

#### One Water and Adaptation Committee

## Bay-Delta Science Summary Update

Item 6a August 18, 2025 Item 6a
Bay-Delta
Science
Summary
Update

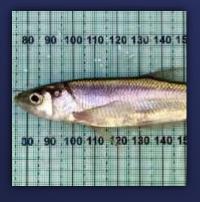
Subject Bay-Delta Initiatives Annual Science Report

Purpose

Provide an update on recent Metropolitan Bay-Delta Science Program achievements and ongoing projects

# Importance of Metropolitan's Bay-Delta Science Efforts

- Consistent with the Board's Bay-Delta policies
- Supports policy & management actions
- Fosters collaborative partnerships statewide
- Improves water supply reliability of SWP









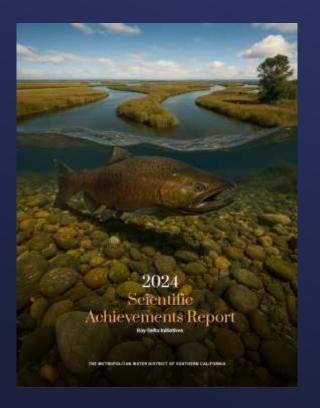
## Engagement with multiple agencies and interested parties is foundational to MWD's science program

Bay-Delta Science Collaboration



WATER & POWER

#### Bay-Delta Initiatives Science Update



#### Science Highlights

- Reorientating to Recovery of Salmon
- Multi-benefit Landscape Restoration on Webb Tract
- COEQWAL
- Delta Smelt
  - Preservation Project
  - Summer/Fall Actions 2025
- Future Studies and Collaborations

#### Funding Received and Spent

- Grants Received \$22M
  - Science \$1.12M
  - Webb Tract \$20.9M
- MWD funded \$2.5M
  - Cash contribution \$2.0M
  - In-kind \$500K
- MWD funds were leveraged with funding from others to achieve over \$8M in research

2024 Research Budget

## Collaborative process to identify projects for recovery of Chinook Salmon

#### Reorienting to Recovery





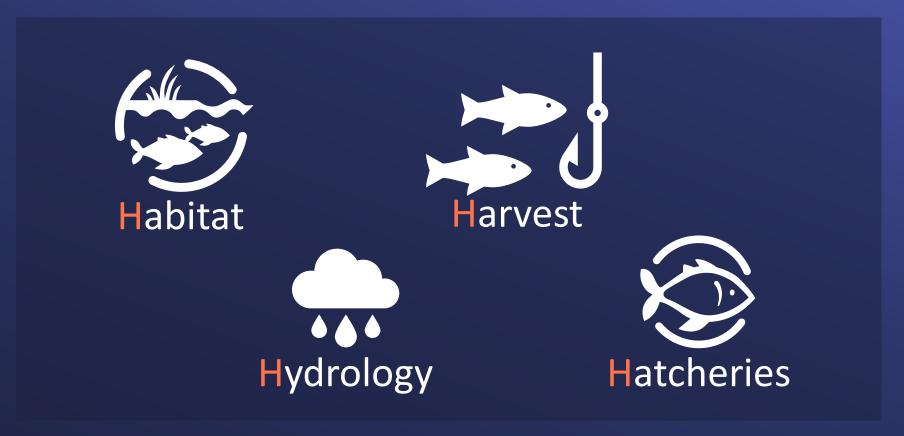
Identify a Suite of Actions to achieve salmonid recovery

Goal

# Four variables were identified as the most impactful towards Chinook Salmon recovery

Reorienting to Recovery

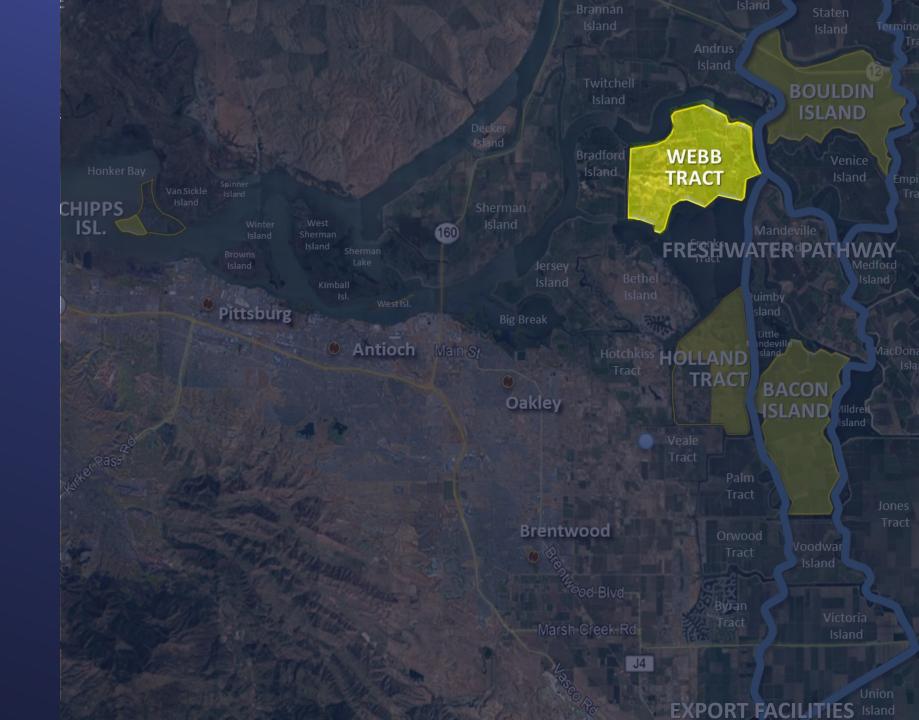




R2R was a collaborative value setting process, collecting feedback from over 110 entities and implemented comprehensive life cycle modeling

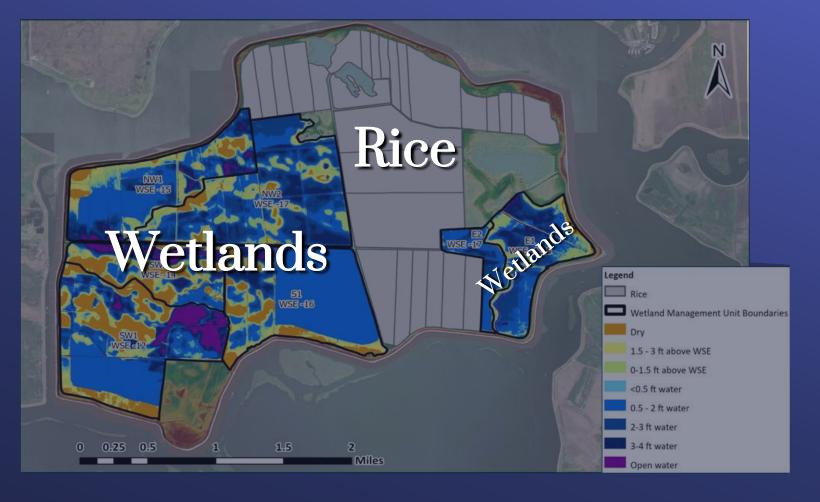
#### Multi-benefit Landscape Restoration on Webb Tract

\$20.9M grant awarded to Metropolitan by the Delta Conservancy



#### Multi-benefit Landscape Restoration on Webb Tract





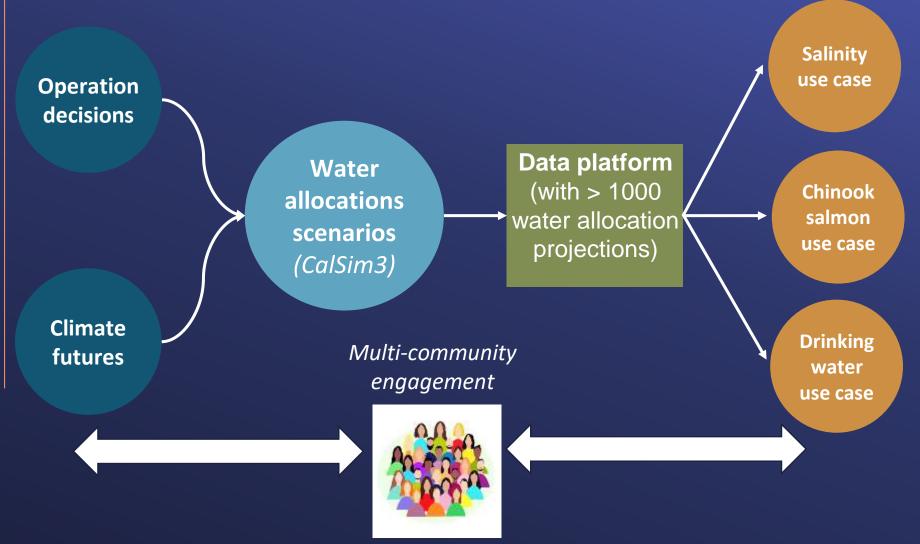
Benefits: sustainable agriculture development, GHG emissions reduction, habitat restoration and halting/reversal of subsidence

### Co-Designing Equitable Water Solutions

To manage water sustainably, equitably, and resiliently

### COEQWAL

Collaboratory for Equitable Water Allocations



#### Delta Smelt Preservation Project Objectives

#### l. Promote recovery of Delta Smelt

- CVP/SWP Permits Require Supplementation of 500K by 2030
- survival
- 1 reproduction
- 2. Improve water supply reliability and permit compliance
  - Permit protections for smelt reduce exports by 390 TAF/year on average

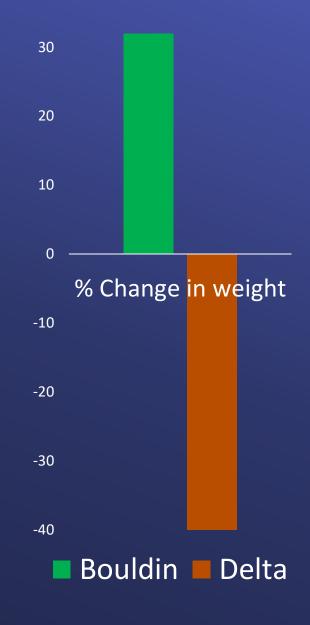


#### Delta Smelt Preservation Project Results



Existing ponds on Bouldin

- Successfully cultured delta smelt on Bouldin
  - >90% survival
  - Fall Growth: Bouldin > in the wild
- Evaluating further expansion in future
- Exploring multiple pond culture options



#### Delta Smelt Summer/Fall Operations 2025



## Structured decision-making saved SWP water this year

- Structured Decision-Making process was employed to evaluate summer/fall Delta operations
- Done in collaboration with multiple agencies and interested parties
- Potential to save the SWP approximately 150 TAF without impacting current protections for species

# Future Updates on Studies Collaborations

- Improving conditions for native species
  - Food
  - Habitat
  - Water Quality
  - Predation
- Webb Tract implementation
- Upper Feather River watershed projects
- Delta island studies on water use and accounting
- Tribal & community partnerships for longterm wetland management
- Additional structured decision-making opportunities

