

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: American River Conservancy

Project title: Watersheds: Human Connections

SNC Reference Number: SNC 80087

Submittal Date: 3/5/2013

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Check one:

6-Month Progress Report

Final Report

<p>6-Month Progress Reports should reflect the previous six months. Final Reports should reflect the entire grant period.</p>

A. Progress Report Summary:

We are pleased to report that all aspects of our project but one have been successfully completed, with the last one anticipated to be completed within two weeks.

The nature center has been significantly upgraded with more informative exhibits on water- in California, in the Sierra, and in our local watersheds. Visitors still enjoy our hands on nature mounts and habitat murals, but now have their visit greatly enhanced. They are able to push a button and watch as water flows from the Sierra to the coast and Southern areas, learn about the water problems the state faces and how we are all in this together, locate themselves on a detailed map of the American and Cosumnes River Watersheds, and learn all about the American River Conservancy and what we do. Before these exhibits were installed, we had nothing on California water, an inaccurate map of only one watershed, and nothing at all about the American River Conservancy. The exhibits have user friendly interactive portions, many effective visuals, and provide succinct, and powerful, verbage.

We also will soon have an exhibit on water conservation, with both kid-friendly hands-on material, and an easy but informative electronic water audit that teen and adult visitors will be able to conduct (as soon as revisions on the app are completed.) The audit will tell visitors exactly where their own water use is highest, and will give ideas specific to their situation on how to reduce it

Water education does not end when our visitors leave. They also can take away material on how to care for their watershed, support ARC either financially or by volunteering, and how to save water at their own home based on the results of their audit.

We have also been able to develop and market a new school program specifically on California water- the "new gold". By tying the program to the local gold rush

history, we have been able to reach a wide school audience that might not have otherwise had time to spend on water education. The project reaches not only the general public and kids/parents who arrive on school trips, but also people who come to the center for our public programs.

Lastly, our public programs are able to run more smoothly now with the nature center wall screen (significantly more convenient than the old portable one we had to manhandle) and ceiling-mounted projector. Our members also now have free access to a DVD library of powerful environmental videos, many of which relate to our local issues.

B. Deliverables or Outcomes completed during this Reporting Period or Milestones Achieved:

Three large panel exhibits in nature center that roll out of the way when needed:

- 1st panel includes- The big story:- A large interactive map of California and its waterscape with lights showing where Sierra water flows, through rivers, the Delta, and aqueducts. Through four interactive doors, visitors learn important facts, such as how many Californians benefit from Sierra waters. Visitors next see the dramatic ways in which the California waterscape has changed in the last 200 years, and learn that there are many demands today on California's limited water. Visitors hear some of the problems facing our state's water, are reminded that we are all in this together, and then have a chance to post their own solutions. The panel also contains several thought-provoking quotes.
- 2nd panel includes-Focus on Watersheds: A large relief map of the American and Cosumnes River Watersheds, showing their location in the Sierra, their communities, dams, canals, rivers, lakes, and hydroelectric facilities. It also has an explanation of what a watershed is, including a graphic. There are two interactive doors where visitors learn what a healthy Sierra watershed has, and what puts Sierra watersheds at risk.
- 3rd panel includes- Focus on ARC: An explanation of who the American River Conservancy (ARC) is, photos of six main areas of ARC work, and take-aways on watershed care, volunteering at ARC, and becoming a member of ARC.
- A water conservation exhibit for all ages that lets visitors explore how much water goes into making their food, gas, clothes, etc. An adjacent electronic water conservation exhibit geared more for teens and adults that lets people do a quick but effective "audit" of their own personal water use. They can then receive a printout of their results, with ideas for improvement in their

own particular situation. In the course of their audit, they see ways that others might be keeping their water use low.

- Large outdoor watershed model that allows visitors of all ages, but especially school groups, to explore the meaning of a healthy watershed. The model includes moving water, and models of local plant and animal life as well.
- A DVD library of educational nature, science, and environmental films for adults and children. The library is available to members and school groups especially.
- Public programs improved by more user friendly video equipment.
- A program for statewide school kids that highlights California water and its need for conservation, including panning for gold in the river, and then learning that California's new "gold" is water.

C. Challenges or Opportunities Encountered:

There have been many challenges and opportunities encountered-

- DVDs are not being checked out as often as we would like, despite advertising in our newsletter. It has also been difficult to find effective classroom DVDs for our programs. Teachers using our videos have been very enthusiastic and grateful, however.
- Visitors to our new California Gold program have been more interested in panning often than in learning about California water. Still, the panning has worked well as a "hook" to get school groups to schedule the program. Unfortunately the park has now implemented a similar panning program, but without the water education component. We have lost considerable numbers of attendees because of this. We did get excellent feedback from most teachers who scheduled our new "California Gold" program.
- Gizmo, our subcontractor, produced disappointing results: One of two main electronic exhibits kept breaking, so that we finally had to just cover it up with a stationary version. Also, the panels didn't roll well, legends of maps literally fell off, and many features requested for the maps just weren't completed. We have been able to remedy most of this. We have somewhat laboriously added information to the maps by hand and have created new legends with better information and better physical attachment. Overall, we are pleased with the final product, but it took a lot of extra work on our part.
- The topic of water conservation was quite a challenge to present in an interesting way. Two original designs for the exhibit were scrapped due to difficulty in presenting the material as desired. We are pleased now with the outcome of the exhibit, but do worry a bit about future electronic breakage

of the tablet. It was also a challenge to present information that would be interesting for all ages.

- We would like to open the outdoor watershed table up more often to the general public (rather than just for school groups and summer day campers), but we have been challenged in finding enough volunteer help to do this.

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

- People love giving solutions, and reading others’! Having an opportunity to add their own ideas and creative solutions has been much more successful than we anticipated it would be.
- Kids **love** the watershed model even more than we thought they would. The model has been a major hit at our day camps, with kids learning about healthy watersheds in a fun, engaging way. It has also been very well received by the teachers and home school parents who used it for their programs. It brings home the idea of healthy watersheds like no amount of talking can.
- The interactive water conservation audit is nearly finished and looks like it will be much more successful than anticipated. We believe that people really will be drawn to figuring out their personal water use, and will learn quite a bit about how they can conserve water in the process.

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
A watershed exhibit panel	18,500.00	18,418.32
B Calif water story panel	19,300.00	19,487.79
C human consumption exhibit	3,126.00	3,098.37
D ARC exhibit panel	7,700.00	7,650.46
E DVD lending library	1,800.00	1,810.64
F Curriculum development CA gold program	313.00	313.00
G Materials etc CA gold program	2,007.00	2,007.31
H Staff coordination	5,433.00	5,432.00
I Stream table/watershed model	2,027.00	2,021.89
J video equipment	2,247.00	2,246.76
K reporting	2,547.00	2,544.16
GRAND TOTAL	65,000.00	65,030.70

Explanation: (if needed)

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

See below: performance measures

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

Numerous materials have been sent with previous reports/invoices.

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

Over the next two weeks we anticipate working with our volunteer software designer to complete trouble shooting of the water conservation app. We are now in the second iteration of this process. We also expect to install the physical part of the exhibit in the nature center as soon as the app is finalized and ready for visitor use.

On April 12, 2013 we will be having an open house here in Coloma of the new nature center exhibits, including the new water conservation portion.

Description of Project Accomplishments:

1. Most Significant Accomplishment

Education on water, watersheds, and what the American River Conservancy actually does has been brought to our nature center and its many visitors. Instead of just displaying local habitats, we are now able to enlighten people with engaging interactive exhibits that have nearly doubled the educational area of our nature center. The exhibits have also been enhanced by a large outdoor watershed model that has been a hit with school groups and summer campers. Visitors of all ages now learn about the importance of the Sierra as a source for most Californians' water, the importance of caring and investing in those Sierra watersheds, and the importance of water conservation at home (and come away with their own personalized plan for how to achieve it.)

2. WOW Factor

1200 kids from around the state really understood just where their water is coming from, and the critical need for water conservation, after experiencing our powerful “California Gold” program developed, marketed, and supported by this grant.

3. Design and Implementation- lessons learned

When subcontracting exhibit construction, site visits during construction of those exhibits are truly important, so that there are not unpleasant surprises at installation. When choosing an exhibit maker, give serious consideration to their strength as a going concern.

Volunteer work is great, but can result in uncontrollable delays.

4. Indirect Impact

We anticipate making the wonderful water conservation app that was developed under this project to be made available to other organizations such as the Regional Water Authority, American River Water Education Center, and even El Dorado Irrigation District. We find it is an effective, personalized tool for teaching water conservation that may now be used by other organizations with the same mission.

All educational projects like this have significant indirect impacts that are not measurable or even known. Which child was so inspired by our California water story that they will become a policy maker some day? Which teen will go on to do documentary films and will now choose the Sierra as their focus? Which older adult will decide after visiting these exhibits to dedicate their retirement years to volunteering for organizations like the American River Conservancy? We do not know, but it is reasonable to guess that indirect impacts such as these will occur, and will have significant and far-reaching effects.

5. Collaboration

Trout Unlimited visited recently and saw that the exhibit on native fish they donated a few years ago has been leveraged with our enhanced exhibits from this project. They may be more likely to collaborate again in the future.

6. Capacity-Building

American River Conservancy is still strong, and is managing to adjust to difficulties recently in obtaining public funding for land projects. Our board has had some turnover but is still vibrant with 10 members. We still have 11 staff members, with our educational director now our development director. Our educational staff may be reduced after this grant from 2 ½ to 2. We have been able to fill in some of the funding gap by utilizing Americorps volunteers the last three years. We hope that our project, in educating thousands on the importance of Sierra watersheds, will have a ripple effect on support for both ours and other Sierra nonprofits. We have a very strong volunteer base, with nearly 150 people volunteering in just the last three months.

7. Challenges

We did indeed face challenges, primarily external, but did not have to change any of our key objectives. See section above: challenges and opportunities.

8. Photographs

Photos are being sent with hard copy

9. Post Grant Plans

- 1) Changes in operations or scope: we plan to begin lending relevant films to teachers after most of their programs with us and thereby increase our DVD library's use by teachers and their students. We also hope to better promote the fact that we have videos available for loan by our members. We plan to continue presenting our California Gold program, primarily now to local schools.
- 2) Replication/use of findings: N/A
- 3) We plan to make our water conservation app available to the Regional Water Authority, American River Water Education Center, and even El Dorado Irrigation District.
- 4) Minor additional financial support, such as repair of exhibits, postage of videos, etc. will be borne by the American River Conservancy
- 5) We plan to present an Open House on April 12, 2013 to promote the new exhibits and enhanced Nature Center. We plan to publicize the event in local media and to our members.

9. Post Grant Contact

Elena DeLacy or Alan Ehrgott (530) 295-2190 or (530) 621-1224, 348 Hwy 49, P.O. Box 562, Coloma CA 95613

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 for the Sierra Nevada
Additional resources generated as a result of SNC investment:
 - a. Volunteer Hours- We had **15** volunteers who generously donated a total of **170** hours time to this project. Help ranged from design and installation of our watershed table, to technical design and development of the app that runs our water conservation audit exhibit.
 - b. There were no major (10K +) In-Kind Contributions-
2. Number and Diversity of People Reached-
 - a. Since installation of the main nature center exhibit on Jan 24 2012, we have had approximately **4,500** visitors. We anticipate there being another roughly **4500** visitors per year. Over 10 years this would be **45,000** people of all ages. Many of our visitors are from our local county, though many also come from various other areas of the state (and even other states) because of the draw to the state park we are located in.
 - b. In addition, we have reached approximately **1250** children and adults with the California Gold (equals water!) program developed through this grant. The program has been very well received (we give all teachers evaluation forms – all those actually mailed back are attached.) Part of the program includes a powerful demonstration of waters coming from the Sierra and going to 2/3 of the state, and the need to conserve.
3. Number and Type of Jobs Created in Sierra Nevada region-
 - a. Work on our nature center enhancement project generated the jobs equivalent of **.4 FTE** for one year. This was for the design itself, and also for teaching the new program created by it. Unfortunately we were not able to find a Sierra exhibit maker, which would have increased that number significantly.
4. Number and Value of New, Improved, or Preserved Economic Activities
 - a. New and Improved Services- Education-
 - We now have a new California gold/water program developed and marketed throughout the state- we have received **\$3700** that we would not have received otherwise from bookings of this program. We anticipate at least another approximately **\$5,000** to be generated over the next 10 years.
 - One whole panel of the new nature center exhibit includes promotion of the American River Conservancy (ARC), and takeaways on volunteering and supporting us financially. Since the exhibits have only been installed recently, it is difficult to say what economic impact that will have. Since our previous exhibits had nothing at all on supporting ARC, it is reasonable to assume that this new exhibit could generate at least **\$5,000** over the next 10 years.

- Our library of educational DVD's supported by this grant will enhance the experience of teachers to our programs and help encourage them to rebook in future years. We anticipate an additional 2 programs per year, or **\$1500** over the next 10 years, because of this library.

5. Measurable Changes in Knowledge or Behavior

Based on assessments conducted before and after installation of the new exhibits, the knowledge of our visitors increased significantly. Attached is a copy of the questions we asked, and an excel sheet showing the change in knowledge level- from an average of **4 out of 10 before** to an average of **7 out of 10 after**. This was based on surveys of 15 visitors before the installation, and a different 15 visitors after the installation was complete. Since some visitors come again and again, we expect that their knowledge will continue to grow as they revisit the exhibits, and that they will remember even more of the Sierra water story.

Unfortunately, the water conservation portion of the exhibit will not be installed until two weeks from now, so that we do not know if this increase in knowledge will be mirrored by a change in behavior. We do expect that the hands-on, personal, fun water use audit it includes, will cause people to conserve more water at home.

6. Value of New and Improved Economic Activities

We now own nature center exhibits with a value of about \$51,300 determined as follows: 40,000 (our costs) for the main three panels; another \$6,000 for the water consumption exhibit. This latter we valued at our costs (\$2,000) plus an additional \$4,000 for the software development inherent in the app that is a central part of the exhibit; \$300 for our DVD library (our cost); an outdoor watershed model/teaching stream table valued at about \$5,000 (based on our costs plus donated contractor time at \$50/hr.) All these have greatly improved our educational services as well as the experience of our visitors, who are more likely now to become donors and/or volunteer supporters.

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.