

Sierra Nevada Conservancy-Progress 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: El Dorado Irrigation District
Project title: Hazel Meadow Restoration Project
SNC Reference Number: SNC 080149 **Submittal Date:** May 11, 2010
Report Preparer: Dena McCann **Phone #:** 530-642-4414

Check one:

6-Month Progress Report
 Final Report

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

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

The Hazel Meadow Restoration Project was completed on May 7, 2010. The project provided increased meadow habitat, a natural vegetation filtering system for upland runoff, improved the equestrian and hiking trails, and increased and improved infrastructure that will allow visitors to appreciate meadow habitat while protecting the vegetation, soil, species or water quality. The project used the awarded grant funds to construct an ADA accessible boardwalk, viewing platform, and educational signage through the meadow to the shoreline of Jenkinson Lake, a major recreational amenity, fishery, and drinking water supply for El Dorado County. The boardwalk and platform are essential to the meadow restoration success and to maintaining the sustainability of the resorted meadow, water quality, habitat diversity, recreation, and education benefits of the overall restoration project.

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.)

The existing infrastructure and non-native plants were removed. The equestrian and bicycle trails were relocated outside the meadow restoration area. A large one acre spoils pile was removed and the site graded and recontoured to allow for upland runoff to be filtered through the meadow before entering Jenkinson Lake. The drainage channel was widened, providing a larger floodplain and a natural meander through the meadow. Soils along the existing equestrian and bicycle trails and visitor

paths were de-compacted. Emergent plantings and plugs were placed in the newly created drainage. The project site was seeded with native herbaceous species and wild flowers and replanted in all exposed soil areas throughout the meadow.

The repair, improvement, and maintenance of the project site's infrastructure was necessary to protect and preserve the meadow restoration. The new infrastructure allows visitors to appreciate the increased and improved meadow habitat without disturbing or destroying it. New infrastructure includes a bridge, picnic tables, grills, and trash and recycling receptacles, two boardwalks, viewing platform, and educational signage. A split-rail fence and barriers of boulders and logs were also installed to protect the restored meadow vegetation.

The elevated boardwalk through the meadow provides access to the shoreline. The boardwalk ends at a platform structure. To increase visitor diversity, the boardwalk and platform was constructed using ADA standards with safety railings and benches. The boardwalk now discourages disturbance of the restored meadow by providing a more desirable route to the lake views, thus allowing visitors to enjoy the area without negatively affecting the hydrology, vegetation, or species that would be using this area.

Bat boxes built by Boy Scout Troops were erected on the east side of the project site in existing thickets of native willows.

Educational signage was also provided with vital information about safety, but also explains technical environmental restoration aspects of the site. Interpretive themes include water quality and natural resource topics such as erosion control, soil compaction, vegetative filtration, biological diversity, and native flora and fauna.

All aspects of the project have been completed to the plans and specifications provided to the SNC upon approval of the project.

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.)

Revegetation – One of the biggest challenges has been to keep the seed in place until germination could occur. Migratory wildlife found the newly renovated meadow to be an ideal place to rest and recover from their long migration and ate a significant portion of the seeds prior to germination. Reseeding was necessary to meet desired coverage.

Weather – Another challenge was working around the unpredictable weather. This last year the project encountered extreme snow storms, icy conditions, and prolonged snowmelt periods making working conditions extremely difficult. During times when the weather was good, park visitors were camping in the area further delaying some of the work.

Community - Opportunities to overcome existing challenges came with the coordination and help from continuous community involvement. Hand raking, planting, reseeding, and the construction of the bat boxes were performed in collaboration with the El Dorado County Charter Schools, Boy and Girl Scout Troops, local community participants, and dedicated EID staff. The large number of volunteers, assisted in moving the project forward to completion.

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

The project received the California Environmental Protection Award from the California Rural Water Association, even prior to the meadow completion. This was a huge recognition for this type of project. The meadow restoration can be used to help guide further meadow restoration endeavors in the Sierra Nevada (also see page 6 for further details).

E. Compare Actual Costs to Budgeted Costs: (Please refer to your grant agreement to list your deliverables/budget categories and budgeted costs compared to actual costs incurred during this reporting period in the table below.)

PROJECT BUDGET CATEGORIES	Budgeted SNC Dollars	Actual Dollars
Materials	32,000.00	32,470.79
Labor	34,116.00	35,057.06
GRAND TOTAL	66,116.00	67,527.85

Explanation: (if needed)

An increase in materials was seen from the time the grant budget was submitted to the SNC and the time the grant contract was executed. Cost of materials increased over the last several years between time that we submitted the budget until the time the grant was initiated and the state freeze on grant funding. Labor costs increased most likely due to all the weather delays (starts and stops).

F. Do you have information to report on the project-specific Performance Measures for your project? (If so, please list the Performance Measures below and describe your progress.)

The majority of the project falls within the heading D of the SNC application guidelines. "Performance Measures Common to Site Improvement Projects Only," items 11-15: The project enhanced Jenkinson Lake's drinking water supply by filtering sediment and pollutants from upland stormwater from entering the lake by utilizing native vegetation. Jenkinson Lake has a capacity of 41,000 acre-feet. Also this project further stabilized the shoreline with vegetation and by maintaining access via a raised boardwalk and platform to reduce erosion.

(12) The project improved 1.4 acres of existing degraded meadow habitat and created an additional 1 acre of meadow habitat through the removal of old spoil piles. The meadow restoration has the support of CDFG and will provide additional habitat to bat species. (13) The project also transitioned a channelized, eroded drainage gully, into a connected waterway that meanders and spreads out through the meadow to provide filtration of pollutants and provide optimal vegetation growth. (14) The equestrian and bicycle trails were relocated to the outside of the restored meadow to maintain an unimpacted restored environment. Additionally, the boardwalks and platform allows visitors to enjoy the meadow habitat without physically impacting it. (15) Although a specific amount of sediment has not been measured, this project through vegetation filtration and the boardwalk installation would significantly reduce sedimentation and erosion from entering the lake.

In addition to this performance measure, some within A of the SNC application guidelines. "Common to All Categories" and B. "Common to Site Improvement & Acquisition Categories" appear to apply. Under A. "Common to All Categories," (1) Approximately 2,000 people per year camp in the immediate vicinity of the meadow site, and need to pass through the meadow to access the lake at this location. This number does not include day use visitors that would be attracted to the unique facility in the park. Under B. "Common to Site Improvement & Acquisition Categories," (6) Approximately 480 linear feet of meandering upland drainage will be restored, enhanced, and protected, and 680 linear feet of lake shore is now protected. (7) There is one new access point via the new boardwalk; however, there are numerous points along the boardwalk and platform from which the public can learn about and view the restored meadow and lake environments. (8) The site of special significance is the restored meadow, the drainage, and the lakeshore of Jenkinson Lake.

G. 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. (Include digital photos, maps, media coverage of project, or other work products.)

None.

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

Project is complete. A tour or an "open house" type ceremony for all participants of the project is planned for the summer.

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?)

This project brought together many different stakeholder and agencies to build a mutually beneficial relationship between all parties working toward a common goal of restoring an invaluable resource such as the meadow within Sly Park Recreation Area. All participants should have come away from this project sharing in the responsibility, authority, and accountability for achieving success with the completion of the meadow. Specifically:

- Department of Fish and Game – supplied a grant of \$42,610 for project materials and has provided technical expertise during the planning stages of the project and stayed involved throughout construction of the project. CDFG also provided solid support to assist EID with gaining the SNC grant for the boardwalk and platform.
- Sierra Nevada Conservancy – supplied a grant of \$66,116 for project materials and labor for the boardwalks and viewing platform. Stayed involved with the project with site visits and continued supportive communications throughout the project phases.
- Local Businesses and Community – Several local businesses and local community members provided support for the project by writing letters, speaking out at community meeting, and volunteering.
- Boy and Girl Scouts of America Troops – Support and hard work was provided by enthusiastic Boy Scouts of America and the Girl Scouts of America (several local troops) in which they gained an Eco-badge and education regarding restoration, plant identification, and water quality.
- El Dorado County Charter School – Students from the school were educated about the importance of restoration work and volunteered on-site to help with many different aspects of the project including planting of vegetation and water quality sampling.
- Sly Park Recreation Area Master Plan Stakeholders – This project was originally identified through the SPRA Master Plan, in which numerous stakeholders were contacted in the development of the meadow project and included the El Dorado County Parks and Recreation Department, El Dorado County Office of Education, City of Folsom, Eldorado National Forest, California Native Plant Society, Cosumnes River Horseman's Association, and the California Department of Fish and Game
- El Dorado Irrigation District Staff and Volunteers – EID provided planning design and permitting for the project. Many aspects of the project also provided staff with volunteering opportunities, which strengthened internal relationships.

Description of Project Accomplishments:

1. Most Significant Accomplishment

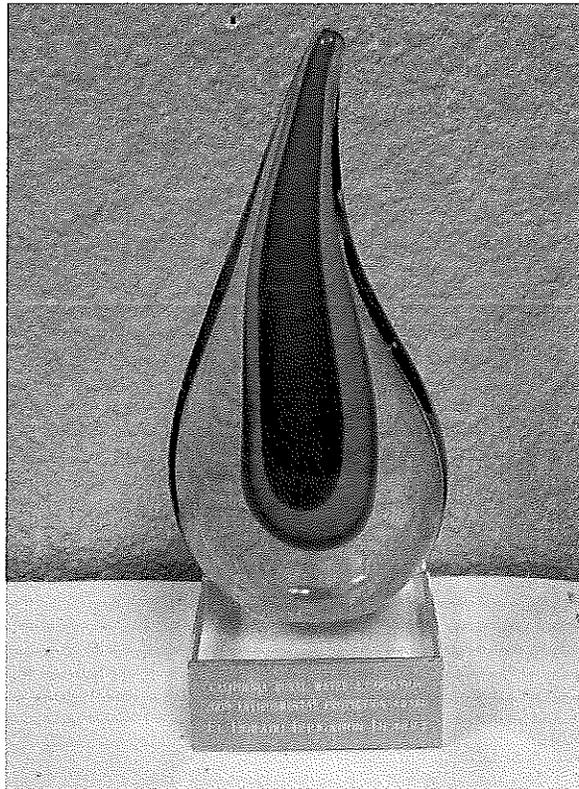
Describe in one concise, well-written paragraph, the most significant accomplishment that resulted from this grant.

The boardwalk and platform completion was the most significant aspect of the project, because all the rehabilitation and restoration of the site would not last long without a way to provide visitors with appropriate access through the meadow to the lake shore without damaging the restored habitat. The boardwalk and platform is essential to maintaining the sustainability of the restored meadow and water quality, habitat diversity, recreation, and education benefits for thousands of people that visit the park each year and the thousands of people of the west slope of the Sierra Nevada in El Dorado County that depend on Jenkinson Lake as a clean, reliable water source.

2. WOW Factor

If applicable, please describe anything that happened as a result of the project or during the project that is particularly impressive.

The project was nominated for and received the California Rural Water Association Environmental Protection Award as a project that meets an innovative way to manage a water supply while maintaining environmental integrity. Entrants for the Environmental Protection Award were evaluated on their unique purpose in protecting California's precious environment and limited resources. The Hazel Meadow Restoration Project won this award in 2009 prior to completing the project. The project was then submitted to the National Rural Water Association for its Exemplary Efforts in Environmental Protection Award as the California nominee.



3. Design and Implementation

When considering the design and implementation of this project, what lessons did you learn that might help other grantees implement similar work?

When performing a restoration project look at designing the project to treat the cause of the detrimental impacts to the ecosystem, rather than the symptoms of the habitat degradation. If the meadow restoration was executed without the design and implementation of the two boardwalks and viewing platform, the project would have failed within only a few years. This is because without providing a viable visitors' path through the meadow the original degradations would return (i.e., soil compaction, soil erosion, water quality concerns, and invasive species). The boardwalks and platform discourages disturbance of the restored meadow by providing a more desirable route to the lake views, thus allowing visitors to enjoy the area without negatively affecting the hydrology, vegetation, or species that would be using this area.

4. Indirect Impact

Please describe any indirect benefits of the project such as information that has been developed as a result of the project is being used by several other organizations to improve decision-making, or a conservation easement funded by this grant that encouraged other landowners in the area to have conservation easements on their property.

Restoration generates indirect benefits that can enhance human welfare, such as adding an ADA component, thereby increasing recreational opportunities to a wider population. Service benefits contribute to social welfare by supporting diversity within a shared experience.

Other indirect benefits could be intrinsic in value such as an increase in biodiversity, a reduction in endangered species listing, or an increase in water quality, which can benefit an entire region.

Volunteers and restoration participants can reflect pride in their accomplishments and translate that into educating others in the value and importance of restoration, conservation, and protecting our natural resources for future generations.

The project has given many community members and groups the opportunity to participate in the restoration process, like the Boy Scouts, Girl Scouts, high school students from various local schools worked together on multiple occasions on the restoration process. Since so many students, teachers and parents vested their time and labor to the project we believe it has afforded the opportunity to spearhead other environmental projects in the community. It has also provided them a place to come and "show off" their work to others when visiting the park.

5. Collaboration and Conflict Resolution

If you worked in collaboration or cooperation with other organizations or institutions, describe those arrangements and their importance to the project. Also, describe if you encountered conflict in the project and how you dealt with it, or if there was conflict avoided as a result of the project.

As stated above this project has many participants, extensive collaborative efforts, and continued cooperation with a variety of agencies, organizations, and the community. The project was also

a success because all participants worked well together. We did not experience or encounter any conflict during the implementation of the project.

6. Capacity-Building

SNC is interested in both the capacity of your organization, as well as local and regional capacity. Please describe the overall health of your organization including areas in need of assistance. SNC is interested in the strength and involvement of your board, significant changes to your staff, size and involvement of membership. In addition, describe how your project improved capabilities of partners, or the larger community.

The EID Board has been briefed on the project throughout its duration and has been positive and supportive. Although the District does not have a membership, we do have customers. Those customers benefit by not only the visual improvements if and when they visit the park, but more greatly by the environmental protection factor that the meadow provides our largest drinking water reservoir. These benefits are what help meld our community together and help ensure support for future restoration projects.

7. Challenges

Did the project face internal or external challenges? How were they addressed? Describe each challenge and any actions that you took to address it. Was there something that SNC did or could have done to assist you? Did you have to change any of your key objectives in response to conditions "on the ground"?

One of the biggest challenges has been to keep the seed in place until germination could occur. Migratory wildlife found the newly renovated meadow to be an ideal place to rest and recover from their long migration route and ate a significant portion of the seeds prior to germination. Another challenge was working around the unpredictable weather. This last year the project encountered extreme snow storms, icy conditions, and prolonged snowmelt periods making working conditions extremely difficult. During times when the weather was good, park visitors were camping in the area further delaying some of the work.

8. Photographs

Grantees are strongly encouraged to submit photos, slides or digital images whenever possible. These images will be used for SNC publications such as annual reports or on the website. Please make sure you clearly identify location, activity, and your project with each submitted image. Images will be credited to the submitting organization, unless specified otherwise.

Please see the attached CD for a slide show of the project from beginning to its completion.

9. Post Grant Plans

What are the post-grant plans for the project if it does not conclude with the grant? Include a description of the following (if applicable): (1) Changes in operations or scope; (2) Replication or use of findings; (3) Names of other organizations you expect to involve; (4) Plans to support the project financially, and; (5) Communication plans?

The project can be useful as a model in other regional parks or agencies for potential projects throughout the Sierra Nevada. The key concept here is the reclamation of a previously disturbed area and redesign of existing uses in such a way as to allow their continuance without impacting the additional amenities.

The project was presented in several EID Board of Directors' meetings, routinely attended and reported on by the media. EID also prepared several news releases for distribution to local and regional newspapers and television media describing the project and how it was developed and funded with the support of local, regional, and state partners. A final presentation will be made to our board and that information will be distributed with our regular news release about the Board meeting.

EID plans to submit this worthy project for upcoming environmental awards. We will announce the completion of the project in our customer newsletter and write a feature on the completion of the project which will be distributed to our list of region-wide community organizations, leaders, individuals and media.

10. Post Grant Contact

Who can be contacted a few years from now to follow up on the project? Please provide name and contact information.

Sly Park Recreation Area
Park and Recreation Supervisor
4771 Sly Park Road
Pollock Pines, CA 95726
530-295-6819

El Dorado Irrigation District
Environmental Division Manager
2890 Mosquito Road
Placerville, CA 95667
530-622-4513

SNC-approved Performance Measures: (Please list each Performance Measure for your Project, as identified in your Grant Agreement, and the results/outcomes.)

See page 3 of this report.

Sierra Nevada Conservancy Grant Program Project Reporting Guidelines

Progress Reports are required periodically throughout the term of the Grant Agreement (Refer to Exhibit B of the Grant Agreement). These reports will allow you and the Sierra Nevada Conservancy (SNC) to see the degree to which the project is on track and achieving your projected outcomes. Your Progress Reports will further provide the SNC with information that will help us to explain your work to the Board Members and various other audiences. Timing of Progress Reports is specified in the Project Schedule included in Exhibit A of the Grant Agreement, but generally every 6 months until completion of the project.

A Progress Reporting Form is provided to Grantees on the SNC Website. **Six-month Progress Reports** should reflect the previous 6-month period; **Final Reports** should address each question for the entire grant period – looking at the project as a whole.

The form specifies the items you will need to report on. For the Six-Month Interim Report these include, but are not limited to: *A Progress Report Summary of work completed, Deliverables or Outcomes Completed, Challenges or Opportunities Encountered, Unanticipated Successes Achieved, Actual Costs compared to Budgeted Costs, Any Additional Relevant Materials Produced, and Next Steps.*

The Final Report will include additional information, such as: *Resources Leveraged, Capacity-Building Results and Collaboration and Cooperation with Stakeholders, a Description of Project Accomplishments, and SNC Approved Performance Measures.*

Please make sure that you submit complete reports by the dates requested in your Grant Agreement.

080149 Final Report- photos: boardwalk and viewing platform/ meadow and creek restoration (EID in-kind)



("before" photos in app file) - A

