



Update on Salmon Initiatives

Bay-Delta Committee
Item 6a
September 28, 2021

Overview

- Salmonid status and life history
- Science investigation priorities
- Salmonid initiatives and collaboration
- Moving forward

Status of Central Valley Salmonids

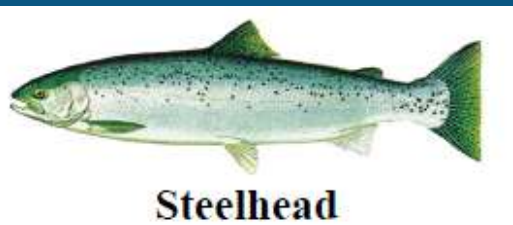
Endangered and
threatened=
export restrictions



Federal:	Endangered
State:	Endangered



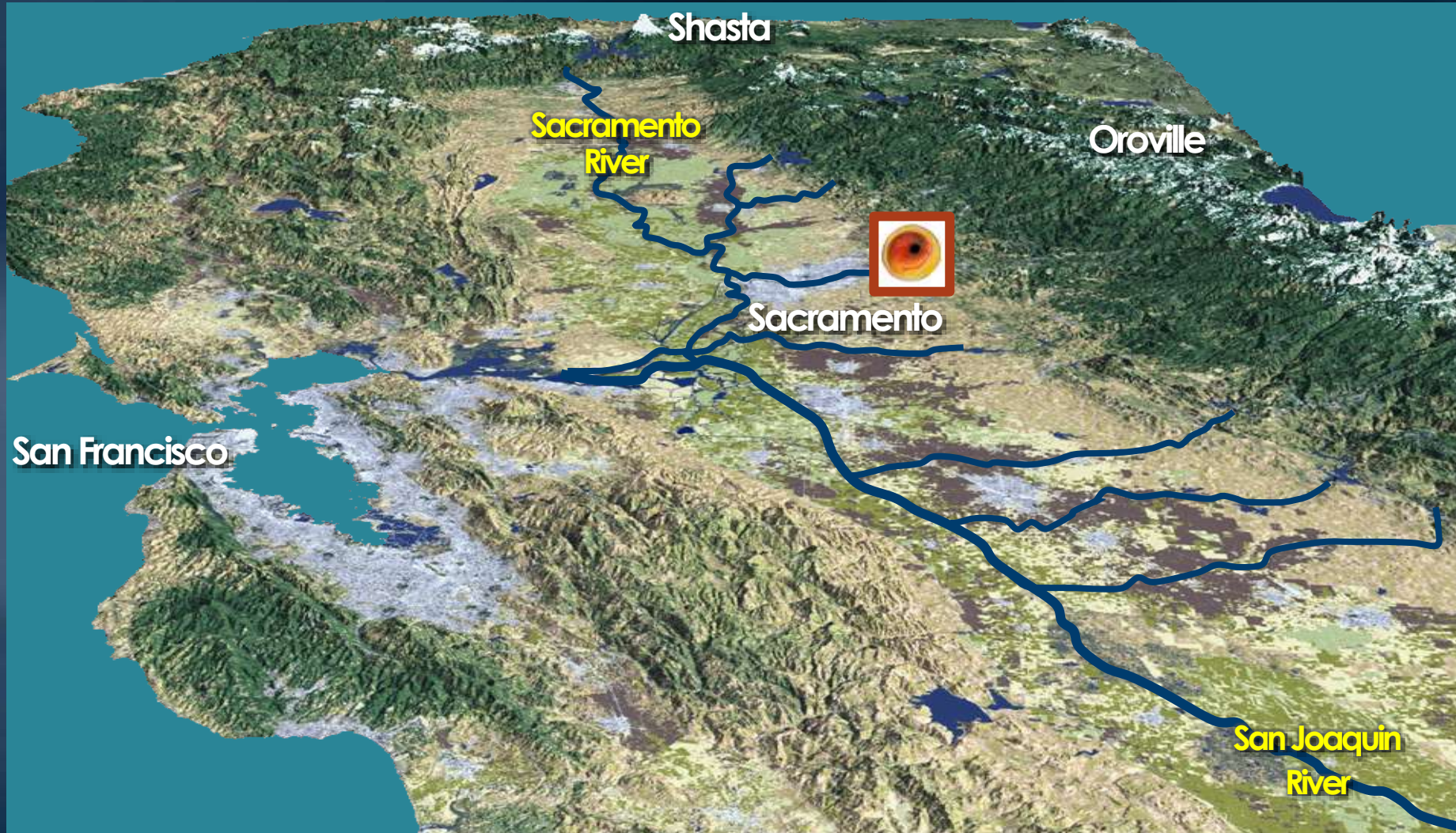
Federal:	Threatened
State:	Threatened



Federal:	Threatened
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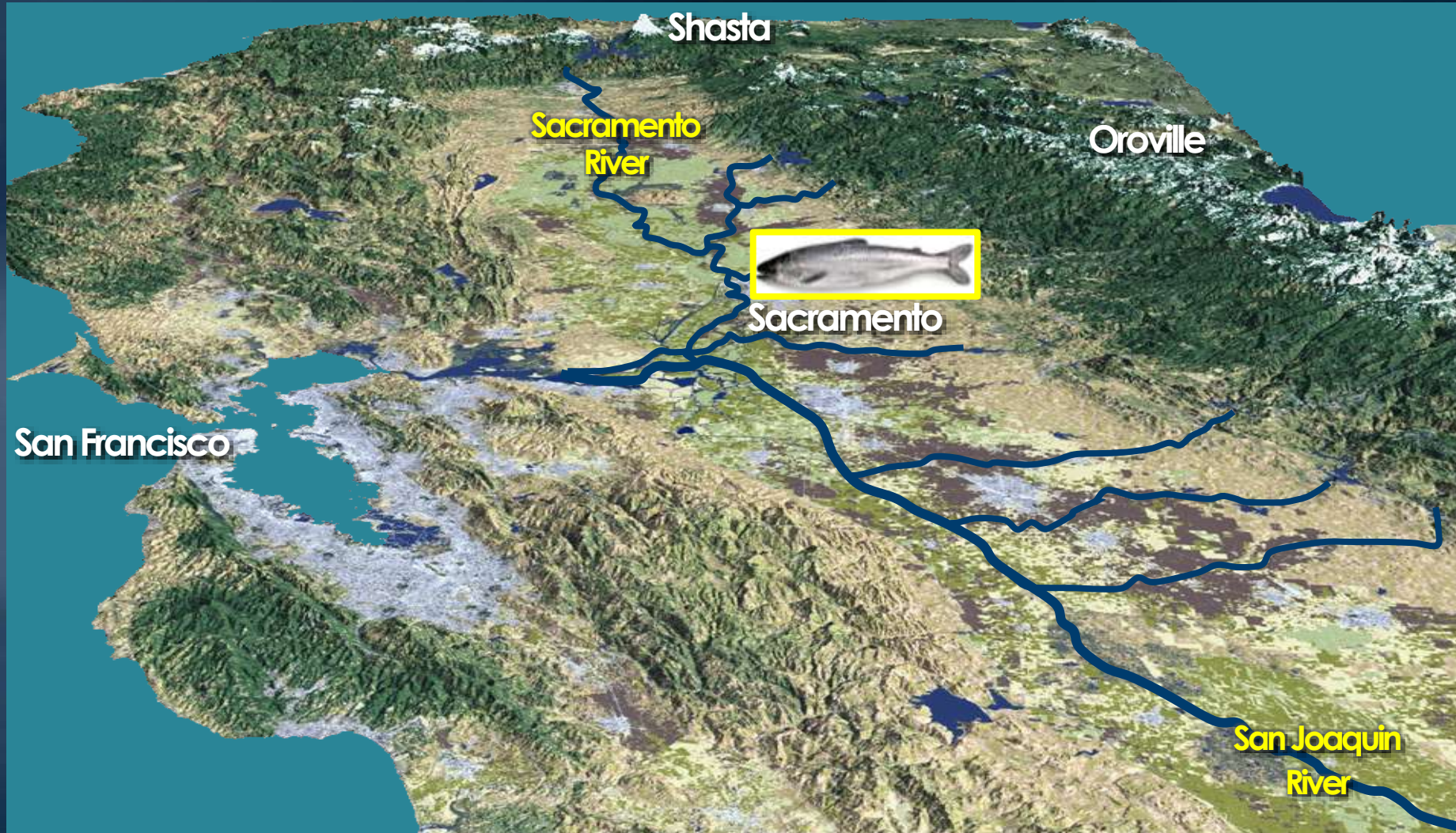
Status of Central Valley Salmonids

Sacramento/San Joaquin Bay-Delta Watershed



Status of Central Valley Salmonids

Sacramento/San Joaquin Bay-Delta Watershed



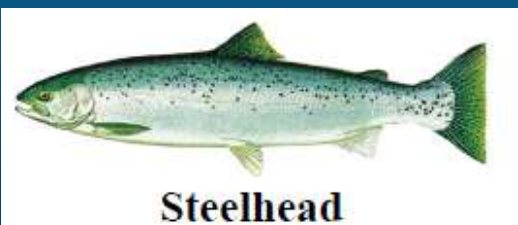
Status of Central Valley Salmonids

Sacramento/San Joaquin Bay-Delta Watershed

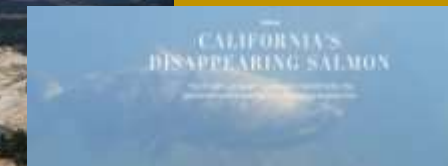


Rebuilding Salmonid Populations Requires Long-Term Approach

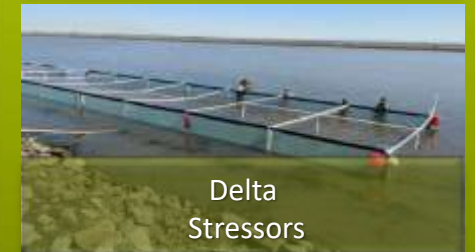
Endangered and
Threatened =
Export Restrictions



Multiple Habitats =
Multiple Threats



Rebuilding
Populations



Science Investigation Priorities

- What is the **effectiveness of management actions** implemented to improve habitat conditions and food availability for listed fish species?
- What are the **impacts of different stressors** on aquatic species in the Delta and their role in species decline?
- What are the **habitat needs** for the listed fish species?
- What **technologies** are needed to enhance our ability to monitor and study listed fish species?

Salmonid Initiatives (2017-Present)



Effectiveness of
Management Actions

- 6 studies
 - Entrainment
 - Species distribution



Habitat Needs for
Listed Species

- 11 studies
- 2 publications
 - Fish food
 - Habitat use



Delta
Stressors

- 9 studies
- 3 publications
 - Predation
 - Pathogens
 - Contaminants
 - Species recovery



Innovation and New
Technology

- Acoustic tagging
- eDNA
- Probabilistic modelling
- Advising graduate students

CSAMP Salmonid Recovery Initiative

- Collaborative Science and Adaptive Management Program (CSAMP)
 - Collaborative forum addressing protection listed fish in the Delta and operation of water projects
- Volunteered to focus on salmonid recovery
- Collaboration between water agencies and environmental groups

CSAMP Salmonid Recovery Initiative Planning Team



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Trout Unlimited



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Michael Harstone
Compass



Brian Crawford
Compass



Bruce DiGennaro
Essex

CSAMP Salmonid Recovery Initiative Funding

- ~\$1.9 million
 - Delta Stewardship Council: ~\$1.5 million
 - State Water Contractors \$400,000
- 3-year timeline

CSAMP Salmonid Recovery Initiative



Salmonid Initiatives Working to Rebuild Populations



Scientific Expertise



Collaboration



Participation

Metropolitan's
Science
Program
Approach



Funding

Rebuilding Salmonid Populations Requires Long-Term Approach

- Listed species = export restrictions = water supply reliability issues
- Salmonid initiatives
 - Effectiveness of management actions
 - Delta stressors
 - Habitat needs for listed species
- Salmonid recovery provides ecological, social, and economic benefits

