

Imported Water Committee

Update on Bay-Delta Salmon Research

Item 6b November 7, 2022

Presentation Outline

Salmonid Recovery Project

- Project Goal
- Background
- Phases







Project Goal

Develop an effective and implementable strategy to achieve "broad-sense" recovery for listed and non-listed salmonids in California's Central Valley while considering other social, ecological, and economic interests in the region.



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Planning Team: water agencies & environmental groups

Added Value of Project A structured process to 'stitch together' disaggregated efforts to advance salmonid recovery

Measurable and ambitious recovery targets Entire salmonid life cycle Multiple models and analytical tools Consideration of all regional projects

Broad, equitable and transparent engagement



PHASE 1 Framework to Define Recovery



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PHASE 1 Recovery Definition

Thank you to the following scientists (and organizations) for helping to develop the recovery definition framework over the course of twelve workshops (and subsequent working groups) in 2021

























Recovery Definition Overview



Key Principles

- Viable Salmonid Population
- Not tied to regulatory or policy processes
- Seeks to go beyond delisting & support longterm harvest
- Distinguishes between: Natural/hatchery origin
- Species: Listed/non-listed

Recovery Definition Overview



Framework

| Objective | Metric | |
|-------------------|--|--|
| Abundance | Abundance relative to carrying capacity for spawning adults, holding adults, rearing juveniles | |
| Productivity | Population growth rate | |
| Spatial Structure | Number of independent viable populations | |
| Diversity | Age distribution of spawning adults | |

PHASE 2 Engagement





PHASE 2: Engagement During 2022 Outreach webinars to multiple organizations

McCloud River Reintroduction Group McCloud Watershed Council Tehama RCD Sacramento River Science Partnership Central Valley Salmon Habitat Partnership Central Valley Joint Venture Collaborative Science & Adaptive

Delta Conservancy Nor-Cal Guides & Sportsmen's Association San Joaquin River Restoration Program Pacific Fishery Management Council

Management Program

Butte RCD Yuba River Management Team Water Forum Cosumnes Coalition Mokelumne River TAC Stanislaus River Fish Group Turlock Irrigation District (Tuolumne interested parties) San Joaquin Conservancy California Indian Environmental Alliance

105 participants60 organizations

Organizations Tribal Nations (4) Non-governmental Organizations (14) Academic Universities (2) State Agencies (12) Federal Agencies (3) Fishery (l) Agriculture (5) Water Agencies (8) Waterfowl (l) Consultants (10)

Values Workshops June 2022

Values

Perspective on values related to salmonid recovery

Watershed Specific Data

- Alternatives/modifications to datasets currently being used for modeling
- Information to set targets at the specific watershed level

Project Catalog



Values Questionnaire

- How do you imagine salmonid recovery might benefit you?
- How do you imagine efforts to achieve salmonid recovery might negatively impact you?
- What are the unique factors in your watershed that act as barriers to salmonid recovery?



Values Statements

- Salmonids as an indicator of the health and integrity of the Bay-Delta
- Preserving natural habitats despite cultural and societal externalities
- Climate change accommodation
- More people employed in salmonid related jobs
- Improving water supply by providing greater flexibility in how and when water is delivered to farms to grow food and cities for human use



Project Data and Project Catalog

- Watershed Data
 - How many salmonids are produced?
 - What habitat is available to restore?
- Project Catalog
 - >200 projects

PHASE 3 Decision Support



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$\begin{array}{c} \text{Builds on} \\ \text{Phase I and 2} \end{array}$

Next Steps – Phase 3

- 2022: Kickoff workshops Dec 1, 6, 12, 2022
- 2023:
 - Identify actions to recover salmonids
 - Estimate consequences of actions
 - Compare tradeoffs of actions
- 2024, March: Strategy to achieve "broadsense" recovery while considering other social, ecological, and economic interests in the region.

Metropolitans' Interests

Metropolitans' Interest

Revised Bay-Delta Policy Objectives

- Promote a Sustainable Bay-Delta Within Metropolitan's One Water Approach
- Support Statewide and Regional Actions that Further the Coequal Goals Established in the Delta Reform Act
- Address the Risks Associated with Climate Change

Revised Bay-Delta Policy Framework

| Science and Watershed Management | Water Supply Reliability and Resilience | Partnerships and Cost-Effective Investments |
|--|--|--|
| Protect and restore aquatic species and habitats based on best available science | Protect water supply reliability and quality while reducing reliance consistent with the Delta Reform Act | Maintain and pursue cost- effective financial investments |
| Partner in watershed-wide approaches to develop comprehensive solutions | Invest in actions that provide seismic and climate resiliency | Foster broad and inclusive engagement of Delta interests and beneficiaries |
| Advance responsible stewardship of Metropolitan's Delta islands | Seek flexible operations, water management actions, and infrastructure solutions | Promote innovative and multi-benefit initiatives |

ESA listed species limit water supply reliability

Metropolitans' Interest

- Project will identify priority actions to recover salmonids agreed upon by multi-user group
- Metropolitan can identify what actions we can best aid

