

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: California Department of Parks & Recreation, Central Valley District

Project title: North Grove Forest Restoration Project

SNC Reference Number: SNC 651 Submittal Date: April, 14, 2016

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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.)

This completes the entire 125 acres project. All of this work has been completed through the combined efforts of the State Park natural resource crew, Calfire Vallecito Conservation Camp crews, CCC crews, and the Arnold Calfire Station.

This forest restoration work involved reducing trees and saplings focusing on pacific dogwoods, then white firs and incense cedars. The cut slash was piled and burned on site. The exact quantity of forest fuels cut and burned is difficult to measure but is likely close to 1000 tons, or 2,000,000 pounds.

- 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 entire 125 acre forest restoration project has been completed. Understory and ladder fuels have been greatly reduced creating a more fire resilient stand. Dogwood densities have been decreased dramatically, reducing resource competition for the remaining trees, benefiting overall forest health. Exhibit A illustrates the acreage of work completed by date and crew.

- 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.)

Challenges: Persistent drought conditions during the project kept the fire season active often through the end of fall. This reduced the number of days available to burn the piles of forest slash created from this restoration work. The final winter

of this project saw average precipitation return and burning efforts were greatly increased to catch up on the backlog of unburned piles.

The restoration goal of 50 – 70 stems per acre is not going to be achieved and upon further research, should not be the goal for this project. Historic stand densities in the North Grove were likely 150 stems per acre or more as the moister north-slope and valley bottom could sustain such densities. However, the pre project stem densities, counting dogwoods, were over 1000 per acre in some locations. By reducing this very dense condition, the remaining old growth trees will benefit by reduced competition for water and a greatly reduced fire severity hazard.

Opportunities: Natural Resources staff had many opportunities to interpret the importance of this restoration project to the public including talking at the docent meetings and escorting visitors through the project site. The interpretive goals have focused on the continued existence of this giant sequoia grove and the importance of forest restoration and prescribed burning. This work increased public awareness for future forest restoration and prescribed burning efforts.

This project has provided funding to employee members of the neighboring communities. Funding was used to hire seasonal crews for each of the 3 years of this project.

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

Fuel reduction work has uncovered multiple giant sequoia, pacific yew, sugar pine and ponderosa pine saplings. Reducing competition for light, water, and nutrients provides these species the necessities needed for continued survival.

Gaps created through pile burning created conditions necessary for giant sequoia and pine regeneration.

The reduction of ladder fuels has greatly improved the view shed along the North Grove trail system. Long time visitors and volunteers have already commented that the forest looks much better and the views of the giant sequoia have been improved.

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	Project Lifetime	Balance
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	SNC Dollars	Expenses	
Project Contractor/Consultants	\$132,025.00	\$58,854.59	\$73,170.41
Project Staff-Project Work/Management	\$180,880.39	\$184,102.30	-\$3,221.91
Publications/Printing/Advertisement and Supplies	\$344.61	\$344.61	\$0.00
Performance Measures/Reports-Staff Consultants	\$800.00		\$800.00
Administrative Expenses	\$34,958.00	\$20,464.57	\$14,493.43
GRAND TOTAL	\$349,008.00	\$263,766.07	\$85,241.93

Explanation: (if needed)

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.)

- **Number and Diversity of People Reached:** Natural Resources staff made direct contact with a minimum of 6383 park visitors while working in the field during the span of this project. Staff educated these visitors on the necessity and benefits of this forest restoration project. Far more visitors have been reached through an educational handout and trail head signs. CBTSP receives over 100,000 visitors per year and the North Grove Trail, where this project is located, is the most popular trail in the Park. It is likely that well over 100,000 people have been reached by these indirect methods during the span of the project.
- **Number of Significant Sites Protected and Preserved:** The historic wagon road and the forty-one historic features have all been protected by state park cultural and natural resources staff through the use of indiscrete flagging.
- **Acres of Land Improved or Restored:** To date, 125 acres (100%) of the project has been manually thinned (improved and ready for burning to achieve a restored stand). Photo points were established. Pre-project inventory has been occurring prior to work being conducted in the designated work locations.

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.)

There is nothing to report at this time.

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

With the manual thinning of the North Grove complete, the next step will be prescribed fire. CSP staff will work closely with Calfire crews and the local Air Quality Control Board to plan this next step. If environmental conditions allow portions of the North Grove will be treated with prescribed fire during late fall/early winter of 2016. Conditions allowing, burning will continue yearly until the majority of the North Grove is treated. The long term goal will be to continue to retreat with fire on a 12-17 year cycle, the estimated historic fire return interval.



Calaveras Big Trees State Park North Grove Forest Restoration Work Progress

Joe Harvey
March 17, 2016
NAD83 California State Albers

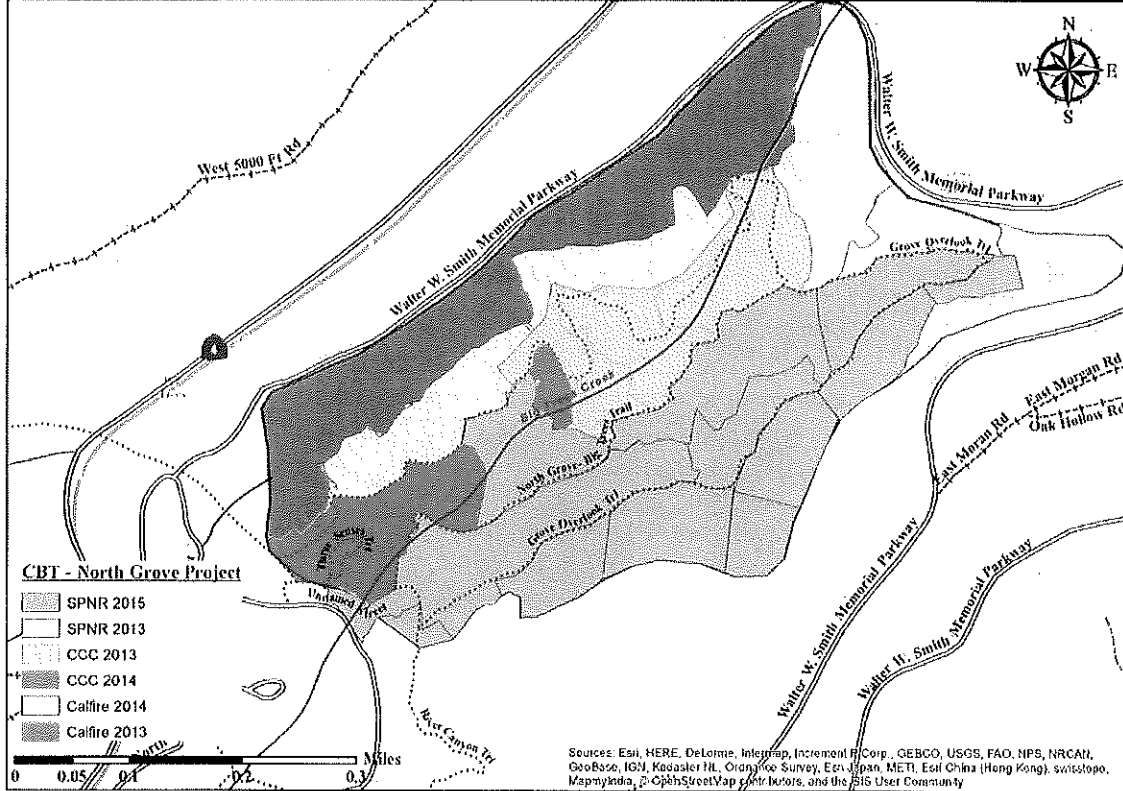


Exhibit A shows the completed work for the North Grove Forest Restoration Project by year and crew. Crews that worked on this project were: State Park natural resource crews (SPNR), Calfire Vallecito Conservation Camp crews (Calfire), and California Conservation Corps crews (CCC). All 125 acres of this project have been treated.