

**U.S. Department of Agriculture Forest Service  
Pacific Southwest Research Station**



With funding through the Southern Nevada Public Lands Management Act  
Announces



**A Request for Proposals (RFP) to Conduct  
Research in Support of the  
Lake Tahoe Restoration Act and the  
Lake Tahoe Environmental Improvement  
Program**



**Opening September 4, 2009  
Closing October 26, 2009 at 4:30 p.m.**

***Notice: Please read the RFP carefully, as there have been significant changes from last year.***

This RFP seeks projects to address the following subthemes within the Lake Tahoe basin:

<b>Theme</b>	<b>Subtheme</b>
1) Forest Health	1a) Understanding long term ecological effects of forest treatments
	1b) Modeling and decision support tools for multi-objective forest management
2) Watershed, Water Quality, and Habitat Restoration	2a) Roadway and urban stormwater management
	2b) Special status species and communities and priority invasive species
3) Air Quality and Meteorology	3a) Impact and control of atmospheric particulate matter
	3b) Impacts and control of gaseous pollutants
	3c) Understanding basin meteorology

## A. Proposal Submission

Proposals must be received by  
October 26, 2009 at 4:30 p.m.

- Proposals must be complete and follow the formatting requirements set forth in this RFP.
- The proposal must clearly state the primary subtheme addressed. Proposals will be evaluated in the context of the primary subtheme identified, although proposals can address more than one subtheme.

**PROPOSALS THAT DO NOT FOLLOW THESE GUIDELINES WILL NOT BE SUBMITTED FOR PEER REVIEW AND WILL NOT BE CONSIDERED FOR FUNDING.**

You can apply via the [www.grants.gov](http://www.grants.gov) website OR you can submit an electronic (PDF) file containing all required documents via e-mail or on a compact disk mailed to:

Jonathan Long  
Tahoe SNPLMA Science Program  
Coordinator  
Pacific Southwest Research Station  
Tahoe Environmental Research Center,  
3rd Floor  
291 Country Club Drive  
Incline Village, NV 89451  
(775) 881-7560 x. 7482  
Email: [jwlong \[at\] fs.fed.us](mailto:jwlong[at]fs.fed.us) [JWLONG@FS.FED.US](mailto:JWLONG@FS.FED.US)

An email confirmation of submission will be sent to the primary author within one week of receipt.

Any questions should be directed to Jonathan Long at the above address.

### *Important Reminders*

- 1) **Funding for these projects is not guaranteed, and awards will be subject to the availability and authorization of SNPLMA funding**
- 2) **Proposals must be submitted in electronic format!**
  - Proposals can be submitted via e-mail or CD in PDF (Portable Document Format). You can create a PDF document using Adobe Acrobat software or using free, open source software such as PDF Creator Portable Document File (PDF)!
  - Proposals submitted via e-mail should be no larger than 2 MB. If your total package is larger than 2 MB, you can submit the proposal by mail on a CD. **Proposals that do not meet these guidelines will not be considered.**
  - Proposals can also be submitted through the [www.grants.gov](http://www.grants.gov) website. To use this route, you must complete several additional steps including submitting a SF-424 form (see Section E of this RFP).
- 3) **Review guidance on engagement with management agencies and review of products (pages 4-5)**
- 4) **Review policies on budgets, indirect costs, permitting, and funding instruments (pages 11-12)**
- 5) **Review modifications to proposal review (page 13)**

## B. Background and Expectations for Proposals

### *Purpose and Needs*

The Pacific Southwest Research Station, USDA Forest Service (PSW) is seeking proposals as part of the Tahoe Science Program funded by the Southern Nevada Public Lands Management Act (SNPLMA). The purpose of the Tahoe SNPLMA Science Program is to provide high quality science to effectively meet environmental goals in the Tahoe Basin, as mandated in the **Lake Tahoe Restoration Act of 2000**. The commitment to the maintenance and restoration of Lake Tahoe for future generations has been put into action through a multi-agency initiative known as the Environmental Improvement Program (EIP). Launched in conjunction with the 1997 Lake Tahoe Presidential Forum, the EIP provides a strategy to help achieve the environmental goals for the Lake Tahoe basin. The strategy builds on the capital improvement approaches that have been underway within the region for over two decades. This strategy is designed to accomplish, maintain or exceed multiple environmental goals and develop a more integrated, proactive approach to environmental management based on a partnership among federal, state and local government, and private landowners. The environmental goals of the Lake Tahoe Region are defined using thresholds, which are standards established to protect the natural environment and to maintain public health and safety within the region. The nine threshold categories are: 1) water quality, 2) wildlife, 3) soil conservation, 4) scenic resources, 5) air quality, 6) recreation, 7) vegetation, 8) noise, and 9) fisheries. For more information about the Lake Tahoe EIP and associated thresholds please visit <http://www.trpa.org/default.aspx?tabindex=10&tabid=227>

Scientific research has played an important role in the management and restoration of the Lake Tahoe Basin by contributing information to the development of environmental thresholds, identifying trends in threshold attainment, and informing policy decisions. **The Lake Tahoe Restoration Act** calls for the best available science to prioritize and evaluate efforts to meet those environmental thresholds. Therefore, research projects funded through this program need to help answer the most pressing management questions facing land managers and regulatory agencies in the Lake Tahoe basin and to promote more effective environmental improvement projects. The program has been designed to ensure that scientific research is applicable to agency needs.

Pressing science information needs are currently described in the Science Plan for the Tahoe Basin (available at [http://www.tahoescience.org/tsc\\_products/Products.aspx](http://www.tahoescience.org/tsc_products/Products.aspx)). Guided by this plan, the Tahoe Science Consortium (TSC), State, Federal, and Local government representatives have collaboratively chosen three major science themes and seven subthemes in response to needs expressed by agency officials within the basin. Project proponents should consult the Science Plan to ensure that their proposed research directly addresses needs that are current and specific to the Tahoe Basin.

A Science Update Report documenting ongoing science efforts is available at the TSC website ([www.tahoescience.org](http://www.tahoescience.org)) and the PSW Tahoe Science website (<http://www.fs.fed.us/psw/partnerships/tahoescience/>). The report summarizes ongoing science projects and current interests of management agencies in relation to the Round 10 subthemes. It also lists recent relevant publications and contact information for agency representatives who can

identify current science priorities for management agencies within the basin. Note that a SNPLMA Round 10 capital project will collect and make available high-resolution Light Detection and Ranging (LiDAR) and multi-spectral imagery covering the entire Lake Tahoe Basin. This data collection effort is expected to occur in the summer of 2010, with post-processed datasets being made available by late fall 2010 to early 2011. Investigators are encouraged to consider how their research could utilize these datasets when they become available.

### ***Expectations for All Proposals***

**Produce meaningful results within set timeframes:** Proposal budgets should be capable of supporting the project for its entire duration. If a proposed project spans more than one year, funding for all years should be requested in the initial proposal. Proposed projects should extend no more than 3 years, with an expected start date no earlier than May 2010 (the actual start date is subject to change). All projects must be capable of producing meaningful scientific results given the funding provided. Follow-up projects will have to compete for additional funding in subsequent rounds.

**Explain relationships between the proposed research and relevant research, monitoring, and environmental improvement efforts.** Proponents should review the Tahoe Science Plan and the PSW Tahoe SNPLMA Science Program website, including the Science Update Report and related documents to make sure that they have considered previous and current research projects. Investigators are encouraged to identify current projects or pending grant proposals to clarify any linkages or overlap among projects, as well as plans to resolve any overlap.

Proposals should leverage existing datasets, models, model elements, and other efforts to the extent possible. Existing data can be analyzed and synthesized to further understand environmental processes, conditions and trends; in particular, these analyses should aim to extract possibly unknown, yet critical, information from existing data sets. Proposals seeking to build new models or refine existing ones should explain how they expand upon or are distinct from relevant models, monitoring, or other research projects that have been or are being developed. Proponents should explain how their results could be used to evaluate environmental improvement efforts or advance management strategies and policies in the Tahoe basin.

**Engage agency and other stakeholder representatives:** Proposals should include provisions to ensure that relevant stakeholders in the Lake Tahoe basin will be engaged early and throughout the project. Proponents are encouraged to contact agency representatives during the preparation of their proposals (several agency representatives are identified in the Science Update Report). **Do not include recommendation letters within the proposal. However, proponents should discuss how the proposal was designed to respond to agency needs, and how products will be delivered to help agencies improve their restoration efforts.** Proposals should explain how and when necessary permits and landowner access permissions will be obtained.

**Facilitate reporting to managers and the public:** PSW expects to work with funded investigators to share their findings with managers, other researchers, and the public in the Lake Tahoe basin. Successful applicants will be expected to provide information regarding their projects to facilitate understanding of their objectives and progress. Each funded project will be

featured on the PSW website including the proposal, summary, photos, and update reports. Applicants can identify and request redaction of portions of their proposal that contain confidential or proprietary information which they do not want to have published.

**Review of data and publications.** A goal of the Tahoe Science Program is to ensure the technical quality and relevancy of scientific products. Accordingly, we encourage all proposals to include plans for technical, peer-reviewed and agency review of work products. Peer-review expectations may be met by delivering final products that include articles for publication in peer-review journals. Where appropriate, we anticipate releasing draft products to agencies and the public for review and comment. Therefore, allow in your schedule at least 3 months between delivery of draft products and finalization of products prior to close-out.

Proposals should also incorporate a data management plan and an appropriate timetable and budget for publishing the data when the project is completed. Researchers are encouraged to use publicly accessible platforms, such as the Tahoe Integrated Information Management System (TIIMS, [www.tiims.org](http://www.tiims.org)), for housing and disseminating data and findings.

**Proposals should consider these expectations in their deliverables, budgets, and timetables. The PSW Tahoe Science webpage has added a “Guidelines for Researchers” section that provides more details about permitting, landowner permissions, reporting, and financial management for funded projects. All individuals preparing proposals for this RFP are strongly encouraged to review these guidelines.**

## **C. Science Themes and Funding Allocations**

PSW is requesting that interested researchers submit proposals for funding within the three science theme areas listed below. The order of subthemes within the themes does not reflect priorities. A total of \$3.75 million has been identified for science activities in this round of funding. However, \$750,000 has been set aside for science programs through the TSC, including two new synthesis projects that will be funded through a separate RFP to be released at a later date. Each theme has a target level of funding indicated below. A small portion of each theme’s target funding level will be reserved to cover PSW support costs for the entire program. Funding levels for each theme may vary somewhat from targeted levels depending on the proposals received and the amount requested by theme.

### ***Forest Health: (Target of \$1,100,000)***

#### **Subtheme 1a: Understanding long term ecological effects of forest treatments**

Management/Policy Need: Agency managers want in-depth and complete information to evaluate long-term ecological effects of alternative forest treatments. Several studies are ongoing that examine the short-term impacts of fuel treatments on forest health, yet more information is needed to compare and evaluate long-term impacts of fire suppression, prescribed fire, pile burning, mechanical harvest, hand thinning, mastication, and other treatments on ecosystem resiliency to drought, insects, diseases, wildfire, and/or climate change. Some agencies also are interested in better understanding the long-term potential for Tahoe forests to sequester carbon or otherwise contribute to reducing greenhouse gas emissions, particularly across sites that vary in

quality or stage of forest development, and in evaluating any tradeoffs between reducing greenhouse gas emissions and maintaining a frequent fire regime through prescribed burning.

How does forest health or resiliency vary in response to treatments over the long-term, possibly considering the influence of climate change? Research should evaluate the ecological effects of forest treatments, including one or more of the following: 1) forest structure, 2) fuel loads and/or fire behavior, 3) water quality (especially delivery of very fine sediment and nutrients), 4) soil quality (including compaction), 5) plant or animal species, including those that are sensitive or vulnerable, 6) spread of exotic plants, diseases, or insect pests, and/or 7) carbon sequestration/greenhouse gas emissions associated with forests. Proposed research can consider resiliency across a variety of forest settings, including the Wildland-Urban Interface, Stream Environment Zones, and higher elevation forests, and can identify and validate appropriate metrics to evaluate treatment effects.

### **Subtheme 1b: Modeling and decision support tools for multi-objective forest management**

Management/Policy Need: The 2008 Tahoe Fire Commission Report (<http://resources.ca.gov/TahoeFireCommission/>) identified a need for resource managers and regulators to have tools that help them to better evaluate alternative strategies for reducing fire risk to public safety, property, and environmental values in the wildland urban interface. Current and future forest management activities include hand thinning, cut-to-length harvest, whole tree removal, mastication, chipping, understory burning, pile burning, road management, and defensible space practices. Well-designed decision support tools and systems can help to efficiently implement treatments across diverse landscapes and generate shared understandings between implementers and regulators regarding risks, costs, and benefits of activities. Relevant forest management objectives include wildfire hazard reduction; improvements in forest health and habitat; conservation of biodiversity; and protection or improvement of air quality, soil quality, and water quality (especially reducing fine sediment particles and nutrients that threaten lake clarity).

Research should develop, refine, and/or validate tools to improve current forest management decision-making and management processes, including: 1) strategic planning, 2) project-level environmental analyses, and/or 3) implementation of the Lake Tahoe TMDL. To improve broad-scale strategic planning in the Basin, research should help develop a decision support system to design, locate, and schedule forest management treatments to best achieve multiple relevant management objectives while meeting applicable (typically short-term) constraints. To improve project-level environmental analysis, existing research could be synthesized and/or new field research conducted to validate and improve models used to evaluate project effects. Research to improve Lake Tahoe TMDL

([http://www.swrcb.ca.gov/rwqcb6/water\\_issues/programs/tmdl/lake\\_tahoe/index.shtml](http://www.swrcb.ca.gov/rwqcb6/water_issues/programs/tmdl/lake_tahoe/index.shtml)) implementation should help to better account for potential impacts of forest management activities and wildfire. Researchers should collaborate with agency representatives and/or other research teams to ensure the products are well-supported and useful.

## ***Watershed, Water Quality, and Habitat Restoration: (Target of \$1,000,000)***

### **Subtheme 2a: Roadway and urban stormwater management**

Management/Policy Need: Lake Tahoe TMDL research indicates that stormwater from urban land uses is the largest contributor and presents the greatest opportunity to control loadings of fine sediment (particles < 20 µm) and total phosphorous. However, pollutant loading and reduction estimates are based upon limited information, particularly with respect to the fine sediment particle size class. Improved characterization of urban stormwater is needed for the purposes of load reduction modeling, BMP design, and TMDL crediting. A better understanding of the factors and processes related to the generation, mobilization, transport and fate of pollutants is needed. Furthermore, a better understanding of treatment and control/recovery mechanisms is needed to inform feasibility and cost-effectiveness evaluations and refine implementation plans and strategies. Roadways are a land use of primary concern, as these have the greatest pollutant yield potential. There is a need to evaluate roadway operations and maintenance practices and optimize them for cost and effectiveness of fine sediment load reduction.

Research should address one or more of the following. 1) Source characterization: What are the factors controlling particle size distribution and turbidity of urban stormwater? How do these factors vary geographically, seasonally, and over the hydrograph? How does impervious area connectivity and hydrologic routing affect pollutant concentrations and loadings? What is the correlation between suspended sediment size classes and phosphorous (total and dissolved) concentrations? 2) Pollutant control/treatment: What is the effectiveness of controls to reduce pollutant concentrations and loadings? What are the key BMP design features that influence load reductions and what are the associated ranges? What are the optimal O&M practices in terms of cost and effectiveness and under various pollutant loading scenarios? How should BMPs be designed to maximize pollutant removal? How does BMP effectiveness vary over time? Research on roadways is especially encouraged. Research should examine the full range of particle size classes (total, < 63µm, <20µm), and express suspended sediment measurements in terms of both mass and particle numbers.

### **Subtheme 2b: Special status species and communities and priority invasive species**

Management/Policy Need: The Tahoe Basin has several special status species (e.g., Sierra Nevada yellow-legged frog and goshawks) and communities (e.g., aspen, fens, cushion plant communities, freshwater marsh and small lakes) that are a focus of multi-agency conservation and restoration efforts. In addition, management agencies are pursuing strategies and techniques to prevent, control, or eradicate priority invasive species (including, but not limited to, cheatgrass, Asian clam, quagga mussel, and zebra mussel). Changes in climate threaten habitats for native species and communities of special concern. Climate change also may influence the establishment and spread of introduced species. Management agencies need applied research to help guide and evaluate conservation, restoration, protection, and control measures, including development of monitoring plans to track long-term status and change. Research under this subtheme will aim to identify strategies, techniques, and standards that will best conserve and restore species and communities of special concern, or areas threatened by the spread of priority invasive species.

Research should address one or more of the following: 1) Evaluate the likelihood or effectiveness of current or potential approaches to prevent establishment, constrain spread, or reduce populations of priority invasive species. 2) Assess the habitat suitability of Lake Tahoe and its watershed to support the establishment of priority invasive species. 3) Evaluate approaches to conserve or restore special status plant and animal species, communities of concern, or habitats threatened by invasive species or climate change. And 4) Identify well-supported indicators and reference conditions to assess biological integrity, and status and trend of species and habitats of special concern. Research may incorporate conventional investigations or synthesis and review. Research on potential indicators should include analyses to assess how the proposed new indicators compare to existing applicable indicators. Researchers should plan to collaborate with agency representatives and other research teams to ensure that agencies can apply the results.

### ***Air Quality and Meteorology (Target of \$900,000)***

#### **Subtheme 3a: Impact and control of atmospheric particulate matter**

Management/Policy Need: The generation, transport, and deposition of fine particles directly affect both air quality and water quality in the Lake Tahoe Basin. The Lake Tahoe TMDL effort identified atmospheric deposition as a significant source of fine sediment particles and nutrients contributing to the loss of lake clarity. Anthropogenic activities including home wood burning, transportation, and road maintenance are considered important stressors to air quality potentially affecting both human and environmental health. However, source loading and control estimates of particulate matter are moderately to highly uncertain. Management agencies have the need to better refine these quantitative estimates to: 1) determine the implications for attaining the TMDL numeric targets, 2) assess the effectiveness of various air quality management strategies, and 3) identify long-term approaches to assessing status and trends and program effectiveness at various spatial and temporal scales.

Studies should focus on one or more of the following: 1) Evaluate past studies to assess sources and factors controlling the flux of particle deposition to the lake. 2) Develop a comprehensive monitoring and evaluation plan to reduce uncertainty in quantifying emissions, deposition, control, and cost-effectiveness estimates for particulate matter and phosphorous in the Basin across hydrologic seasons. 3) Evaluate past studies and conduct additional studies as needed to characterize use of and emissions from woodstoves and fireplaces in the Basin, and assess effectiveness, cost, and feasibility of various potential control strategies. 4) Identify emission sources that cause visibility impairment in the Basin, determine their respective contributions to visibility impairment, and compare the results with the emissions inventory. 5) Prepare a monitoring plan and develop new indicators of regional and sub-regional visibility in the Basin in accordance with USEPA guidance for visibility monitoring; then conduct analyses to assess how the proposed new indicators compare to existing TRPA visibility indicators.

#### **Subtheme 3b: Impacts and control of gaseous pollutants**

Management/Policy Need: Exceedances of the ozone standards are being measured in the Lake Tahoe Basin. Strategies for the control of ozone precursor emissions need to be developed and evaluated, along with recommendations for the implementation of control strategies to

effectively reduce ozone concentrations.

Studies should focus on one or more of the following, although integrated proposals addressing all of these issues are encouraged: 1) Review past studies of the sources of ozone precursor emissions in the Lake Tahoe Basin. Perform field measurement studies to address gaps in knowledge in the sources of ozone-forming precursors, major pathways leading to ozone formation, and the relative contributions from in-basin vs. out-of-basin sources. 2) Review existing reduction strategies, identify viable alternative strategies for the reduction of ozone pollution in the Lake Tahoe Basin, and provide comparisons of the effectiveness and cost effectiveness of each viable strategy.

### **Subtheme 3c: Understanding basin meteorology**

Management/Policy Need: Pollutant transport, transformation, emissions, and deposition are affected by the meteorological conditions present in and around the Lake Tahoe Basin. In addition, agencies need better information on how hydrologic parameters change under different temperature and moisture regimes, so they can more accurately estimate the potential effects of climate change on runoff and erosion. In order to develop a better understanding of the impact of meteorological processes on air and water quality, and watershed hydrology, it is necessary to comprehensively evaluate the meteorological factors that influence these processes at the regional and basin-wide scales and evaluate how these factors/conditions vary between urban and non-urban settings.

Studies should focus on one or more of the following, although integrated proposals addressing all issues are encouraged: 1) Identify past and current meteorological measurement efforts (e.g., RASS and miniSODAR from LTADS, surface data from Nevada Department of Transportation, UC Davis, NASA, and others). Compile into a publicly available data base existing meteorological data for the Tahoe Basin. Conduct analyses focusing on review and synthesis of available data. Establish baseline statistics for mixing height variation on hourly to seasonal scales and develop a database for air quality and meteorological modeling in and around the basin. 2) Develop and/or improve meteorological data and monitoring tools for use in forecasting and making burn day decisions for prescribed fires as well as contributing to a better understanding of climate variability and watershed runoff processes. 3) Develop and/or improve monitoring tools and monitoring plans to obtain more comprehensive localized point source precipitation, surface runoff, erosion, and nutrient transport data to quantify potential changes in discharge loads as a function of amount, type (snow vs. rainfall), frequency, and precipitation intensity.

## **D. Proposal Format and Content Requirements**

The proposal must specify methodologies, deliverables, and strategies for interacting with management agencies in sufficient detail to allow an informed reader to assess the proposal's validity in addressing the science subthemes. The title of each proposal received will be published. Each proposal narrative should begin with a 1 paragraph abstract explaining the scope of the project. Applicants should identify portions of their proposal that contain confidential or proprietary information that they do not want made public. Applicants are advised to use the proposal template, which is available at the grants.gov website.

The required format for all proposals is described in the table below. Project proponents should strictly follow these requirements in developing their proposal. Deviations from the required format may exclude your proposal from further consideration.

**Required Format:** All pages must have a **minimum of 10 point font size and 1” margins.**

Item and Content	Length/format
<b>I. Title page</b>	<b>1 page</b>
a. Project Title (the title of each proposal received will be published)	
b. Primary theme & sub-theme targeted by the proposal ( <b>choose only 1 primary subtheme</b> , although proposals may address other subthemes)	
c. Principal Investigator(s) and Institution(s): name and institution (to which the primary award or any subcontracts will be made), address, phone, fax, and email. The first PI listed should be from the institution that will receive the award.	
d. Collaborators and their institutional affiliations: include any agency personnel who will be directly involved in the project	
e. Grants contact person: name, phone, fax, and email	
f. Total funding requested	
g. Total cost share (value of financial and in-kind contributions)	
<b>II. Proposal narrative</b>	<b>This section</b>
a. Project abstract (1 paragraph summary)	<b>has a</b>
b. Justification statement: explain the relationship between the proposal and the subtheme(s)	<b>maximum of</b>
c. Concise background and problem statement	<b>7 pages,</b>
d. Goals, objectives, and hypotheses to be tested	<b>single-spaced</b>
e. Approach, methodology and location of research	<b>(longer</b>
f. Relationship of the research to previous and current relevant research, monitoring, and/or environmental improvement efforts	<b>proposals</b>
g. Strategy for engaging with managers and obtaining permits	<b>will not be</b>
h. Description of deliverables/products and plan for how data and products will be reviewed and made available to end users	<b>reviewed)</b>
<b>III. Schedule of major milestones/deliverables in a table with estimated start and end dates</b> (note that progress reports are required each quarter)	<b>1 page</b>
<b>IV. Literature cited</b>	<b>Up to 2 pages</b>
<b>V. Figures</b> (optional) for locations, schematics, sample outputs, etc. ( <b>Figures do not count toward page limits unless they are embedded in the narrative</b> ).	<b>Up to 6 figures</b>
<b>VI. Budget (Requested and contributed funds)</b>	Provide
a. Personnel: <b>salaries/wages and time allocations</b> for PI(s), associates, students, technicians, etc.	overall budget
b. Fringe Benefits	with cost
	breakdowns

c. Travel (domestic and international travel must be listed separately)	for each project year, detailed budgets for all subawards or contracts, and narrative justification as needed to explain all project costs.
d. Equipment (purchase of nonexpendable equipment above \$5,000 is discouraged; leasing can be considered for equipment over \$5,000)	
e. Supplies (provide itemized list)	
f. Contractual	
h. Other	
i. Total Direct Costs	
j. Indirect Costs (Facilities and Administration, see page 11. Indirect costs must be shown as a separate line item.	
k. Total Budget Requested and Contributed	
<b>VII. Abbreviated CV(s) for investigator(s) (summarizing qualifications that are most relevant to the research proposal); include CVs for all investigators receiving at least 10% of the total personnel costs.</b>	

**Quarterly Reporting.** To comply with the requirements of the SNPLMA program, all funded projects are required to submit updates on a **quarterly basis, by the 1st of July, October, January, and April.** Proposals should account for these quarterly reports in their budgets and timelines.

**Budgets and Indirect Costs (Facilities and Administrative Costs).** Budgets **must** conform to the format of Standard Form 424 (see [http://www.grants.gov/agencies/aapproved\\_standard\\_forms.jsp](http://www.grants.gov/agencies/aapproved_standard_forms.jsp)). **Detailed budgets must also be included for any subcontracts.** The budget categories on the SF-424 form must be used; for example, costs associated with personnel, including overhead, must be separated among salary/wages, fringe benefits, and indirect costs. The budget should display time allocations for key personnel for whom funding is requested. We discourage requests for purchases of equipment, which defined as non-expendable, tangible personal property with a unit cost of \$5,000 or more and has a useful life of more than one year. Tangible property that does not meet the definition of Equipment may be included in Supplies.

PSW intends to provide for as much on-the-ground science as possible with the limited amount of dollars available. Accordingly, applicants are encouraged to minimize indirect costs to the extent possible. All awardees and subawardees seeking reimbursement of indirect costs will be required to ensure that their budgets comply with a current indirect cost rate determination issued by the cognizant audit agency (i.e., Health and Human Services). Copies of those indirect cost rate determinations will have to be provided prior to approval of the award agreement.

For entities that do not have such determinations (e.g., for-profit companies), their budget must include details of proposed facilities and administrative or indirect costs, which must be reasonable (no more than 49% as an absolute maximum rate of modified total direct costs), allocable, and allowable. No profit or fee will be provided to a for-profit organization. Such entities will be also required to submit a written description of their policy for indirect costs (Facilities and Administrative Costs) and documentation of historical actual indirect cost rates, certified by an accountant, with their award application.

To determine allocable and allowable costs, consult the appropriate guidelines:

**OMB Circular A-122, Cost Principles for Non-Profit Organizations**

**OMB Circular No. A-102 - Grants and Cooperative Agreements with State and Local Governments**

**OMB Circular No. A-21 -- Cost Principles for Educational Institutions**

**FAR Part 31—Contract Cost Principles and Procedures**

**Funding Instruments.** PSW may use different instruments to fund selected projects. Cooperative Agreements are a preferred option as they provide for substantial interaction between Forest Service personnel and researchers in refining study plans and developing products. A grant may also be used if in the best interest of the Tahoe SNPLMA Science Program administered by PSW. Forest Service policy requires use of a Cooperative Agreement for assistance awards that substantially involve Forest Service personnel after the award has been made. Under the terms of a Cooperative Agreement, cooperators have to contribute a cost share amounting to a minimum of 20% total project costs; in addition, State Cooperative institutions cannot be reimbursed for tuition remission and indirect costs. All cooperators can meet cost share by contributing direct cost, indirect cost, or a combination of both. Applicants who cannot meet these requirements may still apply, but they are advised that cost-effectiveness of proposals will be considered as part of the review process. In addition, PSW reserves the right to negotiate all budget elements and to refuse proposals if they are not in the best interest of the Tahoe SNPLMA Science Program administered by PSW.

**Permits and Permissions.** Where necessary or anticipated, applicants should provide documentation to demonstrate that they have or will be obtaining state and federal regulatory permits, and private-or public-landowner written approval to meet the needs of the proposal. More information about permitting and landowner permission requirements is available on the “Guidelines for Researchers” section of the PSW Tahoe Science website.

**Proposal Submission.** In all cases, the affiliation of the principal investigator(s) must match the institution through which project funding will be received. University researchers are advised to submit their proposals through their university’s sponsored projects office. Researchers should conform to the submission policies of their host institutions particularly with regard to obtaining institutional endorsements and requirements for original signed signature pages.

## **E. Option for Applying through Grants.gov**

**Requirements for Applying through Grants.gov Website.** Applicants may file an electronic application at the [www.grants.gov](http://www.grants.gov) Website. If so, you must complete the steps below. Anyone who is awarded funding will eventually have to complete these steps (see Section G: Award Process); however, *you do not have to complete these steps now* if you apply directly through e-mail or mail.

- furnish a DUNS number obtained by contacting Dun and Bradstreet at 1-866-705-5711. A DUNS number will be provided quickly by telephone at no charge. A DUNS number can also be obtained on-line at [www.dnb.com](http://www.dnb.com)
- register in the Central Contractor Registry (CCR), by going to [www.ccr.gov](http://www.ccr.gov) and following the instructions provided on line, or by calling the CCR Assistance Center at 1-888-227-2423
- submit an SF-424 (Application for Federal Assistance) package
- furnish a tax identification number
- designate a financial institution or an authorized payment agent through which a federal payment may be made in accordance with US Treasury Regulations, Money and Finance at 31 CFR 208

**Instructions for Applying through Grants.gov website.** Grants.gov contains full instructions on all required passwords, credentialing, and software. Follow the instructions at Grants.gov for registering and submitting an electronic application. If a system problem or technical difficulty occurs with an electronic application, please use the customer support resources available at the Grants.gov website.

First time Grants.gov users should go to the “Get Started” tab on the Grants.gov site and carefully read and follow the steps listed. These steps need to be initiated early in the application process to avoid delays in submitting your application online. Registering with the Central Contractor Registry (CCR), will take some time to complete, so keep that in mind when beginning the application process. In order to register with the CCR, your organization will need a Data Universal Numbering System (DUNS) number. A DUNS number is a unique nine-character identification number provided by the commercial company, Dun and Bradstreet (D&B). To investigate if your organization already has a DUNS number or to obtain a DUNS number, contact Dun and Bradstreet at 1-866-705-5711. Be sure to complete the Marketing Partner ID (MPIN) and Electronic Business Primary Point of Contact fields during the CCR registration process. These are mandatory fields that are required when submitting grant applications through Grants.gov. Information about registering with CCR was published in the Federal Register on January 17, 2006 (see 71 FR 2549).

The Grants.gov Website includes a blank application package. To access the opportunity to compete for funding under this RFP, search for one or more of the following attributes:

Opportunity Number: USDA-FS-PSW-TAHOE-2009

Opportunity Title: Tahoe Research Supported by SNPLMA Round 10.

Catalog of Federal Domestic Assistance (CFDA): 10.652 (Forestry Research).

## **F. Review Process**

A full description of the process that will be used to evaluate the proposals, including criteria to determine technical quality and relevancy, is available at the PSW website ([www.fs.fed.us/psw/partnerships/tahoescience](http://www.fs.fed.us/psw/partnerships/tahoescience)) and at the Tahoe Science Consortium website

([http://www.tahoescience.org/peer\\_review/Default.aspx](http://www.tahoescience.org/peer_review/Default.aspx)). A brief description of the major steps in the review process is provided below.

**Compliance with RFP:** One or more representative(s) from the Peer Review Committee will work with PSW Tahoe SNPLMA Science Program representatives to examine the submitted proposals to ensure they fulfill all requirements stated in the RFP. Only proposals fulfilling all RFP requirements will be distributed for external peer review.

**Peer Review:** Accepted proposals will be distributed to at least three independent scientists (not affiliated with the TSC or the project proponents) who will evaluate technical quality. **Note that you have an option of identifying reviewers who you do not wish to review your proposal.** If you wish to exercise that option, please contact the TSC Program Coordinator (Jill Falman, [jcfalman@ucdavis.edu](mailto:jcfalman@ucdavis.edu), (775) 881-7566) within 5 business days of submitting your proposal. Do NOT include that information with your proposal.

**Relevancy Review:** Members of the Tahoe Science Agency Coordination Committee who represent land management and regulatory agencies will assess relevancy.

**Synthesis:** The Peer Review Committee will synthesize results of the technical reviews and agency reviews to create a list of proposals recommended to the PSW for funding. PSW will then forward the package of recommended projects to the Tahoe Regional Executive Committee (TREX) and to the Bureau of Land Management for final approval and release of funds.

**Notification:** We anticipate notifying principal investigators about decisions regarding possible funding of their proposals by April 2010, although the schedule is contingent upon approval by TREX and the BLM. Anonymous peer review comments and relevancy review results will be distributed to the Principal Investigators of all proposals. Some projects may be identified as alternates to receive support should funds become available during the negotiation of awards.

## **G. Award Process**

The PSW reserves the right to negotiate scopes of work, budget amounts and deliverables with proponents based upon feedback from the peer review process and to comply with Forest Service policies. Projects may be required to modify their proposed indirect cost rates and/or demonstrate cost share contributions.

**Project Start Dates: Projects should expect to begin no earlier than May 1, 2010, although the actual start date could be delayed.** Until the U.S. Department of Interior, Bureau of Land Management sends PSW notification that funding is approved and available, PSW cannot make awards. Project charges cannot be incurred prior to the award.

**Project Execution.** It is the responsibility of the project proponent to coordinate with appropriate agency representatives or partners and secure any permits, agreements, or approvals necessary prior to initiating research. If, for example, the research is proposed to be conducted on agency or private lands, the project proponent must secure all applicable approvals from the land manager/owner. If the research requires use of data collected by an agency, then the project

proponent must secure approval to use this data. This prerequisite must be satisfied before receiving funding.

**Project Award Requirements.** Upon execution of a federal award, the recipient/cooperator will be requested to

- furnish a DUNS number obtained by contacting Dun and Bradstreet at 1-866-705-5711. A DUNS number will be provided quickly by telephone at no charge. A DUNS number can also be obtained on-line at [www.dnb.com](http://www.dnb.com)
- register in the Central Contractor Registry (CCR), by going to [www.ccr.gov](http://www.ccr.gov) and following the instructions provided on line, or by calling the CCR Assistance Center at 1-888-227-2423
- submit an SF-424 (Application for Federal Assistance) package
- furnish their tax identification number
- designate a financial institution or an authorized payment agent through which a federal payment may be made in accordance with US Treasury Regulations, Money and Finance at 31 CFR 208

**Authorization of Awards.** Funding for these projects is not guaranteed and is subject to the availability and authorization of funds through the SNPLMA program. PSW reserves the right to partially fund proposals/applications by funding discrete activities, portions, or phases of proposed projects. If PSW decides to partially fund a proposal/application, it will do so in a manner that does not prejudice any applicants or affect the basis upon which the proposal/application, or portion thereof, was evaluated and selected for award, and that maintains the integrity of the competition and selection process. PSW reserves the right to make additional awards under this announcement (after the original award selections are made) if additional funding becomes available. Any additional selections for awards will be made no later than 6 months after the original selection decisions. The additional selections must be made in accordance with the terms of this announcement and PSW policy.