## The Sacramento/ San Joaquin River Delta

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The Water Education Foundation's Bay-Delta Tour

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#### Disclaimer

- We are not speaking for the:
  - State Water Resources Control Board
  - The Delta Stewardship Council
- We are not presenting State policy

 We are expressing personal observations and opinions (except where specifically referenced to published materials).



#### Overview



- Some Inconvenient Truths about the Delta
- Brief Overview of Water Rights and Water Allocation
- Planning in the Bureaucratic Labyrinth
- Managing for Drought, Flood and Climate Change
- The Bay/Delta Water Quality Control Plan
- What to Watch For

#### **Inconvenient Truths**

#### Today's Delta:

- Highly Altered in Response to Government Policy
- Artificially Maintained at High Communal Cost
- Ecosystem Decline is Accelerating
- Water Supply Reliability is Evaporating
- Unsustainable as it Exists Today
- Beset by Interrelated Stresses
- Will Continue to Evolve
- And there's a Wolf at the Door!



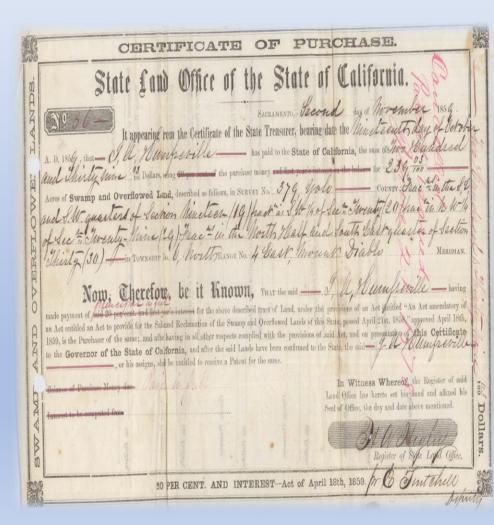
### Water Rights and Water Allocation

- Most Senior Delta Water Rights "Pre-date" the Administrative System
  - ➤ Exceptions: CVP and SWP which are Licensed and Regulated
- Appropriation System Overlain on a Riparian System
- No Reconciliation between Shortage Allocation Regimes
  - > Appropriators According to Priority
  - ➤ Riparians According to Correlative Sacrifice
- Curtailment in the Last Drought: "Whack-a-mole"



#### Refining the Taxonomy of Senior Water Rights

- Senior Claims were "grandfathered" in 1913
- Taxonomy from responses to 2015 Information Order
  - Supports on-going "crowd correction"
  - Opens the "black box" of Delta claims
  - Allows for corrections of common misconceptions
  - Improves understanding of demands and priorities
  - Facilitates planning for next drought



### Planning in the Bureaucratic Labyrinth

 Seventeen State and Federal Agencies Operate and/or Regulate in the Delta

 Coordination is Loose, Budgets are Unstable, Enforceability is Uneven, and Litigation is Inevitable



## Planning in the Bureaucratic Labyrinth

There are a Plethora of Planning Efforts, Including

- √ The Water Action Plan (Administration)
- √ The Water Quality Control Plan (State Water Board)
- √ The California Water Plan (Department of Water Resources)
- √ The Delta Plan (Delta Stewardship Council)
- ✓ The Delta Science Plan (Independent Science Board)





## Climate Change:

- Flashier System
- Warmer Water
- Sea Water Intrusion
- Infrastructure Failure
- Ecosystem Decline



## "We must meet the challenge rather than wish it were not before us."

- William J. Brennan, Jr., former Associate Justice of the United States Supreme Court



The Delta is a distinct and valuable natural resource of vital and enduring interest to all the people and exists as a delicately balanced estuary and wetland ecosystem of hemispheric importance.

The permanent protection of the Delta's natural and scenic resources is the paramount concern to present and future residents of the state and nation.

To promote the public safety, health, and welfare, and to protect public and private property, wildlife, fisheries, and the natural environment, it is necessary to protect and enhance the ecosystem of the Delta and prevent its further deterioration and destruction.



## Water Quality Control Plan

- Beneficial Uses
  - Municipal & Industrial
  - Agricultural
  - Fish & Wildlife
- Objectives
  - Narrative and/or
  - Numeric
- Program of Implementation









December 13, 2006

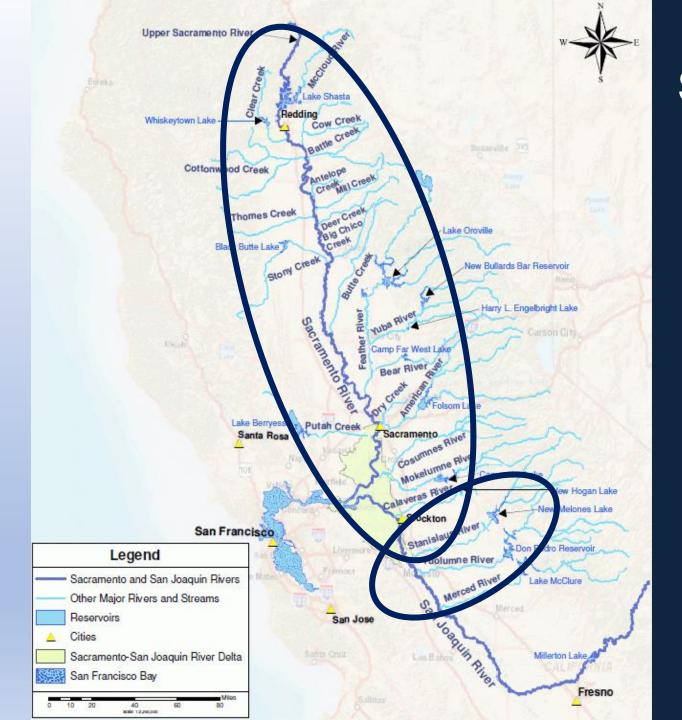


Division of Water Rights
December 2006



## **Bay-Delta Plan Update**

- Lower San Joaquin River & Tributaries
  - Notice 2009
  - Adopted 2018
- Sacramento River, Delta, & Tributaries
  - Notice 2012
  - Draft Staff Report 2020
- Voluntary Agreements



# San Francisco Bay-Delta Watershed

Bay-Delta Plan Updates

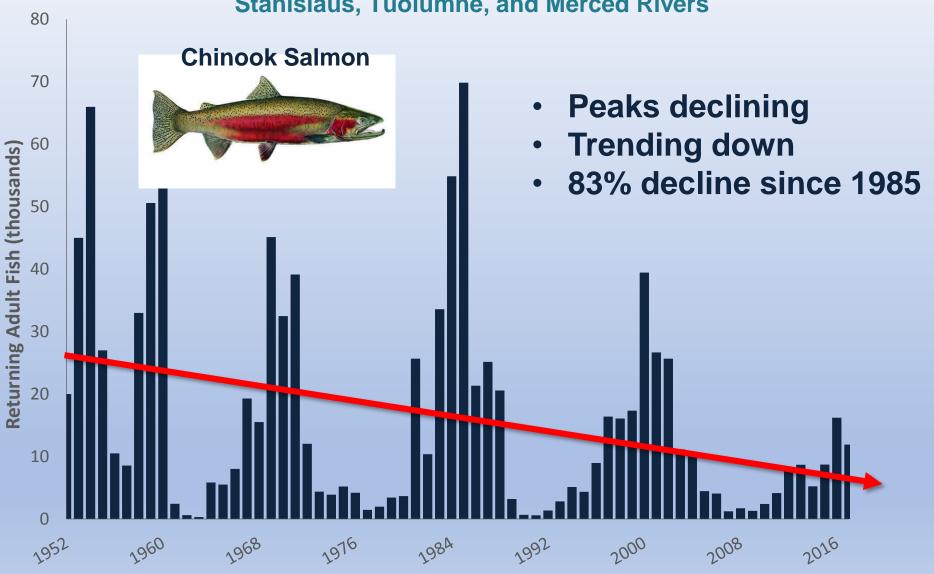
> Lower San Joaquin River

Sacramento River
Delta
Eastside Tributaries



#### **Why Flows Matter**

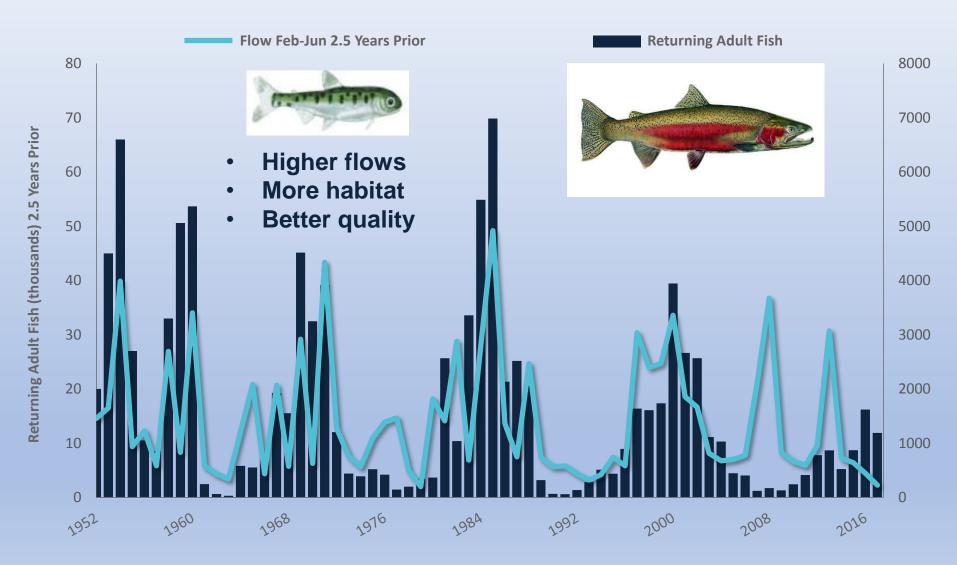
**Stanislaus, Tuolumne, and Merced Rivers** 



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#### **Why Flows Matter**

#### Flows Experienced by Juveniles & Adult Fish 2.5 Years Later



## Voluntary Agreements

- Sacramento/Delta Watershed
- Tuolumne River
- Combination of flow and non-flow measures
- Proposed 15-year term



#### What to Watch For

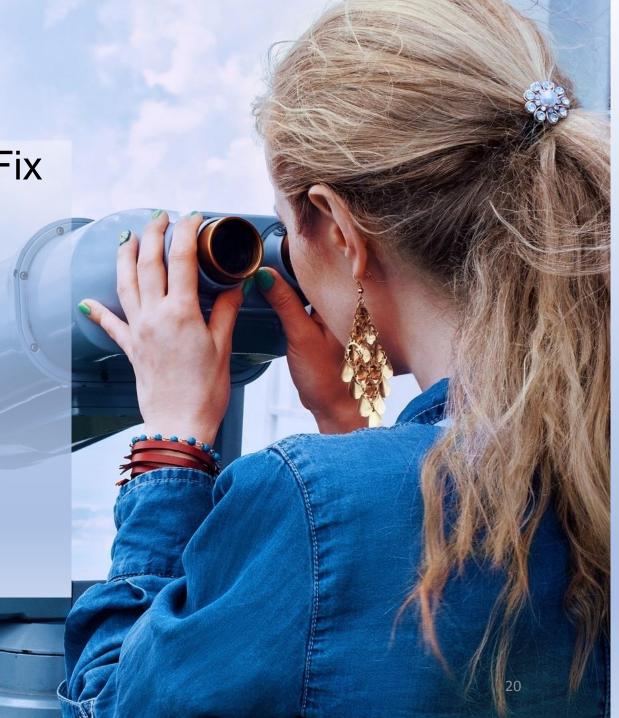
Process for Re-examining WaterFix

 Environmental Impact Report for State Water Project

 Water Quality Control Plan Incorporation of Voluntary Agreements

 State/Federal Comity in Delta Operations

A Black Swan Event



## A Black Swan Event...



- Flood
- Earthquake
- Political Attention
- FinancialCrises
- EcologicalCollapse

## Questions 🗇 Thank You

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