NAS CVP/SWP Long Term Operations Review

August 12, 2024





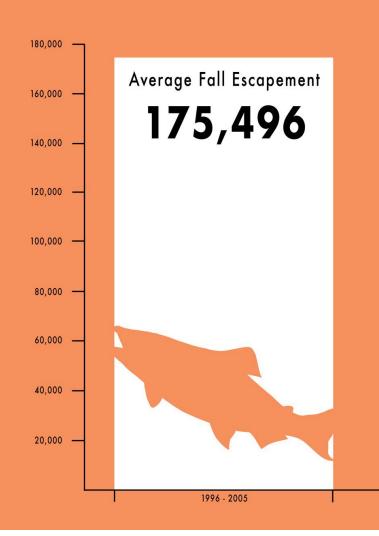


Barry Nelson

California Salmon Fishing Industry

- Reliant on Central Valley Fall run
 - Key stressors identical to those for listed runs
- Central Valley fall run
 - Backbone of CA and coastal OR salmon fishing
 - ○\$1.4 B annually and 23,000 jobs when runs are healthy
 - ○Total closure in 2023-2024
 - Tremendous impacts on businesses, families and communities
 - Currently nearly entirely dependent on hatchery releases

Upper Sacramento River Fall-Run Wild Salmon Escapement | 1996-2023



Escapement of spring-run Chinook to the Sacramento River system in 2023 totaled 1,479 fish, with an estimated return of only 106 to upper Sacramento River tributaries.

2023 Fall Escapement **6,160**

2023



Data: Pacific Fishery Management Council. 2024. Review of 2023 Ocean Salmon Fisheries: Stock Assessment and Fishery Evaluation Document for the Pacific Coast Salmon Fishery Management Plan.

Key Central Valley Salmon Stressors

- Water management
 - Flow
 - Temperature
- Disastrous juvenile survival in recent years
- Flow and temperature impacts can be seen in hatchery trucking survival rates
 - Disastrous 2023 fall run returns on the Sacramento
 - Record 2023 fall run returns on the Mokelumne
- GSSA no longer prioritizes habitat restoration

Solutions to Rebuild Central Valley Listed and Unlisted Salmon Runs

- BOs and SWRCB Bay-Delta Plan Update that significantly improve flow and temperature conditions
- Re-integrate science into decision-making
- BOs and the Bay-Delta Plan should <u>not</u> be based on the proposed Bay-Delta Voluntary Agreements

The Bay-Delta VAs Fail to Incorporate Science

- No scientific support for VA flows
- No scientific support for core VA hypothesis:
 - Floodplain restoration can substitute for flow improvements
- No SMART biological goals and objectives
 - Science-driven program design, evaluation and adaptive management are impossible
- No temperature protections
- No Delta flow requirements
- Inadequate tributary flows

EPA on Bay Delta VA Science

Jan. 19, 2024

 The State Board Sept. 2023 Staff Report "does not yet include a sound scientific rationale that demonstrates how the proposed VA alternative will provide protections for all designated uses."

VA Flows in Critical Years

- No new VA environmental water in critical years on Feather, Yuba and Mokelumne rivers
- 2,000 AF of VA CY flows on the Sacramento River
 - .01% of AY Sac Basin Flows
- VA flow accounting proposals allow dramatic new diversions and reductions in environmental flow
- Providing environmental water through transfers is unreliable
 - 2022 Building Blocks report

EPA on VA Flows

Jan. 19, 2024

- "VA flow assets provide only minimal benefits"
- "EPA is concerned that the total volume and timing of Delta inflow and outflow provided under the proposed VA alternative relative to baseline is not large enough to adequately restore and protect aquatic ecosystems"
- "(D)uring critical dry years the proposed VA alternative will result in a decrease of flows from baseline."

NMFS on VA Flows

Jan. 19, 2024

- "(t)he flow commitments identified in the VA Term Sheet would not provide a significant difference in average flow relative to the baseline."
- "(W)e are highly uncertain that the VAs as currently proposed will provide for the reasonable protection of fish and wildlife beneficial uses."

VAs - Timeline and Completeness

- Since beginning in 2011, 8 deadlines for a complete package
 - Failed to meet all 8 deadlines

VAs - Timeline and Completeness

- Key missing VA components
 - SMART biological goals and objectives
 - Parts of the Science Plan (e.g. peer review and best available science)
 - Funding plan
 - Role of Tribes and Traditional Ecological Knowledge
 - Data management, publication and transparency
 - American and Friant enforcement

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