

Final Report

Sierra Nevada Conservancy Grant Program

Grantee Name: Pit Resource Conservation District

Project title: Ash Creek Wildlife Area Restoration Project

Submittal Date: December 1, 2012

Report Preparer: Todd Sloat

Phone #: (530) 336-5456

Check one:

Quarterly Report

Final Report (Post Construction Phase I)

Progress Report Summary

This progress report covers the time period from July 1 to December 1, 2012. Numerous activities were conducted the previous six months and included, finalizing funding agreements with the Wildlife Conservation Board (WCB), finalizing bid packets for construction activities, reviewing the bids and selecting contractors, conducting a wetland delineation and preparing a Pre-Construction Notification comply with Nationwide Permit No. 27, and collecting monitoring plan data.

The overall restoration project was split into two phases. This was necessary because funds from the Department of Water Resources were not yet secured for construction season. Therefore, Phase I includes the restoration of the area below and including County Road 87A (i.e. Elkins Lane). This includes two areas that require the elimination of gullies and entrenched stream channels using the “pond and plug” technique, the lowering of Elkins Lane, and the installation of the pipeline. The pond and plug treatment was split into two areas (referred to as Lower Ash Creek and Below Elkins) in order to allow for a diversity of contractors (i.e. smaller sized firms) to compete for the work. This was suggested by the Pit Resource Conservation District Board of Directors as they wanted local contractors to be able to potentially win some of this work in order to assist the regional economy. It was thought that the larger portion of the pond and plug work may exceed the capacity of any one local firm.

The Pit RCD received seventeen bids from contractors. Four M Contracting, based out of Winters CA, was awarded all of the “pond and plug” work, LePage Co, based out of Red Bluff CA, was awarded the lowering of Elkins Lane, and Trent Construction, based of Gerber CA, was awarded the pipeline work. Most of the bids received were from contractors that live within 100 miles of the project area. A summary of budget funds and those spend is provided in Table 1 below.

Deliverables or Outcomes completed during this Reporting Period or Milestones Achieved

Tasks Completed:

- Installing of 6,955 feet of 27 inch pipeline, 6,500 feet of 24 inch pipeline, & inlet fittings, 4 overflow valve structures, 1 intake structure, 1 flow meter, 4 inlet valves, 12 air release valves
- Lowering of 3,946 feet of road (Elkins Lane) and installing of geotextile fabric beneath the road with sorted sizes of rock to allow a stable surface to drive upon when wet
- Eliminating 91,825 feet of degraded stream channel
- Restoring 1,131 acres of wet meadow habitat
- Creating 104 acres of ponded area (60 ponds)
- Enhancing/protecting 869 acres of meadow habitat
- Revegetating 91 acres of disturbed areas (new plugs)
- Restoring an estimated 27,302 linear feet of stream

Appendix A provides representative photographs and as-built plan view for Phase I construction.

Challenges or Opportunities Encountered

The Army Corps of Engineers (Corps) was very difficult to work with during the delineation process. The Corps assigned three different staff to the project which resulted in confusion and inefficiency by them. Because of this, the start of the project was delayed from an anticipated July 15 to August 6th, 2012.

Compare Actual Costs to Budgeted Costs:

Table 1. Budgeted and Actual Cost for Construction Related Costs

Construction Budget Categories	Budgeted Dollars	Actual Dollars
Pipeline	\$810,000	\$737,538.28
Elkins Lane	\$119,500	\$58,002.44
Meadow Restoration (Earthwork)	\$1,285,732	\$1,099,841.34
Revegetation	\$17,500	\$6,381.00
Construction materials (rock and plants)	\$35,000	\$14,387.93
GRAND TOTAL	\$2,267,732	\$1,916,150.99

Next Steps

The major tasks for the next six months will be to complete a wetland delineation for Phase II, conduct a hydrologic and hydraulic assessment, prepare a PCN, prepare bid packets and request bids, and conduct monitoring.

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?)

The RCD continued to strengthen their partnerships with the California Dept. Fish and Game, Ducks Unlimited, and private landowners. Multiple meetings were held that resulted in implementing a successful project and building trust between partners. The project would not have been able to be implemented without these partnerships because of the size and complexity of this project. Several project elements required various types of expertise, and the partners were able to use their strengths to meet project objectives. The grant enabled the RCD to maintain capacity and also provided the opportunity for the RCD to work on a project much larger in scale than they had previously implemented.

Description of Project Accomplishments:

1. Most Significant Accomplishment

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

This grant developed the synergy necessary to implement this project, one of the largest meadow restoration projects in California. SNC implementation funds were the first "large" amount of funding committed to the implementation budget. This commitment of funds demonstrated the value of the project merits and trust that SNC has with the Pit RCD to deliver a project. Roughly one year after SNC's commitment of funds, the Wildlife Conservation Board approved over one million dollars as did the Dept. of Water Resources.

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 restoration design estimated the need to move 439,000 cubic yards of dirt. The contractor estimated they moved 437,000 cubic yards.

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?

The major portion of dirt moving with this project was done with large scrapers pulled by tractors. This resulted in a very cost competitive bid (i.e. \$2.00/cubic yard) to move this material. The RCD was able to come under budget for Phase I by approximately \$350,000.

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.

No indirect impacts are yet known from this project. However, the fact that the project integrates water delivery and management with stream restoration has great potential to show how effective this approach can be.

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.

The Pit RCD subcontracted with pipeline design and management portion of the project to Ducks Unlimited. DU had a previous partner relationship with CDFG building seasonally managed wetlands, but not designing and implementing stream restoration projects such as this. CDFG does not have enough staff to do either, but has detail site knowledge of how the site can be managed and what future constraints they may have with design elements. Neither DU nor the RCD has this knowledge. The partnership between the three entities was the only way the project could be implemented in a cost-effective manner.

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.

This SNC grant, and other SNC grants for similar RCD projects, have been instrumental for providing viability for the RCD, their partners, and contractors in the area. Most all communities in the Pit RCD area are considered severely

disadvantaged, and there is little opportunity for work in the area. The RCD's Business Manager, and their watershed coordinator, both live locally and work on several other projects, many of which are volunteer in nature. The Pit RCD is a small RCD, but has been able to assist landowners and stakeholders with important resource projects. There has not been enough workload or opportunities for other funding sources to expand the capacity of the RCD, but the continued effort by the RCD stimulates project development with other partners and stimulates the community through economic activity.

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"?

The project was challenged with securing the Corps of Engineers approval in a timely manner. Initial correspondence with the Corps for the project anticipated using the streamlined process within the Nationwide Permit No. 27. However, in the spring of 2012, Nationwide Permit 27 was revised by the Corps and the streamlined process was removed from this permit. Therefore, the new process required the Pit RCD to conduct a wetland delineation and prepare a Pre-Construction Notification (PCN). These were prepared and submitted to the Corp. The Corps eventually assigned three different staff to work on the wetland delineation and PCN. This was inefficient, delayed the final approval, and nearly forced the project to be constructed in 2013. Although the Watershed Coordinator does not entirely understand how the Corps allocates staff to projects, there is a process that appears to give preference to projects by the Corps. This process is generally referred to as Water Resource Development Act (WRDA) agreements, where a project proponent enters into an agreement with the Corps and finances a personnel position with the Corps. This individual is then assigned projects that are sponsored by the agreement entity, thereby expediting Corps environmental review. It may be possible for SNC to partner with another entities and enter into an agreement with the Corps if there is a need for multiple Corps approvals. This would help project proponents such as the RCD as they would be working with the same Corps staff.

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.

The RCD has numerous photos documenting site conditions at the project site. The most relevant photographs have been provided in Appendix A and also on a CD.

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 Pit RCD and DFG intend to continue monitoring project activities to inform site management decisions. Some of the monitoring results will likely be presented at various meetings and conferences.

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.

Todd Sloat (530-336-5456) and Sharmie Stevenson (530-299-3405).

tsloat@citlink.net

pitred@hdo.net

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

- 1. Resources Leveraged/Number of People reached:** The RCD leveraged the \$48,600 from SNC to plan this project and \$1,000,000 from SNC to implement this project with \$2,532,515 of funds from four other funding sources (Wildlife Conservation board, \$1,154,000; Dept. Water Resources, \$1,039,000; National Fish and Wildlife Foundation, \$100,000; Army Corps of Engineers, \$200,000; CA Dept. of Conservation, \$4,000. Also, the CDFG contributed \$3,715 and \$86,800 in in-kind services/materials.

Articles published in the newspaper were estimated to reach 1,000 people (general public), and newsletter articles describing the project will be sent to 100+ people (general public). The project will also be presented/discussed at stakeholder meetings (e.g. Pit River Watershed Alliance, Fall River-Big Valley Cattlemen's) that will reach another 40 people (i.e. resource professionals, government employees, conservation groups). Finally, both CDFG and DU intend to include a project write-up and include it within their magazines. CDFG's Outdoor CA magazine is sent to an estimated * subscribers within CA, and Ducks Unlimited magazine has an estimated * number of national and international subscribers.

- 2. Number and types of jobs created:** Types of jobs directly created included project administration, project coordination, resource assessments (archeology, botany, and hydrology), design, and construction. Overall, these jobs when combined were determined to equal 5 FTE (see below table). No attempt was made to estimate the number of indirect jobs creating from the project (e.g. service industry that provides equipment rental, fuel, supplies, etc.)

Job Type	Number	Employment Length	Avg. Hrs. worked per week	FTE	Season
Hydrologist/Equip. Operator	2	3 month	50	.75	fall
Archeologist	1	1 week	40	.02	fall
Coordinator	1	3 months	20	.11	fall
Administration	1	1 year	3	.15	fall
Botanist	1	Two weeks	40	.04	Summer and fall
Equipment Operator	12	2.5 month	50	4.0	fall

3. **Number and value of new, improved, or preserved economic activities.** The primary economic activities associated with this project include the improvement of a working landscape and agricultural products for the CDFG and Pit RCD, and jobs for project activities (see item two above). The project will greatly improve the CDFG’s ability to manage the wet meadow system in a sustainable manner and meet their numerous management objectives. First, the meadow has been restored and will provide greater hay production and forage for livestock both within and outside of the project area. The CDFG and Pit RCD lease portions of the ACWA for haying and grazing and share the revenue. These funds are vital for paying employees, purchasing equipment, payment for maintenance, and using to start new project work. The value of the vegetation improvements can not be made at this time but future monitoring will allow very detailed cost/benefits comparisons.
4. **Linear feet of streambank protected/restored.** The project restored/enhanced approximately 27,302 linear feet of streambank.
5. **Acres of land improved/restored.** A total of 1,131 acres of wet meadow habitat was restored and 869 were protected/enhanced.
6. **Acre feet of water supply conserved.** The project is expected to increase the shallow groundwater level by an average of five feet after restoration. Approximately 25% of the restored meadow area (1,131 acres) will then “store” water within the soil, which results in 1,413 acre-feet of water conserved.