

Siskiyou Resource Conservation District
Final Report
To
United States Fish and Wildlife Service

Project Title: Scott River Watershed Education and Communication
Grant Agreement Number: 113334-G003
Project Number: 2004-E-03
Siskiyou RCD Tracking Number: 59 V

Report Date: October 29, 2004
Prepared By: Rhonda Muse, SRWC Coordinator
And Crystal Bowman, Education Coordinator

Abstract

This report is being completed to finalize the contractual requirements for the US 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).

Introduction

The USFWS has provided approximately 36% of the total funding for this project. Other funding dollars have been provided by the California Department of Fish and Game and volunteer hours as the in-kind match.

Purpose:

The purpose of this project is to bring watershed education to local communities through public workshops and forums, distribution of informational newsletters, public relation and promotional activities, and to assist the faculty at local schools.

Background/Need:

There remains a critical need for public education and communication in regards to the restoration and conservation activities occurring within the watershed. To work towards improving education and outreach we have developed an integrated education program throughout the valley, targeting students of all ages and adults. The Watershed Education Coordinator and the Scott River Watershed Council (SRWC) Coordinator work with local volunteers, teachers and the 21st century program, and other interested entities to implement watershed related educational activities geared for adult and student participation.

Description of Study Area

All activities under this contract took place in the Scott River Watershed, tributary to the Klamath River, Siskiyou County California.

Methods and Materials

The SRWC identified areas of interest and compiled reader-friendly newsletters. The articles were informational for public knowledge without being overly technical. The articles were written with involvement from various SRWC participants and Siskiyou Resource Conservation District staff where necessary. One educational field trip was scheduled for the purpose of writing a newsletter article.

The SRWC coordinator scheduled Quarterly Forum meetings and sent invitations to SRWC participants, and previous attendees and interested parties. She set meeting agendas and coordinated presentations.

The Watershed Education Coordinator developed activities at Scott Valley Schools for the purpose of providing opportunities for the students to gain a sense of stewardship for their natural community. In addition, the students were provided with experience and training in Natural Resources through these hands on activities. Various schools created artistic designs to put on display at the County Fair.

The SRWC coordinator and the Education Coordinator worked with SRWC's Outreach Committee members to identify display needs, special demonstrations, hands-on activities, and to coordinated logistics of the County Fair. This display was an alternative to hosting a stand alone watershed fair as the County Fair would generate a larger audience.

The SRWC coordinator wrote and published press releases and other advertisements that were distributed through various media.

Results and Discussion of Accomplishments

The following products have been accomplished as a result of this project:

Task 1: The SRWC Coordinator participated in only 1 educational field trip in November 2003 for the purpose of writing newsletter articles. This field trip was to visit the demonstration project in the French Creek sub-watershed. The project constructed a 150-foot wide shaded fuel break and was used to provide community education about fuel risks and the impact of fire on water quality. Additional articles written by the SRWC Coordinator focused on strategic planning and general information that did not require project field trips. Other articles were written by the specific Project Coordinator or agency representative, therefore field trips were not required for writing the articles.

Task 2: The SRWC Coordinator researched and obtained information for project articles to be highlighted in newsletters by reviewing project proposals, quarterly and final reports. Collected strategic planning information and compiled information into a format useful for newsletter articles. In addition, contacts were made with Project Coordinators and other participants to collect pertinent information:

Mark Hampton, CDFG – Fall Chinook Article
Danielle Quigley, Siskiyou RCD – Stream Inventory Report for 2003
Dennis Maria, CDFG – Hatchery fish marking methods
Robert Lindsay, Siskiyou RCD – French Creek Modified Fuel Zone
Crystal Bowman, Siskiyou RCD – Watershed Education

Task 3: The SRWC Coordinator arranged for the printing and distribution 2 published newsletters to over 2800 recipients each; Winter/Spring 2004 and Summer/Fall 2004 (Appendix A). Funding for the design and compilation of articles for the newsletters was provided through Agreement number 113333G011.

Task 4: The SRWC Coordinator held 4 open forum meetings; October 2003, January 2004, April 2004, and July 2004 (see Appendix C for Scott Quarterly Information Forum announcements).

Task 5: The Education Coordinator was to coordinate and serve on the Resource Advisory Committee for Etna High School Natural Resource Program. This task did not occur as the committee did not meet. It is the responsibility of the Etna High School's Natural Resource teacher to call these meetings.

Task 6: The Watershed Education Coordinator met with after-school program coordinators and teachers from local elementary schools, Etna Union High School and Scott Valley Junior High to coordinate education activities including guest speakers and field trip subjects and sites. It was determined that activities with Scott Valley Junior High be focused on the after-school program only. See section below '*Results of Watershed Education Program*' for specific speaker and field trip information by school.

Additional coordination for field trips and participation of Etna Union High School student in the Fall Chinook surveys was provided by Danielle Quigley, Project Coordinator.

Task 7: Both the SRWC Coordinator and the Education Coordinator planned and organized 1 fair display which includes artwork from students of local watershed education program (items on display at the Siskiyou Golden Fair, see Appendix B for SRWC created posters). The Education Coordinator handled the following student contributions:

| | |
|--|---|
| Etna Union High School | Power Point Show and poster |
| Etna Elementary School | Pictures of outdoor learning activities |
| Etna Charter School | 2-part poster |
| Fort Jones Elementary, 21 st Century Program | Drawings of watershed |

Task 8: The SRWC Coordinator created advertisements for wide-spread distribution:

- Newspaper articles and press releases were covered under the SRWC Agreement 113333G011.

- 4 television and radio advertisements, these are public announcements of public forums and workshops. They included advertisement for the following:
 - a. January 2004: Coho Recovery, Watershed Restoration, and The Landowner
 - b. March 2004: Free Biomass Workshop
 - c. May 2004: An Informational Forum on Conservation Easements
 - d. July 2004: An Informational Forum on The Legal Aspects of the Water Trust

Results of Local Watershed Education Program – work performed by the Watershed Education Coordinator

Three (3) students from the Scott Valley Junior High 21st Century Program went on a field trip to visit the Fort Jones City Park where they will be doing a restoration project next school year. In March of 2004, four (4) students participated in a macroinvertebrate collection and ID field trip.

Etna Union High School (EHS) students participated in various educational activities. These include:

- October 2003, teacher training was provided by CDFG (Mark Hampton) for Spawning Ground Surveys and Whitewater Safety Training. EHS attendance included Jim Morris (EHS Natural Resources Teacher), one parent volunteer, and 16 students.
- Fall Chinook surveys in October and November consisted of 5 field days with a total of 26 student participants.
- December of 2003, 15 EHS students did riparian inventory and annual photopoints (fall/winter photopoint) of riparian plantings completed in the fall of 2002.
- March of 2004, 5 EHS students completed annual photopoint monitoring at Etna City Park (spring photopoint).
- March 2004, Howard Whitman and Richard Van de Water (USFS) presented GIS technology to Jim Morris' Natural Resources Class attended by 20 students. Students will be using GIS technology to map an interpretive nature trail they are building on the campus.

The Etna Elementary Charter School participated in a curriculum design called “Adopt –A – Watershed” in which a school or class picks a nearby creek to monitor throughout the year and analyze the results. The creek chosen for reasons of location was Johnson’s Creek. The seventh grade science class focused on Physics this year, so they monitored the temperature and stream flow while seasonally taking photographs of photo-point sites. Fourteen students and one teacher were present for field trips (4), data analysis, and poster production. The eighth graders focused on “Living Things” in science so they seasonally took macro-invertebrate samples from the same site. Fifteen students and one teacher participated in field trips (3), data analysis and poster production. Data analysis brought both classes together to analyze the effect one thing has on another in the watershed.

Fort Jones 21st Century After-school Program was a mix of grades with no teacher present and about 6-8 students for each of the four presentations. Curriculums for the following activities were taken from the “Klamath River Education Program” for grades K-6. “Rain Gauge’s” - Students built a rain gauge and were asked to monitor rainfall at each of their houses over a five-week period in January. “Klamath and Scott River Watershed Map Activity” – Students labeled various places of importance on a map of the Scott River and then the Klamath River. “Salmon Life-Cycle Mobile” – A variation of a curriculum from the Klamath River Education Program teaching the salmon life cycle by building a life-cycle mobile.

Etna Elementary School science lab consisted of various activities dealing primarily with the Etna Elementary Outdoor Learning Center (EEOLC). Twenty-five students and four teachers participated in a riparian willow planting at the Etna City Park. Fifth graders (30 students), four parents and two teachers participated in taking willow cuttings from the Etna City Park. Twelve fourth graders and two teachers participated in “heeling –in” the willow cuttings at EEOLC for the purpose of rooting them. Once rooted, the willows were then used to restore riparian areas on local farmland in Scott Valley. Procedures for riparian willow planting, cutting and heeling-in were taken from the California Department of Fish and Game protocol. Riparian planting activities in the EEOLC involved many different types of riparian vegetation and many students and teachers participated in this for a total of 10 field trips. The Kindergarten class participated once with a total of thirty students and five teachers. The third graders participated three times totally 72 students and 7 teachers. The fourth graders participated once with a total of 12 students and one teacher. The fifth graders participated twice totaling 21 students, one teacher and one volunteer. The sixth graders participated once totaling 20 students and one teacher. The seventh graders from the Charter School participated once totaling 9 students. Thirty Etna Elementary fifth graders and four teachers attended the creek walk at French Creek Outdoor School with Crystal Bowman leading the walk. The French Creek Outdoor School gives the curriculum for the creek walk.

Summary and Conclusions

Overall the project has been successful in providing information and education to the communities within the Scott River watershed, as well as expanding our contacts outside the watershed area, through improved communication and educational material. The cooperation of CDFG, USFS, and USFWS helped to make this a successful program and is much appreciated. Majority of the funding for coordination was applied to the Education Coordinator for the purpose of providing watershed education to local schools. Materials and supplies necessary for the SRWC Coordinator to complete the required tasks were funded through this grant agreement, however time spent was shared under Agreement 113333G011. All hours covering the Siskiyou Golden Fair display was covered under this grant agreement.

When the watershed education program was first implemented several years ago, it was provided only to Etna Union High School. This year, and last, expanded this scope to include the Scott Valley Junior High School and all elementary schools. Unfortunately in the period since the project proposal was submitted, both the Etna Union High School and the Scott Valley Junior High has experienced layoffs of teachers. This has put an additional work load on the remaining teachers, and it has been difficult to find interested teachers to participate. Due to the lack of available teachers and staff at these two schools, we have no plans to pursue future funding for education activities with the high school and junior high. All activities will focus on the elementary schools, in particular the Etna Elementary School as they are beginning to integrate watershed education activities into the school wide curricula. We are hopeful that with proper funding, the watershed education program will be coordinated with the Siskiyou County Office of Education in future years. This partnership will bring an improved ability to evaluate the programs successes as well as assist with choosing curricula not addressed by the local schools.

Summary of Expenditures

The following report provides the summary of expenditures incurred during this project, underlined amounts represent a **total budget of \$25,721.85** for the entire project:

US Fish and Wildlife Service

Effective October 1, 2003 – October 1, 2004

| | Estimated Budget | Expenditures To Date | Remaining Balance |
|-------------------------------|-----------------------------|---------------------------------|------------------------------|
| Salaries (including benefits) | \$6,289.00 | \$4,464.17 | \$1,824.83 |
| Operating Expenses | \$2,223.00 | \$1,603.57 | \$619.43 |
| Subtotal | \$8,512.00 | \$6,067.74 | \$2,444.26 |
| Administrative @ 10% | \$851.20 | \$606.77 | \$244.43 |
| Total | <u>\$9,363.20</u> | \$6,674.51 | \$2,688.69 |

COST SHARE REPORT: (Total Cost Share \$16,358.65)

Department of Fish and Game

| | Cost Share Amount |
|-------------------------|---------------------------|
| TOTAL PERSONNEL COSTS | \$6,049.00 |
| TOTAL OPERATING EXPENSE | \$3,222.50 |
| SUBTOTAL | \$9,271.50 |
| Overhead (10%) | \$927.15 |
| TOTAL ESTIMATED BUDGET | <u>\$10,198.65</u> |

In-kind Match/Volunteer Hours

| | #Hours | Rate | Total |
|-----------------------|---------------|-------------|-------------------------|
| a. Workshops and Fair | 128 | \$ 20. | \$ 2,560. |
| b. Committee Meetings | 180 | \$ 20. | \$ 3,600. |
| Total | 308 | \$ 20. | <u>\$ 6,160.</u> |

Appendices

- Appendix A: Newsletters: Winter/Spring 2004 and Summer/Fall 2004
Appendix B: SRWC Posters for Siskiyou Golden Fair display
Appendix C: SQIF Announcements