SAN FRANCISCO BAY-DELTA WATER QUALITY CONTROL PLAN

OCTOBER, 2026

Presented by

San Francisco Baykeeper

Friends of the River

California Sportfishing Protection Alliance

The Board Has Obligations and Goals…

- Ensure Flows to Support Viability of Native Fishes
- Double Natural Production of Chinook Salmon
- Protect Coldwater Habitat
- Interior Delta Flows
- Tribal Cultural Beneficial Uses (T-Cul)
- Balance Reasonable Protection Among Competing Uses
- Mimic Natural Hydrographic Conditions
- Employ Best Available Science
- Employ Adaptive Management
- Move Quickly and Avoid Litigation
- Transparent Public Oversight



…None of Which Will Be Achieved

- ~~Ensure Flows to Support Viability of Native Fishes~~
- ~~Double Natural Production of Chinook Salmon~~
- ~~Protect Coldwater Habitat~~
- ~~Interior Delta Flows~~
- ~~Tribal Cultural Beneficial Uses (T-Cul)~~
- ~~Balance Reasonable Protection Among Competing Uses~~
- ~~Mimic Natural Hydrographic Conditions~~
- ~~Employ Best Available Science~~
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- ~~Move Quickly and Avoid Litigation~~
- ~~Transparent Public Oversight~~



Photo credit: San Francisco Baykeeper

VA Negotiations Excluded Tribes, Impacted Communities, Environmental NGOs, Fishing Groups



Negotiators of Voluntary Agreement MOU, March 29, 2022
Photo credit: Cal. Nat. Res. Agency, published by YubaNet.com

Present:
Gov. Gavin Newsom; Sec. Wade Crowfoot (CNRA); Sec. Jared Blumenfeld (CalEPA); Joaquin Esquivel (State Water Board); Karla Nemeth (DWR); Chuck Bonham (CDFW); and Ernest Conant (Bureau of Reclamation); representatives for Metroplitan Water District, San Luis Delta-Mendota Water Authority, Glenn-Colusa Irrigation District, Sacramento River Settlement Contractors, Northern California Water Agency, State Water Contractors, Westlands Water District, Yuba Water Agency, Contra Costa Water District, Garden Highway Mutual Water Co., Sutter Mutual Water Co., and Tehama-Colusa Canal Authority, among other water users.

Not present: Tribes, Environmental NGOs, Fishing Groups, or Delta and Riverside Communities

The Board Knows Better: The Bay–Delta is in Crisis

2010

"Current policies have been disastrous for desirable fish."

2017

"It is widely recognized that the Bay-Delta ecosystem is in a state of crisis."

2018

"The overall health of the estuary for native species is in trouble, and expeditious action is needed on the watershed level to address the crisis…"

The Board Knows Better: Insufficient Flow is the Problem

2018

"For decades, … there has been a substantial reduction in flows and significant changes in the timing and distribution of those flows, and species have been cut off from natal waters. This has led to severe declines, and in some cases extinctions, of native fish and other aquatic species."

2023

2026

"Existing regulatory minimum Delta outflows would not be protective of the ecosystem, and without additional instream flow protections, existing flows may be reduced in the future, particularly with climate change and additional water development."

The Board Knows Better: Flow is the Master Variable

2010

"Flow and physical habitat interact in many ways, but they are not interchangeable."

2023

- "Flow is commonly regarded as a key driver or master variable governing the environmental processes in riverine and estuarine systems such as the Bay-Delta and its watershed."
- "Altered flow regimes negatively affect native fish communities and their aquatic ecosystem."

2026

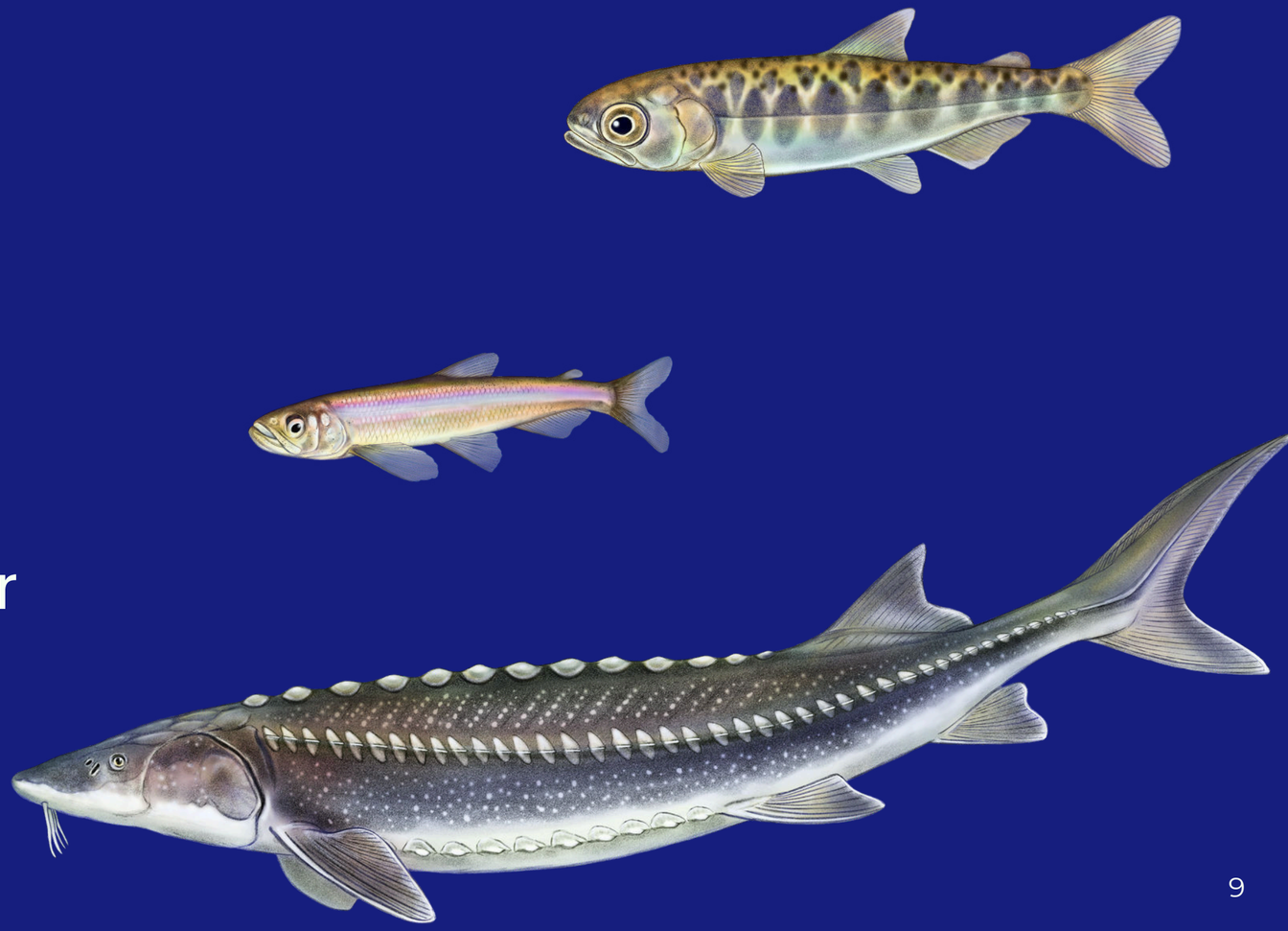
- "(1) flow is a major determinant of physical habitat; (2) aquatic species have evolved life history strategies based on natural flow regimes; (3) upstream-downstream and lateral connectivity are essential to organism viability; and (4) invasion and success of nonnative species is facilitated by flow alterations."

Flow, Temperature, and Viability Objectives Must Contain Numeric Limits or Levels

- Clean Water Act requires numeric objectives
- Porter-Cologne requires objectives with “limits or levels”
- Numeric flow and temperature objectives can be set
- Viability Objectives Can Contain “limits and levels”

The Fish Viability Objectives Do Not Ensure Reasonable Protection of Beneficial Uses

- Plan's understanding of viability is the bare minimum population that won't go extinct
- No evidence this reasonably protects fish and wildlife objectives
- No evidence this reasonably protects Tribal Beneficial Uses or commercial, recreational, or subsistence fisheries
- No evidence this reasonably protects Estuarine Habitat



Illustrations by Fiorella Ikeue for San Francisco Baykeeper

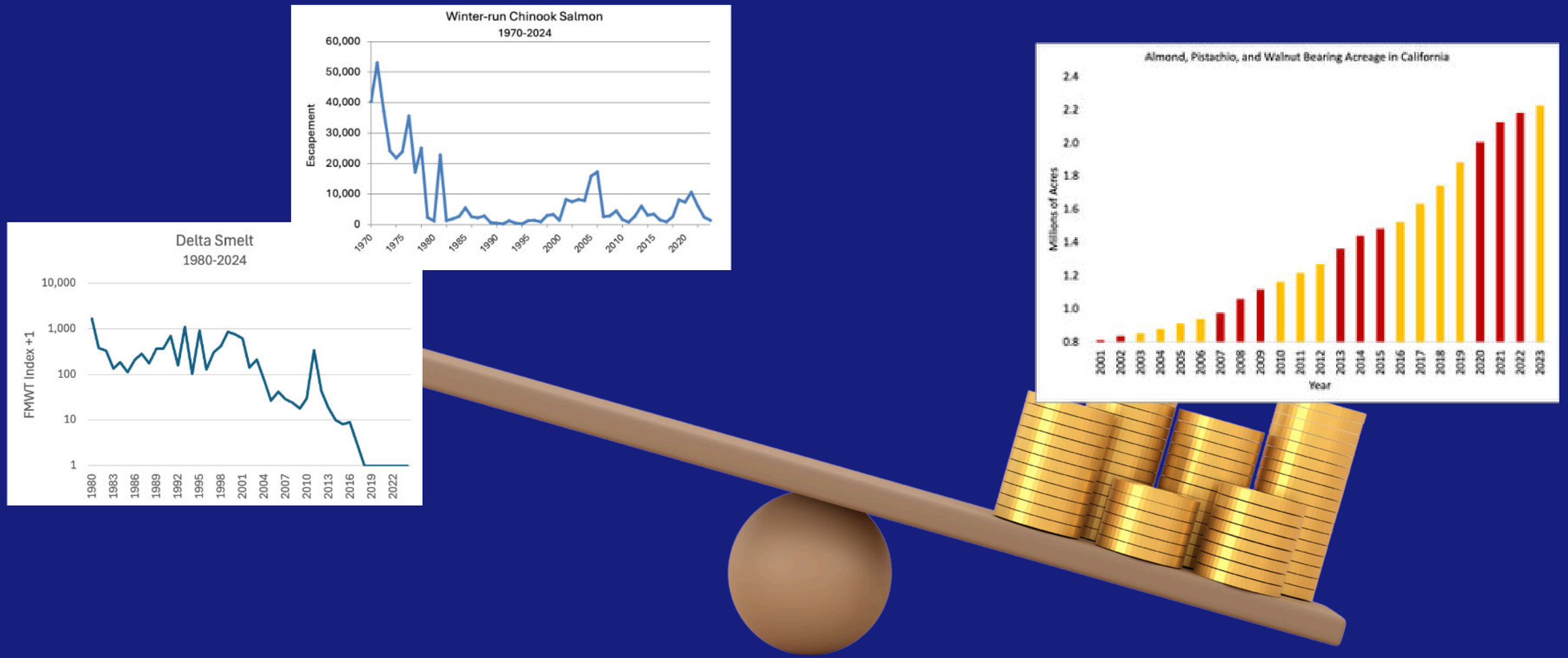
The Plan's Lack of a Water Quality Objective Related to Harmful Algal Blooms Fails to Protect Recreational and Tribal Uses of Water

- Harmful Algal Blooms Threaten Human Health, Wildlife
- Current Water Quality Related to HABs impairs Recreational and Tribal Beneficial Uses
- Failure to Include HABs Objective is Unlawful
- Plan Fails to Protect Beneficial Uses Currently Impaired by HABs



Stockton Waterfront, July 29, 2021
Photo Credit: San Francisco Baykeeper

The Plan Fails To Balance Beneficial Uses



Downward Spiral Toward Elimination of Various Instream Beneficial Uses

Expanding Acres, Growing Profits, Largest Water Use in the State

The Plan Will Not Achieve Its Own Inadequate and Unlawful Objectives

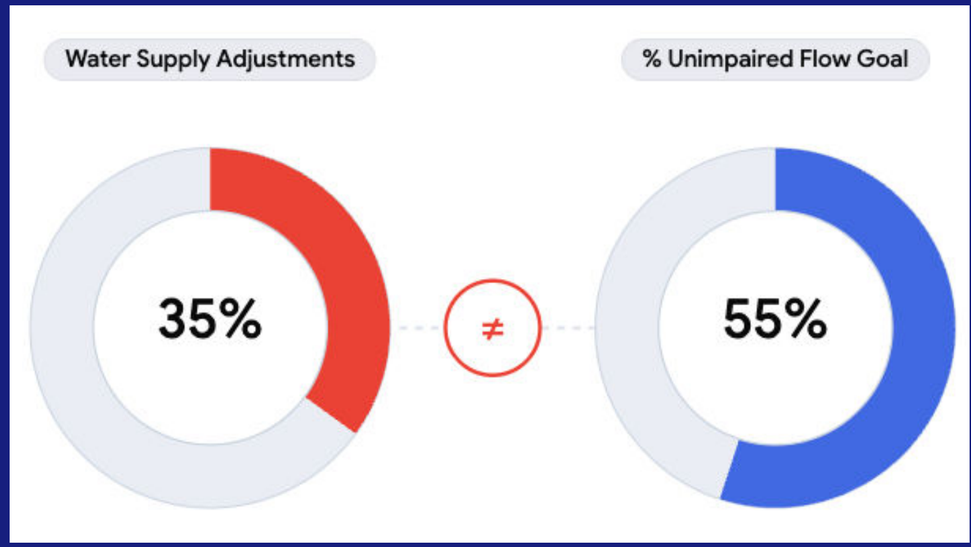
Too little water

Final Staff Report:

- "marked expected improvements in protecting fish and wildlife beneficial uses" from 55% unimpaired inflow and an appropriate protective range is 45%-65% (Final Staff Report, August 2026, pp. 5-16 to 5-18)
- "Limited benefits" under 35% scenarios (Final Staff Report, p. 5-31; *see also* Table 5.3-3)

Proposed Plan with Water Supply Adjustments:

- In ⅔ of years, WSA flows are below 55%
- In ⅓ of years, WSA flows are less than or equal to 35%; flows the Board's science concluded were not protective or adequate



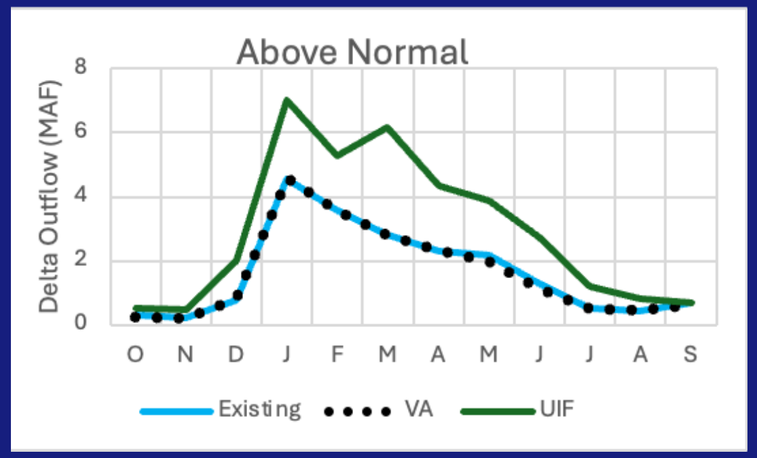
The Plan Will Not Achieve Its Own Inadequate and Unlawful Objectives

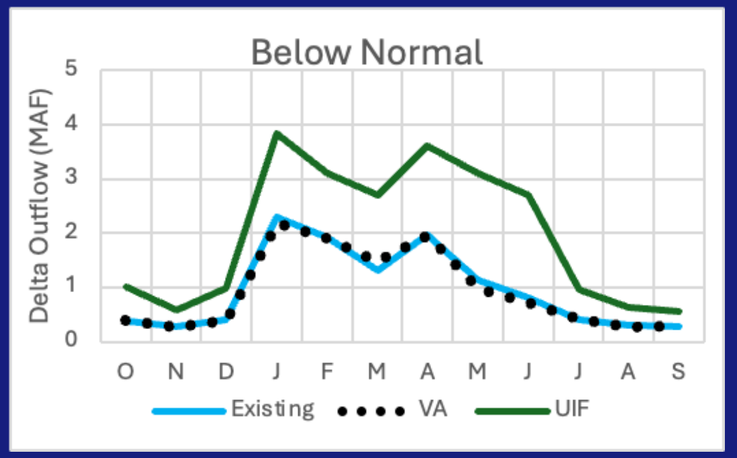
The Unnatural Hydrograph Continues

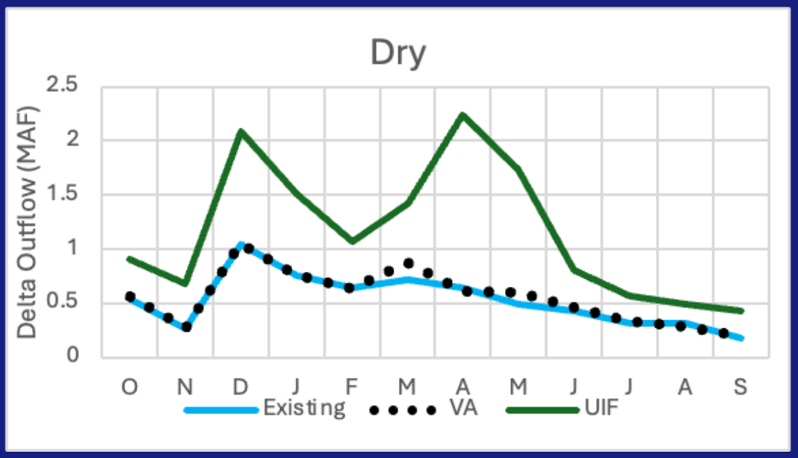
<u>Inflow Objective</u>

- Flows as they "naturally occur" would "reasonably contribute" to meeting viability objective (Final Draft Plan, October 2026, p. 18)

<u>VA flows do not better mimic the natural hydrograph:</u>







Modeled monthly Delta outflow in Above Normal (1993), Below Normal (2010), and Dry (2020) water years.

The Plan Will Not Achieve Its Own Inadequate and Unlawful Objectives

The Water is Too Hot

<u>Cold Water Habitat Objective:</u>

- Carryover storage levels are inadequate
- VA Parties don't have to meet the objective or the carryover storage targets
- The targets are unenforceable – requirements are left reservoir operators, water users, and future decisions

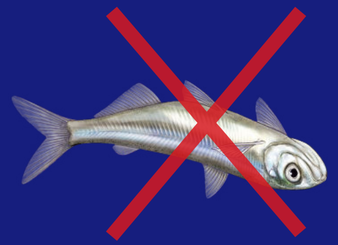


The Plan Will Not Achieve Its Own Inadequate and Unlawful Objectives

No Viability or Salmon Doubling



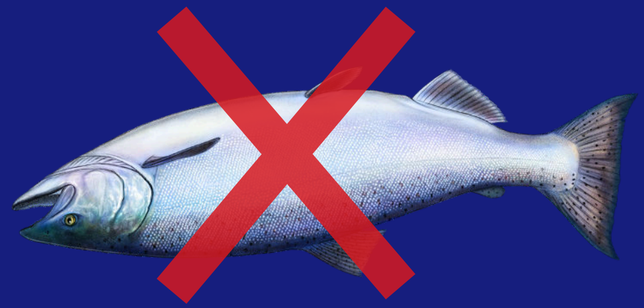
The Voluntary Agreements are an Extinction Plan for Native Fish



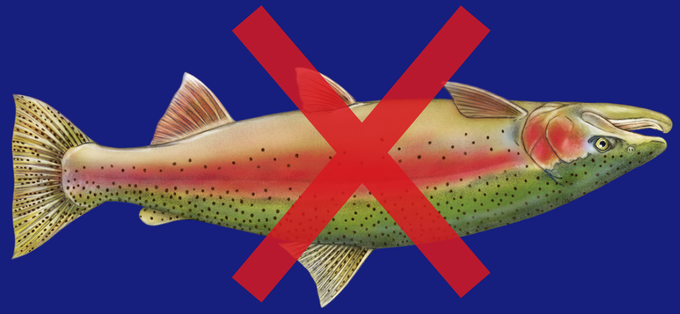
Delta Smelt



White Sturgeon



Chinook Salmon



Central Valley Steelhead



Longfin Smelt



Green Sturgeon

Illustrations by Fiorella Ikeue for San Francisco Baykeeper

The Voluntary Agreements are an Extinction Plan for Native Fish

The Status Quo is Decline Toward Extinction for Seven Native Species

Reliance on the Endangered Species Act Has Not Protected Fish and Wildlife Beneficial Uses

1989
- Winter-Run Chinook Salmon — THREATENED — Federal
- Winter-Run Chinook Salmon — ENDANGERED — State

1993
- Delta Smelt — THREATENED — Federal
- Delta Smelt — THREATENED — State

1994
- Winter-Run Chinook Salmon — ENDANGERED — Federal

1998
- Central Valley Steelhead — THREATENED — Federal

1999
- Spring-run Chinook Salmon — THREATENED — Federal
- Spring-run Chinook Salmon — THREATENED — State

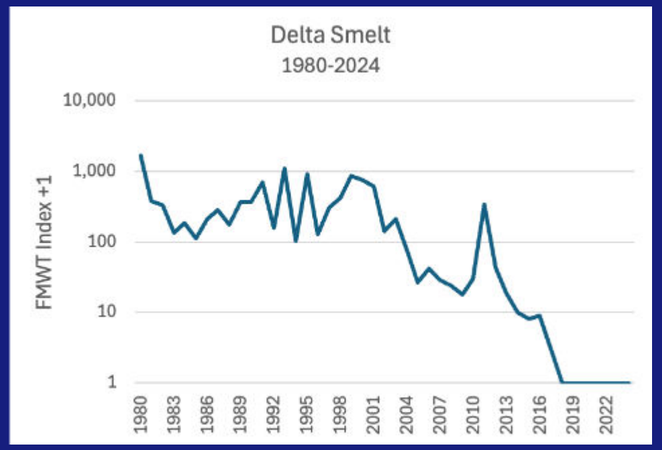
2006
- Green Sturgeon — THREATENED — Federal

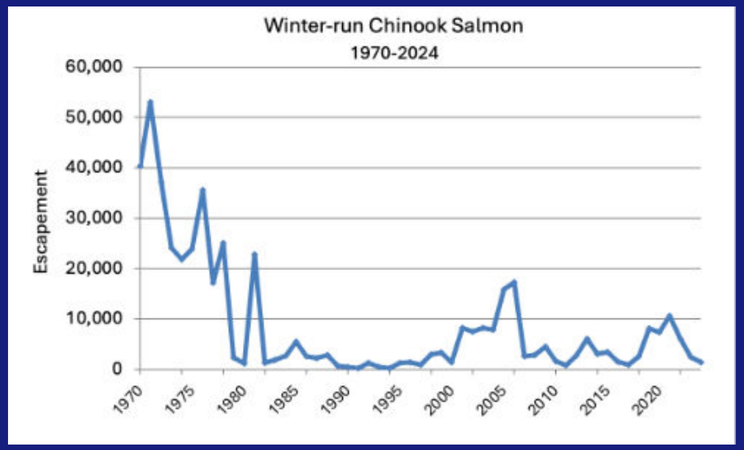
2009
- Longfin Smelt — THREATENED — State

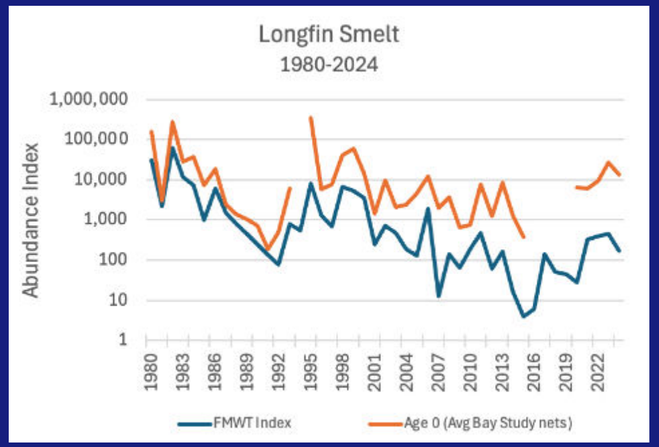
2010
- Delta Smelt — ENDANGERED — State

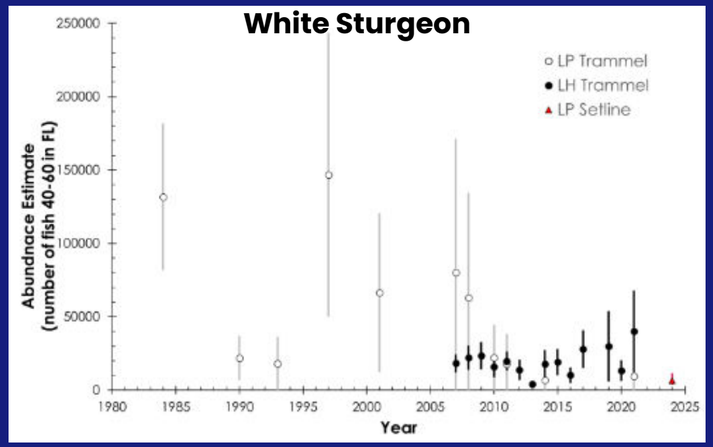
2024
- Longfin Smelt — ENDANGERED — Federal
- White Sturgeon — CANDIDATE — State

2026
- White Sturgeon — WARRANTED — Federal
- Spring-run Chinook Salmon — ENDANGERED — State



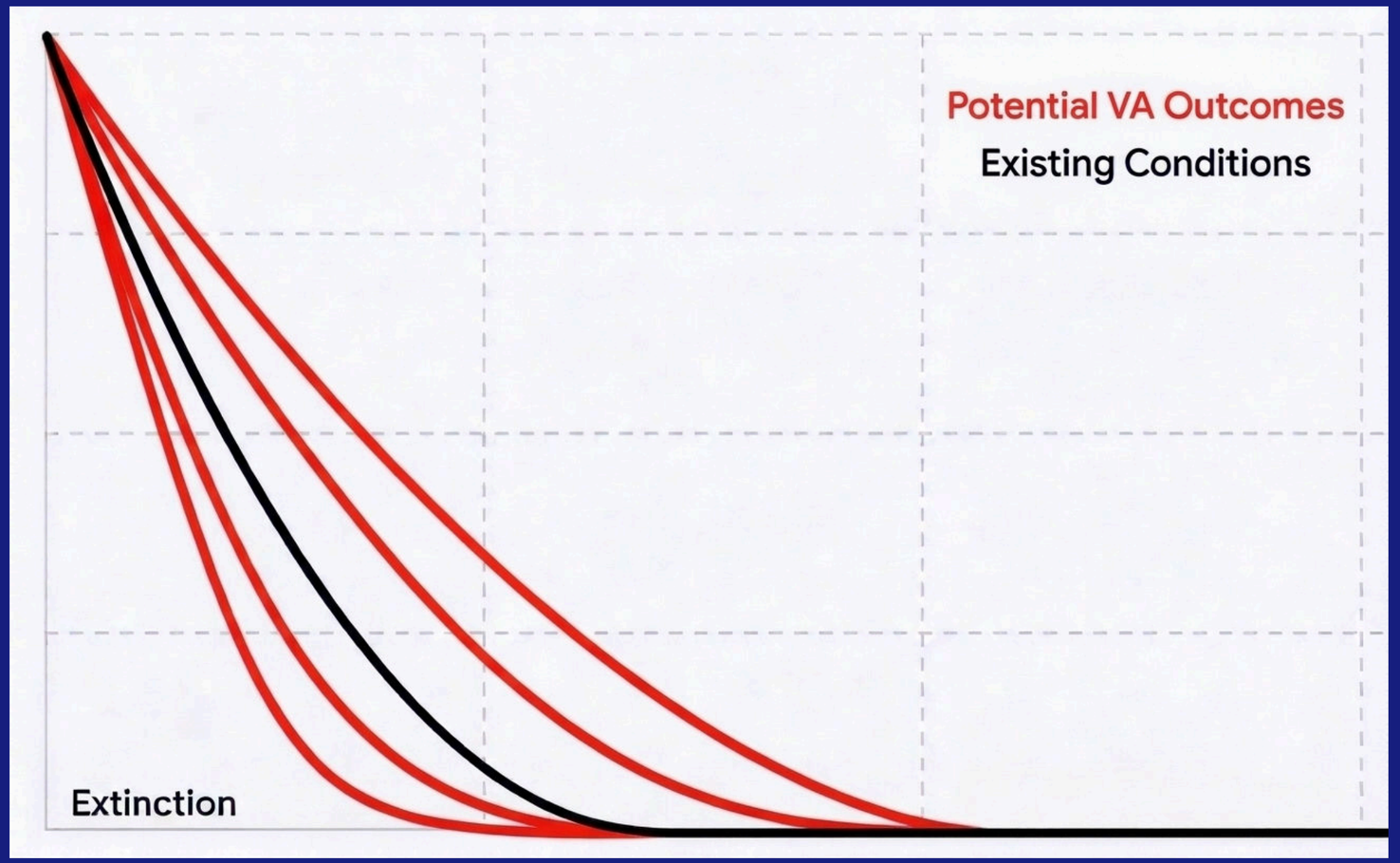






The Voluntary Agreements are an Extinction Plan for Native Fish

A slower path to zero is not reasonable protection



Peer Review of the VA Science Plan shows the 'Experiment' Won't Teach Anything New

- "The actions being taken in the Healthy Rivers and Landscapes program could be considered comparatively small relative to past changes, other environmental drivers, and interannual variability." (Dr. Stephen B. Brandt, p. 43)

- "The 8-year time frame of the HRLSP is insufficient to provide even a moderate level of inference about hypotheses evaluated based on annual data/estimates... The extent of contrast provided by flow actions, and potential for replication of actions over time, is highly uncertain but likely limited... I expect that the magnitude of effects of flow and habitat changes will most often result in a low signal-to-noise ratio, making it difficult to discern their effects..." (Dr. Josh Korman, pp. 2-3). "The [science] plan is deficient in identifying substantive limitations in assessing HRL actions due to an assessment period that is too short, variation in flow change magnitudes and frequencies which are likely not great enough to provide sufficient contrast and replication..." (Dr. Josh Korman, p. 39)

- "But the Science Plan does not provide any guidance for the adaptation step, because alternative measures are not articulated. If a proposed Measure fails, what course of action is then recommended? ... That is, the Science Plan is well designed to evaluate whether a Measure worked as intended, and if it did not, to suggest why it failed, but it is not designed to say what action should be taken instead." (Dr. Mike Runge, p. 8)

The Plan Allows the Limited New VA Water to be Diverted by New Water Supply Projects

- Sites Reservoir and Delta Conveyance Project diversions would eliminate nearly all VA additions
- The Board's determination to require make-up water for CVP / SWP operation changes, but not new water supply projects, is arbitrary and unprotective
- October 2026 Response to Comments, p. 16:
  - "The State Water Board cannot require HRL participants to make up for diversions by non-HRL water rights."
- Why on earth not? HRL parties chose "additive" flow formula and the VA formula presumes unregulated flows as part of base
- Elementary school arithmetic (Associative Property)

Net Changes to Delta Outflow with VAs and New Water Supply Projects

Water Year Type	VA Flow Additions (Thousand Acre Feet)			Future Water Supply Project Reductions in Delta Outflow (TAF)		Total Net Addition / Loss Delta Outflow (TAF)
	Sac River & Tributaries - Flow Additions	VA - Foregone Delta Exports	Water Purchases	Sites Reservoir	Delta Conveyance Project	
Wet	-	-	150	(275)	(758)	**(883)**
Above Normal	234	125	237	(227)	(1,061)	**(693)**
Below Normal	234	125	155	(121)	(649)	**(257)**
Dry	264	125	222	(25)	(326)	**259**
Critical	30	-	68	(20)	(156)	**(78)**
Weighted Avg.	129	63	165	(148)	(588)	**(381)**

No evidence that increasing Delta outflow in dry years, while reducing it in all other years, will achieve plan objectives or reasonably protect beneficial uses.

October Changes About New Water Supply Projects Create Confusion and Reduce Accountability

- 55% of unimpaired bypass flow was the clear standard for “new water supply projects” in footnote 5 of August Plan
- October Draft deletes the definition of “new water supply projects”
- The deletion would allow new water supply projects to avoid a 55% of bypass flow requirement
    - Indeed, this appears to be the point

October Changes About New Water Supply Projects Create Confusion and Reduce Accountability

- October Draft, p. 46: WSAs apply to the “level of diversions authorized under that right as of December 31, 2025”
    - Does “level of diversions authorized” mean volumes, points of diversion & rediversion, places of use, all of these, or other?
- Creates new ways to allow WSA to apply to new water supply projects

October Changes About New Water Supply Projects Create Confusion and Reduce Accountability

- Letting new projects to enroll in VA pathway is an agenda for backsliding
- p. 64: Voluntary agreement pathway applies to VA water rights in Appendix B.1 “as they exist”
    - Does “as they exist” mean volumes, points of diversion or rediversion, places of use, all of these, something else?
- p. 65: Potential to add to VA water rights “expanded diversions beyond those authorized as of December 31, 2025”
    - Does “expanded diversions” for DCP diversions mean that all DCP diversions start at 55%, or just DCP diversions that push combined annual SWP volumes above the historical annual maximum at Banks, or something else?

VA Participation Remains Uncertain

- Reclamation: “Cannot support or participate” and threatening to “cease any further paricipation or funding”
- Westlands Water District: “will not continue in the [VA] Program”
- Metropolitan Water District: Board has “jeopardized the ability to implement the Bay-Delta Plan”
- State Water Contractors: “Fundamental changes” are needed
- Santa Clara Valley Water: VAs are “inconsistent” with Memorandum of Understanding

Adopting the VAs Cedes the Board's Authority to the Regulated Industry

- Water Board has given up its authority and obligation to regulate water users for the next 8 years
- Deck is stacked in favor of continuing even a failing VA Program
- There is no effective, implementable, or scientifically supported backstop



Image Credit: Scott Gustafson

Citations

Slide No. 5

- *2010 – Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem*, State Water Resources Control Board, August 3, 2010, p. 1 (quoting Fleenor et al., 2010)
- *2017 - Final Scientific Basis Report in Support of New and Modified Requirements for Inflows from the Sacramento River and its Tributaries and Eastside Tributaries to the Delta, Delta Outflows, Cold Water Habitat, and Interior Delta Flows*, State Water Resources Control Board, p. 1-4.
- *2018 - Framework for the Sacramento/Delta Update to the Bay-Delta Plan*, State Water Resources Control Board, July 2018, p. 4.

Slide No. 6

- *2018 - Framework for the Sacramento/Delta Update to the Bay-Delta Plan*, State Water Resources Control Board, July 2018, p. 4
- 2023 - *DRAFT Staff Report/Substitute Environmental Document in Support of Potential Updates to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary for the Sacramento River and its Tributaries, Delta Eastside Tributaries, and Delta*, State Water Resources Control Board, September 2023, p. 1-9
- 2026 - *FINAL Staff Report/Substitute Environmental Document in Support of Potential Updates to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary for the Sacramento River and its Tributaries, Delta Eastside Tributaries, and Delta,* State Water Resources Control Board, August 2026, p. 1-6

Slide No. 7

- *2010 - Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem*, State Water Resources Control Board, August 3, 2010, p. 1
- 2023 - *DRAFT Staff Report/Substitute Environmental Document in Support of Potential Updates to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary for the Sacramento River and its Tributaries, Delta Eastside Tributaries, and Delta*, State Water Resources Control Board, September 2023, p. 3-2
- 2026 - *FINAL Staff Report/Substitute Environmental Document in Support of Potential Updates to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary for the Sacramento River and its Tributaries, Delta Eastside Tributaries, and Delta,* State Water Resources Control Board, August 2026, pp. 3-2, 3-3

Slide No. 11

- Delta Smelt - CDFW, Fall Midwater Trawl; Chinook Salmon - CDFW, Grantab Escapement
- Crop Acreage - Graph prepared by Friends of the River, data from CDFA, USDA and other sources
-

Slide No. 13

- Date Source: State Water Resources Control Board. Staff Report 2026. Water Years 1993, 2010, and 2020. Modeling output file - SacWAM_20260529_PostP_va_pathway_part1.xlsm

Slide No. 17

- Delta Smellt - CDFW, Fall Midwater Trawl; Longfin Smelt - Interagency Ecological Program. San Francisco Bay Study & CDFW, Fall Midwater Trawl; Chinook Salmon - CDFW, Grantab Escapement; White Sturgeon - 2024 White Sturgeon Population Estimate, CDFW.
- Spring-run Chinook Salmon - FIVE-YEAR SPECIES REVIEW OF CENTRAL VALLEY SPRING-RUN CHINOOK SALMON, CDFW, available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=247195&inline

Slide No. 19

- *Healthy Rivers and Landscapes Science Plan Independent Peer Review,* Letters by Dr. Josh Korman, Dr. Mike Runge, and Dr. Stephen Brandt, June 2025, available at https://deltacouncil.ca.gov/pdf/science-program/correspondence/2025-07-15-letters-to-the-delta-science-program.pdf

Slide No. 21

- *VA Additions* - Final Draft Plan (Oct. 2026), section 4.4.9.3, Table 9
- *Sites and DCP Diversions - FINAL Staff Report/Substitute Environmental Document in Support of Potential Updates to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary for the Sacramento River and its Tributaries, Delta Eastside Tributaries, and Delta, State Water Resources Control Board, August 2026,* Table 7.24-1