

## South Loop Trail Post-Fire Restoration Project Final Project Report

### Executive Summary:

The Nevada Conservation Corps of the Great Basin Institute worked on the South Loop Trail Post-Fire Restoration Project to reopen the trail for public use. During the summer of 2016, a 4-person crew cleared 72 logs from the trail corridor, and 45 drainage features were installed and 11 were maintained.

### Introduction:

The purpose of this project was to restore habitat and improve approximately three miles of Mount Charleston's South Loop Trail system in response to damage caused by the 2013 Carpenter 1 Fire. This was predominately a high-severity fire which burned approximately 28,000 acres of forested habitat and killed trees that were dated to be over 700 years old. The affected mountain range contains habitat for a multitude of species, including the federally endangered Mount Charleston blue butterfly.

### Methods and Materials:

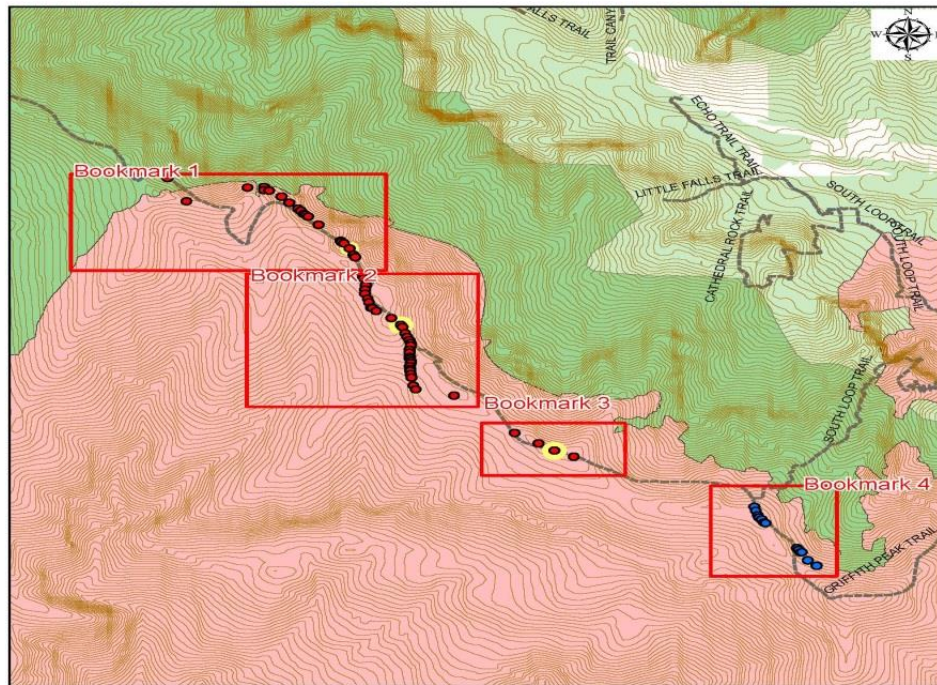
The Nevada Conservation Corps crew repaired the trail tread surface, including restructuring the backslope and outslope, as well as the removal of downed trees that were blocking passage and the engineering of erosion control trail designs (i.e., rolling grade dips). This was completed using cross-cut saws and hand tools. All equipment was transported to and from the work site using pack horses. All trail maintenance work conformed to National design and maintenance standards for the US Forest Service. Additionally, the trail crew adhered to methods, design criteria or conservation measures identified in consultation with the US Fish and Wildlife Service to avoid, minimize, or mitigate impacts to the Mount Charleston blue butterfly and its habitat. Camp locations for the trail crews were approved prior to use by a qualified biologist.

### Results and Evidence of the Results:

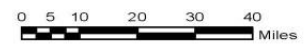
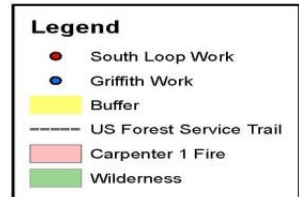
Along the trail segment that the NCC Restoration Crews restored, 72 logs were cleared from the trail corridor, and 45 drainage features were installed and 11 were maintained. As noted on the attached map the area worked on was along the ridge line from the peak of Griffith heading toward Mount Charleston.

Before and after photos of log clearing:





South Loop Trail Work



**Conclusion:**

All drainage features have been constructed; all downed trees have been removed and placed as directed per agreement, all tread and backslope has been reconstructed to FS standards. GPS data for where crew had to harm or transplant host or nectar plants has been submitted to and checked by the FS.

**Recommendations:**

There is still a lot of standing dead/widow makers along this trail. It may be advisable for the Forest Service to send personnel on this trail into the foreseeable future to continue the logging out of this trail. It also would be advisable, for public safety, to post signs at all four access points to this burn area (Griffith Peak trail via Harris springs road, Trail Canyon Trail Head, North Loop Trail Head, South Loop Trail Head) warning user groups that it is dangerous in those areas where the fire has gone through especially during high winds.