# Announcement for Proposals, 2004-4 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 15, 2003** 

Closes December 15, 2003

# NOTE TO POTENTIAL PROPOSERS: There are significant changes in requirements for proposals. Please read the AFP carefully.

This Announcement for Proposals includes two Task Statements on science delivery and application (formerly technology transfer)

## **Announcement for Proposals**

by the Joint Fire Science Program

(Note: The Joint Fire Science Program previously posted Requests for Proposals (RFPs). These are now called Announcements for Proposals (AFPs).

#### 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 (combustible material, generally living and dead plant materials), 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 purposes of this Announcement for Proposals (AFP), "wildlands" are considered to be forests, woodlands, shrublands, grasslands, and associated 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 wildland fires, 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 continue to escalate.

The Congress, agency administrators, JFSP partners, research scientists, 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 include wildland fuels inventory and mapping, evaluation of fuels treatments, scheduling of fuels treatments, and monitoring and evaluation. The 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 such issues 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:/fsp.nifc.gov. In addition, the JFSP issued AFPs in June 1998, February 1999, February 2000, February 2001, and October 2003 and subsequently selected and funded more than 220 projects. Previous AFPs and lists of funded projects can also be found on the JFSP web page.

This AFP contains two Task Statements for which proposals are sought. 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 and/or scientists will not be considered for funding.** Examples of documented 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 issue on or important to the land managers unit.

All proposals must include the following items to be considered. The JFSP program office must receive the complete proposal package (including all items in this checklist) by close of business (5:00 pm MST) December 15, 2003. There will be no exceptions to this closing date; incomplete proposals will not be considered.

## Facsimile or e-mailed proposals will no longer be accepted.

- 1) One original and five copies of complete proposal packet including all material.
- 2) An electronic version on a diskette or compact disk (in Word or WordPerfect format) must be included.
- 3) Signature of a principal investigator (PI), (this person will be the technical contact for the JFSP office), Federal cooperator or land manager (if different than the PI) as appropriate (see definitions of Federal cooperator and land manager), and a concurrence signature of the appropriate Federal Administrative or Contracting Officer.
- 4) 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, and appropriate Federal Administrative or Contracting Officer.
- 5) Letters of support are not required but are considered in the review process. However, all letters of support that are submitted must be included with the hard copy proposal package 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. Bob Clark Program Manager Joint Fire Science Program National Interagency Fire Center 3833 S. Development Ave. Boise ID 83705 phone (208) 387-5349 e-mail: Bob\_Clark@nifc.blm.gov Funding of selected projects can be complex, often involving multiple agencies or units in association with non-Federal units. Therefore, proposers should ensure that appropriate Federal Administrative Officer, Contracting Officer, or Grants and Agreements Specialist review the proposal prior to submission to ensure that the budget and other fiscal aspects of the proposal meet agency requirements. The appropriate AO/CO/Grants and Agreements Specialist concurrence signature is required as identified in number 3 above.

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

This AFP contains two Task Statements:

## Task 1: Science Application Partnerships.

Describe and apply a specific approach to delivering, to field level practitioners, fire science information or tools related to the topic areas of the Joint Fire Science Program. The proposal should address the methods to (1) identify, (2) acquire, (3) analyze, (4) synthesize, (5) package, and (6) deliver the science.

Wildland fire managers are faced with evolving situations that demand increasingly intensive planning and implementation that require use of the best available fire science. The science delivery and application (technology transfer) process includes the identification, acquisition, analysis, synthesis, packaging and delivery of fire science information that is readily understandable by and useable to field level practitioners. The Governing Board seeks proposals that (a) identify and describe a method or methods of science delivery and that (b) demonstrate the utility of the method by developing a delivery product using the approach described. The product must deliver science-based information or tools relevant for practitioners in fields such as fuels treatment, post-fire stabilization and rehabilitation, or other Joint Fire Science Program themes in geographical areas at the landscape or ecosystem levels. Expected deliverables include: (1) Analysis and description of the approach and the process used to develop the science application product, and (2) A completed product for delivering science information to field practitioners. This could be, for example, in the form of a training course, a web-based application, a publication, or other forms of information dissemination.

## Task 2: Evaluating Success of Fire Science Application Efforts

Proposals are sought to describe, compare, contrast, and evaluate the effectiveness of various processes used to disseminate information, facilitate science-management collaboration, enhance the utility of scientific information, and increase the likelihood of management application of science.

This task is in response to one of the questions identified in a series of three workshops on applied fire science: "Bridging the Worlds of Fire Managers and Applied Fire Researchers," which were cosponsored by JFSP in 2003. A General Technical Report on these workshops is in press. The Executive Summary is posted at http://www.fs.fed.us/pnw/about/programs/fsd/exec\_summ072203.pdf

A wide range of approaches is used to develop scientific information in support of fire and fuels

management and to develop methods and tools for moving science knowledge and science-based tools into management application. Some of these may be more successful than others in terms of reaching target audiences, being useable and relevant to those audiences, and that result in moving science into application. Target audiences for specific information and products may range from staff specialists responsible for project planning and implementation, to regional and national-level agency administrators and policy-makers.

### **C.** Format for Proposals

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

The pre-proposal should specify rationale, objectives, methodologies, and deliverables in sufficient detail to allow an informed reader to assess the proposal's validity in addressing the Task Statement in this AFP. The pre-proposal text and accompanying tables and figures, exclusive of curricula vitae or other appended information, should be limited to eight pages. Please use at least 11-point font. Annual and total (18 month) budgets and a 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.

## **Title Page**

The following format should be used for the title page (not to exceed 1 page):

 Project Title:

 Announcement for Proposals this proposal is responding to:

 Principal Investigator(s):

 Affiliation:

 Address:

 Telephone/Facsimile Number(s):

 E-mail:

 Federal Cooperator (please include full mail and e-mail addresses as well as phone number:

 Duration of Project:

 Annual Funding Requested from the Joint Fire Science Program: \$ \_\_\_\_\_\_

 Total Funding Requested from the Joint Fire Science Program: \$ \_\_\_\_\_\_\_

 Total Funding Requested from the Joint Fire Science Program: \$ \_\_\_\_\_\_\_

Abstract: Summarize the proposed project in a brief abstract not to exceed **2** page. 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:
Concurrence of Federal Cooperator fiscal representative:	Date:

#### Introduction

An introductory section should include:

1) Project Justification. A brief summary describing why this project needs to be completed in this ecosystem and benefits derived.

2) Project Objectives. A statement of the project objective(s) must be clearly stated. This should include a brief statement of the information or product(s) that will be provided at the end of the project, and how the information or product can be used to resolve the issue(s) stated in the task statement.

3) Background. This section includes a concise review and synthesis of existing knowledge and previous research or other pertinent background information, 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 proposed work compliments previous and on-going work and that the work is applicable to Task Statement in the AFP. Although the literature may be extensive, the synthesis should generally include reference to no more than about 12-15 of the most important and/or most relevant sources.

#### **Materials and Methods**

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

#### **Project Duration**

The Governing Board anticipates that all projects funded from this AFP will be completed within 18 months.

#### Budget

The proposed budget should be provided in sufficient detail 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, and annual and total costs should be provided. Separate line items for "capitalized" equipment (more than \$5000) should be included. Outyear 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. The JFSP standard indirect rate is 20% for agencies/units/institutions conducting the work, and 10% administrative on funds passed through to collaborators. See section on Indirect Costs below.

#### Deliverables

Proposals must provide specific details on the information or product(s) that would be provided by the proposed work, and a realistic timetable for delivery. 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. Annual progress summaries are required.

#### Science Application and Delivery (formerly Atechnology transfer@

It is imperative that information or products reach field managers and other end users in a useful form. Therefore, each proposal should include a description of how the "technology" would be transferred to the field and other end users. Also, funded projects are required to use Internet websites to post current and relevant information concerning each project except where legally precluded.

#### **Qualifications of Investigators**

Include Curriculum Vitae for primary PI(s) and at least one Federal cooperator, land manager, or research collaborator. These should reflect recent, relevant experience and publication(s) and should not exceed 2 pages.

#### **D.** Review and Evaluation of Proposals

## Facsimile or e-mailed proposals will no longer be accepted.

#### Checklist of items that must be included in Proposal Submissions

- **G** One original and five copies of complete proposal packet including all material,
- **G** An electronic version on a diskette or compact disk (in Word or WordPerfect format) must be submitted with the packet.
- **G** Signatures of principal investigator (PI), (this person will be the technical contact for the JFSP office), the Federal cooperator or land manager (if different than the PI) as appropriate (see definitions of Federal cooperator and land manager), and signature of concurrence of the appropriate Federal Administrative or Contracting Officer.

- **G** Complete address including phone number, mailing address, surface mail address (if different than mail address) and e-mail address of the principal investigator, Federal cooperator or land manager as appropriate, and Federal Administrative or Contracting Officer who would administer the fiscal aspects of the project.
- **G** Letters of support are considered in the review process but are not required. However, letters of support that are submitted must be included with the proposal package. Letters must include the title and principal investigator of the project.
- **G** An introduction or background section that includes the specific objectives of the project and describes how the proposed work is relevant to Task Statement in the AFP.
- **G** A list of cooperators and their proposed contribution.
- **G** 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
- **G** A brief review and synthesis of related past and current literature and work
- **G** A first year and total budget, including identification of salaries and indirect costs.
- **G** Include a AJustification of Need for Salary Support,@approved by appropriate authority, as necessary.
- **G** A list of deliverables with proposed dates of delivery
- **G** A science delivery and application mechanism.
- **G** Letters of support.

#### **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:

- c Relevancy
- c Scientific Methods and Study Design
- c Products and Delivery into Application
- C Collaboration and Leverage
- c 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:

- 1. Are study approaches appropriate and adequate to meet stated objectives?
- 2. What are the qualifications of the team to do the proposed work? Are adequate institutional resources and support available?
- 3. If the proposal involves software development, does it include beta-testing in the proposal and is there evidence that the proposal addressed agency system architecture and security requirements?

Products and Delivery into Application

- 1. Does the proposal provide for adequate transfer of information or products and consider general availability and usefulness of proposed technology?
- 2. Is the proposed work cost effective?
- 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 or enhance the utility of the scientific information for management application?
- 5. Does the delivery use an combination of passive and active science application and delivery methods?

Collaboration - Leverage:

- 1. How well does the proposed work build on or interface with past or ongoing studies or products on related topics?
- 2. Does the proposal provide for adequate collaboration among agencies, between fire and land management personnel and research scientists or other collaborators, and between disciplines to ensure broad integration of existing knowledge and approaches as well as applicability of results and recommendations?
- 3. Is there evidence of local or regional agency support and involvement in the proposal?

Administrative Adequacy:

- 1. Does the proposal follow the requested format and include all the requested information?
- 2. 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?
- 3. Does the proposal address compliance with the National Environmental Policy Act, Threatened/Endangered Species Act, or similar statues?
- 4. Are proposed timeframes and budget reasonable and adequately justified, including budgets for proposed sub-agreements?
- 5. Are the in-kind contributions reasonable/adequate with the proposed budget?
- 6. Is a justification for salaries included and adequate?

## E. Indirect Costs and Salary Policy

#### **Indirect Costs**

The JFSP Governing Board recognizes the need of participating organizations to recover reasonable indirect costs. At the same time, the JFSP has limited authority to pay indirect costs, and cost is clearly a factor in the final proposal selection process. The JFSP maximum allowed indirect rates are 20 percent for that portion of the funding that is used by units/institutions conducting the work, and 10 percent administrative cost to the Federal cooperator for Apassing through@funding to those cooperating units/institutions.

#### **Salary Policy**

Normally, salaries of permanent full-time Federal 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 organizations or institutions. However, the Governing Board recognizes that there can be mitigating circumstances arising from the need to fill in behind these employees when they are reassigned to Joint Fire Science Program funded activities, or due to policies of individual organizations. In such cases, the Governing Board may agree to fund salaries of permanent employees. A brief justification must be included in the proposal, and the justification must be certified by an appropriate institutional authority, other than the PI or other cooperator on the proposal, at the employees organization or institution. The format provided below should be used for the certification. In addition, permanent employee salary costs must be explicitly identified in the proposed 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, or graduate or undergraduate students. Stipends are normally funded but tuition is not.

#### F. Definitions

**Agency Administrator:** The agency Administrator is the 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, **a**Line Officer, **a** and **A**Land Manager. **a** 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. AFPs include Task Statements for which proposals are sought, instructions for proposal submission, and related information.

**Federal Administrative or Contracting Officer**: The individual attached to the Federal proposers or Federal cooperators unit who will be responsible for the administrative and fiscal aspects of the proposed work. 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 not directly 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: Ain-house@costs incurred by the agency, institution, or unit completing the research, and Apass-through@costs associated with passing funds to another agency, institution, or unit for the purpose of completing research. Indirect costs are limited to 20 percent of that portion of the proposed budget attributable to the agency, university or unit that is completing the research. Pass-through administrative costs are limited to 10 percent of the funds that are forwarded to the agency, university, or unit that is completing the research. Equipment purchased (\$5000 or more) to support the research project are excluded from indirect costs.

**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, typically in the Spring, 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. This person 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 administrators commitment to supporting the proposed work. The problem statement is typically one page or less.

**Science Delivery and Application (formerly Atechnology transfer@:** The transfer of information, materials, models and other research deliverables to end users, along with adequate information to user or 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.

## 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.

Date\_\_\_\_\_

Name (type or print)

Title	
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Phone Number