

Coastal Off-channel and Tidal Habitat Restoration Symposium



November 15-16, 2012, Eureka, California

Humboldt Bay Aquatic Center



This two day symposium will provide overviews and methodologies of innovative restoration techniques that were employed in the Humboldt Wildlife Refuge, coastal tributaries, and the Klamath estuary including restoring the natural meander of the estuarine side-channel, wood loading to provide structure and diversity, and restoring the salt marsh. Participants will tour estuary and wetlands restoration sites, coho off-channel habitat, and tide gate designs.

Symposium Agenda, 9am to 5pm, November 15

The Background and Development of Off-Channel and Estuary Habitat Restoration for Coho Salmon in California, *Mitch Farro*, Pacific Coast Fish, Wildlife and Wetlands Restoration Association

Response of Juvenile Salmonids to Habitat Restoration in the Tidal Portions of Humboldt Bay Tributaries, *Michael Wallace*, Environmental Scientist, Natural Stocks Assessment Project, California Department of Fish & Game

Regulatory Compliance and Constraints in the Coastal Zone; Case Studies on Humboldt Bay Tributaries, *Aldaron Laird*, Environmental Planner, Trinity Associates

Addressing Geomorphic and Hydraulic Controls in Off-channel Habitat Design, *Conor Shea*, U.S. Fish and Wildlife Service

DFG's Design Guidelines for Off-Channel and Side Channel Habitat Restoration Projects, *Mark Smesler*, Regional Engineering Geologist, California Department of Fish and Game

Salmon Creek Tidal Sloughs and Off-Channel Ponds: The Design Process and Post-Construction Observations, *Michael Love*, Michael Love and Associates

Biogeomorphic Approaches to Creating Off-Channel Habitat, *Rocco Fiori*, Yurok Tribal Fisheries Program

Modern Tidegates and Muted Tidal Regulators, *Leo Kuntz*, Tidegate Specialist, Nehalem Marine

Poster Session and Reception, 6pm to 8pm, November 15

Please join Salmonid Restoration Federation for a poster session and reception to highlight Coastal Off-channel and Tidal Habitat Restoration Efforts on the North Coast. To present at the poster session you must be registered for the symposium and email srf@calsalmon.org to reserve a space.

Concurrent Field Tours, 9am to 5pm, November 16

Field Tour #1: Salmon Creek Delta and Jacoby Creek Off-Channel Pond

The tour will include the Salmon Creek Delta on the Humboldt Bay National Wildlife Refuge. Participants will view and learn about the constructed slough channel, five new off-channel ponds, and large wood structures. Each pond was constructed with different objectives and have varying shapes and connections to Salmon Creek. Mitch Farro, Michael Love, and Conor Shea will discuss the project design and construction, and physical the geomorphic and hydraulic processes at work. Mike Wallace with DFG will discuss his techniques and finding from ongoing fish utilization monitoring. The group will then visit the new tide gates designed to restore a muted tide to Salmon Creek and the restored salt marshes created by raising subsided lands from project spoils.



Aerial view of the Salmon Creek Delta

Photot: David Kenworthy

Participants will also visit the abandoned off-channel pond on Jacoby Creek Land Trust property. Through a FRGP grant, the project site is currently being studied for restoring fish access to the pond. Participants will learn about the site characterizations employed for off-channel habitat design development, and the considerations that go into developing a project.

Field Tour #2: Biogeomorphic Approaches to Creating Off-Channel Habitat



Experimental wood loading in Mill Creek.

Photo: Brock Dolman

In 2009, the NOAA Restoration Center awarded the Yurok Tribe \$547,000 in Recovery Act funds to improve habitat in tributaries to the Lower Klamath River near the Oregon border. Early monitoring results have already shown promising signs of fish using this newly-created habitat, and growing bigger and faster than in headwater streams, which lack slow velocity winter habitat.

With the Recovery Act funding, the Yurok tribe working with Rocco Fiori was able to plant and restore 200 acres of riparian habitats on Terwer and McGarvey Creeks; install engineered log jams and 200 willow baffles (rows of willow brush and woody material on flood-prone surfaces to reduce bank erosion and rehabilitate riparian areas); and create two off-channel ponds in lower Terwer Creek. The Tribe and Rocco Fiori also constructed an additional off-channel habitat feature in McGarvey Creek with funding from the USFWS and USBOR.

Soon after the off-channel ponds were completed, they quickly provided critically valuable rearing habitat for Klamath River coho and Chinook salmon, steelhead trout, and coastal cutthroat trout. The ponds act as a slow water refuge for salmonids, especially important to juvenile coho. Participants will have a chance to see some of these innovative projects.

Registration Form

Register early! The Symposium is limited to 80 participants.

Please mail registration and check to: SRF, PO Box 784, Redway, CA 95560 by November 1, 2012

Name: _____

Address: _____

Phone/Email: _____

Group/Organization Representing (if applicable): _____

Course Fees: \$150 for course & lunches.

Do you want to carpool? need a ride have room for _____ people

Method of Payment: Check

VISA MasterCard Credit Card# _____ Exp. Date _____

Approval Signature _____