## The Sacramento / San Joaquin

River Delta

Michael Patrick George Delta Watermaster July 13, 2018



North Bay Watershed Association Board





### Disclaimer

- I am not speaking for the:
  - State Water Resources Control Board or
  - The Delta Stewardship Council
- I am not presenting State policy
- I am expressing personal observations and opinions (except where specifically referenced to published materials).



## Overview

- Why Should North Bay Water Agencies Care about the Delta?
- Role of the Delta Watermaster
- Water Rights and Water Allocation
- Managing for Drought, Flood and Climate Change
- Planning in the Bureaucratic Labyrinth
- What to Watch For

## Why Does the Delta Matter to NBWA?

- Except in Extreme Drought (1977), the Delta is Not a Water Supply Source, but:
  - Think of the Delta as "the Upper Estuary"
  - Climate Change will Increase Connectedness
    - ✓ Sea Level Rise
    - ▼ Temperature Rise
    - ✓ Flood/Drought Severity
    - ✓ Impacts on Productivity of Watershe
  - ➤ We're All in this Together
    - ✓ Constricted Water Resources
    - ✓ Aging Infrastructure
    - ✓ Rising Costs of Diminishing Services



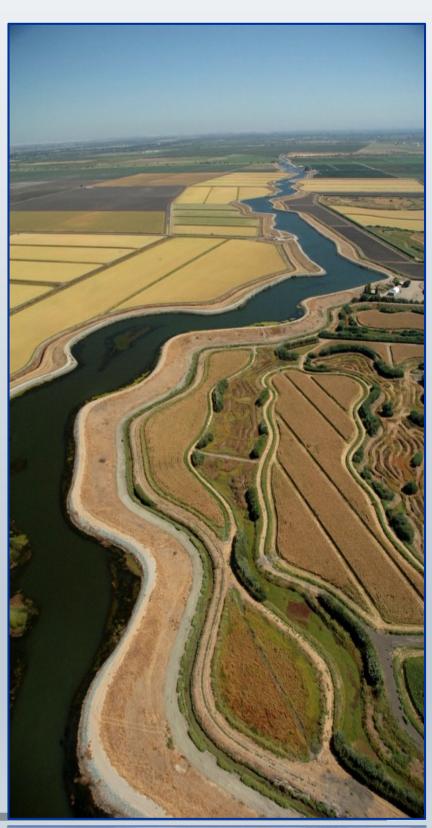
### Role of the Delta Watermaster

- Independent Officer of the State
- Created as part of 2009 Delta Reform Act
- Four-year Term
- Reports jointly to Water Board and Delta Stewardship Council

## Water Rights and Water Allocation

in the Delta

- Appropriation System Overlain on Riparian System
  - Appropriation by Priority: "First in Time, First in Right"
  - Riparian by Correlative Curtailment: "Shared Sacrifice"
- Most Senior Delta Water Rights "Pre-date" Administrative System
- Curtailment: "Whack-a-Mole"



# Response: Division of Water Rights Issued Informational Order During 2015 Drought

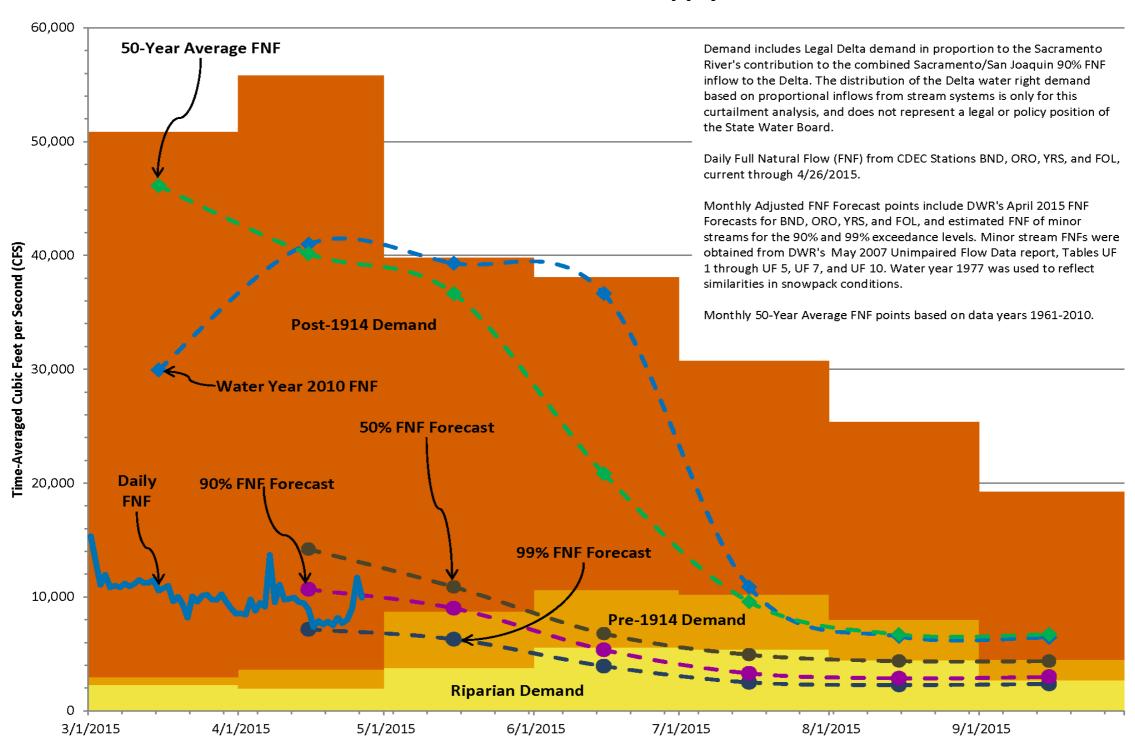
Short-term:

- Report Recent and Projected Water Use
- Informed Regular Updates to Water Supply Availability Analyses ("Supply/Demand Curves")

## WATER AVAILABILITY

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#### 2015 Sacramento River Basin Supply/Demand



## Response: Division of Water Rights Issued Informational Order During 2015 Drought Longer-term:

- - Provide Documentation Supporting the Senior Water Right Claim
    - ✓ Very High Compliance Rate
    - Avalanche of Material
    - ✓ Two-year Process of Organization, Review and Analysis
    - ✓ Culminated in First-ever Taxonomy of Delta Senior Water Rights Claims

## First Comprehensive Taxonomy of Senior Water Right Use in the Watershed

ALL STATEMENTS											
		Riparian Category					Pre-1914 Category				
	Total										
Claim	Statements	R1	R2	R3	R4	N/A	P1	P2	P3	P4	N/A
Only Riparian	108	9	9	18	72	0	0	0	0	72	36
Only Pre-14	75	0	0	0	6	69	27	11	31	6	0
Both	864	113	142	344	265	0	522	14	73	255	0
Neither	14	1	0	0	12	1	0	0	0	12	2
Total	1061	123	151	362	355	70	549	25	104	345	38

- Undergoing "Crowd Correction"
- Cracks Open "Black Box" of Delta Claims
- Fills Gaps in Understanding Water Diversion and Use

Managing Complexity Under the

Delta Reform Act

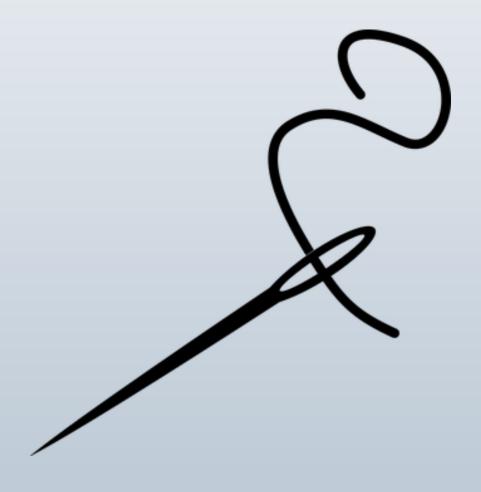
"Co-equal Goals"

- Three Issues:
  - 1. Water Supply Reliability
  - 2. Ecosystem Renewal
  - 3. Regard for Delta as an Evolving Place
- We Can All Agree on the Appropriate Balance, Right?



## Delta Plan – Thread the Needle Challenges:

- Natural
- Economic
- Infrastructure
- Cultural
- Ecological
- Vision



### The Delta Plan

- Currently Suspended –
  Procedural Attack (Of course!)
- Undergoing Major Revision:
  - Levee Investment Strategy
  - Storage, Conveyance and Operation of Both
  - > Ecosystem Renewal
- Delta Plan Interagency Implementation Committee

## What to Watch For

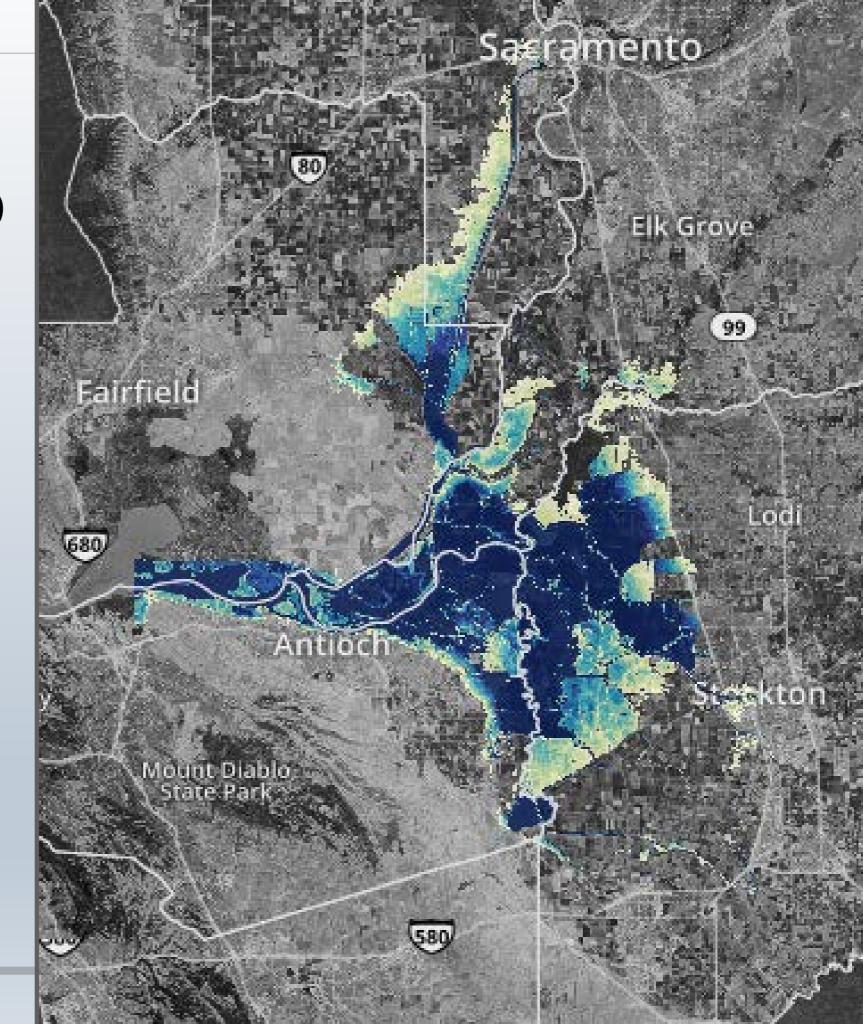


- Water Quality Control Plan Update (Can we set minimum flows?)
- WaterFix (Credible operating conditions?)
- EcoRestore (Practical, actionable, affordable, scalable or utopian?)
- Delta Plan Revisions (Can we escape the ESA single-species straightjacket?)
- Arrival of the Black Swan (Can a mature democracy manage change?)

## Sea Level Rise Scenario

- Sacramento San Joaquin Delta
- Inundation of 100-year Flood with 1.4M of Sea Level Rise

(Cal-Adapt.org)



## Questions Thank You

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