -3,500. Particles Injected 2/24/2026 at DSM2 Node 469 (Jersey Point).

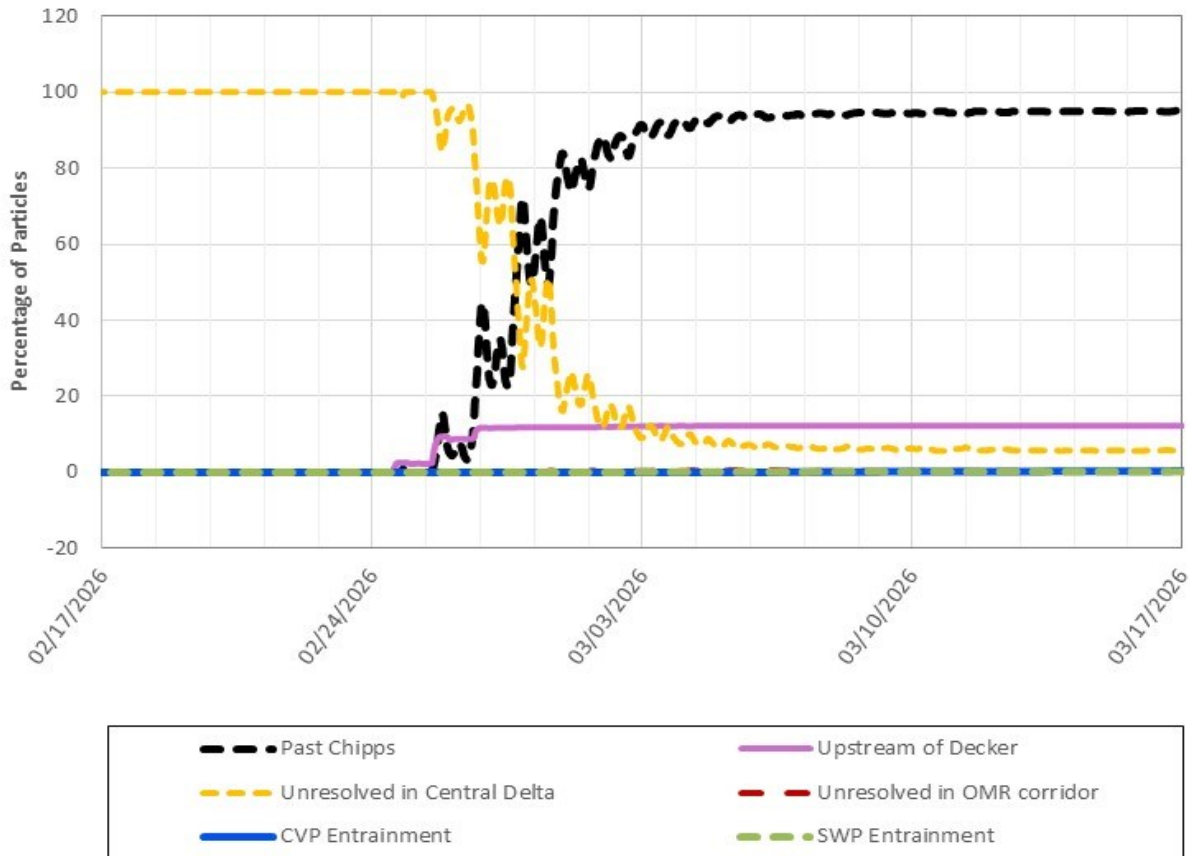


Figure 33: PTM Results for Surface Oriented Particles at Jersey Point, OMR Scenario -3,500

Figure 33 is a line graph showing the percentage of surface oriented particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at D...Figure 33 is a line graph showing the percentage of surface oriented particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 469 (Jersey Point) under the OMR scenario of -3,500 cfs. Past Chipps (black) rises gradually to roughly 95% by mid-March, Unresolved in Central Delta (yellow) peaks near 100% before declining to around 6% by the end of the period, and Upstream of Decker (pink) rises modestly to near 10% and remains relatively stable through the end of the period.

PTM Results for Surface Oriented Particles. OMR Scenario = -2,000. Particles Injected 2/24/2026 at DSM2 Node 469 (Jersey Point).

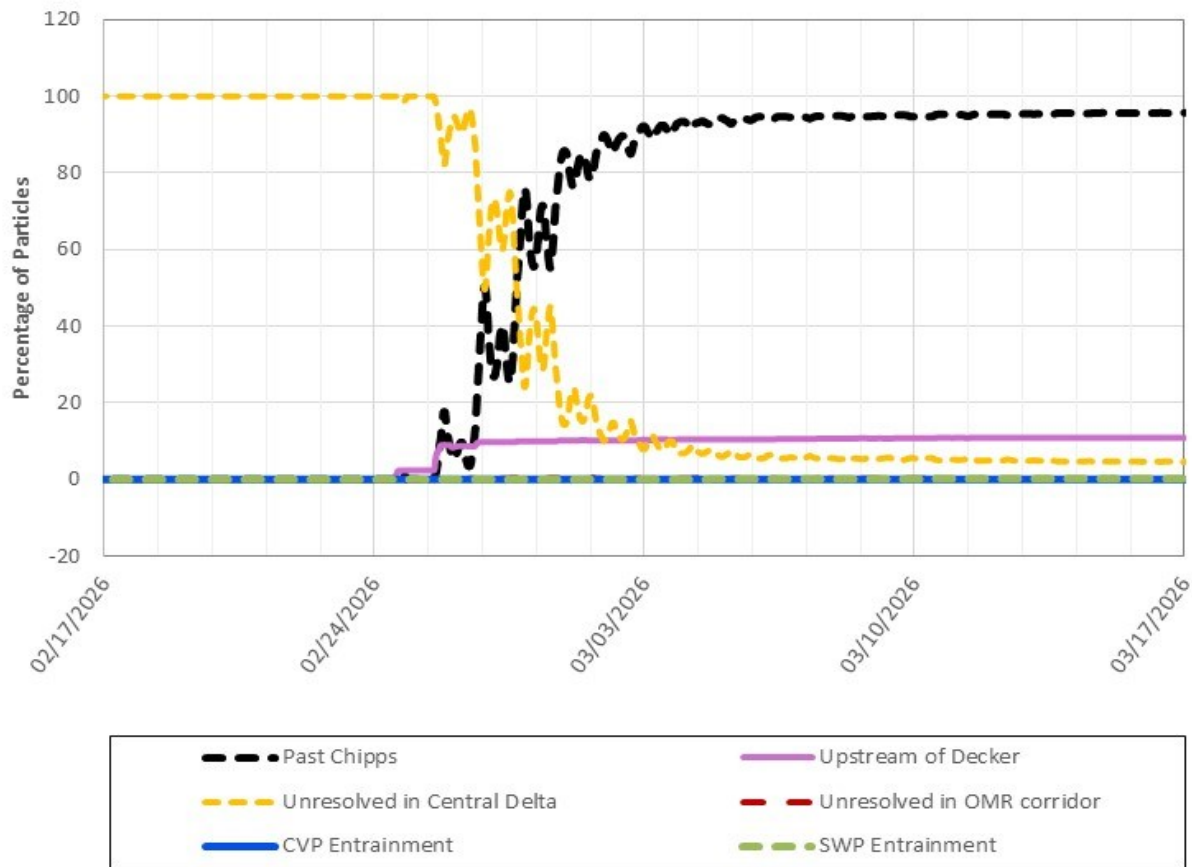


Figure 34: PTM Results for Surface Oriented Particles at Jersey Point, OMR Scenario -2,000

Figure 34 is a line graph showing the percentage of surface oriented particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 469 (Jersey Point) under the OMR scenario of -2,000 cfs. Past Chipps (black) rises gradually to roughly 96% by mid-March, Unresolved in Central Delta (yellow) peaks near 100% before declining to around 5% by the end of the period, and Upstream of Decker (pink) rises modestly to near 10% and remains relatively stable through the end of the period.

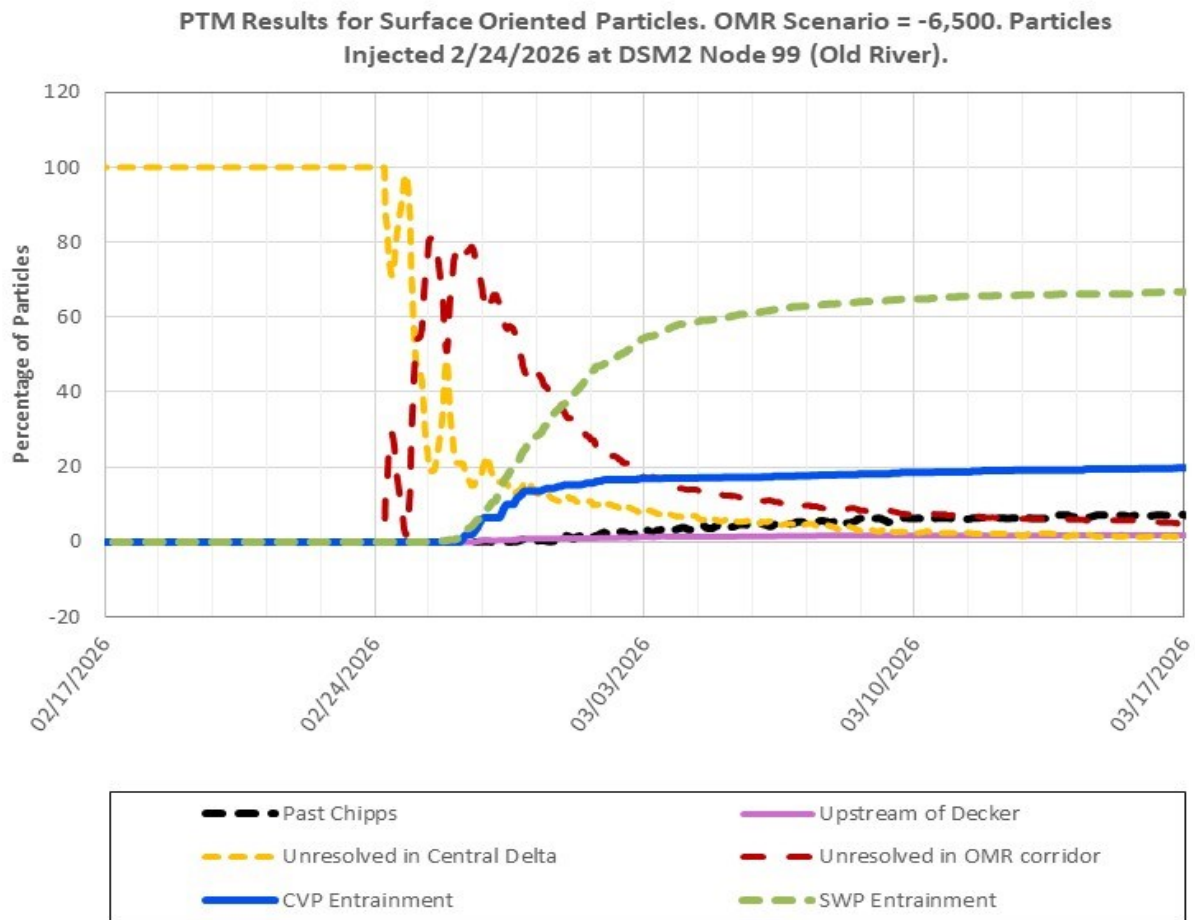


Figure 35: PTM Results for Surface Oriented Particles at Old River, OMR Scenario - 6,500

Figure 35 is a line graph showing the percentage of surface oriented particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 99 (Old River) under the OMR scenario of -6,500 cfs. SWP Entrainment (green) rises steadily to roughly 67% by mid-March, CVP Entrainment (blue) rises to near 20% shortly after injection and remains stable through the end of the period, Unresolved in OMR corridor (red) peaks near 80% before declining to around 7% by mid-March, and Unresolved in Central Delta (yellow) peaks near 100% before declining to near zero by early March.

PTM Results for Surface Oriented Particles. OMR Scenario = -5,000. Particles Injected 2/24/2026 at DSM2 Node 99 (Old River).

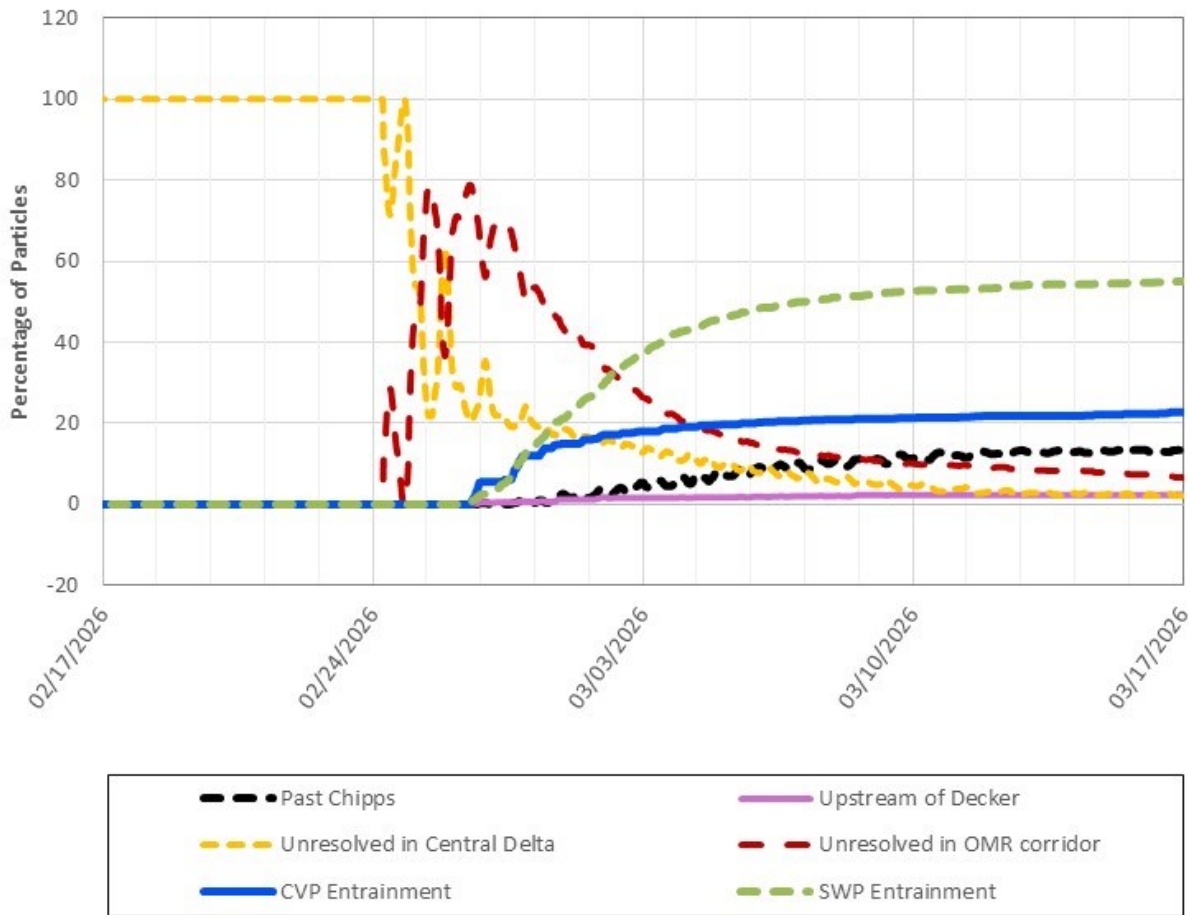


Figure 36: PTM Results for Surface Oriented Particles at Old River, OMR Scenario - 5,000

Figure 36 is a line graph showing the percentage of surface oriented particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 99 (Old River) under the OMR scenario of -5,000 cfs. SWP Entrainment (green) rises steadily to roughly 55% by mid-March, CVP Entrainment (blue) rises to near 23% by early March and remains stable through the end of the period, Unresolved in OMR corridor (red) peaks near 80% before declining to around 7% by mid-March, and Unresolved in Central Delta (yellow) peaks near 100% before declining to near zero by early March.

PTM Results for Surface Oriented Particles. OMR Scenario = -3,500. Particles Injected 2/24/2026 at DSM2 Node 99 (Old River).

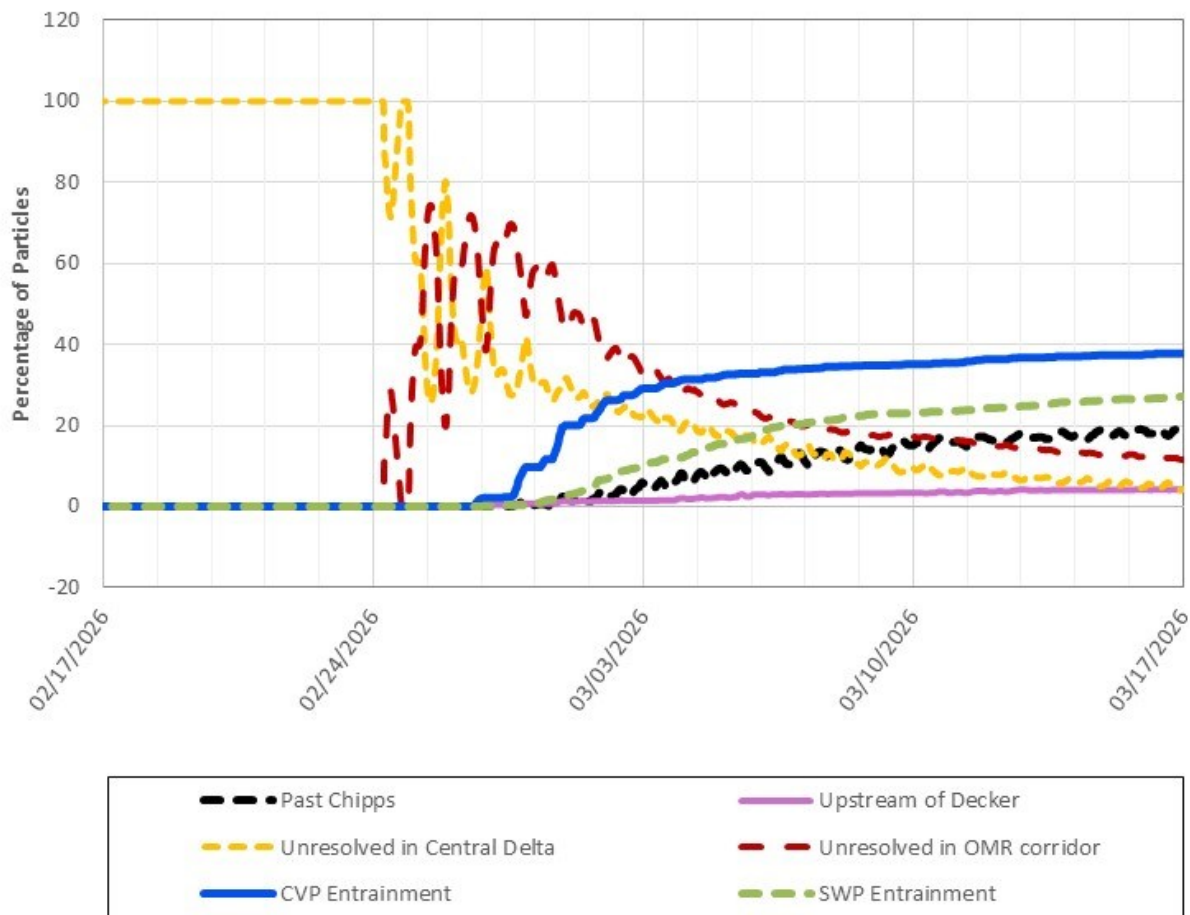


Figure 37: PTM Results for Surface Oriented Particles at Old River, OMR Scenario - 3,500

Figure 37 is a line graph showing the percentage of surface oriented particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 99 (Old River) under the OMR scenario of -3,500 cfs. CVP Entrainment (blue) rises steadily to roughly 38% by mid-March, SWP Entrainment (green) rises to near 28% by mid-March, Unresolved in OMR corridor (red) peaks near 75% before declining to around 5% by mid-March, Unresolved in Central Delta (yellow) peaks near 100% before declining to near zero by early March, and Past Chipps (black) rises gradually to near 20% by the end of the period.

PTM Results for Surface Oriented Particles. OMR Scenario = -2,000. Particles Injected 2/24/2026 at DSM2 Node 99 (Old River).

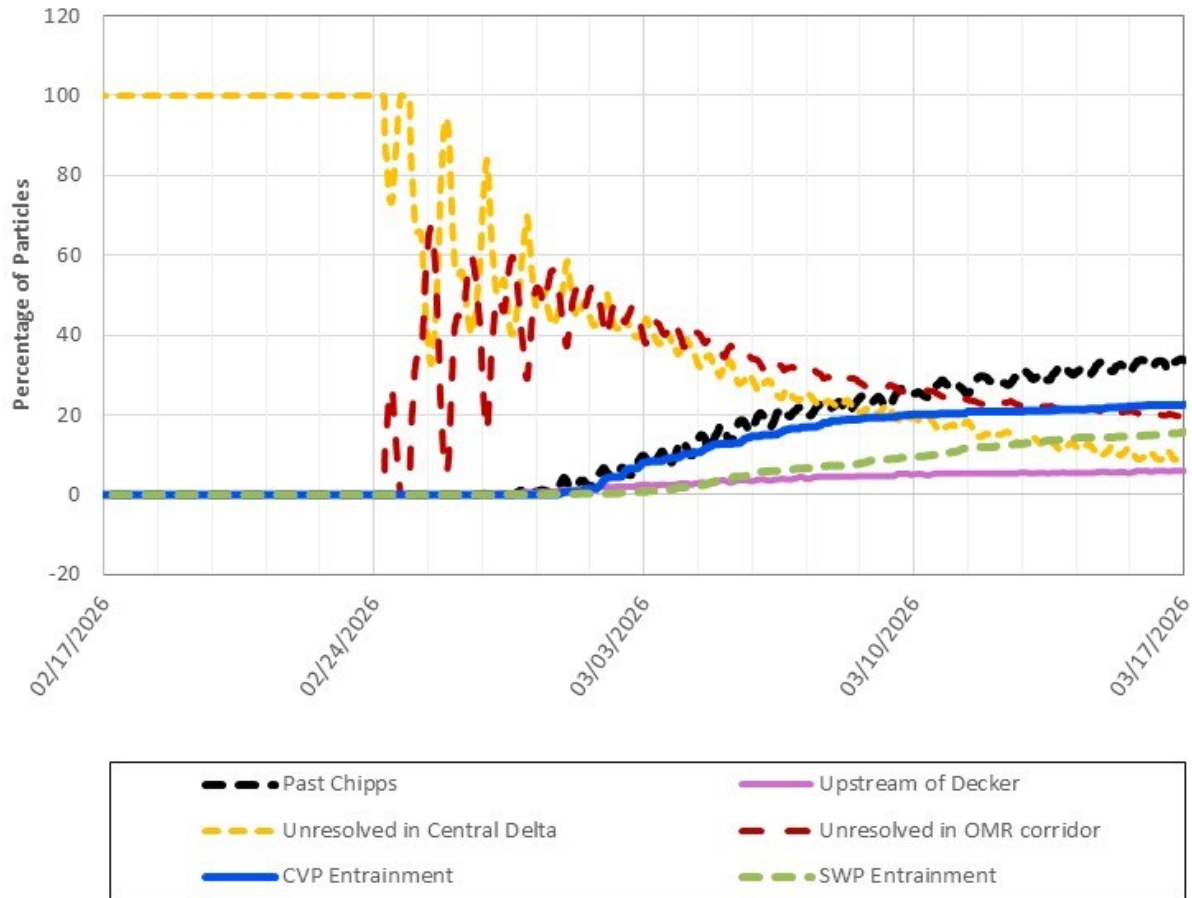


Figure 38: PTM Results for Surface Oriented Particles at Old River, OMR Scenario - 2,000

Figure 38 is a line graph showing the percentage of surface oriented particles over time from February 17 to March 17, 2026, injected on February 24, 2026 at DSM2 Node 99 (Old River) under the OMR scenario of -2,000 cfs. Unresolved in Central Delta (yellow) peaks near 100% before declining to around 15% by mid-March, Unresolved in OMR corridor (red) peaks near 90% before declining to around 22% by mid-March, Past Chippis (black) rises gradually to near 33% by the end of the period, CVP Entrainment (blue) rises steadily to roughly 22% by mid-March, and SWP Entrainment (green) rises modestly to near 16% by the end of the period.

ECO-PTM (Ecological Particle Tracking Model)

ECO-PTM Results Evaluation Period: 02/24/2026 – 03/16/2026

Particles Injected: 02/24/2026

Injection Location: Sacramento River at Freeport

Table 12. Salmon Particle Route Ratio After 3 Weeks (Ending 03/16/2026)

OMR Flow Bin	Sutter Slough Route	Steamboat Slough Route	Sacramento River (SS) Route	Sacramento River (GEO) Route	Georgiana Slough Route
-6,500	0.13	0.28	0.59	0.81	0.19
-5,000	0.13	0.29	0.58	0.82	0.18
-3,500	0.13	0.29	0.58	0.81	0.19
-2,000	0.13	0.28	0.59	0.82	0.18

Table 13. Salmon Particle Route-Specific Survival After 3 Weeks (Ending 03/16/2026)

OMR Flow Bin	Sutter Slough Route	Steamboat Slough Route	Sacramento River Route	Georgiana Slough Route	All Routes Combined
-6,500	55%	66%	63%	45%	61%
-5,000	54%	67%	64%	35%	60%
-3,500	54%	66%	63%	35%	60%
-2,000	55%	64%	62%	34%	59%

Notes:

- Salmon particle route ratio for the Sacramento River (SS) Route reflects particles inserted at Freeport that are not routed through either Sutter Slough or Steamboat Slough.
- Salmon particle route ratio for the Sacramento River (GEO) Route reflects particles inserted at Freeport that are not routed through either Sutter Slough, Steamboat Slough, Georgiana Slough, or the Delta Cross Channel (when operational).

Longfin Smelt Larval Population and PTM Analysis

PTM Results Evaluation Period: 02/24/2026 – 03/16/2026

Particles Injected: 02/24/2026

PTM Injection Location: node(s) within each Delta Region identified in map below

PTM Analysis Method: LFS larva abundance is estimated in each Enhanced Delta Smelt Monitoring (EDSM) program subregion. Cumulative particle flux into CVP and SWP facilities is represented in PTM by one injection location per subregion. LFS larva entrainment is estimated by multiplying the LFS subregion abundance by cumulative particle flux into CVP and SWP facilities from the corresponding subregion injection point. LFS entrainment from each subregion is added together and reported at the LFS Region scale identified on the map below.

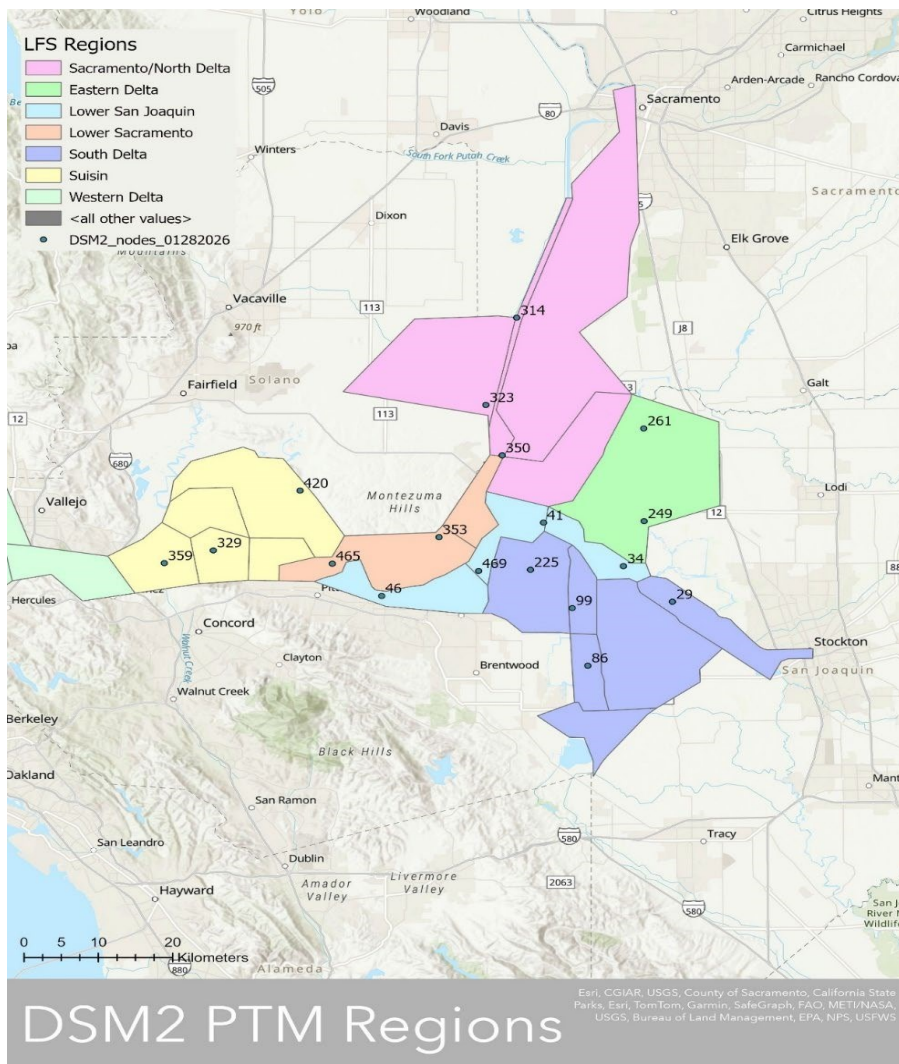


Figure 39: DSM2 PTM Regions in the Sacramento-San Joaquin Delta

Figure 39 is a map of the Sacramento-San Joaquin Delta showing the seven DSM2 PTM regions — Sacramento/North Delta, Eastern Delta, Lower San Joaquin, Lower Sacramento, South Delta, Suisun, and Western Delta — each distinguished by a different color. DSM2 channels and node locations are also displayed, with node numbers labeled throughout the map.

Notes:

- Regional and Delta-wide longfin smelt (LFS) larval population is estimated using SLS survey data from Survey 4 (2/9/2026-2/12/2026) and volumetric expansion methods developed by the SixAgency Monitoring Survey Design Team. As of the date of this assessment, Survey 4 still has about 1/3 of samples yet to be processed with most of the unprocessed samples in the western extent of the sampling area. Results from Survey 4 are used over Survey 3, which was conducted over a month ago (1/26/2026-1/28/2026), as a conservative approach because it's more recent and likely to overestimate proportional entrainment since the unprocessed western stations generally see higher abundances, but minimal entrainment risk.

EDSM subregions are shown in the figure below.

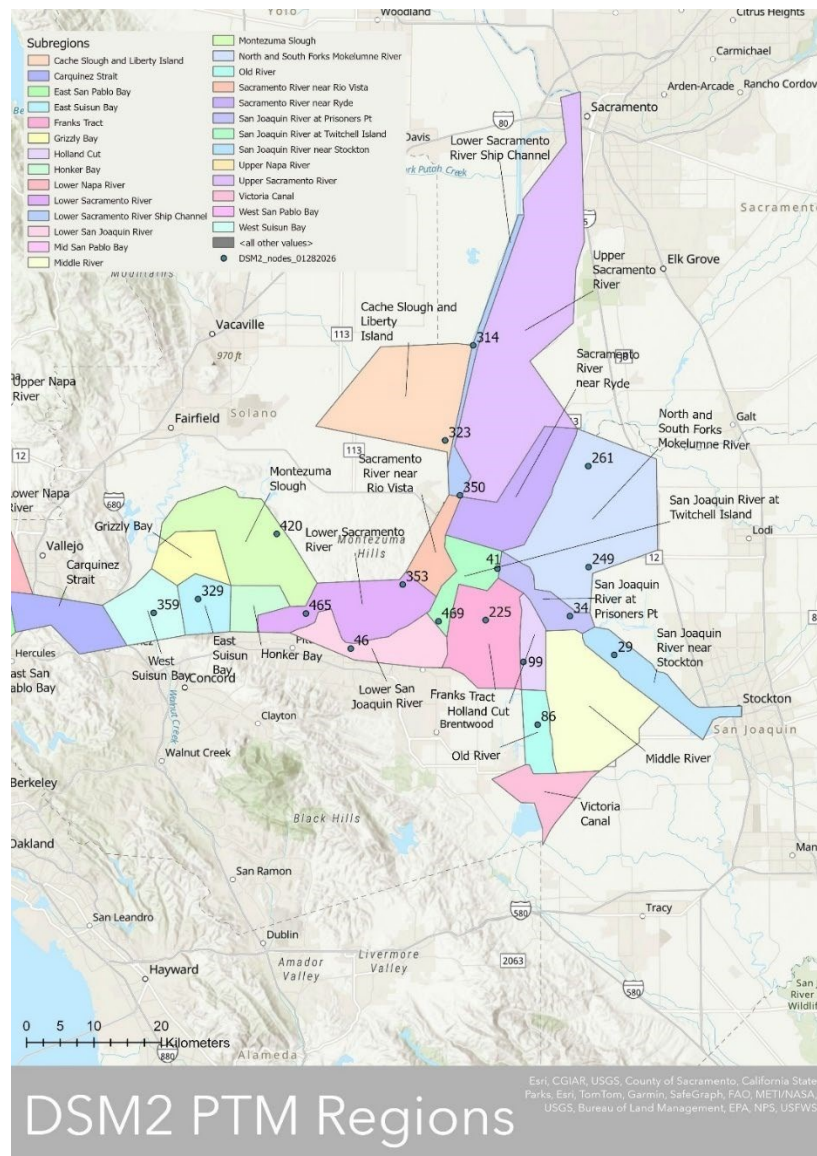


Figure 40: EDSM Subregions and DSM2 Node Locations in the Sacramento-San Joaquin Delta

Figure 40 is a map of the Sacramento-San Joaquin Delta showing the 27 EDSM program subregions, each distinguished by a different color, spanning waterways from the Upper Sacramento River and North Delta down through the South Delta, Suisun Marsh, and San Pablo Bay. DSM2 node locations are displayed throughout the map with node numbers labeled, representing the injection points used to estimate cumulative particle flux into CVP and SWP facilities for each corresponding subregion. The map reflects node locations as of January 28, 2026.

The DSM2 node used as an injection point, EDSM subregion, and LFS Region for reporting are shown in the table below.

Table 14: DSM2 Injection Node Assignments by EDSM Subregion and LFS Region

DSM2 Injection Node	EDSM Subregion	LFS Region
329	East Suisun Bay	Suisun
329	Grizzly Bay	Suisun
465	Honker Bay	Suisun
420	Montezuma Slough	Suisun
359	West Suisun Bay	Suisun
359	Carquinez Strait	Western Delta
359	Upper Napa River	Western Delta
359	Lower Napa River	Western Delta
359	East San Pablo Bay	Western Delta
359	West San Pablo Bay	Western Delta
359	Mid San Pablo Bay	Western Delta
353	Lower Sacramento River	Lower Sacramento
353	Sacramento River near Rio Vista	Lower Sacramento
465	Lower Sacramento River	Lower Sacramento
350	Lower Sacramento River Ship Channel	Sacramento/ North Delta
350	Sacramento River near Ryde	Sacramento/ North Delta
323	Cache Slough and Liberty Island	Sacramento/ North Delta
314	Lower Sacramento River Ship Channel	Sacramento/ North Delta
261	North and South Forks Mokelumne River	East
249	North and South Forks Mokelumne River	East
46	Lower San Joaquin River	Lower San Joaquin
41	San Joaquin River at Twitchell Island	Lower San Joaquin
34	San Joaquin River at Prisoners Pt	Lower San Joaquin
469	San Joaquin River at Twitchell Island	Lower San Joaquin
225	Franks Tract	South Delta
99	Holland Cut	South Delta
86	Old River	South Delta

Table 15. LFS Entrainment Estimate using PTM with Surface Oriented Particles: Week 1 ending 03/02/2026

OMR (cfs)	Combined Exports (cfs)	Region Metric	West	Suisun	Sacramento/ North Delta	Lower San Joaquin	Lower Sacramento	South Delta	East	Total (#)	Total (%)
N/A	N/A	LFS Larva Abundance	619,334	7,611,444	216,666	2,361,889	5,673,167	307,000	0	16,789,500	N/A
-6,500	10,862	PTM Entrained (%)	0.0	0.0	0.0	0.4	0.0	25.9	0.0	N/A	N/A
-5,000	9,245	PTM Entrained (%)	0.0	0.0	0.0	0.2	0.0	22.9	0.0	N/A	N/A
-3,500	7,571	PTM Entrained (%)	0.0	0.0	0.0	<0.1	0.0	17.9	0.0	N/A	N/A
-2,000	5,939	PTM Entrained (%)	0.0	0.0	0.0	0.0	0.0	13.8	0.0	N/A	N/A
-6,500	10,862	LFS Larva Entrained (#)	0.0	0.0	0	9,978	0.0	79,384	0.0	89,362	0.5%
-5,000	9,245	LFS Larva Entrained (#)	0.0	0.0	0	4,521	0.0	70,412	0.0	74,933	0.4%
-3,500	7,571	LFS Larva Entrained (#)	0.0	0.0	0	535	0.0	54,971	0.0	55,506	0.3%
-2,000	5,939	LFS Larva Entrained (#)	0.0	0.0	0.0	0.0	0.0	42,413	0.0	42,413	0.3%

Notes:

Values between 0.0 and 0.1 are indicated with <0.1

For locations with multiple DSM2 nodes indicated, the PTM entrained (%) value reflects the average across all nodes

Table 16. LFS Entrainment Estimate using PTM with Surface Oriented Particles: Week 2 ending 03/09/2026

OMR (cfs)	Combined Exports (cfs)	Region Metric	West	Suisun	Sacramento/ North Delta	Lower San Joaquin	Lower Sacramento	South Delta	East	Total (#)	Total (%)
N/A	N/A	LFS Larva Abundance	7,811,223	20,722,666	91,333	2,616,018	5,068,667	390,000	0.0	36,699,907	N/A
-6,500	9,073	PTM Entrained (%)	0.0	0.0	0.2	4.8	0.0	34.4	0.0	N/A	N/A
-5,000	7,456	PTM Entrained (%)	0.0	0.0	0.1	2.5	0.0	29.9	0.0	N/A	N/A
-3,500	5,782	PTM Entrained (%)	0.0	0.0	0.0	1.1	0.0	25.0	0.0	N/A	N/A
-2,000	4,150	PTM Entrained (%)	0.0	0.0	0.0	0.2	0.0	19.5	0.0	N/A	N/A
-6,500	9,073	LFS Larva Entrained (#)	0.0	0.0	467.3	112,714	0.0	105,674	0.0	215,855	1.3%
-5,000	7,456	LFS Larva Entrained (#)	0.0	0.0	250.7	59,841	0.0	91,812	0.0	151,904	0.9%
-3,500	5,782	LFS Larva Entrained (#)	0.0	0.0	0.0	27,151	0.0	76,597	0.0	103,748	0.6%
-2,000	4,150	LFS Larva Entrained (#)	0.0	0.0	0.0	4,039	0.0	59,997	0.0	64,036	0.4%

Notes:

Values between 0.0 and 0.1 are indicated with <0.1

The PTM entrained (%) value reflects the total entrained particles from all subregions within an LFS Region divided by the estimated LFS Region abundance

Table 17. LFS Entrainment Estimate using PTM with Surface Oriented Particles: Week 3 ending 03/16/2026

OMR (cfs)	Combined Exports (cfs)	Region Metric	West	Suisun	Sacramento/ North Delta	Lower San Joaquin	Lower Sacramento	South Delta	East	Total (#)	Total (%)
N/A	N/A	LFS Larva Abundance	7,811,223	20,722,666	91,333	2,616,018	5,068,667	390,000	0.0	36,699,907	N/A
-6,500	8,014	PTM Entrained (%)	0.0	0.0	0.3	7.3	0.0	36.9	0.0	N/A	N/A
-5,000	6,412	PTM Entrained (%)	0.0	0.0	0.2	4.3	0.0	32.5	0.0	N/A	N/A
-3,500	4,708	PTM Entrained (%)	0.0	0.0	<0.1	2.4	0.0	27.5	0.0	N/A	N/A
-2,000	3,106	PTM Entrained (%)	0.0	0.0	0.0	0.6	0.0	22.7	0.0	N/A	N/A
-6,500	8,014	LFS Larva Entrained (#)	0.0	0.0	718.0	172,700	0.0	113,220	0.0	286,638	1.7%
-5,000	6,412	LFS Larva Entrained (#)	0.0	0.0	376.0	102,166	0.0	99,811	0.0	202,353	1.2%
-3,500	4,708	LFS Larva Entrained (#)	0.0	0.0	125.3	57,278	0.0	84,549	0.0	141,952	0.8%
-2,000	3,106	LFS Larva Entrained (#)	0.0	0.0	0.0	14,471	0.0	69,830	0.0	84,301	0.5%

Notes:

Values between 0.0 and 0.1 are indicated with <0.1

The PTM entrained (%) value reflects the total entrained particles from all subregions within an LFS Region divided by the estimated LFS Region abundance.

**Average PTM Results by Injection Region for Position Oriented Particles
Entrained at CVP and SWP. OMR Scenario = -6,500. Particles Injected
2/24/2026.**

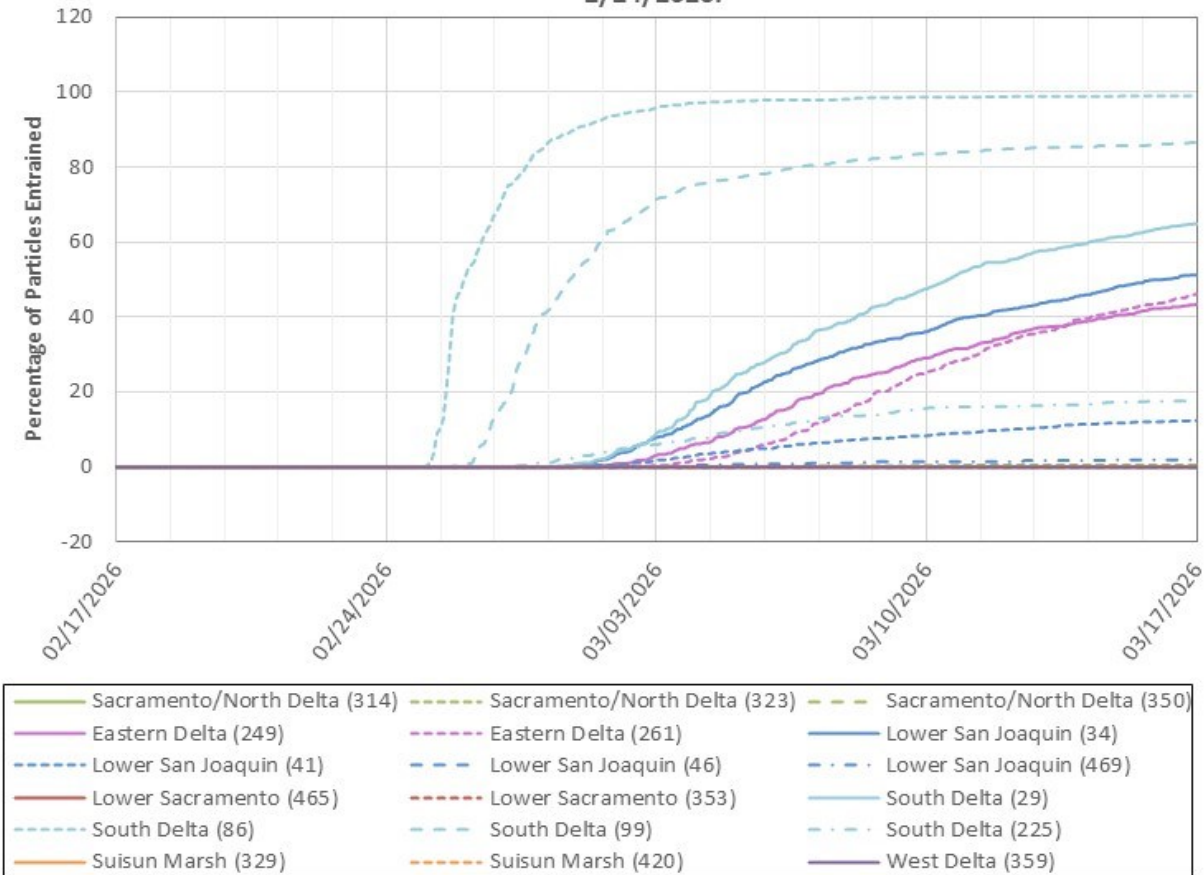


Figure 41: Average PTM Results by Injection Region for Position Oriented Particles Entrained at CVP and SWP, OMR Scenario -6,500

Figure 41 is a line graph showing the average cumulative percentage of position oriented particles entrained at CVP and SWP facilities from February 17 to March 17, 2026, injected on February 24, 2026 under the OMR scenario of -6,500 cfs, across 20 injection nodes representing seven LFS regions. South Delta nodes show the highest entrainment, reaching near 100% by mid-March, while Lower San Joaquin and Eastern Delta nodes show moderate entrainment of 10–65% by late March. Sacramento/North Delta, Lower Sacramento, Suisun Marsh, and West Delta nodes remain near zero throughout the period.

**Average PTM Results by Injection Region for Position Oriented Particles
Entrained at CVP and SWP. OMR Scenario = -5,000. Particles Injected
2/24/2026.**

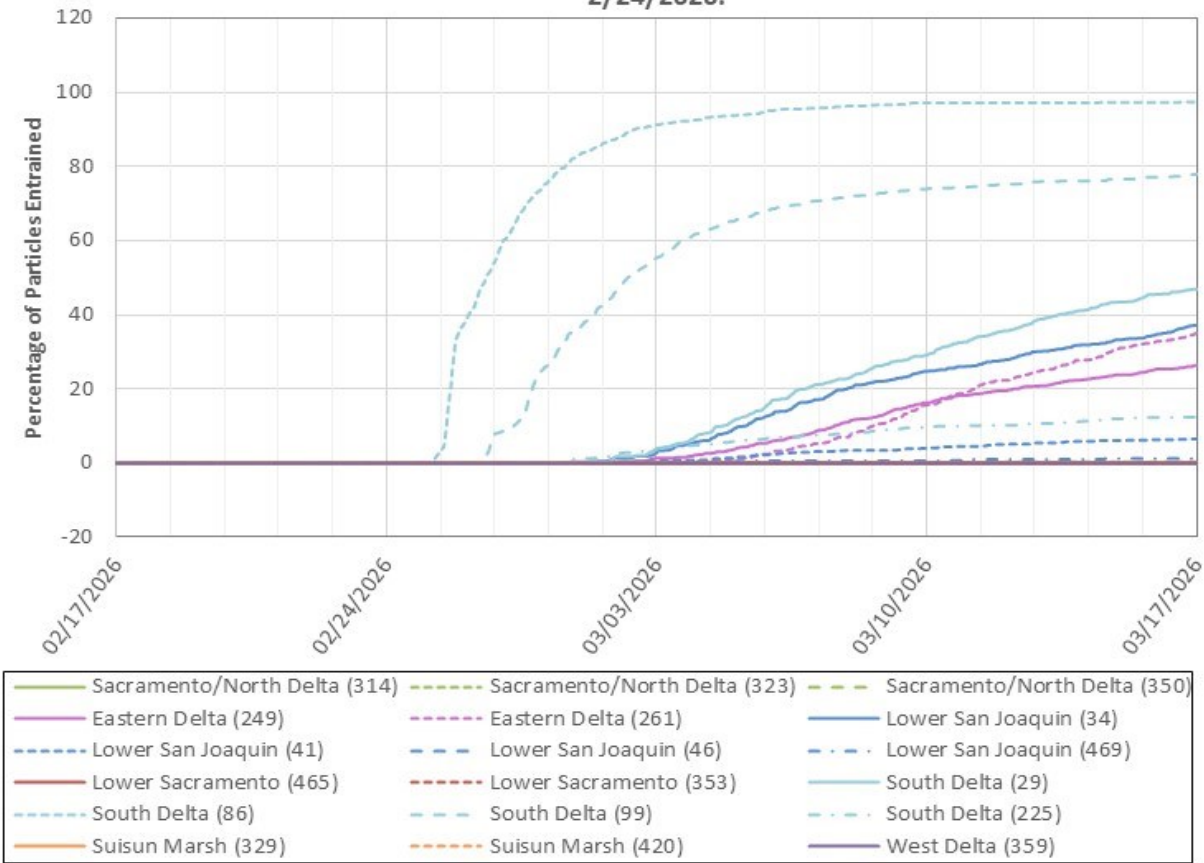


Figure 42: Average PTM Results by Injection Region for Position Oriented Particles Entrained at CVP and SWP, OMR Scenario -5,000

Figure 42 is a line graph showing the average cumulative percentage of position oriented particles entrained at CVP and SWP facilities from February 17 to March 17, 2026, injected on February 24, 2026 under the OMR scenario of -5,000 cfs, across 20 injection nodes representing seven LFS regions. South Delta nodes show the highest entrainment, reaching near 100% by mid-March, while Lower San Joaquin and Eastern Delta nodes show moderate entrainment of 10–48% by late March. Sacramento/North Delta, Lower Sacramento, Suisun Marsh, and West Delta nodes remain near zero throughout the period.

**Average PTM Results by Injection Region for Position Oriented Particles
Entrained at CVP and SWP. OMR Scenario = -3,500. Particles Injected
2/24/2026.**

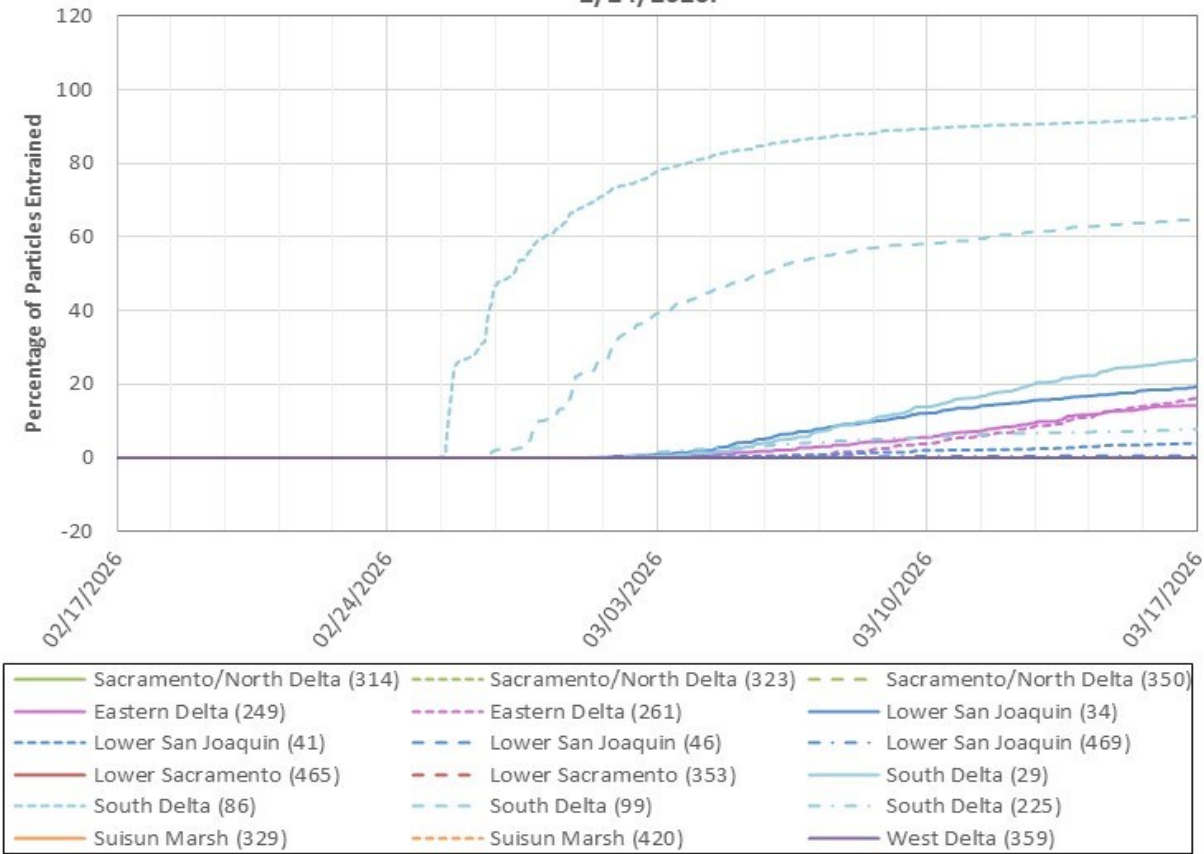


Figure 43: Average PTM Results by Injection Region for Position Oriented Particles Entrained at CVP and SWP, OMR Scenario -3,500

Figure 43 is a line graph showing the average cumulative percentage of position oriented particles entrained at CVP and SWP facilities from February 17 to March 17, 2026, injected on February 24, 2026 under the OMR scenario of -3,500 cfs, across 20 injection nodes representing seven LFS regions. South Delta nodes show the highest entrainment, reaching near 93% by late March, while Lower San Joaquin and Eastern Delta nodes show low to moderate entrainment of up to 27% by late March. Sacramento/North Delta, Lower Sacramento, Suisun Marsh, and West Delta nodes remain near zero throughout the period.

**Average PTM Results by Injection Region for Position Oriented Particles
Entrained at CVP and SWP. OMR Scenario = -2,000. Particles Injected
2/24/2026.**

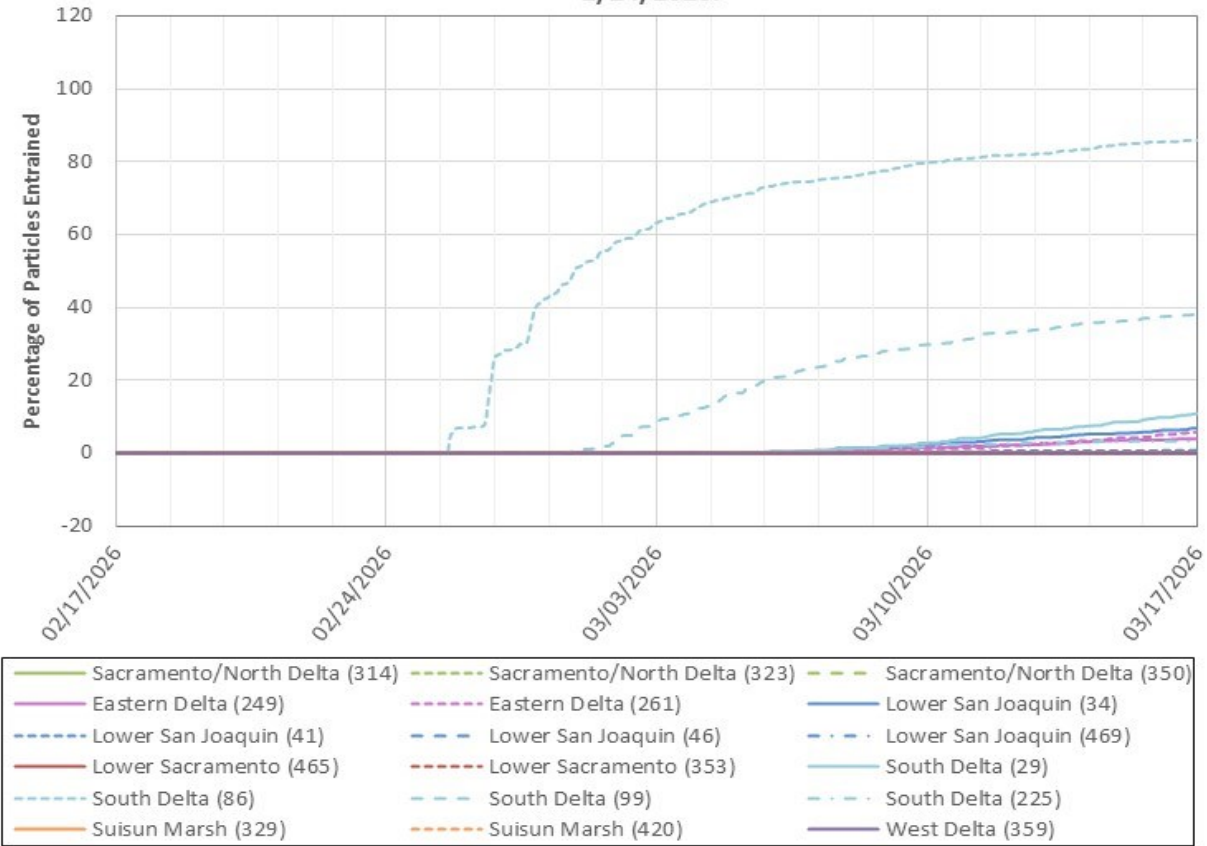


Figure 44: Average PTM Results by Injection Region for Position Oriented Particles Entrained at CVP and SWP, OMR Scenario -2,000

Figure 44 is a line graph showing the average cumulative percentage of position oriented particles entrained at CVP and SWP facilities from February 17 to March 17, 2026, injected on February 24, 2026 under the OMR scenario of -2,000 cfs, across 20 injection nodes representing seven LFS regions. South Delta nodes show the highest entrainment, with node 29 reaching near 86% by late March, while Lower San Joaquin nodes show low entrainment of up to 10% by late March. Sacramento/North Delta, Eastern Delta, Lower Sacramento, Suisun Marsh, and West Delta nodes remain near zero throughout the period.