2016 REI Volunteer Projects Report



















Central Sierra Environmental Resource Center

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2016 Volunteer Report for CSERC

What a year! In 2016, we completed 16 volunteer project days with 206 participants and 1,458 hours of labor donated.

How did the dedication of our volunteers benefit public land this year?

- Ø Over 2,380 trees were planted in dozens of acres of high-intensity forest fire areas.
- More than 34 acres of meadow and wetland habitat were protected and/or restored through fence building and watershed restoration work.
- Thousands of invasive plants were removed around sensitive habitats.
- Hundreds of pounds of trash were picked up in popular recreation areas and along riverside habitat.
- 2.5 miles of trail were brushed and maintained.
- Over 3/4 miles of illegal and highly erosive off-road vehicle routes were naturalized, blocked, and restored.
- 9 areas popular for outdoor-recreation activities (including hiking, swimming, camping, and nature viewing) were enhanced by restoration work.
- 13 different streams or rivers directly benefitted from restoration work that improved watershed health.

There have been many changes in our local environment over the past few years, as devastating wildfires, several years of extreme drought, and a wave of tree mortality from bark beetles has affected our region. Protecting the health of our forests and watersheds in the face of these threats has become all the more important, and there is a sense of wanting to give back and help in our volunteers that is stronger than ever before. We believe that in the years to come that the momentum that has been building from many years of successful and diverse projects organized by our Center will continue to grow as more people look to get involved in taking care of their public lands.

We say it every year, but REI is the reason we are able to devote so much time and energy into organizing, coordinating, and leading so many restoration projects every year. Looking at one year of work is one way to conceptualize the benefit that this partnership has had, but if you start to look at CSERC volunteer efforts on a multi-year scale, it quickly becomes apparent that the work is cumulative and far-reaching. Good examples of our commitment to restoration and the cumulative effect of our work are shown at Fiddler Green Meadow projects as well as at Sapps Meadow. We are certainly proud, and hope that you are too.

Please take a few minutes to look through CSERC's 2016 Volunteer Projects Report to get a sense of the positive effect that our volunteers have made on our public lands in the Northern Yosemite region this past year.

- 2016 CSERC Volunteer Project Overview-

Project date	Project objective	<u>Time (total</u> donated)	<u># of</u> people	<u>Details</u>
1. Feb. 23 rd	Rim Fire tree planting	9 hour project (288 total hours donated)	32	Planted 1,380 trees in the Rim Fire burn area
2. June 2 nd	Lake Moran meadow fencing	9 hr project (36 total hours donated)	4	Put up seasonal meadow fence around approximately 5-acre meadow site to protect sensitive plant species.
3. June 4 th	Whittle's fen fencing	8 hours (104 total hours donated)	13	Built a new fence around 2 acres of a degraded wetland site known as a fen.
4. June 9 th	Burt Reed & Fiddlers Green Meadow fencing	6 hr project (60 hours donated)	10	Put up seasonal fences around meadow restoration sites totaling over 8 acres.
5. June 20 th	Whittle's fen fencing	8 hr project (40 hours donated)	5	Built another new fence around 2 acres of a degraded wetland site known as a fen.
6. June 25 th	Crab Meadow fencing	5 hr project (65 hours donated)	6	Set up "take-down" fence at Crab Meadow (about 2 acre site) to protect from livestock damage to sensitive and degraded wetland habitat.
7. July 5 th	Long John Meadow fencing	7 hr project (28 hours donated)	4	Repaired a damaged fence line around 4 + acre meadow within Rim Fire burn area.
8. July 6 th	Wilson Meadow/Rim Fire weed removal	8.5 hr project (127.5 hours donated)	15	Pulled and dug out non-native bull thistle plants, surrounding Wilson Meadow. The area burned in the 2013 Rim Fire, and the thistle colonized the area. Wilson Meadow has a wetland restoration project scheduled and the weed removal work will help prevent thistles from spreading into the meadow when the heavy equipment comes in.
9. July 12 th	Clavey Pools clean up	5.5 hr project (77 hours donated)	14	Volunteers picked up trash around dispersed campsites that border a popular area of the Clavey River. They also hiked the length of the river that is popular for recreation to clean up trash along its banks. Dispersed campsites were minimized and excessive campfire rings were destroyed.

Project	Project	Time (total	<u># of</u>	Details
<u>date</u>	<u>objective</u>	donated)	<u>people</u>	
10. July 16 th	Chain Lakes trail maintenance	8.5 hr project (153 hours donated)	18	Brushed and improved drainage (building water bars) on 2.5 miles of hiking trail.
11. Sept.28 ^t	Coyote Meadow restoration	8 hr project (112 hours donated)	14	Naturalized and restored soils along a trail that had been re-routed around the meadow (to protect wetland and amphibian habitat).
12. October 5 th	Crab and Fiddlers Meadow fences takedown	5.5 hr project (38.5 hours donated)	7	Took down seasonal fence line around 6 acres of restored meadow habitat.
13. October 11 th	Sapps Meadow fence repair	7 hr project (28 hours donated)	4	Replaced logs and re-wired several sections of a 1+ acre split-rail wooden fence that CSERC volunteers built a few years ago to protect rare plants and sensitive wetland habitat.
14. Oct. 12 th	Lake Moran fence takedown	8.5 hr project (42 hours)	5	Took down two seasonal fences that are protecting spring wetland sites with rare plant species vulnerable to grazing damage.
15. October 29 th	American Camp OHV	6.5 hr project (67.5 hours donated)	11	Blocked unauthorized hill climbs with debris, spread erosion control rice straw, and installed straw wattles/silt fence as needed. Picked up hundreds of pounds of trash, especially target-shooting trash (targets and gun shells).
16. November 18 th	Big Creek Fire tree planting	8 hr project (192 hours donated)	24	Planted over 1,000 young conifer trees in an area that burned at high intensity in 2015.

Total # of participants: 206

Total # of hours served in restoration work: 1458.5



Project # 1. Rim Fire tree planting - Feb 23rd, 2016

Over 1,380 trees were planted by volunteers in a severely burned area of the Rim Fire.



Project # 2. Lake Moran meadow fencing - June 2nd, 2016 set up and Project #14. October 12th fencing takedown

Put up seasonal meadow fence around approx. 5-acre meadow site to protect sensitive plant species.





Project # 3. Whittle fen fencing - June 4th, 2016

Volunteers built a new fence (pounding t-posts, creating corner anchors, stretching and attaching wire) around 2 acres of a degraded wetland site known as a fen, in order to restore and protect it from future livestock damage.









Project # 4. Burt Reed & Fiddler's Green meadow fencing - June 9th, 2016

At these two meadows, CSERC volunteers put up seasonal fences around 8 acres of restoration sites to continue to protect them from livestock degradation.









Project # 5. Whittle fen fencing - June 20th, 2016

Just a few hundred feet away from the fen that was fenced in Project # 3, volunteers built another new fence (pounding t-posts, creating corner anchors, stretching and attaching wire) around severely degraded wetland fen. *Fens are rare wetland habitats that take thousands of years to form, but can be destroyed in just a couple of years of livestock grazing from hoof pocking and sloughing in the peat soil.*



<u>Top left</u>: pounding in the t-posts. <u>Top right</u>: Creating the corner post anchors for the fence line. Bottom left: attaching the newly strung wire to the t-posts. <u>Bottom right</u>: Livestock had already made it into the fen that we built a fence around, already doing a significant amount of damage by puncturing the vulnerable peat soil with their hooves. Fortunately CSERC and volunteers will maintain the now standing fences, and these special habitats will be given the time they need to rehabilitate.

Project # 6. Crab Meadow fen fencing - June 20th, 2016

CSERC volunteers set up and did repairs to the "take-down" fence at Crab Meadow (about 2 acre site) to protect a highly degraded fen from livestock damage and allow it to slowly restore.



Project # 7. Long John Meadow fencing repair- July 5th, 2016

Repaired a damaged fence line around 4 + acre meadow within Rim Fire burn area. CSERC has been maintaining this fence since at least 2013.



Project # 8. Wilson Meadow weed removal - July 6th, 2016

At this project volunteers pulled and dug out the non-native bull thistle that surround Wilson Meadow. The area burned in the 2013 Rim Fire, and the plant has been colonizing the area. Wilson Meadow has a wetland restoration project scheduled and the weed removal work will help prevent the plant from spreading into the meadow when the heavy equipment comes in.





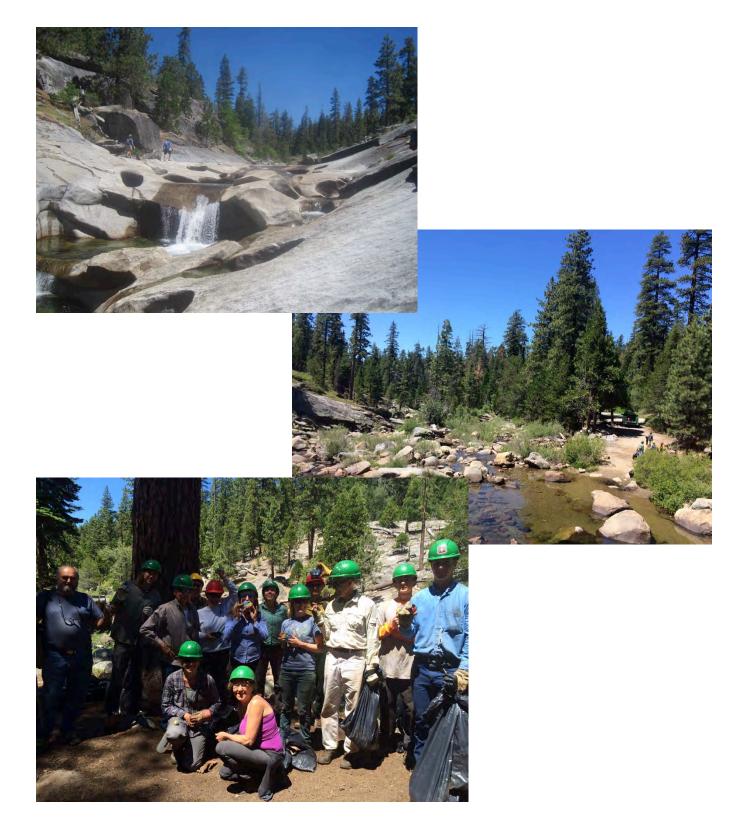






Project # 9. Clavey River "tub city" clean up - July 12th, 2016

Volunteers picked up trash around dispersed campsites that border a popular area of the Clavey River. They also hiked the length of the river that is highly visited to clean up trash along its banks. Dispersed campsites were minimized and excessive campfire rings were destroyed.



Project # 10. Chain Lakes trail maintenance - July 16th, 2016

A crew of CSERC volunteers brushed and improved drainage (building water bars) on 2.5 miles of hiking trail into the Emigrant Wilderness destination, Chain Lakes.











Project # 11. Coyote Meadow restoration - September 28th

This meadow had severe hydrology problems due to a poorly placed trail that was diverting a creek out of its channel and into the trail bed causing mud pits, trail braiding, and more. The rare Yosemite toad was also being affected by the water diversion. The trail crew for the forest had re-routed the trail to bypass the meadow. CSERC volunteers naturalized the former trail in the meadow and restored the soil by digging up the trail and replanting the path with sod to revegetate it.



Photo at left shows the trail in Coyote Meadow pre-restoration. Note the stream that is diverted into the trail, and the braiding and trail widening that was resulting from horses and people trying to avoid the water.







Project # 12. Crab Meadow fen and Fiddlers Green Meadow fence takedown -September 28th

CSERC volunteers took down the seasonal fence line around a total of 6 acres of restoring meadow habitat.







Six years of restoration work at Fiddler's Green Meadow!

Through the past several years CSERC volunteers have done over a dozen volunteer projects to help with the restoration of this once highly degraded meadow. Shown at middle left is a project in the Fall of 2010 where over 20 volunteers planted hundreds of willow stakes in the meadow. Bottom left shows the meadow at the project day on September 28th, 2016, where the willows that volunteers had planted are now 5-6 feet in

Project # 13. Sapps Meadow fence repair - October 11th, 2016

CSERC replaced logs and re-wired several sections of a 1+ acre split-rail wooden fence that CSERC volunteers built a few years ago to protect rare plants and sensitive wetland habitat.



At left: CSERC volunteers building the fence around the fen in Sapps Meadow in 2010.



In 2016, the fence that took so many projects to build is holding up well, but a few logs needed reinforcement or replacement.



Summer 2016: The difference between the meadow and fen habitat that is protected from livestock grazing and pocking at Sapps Meadow by the fence CSERC volunteers built, is drastic.

Project # 15. American Camp OHV restoration - October 29th, 2016

At this productive workday, volunteers blocked over 3/4 miles of unauthorized motorcycle hill climbs with debris, spread erosion control rice straw, and installed straw wattles/silt fence as needed. They also picked up hundreds of pounds of trash from dispersed recreation users, especially target-shooting trash (targets and gun shells).



BeforeDuringAfterThe hill climb slowly disappeared under dozens of bales of rice straw spread out by our volunteers.



Project # 16. Big Creek Fire tree planting - November 18th, 2016

In the final project of 2016, CSERC volunteers finished the year the way that we started it (in terms of restoration work) - they planted over 1,000 young conifer trees in an area that burned at high intensity in 2015.















