

Leaf Bike Trail Analysis and Design Lead Agency: USDA FS LTBMU	Water Quality Improvement/Erosion Control	704.01	Contact: Garrett Villanueva
Threshold: WQ/SOIL/REC/WL			Phone Number: 530-543-2762
Threshold Standard: WQ4,WQ5,SC2,R1,W2			Email Address: gvillanueva@fs.fed.us
Is this a multi-year Project? Yes, NEPA analysis and design is the 1 st phase. The second phase is implementation.			Total Project Cost: 1.5 million Funding Request in this Round: \$290,000

Project Summary (maximum 200 words):

This project would provide shared use trail around the Fallen Leaf Lake Area. The trail would combine different uses on a hardened trail to provide access on National Forest. The plan includes analyzing trails in the area to establish a planned trail system that meets recreation needs while minimizing impacts to resources. Trails would be closed, upgraded, or rerouted in order to reduce impacts and locate trails to compliment the forest ecosystem. New trails may be identified to connect destinations from access points. Trailheads would also be identified for upgrade and BMP design. Plans will include a bridge crossing of Taylor Creek. The shared use trail will meet universal accessibility standards. Survey data will be collected during the 2007 field season, NEPA analysis and design is planned in 2008 and implementation is planned to begin in 5/2009.

Analyze and design a shared use paved trail to connect campgrounds and existing trails to Fallen Leaf Lake and mitigate impacts to resources.

Detailed Project Description:

Analyze and design a shared use paved trail to connect campgrounds and existing trails to Fallen Leaf Lake and mitigate impacts to resources.

Describe the goals and objectives of the project:

Reduce impacts to soils and water quality by developing a planned trail system in the Fallen Leaf Lake Area.

- WQ-3 Inventory and evaluate water quality risks associated with all USFS roads, trails and recreation facilities. Provide a plan and public process to determine which roads, trails, and facilities. Provide a plan and public process to determine which roads, trails and facilities should be maintained, upgraded, relocated, or decommissioned. Decommission, relocate, maintain, or upgrade USFS roads, trails, and recreation facilities based on water quality risk assessment and public or administrative need.
- WQ-4 Upgrade all critical drainage facilities and crossings on USFS system roads, trails, and recreation facilities to withstand the appropriate storm criteria.
- WQ-5 Minimize the erosive effects of water concentrated by road, trail and

- recreation facility's drainage features and to minimize the erosion of road, trail, and recreation facility surface materials, reducing the likelihood of sediment production.
- WQ-6 Upgrade and maintain USFS system roads, trails, and recreation facilities in a manner that provides for water quality protection by minimizing rutting, failures, side casting, and blocking of drainage facilities.
 - WQ-7 Ensure BMP effectiveness through maintenance, monitoring, evaluation, adaptive management, and public education.
 - WR/HI-20 Decommission unnecessary roads and trails in sensitive wildlife habitat or re-route roads and trails around sensitive wildlife habitats.
 - Combine recreation use onto designed trails.
 - Close and restore trails in sensitive ecosystems or that are high risk to resources.
 - Establish and BMP Trailheads.
 - Protect heritage resources.
 - Protect botanical resources.
 - Prevent the spread of noxious weeds.
 - Improve wildlife habitat.
 - Establish sustainable access to National Forest.

Describe the anticipated project accomplishments:

The following actions are estimated:

- Close and Restore – 5 miles of trail
- Develop 1.5 miles of hardened shared use trail.
- Construct a bridge across Taylor Creek that meets Universal Accessibility standards.
- Restore 30,000 sq. ft of Stream Environment Zones.
- Restore damaged stream banks on Taylor Creek.
- Establish/BMP two trailheads.
- Adopt and reconstruct 15 miles of trail.
- Establish interpretive signage for forest ecosystem education.

Describe the “readiness” of this project to move forward (Environmental documentation, etc.):

Opportunities have been identified an preliminary alignment work has been accomplished to determine initial cost estimates and feasibility. This project is ready for resource surveys and “left side” NEPA analysis.

Describe partnerships for this project. (Include documentation):

A partnership with the California Tahoe Conservancy has been discussed. Additionally partnerships with the Nevada Conservation Corps may be possible to reduce costs during implementation.

Describe the project monitoring that will implemented as part of this project including:

(1) The questions the monitoring program is designed to answer

Are we meeting our temporary BMP requirements?

Do permanent BMPs work?

Are mitigations measures performing as stated?

What adaptive management strategies need to be implemented?

(2) The monitoring approach

An Adaptive Management approach will be used to monitor the implementation and effectiveness of trail upgrades. Several approaches will be used on this project. WEPP modeling will be used to derive before/after sediment contribution and erosion. Additionally the LTBMU will use a water quality risk analysis to define risk to water quality. Further recreation patterns and impacts to wildlife, heritage resources, sensitive plants, and the spread of noxious weeds will be monitored to determine project success and adaptive management needs. The program will involve monitoring before, during, and after construction. Pre-construction monitoring will establish a baseline of existing threats to water quality and help to develop a plan to resolve the threats. Construction monitoring will ensure that the resource protection measures specified are both being followed, and are effectiveness. Post-construction monitoring will evaluate the success of the project implementation. The facility will be evaluated for two years in the spring, summer, and fall to measure changes in sediment production and transport. This will be compared against the baseline condition. Evaluation of the effectiveness of this project will enable the Forest Service to take corrective measures and modify monitoring protocols if needed, and improve the design.

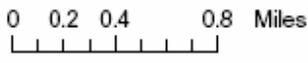
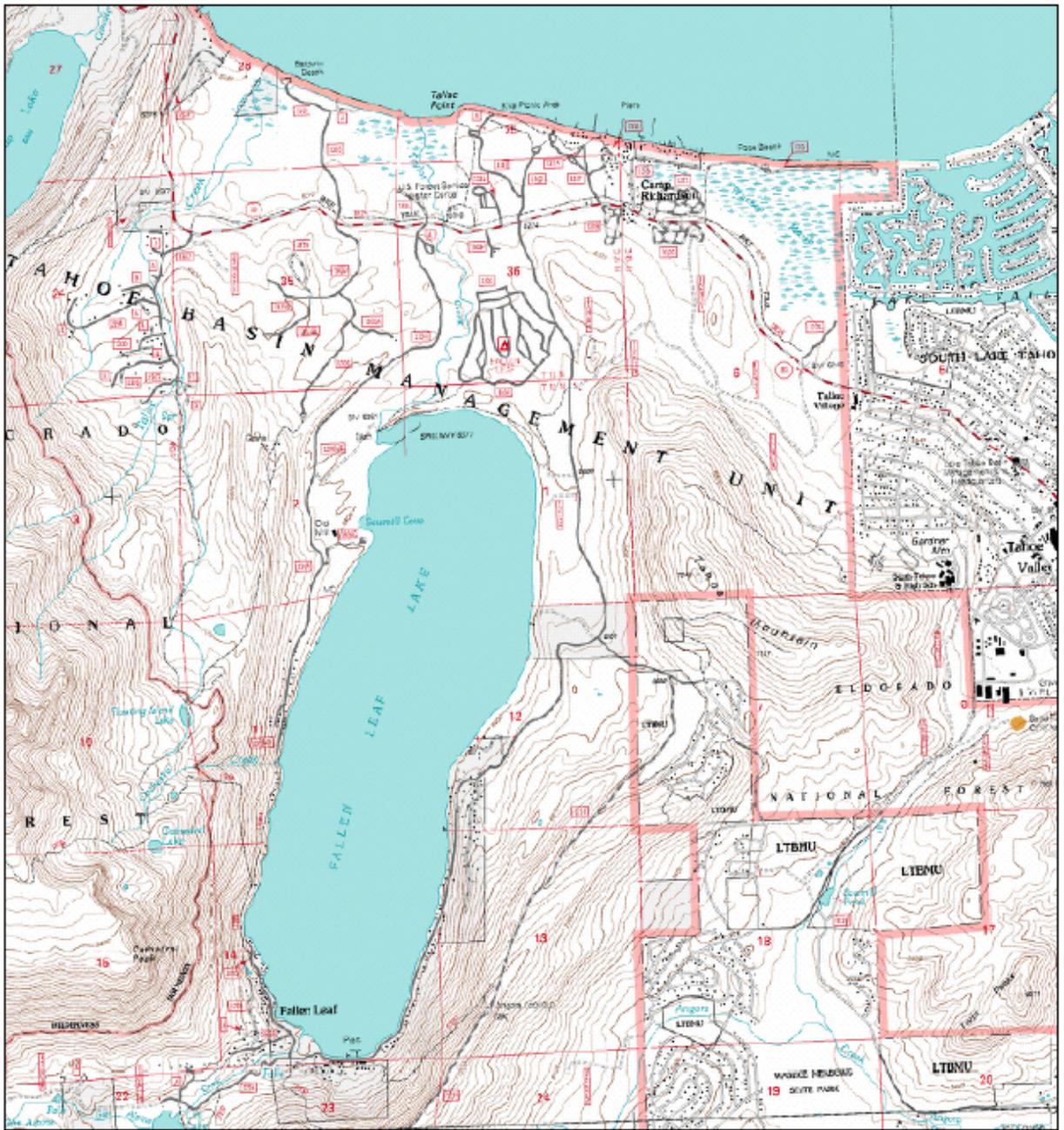
(3) Whether this project monitoring fits in to a larger monitoring or research program?

The results from the monitoring program for this project will be available to help refine the Total Maximum Daily Load (TMDL) model that is currently being developed by the Regional Water Quality Control Board. Monitoring for this project will be performed in conjunction with the Basin-wide BMP retrofit adaptive management monitoring program. The purpose of this program is to determine the need for BMP retrofits at Forest Service facilities as well as the effectiveness of the BMP retrofits.

Describe how the project results will be communicated and made-available to the public.

The results of the project level monitoring will be compiled in a report that will be updated as the post-construction monitoring is completed. This report will be part of the project record and will be available for public / agency review and use upon request at the LTBMU Supervisors Office.

Include an 8 ½ X 11 map depicting the project.



SNPLMA Project Proposal Fallen Leaf Bike Trail

USDA Forest Service
Lake Tahoe Basin Management



US Forest Service. All rights reserved. This document is the property of the U.S. Forest Service and is loaned to you for your use only. It is not to be distributed outside your agency. If you have any questions, please contact the U.S. Forest Service at (775) 784-2000. The Forest Service cannot be held liable for any damages or injuries resulting from the use of this document.