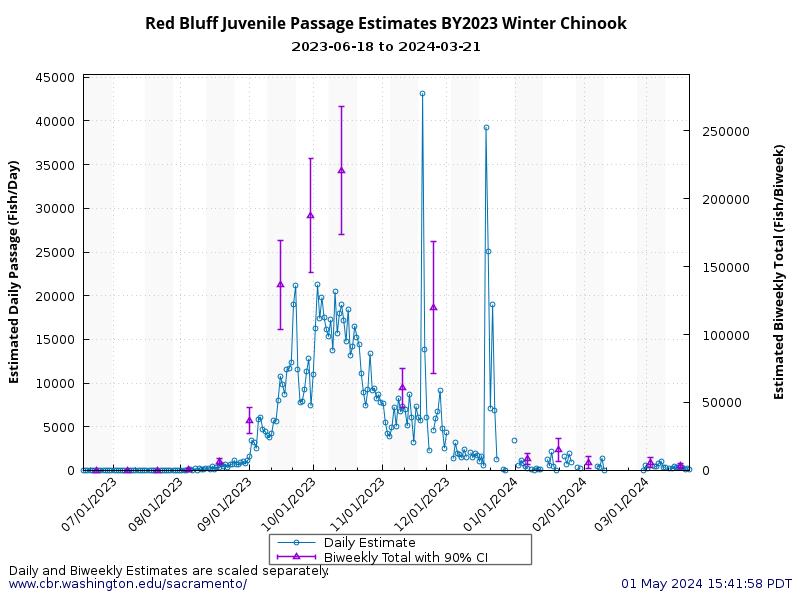
1. abundance (RBDD production plot)



[Red Bluff Juvenile Passage Estimates Graph: SacPAS Central Valley Prediction & Assessment of Salmon (washington.edu)](https://www.cbr.washington.edu/sacramento/tmp/redbluffdaily_1714603318_94.html)

1. survival (STARS plots) (this is a surrogate for steelhead)

* Same as the plots for winter run (Figure 2)

Diagram

Description automatically generated

1. minimization ((a) bar plots of totals (wild and hatchery), (b) annual cumulative loss by period and water year type)

(A1)

A screenshot of a graph

Description automatically generated with low confidence

(A2)

Chart, histogram

Description automatically generated

(A3)

Chart, line chart

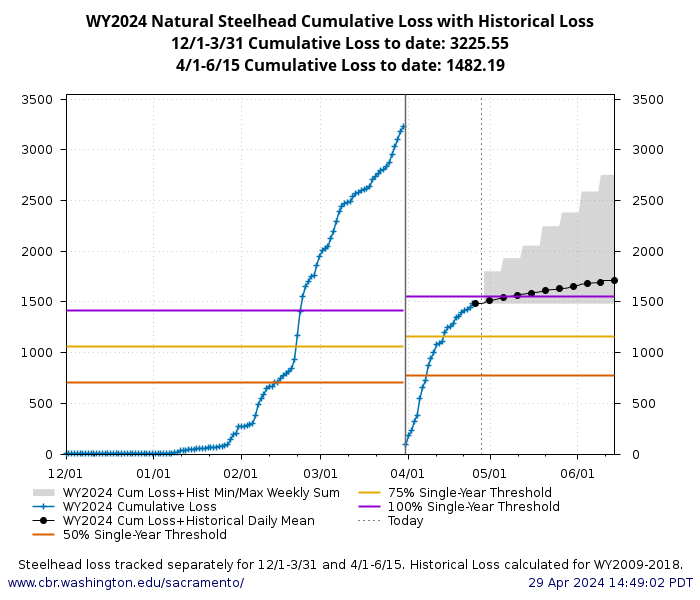
Description automatically generated

(B)

Chart

Description automatically generated

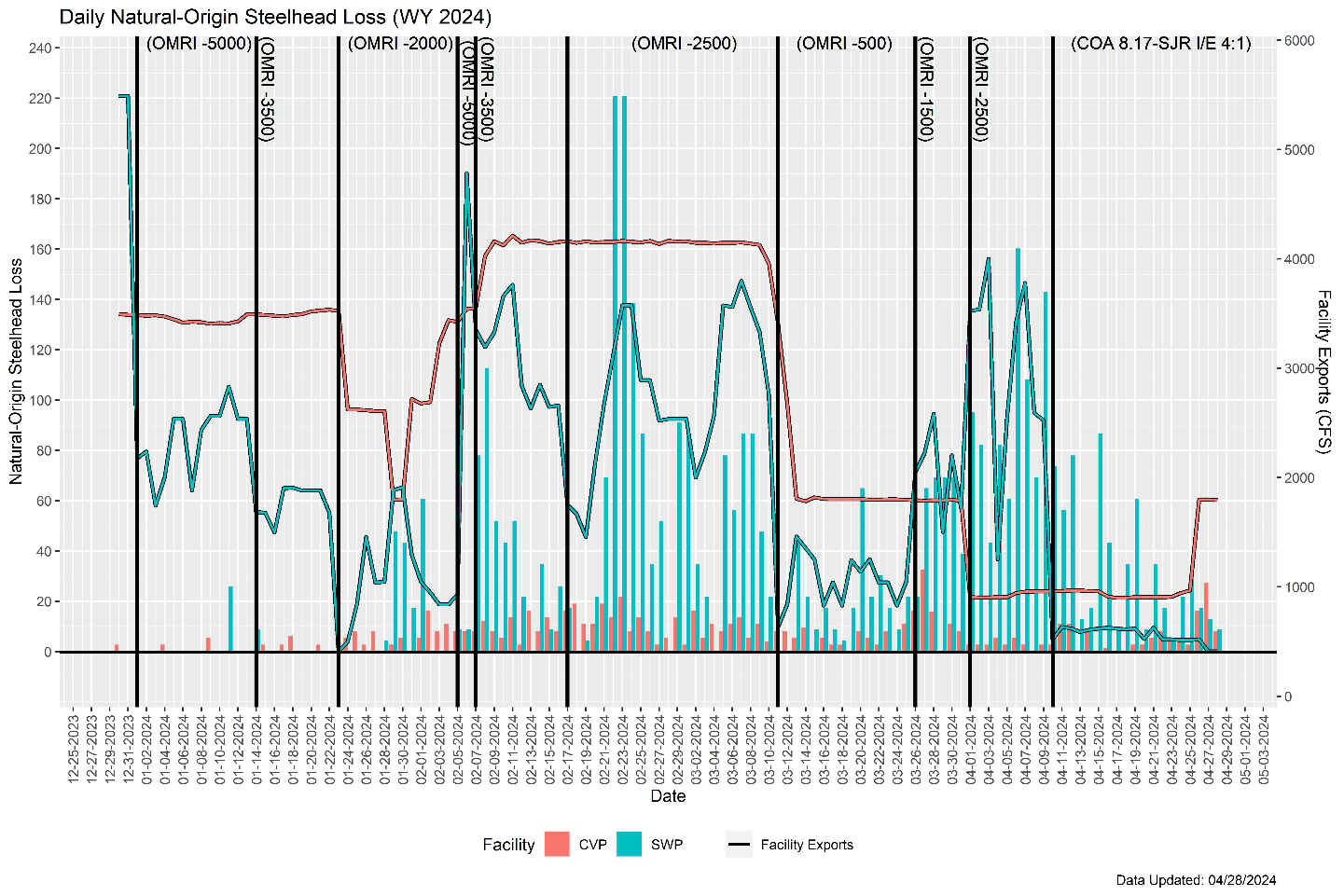
1. minimization (loss)



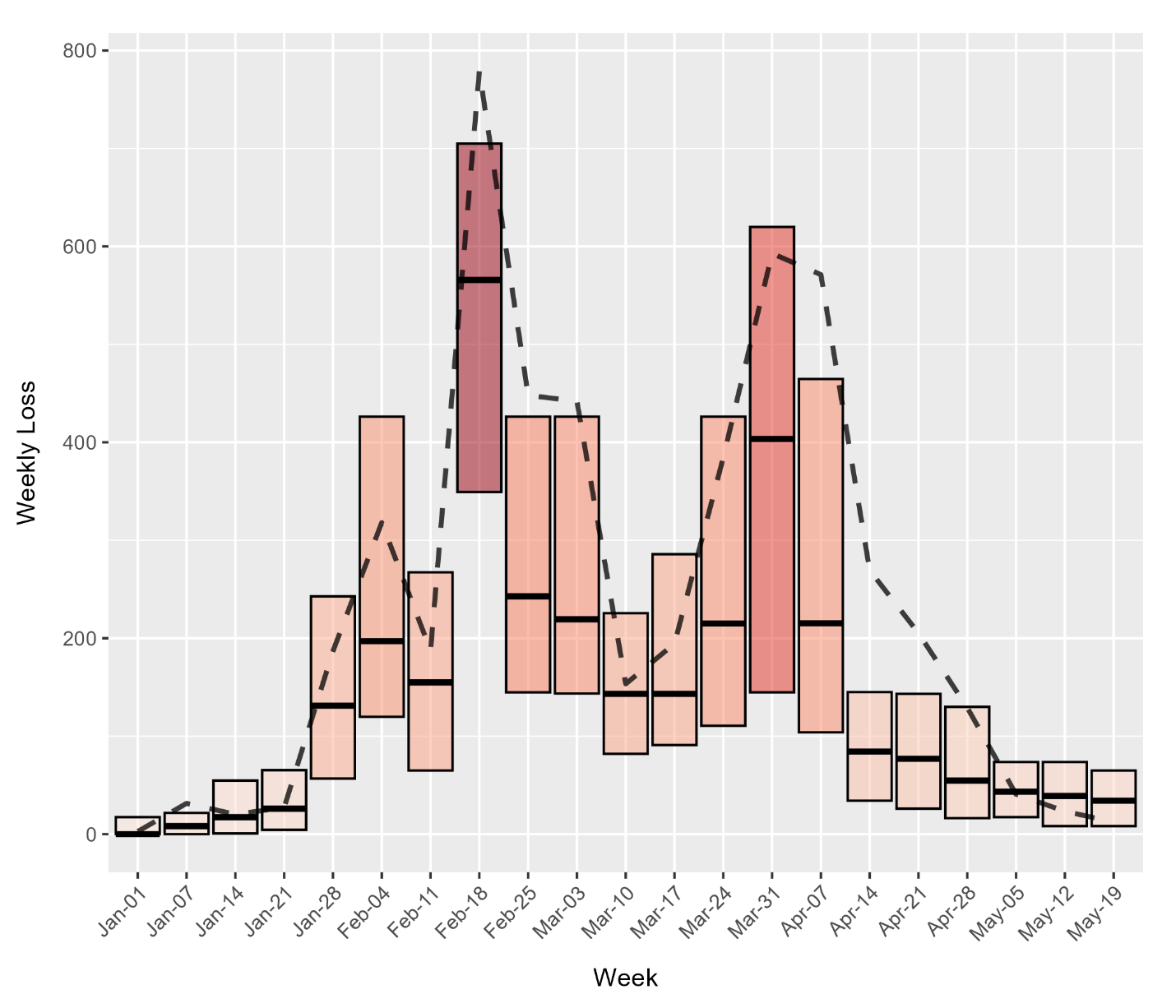
1. minimization (% of hatchery fish loss)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| BroodYear | Total Hatchery Steelhead Release Number (BY) | Loss of clipped steelhead at the facilities (WY) | % Total Hatchery Release Number Lost to the Facilities | WaterYear |
| 2016 | 1,019,501 | 164.29 | 0.016 | 2017 |
| 2017 | 811,379 | 2,462.90 | 0.304 | 2018 |
| 2018 | 1,264,939 | 5,777.70 | 0.457 | 2019 |
| 2019 | 1,084,899 | 659.44 | 0.061 | 2020 |
| 2020 | 1,853,751 | 341.69 | 0.018 | 2021 |
| 2021 | 1,676,701 | 639.79 | 0.038 | 2022 |
| 2022 | 1,623,483 | 3,650.30 | 0.225 | 2023 |
| 2023 | 1,592,998 | 2,576.29 | 0.162 | 2024 |

1. minimization (daily loss and daily pumping rates)



1. minimization (Tillotson seasonal predictions- weekly loss)



1. **Table comparing predicted and observed loss (hindcast)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Week** | **Average OMR** | **Average Exports** | **Average**  **San Joaquin Flow** | **Average Sacramento Flow** | **Predicted Weekly Loss Based on Columns to the left** | **Observed Loss** |
| 1/1 | 481 | 1570 | 4938 | 24037 | 116.95 | 8.20 |
| 1/8 | 0 | 2100 | 4938 | 24037 | 130.21 | 10.52 |
| 1/15 | -500 | 2650 | 4938 | 24037 | 171.27 | 16.01 |