I. **Location:** Annie Creek Trail

II. **Area Description:** This 1.7 mile trail is a circuitous route that descends into the Annie Creek Canyon adjacent to Mazama campground. It is a high use trail built into the steep pumice canyon wall. At the base of the narrow canyon the trail follows Annie Creek, crossing it twice. Map of site is attached.

III. **Specific Management Actions:** The following specific actions are recommended to control erosion, shortcutting and vegetation impact from visitor use. The actions are explained fully on a section by section basis. Slides are included for ease of recognition. The section areas begin in a clockwise direction beginning at campsite C-11.

**Site 1:** Fence at top of drainage near trailhead. This is a natural drainage that funnels water from the area around site C-11. In dry conditions it may attract some short cutting and "scrambling" by visitors. The fence provides some prevention of this.

**Recommendations:** Place brush and some natural materials sloping downhill to the center: this will provide some water direction. Place revegetation sign on fence.

**Site 2:** The trail tread here is narrow. Erosion from the bank above has filled in the upper side of the trail. This should be dug out and
placed on the outside of the trail. Do not dig into bank or disturb established vegetation. Do not dig deeper than level of existing trail.

Site 2

Site 3: This is a shortcut social trail coming from both sides. Soil surface should be loosened and brushed in to prevent access. A revegetation sign should be placed here.

Brush in for distance of 36 feet to small trees. Use largest objects nearest trail intersections. Use small litter on trail tread, larger to prevent walking on shortcut or around.

Site 4: There are several problems here. The trail makes an abrupt right turn downstream. The public needs to be funneled to the right. Use small logs laid on downhill side of trail to indicate trail direction. Also remove rounds from stream. Dispose of out of sight.
Due to past walking of public along bank, a very wet marshy area has developed. This should be brushed in to prevent further use. Use brush in direction of stream flow.

Site 5: This is the bottom of the shortcut social trail in Site 3. It too needs brushing in for a distance of about 50 feet.

Site 6: Small social trail coming in on right. Brush in about 20 feet between two trees.

Site 7: Trail here is being undercut by stream. The curvature of the stream will cause this to continue and eventually the trail may have to be moved across the stream. To slow the process:
(1) Locate and carry to site one log 15 feet long and no less than 12 inches in diameter. Dig in either end into edge of trail to bridge gap. (2) Fill underneath with gravel and rock. (3) Pack largest rocks available and moveable on stream side of log. Feather in edges to prevent backcutting.
Site 8: Social trail on right. Brush in for distance of 20 feet.

Site 9: This area is severely impacted by the presence of two trails, one being the original and a higher social trail apparently caused by the visitor avoiding a late melting snowpack. This upper trail is very soft ash soil and has no support at all. It is unacceptable as a tread, and the soil and vegetation loss is a serious problem.

Recommendation: Work the upper trail to restore natural slope and vegetation. Rake soil into place, cover with jute and plant local grass plugs, 6 inches apart. Put light brush over site. Place revegetation signs at either end.

This problem can be prevented by early snow shoveling of this trail to prevent shortcutting. The lower trail should be shoveled prior to opening Mazama campground.
Site 10: This situation is exactly as Site 7, though longer. Use log around 15 feet long and build up underneath.

Site 11: This section of trail is over a wet area. The cut rounds placed into the trail are not effective, are slippery and potential for visitor injury. This area should be "turnpiked". Place two logs 6 inches in diameter, 11 feet long placed on either side of trail. Stake outside of logs with 12 inch stakes driven flush. (Five per side.) Fill in between with gravel from stream.

Site 12: This site is at the end of the bridge where the trail has given way to the stream. Place two logs, 10 feet long, on top of each other and pinned to the bank. Place rock along base to protect bank from stream. Put ends of logs under bridge to tie them in. Feather edges to prevent backcutting.
Site 13: This is by far the most impacted site on the trail. The old trail skirted the marsh and curved into a steep drainage that caused a severe washout. Consequently, a new trail was routed through the marsh. The year round wet soil has caused severe impact from trampling by visitors attempting to avoid the soft soil. The rounds placed in the soil have come loose, are slippery and highly dangerous.

Recommended Action: Eliminate trail through marsh. Resculpt soil, remove rounds and where needed, place jute and grass plugs. Put up reseed signs. (2) Rework old trail. Brush in lead to new trail. Put in 8 foot water bar at hemlock on old trail. Put in four 8 foot check dams at washout and corduroy behind each. Define trail to bridge with loop.

Site 14: This site is along the top of the hill, at the edge of the campground. Social trailimg and scrambling from the campers has created this erosion. Area should be lightly brushed in and a revegetation sign placed.

Replace sign with Reveg Sign.

Sleep bank
IV. **General:** The entire trail should be handdressed to provide a relatively smooth thread. Trip hazards should be cut below surface levels. All signs should be evaluated for proper information. A trailhead sign should be designed to indicate it is a loop trail of 1.7 mile and goes to the stream.

Sign Design Example:

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Annie Creek Loop Trail
Total Length 1.7 mi  km
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V. **Manpower Requirements:** Four hundred manhours. To be provided by SCA's.

Tools: 6 pickshovels, two pickmattocks, 2 fire axes, 2 gallon, 2 loppers, buckets, small sledge hammer, 4 pullers, wheel barrow, 2 shovels, metal box for food, radio,

**Follow-up:** This is a high use trail. It received not only regular use but use by the Mazama camper out for the casual stroll, perhaps not wearing proper footwear. Therefore its maintenance standard should be higher than a backcountry trail.

1. The trail should be walked prior to opening Mazama and all snowed-in sections should be shoveled.

2. The trail should be walked at least 3 times a season to identify and correct shortcutting, erosion, and safety problems.

3. Brushed in areas will be monitored for natural revegetation.