Appendix B-8

LAKE TAHOE RESTORATION PROJECTS
ESTIMATED NECESSARY EXPENSES & KEY MILESTONE DATES

Project Name: Basinwide Trail ATM Phase II Agency: USDA Forest Service LTBMU
Prepared by: Garrett Villanueva Phone:530-543-2762 EIP #: 965.06
SNPLMA Project #:

Identify estimated costs of eligible reimbursement expenses:

1. Planning, Environmental Assessment and Research Costs (specialist surveys, reports, monitoring, data collection, analysis, NEPA, etc.)	$	%
2. FWS Consultation—Endangered Species Act	$	%
3. Direct Labor (Payroll) to Perform the Project	$ 88,000	8 %
4. Project Equipment (tools, software, specialized equipment, etc.)	$	%
5. Travel (including per diem where official travel status required to carry out project, such as serve as COR, experts to review reports, etc.)	$ 50,000	4.5 %
6. Official Vehicle Use (pro rata cost for use of Official Vehicles when required to carry out project)	$	%
7. **Cost of Contracts, Grants and/or Agreements to Perform the Project**	$ 750,000	68 %
8. Other Direct and Contracted Labor: Agency payroll for the Contracting Officer to do project procurement, COR, Project Inspector, Sec. 106 Consultation if required, NEPA Lead, Project Manager, Project Supervisor, and subject experts to review contracted surveys, designs/drawings, plans, reports, etc.; Also covered is the cost to contract for a Project Manager and/or Project Supervisor if contracted separately from other project contracts)	$ 80,000	7.5 %
9. **Other Necessary Expenses** (See Appendix B-11)	$ 132,000	12
TOTAL:	$ 1,100,000	100 %

Estimated Key Milestone Dates:

Milestones/Deliverables:	Date:
East Shore Beaches ATM – Begin work	**5/15/2009**
Fallen Leaf Bike Path ATM – Begin work	**8/15/2009**
High Meadows ATM – Begin Work	**6/1/2009**
Final Completion Date:	11/30/2011

COMMENTS:

APPENDIX K
LAKE TAHOE CAPITAL PROJECT PROPOSAL
ROUND 9

Consistency with Lake Tahoe nomination criteria:

Project nominations must qualify as an Environmental Improvement Program (EIP) project and be the responsibility of the federal government (federal share responsibility); and have a willing and ready federal sponsor.

Project nominations must be consistent with one of the focus areas in the June 2006 Federal Vision (pp. 8-9) (http://www.fs.fed.us/r5/ltbmu/documents/ltbec/revised-FV-Final.pdf) and fit into at least one category.

Capital Focus Area (as described in the 2006 Federal Vision): *Watershed and Habitat Improvement*

Circle a minimum of one category:

1. Continued emphasis on fuels reduction in coordination with projects funded under the 2006 SNPLMA amendment (the "White Pine" amendment).
2. Continued implementation of projects approved in Rounds 5 through 8 which implement the EIP. Project proposal should clearly describe the phase/product being produced along with the consequence of not completing the project phase proposed for Round 9.
List project(s): Round 8: Basinwide Trail ATM Phase 1
3. Project is consistent with and contributes toward TMDL pollutant reductions within the four source categories (atmospheric, urban & groundwater, forested uplands, and stream channel).
List category(ies): forested uplands and stream channel
4. Control of aquatic invasive species and prevention of new aquatic invasive species.

Project Name: Basinwide Trail ATM Phase II **EIP #: 965.06**

Lead Agency: LTBMU Forest Service **Contact: Garrett Villanueva**

Threshold: Water Quality **Phone Number: 530-543-2762**

Threshold Standard: WQ-5 **Email Address: gvillanueva@fs.fed.us**

Funding Requested in this Round: $1,100,000 **Total Project Cost: $5,000,000**

Is this a multi-year Project? (If "Yes", describe in the Detailed Project Description below number of years or phases and which year the requested funding will cover)

Yes

Project Summary (maximum 200 words): (applicable ONLY to this Round 9 project):

This project will implement trail BMPs in the East Shore Beaches Trail ATM, High Meadows Road and Trail ATM and Fallen Leaf Bike Path Trail ATM, which includes the Angora Burn Area Trail ATM. Trail BMPs involve decommissioning, reconstruction, reroute and road to trail conversions. In the High Meadows area road and trail BMPs will be addressed. The resulting trail system will reduce impacts to water quality, wildlife, botanical resources, soils, and heritage resources. Further the trail system will establish sustainable trail recreation opportunities compatible with resource protection goals.

Detailed Project Description (focuses on what Round 9 is funding; list the number of years or phases the Round 9 requested funding will cover; if phased, briefly describe how this project links into previously phased projects including what remains for Rounds 10 and beyond).

Phase I of the Basinwide Trail ATM included funding for implementation of the Fallen Leaf Bike Trail ATM and East Shore Beaches Trail ATM. Phase II of the trail ATM will fund work in additional ATM areas. Further, The East Shore Beaches ATM NEPA Analysis (Rnd 6), High Meadows Road and Trail ATM NEPA Analysis (Rnd 5), and the Fallen Leaf Bike Path Trail ATM NEPA Analysis (Rnd 7) will have components ready for implementation during FY09. The Fallen Leaf Bike Path Trail ATM will be split into two project areas resulting in the Angora Burn Area ATM and the Fallen Leaf Bike Trail ATM. The two areas (Fallen Leaf Bike Path ATM and the Angora Burn Area Trail ATM) have been split to fast track trail and road upgrades within the burn area due to the post fire-high erosion potential. The Fallen Leaf Bike Trail ATM implementation will be funded under round 10 and perhaps round 11. The NEPA analysis for the Fallen Leaf Bike Trail ATM is funded under round 8. The Round 9 Phase II project implementation is planned for completion in 2009 and 2010. Future projects include Phase III in Round 10 and Phase IV in Round 11 to complete Trail ATM implementation of high priority trail work related to BMP upgrades within the Lake Tahoe Basin on existing trails.

Describe the goals and objectives of the project (those applicable ONLY to this Round 9 project):

Phase II of the Trail ATM is intended to establish a sustainable trail system that will provide for current and future access needs to the forest while minimizing impacts to resources. Specifically water quality and wildlife habitat will be improved and further protected. As a result of designing trails to meet current design standards, soils will be conserved, maintenance needs will be reduced, and habitat will be restored. The following are the planned accomplishments:

East Shore Beach Trail ATM - $500,000 FY09 Rnd
- Trail Upgrade – 3 miles
- Trail Reroute – 2 miles
- Trail Decommissioning – 2 miles
- Stream Crossing Upgrades/Restoration -1/1 mile

Angora Burn Area Trail ATM - $250,000 FY09 Rnd 9,
- Trail Upgrade – 4 miles
- Trail Reroute – 2.5 miles
- Trail Decommissioning – 1 mile
- Stream Crossing Upgrades – 1 mile

High Meadows Road and Trail ATM - $350,000 FY09 Rnd 9

Trail Upgrade 1.5 miles
Trail Reroute – 1.5 miles
Trail Decommissioning – 1 mile
Stream Crossing Upgrades – 1

Describe the anticipated project accomplishments (i.e. products or identifiable environmental benefits being produced or implemented under this project):

Implementation of the Trail ATM will result in reduced erosion from trail tread and reduced erosion from potentially focused surface runoff. Trails within critical wildlife habitat, historic sites, and riparian zones will be rerouted if possible. The anticipated result is a net benefit to resources and the establishment of a sustainable trail system. The following totals are expected:

Trail Upgrades - 8.5 miles
Trail Reroutes – 6 miles
Trail Decommissioning – 4 miles
Stream Crossing Upgrades/Restoration – 3/1

Describe the "readiness" of this project to move forward (urgency, capacity, capability, environmental documentation etc.):

The East Shore Beaches Trail ATM environmental analysis is scheduled for completion in March 2008 and is funded from round 6. The High Meadows ATM environmental analysis is scheduled for completion in November 2008 and is funded from round 5. The Angora Burn Area Trail ATM is undergoing analysis and is planned for completion in November 2008. The project is planned for implementation in May of 2009 or when funding becomes available.

Describe partnerships for this project. (if applicable, project should identify partner funding [committed/secured] and how it is integrated into the project)

Partnerships for this project include the Great Basin Institute/Nevada Conservation Corp which incorporate AmeriCorp volunteers into their programs. The partnership provides trail crews at a low cost. Additionally, the Tahoe Rim Trail Association has provided substantial contributions to the ATM program and plans to continue their volunteer efforts toward implementation.

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

Monitoring to determine BMP effectiveness including watershed modeling has been completed. A WEPP (watershed erosion prediction project) study was published in *Stream Notes* regarding trail design standards and sediment reduction to surface water quality. The study affirmed trail design standards and project goals. Additionally, user surveys have been completed to determine how trail system upgrades are affecting the user experience. Monitoring at this time is planned to determine if projects continue to meet water quality objectives and to assure that projects remain in compliance with temporary BMP standards.

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

Implementation Monitoring Question: Has the implementation of Trail Decommissioning and BMP Upgrades reduced the potential for water-quality impacts?

Effectiveness Monitoring Question: What impacts do forest trails have on sediment loading to Lake Tahoe, and how successful are BMP retrofits and decommissioning in mitigating those impacts?

2) **The monitoring approach (describe the methods and strategies [i.e. monitoring, research, or both] that will be used to verify whether the project goals and objectives have been met. A detailed monitoring/research plan is not required, but enough detail must be provided to allow someone that is unfamiliar with the project to understand and evaluate the proposed methods and strategies.)**

Future longer term effectiveness monitoring is expected to be funded through research proposals funded through the TSC process, or the USFS monitoring program funded through base appropriations and/or the SNPLMA funded NEPA Resource Surveys Project.

Project monitoring will be used during project construction for temporary BMP effectiveness. Pre-project and post project monitoring will be conducted to determine project effectiveness.

3) **Whether this project monitoring fits into a larger monitoring or research program (including how information from the monitoring and research will be used to improve the continued performance of the proposed project or improve future similar projects)**

The monitoring identified for this project is part of the overall Forest Plan monitoring effort for the Lake Tahoe Basin Management Unit. Results and accomplishments of all Forest Monitoring are summarized every year in the Annual Forest Monitoring Report. When appropriate, interpretation of results is integrated at the programmatic, forest, and sometimes Regional level. For this project integration at a larger scale is expected. Results of WEPP modeling will support trail designs throughout the basin and perhaps at an international level. Project effectiveness continues to be important to refine BMP designs throughout the basin.

Describe these two items which will be considered along with the above project monitoring information by the Tahoe Science Consortium related to research and monitoring resource areas and the effectiveness of environmental restoration activities:

1) Describe the specific goals and objectives of the project and describe how fulfilling those objectives will contribute to the achievement of one or more environmental thresholds.

The goals of the Trail ATM are to establish a sustainable trail system that provides for current and future recreation access needs. Through analysis and design the trail system is being redeveloped to locate trails upon the highest capability lands possible. In doing

so, sensitive ecosystems are being further protected, damaged areas are being restored and as a result water quality and habitat is being protected and improved. Establishment of a sustainable trail system will help to ensure that forest ecosystem integrity remains intact for future generations.

2) Describe the risk to the environment from failure of the proposed project (i.e. if the project fails what is the environmental consequence).

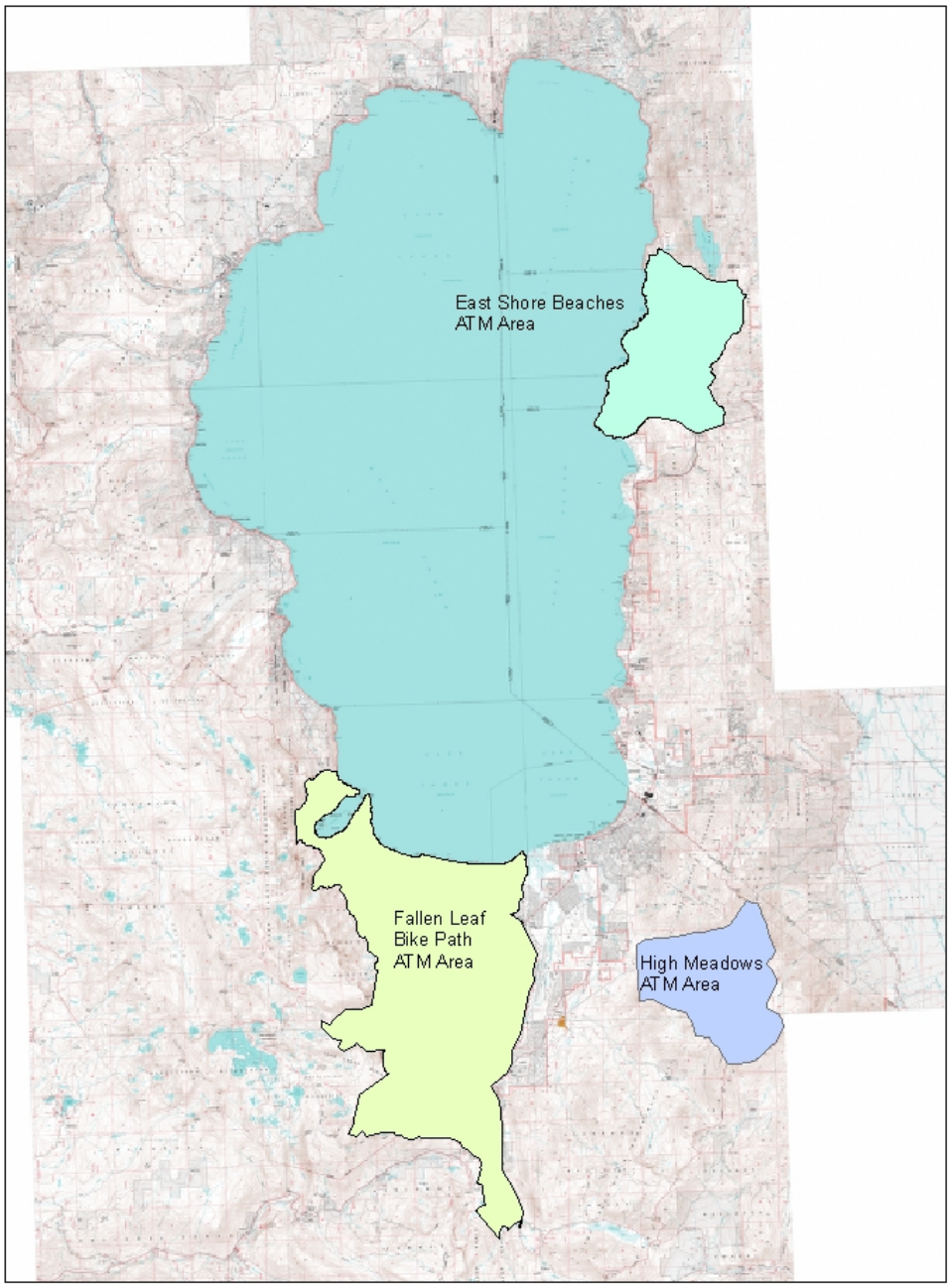
Failure to implement the Trail ATM would result in more unplanned trails occurring across the forest. Without environmental analysis, the environmental consequence is difficult to quantify, however it may be assumed that sensitive ecosystems would be impacted. Additionally, existing managed and unmanaged trails that have high relative impacts would continue to degrade resources. In one example of an existing trail that was reconstructed, an estimated 2,200 cubic yards of sediment had left a 1.5 mile section of trail prior to its reconstruction. In another example, multiple braided trails had developed through Tahoe Draba habitat.

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

Environmental Analysis of the projects are available via the LTBMU website. Post project monitoring reports will be available upon request.

Include an 8 ½ X 11 map depicting the project.

Basinwide Trail ATM Phase II



12/12/2007