

# **Announcement for Proposals, 2006-3**

## **Joint Fire Science Program**

### **U.S. Department of the Interior**

**Bureau of Indian Affairs  
Bureau of Land Management  
National Park Service  
U.S. Fish and Wildlife Service  
U.S. Geological Survey**

### **U.S. Department of Agriculture**

**Forest Service**

**Opens October 14, 2005**

**Closes December 14, 2005**

#### **NOTE TO POTENTIAL PROPOSERS:**

**There are significant changes in requirements for proposals.  
Please read the AFP carefully.**

This Announcement for Proposals includes four (4) Task Statements: 1) Supporting the needs of wildland fire managers and policy makers in understanding past, current and future natural fire regimes; 2) Supporting the needs of wildland fire managers and policy makers in assessing the cumulative effects of wildland fuels treatments; 3) Developing guidance for maintaining effective fire and non-fire fuels treatments; and 4) Evaluating the effects and effectiveness of post-fire management activities.

# **Announcement for Proposals**

by the  
Joint Fire Science Program

## **A. Program Description**

The Joint Fire Science Program (JFSP) is a partnership of six federal wildland management and research agencies with a need to address problems associated with managing accumulating wildland fuels, fire regimes, and fire-impacted ecosystems on lands administered by the partner agencies. The partner agencies include the USDA Forest Service and five bureaus in the Department of the Interior (Bureau of Indian Affairs, Bureau of Land Management, National Park Service, U.S. Fish and Wildlife Service, and the U.S. Geological Survey). For the purpose of this Announcement for Proposals (AFP), "wildland fuels" are considered to be living and dead plant material associated with forests, woodlands, shrublands, grasslands, wetlands, and riparian areas.

Wildland fuels have been accumulating during at least the past half-century due to wildland fire management policies, wildland management practices, and other factors. As demonstrated in recent years, the additional fuels contribute to intense fire behavior and increase the resistance of fires to control. Consequently, property and natural resources have been destroyed, costs of fire management have escalated, fire dependent ecosystems have deteriorated, and the risks to human life and property continue to escalate.

Congress, agency administrators, JFSP partners, and others have recognized that the accumulation of wildland fuels must be reduced in order to reduce the human threat from fire and maintain natural resource values. Congress directed the Department of the Interior and the USDA Forest Service to develop a Joint Fire Science Plan to provide science-based support to land management agencies as they address this need. The JFSP was established with the 1998 Appropriation for Interior and Related Agencies to help ensure that cooperating Federal land management agencies expedite scientifically sound, efficient, systematic, and effective solutions and monitoring programs that cross agency jurisdictions and fuel types.

The 1998 Joint Fire Science Plan addressed four issues (Principal Purposes) critical to the success of the fuels management and fire use programs. These included wildland fuels inventory and mapping, evaluation of fuels treatments, scheduling of fuels treatments, and monitoring and evaluation. Congress included additional direction in the 2001 Appropriation for Interior and Related Agencies. In addition to the four original Principal Purposes, the JFSP was directed to focus attention on issues such as protocols for evaluating post fire stabilization and rehabilitation projects, aircraft based remote sensing, and regional/local issues.

For further background on the goals of the JFSP, those considering submitting proposals and other interested parties are encouraged to review the Joint Fire Science Plan, which is available via the Internet at: <http://jfsp.nifc.gov>. The JFSP has issued AFPs every year since 1998 and subsequently selected and funded more than 270 projects. Previous AFPs and lists of funded projects can be found on the program web site. Historically approximately 25% of submitted proposal have received funding.

The Governing Board does not fund projects that are or should be internally funded from existing accounts (such as routine agency monitoring) or operational portions (such as the installation of

fuels treatments or development of Fire Management Plans) of other projects.

The JFSP encourages proposals from all interested parties. However, because the focus of the JFSP is on wildland fire and fuels issues on Federal wildlands, evidence of direct involvement by Federal scientists or land managers in the development of proposals must be included in all proposals. **Proposals that do not have evidence of direct involvement by federal land managers or scientists will not be considered for funding.** Examples of direct involvement by land managers or scientists include participation as a principal investigator, cooperator, or collaborator; letters of commitment and support; and written evidence from the manager that the proposal is responding to an urgent fire or fuels problem related to the land manager's unit.

## **B. Proposal Submission**

**All proposals must include the following items to be considered. The JFSP program office must receive the complete proposal package (including all items in the checklist in section F) by close of business (5:00 pm MST) December 14, 2005. There will be no exceptions to this closing date. Incomplete proposals will not be considered.**

### **Facsimile or e-mailed proposals will not be accepted.**

1. One original and five copies of complete proposal packet including all material.
2. An electronic version on a compact disk (in MS Word or editable pdf format) must be included.
3. Signature and complete address including phone number, mailing address, surface mail address (if different than mail address) and e-mail address of principal investigator, Federal cooperator or land manager as appropriate, point of contact, and appropriate Federal Fiscal Representative (see definition section H).
4. Letters of support are not required but are considered in the peer review process. However, all letters of support must be included with the hard copy proposal package and received by the due date. Each letter must clearly state the title of the project and the principal investigator of the proposed work.

Questions and proposals should be directed to:

Dr. Erik Berg  
Program Manager  
Joint Fire Science Program  
National Interagency Fire Center  
3833 S. Development Ave.  
Boise ID 83705  
phone (208) 387-5349  
email: Erik\_Berg@nifc.blm.gov

## **C. Area of Interest for Proposals**

This AFP may contain more than one Task Statement. Proposals will be sought for each of the tasks. Proposals submitted should clearly state which Task Statement is being addressed.

The Governing Board anticipates that these projects can be accomplished within three years or less. The Governing Board does not anticipate funding projects that are or should be internally funded from existing accounts (such as routine agency monitoring, development of fire management plans or NEPA compliance) or operational portions (such as the installation of fuels treatments) of other projects.

**Task 1: *Proposals are sought that will support the needs of wildland fire managers and policy makers in understanding past, current and future natural fire regimes and aid in the ability to assess current departures from historic conditions.***

Decades of fire exclusion activities have resulted in fire being excluded from many wildland ecosystems. In many cases, the effect of this exclusion has been a change in the role fire plays across the landscape. These changes manifest themselves through changes in fire regime attributes.

Historic fire regime information is lacking for many ecosystems. The Board is particularly interested in projects that would address this lack of information for tundra, taiga, grassland, wetland, deciduous forest, tropical, subtropical and shrubland ecosystems. Fire scar analyses have provided historic fire return interval, seasonality, and fire size information for many conifer forest types but have been less successful in other vegetation types. This task seeks to address this information need through research that uses a combination of methods, including fire scars if feasible, for fire regime types not currently well defined.

Other historical fire regime attributes, such as fire intensity, fire severity, fire type, and spatial complexity, are not known for most ecosystems. These attributes are closely related but difficult to ascertain. This task also seeks to develop this information for areas where it is not available. New methodologies such as remote sensing, GIS, and spatial analysis, coupled with fire history might prove fruitful and are encouraged.

Current fire and fuel management programs assume that today's climate will continue into the future. Climatologists have proposed several alternative future climate scenarios, any one of which could change the role of fire on the landscape. This task seeks to assess such changes using existing ecosystem models and predicted climate scenarios, including changes in temperature, precipitation, and lightning patterns.

**Task 2: *Proposals are sought that support the needs of wildland fire managers and policy makers in assessing the cumulative effects of wildland fuels treatments at the landscape level.***

Treatment of wildland fuels by fire and non-fire means not only alters the structure and composition of vegetation, but may also change physical and biological properties of treated and adjacent areas. Taken individually, the effects may appear to be restricted to sites; however, when considered collectively, fuel treatment effects change landscapes. Proposals are sought that assess and/or develop methods for assessing landscape scale cumulative effects of fuels treatments. Proposals must assess treated fuels in relation to both land management and fuels treatment objectives as well as changes to broad landscape functions (e.g., a better understanding and interpretation of the role fire plays in carbon storage and release, fire regime maintenance or restoration, wildlife habitat, plant, soil, or wildlife ecology, water quality and quantity). Proposals need to clearly define proposed landscape scale and level of analysis. The scope of proposals can be at the local to national

scale. Any development of assessment tools should use existing tools and data that are currently being used or developed by federal land management agencies. The development of new software other than add-ons or refinements to existing tools will not be supported.

The results of successful proposals should assist wildland fire managers and policy makers in making strategic decisions on planning and implementation of fuels treatments and in developing wildland fire and fuels management policy.

***Task 3: Proposals are sought that develop guidance for maintaining effective fire and non-fire fuels treatments, with the aim of supporting long-term fuels management.***

Communities and land management agencies are treating annually millions of acres of wildland fuels; however, there is little information available to help guide decision-makers about maintaining effective fuel treatments.

Proposals should support the ability of communities and fire managers to identify and use appropriate methods and analysis tools to:

- Estimate how long treatments fulfill the required objectives – (what is the treatment life span)
- Assess and describe the matrix of potential maintenance treatments and costs
- Determine the scheduling and timing of maintenance activities
- Assess capabilities of existing software and decision-support tools for evaluating treatment life span and/or maintenance requirements (e.g., costs, scheduling, timing, activity type)

The scope of proposals may include spatial scales from projects to landscapes. Analysis of recent and past wildland fires and other fuel reduction activities, including silvicultural treatments, can be used to assess longevity of treatments. Proposals should use or build on existing software and decision-support tools. Proposals should consider the diversity of factors that affect fuels treatment longevity, effectiveness, and cost (i.e., type of treatment and site characteristics).

JFSP will not fund proposals for agency monitoring, development of fire management plans, NEPA compliance or operational portions of projects (such as the installation of fuels treatments).

***Task 4: Proposals are sought that evaluate the effects and effectiveness of post-fire management activities, including but not limited to burned area emergency stabilization, rehabilitation, restoration treatments, and post fire removal of woody material (e.g., salvage logging, biomass utilization).***

Proposals that evaluate critical, time-sensitive information or data during or immediately following future wildland fire incidents should be submitted under AFP 2006-2 Rapid Response.

Fire causes many changes in ecosystems, including altered erosion, runoff, downstream flooding and sedimentation; patterns and frequencies of landslides and debris flows; changes in soil biology and chemistry; altered ecosystem biogeochemistry; and impacts on water quality. Fire impacts vary greatly from site to site as a function of interactions between physical and biological site characteristics, fire behavior and severity, and post-fire weather patterns. These impacts often require post fire land management activities to lessen their effects. While millions of dollars are spent annually on post-fire stabilization, rehabilitation and restoration treatments, effectiveness of,

and ecosystem response too many of these treatments have not been quantitatively evaluated. The Board is seeking proposals that evaluate the effects and effectiveness of these treatments. Additionally, the effects of post-fire removal of woody material from burned areas whether as a stand alone treatment, or in combination with stabilization, rehabilitation, and/or restoration treatments, are poorly understood. Information regarding how post-fire removal of woody material affects the severity of future wildfires is particularly lacking and proposals addressing this issue are strongly encouraged.

The Board encourages proposals that 1) link post-fire and future biological or physical resource effects to pre-fire vegetation conditions (e.g., stand structure and fuels characteristics) and observed fire behavior; 2) take a retrospective approach. A retrospective approach takes advantage of sites with previous pre-fire land management activities (such as mechanical treatment and/or prescribed burning that removed biomass) and wildland fire incidents that received post-fire land management activities.

Proposals that specifically address burned area emergency stabilization, rehabilitation, and restoration treatments should rely on the definitions for these terms developed for USFS burned area emergency stabilization and rehabilitation (BAER) and DOI emergency stabilization and rehabilitation (ESR); see definitions section H.

## **D. Special Requirements**

There are no special requirements for AFP 2006-3.

## **E. Format for Proposals**

### **Overview of the Proposal Format**

The full proposal should specify rationale, objectives, methodologies, and deliverables in sufficient detail to allow an informed reader to assess the proposal's validity in addressing one of the Task Statements in the AFP. The proposal should also identify criteria by which success of the project can be determined. The proposal text and accompanying tables and figures, exclusive of title page, curricula vitae or other appended information, should be limited to 12 (twelve) pages. Please use at least 11-point font. Complete annual and total budgets and a firm timeline for deliverables must be included, as well as a mechanism for technology transfer to appropriate end users. The proposal also provides a record of management responsibility and accountability for various aspects of the project.

All proposals must be submitted in the attached format (Appendix A) to be considered. Additional elements may be added as needed by the Proposers, but all elements contained in the required format and order must be retained.

## Title Page

The attached template (Appendix A) must be used for the title page. The title page may not exceed 2 (two) pages in length). The information required to be completed on the Title Pages is:

- Project Title:
- **Announcement for Proposals and task statement this proposal is responding to:**
- Principal Investigator(s):
  - Affiliation:
  - Address:
  - Telephone/Facsimile Number(s):
  - E-mail:
- Point of Contact - This person will be the one contacted by the program office with all correspondence on this project. Include full mail and e-mail address as well as phone and facsimile number:
- Federal Cooperator: Include full mail and e-mail address as well as phone and facsimile number
- Federal Fiscal Representative: Include full mail and e-mail address as well as phone and facsimile number
- Duration of Project: Include both the actual calendar dates of the proposal and the federal fiscal years for the proposal.
- Annual Funding Requested from the Joint Fire Science Program: by Federal Fiscal Year (October 1 to September 30)
- Total Funding Requested from the Joint Fire Science Program:
- **Total Value of In-Kind and Financial Contributions:**
- Abstract: Summarize the proposed project in a brief abstract not to exceed the available space in the Title Page Template. The abstract should include the justification for the proposed project in relation to one or more task statements in the AFP, objectives, appropriate methodology, and applicability of results.
- Signature of PI \_\_\_\_\_ Date:
- Signature of Federal Cooperator: \_\_\_\_\_ Date:
- Signature of Federal Fiscal Representative (see definition section H): \_\_\_\_\_  
Date:

(The Federal Fiscal Representative will be responsible for receiving funding if the proposal is successful. Signature by the Federal Fiscal Representative also indicates that the federal grants and agreements specialist has reviewed and concurs with the terms of the proposal).

## I. Introduction

An introductory section should include:

1) Project Justification. A summary of the issue(s), why the project needs to be done (relevance to Task Statement(s) in the AFP), and benefits derived.

2) Project Objectives. A statement of the project objective(s) must be clearly stated and measurable. This should include a brief statement of the hypothesis to be tested (if applicable), what information or product(s) will be provided at the end of the project, and how the information or product(s) can

be used to resolve the issue(s) stated in the Task Statement(s).

3) Background. This section includes a concise review and synthesis of existing knowledge and previous research or other pertinent background information in the project task area, a description of how the proposed project adds to or improves existing knowledge or tools, and a description of coordination with other relevant ongoing or completed products to ensure cross-compatibility and eliminate redundancy.

The introductory section is intended to provide peer reviewers and the Governing Board with evidence that the proposal demonstrates new work or significantly builds on previous and on-going work. Proposals should also describe how the work responds to task statements in the AFP. Although the literature may be extensive, the synthesis should generally include reference to no more than 15-20 of the most important and/or most relevant sources.

## **II. Materials and Methods**

This section should describe procedures proposed for conducting the project in sufficient detail that a knowledgeable reviewer could understand the process and that a peer could replicate the proposed work.

This section should resemble an **abbreviated** methods section typically found in research study plans or scientific peer-reviewed journal articles. At a minimum, methods should **succinctly** identify the following if applicable or appropriate:

- A description of the study sites.
- Materials to be used to conduct the investigation.
- Experimental design- both treatment and design structures.
- Response variables and tentative independent variables or covariates.
- Sample design- including procedures for sub-sampling.
- The experimental unit(s) for statistical analysis.
- Tentative statistical analysis procedures.

## **III. Project Duration**

Proposals will generally not be approved for longer than three years unless otherwise specified in the task statement. Proposals must clearly state how research activities, including the final report and deliverables, can be completed within the project term. Proposals should provide a proposed timeline for the project that identifies the significant milestones to be achieved.

**Agreement funding (except for proposals received for AFP 2006-2 Task 2) is typically not available until late summer following selection and funding approval decision by the Governing Board. Projects will most likely not be funded in time to complete substantial amounts of fieldwork the summer following funding decisions. Proposers should adjust project schedules accordingly.**

## **IV. Project Compliance:**

Proposals must clearly state when required NEPA and other necessary clearances will be completed to ensure the project may be completed within the project term. Proposals should identify the unit



responsible for the NEPA and other compliance. Letters from the responsible unit that describe the unit's commitment to the schedule are encouraged.

## V. Budget

Proposed project budgets can be complex, often involving multiple agencies or units in association with non-Federal units. Proposers should ensure that appropriate Federal Fiscal Representative (see definition), as well as budget or grants and contract offices of non-federal cooperators, review the proposal prior to submission to ensure that the budget and other fiscal aspects of the proposal meet agency requirements. **Concurrence, signature, and contact information of the Federal Fiscal Representative is required on the title page of the proposal.** Both the fiscal representative and the grants and agreements specialist or contracting office must be involved if the development of the budget if a portion of the work will be subcontracted or sub-granted. **Signature by the Federal Fiscal Representative also indicates that the federal grants and agreements specialist has reviewed and concurs with the terms of the proposal.**

### Budget Format

A budget summary using the following format must be included in the body of the proposal.

Table x. Proposal Budget Summary for FYs 200x, 200y, and 200z

Budget Item	200x		200y		200z	
	Requested	Contributed	Requested	Contributed	Requested	Contributed
<b>LABOR</b>						
<b>TRAVEL</b>						
<b>VEHICLES</b>						
<b>CAPITALIZED EQUIPMENT:</b>						
<b>MATERIALS AND SUPPLIES:</b>						
<b>SCIENCE DELIVERY AND APPLICATION:</b>						
<b>OTHER</b>						
<b>TOTAL DIRECT COSTS</b>						
<b>INDIRECT COSTS: XX% - of total direct costs (if applicable)</b>						
<b>TOTAL REQUESTED JFSP FUNDING</b>		<b>xxxxxxx</b>		<b>xxxxxxx</b>		<b>xxxxxxx</b>

The proposed budget should be sufficiently detailed to identify direct and indirect costs and related surcharges, to separate labor costs from operational costs, and to identify salaries associated with funded scientists. Contributed costs and the source of those costs should be included in the budget. Annual and total costs should be specified. Separate line items for "capitalized" equipment (more than \$5000) should be included. Out-year projections should be included for multi-year proposals. Proposed budgets should include travel expenses for one PI to participate in an annual 3-day PI workshop. The Governing Board of the Joint Fire Science Program reserves the right to negotiate budget amounts and deliverables with proposing organizations. Stipends are normally funded, but

tuition fees are not.

Budget detail must be presented in the proposal appendices using the format (Appendix B) shown below:

Table x. Budget Detail for FYs 200x, 200y, and 200z

Budget Item	200x		200y		200z	
	Requested	Contributed	Requested	Contributed	Requested	Contributed
<b>LABOR/PI salary:</b> \$xx/week @ xx weeks for FY xx, yy, and zz)						
<b>LABOR/Other Salary:</b> \$xx/week @ xx weeks for FY xx, yy, and zz)						
<b>LABOR/Other Salary:</b> \$xx/week @ xx weeks for FY xx, yy, and zz)						
<b>LABOR/Other Salary:</b> \$xx/week @ xx weeks for FY xx, yy, and zz)						
<b>LABOR/Other Salary:</b> \$xx/week @ xx weeks for FY xx, yy, and zz)						
<b>LABOR/Other Salary:</b> \$xx/week @ xx weeks for FY xx, yy, and zz)						
<b>Commercial air travel:</b>						
<b>Travel expenses (i.e., meals, lodging):</b> - Field - Site Visits - PI workshop - Other						
<b>Vehicle Rental:</b>						
<b>Capitalized Equipment:</b> - Computers - software - other (itemize)						
<b>Materials and Supplies:</b>						
<b>Science Delivery and Application:</b> - Manuscript Prep/Publication Costs - Web Page - Software distribution - workshops						

- Other						
<b>Other</b>						
- Itemize						
-						
<b>Total Direct Costs</b>						
<b>Indirect Costs attributable to project (in-house):</b> XX% - of total direct costs (if applicable)						
<b>Pass-through indirect costs:</b> YY% - of total direct costs (if applicable)						
<b>Total Requested JFSP Funding</b>						

### Indirect Costs

The JFSP Governing Board recognizes the need of agencies and organizations participating in the program to recover reasonable indirect overhead costs. However, cost effectiveness of the individual projects is clearly a determining factor in the final selection process of the proposals that will be awarded funding. The JFSP is limited within its authorization regarding the amount of the indirect cost rate that will be approved. The standard maximum indirect rate is twenty (20) percent of that portion of the recipient Federal agency's cost attributable to the project. The standard maximum indirect rate that a Federal agency may charge for flow-through/pass-through indirect costs when a major portion of the project is subcontracted or sub-granted is ten (10) percent. Proposals that are submitted and applicable to the Cooperative Ecosystem Studies Units (CESU) criteria should abide by the established CESU indirect rates, which are currently capped at Seventeen and one-half (17.5) percent.

### Salary Policy

Normally, salaries of permanent full-time employees are expected to be provided by their agencies. This is also true of university faculty on 12-month tenure-track appointments. These employees are already fully funded by their institutions. However, the Governing Board recognizes there can be some unique situations where the Governing Board may agree to fund the salary of permanent employees.

A detailed justification for funding the salary of permanent employees must be included in the proposal to be considered for funding. The justification should indicate all sources of funding, including other pending projects and associated FTE for the permanent position for which salary funding is requested. The justification must be certified by the agency administrator, research line officer or other appropriate institutional authority, other than the PI or other cooperator on the proposal, at the employee's organization or institution.

The format included in this AFP (Appendix D) **must** be used for the certification. In addition, permanent employee salary costs must be explicitly identified in the project budget. The Governing Board requires no special justification (other than a brief description of the need for the position in the budget justification section of the proposal) for funding temporary or term employees, post-doctoral employees, graduate, or undergraduate students. Stipends are normally funded, but tuition fees are not.

## VI. Research Linkage

This section should detail any other current research projects that this proposal is linked to in study sites, design, funding, or results including other JFSP, NFP or other projects

Grant Program	Project or Proposal Description/Identification	Funding Amount	Project Completion Date

## VII. Science Delivery and Application

Investments in wildland fire science need to be accompanied by an emphasis on science interpretation and delivery. Program success will not be measured by how many research projects are funded or how many research papers are generated, but how critical information from research efforts is successfully conveyed to resource managers and end users with the expressed purpose of improving management decisions. Therefore, it is imperative that each proposal include a description of how results and products will be effectively transferred to field managers and other end users in a useful form. A combination of passive (e.g., published papers, CDs, websites) and active (e.g., field tours, workshops, and training sessions) methods are preferred. Those proposals utilizing a variety of methods and approaches to accomplish this function will receive higher ratings. Proposals that utilize innovative methods or approaches will be given additional consideration. Proposals should provide detail on the methods that will be utilized to get the deliverables to the user community. Project descriptions and deliverables must be available on the Internet.

## VIII. Deliverables

Deliverables include final reports, published articles, data, results, software, tools, and other information or products developed during the proposed research project. Proposals must provide specific details on deliverables that will be provided by the proposed work, along with realistic delivery dates. Submit information about deliverables using the following table or similar format.

Deliverable	Description	Delivery Date(s)

Annual progress summaries are required and will be requested by the program office around mid-August each year.

**A final report must be delivered to the program office (both electronically and hard copy) by the project termination date that includes:**

- A statement of how the deliverables listed in the proposal match what has actually been produced.

- Copies of all completed deliverables and a timeline of additional deliverables not yet completed
- It is expected that all final products will include an electronic version suitable for distribution, posting, etc. Descriptions in English units, with metric equivalents in parenthesis, are required.
- A brief summary of what was learned from the investigation, including how the research met the objectives stated in the proposal.

**IX. Expected Benefits of the Proposal**

Provide a concise summary of the benefits expected from the results of the proposal either to the land management, fire managers or research community.

**X. Qualifications of Investigators**

Include Curriculum Vitae for at least one PI and at least one Federal agency manager or research collaborator in the proposal appendices. These should reflect recent, relevant experience and publication(s) and should not exceed 2 pages. Brief summaries of co-PIs should be included as appropriate.

The project personnel, (including collaborators) and their responsibilities must be described in the table below.

Table x. Personnel Involved in Project, and their Responsibility

Personnel	Responsibility

**XI. Literature Cited**

Although the literature may be extensive, the synthesis should generally include reference to no more than 15-20 of the most important and/or most relevant sources.

**F. Submission Checklist**

**Proposers are encouraged to use the following checklist prior to submitting their proposals to ensure all required items are addressed.**

**Checklist of items that must be included in Proposal Submissions:**

- One original and five copies of complete proposal packet including all material.
- An electronic version on a compact disk (in MS Word or editable pdf format) must be submitted with the packet.
- Federal cooperator or land manager (if different than the PI) is identified (see definitions of Federal cooperator and land manager)

- Signature and complete address including mailing address, surface mail address (if different than mail address), phone numbers and e-mail address of the principal investigator(s)
- Complete address including mailing address, surface mail address (if different than mail address), phone and facsimile numbers and e-mail address for the project point of contact are shown.
- Concurrence signature and complete address including mailing address, surface mail address (if different than mail address), phone and facsimile numbers and e-mail address of the Federal Fiscal Representative (see definition section H) are included.
- An introduction or background section that includes the specific objectives of the project, and describes how the proposed work is relevant to the Task Statement in the AFP.
- A brief review and synthesis of related past and current literature and work.
- A project budget, including identification of salaries and indirect costs.
- Include a “Justification of Need for Salary Support,” approved by appropriate authority, as necessary.
- A list of deliverables with dates of delivery.
- A science delivery and application mechanism as described in the science delivery section of this AFP.
- A list of cooperators and their proposed contribution.
- A Curriculum Vitae or other description of credentials of the PI and co-investigator(s) that are signatories which demonstrates ability to complete the proposed work.
- Letters of support are considered in the review process but are not required. However, letters of support must be included with the proposal package. Letters of support submitted separately from the proposal will not be accepted or considered. Letters must include the title and principal investigator of the project.

**Facsimile or e-mailed proposals will not be accepted.**

## **G. Review and Evaluation**

Reviews and evaluations of proposals submitted in response to this AFP to the Joint Fire Science Program will focus on the following five factors:

- Relevancy

- Scientific Methods and Study Design
- Products and Delivery into Application
- Collaboration and Leverage
- Administrative Adequacy

Criteria associated with the factors include:

Relevancy:

1. Does the proposal address the Task Statement in the AFP?
2. How relevant is the proposed work to field level personnel?
3. Does the Project Justification adequately describe why the project needs to be done?
4. Is there evidence that land managers need the proposed work?
5. Does this proposal demonstrate new or significant contributions to existing knowledge bases?

Scientific Methods and Study Design (if applicable or appropriate):

1. Are the questions, objectives, or hypotheses well-formed and clearly stated?
2. Are study approaches appropriate and adequate to meet stated objectives?
3. Is the design statistically sound? (i.e. Can hypotheses or questions be answered with the proposed design? Does the design provide for sufficient statistical power?)
4. Do proposed administrative studies or demonstrations lay out the desired outcome and a series of steps (methods) that will lead to that outcome?
5. What are the qualifications of the team to do the proposed work?
6. If the proposal involves software development, does it include beta-testing and is there evidence that the proposal addresses agency system architecture and security requirements?

Products and Delivery into Application

1. Does the proposal provide for adequate transfer of information or products?
2. Does the proposal complement or strengthen other research in this field? If so, how will efforts from this proposed work be coordinated with other research in this area?
3. At what scale will the proposed work provide information or products? Are the products useful across agency jurisdictions, fuel types, and geographic areas?
4. Does the delivery method facilitate and enhance the utility of the scientific information for management application?
5. Does the delivery use a combination of passive and active science application and delivery methods?
6. Will the final product(s) stand alone and be complete or need further work or development to be useful?

Collaboration - Leverage:

1. Does the proposal provide for adequate collaboration among agencies, fire and land management personnel, research scientists, and other collaborators?
2. Does the proposal ensure broad integration among disciplines; build on existing knowledge or ongoing studies?
3. Will results and recommendations be applicable to a variety of agencies and organizations?

4. Is there evidence of local or regional agency support and involvement in the proposal?
5. Are the in-kind contributions reasonable and adequate?
6. Is the proposed work cost effective?

#### Administrative Adequacy:

1. Does the proposal follow the requested format and include all the requested information?
2. Are adequate institutional resources and support available?
3. Based on the design and the track record of the investigators/participants, what is the likelihood of success?
4. If formal cooperative arrangements are proposed (e.g., with universities or other non-federal organizations), is there documentation that these will be feasible and agreeable to the cooperators?
5. Does the proposal address compliance with the National Environmental Policy Act, Threatened/Endangered Species Act, or similar statutes?
6. Are proposed timeframes and budgets reasonable and adequately justified, including funding for sub-agreements? Is adequate time allocated to complete the study? Is a justification for salaries included and adequate if necessary?
7. Is the problem statement written and signed by an Agency Administrator?

## H. Definitions

**Agency Administrator:** The agency Administrator is the federal official responsible for administering policy on an area of public land who has full authority for making decisions and providing direction. Also known as "Agency Line Officer," "Line Officer," and "Land Manager." Examples include Park Superintendent, Forest Supervisor, District Manager, Refuge Manager, District Ranger, and Field Office Manager. Research line officers are not included for the purpose of this AFP.

**Announcement for Proposals (or AFP):** Joint Fire Science Program method of requesting proposals. Announcements for Proposals include Task Statements for which proposals are sought, instructions for proposal submission, and related information.

**Federal Fiscal Representative:** The JFSP partner agency federal employee attached to the Federal proposers or Federal cooperator's unit who will be responsible for the administrative and fiscal aspects of the proposed work. This person will be responsible for receiving funding if the proposal is successful. This individual is typically an Administrative Officer, Contracting Officer, or Grants and Agreements Specialist.

**Federal Cooperator:** Representative of a Joint Fire Science Program partner agency.

**Indirect Costs:** Those costs that are a percentage of the overhead/administrative costs attributable to a specific research project. Examples include the cost of operations and maintenance such as janitorial, phone, and clerical services. The Joint Fire Science Program recognizes two types of indirect costs: "in-house" costs incurred by the agency, institution, or unit completing the research, and "pass-through" costs associated with passing funds to another agency, institution, or unit for the purpose of completing research.



**Joint Fire Science Program Governing Board:** An appointed, 10-person board, representing the JFSP partners, that manages the JFSP. The Board drafts and posts Announcements for Proposals, selects proposals for funding, supervises the JFSP Manager and program office, and conducts related business.

**Joint Fire Science Program PI Workshop:** Annual workshop, in which PIs of JFSP-funded projects provide progress reports, discuss research-related issues, and conduct other business.

**Land Manager:** see Agency Administrator

**Principal Investigator (or PI):** The individual identified in a proposal who is primarily responsible for completing a research project.

**Point of Contact:** The person that will be the main technical contact for the JFSP Office.

**Problem Statement or Statement of Need:** A brief statement, written and signed by the agency administrator, which clearly describes the need for the proposed work and how the proposed work would resolve the issue. The statement also includes the agency administrator's commitment to supporting the proposed work. The problem statement is typically one page or less.

**Science Delivery and Application:** The transfer of information, materials, models and other research deliverables to end users, along with adequate information and training to apply the deliverables. Examples of active methods include workshops, training sessions, guided field tours, conferences, meetings, and symposia. Examples of passive methods include published papers and websites. A combination of active and passive methods is preferred.

**Task Statement:** A specific area of interest, identified in an Announcement for Proposals, for which proposals are sought.

**Stabilization:** Planned actions to stabilize and prevent further unacceptable degradation to minimize threats to life or property resulting from the effects of a fire, critical natural and cultural resources, or to repair/replace/construct physical improvements necessary to prevent degradation of land or resources. Emergency Stabilization actions must be taken within one year of containment of the fire.

**Rehabilitation:** Efforts (non-emergency) undertaken within three years of a wildland fire to repair or improve fire-damaged lands unlikely to recover to management approved conditions.

**Restoration:** The continuation of rehabilitation beyond the initial three years

## APPENDIX A – PROPOSAL TEMPLATE

Project Title:	
Announcement for Proposals and task statement this proposal is responding to:	Joint Fire Sciences AFP 200x-x Task Y,
Principal Investigator:	<Name>
Affiliation:	<Organization/Unit/Institution>
Address:	<Mailing Address>
Phone:	<000-000-0000>
Email:	<smokey@bear.com>
Co-Principal Investigator:	<Name>
Affiliation:	<Organization/Unit/Institution>
Address:	<Mailing Address>
Phone:	<000-000-0000>
Email:	<smokey2@bear.com>
Co-Principal Investigator:	<Name>
Affiliation:	<Organization/Unit/Institution>
Address:	<Mailing Address>
Phone:	<000-000-0000>
Email:	<smokey3@bear.com>
Point of Contact:	<Name> <Affiliation> <Mailing Address> Email: <bambi@deer.com> Phone: <000-000-0000> Fax: <000-000-0000>
Federal Cooperator:	<Name> <Affiliation> <Mailing Address> Email: <woody@owl.com> Phone: <000-000-0000> Fax: <000-000-0000>
Additional Federal Collaborator(s):	<Name> - <Affiliation> <Name> - <Affiliation> <Name> - <Affiliation>
Federal Fiscal Representative:	<Name> <Affiliation> <Mailing Address> Email: <scrooge@bigbucks.com> Phone: <000-000-0000> Fax: <000-000-0000>
Duration of Project:	X calendar years (MM/YYYY through MM/YYYYY); X fiscal years
Annual Funding Requested:	FY200x: \$ FY200y: \$ FY200z: \$
Total JFSP Funding Requested:	\$xx,xxx
Total Value of In-Kind Contributions:	\$xx,xxx
Abstract:	

--	--	--

Signature of PI:	<signature>	<Date>
Signature of Co-PI:	<signature>	<Date>
Signature of Co-PI:	<signature>	<Date>
Signature of Co-PI:	<signature>	<Date>
Signature of Federal Cooperator:	<signature>	<Date>
Signature of Federal Fiscal Representative:	<signature>	<Date>

## **I. Introduction**

<Narrative>

### ***1. Project Justification***

<Narrative>

### ***2. Project Objectives***

<Narrative>

### ***3. Background***

<Narrative>

## **II. Materials and Methods**

### ***1. Study Site***

<Narrative>

### ***2. Sampling Design***

<Narrative>

### ***3. Methods***

<Narrative>

### ***4. Data Analysis***

<Narrative>

## 5. Materials

<Narrative>

## III. Project Duration and Timeline

This project will last approximately x years, assuming a start date in Month of Year, with completion in Month of Year.

*Time Period (Month/Year)*

- Project Milestone(s)

*Time Period (Month/Year)*

- Project Milestone(s)

*Time Period (Month/Year)*

- Project Milestone(s)

## IV. Project Compliance - NEPA and other clearances.

<Narrative>

## V. Budget

*Budget and Salary Justification*

<Narrative – If salary is requested for a permanent full-time Federal employees or university faculty on 12-month tenure-track appointments a detailed justification must be included in the proposal. The justification should indicate all sources of funding and associated FTE for the permanent position for which salary funding is requested. The justification must be certified by the agency administrator, research line officer or other appropriate institutional authority, other than the PI or other cooperator on the proposal, at the employee’s organization or institution. The format included in Appendix D **must** be used for the certification.

Table x. Proposal Budget Summary for FYs 200x, 200y, and 200z

Budget Item	200x		200y		200z	
	Requested	Contributed	Requested	Contributed	Requested	Contributed
<b>LABOR</b>						
<b>TRAVEL</b>						
<b>VEHICLES</b>						
<b>Capitalized Equipment:</b>						

<b>Materials and Supplies:</b>						
<b>Science Delivery and Application:</b>						
<b>Other</b>						
<b>Total Direct Costs</b>						
<b>Indirect Costs: XX% - all costs</b>						
<b>Total Requested JFSP Funding</b>		<b>xxxxxxx</b>		<b>xxxxxxx</b>		<b>xxxxxxx</b>

## VI. Research Linkage:

<Narrative>

Table x. Current and Pending Research Grants

<b>Grant Program</b>	<b>Project or Proposal Description/Identification</b>	<b>Funding Amount</b>	<b>Project Completion Date</b>

## VII. Science Delivery and Application

<Narrative>

## VIII. Deliverables

<Narrative>

Table x. Deliverable, Description and Delivery Dates

<b>Deliverable</b>	<b>Description</b>	<b>Delivery Dates</b>

## IX. Expected Benefits of the Proposal

<Narrative>

## X. Qualifications of Investigators

The CVs of <PI>, <Co-PI> and <Co-PI> are included in the Appendix. A summary of the project personnel, (including collaborators) and their responsibilities are described in the table below.

Table x. Personnel Involved in Project, and their Responsibility

Personnel	Responsibility

## XI. Literature Cited

## APPENDIX B – BUDGET DETAIL

Table x. Budget Detail for FYs 200x, 200y, and 200z

Budget Item	200x		200y		200z	
	Requested	Contributed	Requested	Contributed	Requested	Contributed
<b>LABOR/PI salary:</b> \$xx/week @ xx weeks for FY xx, yy, and zz)						
<b>LABOR/Other Salary:</b> \$xx/week @ xx weeks for FY xx, yy, and zz)						
<b>LABOR/Other Salary:</b> \$xx/week @ xx weeks for FY xx, yy, and zz)						
<b>LABOR/Other Salary:</b> \$xx/week @ xx weeks for FY xx, yy, and zz)						
<b>LABOR/Other Salary:</b> \$xx/week @ xx weeks for FY xx, yy, and zz)						
<b>LABOR/Other Salary:</b> \$xx/week @ xx weeks for FY xx, yy, and zz)						
<b>Commercial air travel:</b>						
<b>Travel expenses (i.e., meals, lodging):</b> <ul style="list-style-type: none"> <li>- Field</li> <li>- Site Visits</li> <li>- PI workshop</li> <li>- Other</li> </ul>						
<b>Vehicle Rental:</b>						
<b>Capitalized Equipment:</b> <ul style="list-style-type: none"> <li>- Computers</li> <li>- software</li> <li>- other (itemize)</li> </ul>						
<b>Materials and Supplies:</b>						
<b>Science Delivery and Application:</b> <ul style="list-style-type: none"> <li>- Manuscript Prep/Publication Costs</li> <li>- Web Page</li> <li>- Software distribution</li> <li>- workshops</li> <li>- Other</li> </ul>						
<b>Other</b>						



- Itemize						
-						
<b>Total Direct Costs</b>						
<b>Indirect Costs attributable to project (in-house):</b> XX% - of total direct costs (if applicable)						
<b>Pass-through indirect costs:</b> YY% - of total direct costs (if applicable)						
<b>Total Requested JFSP Funding</b>						

## **APPENDIX C - CURRICULUM VITAE**

**APPENDIX D – SALARY JUSTIFICATION**

**Certification to the Joint Fire Science Program  
Justification of Need for Salary Support**

I hereby certify the attached Justification of Need to provide temporary salaries for full-time permanent employee (s) \_\_\_\_\_ (*list name of employee(s)*) is necessary and appropriate to enable him/her (them) to fully and directly participate in the proposed project.

Justification:

I understand that salary funding for this/these employee(s) directly involved in the proposed project is temporary and will not be provided beyond the duration of the proposed project.

Signature \_\_\_\_\_

Date \_\_\_\_\_

Name (type or print) \_\_\_\_\_

Title \_\_\_\_\_

Phone Number \_\_\_\_\_