



Russian River Habitat Focus Area

Managing and Restoring the Russian River Estuary for Multiple Uses

National Ocean Service, National Marine Fisheries Service and NOAA Restoration Center



Gualalaredoods.com

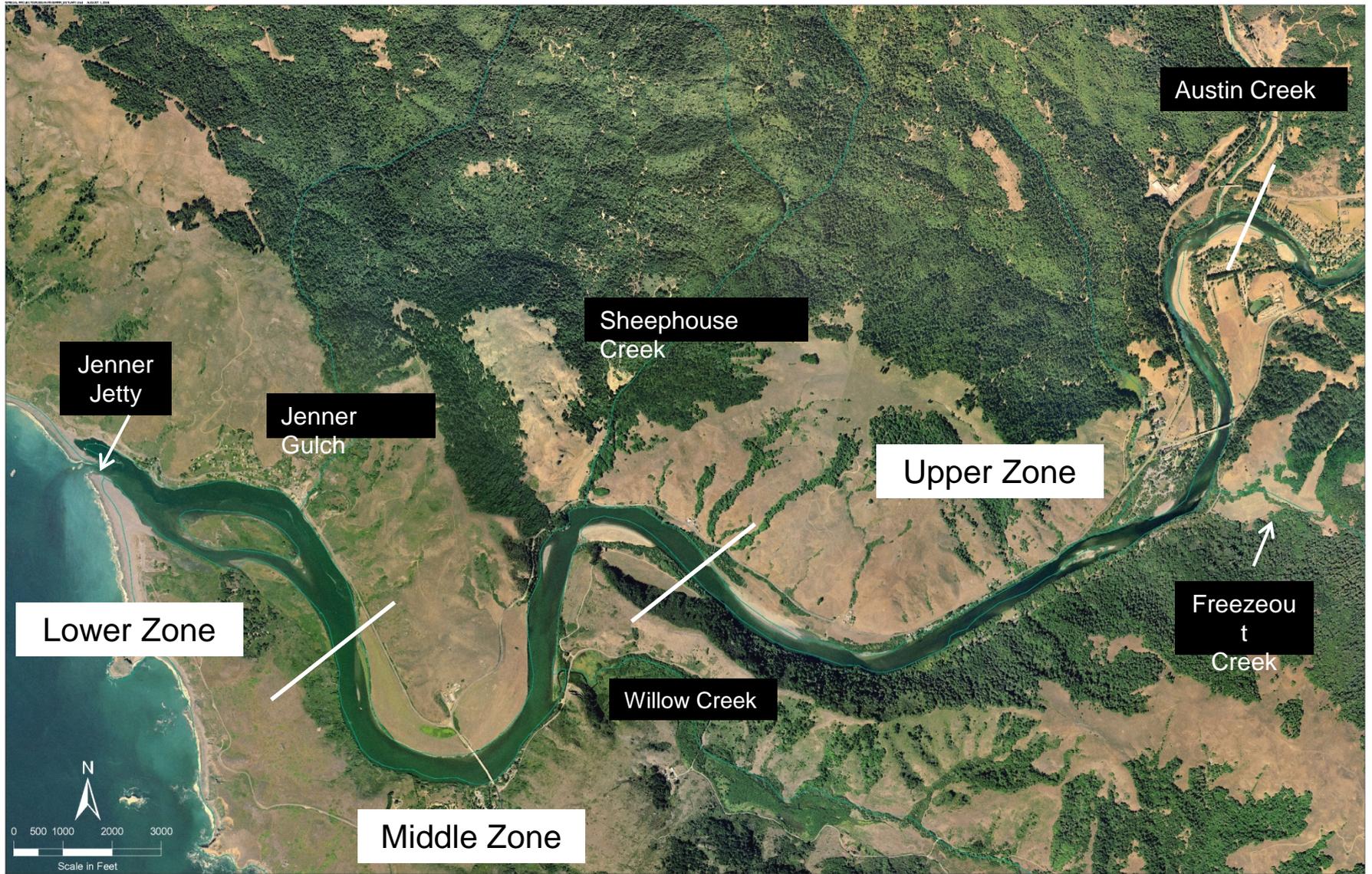




Project Area: Russian River Estuary from the beach/river mouth at Jenner extending inland to approximately Monte Rio
The project will also incorporate near shore / ocean and watershed processes.



Russian River Estuary



Managing for Multiple Uses



Resources



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Current Management

Conserving California's Coastal Treasures



Marine Protected Areas Safeguard Our Ocean's Bounty

A statewide network of Marine Protected Areas (MPAs) safeguards California's rich coastal resources. The MPAs here protect offshore rocky reefs, kelp forests and beaches. The river mouth and salmon, who return here from the sea each year to spawn in their birth streams, are also protected. Paddlers and hikers enjoy views of harbor seals basking on the beach. Seabirds and shorebirds soar and dive to feed on abundant fish.



MPA Regulations

- Russian River State Marine Recreational Management Area (SMRMA)**
Take of all living marine resources is prohibited except recreational hunting of waterfowl, unless otherwise restricted by hunting regulations.
- Russian River State Marine Conservation Area (SMCA)**
Take of all living marine resources is prohibited except the recreational take of Dungeness crab by trap and surf smelt by hand-held dip nets or beach nets. Commercial take of Dungeness crab by trap allowed.



Harbor seal

California leads the nation and the world with its network of MPAs.

These MPAs—

- Have varying levels of protection
- Conserve marine habitats and diversity
- Allow marine life to thrive
- Make great places for education, research and fun

MPAs—Good for the Ocean; Good for You!



This scenic shoreline is breached by the Russian River as it flows to the sea. Sonoma Coast State Park makes beaches accessible for all to enjoy.

With MPA protection, salmon and steelhead populations may rebound.

Western gulls find food in MPAs and roost on nearby rocks and beaches.

Thousands of marine species are protected in kelp forest ecosystems within MPAs.

To report violations call 1-888-DFG-CALTIP
Visit www.dfg.ca.gov/mpa for detailed maps and regulations



Current Management

ESTUARY/LAGOON MANAGEMENT RR BiOp

Two Prong Approach

1) Adaptively manage the beach/breachings to promote sustained perched lagoon

- When beach naturally forms, promote long outlet channel over beach
- Manage estuary water elevations to maximize summer habitat volume
- Controlled breachings at > 7 feet elevation to prevent flooding
- Evaluate artificial Jetty modification/removal

2) Reduce inflows by reducing reservoir releases

- Dry Creek and East Branch Russian
- modify mainstem river flow requirements D1610

Objectives

Initial Objectives:

"Exploring the role of habitat for fisheries and coastal resilience"

This project will seek to convene and support an **Estuary workgroup**, composed of local, state, federal and local community members, that aims to support estuary conservation planning and develop recommendations and projects for improving habitat.

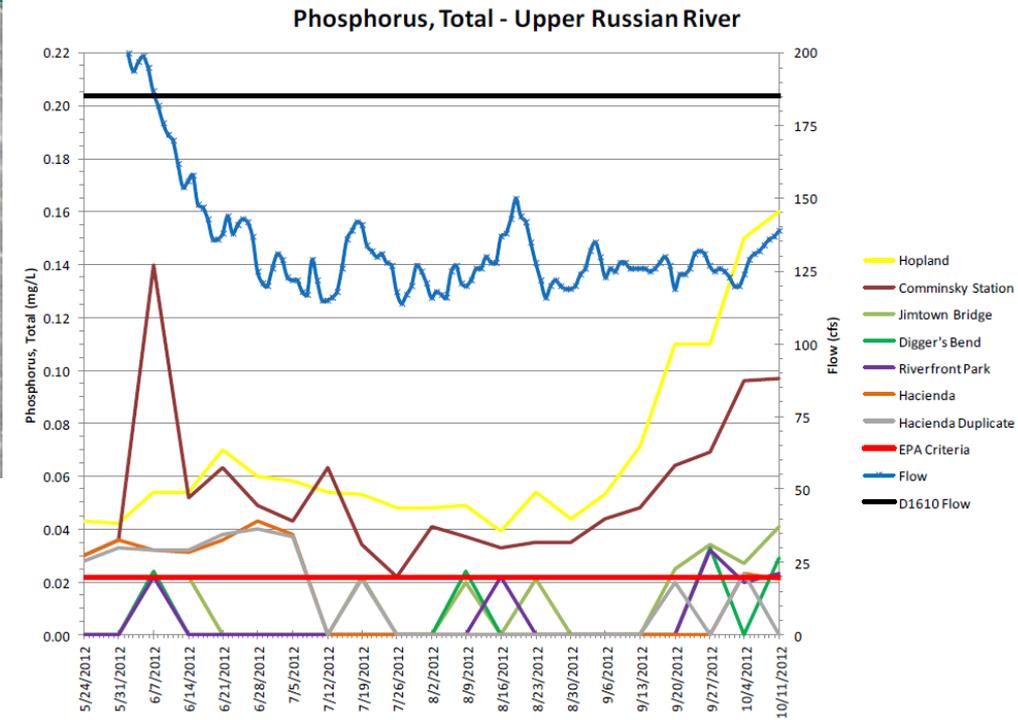
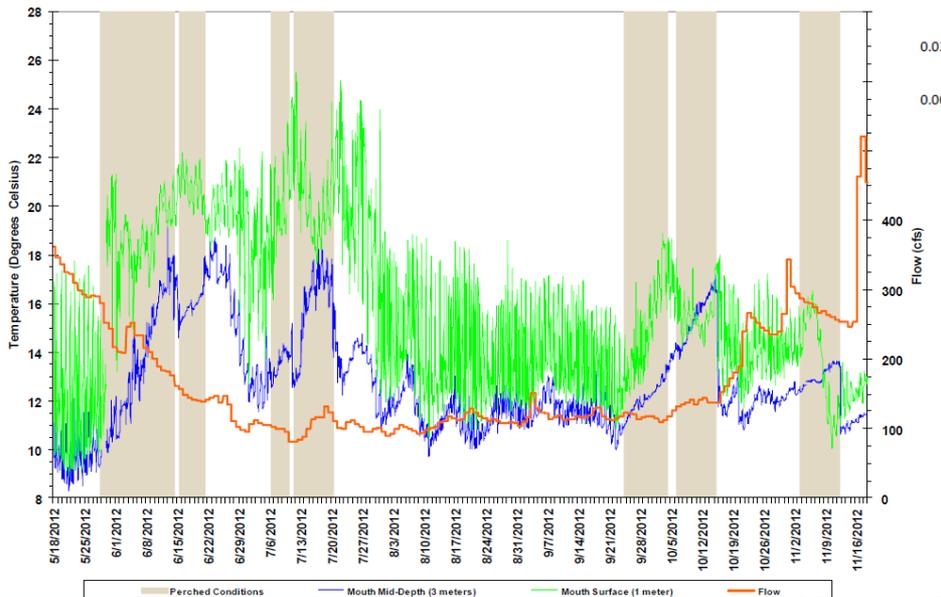
In addition, the project aims to develop a **planning framework** that aims to identify restoration and enhancement projects and make recommendations on future projects and management.

The project will also explore how to integrate climate change and sea level rise scenarios into the planning framework.

Current Science - SCWA/UCCE



Russian River Mouth - Temperature and Flow 2012



Fisheries Focus

Chinook



Coho



Steelhead



Restoration of Estuarine Wetlands and Ecology of Salmon in Salmon River Watershed

An aerial photograph of a river system flowing through a lush, green landscape. The river is dark blue and winds through a network of green wetlands and meadows. The surrounding hills are covered in dense green forests. The sky is a clear, pale blue.

Partners in restoration and research:

Oregon Watershed Enhancement Board

USDA Forest Service

Oregon Department of Fish and Wildlife

Oregon Sea Grant

NOAA Fisheries

University of Washington

National Fish and Wildlife Foundation

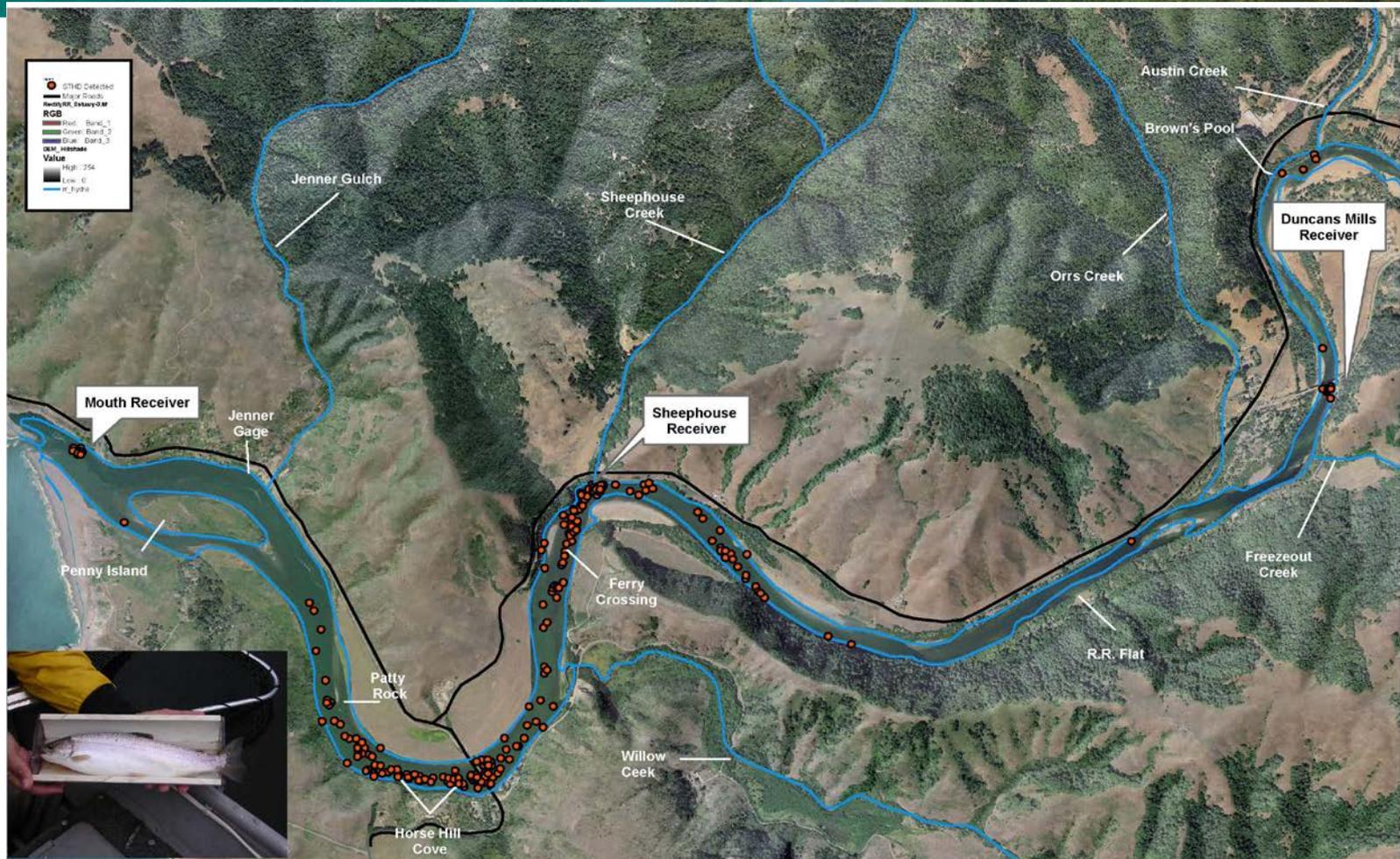
Photo by Carey Smith, Pacific Coast Joint
Venture, Vancouver, WA

Importance of Estuaries to Juvenile Salmon

An aerial photograph of a large estuary. A river flows from the top left towards the bottom right, where it meets the ocean. The estuary is characterized by a complex network of channels and tidal flats, with varying shades of brown, tan, and green. The coastline is lined with dense, dark green forest. The sky is a pale, hazy blue.

- Transition to salt water
- Productive feeding area
- Refuge from predators

Habitat Focus



0 0.25 0.5 1 1.5 2 Kilometers

Russian River Estuary
Sonoma County, CA
Josh Fuller 2008

2006 - 2007 Locations of Tagged STHD
Detected After Release July - January 2006/07:
STHD detections in December and January
were upstream of Austin Creek.
Draft

Jenner Jetty



Constructed between 1929 - 1941

Willow Creek



Bridgehaven



Future Planning / Science

Specific project elements could include:

Extending the OCOF project which integrates high resolution topographic data with sea level rise projections to develop maps and data for planning and management.

Developing a training / workshop to complement the Blueprint project. Potential training topics could focus on climate change adaptation planning or integrated solutions for increasing coastal resilience.



NOAA



Ultimately, this could result in identification of priority actions for improving habitat and conservation/ management of coastal and estuarine resources in the Russian River and in informing the Adaptive Management Plan in the NMFS Russian River Biological Opinion.

