Weekly Assessment of CVP and SWP Delta Operations on ESA-listed Species

Bureau of Reclamation

October 11, 2024

## Chinook Salmon

### TABLES

#### TABLE 2. Historic migration and salvage patterns.Last updated 10/11/2024

| Species | RedBluffDiversionDam | TisdaleRst | KnightsLandingRst | SacTrawlSherwoodCatchIndex | ChippsIslandTrawlCatchIndex | Salvage |
| --- | --- | --- | --- | --- | --- | --- |
| Chinook, Winter-run, Unclipped | 54.5%(45.9%,63.0%) BY: 2014 - 2023 | 5.6%(0.6%,10.6%) BY: 2014 - 2023 | 5.1%(1.5%,8.7%) BY: 2014 - 2023 | 0.0%(0.0%,0.0%) BY: 2014 - 2023 | 0.0%(0.0%,0.0%) BY: 2014 - 2023 | 0.0%(0.0%,0.0%) WY: 2015 - 2024 |
| Chinook, Spring-run, Unclipped |  | 0.0%(0.0%,0.0%) BY: 2014 - 2023 | 0.0%(0.0%,0.0%) BY: 2014 - 2023 | 0.0%(0.0%,0.0%) BY: 2014 - 2023 | 0.0%(0.0%,0.0%) BY: 2014 - 2023 | 0.0%(0.0%,0.0%) WY: 2015 - 2024 |
| Steelhead, Unclipped (January-December) |  |  |  |  |  |  |
| Steelhead, Unclipped (December-March) |  |  |  |  |  |  |
| Steelhead, Unclipped (April-June) |  |  |  |  |  |  |

#### TABLE 3. Knight’s Landing (KLCI) and Sacramento Seine and Trawl (SCI).

| Date | Knights Landing RST: Winter Chinook: Catch Index | Knights Landing RST: Older Chinook: Catch Index | Sacramento Trawls: Older Chinook: Catch Index | Sacramento Beach Seines: Older Chinook: Catch Index | Alert: Catch Index > 5 | Alert: Catch Index 3 < X ≤ 5 |
| --- | --- | --- | --- | --- | --- | --- |
| 2024-10-10 | 0 | 0 |  |  |  |  |
| 2024-10-09 | 0 | 0 | 0 | 0 |  |  |
| 2024-10-08 | 0 | 0 |  |  |  |  |
| 2024-10-07 |  |  | 0 | 0 |  |  |
| 2024-10-06 |  |  |  |  |  |  |
| 2024-10-05 |  |  |  |  |  |  |
| 2024-10-04 | 0 | 0 | 0 | 0 |  |  |
| 2024-10-03 | 0 | 0 |  |  |  |  |
| 2024-10-02 | 0 | 0 | 0 | 0 |  |  |

#### TABLE 4. Mean daily flow and percent change (Wilkins Slough, Deer Creek, Mill Creek; cfs from CDEC) and temperature and percent change (Knights Landing; °F from RST)

| Date | Mill Creek (MLM): mean daily flow (cfs) | Mill Creek (MLM): flow percent change | Mill Creek (MLM): Alert | Deer Creek (DCV): mean daily flow (cfs) | Deer Creek (DCV): flow percent change | Deer Creek (DCV): Alert | Wilkins Slough (WLK): mean daily flow (cfs) | Knights Landing RST: water temperature (f) | Alert Triggered |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10/10/2024 | 108.1 | 0.1% | Flow>95cfs | 92.5 | 0.3% |  | 5,549.0 | 49.7 |  |
| 10/9/2024 | 108.0 | 0.2% | Flow>95cfs | 92.2 | 0.1% |  | 5,605.0 | 50.3 |  |
| 10/8/2024 | 107.8 | 0.1% | Flow>95cfs | 92.0 | 0.7% |  | 5,686.3 | 50.6 |  |
| 10/7/2024 | 107.8 | -0.1% | Flow>95cfs | 91.4 | 0.2% |  | 5,791.6 | 50.3 |  |
| 10/6/2024 | 107.8 | 0.5% | Flow>95cfs | 91.2 | 0.8% |  | 5,829.5 |  |  |
| 10/5/2024 | 107.3 | 0.1% | Flow>95cfs | 90.5 | 0.1% |  | 5,913.2 |  |  |
| 10/4/2024 | 107.2 | -0.7% | Flow>95cfs | 90.4 | 1.7% |  | 6,065.6 | 50.2 |  |

#### TABLE 5. STARS model simulations for route-specific entrainment, travel times, and survival. Travel time is calculated in days.

| Stock | Date | Route | Median Travel Time | Survival | Routing Probability |
| --- | --- | --- | --- | --- | --- |
| Winter Chinook | 2024-10-09 | Overall | 6.58 | 0.01 |  |
| Winter Chinook | 2024-10-09 | Sacramento River | 6.11 | 0.01 | 0.59 |
| Winter Chinook | 2024-10-09 | Yolo Bypass | 10.15 | 0.38 | 0.00 |
| Winter Chinook | 2024-10-09 | Sutter Slough | 6.26 | 0.02 | 0.14 |
| Winter Chinook | 2024-10-09 | Steamboat Slough | 5.97 | 0.01 | 0.14 |
| Winter Chinook | 2024-10-09 | Interior Delta | 9.69 | 0.00 | 0.13 |
| Late-fall Chinook | 2024-10-09 | Overall | 11.71 | 0.30 |  |
| Late-fall Chinook | 2024-10-09 | Delta Cross Channel | 19.34 | 0.12 | 0.18 |
| Late-fall Chinook | 2024-10-09 | Georgiana Slough | 17.86 | 0.17 | 0.18 |
| Late-fall Chinook | 2024-10-09 | Sacramento River | 8.72 | 0.40 | 0.36 |
| Late-fall Chinook | 2024-10-09 | Sutter and Steamboat Slough | 9.06 | 0.36 | 0.27 |

#### TABLE 6. a) WY 2022 loss and salvage predictor data: Predicted weekly loss of winter-run Chinook salmon and steelhead at CVP and SWP facilities. TABLES AREN’T ON SACPAS YET SO THE CODE CHUNK IS TURNED OFF IN THE MARKDOWN CODE.

#### TABLE 6. b) Environmental details, current and forecast. TABLES AREN’T ON SACPAS YET SO THE CODE CHUNK IS TURNED OFF IN THE MARKDOWN CODE.

### FIGURES

 