



Middle Klamath River Subbasin Planning

Final Report

**US Fish and Wildlife Service
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ABSTRACT

The objective of the Middle Klamath Sub-basin Planning program is to contribute to the restoration of anadromous fish stocks in the Klamath River by completing the tasks outlined in the proposal, which tier to the Middle Klamath Sub-basin Fisheries Resource Recovery Plan. These tasks fall into three categories: education, communication, and community based restoration. The education component is directed primarily at the public school system and summer youth educational programs. The communication and community based restoration components are directed at both the general public and at special interest groups in the subbasin. Through formation and management of a community-based watershed group, the Mid Klamath Watershed Council, the subbasin planner has empowered Middle Klamath River residents to be involved in recovery of anadromous fisheries in the Klamath River.

INTRODUCTION

The Klamath River historically supported large runs of salmon, steelhead, pacific lamprey and sturgeon. These runs have been steadily declining for decades due to increased anthropogenic disturbance and subsequent loss of quality habitat. These fish are an important contribution to the subsistence, sport, and commercial fishery in Northern California and Southern Oregon. Native Americans, including the Karuk Tribe, continue to harvest these fish today and therefore are major stakeholders in the Klamath Basin.

The Karuk Tribe, with funding from the Klamath River Task Force, hired a Subbasin Coordinator to implement the objectives of the Middle Klamath River Subbasin Planning program. The Klamath Task Force, in their Long Range Klamath Plan, identified public involvement and education as important mechanisms in achieving restoration goals in the Klamath Basin. Through this grant, specific grant tasks were implemented which both directly and indirectly benefit the fisheries resource. The subbasin coordinator also increased outreach in the upper portion of the subbasin, as well as to Upper Klamath Basin, Shasta, and Scott River stakeholders. The Tribe recognizes that the fish upon which they depend in turn depend upon the health of these tributaries to the Mid Klamath Subbasin.

DESCRIPTION OF PROJECT AREA

The Mid-Klamath Subbasin includes the Klamath River and its minor tributaries from Iron Gate Dam down river to the confluence with the Trinity River. The sub-basin covers approximately 1524 square miles and is one of the larger sub-basins in the Klamath Basin. The Klamath National Forest and the Six Rivers National Forest comprise a large portion of the land base. Major private land holdings in the Cottonwood Creek watershed and other tributaries of the upper Mid Klamath subbasin comprise the largest private land base in the subbasin. Major landowners include timber companies such as Fruit Growers Supply and Timber Products, R-Ranch, and other large family owned farms and ranches. Small patches of private and tribal trust land are scattered throughout the western portion of the sub-basin.

The population of the sub-basin is roughly three thousand people spread out in small rural communities along the mainstem Klamath and a few of the major tributaries. The principal land uses in this sub-basin are timber, mining, agriculture and recreation. The main-stem Klamath River is included in the California and Federal Wild and Scenic River Systems. The sub-basin encompasses seven “key” watersheds designated the 1993 President’s Forest Plan, the highest concentration in any other Klamath River sub-basin. Four wilderness areas (Marble Mountains, Trinity Alps, Red Buttes and Siskiyou Mountains) from two National Forests comprise a large portion of high elevation headwater area.

METHODS AND MATERIALS

Methods are outlined in the current Draft Middle Klamath River Subbasin Plan, developed by the Karuk Tribe in 1999 and revised in 2001. Project tasks have been implemented and are described below. The Coordinator assisted elementary school watershed education programs by developing curriculum, giving class room presentations participating in fieldtrips and providing information to teachers regarding salmonids and their environmental requirements. Workshops and informational meetings were organized and hosted by the Coordinator and other Karuk Department of Natural Resources staff. Workshop and meeting notices were posted at local bulletin boards, business locations and in local newsletters. Karuk Department of Natural Resources quarterly newsletters highlighted Subbasin Planning activities and other related components.

The Coordinator facilitated local watershed group meetings and neighborhood meetings that addressed local restoration needs. A localized strategy was employed to boost involvement of people who otherwise, would not attend large public meetings. Meeting notes were recorded to track progress and identify restoration priorities expressed by community members. The coordinator informed community members about current restoration projects and funding sources for potential projects. Requests for proposals (RFP’s) from funding agencies were distributed to people seeking funding for projects, and the coordinator helped landowners to fill out these proposals. The Subbasin Planner also submitted several successful proposals through the Mid Klamath Watershed Council and the Orleans/Somes Bar Fire Safe Council to the USFWS, CDFG, NRCS, BLM, USFS, CDFG, SRWCB, Rocky Mountain Elk Foundation, Siskiyou County RAC, and State FSC.

RESULTS AND DISCUSSION OF ACCOMPLISHMENTS

The Karuk Tribe’s Department of Natural Resources and the subbasin planner continue to foster watershed education, communication on resource issues, and watershed restoration projects in the Middle Klamath subbasin. By conducting extensive outreach to stakeholder throughout the subbasin, and in adjacent subbasins that directly affect the fisheries of the Middle Klamath, the subbasin planner has effectively educated and involved stakeholders in current restoration efforts, and informed them of the need for future restoration projects to protect our anadromous fishery. With continued support, the MKWC has become a 501(c)(3) non-profit, increased their annual grant funding and project workload, and expanded their area of service to the Seiad Valley. The Orleans/Somes Bar Fire Safe Council (FSC) has become a statewide model for rural FSC’s. Through work with county Fire Safe Council’s, the subbasin

planner has fostered the growth of local FSC's in the subbasin. Results are listed below by task for this grant:

1. Assist Mid-Klamath elementary school teachers with current watershed education programs to develop salmonid life history curriculum, water quality monitoring and habitat assessment projects.

The subbasin planner worked primarily with watershed ed coordinators from the Karuk Tribe, Mid Klamath Watershed Council, and the Salmon River Restoration Council, to provide updated curriculum for classroom projects and studies, identify resource professionals for classroom presentations, organizing events, and participating in and leading watershed education field trips. The subbasin planner also conducted outreach to university students and secured resources from university students for volunteer grant development and volunteer opportunities. Additionally, the subbasin planner gathered never before seen underwater video of salmonids in the Mid Klamath subbasin for educational use in schools, and throughout the community.

- Riparian Function and Restoration Field Trip with Happy Camp and Jefferson High School students on Indian Creek, Happy Camp, CA.
- Fall Carcass Surveys with Junction and Forks Elementary students. Salmon River, CA.
- Field Trip with Junction Elementary Students to the Salmon River Screw Trap to identify juvenile salmonids and other aquatic species, and talk about salmon biology.
- Field Trip with Junction Elementary students to identify, press and sketch native plants, and discuss the role of the native plants in current restoration efforts in the Mid Klamath Subbasin.
- Underwater Fisheries Video instruction with Junction Elementary students. Students also learned editing skills.
- Grantwriter training for MKWC staff and community participants.
- Riparian Ecology Field Trip with the Forks of Salmon Elementary students on the South Fork of the Salmon River.
- Grantwriting instruction and mentoring with HSU grad students for restoration grants focused on the Mid Klamath Subbasin.
- Coordination of watershed education activities with watershed ed coordinators from the Karuk Tribe DNR, MKWC, and SRRC.
- Powerpoint presentation for Special Forest Products Workshop in Orleans, CA.

- Video documentation of fisheries surveys on the Klamath and Salmon Rivers.
- Presentation at the University of Oregon on the Impacts of Fisheries Decline to Communities in the Lower Klamath and Efforts to Reverse this Trend.
- Research and creation of an educational scientific paper on Green Sturgeon use of the lower Salmon River.
- Fish Identification and Ecology Presentation to Salmon Camp at the mouth of Wooley Creek.
- Underwater video documentation and range extension of juvenile coho in the NF Salmon River.
- Planning, facilitation and presentation at the Fall Carcass Survey Training at Oak Bottom Campground. Fall Carcass Surveys with Forks and Junction Elementary Students on the Salmon River. Fall Carcass Surveys with Happy Camp and Jefferson High School students on Elk Creek.
- Field Trip to Iron Gate Dam and Hatchery with Junction Elementary Students.

2. Continue communication about habitat protection and restoration efforts through weekend workshops, a newsletter and personal interface with managing agencies, special interest groups and the general public in the Mid-Klamath River Subbasin.

The subbasin planner continued efforts to strengthen the Mid Klamath Watershed Council by developing, submitting and receiving multiple grants for watershed restoration work in the Mid Klamath Subbasin. Through the Orleans/Somes Bar FSC, the subbasin planner submitted and received funding for innovative projects to maintain existing fuelbreaks, including the use of prescribed fire. Through the efforts of the subbasin planner, the Mid Klamath Watershed Council is a fully functional and growing 501(c)3 non-profit organization. Outreach efforts to the community of Happy Camp has led to discussions of forming a satellite office there to further organize watershed restoration efforts in this portion of the subbasin.

- Orleans/Somes Bar FSC: Coordinated and facilitated monthly meetings. Edited and distributed monthly meeting minutes. Submitted and received over \$170,000 in fuels reduction grants, including prescribed burning, shaded fuelbreak construction, Community Wildfire Protection Planning, NEPA coordination, and community wildfire education. Participated in Humboldt County FSC and Siskiyou County FSC as a Director on their respective boards and collaborated with local FSC through project facilitation and information sharing. Coordinated six volunteer workdays, including a prescribed burning workday at the Ten Bear Ranch in collaboration with the Orleans Volunteer Fire Department, the Karuk Tribe and the USFS.

- MKWC: Coordinated and facilitated monthly meetings and first annual Board Meeting. Edited and distributed monthly meeting minutes. Submitted and received nearly \$90,000 in grants from the CDFG, Humboldt County Title III, private foundations, CDFA, USFS, etc. Coordinated volunteer workdays surveying for salmonids on select Mid Klamath tribs in conjunction with the Karuk Tribe and USFS, cold water refugial monitoring and enhancement, noxious weed mapping and eradication, native plant nursery and ID, etc. Provided community volunteers to Fall Carcass Survey effort on Ukonom, Salmon and Orleans Ranger Districts. Coordinated with Whitman College to set up Alternative Spring Break volunteer opportunities for college students in the Mid Klamath Subbasin. Facilitated grant and lease for new 5000 square foot MKWC office and community center in downtown Orleans.
- Videography: Documented the juvenile fish kill in the upper Mid-Klamath with digital underwater video. Documented adult green sturgeon, spring Chinook, summer Steelhead, fall Chinook, spawning Coho in the Mid Klamath and Scott River Subbasins, juvenile salmonids, and salmonid cold water refugia usage and mortality in the Klamath River. Documented fisheries surveys in the Mid Klamath Subbasin, the Salmon River Volunteer Spring Chinook Dives, and Fall Carcass Surveys in the Mid Klamath and Salmon River subbasins. Edited video for the "Restoration in the Mid Klamath" video production.
- Wrote articles for the Karuk Tribe DNR newsletter, the MKWC newsletter, the Scott River Watershed Council newsletter, and the Orleans/Somes Bar FSC fuels reduction and prescribed burning programs.
- Conducted outreach to regional and national river restoration groups to gather information and gain support for restoration efforts in the Mid Klamath Subbasin.
- Presentation to Shasta RCD on the Mid Klamath Fisheries Resource Recovery Plan and opportunities for collaboration on restoration projects.
- Participated in Klamath Restoration Council meetings and presented on restoration priorities within the Mid Klamath Subbasin.
- Landowner outreach in the Upper Mid Klamath and Scott River Subbasins regarding coho habitat restoration projects.
- Coordination with the Intertribal Fish Commission on restoration priorities in the Mid Klamath Subbasin.
- Coordination between the Karuk Tribe and the Six Rivers and Klamath National Forests on collaborative fisheries restoration opportunities outlined in the Mid Klamath Fisheries Resource Recovery Plan.

- Created a Powerpoint Presentation for presentations at TWG, Task Force, and stakeholder meetings to review the contents of the Mid Klamath Fisheries Resource Recovery Plan, and identify future planning and implementation needs.
- Coordination of a meeting with NRCS, USFS and the Karuk Tribe to discuss Water Balance modeling of select tributaries in the Mid Klamath Subbasin.
- Added suggested stakeholder revisions to the Mid Klamath Fisheries Resource Recovery Plan.
- Attended the Technical Work Group meeting in Yreka to present Karuk DNR proposals for 2006 Task Force grants.
- Attended Klamath Stakeholders Conferences in Klamath and Tulelake, CA. Presented on significance of Klamath River fishery and water quality to the Karuk Tribe and other stakeholders in the subbasin. Conducted follow-up outreach to conference participants.
- Participated in Integrated Resource Management Planning efforts with the Karuk Tribe DNR and stakeholders to begin the process of establishing a restoration workplan for the Karuk Tribe.
- Powerpoint presentation to Karuk Tribal Council on the Subbasin Planning Program and Current and Potential Fisheries Restoration Projects.
- Powerpoint Presentation to 45 participants at Native Plant Workshop in Orleans, CA, on Fisheries Restoration Applications for Native Plants in the Mid Klamath Subbasin.
- Development and dissemination of Mid Klamath Restoration Projects Database.
- Coordination with USFS KNF Fisheries on restoration opportunities in Horse and Beaver Creek drainages.
- Powerpoint presentation at Northwest Regional Firesafe Conference identifying fire restoration projects in the Mid Klamath subbasin. Solicited academic support for these efforts from regional fire scientists.
- Participated in FERC Settlement Subgroup meeting on Fiscal Impacts of Dam Decommissioning and presented on potential impacts and benefits to the Mid Klamath Subbasin.
- Coordination with Tribes and Scott River Watershed Council to organize the Tribal Trust workshop held in Greenview, CA. Attended and presented at the meeting. Coordinated with ag interests from Scott, Shasta and Upper Klamath Subbasins.

- Attended the USFS Stewardship Contracting meeting at the Orleans RD to begin process of planning local stewardship contract restoration projects on public lands.
- Coordination of Outreach Meetings with Upper MK landowner re: Water Conservation. Creation of an Upper Mid Klamath Landowner Outreach Letter.

3. Coordinate with Mid-Klamath landowners, private and public, for the development and implementation of restoration projects that respond to problems related to fishery recovery and to the Middle Klamath Subbasin planning and public review process.

The subbasin planner has continued efforts to develop large scale restoration projects on Stanshaw Creek and Ishkaysh Ranch, while submitting and receiving several grants through the Mid Klamath Watershed Council and the Orleans Somes Bar FSC.

- Continued working with Doug Cole of Marble Mountain Ranch (MMR), DFG, Karuk DNR, NOAA Fisheries, Water Quality Control Board, downstream landowners, and Caltrans to create a proposal to return Stanshaw Creek water used by MMR back to Stanshaw Creek above the Hwy 96 culvert, and upgrade the ditch to prevent more failures. Specifically, this project will:
 - Return 1.5-2.5 cubic feet per second (cfs) year round from the MMR hydroelectric plant back to Stanshaw Creek above the Highway 96 culvert to benefit critical Coho refugia below Highway 96 culvert.
 - Coordinate with NOAA Fisheries, California Department of Fish and Game, the State Water Resources Control Board, Natural Resource Conservation Service, landowners, the Karuk Tribe, the Klamath Forest Alliance, Siskiyou Telephone and CalTrans on project design and implementation.
 - Ditch and pipe (8" pipe) hydroplant tailwater 3100 feet to Stanshaw Creek: 580 ft from hydro plant across Cole's property to inboard ditch on HWY 96, 2060 ft along Highway 96 inboard ditch, and 460 ft across level fill to top of Stanshaw Creek culvert above HWY 96.
 - Recent developments include a Issues of Concern by Stakeholder which outlines the requirements of each stakeholder and identifies areas of common ground. A proposal for this project will be submitted in December 2005.
- Worked with a Karuk DNR Planning Team to develop portions of the Ti Bar Demonstration Project, which seeks to implement cultural land management prescriptions at the landscape level in the Ti Creek Watershed.
- Continued coordinating with Karuk Tribe on the Ishkaysh Riparian Planting Project near Happy Camp, CA. Grant will be submitted to the NRCS and to the Fish and Wildlife. Specifically, this proposal will:

- Restore 4750 feet of degraded riparian and aquatic habitat along the Klamath River main stem through riparian planting and subsequent shading.
 - Enhance the habitat for Federally listed and tribal trust species, including Coho Salmon (*Oncorhynchus kisutch*), Chinook Salmon (*O. tshawytscha*), Steelhead (*O. mykiss*), Green Sturgeon (*Acipenser medirostris*), and Pacific Lamprey (*Lampetra tridentata*).
- Orleans/Somes Bar FSC: Submitted and received over \$170,000 in fuels reduction grants, including prescribed burning, shaded fuelbreak construction, Community Wildfire Protection Planning, NEPA coordination, and community wildfire education.
 - MKWC: Submitted and received nearly \$90,000 in grants from the CDFG, Humboldt County Title III, private foundations, CDFG, USFS, etc. Recently submitted two grants to the DFG Fisheries Restoration Program for organizational support and Mid Klamath Fish Passage Improvement at the mouths of 20 tributaries to the mainstem Klamath in the Mid Klamath subbasin.
- 4. Develop and submit two semi-annual progress reports to the Yreka FWO for submittal to the Technical Work Group:**

Instead of progress reports, I submitted digital copies of PowerPoint presentations given at semi-annual Task Force meetings.

5. Submit a Draft Final Report, and the Final Report along with an extra hardcopy and an electronic copy, to the Yreka Fish and Wildlife Office:

I am submitting this Draft Final Report to the Yreka FWO, along with an extra hardcopy and an electronic copy for review.

SUMMARY AND CONCLUSION

Through the work of the subbasin planner, the Mid Klamath Watershed Council has effectively grown into a well organized nonprofit capable of implementing watershed education and restoration projects throughout much of the subbasin. FY 2004 Subbasin Planning funding allowed for restoration proposals to be developed and funded, which has led to local jobs and local participation in watershed restoration efforts. Community awareness, in the form of communication and education, is growing in the sub-basin as a result of the ongoing public outreach being implemented by the subbasin planner, the Karuk Tribe DNR, and the Mid Klamath Watershed Council. Middle Klamath residents are more aware of the declining anadromous fishery and its importance to all of the stakeholders in the Klamath River Basin. The success of watershed groups in the Middle Klamath and the rise of volunteer and paid restoration work reflect this increased awareness about habitat protection and restoration opportunities. The Middle Klamath Sub-basin encompasses a large geographic area with a diverse group of stakeholders therefore communication, cooperation, and education are critical components of a successful restoration program.

SUMMARY OF COSTS AND EXPENDITURES

Professional Fees	\$21,500.00
Travel/Per Diem	\$1,000.00
Total Direct	<u>\$22,500.00</u>
Administration @ 10%	\$2,500.00
Total Project Cost to USFWS	<u>\$25,000.00</u>
In-kind contribution*	\$5,000.00

*In-kind contribution includes; office spaces, phone, copying, mail services, secretarial services, GIS mapping and meeting facilities.