Project Report
Yosemite National Park Volunteer Expedition
September 18 – 22, 2013

Executive Summary
Nineteen volunteers and two trip leaders contributed 399 hours of volunteer labor from September 19 through September 21, assisting the National Park Service in maintaining approximately one mile stretch of the John Muir Trail just below Clarke Point, including the section damaged by the May 11, 2013 rockslide. Maintenance activities included building or reconstructing several rock retaining walls and removing loose rock from the trail tread. The volunteers also constructed a 70-foot long section of split rail fence to delineate the Mist/John Muir Trail boundary and eliminate social trails through this sensitive entrance area. In addition, the volunteers assisted in redefining trail boundaries and eliminating social trails along the trails emanating from the Mist Trail trailhead in the direction of the Stables/Mirror Lake for one third of a mile.

The National Park Service (NPS) Trail Crew, working under the supervision of Brian Ward, provided guidance and oversight of the projects assigned to volunteers. All projects assigned by the National Park Service Trail Crew to Conservation Volunteers International Program Volunteers were successfully completed and the NPS crew noted the high efficiency and careful skill with which the Volunteers conducted their tasks.

Introduction
Project trip leaders Paul Adams and Ed Eads (who were assisted by Dale Walker) met with NPS Trail Crew Supervisor Brian Ward the morning of the volunteers’ arrival, September 18, to discuss the projects assigned to the volunteers and NPS expectations of the volunteers. All necessary tools required to perform the various projects were identified and provided by the NPS Trail Crew.

Two additional volunteers, previously on Conservation Volunteers International Program trips, were under evaluation for serving as trip leaders. Both performed extremely well as requested providing oversight for volunteer safety, trail work completion, and valuable insights into volunteers’ needs.

Volunteers began arriving the afternoon of Wednesday, September 18, 2013. All volunteers were welcomed with an orientation briefing prior to the first evening meal. A safety discussion was conducted, which included a demonstration on the safe use of the tools that were to be used. Volunteers were also briefed on the type of projects they would work on and the location of those projects. An evening campfire on Day 1, September 18, provided an opportunity for everyone to get acquainted.

Detailed Report
Day 1
On the morning of the first work day, September 19, 2013, after arriving and parking at the base of the Mist Trail near Happy Isles (shuttle stop #16), volunteers were briefed again about the various work sites and the work to be accomplished at each site. All volunteers were checked to ensure that they had leather work gloves, boots, safety goggles, water, lunch and snacks. The NPS provided hard hats and additional safety gear, which were required to be worn at all times while on the work site.
The work site was located on the John Muir Trail, roughly 2 miles from the trailhead. The NPS crew, volunteers, and trip leaders began hiking to Clarke Point, which is roughly 2.5 miles from and 1500 feet elevation gain above the trailhead. Volunteers were encouraged to hike at their own speed and to stop to enjoy the scenery and drink. One trip leader remained in rear as “sweep” to ensure all volunteers arrived safely. A break was taken at the Happy Isles Bridge for water and bathroom accommodation. The volunteers were treated to temperate weather and picturesque views of Vernal Falls, Nevada Falls and Glacier Point. At Clarke Point, the group divided into three teams, who then worked one to two switchbacks apart below Clarke Point. Trip leaders were in constant contact via handheld radio.

The first group set to repairing a section of trail where a boulder and several large rocks had shifted into the trail. Their primary goal was to reconstruct a 25-foot section of retaining wall and to shift the large rocks and boulder off the trail. This group also repaired an additional section of retaining wall roughly 3 feet long.

The second group working two switchbacks below installing a new retaining wall 13-feet long and approximately 3-feet high. This group also bolstered a section of retaining wall 4-feet long and 2-feet high where the trail tread had become lower than the existing wall.

The third group, working one switchback lower, repaired a damaged retaining wall along a switchback roughly 10-feet long and 2-feet high. The third group also cleared the trail tread of loose rock that had accumulated on the trail. The second group’s projects were completed on the Day 1, the first and third groups’ projects were completed on Day 2.

Throughout the day, NPS Trail Crew members instructed the volunteers on safety concerns and appropriate methods for constructing retaining walls along the trail. Volunteers utilized shovels, rakes, rock bars, rock hammers, and buckets to construct the retaining walls.

At the completion of the workday, all three groups hiked down with each individual hiking at their own pace, being encouraged to take breaks to view the scenery and drink water. One trip leader remained in rear as “sweep” to ensure all volunteers arrived safely. Roughly half way to the work site, there was an opportunity for the volunteers to refill their water bottles at the Happy Isles Bridge.

Throughout the day, hikers, tourists, and horseback riders stopped to ask questions and complement the volunteers for their work who in turn cheerfully greeted and engaged all.

**Day 2**
Meeting the NPS Trail Crew at the base of the Mist Trail near Happy Isles (shuttle stop #16), volunteers were briefed again about the various work sites and the work to be accomplished at each site. All volunteers were checked to ensure that they had the necessary safety gear and nourishment.

Splitting into two teams, one team remained at the trailhead and the other team returned to the John Muir Trail worksite. The John Muir Trail team hiked to the worksite as they had the prior day – at their own
pace and stopping to enjoy the scenery and drink. A volunteer leader was designated as team lead for the trailhead team and remained in contact with the Trip Leaders via text message. The Trip Leaders remained in constant contact via radio.

The John Muir Trail team completed the projects started by the first and third groups on Day 1. Several volunteers constructed a retaining wall wrapping around a switchback corner measuring 8 feet long by 2-feet high. Two volunteers constructed another retaining wall of approximately 8-feet long by 2 feet high.

A third cluster of volunteers constructed a retaining wall measuring 11-feet long by 3-feet high and a second wall measuring 2-feet long by 1.5-feet high along the section of the trail damaged by the May rockslide. After constructing the retaining walls, all volunteers cleared the trail tread of loose small rocks that had accumulated from roughly Clarke Point to one mile below Clark Point, including the area damaged by the May rockslide. Removing the loose stones made the trail safer for hikers and pack animals. Restoring and constructing the various retaining walls widened the trail, protected the trail from erosion, and contained loose rock that would otherwise fall on the tread. The walls thereby provided an enhanced trail experience and safety for both hikers and pack animals.

At the completion of the workday, the volunteers hiked down with each individual hiking at their own pace and encouraged to take breaks to view the scenery and drink water. Roughly half way to the work site, there was an opportunity for the volunteers to refill their water bottles. Throughout the day, NPS Trail Crew members instructed the volunteers on safety concerns and appropriate methods for constructing retaining walls along the trail. Volunteers utilized shovels, rakes, rock bars, rock hammers, and buckets to construct the retaining walls.

The trailhead team worked at the trailhead on the construction of a split rail fence. The area previously contained a cable fence that was intended to cut off social trails and protect a sensitive slope, but had fallen into disrepair. The split rail fence was installed to provide a more substantial and more aesthetically pleasing solution to the goals of the prior fence. The volunteers, under the direction of a NPS Trail Crew member specifically trained to construct split rail fencing, removed the prior fence, sunk end posts, and began construction of the fence. Each split rail was refined on site using a two handed plane to achieve a tight fit. The fence measured 70-feet long and the volunteers completed the first two tiers on Day 2.

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Day 3
Volunteers met the NPS Trail Crew at the base of the Mist Trail near Happy Isles (shuttle stop #16), were briefed again about the various work sites and the work to be accomplished at each site. All volunteers were checked to ensure that they had all safety gear and nourishment.
The volunteers split into three teams – the split rail fence team, a team repairing trail tread along the Mirror Lake trail, and a team who would define trail boundaries and eliminate social trails. The split rail fence team completed construction of the split rail fence started on Day 2 adding the final two tiers of railing.

The Mirror Lake team repaired the trail tread along a roughly quarter mile length of trail to improve the quality and safety of the trail. The team enjoyed a short hike to Mirror Lake, which is completely dry this time of year. The group then continued about a quarter mile past Mirror Lake where they worked back toward the lake clearing and constructing approximately five drainage areas to aid in removing water from the trail.

The third and largest team delineated trail boundaries and eliminated social trails along a cumulative length of roughly one mile of paved and unpaved trail. Volunteers brought in heavy debris (branches, fallen tree trunks, pine needles, etc.) to create visual and physical barriers of trail openings along unpaved hiking path and paved road. Directly across the street from the trailhead of Mist Trail, volunteers worked redefining the walking trails and creating an effective barrier in a large area to protect it from visitors. The triangular area blocked off was approximately 100 feet long on two sides and 50 feet wide at the base. Larger branches and brush material were moved into the inner area to discourage accessing it. This effort resulted in significant enhancements to trail delineation effectively routing hikers and tourists to remain on designated pathways (paved and unpaved).

Throughout the day, hikers, tourists, and horseback riders stopped to ask questions and complement the volunteers for their work who in turn cheerfully greeted and engaged all.

At the conclusion of Day 3’s work, volunteers were invited to participate in the Yosemite Valley Tour along with approximately 20 other visitors to the Park. All who attended made a new friend in Ranger Ben and learned more of the park’s history. As the Valley Floor tour passed by the newly constructed fence at the trailhead of the Mist Trail, the volunteers cheered with enthusiasm, resulting in Ranger Ben calling our Conservation Volunteers International Program efforts and the importance of volunteering.

Logistics
The NPS Trail Crew provided all tools for all work sites. The volunteers hiked to their respective work sites under the supervision of the NPS Trail Crew.

Volunteers and Project Leaders camped at the Volunteer Camp in Yosemite Valley (Yellow Pine). All personnel brought their own camping gear and tents.

The High Sierra Volunteer Trail Crew, a non-profit entity that provides meals to wilderness trail crews, provided all meals in a timely and tasty fashion at all times. Conservation Volunteers International Program contracted with the High Sierra Volunteer Trail Crew to provide cooked breakfasts and dinners, and to provide food for volunteers to prepare their own lunches to take to the work site. A cook tent and cook truck were set up adjacent to the campsite. Sufficient water and drinks were provided at all times.
Summary
Tourists both from the United States and abroad made many positive comments of gratitude to the volunteers at their various work sites. All volunteers, who quickly became good friends and shared the common bond of “sustaining some of the world’s greatest landscapes and cultural sites,” made a lasting impact on the Park and positively influenced the NPS Trail Crew. Conservation Volunteers International Program and volunteers give special thanks to the Yosemite National Park Valley Trail Crew under the leadership of Brian Ward, Yosemite National Park Trails Manager Dave Kari, and Yosemite National Park Volunteer Coordinator Heather Boothe for their commitment to our volunteer projects. Conservation Volunteers International Program also wishes to thank DNC Parks and Resorts at Yosemite for providing discounted tickets for the Valley Tour, which enabled the volunteers to enjoy a fun and informative tour of Yosemite Valley. Volunteers also thank the High Sierra Volunteer Trail Crew for their outstanding assistance with food preparation and service.

Volunteers completed 399 hours of volunteer labor, hiked up to 10 miles each, constructed 9 retaining walls, built 182 square feet of retaining walls, cleared/repaired 1.25 miles of trail tread, delineated 1 mile of trail, constructed a 70-foot split rail fence, enjoyed 231 tasty meals served by High Sierra Trail Crew, and most importantly, made 23 new friends and countless lasting memories!