

Proposed Action for the Ward Creek Watershed Ecosystem Restoration

USDA Forest Service Pacific Southwest Region
Lake Tahoe Basin Management Unit
El Dorado Co., California

Background:

Prior to human disturbance, most precipitation at this location infiltrated into the terrace soils of the abandoned Ward Creek floodplain, and was transported as subsurface lateral flow across the floodplain terrace, before discharging into many small ephemeral/intermittent drainages. The portion of snowmelt that did not infiltrate was transported as surface runoff over the north edge of the floodplain terrace and was dispersed over the steep slope connecting the abandoned floodplain terrace to the existing Ward Creek floodplain below, through several small drainages. Erosion was negligible on this terrace slope, because of the existence of willow thickets along these drainages.

During historic logging activities in the 1970s, drainage patterns were altered at this five acre site by the construction of a road and a ditch that routes water from natural drainages to a manmade pond that is located on CTC land. The original purpose and uses of the pond are unknown. However, the environmental consequence is that a large gully formed (6 feet deep and 200 feet long) at the outlet of the pond and continues to erode upslope.

Purpose & Need:

The purpose of this project is to reduce the accelerated erosion caused by the diversion of natural drainage patterns, and to restore the riparian habitat that has been degraded by these diversions.

Project Description (Proposed Action and Project Design Features):

The USFS proposes to partially reestablish drainage patterns at a five acre site on the south side of Ward Creek, near the abandoned Stanford Rock Road Crossing (Fig. 1). All work would be accomplished using hand labor.

The proposed actions are to:

- Breach the ditch berm in 2 to 3 locations, within a reach of approximately 70 feet. The channels created through the ditch berm would be revegetated.
- Construct 3 to 5 waterbars on the abandoned logging road, to restore the original drainage paths across the roadbed. Waterbars would be reinforced with available rock on site.

Fig. 1 – Proposed actions to restore natural drainage on tributaries to Ward Creek.

Pond on CTC land

Ditch crosses onto CTC parcel

Existing gully

CTC parcel boundary

National Forest

Breach ditch berm in 2-3 locations

Restore drainages by installing 3-5 hand constructed water bars across road

