

Sierra Nevada Conservancy-Final Report

**Sierra Nevada Conservancy Grant Program
Safe Drinking Water, Water Quality and Supply, Flood Control
River and Coastal Protection Act of 2008 (Proposition 84)**

Grantee Name: Friends of the Inyo

Project title: Eastern Sierra Water Watchers

SNC Reference Number: SNC 070164 **Submittal Date:** March 30, 2012

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Check one:

6-Month Progress Reports should reflect the previous six months. **Final Reports** should reflect the entire grant period.

6-Month Progress Report

Final Report

A. Progress Report Summary: (Please provide a general description of work completed during this reporting period.)

This is the final report, reviewing all work done under the grant.

B. Deliverables or Outcomes completed during this Reporting Period or Milestones Achieved: (Include specific information, such as public meetings held, agency participation, partnerships developed, or acres mapped, treated or restored.)

We successfully completed water quality monitoring programs in 2010—details regarding the program are given below.

C. Challenges or Opportunities Encountered: (Please describe what has worked and what hasn't; include any solutions you initiated to resolve problems. If your project is not on schedule, please explain why here.)

D. Unanticipated Successes Achieved: (Please describe any additional successes beyond completing scheduled tasks or meeting scheduled milestones.)

We were very successful with volunteer recruitment and relationship building while dealing with logistical challenges.

E. Compare Actual Costs to Budgeted Costs:

PROJECT BUDGET CATEGORIES	Budgeted SNC Dollars	Actual Dollars
Travel	8,100	3141.55
Equipment	2,000	1671.24
Coordinator hours	20,900	20740
Tracking and Management hours	5,000	4970
Education materials	9,000	8779.49
GRAND TOTAL	45,000	39,302.28

Explanation: (if needed)

A. Do you have information to report on the project-specific Performance Measures for your project?

Watershed areas to be monitored:

Headwaters of the Owens River (Deadman and Glass Creeks)

Outcome: Monthly Spring through Late Fall biological, physical, and chemical water quality monitoring performed

Mono Basin Watershed (Mill and Wilson Creeks)

Outcome: Monthly Spring through Late Fall biological, physical, and chemical water quality monitoring performed

Mount Whitney Watershed (Lone Pine Creek)

Outcome: Monthly Spring through Late Fall biological, physical, and chemical water quality monitoring performed (2009)

Lower Owens River Watershed

Outcome: Bi- Monthly Spring through Late Fall biological, physical, and chemical water quality monitoring performed (2009)

Monitoring Goals:

Design and execute scientifically credible studies that assess the condition of the above listed stream systems

Outcome: Designed a monitoring schedule, protocol, and Quality Assurance/Quality Control plan. Got program approved and audited by the State of California Citizen Monitoring Program "Clean Water Team". Recruited and trained 25 dedicated volunteers that monitored over 150 of the Sierra crest for water quality issues. Conducted qualitative and quantitative chemical, biological, and physical monitoring of streams, riparian areas, and watersheds.

Screen for potential water quality problems and identify potential workable solutions, particularly as they apply to restoration activities

Outcome: Performed hundreds of hours of watershed-health monitoring, adapting to meet needs and problems as they arise while gathering quality data that ensured healthy water for the region's people and environment.

Measure the efficacy of place-based citizen stewardship and restoration projects as they relate to addressing water quality, habitat condition, and sustainable recreational use

Outcome: Monitored watershed health in conjunction with watershed-focused community stewardship and restoration projects to ensure that work was benefiting regional water quality and environmental quality goals.

B. Were there any other relevant materials produced under the terms of this Agreement that are not a part of the budgeted deliverables? If so, please attach copies.

Attached are a 2010 Eastern Sierra Water Watchers Program Summary and graphs of data collected.

C. Next Steps: (Work anticipated in the next 6 months, including location and timing of any scheduled events related to the project.)

We will be working to secure additional funding for the Eastern Sierra Water Watchers in the near future, in order to maintain the continuity of our data and ensure watershed health improves in the Eastern Sierra.

Please Complete this Section for FINAL Report ONLY

Capacity-Building Results and Collaboration and Cooperation with Stakeholders:

(What partnerships did you initiate or strengthen as a result of this project? How did they affect the project outcome? If applicable, how did this grant increase your organization's capacity? What is your plan to sustain this increase?)

Friends of the Inyo engaged with volunteers to complete the project deliverables; this helped us expand our role in local communities and increase our membership. We strengthened existing partners with agencies such as the Inyo National Forest, Mammoth Community Water District and Lahontan Regional Water Quality Control Board.

We hope to continue to work with the Inyo on Watershed Condition Framework projects that will help restore the critical Eastern Sierra watersheds that we monitored during this grant period.

Description of Project Accomplishments:

1. Most Significant Accomplishment

Under the Proposition 84 grant, Friends of the Inyo established a powerful and sleek citizen science program area that protects the watershed health of the Eastern Sierra. The Eastern Sierra Water Watchers are a dedicated, results-driven group of volunteers that genuinely care for the aquatic and natural resources of the Inyo National Forest. The funding from the Sierra Nevada Conservancy has brought fantastic involvement in Eastern Sierra watersheds, focused needed scrutiny on their condition, and restored watersheds to their proper functioning condition.

2. WOW Factor

Over the course of the grant, the Eastern Sierra Water Watchers (ESWW) monitored 15 different creeks in the Sierras and White mountains, including two Wild & Scenic Rivers. The Eastern Sierra Water Watchers have monitored watershed health in two states, in a zone that stretches close to 150 miles. It's a lot of ground to cover, but the funding from the Sierra Nevada Conservancy allowed the monitoring of some of the wildest, pristine, and ecologically-critical lands in the American West.

3. Design and Implementation

As discussed in the above answer, the area we covered was during the grant period was jaw-dropping. Friends of the Inyo is the only non-profit organization in the Eastern Sierra dedicated to regional public lands conservation. We saw a void that needed filling, and willingly jumped in to get great data on watershed condition along the Sierra. In retrospect, we might have scaled down the scope of our monitoring, and adapted our monitoring strategy to target known problem areas in order to have the capacity when needed to respond to emerging problem areas.

With water quality monitoring, it's tough to strike the balance of gathering good baseline data while also be nimble enough to redistributing resources to cover emerging treats to our region's natural resources. We feel that we did a good job reflecting on our efforts at the end of each monitoring season to optimize our resources and efforts, yet it is something we can continue to improve upon in the future.

4. Indirect Impact

The data collected and shared by the ESWW proved very valuable for many of our partner organizations. Our regional office of the State Water Resources Control Board found the information invaluable, because of the vast region that they are forced to regulate. It was extremely helpful that the Eastern Sierra Water Watchers were out every month monitoring creeks that the State Water Resources Control Board would be lucky

to hit every five years. The Water Watchers were able to raise red flags when water quality conditions were in violation of state and federal standards, which enabled the State authorities to get involved when necessary.

The Mammoth Community Water District also found the information gathered by the ESWW valuable for their mission of providing clean water for the town of Mammoth Lakes, California. In one instance, Water Watcher volunteers noticed an algal bloom while monitoring Mammoth Creek in the Lakes Basin, an beautiful alpine area above Mammoth Lakes that serves as a de facto drinking-water reservoir for the town. The Water Watchers were able to alert the Water District of the condition so that they could test the water to ensure that it was up to drinking water standards.

The Mono Lake Committee, a non-profit based in Lee Vining, California, is focused on the conservation of Mono Lake. The ESWW volunteers monitored the watershed condition of the streams that nourish the fragile terminal lake, information that proved a great resource for the Mono Lake Committee in their efforts to ensure the future health and prosperity of Mono Lake and the surrounding environment.

Perhaps the largest beneficiary of the monitoring and projects planned by the Water Watchers is the Inyo National Forest. Friends of the Inyo has a great partnership with the Inyo NF, and the Eastern Sierra Water Watchers built and enhanced an already-strong relationship. The ESWW monitored creeks that were almost exclusively on the Inyo NF lands, which provided the watershed professionals on the Inyo NF great baseline data for the creeks on the forest, and alerted them of problem areas such as sedimentation from forest roads into streams. Data collected by the ESWW has provided the Inyo National Forest with key baseline data that enabled Upper Deadman Creek and Cottonwood Creek to obtain designation as federal Wild & Scenic Rivers in 2009. The pre-designation data, and the subsequent data will enable the Inyo NF to have great data to maintain and enhance the Creeks through upcoming River Management Plans.

5. Collaboration and Conflict Resolution

Friends of the Inyo worked in collaborative relationships with a variety of local and regional groups, individuals, and agencies. One of the largest partners in water quality testing and restoration activities was the Mono Lake Committee (MLC). The MLC had a staff member for a number of years who worked with Friends of the Inyo staff to help coordinate and recruit volunteers in the Mono Basin, as well as assist with monitoring days and trainings. The collaboration with the MLC worked out great, with both MLC and Friends of the Inyo benefiting from the additional capacity of having someone to work with and cover for them when they had to be two places at once.

In addition to the collaboration with the Mono Lake Committee, Friends of the Inyo worked closely with the Regional Water Board, the Inyo National Forest, the Bishop field office of the Bureau of Land Management, the University of California Sierra Nevada Aquatic Research Laboratory, California Trout, Mammoth Lakes Trails and Public Access, Trout Unlimited, Mammoth Community Water District, and the Los Angeles Department of Water and Power.

With so many diverse partnerships, we found the most difficult part of collaboration and cooperation just keeping in touch with everyone. It's no simple feat to maintain professional relationships with so many important groups, and each one can be an

important resource to help with our mission. You never know when you'll be needing a sample of macroinvertebrates identified, or need to partner for a National Public Lands Day watershed health stewardship project.

6. Capacity-Building

Friends of the Inyo is a stable organization, having been embedded in the California conservation community for over 25 years. We have an extremely impassioned and dedicated board and staff, who work long hours and truly believe in the work we do. Our board, staff, and membership numbers have all steadily increased for the past fifteen years, and there's certainly no shortage of work to be done here in the Eastern Sierra.

Like most non-profits in this economy, we are faced with more work and projects than we can take on financially. We have been facing reduced funding from granters, but have actually found that membership donations are up since the economy started to go downhill. Our members recognize the importance of the work we do, and continue to be one of our greatest resources.

Grant funding like the Proposition 84 grant has also been crucial for building our organization. Through this generous grant, for example, we were able to increase our organizational capacity to design and execute scientifically credible studies that assessed the local ecosystems. By performing sound science and rigorous environmental monitoring, we have been able to prove to our membership and the communities of the Eastern Sierra that we are serious and dedicated to the long-term preservation of the land.

By receiving the funding for our water quality program, Friends of the Inyo has been able to assist our partner organizations by providing data, project support, and technical knowledge to them, all things that they would likely not be able to devote the time and resources towards. Perhaps the biggest capability improvement has been to the Eastern Sierra's communities and watersheds, now functioning under the continued watch of an efficient and observant citizen-based water quality monitoring program.

7. Challenges

Friends of the Inyo has faced both internal and external challenges with the implementation and management of the Eastern Sierra Water Watchers. As previously mentioned, the water watchers program covers a large geographic area, and coordinating volunteers, trainings, supplies, monitoring schedules, and stream assessments was a struggle at times, and certainly translated into a lot of highway miles.

Another challenge we have faced is staff turnover. The original coordinator of the Water Watchers program moved on in 2009, and her replacement left in 2010. So it has been a bit of a struggle to connect the coordination of equipment, volunteers, and data management. Despite the staffing challenges, our corps of volunteers is still collecting great data, and we are fulfilling our mission of gathering great data to guide restoration and recreational projects to improve habitat quality and sustain diverse recreational use.

8. **Photographs**



Volunteers conduct a stream riparian survey near June Lake, CA



Volunteers check stream pH and temperature near Lee Vining, CA



Eastern Sierra Water Watchers take a water sample for further lab testing on the Upper Owens Wild & Scenic River, near June Lake, CA

9. **Post Grant Plans**

At this point in time, funding has run out for the Eastern Sierra Water Watchers project. We've been managing to get by with donations in supplies, time, and lots and lots of volunteer help. We are grateful for the support for this program. We think that the Eastern Sierra Water Watchers program provided a worthwhile and needed service to the lands and people of the Eastern Sierra, and we are actively seeking funding for the continuation of the Water Watchers and Citizen Science program areas.

10. **Post Grant Contact**

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