U. S. Fish & Wildlife Service

KLAMATH RIVER BASIN CONSERVATION AREA RESTORATION PROGRAM

Working to Restore Anadromous Fisheries of the Klamath River Basin
FY 2005 Annual Report

Introduction to the Klamath River Basin Conservation Area Restoration Program

The Klamath River Basin Fisheries Task Force (Task Force) was established by the Klamath River Basin Fishery Resources Restoration Act of 1986 (P.L. 99-552) to provide recommendations to the Secretary of the Interior on the formulation, establishment, and implementation of a 20-year program to restore the anadromous fish populations of the Klamath River Basin Conservation Area to optimal levels and to maintain such levels. The Klamath River Basin Conservation Area Restoration Program (Klamath Restoration Program) is administered for the Department of Interior by the U.S. Fish and Wildlife Service office in Yreka, California. Congress authorizes $1 million per year to implement this program until 2006, when authorization will cease.

To administer the Klamath Restoration Program, the Yreka Fish and Wildlife Office performs the following functions: [1] provides staff support to the two Federal advisory committees: the Task Force, which provides guidance on implementation of the Klamath Restoration Program; and the Klamath Fishery Management Council (Council), which provides recommendations on the regulation of harvest; [2] coordinates, funds and assists restoration planning and implementation of restoration projects; [3] monitors and coordinates research evaluating anadromous fish populations; and [4] promotes partnerships that help to leverage additional funding for restoration in the Klamath River Basin.

The Yreka Fish and Wildlife Office provides funds for restoration projects from the Klamath Restoration Program and other programs including the U.S. Fish and Wildlife Service, Jobs-In-The-Woods Program, Partners for Fish and Wildlife Program, and National Fish Passage Programs. See insert below for descriptions of these programs. This Annual Report summarizes restoration projects that were completed in 2004. Full reports of each project are available from the Yreka Fish and Wildlife Office and on our website at http://pacific.fws.gov/yreka/.

The Jobs In The Woods Program is part of the U.S. Fish and Wildlife Service's contribution to the Northwest Forest Plan to participate in watershed restoration activities in northern California, Oregon, and Washington. The goals are to: 1) Support watershed restoration efforts on nonfederal lands, 2) contribute to the recovery of fish, wildlife, plant species, and their habitats, 3) complement ongoing watershed restoration efforts on federal lands, 4) provide employment and training opportunities to timber-dependent community workers, and 5) support a cooperative approach to watershed restoration.

The Partners for Fish and Wildlife Program is a technical and financial assistance program working with private landowners to restore wetlands, streams and river corridors, fish and wildlife habitats. The Program provides advice on the design and location of potential restoration projects, as well as financial assistance to implement the projects.

The Fish Passage Program provides funds to improve fish passage through water ways. Past projects have improved fish passage at culverts, repaired defective screens, and studied remedies to other fish passage problems. These projects have benefited federal trust species (such as salmon, trout, and other species important to Tribal traditions), as well as recreational and commercial fisheries. Recently this program has been greatly expanded, and we expect to be able to help many more people who are ready to help salmon.

Siskiyou Resource Conservation District
Scott River Fish Passage Project
02-FISHPASS-HR-01

The Scott River is a major tributary to the Klamath River. The Scott River and many of its tributaries support runs of three species of anadromous salmonids: Chinook, coho, and steelhead trout. The intent of the Scott River Fish Passage Project (FWS project agreement title)/ Scott River Diversion Improvement Program (RCD proposal title) was to improve access and passage for migrating coho and steelhead trout in the important tributaries of the Scott River. This project shall be referred to as the Scott River Diversion Improvement Program throughout the remainder of this report.

The largest fish passage issue is the mid and lower tributary reaches are the structures constructed for agricultural diversions. These structures range from dams constructed from gravel using equipment to hand stacked boulder dams sealed with plastic. During the mid to later part of the summer and often extending into the fall, some of the diversion structures can be barriers to fish passage whether they are juvenile or adults. The intent of the Scott River Diversion Improvement Program was to improve four diversion structures in Patterson Creek (a tributary to the Scott River) so fish passage was available during most flow scenarios. This was achieved by installing boulder weirs to act as a grade control and by installing a headgate at each diversion head to control adjustment of flows. A NOAA/CDFG approved fish screen was installed at all four sites (fish screens were not weirs). The weirs have been installed for two to three winters and appear to be functioning well for fish passage and diversion purposes. During December of 2004, adult coho have been observed above all weirs and the structures meet juvenile fish passage standards when there is more than 0.2-0.3 cubic feet per second (cfs) going over the weir.

Siskiyou Resource Conservation District
Scott River Coho Spawning Assessment II
03-FISHERIES-FP-01

Adult coho spawning ground surveys were completed in the Scott River watershed from December 2003 through January 15, 2004. Surveys were completed on the Scott River mainstem, East and South Fork Scott River, Rail Creek, Kangaroo Creek, Sugar Creek, Wildcat Creek, French Creek, Miners Creek, Shackleford Creek, Shackleford-Mill Creek, Kidder Creek, Canyon Creek, Kelsey Creek, and Mill Creek (Scott Bar). Flow barriers, and lack of access prevented some reaches from being surveyed.

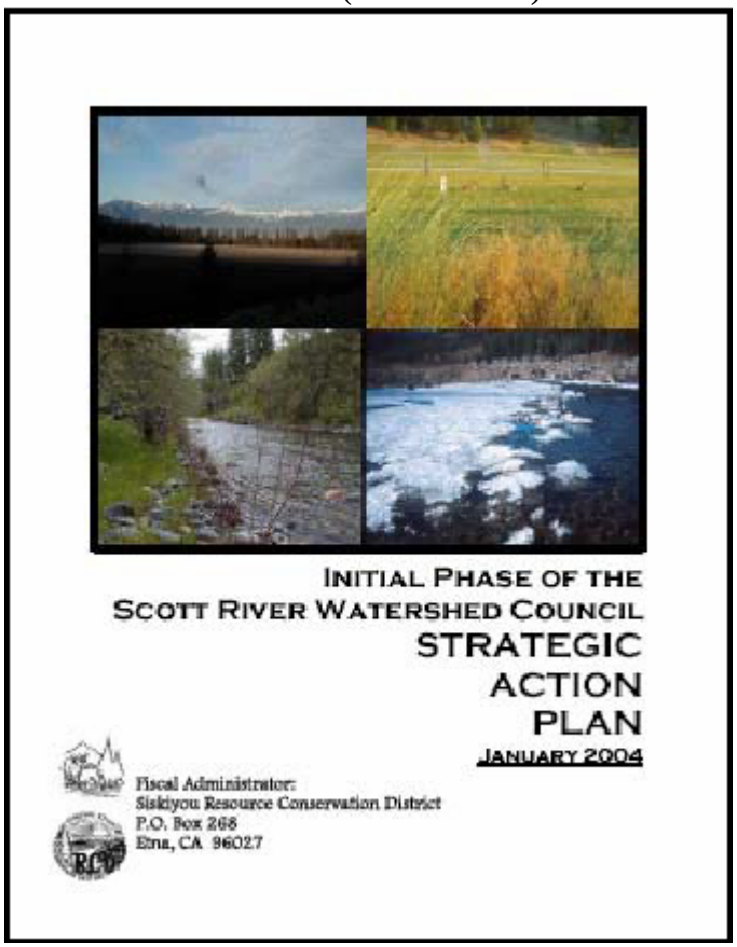
Surveys were completed cooperatively by the United States Forest Service *USFS), United States Fish and Wildlife Service (USFWS), Siskiyou Resource Conservation District (RCD), and the California Department of Fish and Game (CDFG).

A Total of 24.35 miles of stream were surveyed. Approximately 2 miles of additional survey reach were added in French Creek and Shackleford Creek. A total of 2.8 miles of previously established reaches were not surveyed due to flow barriers, (Indian Cr., McAdams, Moffet, Patterson, Rattlesnake, Meamber Gulch, and Johnson Creek) and another 5.3 miles were not surveyed due to lack of access (n. Fork French, Upper Etna, Clarks Creek, Grouse Creek, East Fork at Lower Masterson).

A total of sox redds, six carcasses, and eight live fish, were found in reaches surveyed in the Scott River Watershed. Almost all fish and redds were found in Shackleford-Mill Creek and French-Miners Creek, with the exception of one live fish sighted in lower Sugar Creek, and one early season redd found in the South Fork.

Siskiyou Resource Conservation District
Scott River Watershed Education and Communication
04-E-06

This report is being completed to finalize the contractual requirements for the U.S. Fish and Wildlife Service for the Scott River Watershed Education and Communication. These activities have been funded by both the US Fish and Wildlife Service (Klamath River Basin Fisheries Task Force) and the California Department of Fish and Game. Over the period of time from the contract effective date to the contract expiration date, education and communication activities were completed by one full time Scott River Watershed Council Coordinator (Rhonda Muse) and one part time Watershed Education Coordinator (Crystal Bowman). Additional activities were performed by one full time Project Coordinator (Danielle Quigley).



All expected tasks under this contract that have been met and are detailed in the Results and Discussion of Accomplishments section. This has not been without its difficulties. The lack of available teachers/staff at most of the schools, as well as a reduction in student body has resulted in lower participation than expected. At Etna Union High School, the Natural Resources teacher is very enthusiastic and involved. Unfortunately, he is the only teacher interested in the activities of the Watershed Education Program.

Presentation of watershed restoration and education products will be provided at the Siskiyou Golden Fair in August 2004. Assistance with training and promotional/advertising materials has been provided by employees of California Department of Fish and Game (CDFG), Klamath National Forest (USFS), and US Fish and Wildlife Service (USFWS).

Yurok Tribe
Lower Klamath Subbasin Riparian Restoration Project
02-HR-01

The Yurok People have inhabited the lands of and sustained themselves upon the resources of the Klamath River for centuries. The Yurok Tribe's entire culture is largely based upon the Klamath River and its associated fish populations. Today, only a fraction of historic anadromous fish runs return to spawn in the Klamath River and its tributaries. Although many factors have contributed to these declines in native fish runs, degradation of freshwater habitat has been pervasive in the Klamath River Basin. Kier and Associates (1991) note that "the fish habitats of the basin have been greatly diminished in extent and value in the past century by the construction of impassable dams and by stream diversions and sand and silt from mining, logging, grazing, road development, and floods." The declining health and productivity of the Klamath River's anadromous fisheries is of great cultural and economic concern to the Yurok Tribe.

Past timber harvest practices in the Lower Klamath sub-basin have severely degraded aquatic habitat throughout many of the tributaries. This sub-basin, as defined in the Klamath Restoration Program's Long Range Plan (Kier and Associates 1991), includes all Klamath tributaries downstream of the confluence of the Trinity River, encompassing a drainage area of approximately 450 square miles. Extensive road networks have been constructed on steep, naturally fragile terrain, resulting in chronic streambed sedimentation over the last 50 years (Balanced Hydrologics, Inc. 1995; Gale and Randolph 2000). These activities have contributed to the decline of native stocks of chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*O. kisutch*), steelhead trout (*O. mykiss*), and coastal cutthroat trout (*O. clarki clarki*). Coho salmon within the Klamath Basin are listed as threatened under the federal Endangered Species Act (ESA) and have been found to warrant listing as threatened under the California ESA. Chinook salmon, steelhead and sea-run cutthroat trout have all previously been petitioned for federal listing and their status within the Klamath Basin continues to be a source of great concern.

To proactively address these declines, the Tribe initiated a large-scale, coordinated watershed restoration effort throughout the Lower Klamath sub-basin in conjunction with Simpson Resource Company and the California Coastal Conservancy. This cooperative framework is intended to meet the mandates and objectives of tribal, state, and federal planning efforts, the Northwest Economic Adjustment Initiative and the state and federal ESA through innovative solutions to resource management issues between private landowners, Tribal interests, and public agencies.

In order to provide for meaningful restoration plans that truly address the limiting factors facing each salmonid species in a given drainage, the Yurok Tribe initiated the Lower Klamath River Watershed Assessment. This interdisciplinary effort, consisting of historical and current condition assessments throughout each of the Lower Klamath tributaries, resulted in the prioritization of restoration activities throughout the basin. The Lower Klamath Sub-Basin Watershed Restoration Plan (Gale and Randolph 2000) identifies chronic streambed sedimentation, heavily degraded instream and riparian habitat, and loss of habitat connectivity as the primary factors for salmonid decline. In order to address these problems, the Sub-Basin Plan

prioritizes treatment of upslope sediment sources, in conjunction with instream and riparian restoration and fish barrier treatment.

This project undertook revegetation of conifers within the riparian corridor in McGarvey, Ah Pah, and Tectah Creeks. The Yurok Tribal Fisheries Program (YTFP) has documented through watershed assessment activities that existing and future sources of large woody debris (LWD) are virtually non-existent within these tributaries. The reestablishment of riparian conifers and the restoration of riparian habitat throughout the lower Klamath sub-basin has been identified as a priority restoration activity in the Lower Klamath Sub-basin Watershed Restoration Plan (Gale and Randolph 2000). These three tributaries are all prioritized as top priority recipients of watershed restoration activities (Gale and Randolph 2000), and upslope restoration and erosion control projects have been implemented and are ongoing in all three drainages.

Yurok Tribe
Lower Blue Creek Watershed Restoration Implementation
03-HR-01

From September 04 through the end of October 04, the Yurok Tribe conducted a Watershed Restoration Implementation and Training Program within the Polavasar Creek drainage located in the lower portion of the Blue Creek basin. Polavasar Creek is a small tributary that feeds directly into the mainstem of Blue Creek. Funding was obtained from the U.S. Fish and Wildlife Service and Green Diamond Resource Company. This project has been part of a multi0year restoration effort in Blue creek. This effort is intended to remedy road related sediment sources from 30 tributary sub-basins, within the Lower Klamath River Basin.

This program is part of a long-term watershed restoration goal intended to fulfill two principal Tribal objectives:

1. Return the Klamath River fishery to the healthiest possible condition.
2. Create job training and employment opportunities for Tribal members.

The Blue Creek Watershed Implementation and Training Program employed ten Tribal members within the Yurok Tribe's Watershed Restoration Department. First Aid and CPR training was provided by the Northern California Safety Consortium (her in referred to as N.C. S. C.). Advanced training in road restoration layout, site supervision, and heavy equipment operation/coordination was also provided throughout the heavy equipment field season. The training included actual road decommissioning along prioritized roads and stream crossings within the Blue Creek watershed.

The roads decommissioned in the Polavasar area of the Blue creek watershed during this project include the PC10, PC10A, PC14, PCB830, and preventing an estimated 55,735yd^3 of road fill material from entering surrounding streams.

Salmon River Restoration Council
Salmon River Watershed Education Program
04-E-02

The Salmon River Restoration Council (SRRC), a 501©3 corporation, has been promoting stewardship in the remote Salmon River basin for nearly 13 years. The Salmon River watershed is the largest cold-water contributor to the Klamath River, and is known as one of the cleanest rivers in the state of California. This 751 sq. mile watershed is entirely within the Klamath National Forest and is considered a key watershed by the Forest Service.

The SRRC is guided by a Community Restoration Plan (CRP). The CRP is updated each year, and is included as a component of the Salmon River Subbasin Restoration Strategy (2002) to help facilitate and guide the SRRC in watershed and fisheries recovery. These documents compliment each other and provide the SRRC with programmatic direction and project development. Some of the projects run by the restoration council include, fisheries monitoring and restoration, water quality monitoring, noxious weed management, fuels reduction, and watershed education.

The watershed education project works in the two local elementary schools to teach natural resource sciences, ecosystem management and watershed stewardship. Students learn scientific protocol and gain valuable career development through experiential teaching methods, which comply with the state educational standards, and current resource management methods.

The SRRC's Watershed Education year in 2004-2005 went very well. All tasks in the agreement were performed by the coordinator, SRRC staff and volunteers. During the time of the agreement the program coordinator led at least 8 field trips, coordinated more than 12 in-class presentations, facilitated seven major student projects and hosted five teacher planning sessions. These activities all led up to the annual River Schools Watershed Fair, which was one of the best attended so far.

The coordinator involved several resource professionals from: local watershed councils, the U.S. Forest Service, the Department of Fish and Game, the Department of Fish and Wildlife, the Karuk Tribe of California, the Yurok Tribe of California, and the Hoopa Tribe of California. All of these organizations, in addition to community volunteers helped to enrich the watershed education curriculum.

This report was prepared for the
Klamath River Basin Fisheries Task Force

U. S. Fish and Wildlife Service
Yreka Fish and Wildlife Office

For more information see our website at http://pacific.fws.gov/yreka
or contact: Phil Detrich or Laurie Simons at
1829 S. Oregon St., Yreka, California, 96097
The telephone number is (530) 842-5763.

Report prepared by Emily Castro
and Jennifer Silveira