

RRIFR
Russian River Instream
Flow and Restoration

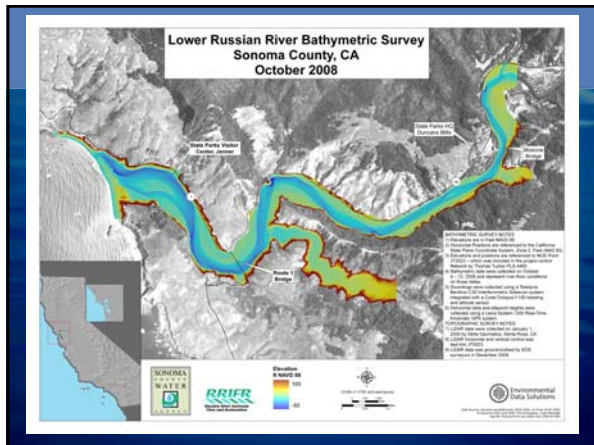
Russian River Estuary

Jessica Martini-Lamb, Principal Environmental Specialist

RRIFR
Russian River Instream
Flow and Restoration

Estuary RPA – Year 1

- Bathymetric Survey
- Lagoon Outlet Channel Adaptive Management
- Artificial Breaching
- Monitoring



RRIFR
Russian River Instream
Flow and Restoration

Lagoon Outlet Channel Adaptive Management

- 7 ft. water surface elevation (May 15 to October 15)
- Year 1 Plan works with natural processes – no structures
- Pursue incremental changes to existing mgt practices

RRIFR
Russian River Instream
Flow and Restoration

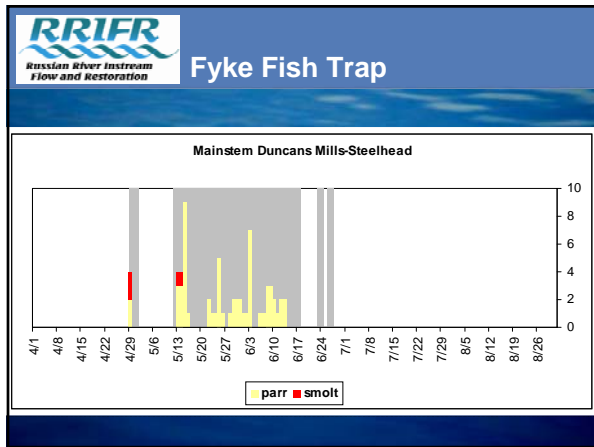
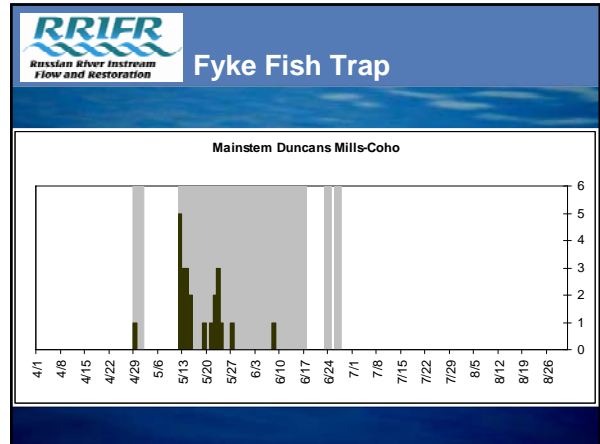
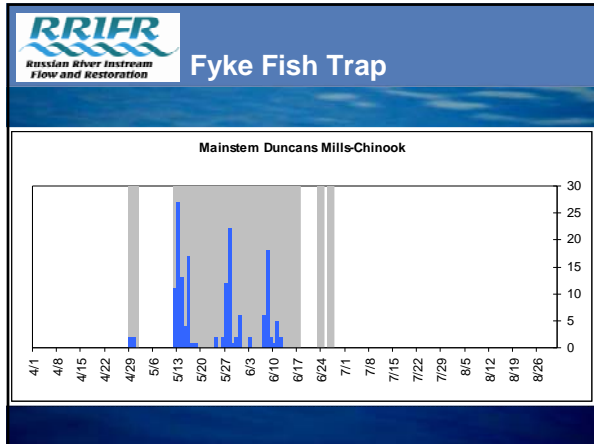
Lagoon Outlet Channel Adaptive Management

- Marine Mammal Protection Act
 - Pinniped monitoring with Stewards of Coast and Redwoods
- Modify existing federal and state permits
 - Corps, State Parks, NCRWQCB, State Lands, Coastal Commission, CDFG

RRIFR
Russian River Instream
Flow and Restoration

Fyke Fish Trap

- Target is YOY steelhead
- Successes
- Challenges



Fyke Fish Trap

- Target is YOY steelhead
- Successes
- Challenges

Invertebrates

- Univ of Washington
- Response to change in Estuary condition
- Salmon prey
 - Distribution
 - Composition
 - Abundance

Pinnipeds

- Collaboration with Stewards of Coast and Redwoods
- Baseline
- Breaching/lagoon outlet channel mont.



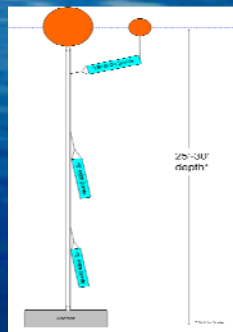
Seining

- Distribution & abundance
 - Listed steelhead, Chinook salmon, coho salmon
 - Common species
- 8 sites every 3 weeks, May to September



Water Quality

- 6 locations, May to December
- Multi-sonde arrays
- Continuously record hourly data
 - Temperature, dissolved oxygen, pH, salinity, conductance, depth



Artificial Breaching

- 4 artificial breaching events in 2009 to date
 - 2 breaching between May 15 – Oct 15



Extended Closure

- Sept 6 – Oct 5
- 30 days
 - Previous longest: 14 d
- Daily mean flow 70-96 cfs
- Monitoring
 - Water quality, inverts, fish, pinnipeds



Year 2 Tasks

- Monitoring
- Camera installation
- Circulation modeling
- CEQA
- Permitting
- Flood risk mgt feasibility study
- Implement Lagoon Outlet Adaptive Mgt Plan

