

Final Report
Shasta River CRMP Coordinator, 2002



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Abstract: Summary of efforts and accomplishments of person employed in the part time staff position for Coordinated Resources Management and Planning (CRMP) group working on salmonid and water quality issues in the Shasta Valley in Northern California during 2002.

2002 included community outreach, ongoing meetings with landowners, agencies and political figures, preparation of materials for inclusion in a planned revision of the Watershed Restoration Plan, fish screen fabrication, and the preparation and oversight of restoration projects. Of major importance was the initiation of a Scott Shasta Coho Recovery Planning Team, which finished the bulk of its work in 2003.

Funding for this work was provided by the Klamath River Basin Fisheries Task Force, with matching funds for this and additional work provided by the California Department of Fish and Game from SB 271 bond act funds.

Introduction:



The Shasta River Coordinated Resources Management and Planning group (CRMP) was started in mid-1991, through the combined efforts of several members of the ranching community, the Siskiyou RCD, and the Natural Resources Conservation Service (then Soil Conservation Service). At that time there was no similar organization in Siskiyou County, and the prospect of developing a good working relationship amongst the various landowners and agencies seemed unlikely.

Given the magnitude of the task undertaken—to restore the productivity of the Shasta, while maintaining a healthy local agricultural economy—it was clear that efforts beyond what a volunteer group was capable of were required. Recognizing this, the Klamath River Basin Fisheries Task Force provided funding in FY 1992 for a part time Projects

Coordinator to assist the CRMP in progressing from discussion, self-education and planning to project implementation, grant funding and community outreach.

That funding has been renewed at varying levels in FY 1993, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, and 2003. Partial supplemental funding was made available through a grant from the Calif. DFG for 2000, with funding for additional full time help provided in 2001 and 2002.

Description of Study Area:

The Shasta River and its major tributaries are part of the Klamath Basin (see map on cover), and total hundreds of miles in length, draining an area of approximately 800 square miles.

They flow almost entirely through relatively small parcels of private ranch land. To be effective, any activity aimed at improving water quality for fish or human needs must be done with the active help and participation of a large number of individual owners whose needs, desires and financial conditions vary greatly.

Each of these ranchers has long-standing cultural practices, many of which depend on the river, including irrigation of pasture and hay fields, grazing of riparian areas, and watering of livestock. All of these activities can have a substantial impact on water quantity and quality.

Historically the Shasta River was an important spawning and rearing area for chinook and coho salmon, and steelhead. Records of fall chinook spawners kept since the 1930's show a long decline, from over 80,000 in 1931 to as few as 530 in 1992. Since 1992, numbers have climbed to as high as 13,000. Steelhead and coho are likewise no longer present in significant numbers, although actual counts are not available. Coho in particular are viewed as an important species because the Shasta is near the extent inland of their range, and conditions in the Shasta may have favored fish somewhat more tolerant of adverse conditions.

Over the last ten years there has been an extensive program of water testing in the Shasta. Results indicate significant problems for cold water fish resulting from high water temperatures and low levels of dissolved oxygen. Additional fieldwork indicates severe problems of fine sedimentation. Other observed but less well documented problems include: blockage of coarse sediment by dams, groundwater withdrawals capable of affecting surface flows, high nutrient levels and consequent turbidity caused by free-floating algae.

The Shasta CRMP coordinator is charged with developing responses to these problems, helping landowners to embrace solutions, securing funding to pay for part or all of the changes proposed, and supervising project implementation.

Methods and Materials:

The Shasta CRMP serves generally as a broad oversight body, with the details of implementation of its goals left to the project coordinator. The coordinator works with individual CRMP members, agencies, and other groups and individuals to develop and implement specific actions that will further the CRMP's goals. In addition, the CRMP Coordinator must be available to respond to requests for assistance from the USFWS, TWG and Task Force, along with state agencies (including DFG and DWR), schools, and other restoration workers.

Information transfer and reporting is frequently accomplished verbally at CRMP meetings or to individuals, in written form in newsletters and agendas, electronically via email, and photographically. Most residents of the Shasta Valley do not make routine use of computers, so mailings and verbal reporting is the most effective way to communicate with them. Agencies and persons engaged in restoration planning generally all have ready access to computers and the Internet, making electronic data and document transfer their preferred method.

Project documentation has been done using photographs and slides, some of which have also been scanned for use electronically on the Internet or in the Klamath Resource Information System (KRIS).

Post project monitoring and documentation, and responding to needs and opportunities as they arise can require almost anything by way of methods and materials. An engineering autolevel, steel T posts, hacksaw and post driver are used in setting up stream cross section profile locations; Arcview software, plotter and laptop computer were needed to prepare maps and for project tracking and documentation, temperature measuring devices were placed in streams then downloaded for future use, dissolved oxygen meters were utilized in water quality monitoring; camera, scanner, and computer were used for report writing, project documentation, etc.

Results and discussion of accomplishments:

Successfully meeting the overarching goal of this grant--assisting the Shasta CRMP to continue to make substantial steps towards restoring the Shasta River for salmonids--required a variety of approaches. General activities included:

- Providing staff to the Shasta CRMP,
- Coordination of fieldwork
- Meeting with interested parties, both individually and in groups,
- Assisting with planning both within the Shasta Watershed and elsewhere in the Klamath Basin,
- Meeting with Task Force and its technical work group,
- Responding to problems and opportunities as they arose
- Work on restoration planning for Shasta Basin
- Provide assistance to the technical writer working on revisions to Shasta Watershed Plan

Beyond the above, significant amounts of time not anticipated when this grant was proposed were devoted to assisting in the developing of the Shasta-Scott Coho Recovery Plan, an effort initiated following the decision by the State of California to list Coho salmon as a threatened species. That effort continued on through the entirety of 2003 and into 2004.

This grant included a number of defined tasks to be completed, and specific work products, each of which will be described separately below, followed by a description of some of the more important unexpected opportunities that arose and were acted upon:

Task 1—Provide Support needed to complete the Shasta Watershed Plan.

Work on the Shasta Watershed Plan was well underway during the first half of 2002, but all work on it was put on hold once the bulk of the background and informational portions were done. The strategic planning portions of it were held back pending the completion of the coho recovery planning process so that coho recovery plans could be incorporated into the new watershed plan.

Task 2—Pursue funding for fishery restoration work including coarse and fine sediment, expansion/updating of the watershed plan, development of an emergency action plan for dry years, and an assessment of the social and economic impacts of restoration options.

Substantial completion of this task proved to be beyond reach, although grant funding was sought for substantial other work. Never the less, steps on each identified problem area were made, steps that will facilitate making progress in the future. They included:

- Re-submission of funding requests to several funding sources for coarse sediment studies (not funded)
- Identification of coarse sediment as a limiting factor in the coho recovery plan, improving the likelihood of future investigations
- Identification of fine sediment as a limiting factor in the coho recovery plan, improving the likelihood of future investigations
- Identification of the need for developing an Emergency Action Plan in the coho recovery plan, improving the likelihood of steps being taken.
- While the statewide coho recovery plan as prepared by the State of California included an assessment of economic impacts of coho recovery, it could not go into sufficient detail to provide useful guidance for efforts in the Shasta Valley
- No additional funding was sought for revising the watershed restoration plan due to lack of opportunity to develop a focus of such work with a funding source likely to be interested in providing money with which to follow through.

Task 3—Meet periodically with the Klamath River Basin Fishery Task Force, the Task Force’s Technical Work Group (TWG), and other subcommittees.

The CRMP Coordinator attended task force meetings in February and October. In addition, he attended TWG meetings in June and October.

In addition, he met with the County GIS Steering Committee in March and June, The Yreka Creek Committee in February, March and April.

Task 4— Re-contact Key landowners along the Shasta River and its tributaries who are not participating in restoration; try to find opportunities for future restoration projects.

This process was ongoing throughout the grant period, both in person and via written materials.

Of particular note was the positive outcome of working with the owners of a ranch in the heart of the most important refugia area who had no fish screen on their irrigation pump, despite its being identified by the DFG since 1936 as being of the highest priority. By working together we developed a screening approach they found acceptable, built and installed the screen, and laid the foundation for significant future efforts.

We also invested considerable time in trying to work out a successful outcome to a difficult fish passage/instream flows problem site involving adjoining landowners, ranchers and farmers using water from the Upper Shasta. Despite multiple meetings and discussion, resolution remains elusive but efforts are ongoing.

Task 5—Keeping the Public Informed—Met with recently formed Save our Shasta and Scott Valleys group to help them understand the state coho listing process and examine options in March and July, prepared materials and provided tour of portions of the Shasta Valley for the National Academy of Sciences, along with CRMP meetings (see below).

In addition, the CRMP Coordinator met with key persons in political positions, including newly appointed supervisor Ayn Marsh to give her background on the work being done and the needs addressed by that work to assist her in performing her duties as a county supervisor; LaVada

Erickson, county supervisor, Senator Maurice Johanneson and Senator elect Sam Aanestadt, and staff of Representative Dickerson.

Task 6—Hold 4 public CRMP Meetings: The Shasta CRMP chose to meet in February, May, June, August, September, and October. Special committees to examine restructuring the CRMP meet in September, October, and November.

Task 7—Assist CRMP in formulating 5 year goals and objectives and 10 year Strategic Plan.

No significant progress was made on this task, other than the above mentioned special committee looking at restructuring the CRMP. The ongoing intense focus on the state listing of coho pre-empted everyone's attention, and left little interest in anything beyond immediate concerns. This process will have to be revived later, once things have settled down and long-range planning again makes sense to people.

Task 8—Revisit Restoration sites and evaluate each. Large forest fires started early in the summer of 2002, making for extremely hazy conditions. Rather than invest considerable time in taking photographs that would show changes only poorly, we postponed this task for 2003.

Task 9 Work with Sisk Ofc. of Education: The CRMP Coordinator met with the Siskiyou Office of Education or teachers for planning, to assist with training, or help on field trips in January, February and March.

Task 10—Continue to assist the Yreka Creek Committee—CRMP Coordinator met with the Yreka Creek Committee in twice in February, March and April, worked with them on preparing funding requests to several sources, helped them to expand the scope of their interest to the entire Yreka Creek Watershed, and helped them secure some funding for expansion, maintenance and repairs on the greenway.

Task 11—Prepare report documenting 10 years of Progress made in Shasta from 1991-2001. See attached Decade-Plus Report, and 10 Years of Restoration Report.

Task 12 Complete progress and Final Report to the Yreka FWO: Reports included periodic formal oral progress reports to the FWS, a written and oral progress report to the Task Force in February, and this final report.

Specific Work Products:

Update the CRMP mailing list as needed.

This is a regular ongoing process. New names from meetings are added, as have been the persons residing in irrigation districts who otherwise would have little information other than what the newspaper presents. In addition, mailings are sent as first class mail so that those sent to persons who have moved are either forwarded or returned to us for updating our address list, or deletion as appropriate.

Produce at least 6 funding requests for restoration projects and/or studies on the Shasta River or its tributaries.

Approximately 23 funding proposals were prepared for a variety of projects. Of these 10 were funded during 2002. Funding requests prepared included requests for additional outreach, coarse and fine sediment studies, fencing, tailwater capture, fish passage, water use efficiency, groundwater investigations, etc.

Hold four public CRMP meetings, with notification to all persons owning land adjacent to the Shasta River and its major tributaries, irrigation district members, interested area residents, and key agency employees and political figures.

The Shasta CRMP chose to hold public meetings in February, May, June, August, September, and October. The extra meetings were held to address issues related to the state's listing of Coho in August, 2002.

Hold other Shasta River CRMP committee meetings as appropriate.

A special committee to examine restructuring the CRMP met in September, October, and November. In addition, a special working group convened by the CRMP coordinator, made up of all local fisheries biologists with familiarity with the Shasta River met periodically to discuss and prioritize limiting factors to salmonid production in the Shasta River and its tributaries.

Gather data, documents, maps, photos and other information required to complement the re-writing of the Shasta River CRMP Restoration Plan.

Producing maps, photos, historic and current documents, and water and fish data is ongoing and will be used in completion of the watershed plan.

Attend TWG meetings and also Task Force meetings as appropriate. Make at least one formal report to the Task Force.

The CRMP Coordinator attended Task Force meetings in February and October, and made a formal progress report at the February meeting. In addition, he attended TWG meetings in June and October.

Produce at least 4 newsletters.

See 4 newsletters attached separately.

Coordinate with DWR to do water quality studies in the Shasta.

Funding shortfalls caused DWR to abandon their water quality efforts on the Shasta. Fulfillment of this task was changed to assisting the North Coast Regional Water Quality Control Board in beginning its work on developing Total Maximum Daily Loads for the Shasta River consistent with the dictates of the Clean Water Act. Work done included numerous sampling runs the length of the Shasta River between Dwinnell and the mouth, locating several sites for the collection of irrigation

tailwater to allow its characterization, attending numerous meetings with the local advisory committee, and providing background information to RWQCB staff. The technical TMDL data gathering process continued through 2003 and into 2004.

Highlights of the Year:

See attached report to the TF for highlights of the 2002, particularly for those activities which were not on the list of required tasks and deliverables.

Overall, 2002 was a year with a tremendous amount of time and effort spent helping people in the Shasta Valley understand the details and issues surrounding the state coho listing. That all-consuming task overwhelmed any possibilities for most other broader efforts towards fishery restoration. Of particular importance was the formation and rapid rise to prominence of the Save our Shasta and Scott Valleys (SOSS) organization. Initially they were focused on preventing the listing, but once it occurred in August, they focused their efforts on insuring that Coho recovery planning would be locally based, and were very instrumental in building on the many years off fishery restoration work to cause the state to create a pilot project area in the Shasta and Scott Valleys focused on Coho recovery. Part of that process was the formation of the Shasta-Scott Recovery Team whose task was to develop a proposed Coho recovery strategy for the Shasta and Scott Valleys. Membership on that team included the Shasta CRMP Coordinator.

Volunteer Contributions:

Estimated volunteer contribution for 2002 is conservatively estimated at \$15,000

Summary and Conclusions:

As is occurring in many other watersheds throughout the state, restoration progress continues to be made. The Shasta continues to be an important producer of salmon, with spawner numbers considerably above the lows of the early 1990's. The need for substantial improvement continues, particularly in the form of provision for assured instream flows and temperatures, particularly in low-water years. The slow workings of the federal ESA for coho, and the Clean Water Act for TMDLs gave to many the appearance of limitless time, but the state listing of Coho has significantly changed that perception. Unfortunately the initial response has been to seek ways to resist the listing, rather than try to accommodate its mandates.

Funding by the Klamath River Basin Fisheries Task Force continues to be the most long-standing and reliable assurance of continued restoration progress; competing demands for Task Force funds throughout the Klamath Basin severely limit that group's ability to fully fund outreach efforts throughout the Klamath Basin, but without the Task Force's vision and ongoing support little would have been accomplished to date. Supplemental funding is now increasingly available from the California Department of Fish and Game. If this proves to be relatively reliable, the rate of change should slope more sharply upwards.

Summary of Expenditures, CRMP 2002

Salary:	\$ 21,732.17
Materials	994.83
General Administration	<u>2273</u>
Total	\$25,000

Cost Share and matching funds:

California Department of Fish and Game—Cash Match \$60,000

Volunteer Contribution: \$15,000

Total Project: \$100,000