**ROUND 11 CAPITAL PROJECT NOMINATION FORM**
**LAKE TAHOE FEDERAL SHARE EIP CAPITAL PROJECTS**
**APPENDIX K**

| | | | |
|---|---|---|---|
| **Project Name:** | NEPA Resource Inventories, Surveys, and Analysis (NRI) | **EIP Number: (*Required*)** | 667; 10163.48; 10163.5 |
| **Federal Agency Sponsor: (*Required*)** | Forest Service - LTBMU | **Contact:** | Holly Eddinger |
| **Threshold:** | Soils, WQ, Wildlife, Fish, Veg | **Phone Number:** | 530-543-2633 |
| **Threshold Standard:** | Soils, WQ, special interest species, unique plant communities, habitats of significance | **Email:** | heddinger@fs.fed.us |
| **FUNDING REQUESTED IN THIS ROUND:** | **$** 375,000 | | |

**Federal Share EIP Consideration**

*Select "yes" or "no" for each question. If you have a "yes" response, briefly describe.* ***Projects must meet one or more of these 5 items.***

1. **Does the project involve federal land? If yes, is the federal land involved important to successful implementation of the project?** — ***Yes*** ☒ ***No*** ☐

Yes, the project would continue to occur solely on federal lands managed by the USFS Lake Tahoe Basin Management Unit.

2. **Is this project identified in the EIP? If yes, please ensure the EIP number is identified in the above project information box. If no, provide a description of the projects contribution to the EIP program.** — ***Yes*** ☒ ***No*** ☐

Yes, EIP #: 667; 10163.48; 10163.5

3. **Does the project involve the conservation of a federal or regional threatened, rare, endangered, or special interest species?** — ***Yes*** ☒ ***No*** ☐

Yes, the project is directly related to the conservation of species and their habitats by collecting pertainent information to help managers in the design of projects; provide data to forest, regional, and national species datasets; and provide key species protocol and monitoring plan development.

4. **Does the project involve an identified federal interest such as the detection and eradication of non-native invasive species (aquatic or terrestrial)? If yes, identify the species?** — ***Yes*** ☒ ***No*** ☐

Yes, species data collected will provide information to managers on the location and detections of non-native invasive species both terrestrial and aquatic through species and habitat inventories.

5. **Does the project contribute to supporting implementation of capital projects in the EIP? Such projects that fulfill this function would include technical assistance, data management, and/or resource inventories?** — ***Yes*** ☒ ***No*** ☐

Yes, the project is directly related to contributing support in implementing capital projects by providing the necessary resource inventories, data management, and reporting.

**Check all Capital Focus Area(s) that apply:**

- ☒ 1. **Watershed and Habitat Improvement**
- ☒ 2. **Forest Health**
- ☐ 3. **Air Quality and Transportation**
- ☐ 4. **Recreation and Scenic**

**Check all that apply (must meet a minimum of one category):**

- ☐ 1. **Continued emphasis on forest ecosystem health/fuels reduction projects considering the LTBMU Stewardship Fireshed Assessment and Lake Tahoe Basin Multi-Jurisdictional Fuels Reduction and Wildfire Prevention Strategy.**

- ☒ 2. **Continued implementation of projects approved in Rounds 5 through 10 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 10.**

  ***List Rounds and funding:***

| |
|---|
| Round 7 (F079) $1,064,000 |
| Round 8 (F115) $1,064,000 |
| Round 9 (F130) $ 500,000 |
| Round 10 (F151) $ 500,000 |

- ☐ *3.* **Project is consistent with and contributes toward TMDL pollutant reductions within the four source categories (atmospheric, urban & groundwater, forested uplands, and stream channel).** ***NOTE: If "yes", then please respond to questions in the accomplishments section of the nomination proposal.***

- ☒ 4. **Control of aquatic invasive species and prevention and/or detection of new aquatic invasive species.**

## Project Nomination Proposal Outline

**Project Summary (a brief summary which clearly describes the proposed project –maximum 200 words)**

- Summarize ONLY this Round 11 project**.**

The Round 11 NEPA Resource Inventory, Survey, and Analysis (NRI) project would focus on two main areas: 1. Biological Species and Habitat Inventories and Monitoring and 2. Angora Burn Area Monitoring. For the Biological Species and Habitat Inventories and Monitoring, the proposed components include stream condition inventory, fen assessments, botanical long term monitoring plots, post-project effectiveness monitoring, stream temperature monitoring, bullfrog data synthesis and eradication plan development, native mussel assessment in LTBMU aquatic habitats (i.e. both lakes and streams), TES wildlife breeding inventories & monitoring (including active PACs and nest sites), and all necessary and related data entry, database management, and data GIS support needs. For the Angora Burn Area Monitoring the proposed components include monitoring of vegetation (i.e. collecting data on post Angora Burn area on vegetation succession, conifer regeneration, snag fall and down woody debris recruitment, fuel development, tree mortality, and beetle populations); and water quality (i.e. measure sediment and nutrient concentrations at one out of five stations to be monitored across Lake Tahoe (multi agency effort)).

**Project Description**

**Introduction**

- Provide project background which explains the situation and state the problem and how it will be addressed.

***Note:*** *Focus needs to be the project in Round 11 not a history of an ongoing project or program.*

The NRI Project for Round 11 is split into two primary needs: 1. Biological Species and Habitat Inventories and Monitoring and 2. Angora Burn Area Monitoring.

For the Biological Species and Habitat Inventories and Monitoring, the components proposed include continuation of annual monitoring efforts (e.g. TES wildlife breeding inventories & monitoring (including active PACs and nest sites), stream condition inventory, botanical long term monitoring plots, post-project effectiveness monitoring, stream temperature monitoring), and initiation of LTBMU aquatic invasive species program needs (e.g. bullfrog data synthesis and eradication plan development, native mussel assessment). In many instances more than one year of surveys are required for protocol level surveys to be completed (e.g. willow flycatcher). The biological species and habitat information has been used (and will continue to be used) for NEPA (National Environmental Policy Act ) purposes and compliance with ESA (Endangered Species Act), NFMA (National Forest Management Act) requirements, augmentation of Forest Plan Status and Trend Monitoring, and evaluation of TRPA thresholds. Included are flora and fauna surveys (e.g., for establishment and management of special status species, Protected Activity Centers, Home Range Core Areas).

For the Angora Burn Area Monitoring, the components proposed include the continuation of the Vegetation Monitoring Study conducted by agreement with PSW to study and collect data on the Angora Burn area on vegetation succession, conifer regeneration, snag fall and down woody debris recruitment, fuel development, tree mortality, and beetle populations. Also proposed is the continuation of the water quality monitoring in the Angora Burn area (i.e. measure sediment and nutrient concentrations at one out of five stations to be monitored across Lake Tahoe (multi agency effort)).

Analyses of the information collected will yield key watershed-scale and landscape-level natural resource attributes and species population information. These have been and are essential to putting in perspective the potential natural resource impacts of forest activities at localized sites (e.g., vegetation treatments, construction of roads and trails, motorized and non-motorized recreation, and restoration projects). Without this information, conducting the comprehensive cumulative effects analyses required by NEPA of each project would require substantially greater costs and time; by contrast, with the basin-wide information / data produced by this project, it is a relatively simple matter of integrating those basin-wide data with minimal project-specific information.

Additionally, results will be evaluated and utilized to adaptively manage the natural resources and forest activities. Impacts to resource conditions that can be associated with forest activities will spur action to mitigate impacts and to modify actions to minimize impacts of future forest activities. Data collection and analysis conducted through these efforts will be made available to the larger Basin Management System for its comprehensive evaluation of Tahoe Basin environmental resources.

- Describe what Round 11 is specifically funding; list the number of years the requested funding will cover; briefly describe how this project links into previous and future projects, and identify other round funding.

***NOTE:*** *Focus should be on finishing current/phased projects. If project is new in Round 11, clearly identify if the project is for planning or implementation and how it will be completed with Round 11 funds. Identify if Round 12 or other funds will be needed to complete the project. Please identify total non-SNPLMA funds that are being contributed/dedicated to the proposed Round 11 project and the source of those funds.*

In Round 11 the NRI funds are expected to fund the continuation of the biological inventory and monitoring needs for the LTBMU as well continue the Angora Burn Area monitoring. Due to the need for allowing funds to be available for two years for contract fulfillment and to allow for completion of field surveys in subsequent year(s) due to unforeseen complications (e.g. bad weather delays the start of the field season, large on-forest fire disrupts ability of field crews to reach survey sites, etc…) – the project is being proposed for approximately three years.

In brief the previous NRI funding:

- Round 5 (**F027**) $1,230,000 (Multi-species Inventory Monitoring Protocol Development) – not considered a NRI project but data helped inform the needs for future NRI round proposals
- Round 6 (**F068**) $ 585,200 (data assessment & monitoring plans) – not considered a NRI project but data helped inform the needs for future NRI round proposals
- Round 7 (**F079**) $1,064,000 (data collection & monitoring plans) – NRI project
- Round 8 (**F115**) $1,064,000 (data collection, effectiveness monitoring, & Angora Burn monitoring) – NRI project
- Round 9 (**F130**) $ 500,000 (data collection, effectiveness monitoring, & Angora Burn monitoring) – NRI project
- Round 10 (**F151**) $ 500,000 (data collection, effectiveness monitoring, restoration project identification, & Angora Burn monitoring) – NRI project

In summary, the Round 11 NEPA Resource Inventory, Survey, and Analysis (NRI) project will accomplish:

1. Biological Inventory and Monitoring = $220,000
2. Angora Burn Area Vegetation Monitoring = $60,000
3. Angora Burn Area Water Quality = $50,000
4. LTBMU Indirect Costs (ONE + Env Ed) = $45,000

Round 12 NRI funding is estimated at $345,000 to continue annual biological inventory and monitoring needs, complete assessments, and continue monitoring needs within the Angora Burn Area.

- Describe the "readiness" of this project to move forward (urgency, capacity, capability, environmental documentation, interagency agreements, etc)

This project will be ready for immediate initiation in fiscal year 2011. The LTBMU has the capacity to carry-out the necessary work with a combination of in-house staff, summer temporary hires, and or with contractors.

- Describe partnerships for this project. (if applicable, project should identify committed/secured partner funding and/or other partner contributions (describe) and how it is integrated into the project)

The work will be conducted primarily by LTBMU staff; researchers at Pacific Southwest Research Stations and various universities will be utilized for completing and assistance with advanced statistical analyses and reporting. We will continue to coordinate with other agencies within Lake Tahoe Basin (e.g., TRPA, State Parks, California Tahoe Conservancy, etc) to accomplish the inventories and surveys and share monitoring results (Tahoe Science Consortium, Lahontan Regional Water Quality Control Board). A portion of the Round 11 funds would be to continue partnership development with other agencies in order to address basin wide monitoring and evaluation needs.

***Note:*** *The form requests information about project goals, objectives, accomplishments, and questions the program is designed to answer across several different sections. These issues are closely linked and your individual responses should provide a cohesive description.*

**Goal – Purpose and Need ("larger" statement of future expected outcome – usually not measurable)**

The overall goal of this project is to utilize a coordinated approach for inventorying and surveying natural resources on National Forest System lands within Lake Tahoe Basin in a basin-wide context and to quantify effects of various management activities (e.g., vegetation and fuels reduction treatments, recreation impacts, road decommissioning, and restoration projects) and environmental stressors (e.g., air pollution, water quality degradation, exotic species, etc) on soil, water, and biological resources related to desired future conditions or threshold standards in Lake Tahoe Basin. The project will also establish implementation and effectiveness monitoring guidelines for management / restoration activities that will allow individual projects to evaluate their success at attainment of -- or movement toward -- desired future conditions or threshold standards.

**Objectives (specific measurable statements of action which when completed will move towards achieving the goal)**

***Note:*** *Objectives will form the basis for the milestones/deliverables to be identified in Appendix B-8*

- Describe how fulfilling objectives will contribute to the achievement of one or more environmental thresholds (air quality, water quality, soil conservation, vegetation, fisheries, wildlife, scenic, noise, recreation). Provide measures if applicable. For example: acres treated, miles of stream restored for each objective.

The NRI project provides data and the associated analysis for status-and-change and long term cause-and-effect information on physical resources (soil and water), aquatic, riparian, and terrestrial habitat condition, special status species and TRPA special interest vertebrates, aquatic warm water invasive, plants and plant communities of concern. This will provide the necessary information for cumulative effect analysis required by NEPA and evaluation of whether at the broad scale, Forest Management activities are meeting TRPA thresholds and Forest Plan objectives.

Biological status-and-trend components of the project include: avian special status species (e.g. Bald eagle, California spotted owl, Northern goshawk, Osprey, Willow flycatcher), terrestrial special status species (e.g. American marten, Sierra Nevada red fox, wolverine) amphibian special status species (e.g. Sierra Nevada (mountain) yellow-legged frog), special status plant species and communities of concern (Tahoe draba (*Draba asterophora* var. *asterophora*) and Cup Lake draba (*D. a.* var. *macrocarpa*) and fen ecosystems -- together with their associated special status species), and aquatic invasive species (e.g. bullfrogs).

Long-term effectiveness monitoring of past stream channel restoration projects (e.g. at Cookhouse Meadow and Blackwood Creek) and in the stream environmental zone (SEZ) include measurements such as stream geomorphology, groundwater levels, aquatic habitat features, and the response of riparian vegetation specifically in the Heavenly SEZ Fuels Reduction Project area.

The methodologies that will be used in all of these efforts are a combination of established protocols as well as field and analysis methodologies developed from more recent studies.

In addition, this project will provide data on post-wildfire effects in the Angora Burn area related to soil quality, vegetation succession, hill-slope stability, and channel condition.

- Describe the estimated environmental risks from unintended consequences of the proposed project (if applicable)**.**

None expected.

**Accomplishments**

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

***Note:*** *Differentiate between direct and/or primary project effects and secondary and/or overall watershed effects.*

A comprehensive Annual Forest Monitoring Report will highlight the accomplishments from this project (NRI) as well as other forest wide monitoring efforts. In additional annual reports for individual elements of the monitoring program would be used in current NEPA analyses, updates to the Forest Five Year Monitoring Strategy, and updates to the Forest Plan monitoring plan.

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

This proposal will remain posted on LTBMU's "SNPLMA website" and interested parties will use the project contact information supplied herein to communicate directly with the LTBMU contact. Significant interim accomplishments may be reported out as they occur, by posting to LTBMU's website. Discussion of project particulars may periodically occur during inter-agency meetings (e.g. Tahoe Science Agency Coordinating Committee).

Results of the inventories and surveys, together with analyses of these datasets, will be summarized in an Annual Forest Monitoring Report, and posted on the LTBMU website. Further, the Interpretive Services staff will conduct public outreach at various locations (e.g., visitor centers, schools, public agencies) and during various events to educate the public concerning the principles, practices, and products of this project; an amount equal to two percent of the project costs is dedicated to this effort.

- If you checked "yes" for the project being consistent with and contributes to TMDL pollutant reductions please consider and integrate the following in the project description:

a) Describe whether, and how, the project demonstrates advanced, alternative, or innovative practices.

n/a

b) If project includes project level monitoring, describe ability of proposed monitoring strategy to contribute to the state of TMDL knowledge. Also describe if purpose of the capital project is to conduct data collection and/or analysis related to Lake Tahoe clarity.

n/a

c) Describe treatment approach for reducing pollutants and/or measures to address connectivity between pollutant sources and Lake Tahoe or its tributaries. Identify target pollutants, and, to the degree feasible, provide quantitative estimates of project effectiveness at reducing pollutant loads (and/or a commitment to provide post-project estimates).

n/a

d) If appropriate, describe whether, and how, the project can be combined or coordinated with other TMDL implementation projects.

n/a

**Monitoring**

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

  - List the questions the monitoring program is designed to answer.

What is the current status and change in Special Status Plant and Animal Species (Listed Threatened and Endangered, Species of Concern and Species of Interest) populations within the Lake Tahoe Basin?

To what extent have desired conditions for aquatic and terrestrial ecosystems been achieved within the Lake Tahoe Basin and what are factors that affect achievement of desired conditions?

What are the short term (up to 3 yrs) and long term (5- to 10-year) ecological impacts from the Angora Fire and has the fire and post fire restoration efforts affected desired conditions?

  - Describe any coordination with, or input from, the science community on monitoring and adaptive management that has occurred on the development of this nomination and what changes (if any) to the project were made as a result of this input.

The work will be conducted primarily by LTBMU staff for the biological inventories. Previous data collection and monitoring plan development have all been in done in coordination with researchers at Pacific Southwest Research Station (PSW) and multiple university research students and staff. We will continue to coordinate with other agencies within Lake Tahoe Basin (e.g., TRPA, State Parks, California Tahoe Conservancy, etc) to accomplish the inventories and surveys and share monitoring results (Tahoe Science Consortium, Lahontan Regional Water Quality Control Board, TRPA).

  - 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? (*Note: A detailed monitoring plan and/or research plan is not required, however, enough detail must be provided to allow someone that is unfamiliar with the project to understand and evaluate the proposed methods and strategies.*)

All components of the NRI proposal involve inventory, monitoring, and assessments by using established protocols (e.g. Stream Condition Inventory for aquatic habitat assessments) and monitoring plan guidance (e.g. Marten monitoring plan). The project goals and objectives can be verified by the annual reporting documents.

  - Describe whether the monitoring or research associated with this project fits into or is part of a larger monitoring or research program.

These annual inventories and surveys provide the basin-wide context (baseline) within which to put project-level monitoring results in perspective, for comprehensive cumulative effects analyses and for adaptive management of the natural resources in National Forest System lands within Lake Tahoe Basin. These are summarized annually in the Annual Forest Monitoring Program Report, as well as every five years in a comprehensive evaluation report. Information is used to inform NEPA analysis to develop proposed projects.

- Describe how information from the monitoring and/or research will be used to improve the continued performance of the proposed project or future similar projects.

The annual inventories and surveys provide the basin-wide context (baseline) within which to put project-level monitoring results in perspective, for comprehensive cumulative effects analyses and for adaptive management of the natural resources in National Forest System lands within Lake Tahoe Basin. These are summarized annually in the Annual Forest Monitoring Program Report, as well as every five years in a comprehensive evaluation report. Information is used to inform NEPA analysis to develop proposed projects.

**Attachments**

- If applicable, include 8 ½ X 11 map depicting the project

**Appendix B-8**
**LAKE TAHOE RESTORATION PROJECTS**
**ESTIMATED NECESSARY EXPENSES & KEY MILESTONE DATES**

| | | | |
|---|---|---|---|
| Project Name: | NEPA Resource Inventories, Surveys, and Analysis (NRI) | Agency: | Forest Service - LTBMU |
| Prepared by: | Holly Eddinger | Phone: | 530-543-2633 |
| SNPLMA Project #: | | EIP #: | 667; 10163.48; 10163.5 |

**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** | $ 175,000 | 47 | % |
| 4. **Project Equipment** (tools, software, specialized equipment, etc.) | $ 5,000 | 1 | % |
| 5. **Travel** (including per diem where official travel status required to carry out project, such as serve as COR, experts to review reports, etc.) | $ 20,000 | 5 | % |
| 6. **Official Vehicle Use** (pro rata cost for use of Official Vehicles when required to carry out project) | $ 5,000 | 1 | % |
| 7. **Cost of Contracts, Grants and/or Agreements to Perform the Project** | $ 125,000 | 33 | % |
| 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) | $ | | % |
| 9. **Other Necessary Expenses** (see Appendix B-9) | $ 45,000 | 12 | % |
| **TOTAL:** | $ 375,000 | 100 | % |

**Estimated Key Milestone Dates:**

| Milestones/Deliverables: | Date: |
|---|---|
| Project Plan including Budget Allocation | 9/30/2011 |
| Inventory, Assessments, Monitoring of Biological Communities - Field Data Collection, Annual Reports, Angora Burn Area Vegetation Monitoring | 12/30/2013 |
| Inventory, Assessments, Monitoring of Water Quality - Angora Burn Area Water Quality | 12/30/2013 |
| Project Closeout Begins | 3/30/2014 |
| | |
| **Final Completion Date:** 9/30/2014 | |

**COMMENTS:**

Deliverable dates incorporate the two year contract fulfillment need and allows for completion of field surveys in subsequent year(s) due to unforeseen complications (e.g. bad weather delays the start of the field season, large on-forest fire disrupts ability of field crews to reach survey sites, etc…). Other Necessary Expenses is a set amount of 12% of the project's estimated total for the LTBMU. An additional 6 months is also included for the administrative task of closing the project.