



Sacramento River

SETTLEMENT CONTRACTORS



108
RECLAMATION DISTRICT

Agreements to Support Healthy Rivers and Landscapes

Public Water Agency Perspective

Lewis Bair / General Manager

Agenda

Need and Purpose

Objectives

About Us

Approach: Collaborate, Innovate, and Implement
Large Scale Restoration Collaboration

Questions





Need and Purpose

Need

California's defining 21st century challenge in the face of climate change: reconciling water supply and food security with ecosystem function.

Purpose

Implement science-based collaboration to address recovery of imperiled populations of keystone species in the native fisheries across life stages at a landscape scale.



“...to establish water quality control measures that provide reasonable protections for beneficial uses in the Delta Watershed.”



Need and Purpose

Regulatory Pressures

California’s State Water Resources Control Board has a mandate to update and enforce the Water Quality Control Plan for the Bay-Delta (Bay-Delta Plan).

The only tool in the SWRCB toolbox
= water rights = flow.

Species Decline and Conflict

Increased flow would mean detrimental impacts to terrestrial species, economic sectors, and community prosperity.



Objectives

Ultimate Goal

Species Recovery and a Healthy Watershed

Objectives

Expand the SWRCB toolbox through partnership and collaboration

Build ecological resiliency with diversity and addressing function, not just flow

Approach

Agreements for Healthy Rivers and Landscapes





About California

Managed Water System in Northern California

- 🌊 State of California and US Bureau of Reclamation operated water systems
- 🌊 Controlled river flow to meet storage, flood, and irrigation metrics
- 🌊 Shasta Dam is the flagship and largest reservoir at the head of the federally operated system. This is a precipitation-based watershed.
- 🌊 Precipitation and demand are shifted in California.



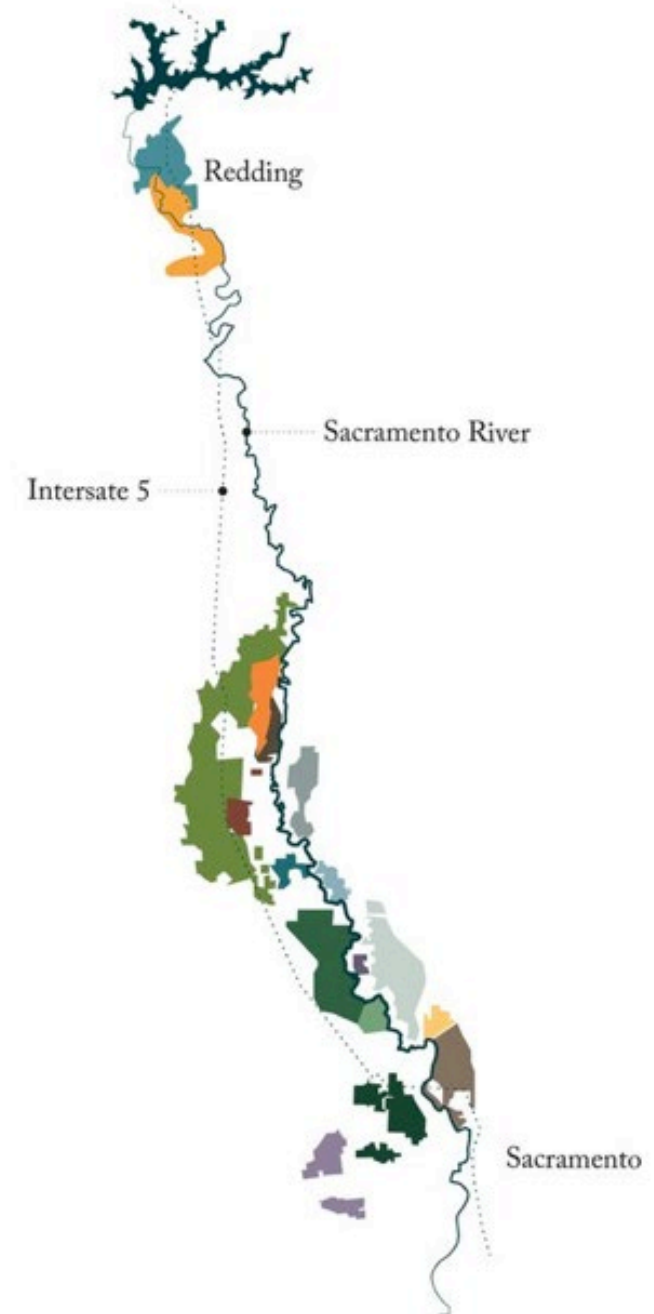
About RD108

- ❖ A public entity with almost 50,000 acres of reclaimed land in the Sacramento Valley with agricultural, drainage, flood control, and ecosystem management imperatives.
- ❖ Second largest SRSC Member
- ❖ Over 150 years of leadership in Northern California and managing member of Sacramento River Settlement Contractor Non-profit Corporation.



About SRSC

- Senior water rights holders on the Sacramento River (water rights that pre-date Shasta Dam)
- More than 135 members with 90% of the water rights on the Sacramento River
- Irrigation Districts, Mutual Water Companies, Reclamation Districts, and Private Landowners
- Reputation of collaboration and propensity toward action: The Fix not the Fight



Approach

Collaborate, Innovate, Implement

Landowners



Conservationists



Collaboration

Regulators



Scientists



Innovation

Use experience to maintain water systems to implement restoration projects and spread the workload across SRSC members

Identify problems like thiamine deficiency and implement creative solutions



Implementation

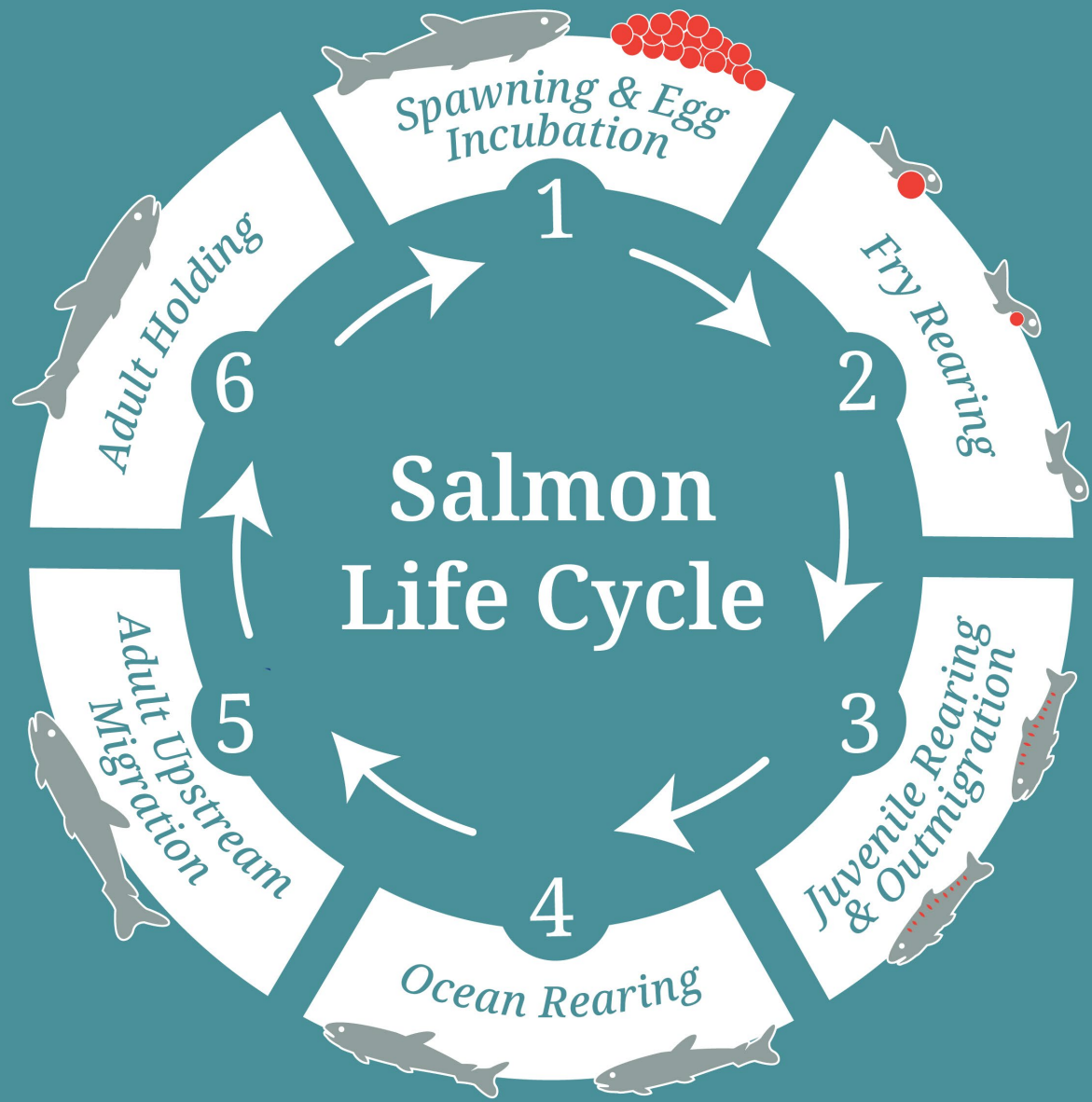
- Implementing restoration with water agency forces since 2014
- Spawning/Gravel Projects
- Rearing Habitat Projects
- Floodplains Project
- Fish Food

Landscape Scale Restoration Across Salmonid Life Stages



Priorities

- Native Fish Species Recovery
- Climate Change Resiliency
- Flood Control Resiliency
- Community Prosperity
- Groundwater Recharge
- Waterfowl and Wildlife Resiliency





Upper Sacramento River / Stage 1
Spawning Gravel Injection

Since 2018
60,000+ tons
28 acres of spawning habitat

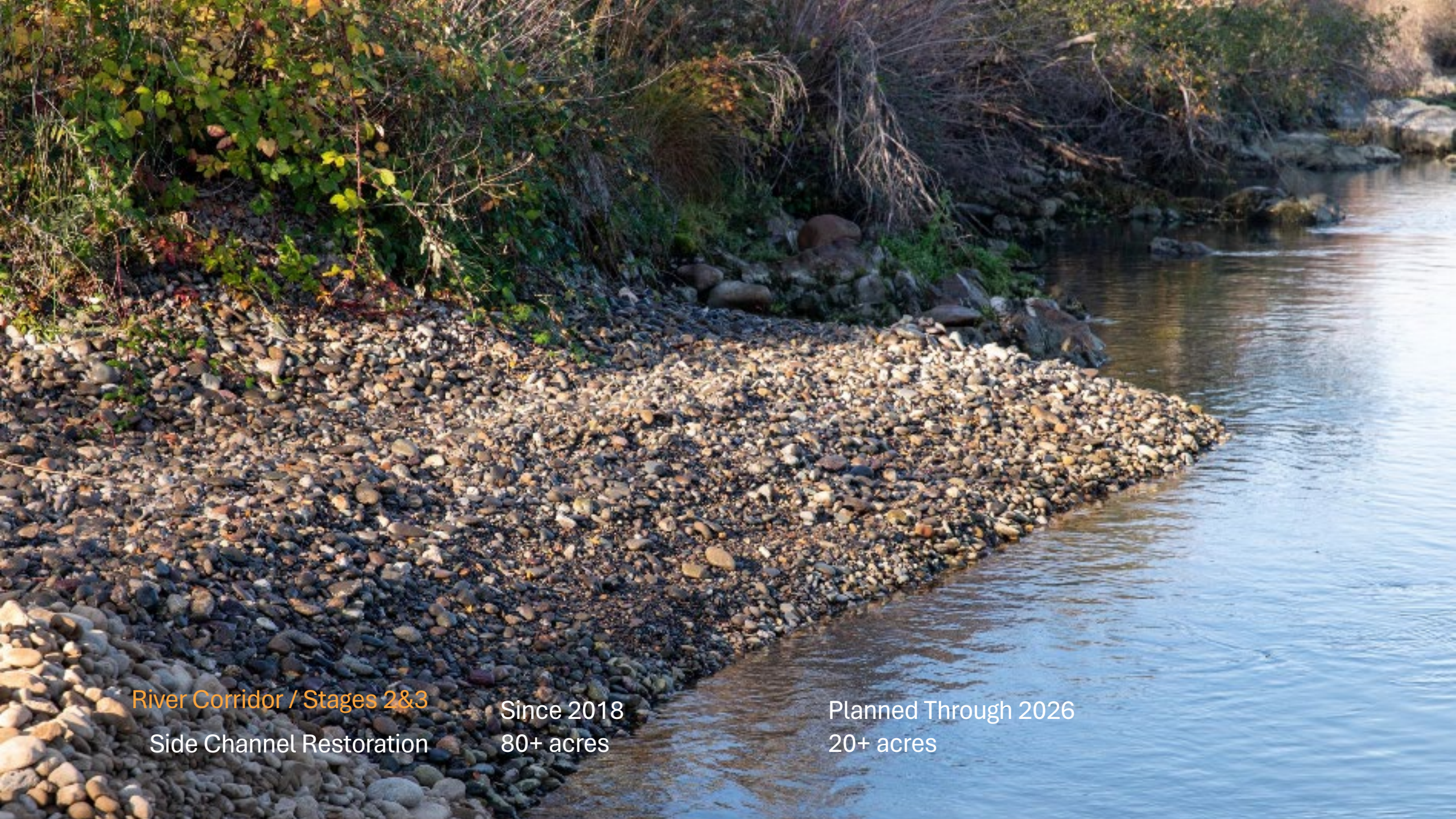
Planned (through 2026)
40,000+ tons
22 acres of spawning habitat



Upper Sacramento River / Stage 2
Juvenile Refugia Habitat

Since 2018
25 'rockwads'

Planned (through 2026)
25 additional 'rockwads'



River Corridor / Stages 2&3
Side Channel Restoration

Since 2018
80+ acres

Planned Through 2026
20+ acres



Sacramento Valley / Stage 3

Fish Food on Flooded Farm Fields - 35,000 acres activated in 2023/24 season

Landscape Scale Restoration Historic Floodplains

- Field research is starting to point to the importance of access to nutrients on the historic floodplains to the health and condition of Chinook salmon.
 - 20% of juveniles have access to the historic floodplain
 - 80% of the juveniles that return for spawning have chemical signatures indicating that they were reared on floodplains



Landscape Scale Restoration Historic Floodplains

- 🦋 Diverse partnership across water users, NGOs, landowners, land managers, resource and permitting agencies, and State and Federal governments
- 🦋 Grassroots partnership that is voluntary respecting existing land uses
- 🦋 Prioritizes on-the-ground feasibility considering infrastructure, operations, and advancing science.





Landscape Scale Restoration Historic Floodplains

- Almost 1/2 million acre footprint in Northern California
- Focused on increasing growth and condition of juveniles in life stage 3 to increase potential for outmigration and return
- Scientific efforts are indicating that access to floodplain nutrients could have significant impact on salmon return.
- A highly collaborative \$2 billion portfolio of projects

Landscape Scale Restoration Historic Floodplains

- 🦋 Floodplains Reimagined is structured to enhance diversity, create a space for shared understanding, and encourage diverse viewpoints to develop robust solutions
 - 🦋 Guided by a charter
 - 🦋 Phase 1 is concluding; Phase 2 will start this May with an emphasis on
 - 🦋 technical assistance for landowners, NGOs, and land managers and
 - 🦋 Advancing science by addressing scientific uncertainties identified in Phase 1



**FLOODPLAINS
REIMAGINED**

Program Team

**Role: Management
of Funding and
Program**

Fiscal Agent (RD 108)

**PM and Grant Admin
Technical Resources**

Steering Committee

Role: Approval

**Closed 11 Person
Membership**

**Landowners/Water Users (3) NGO/Academic (3)
State/Federal Agencies (4) Tribes (1)**

Advisory Committee

Open Membership

**Role: Make Recommendations to the Steering
Committee**

Ad Hoc Groups

Open Membership

**Role: Discuss topics in detail and make
recommendations to the Advisory Committee**

Ongoing Work

- *Advancing science*
 - *Identifying restoration needs based on multiple inputs*
 - *Genetic/parentage studies*
 - *UC Davis – Fish Eye Study*
- *Addressing permitting capacity and efficiencies*
- *Building robust monitoring and data feedback loops*
- *Building capacity*

An aerial photograph of a wide, dark green river. On the right bank, there is a dirt road running parallel to the water, followed by a strip of green trees and bushes, and then a large, brown, tilled field. The text "Thank You Questions?" is overlaid in the center of the river.

Thank You
Questions?



Sacramento River

— SETTLEMENT CONTRACTORS