

Announcement for Proposals, 2005-2
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, 2004

Closes December 15, 2004

This Announcement for Proposals includes one Task Statement on Local Research Needs.

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 in June 1998, February 1999, February 2000, February 2001, October 2002, and October 2003 and subsequently selected and funded more than 250 projects. Previous AFPs and lists of funded projects can be found on the program web site.

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 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 problem related to the land manager's 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 the following checklist) by close of business (5:00 pm MST) December 15, 2004. 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 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).
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:

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Joint Fire Science Program
National Interagency Fire Center
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B. 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.

Task 1: Proposals are sought to directly address locally important knowledge or data gaps associated with planning and implementation of wildland fire, fuels treatment, or post-fire treatment actions (including post-fire salvage logging) that are specifically identified by an agency administrator (see definition section F).

Local land managers often have limited ability to develop and implement research projects or administrative studies because of the lack of specific research expertise, specialized equipment, or laboratory facilities, or because of workload commitments. However, such projects can provide extremely valuable information on local treatment effects to guide wildland fire management, fuels treatment, or post-fire treatment actions.

These site-specific projects may include biological, social, cultural, or physical effects of fires, fuel treatments, or post-fire activities. Whether described as “research projects” or “administrative studies,” proposed projects must be of high quality, defensible, replicated as appropriate, and subject to peer review. Land managers are encouraged to partner with the research community to develop and implement the proposed work. **Proposals must clearly demonstrate that need for the proposed work originated from an agency administrator(s).** Funding may be approved by the JFSP Governing Board to include the development of a demonstration site when required as a part of science delivery and application (technology transfer).

All proposals responding to this task statement must contain a specific problem statement, not to exceed one page, which forms the basis for presenting the issue(s) to be addressed in the proposed work. **The problem statement must be written and signed by the agency administrator (see Section F, Definitions) and include the phone number of that official. Proposals that do not contain the required problem statement and agency administrator signature will not be considered.**

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) or operational portions (such as the installation of fuels treatments or development of Fire Management Plans) of other projects.

C. 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 curricula vitae or other appended information, should be limited to 12 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.

Title Page

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

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. Please include full mail and e-mail address as well as phone number):

Federal Cooperator (please include full mail and e-mail address 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 Value of In-Kind and Financial Contributions:

Abstract: Summarize the proposed project in a brief abstract not to exceed ½ 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:

Signature of Federal Fiscal

Representative (see definition): _____

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).

Problem Statement

The AFP requires a problem statement written and signed by the agency administrator (see Section F, Definitions) and includes the phone number of that official. Proposals that do not contain the required problem statement and agency administrator signature will not be considered.

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 proposed work demonstrates new 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.

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.

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.

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. 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.**

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.

Agreement funding is typically not available until late summer or early fall following selection and funding approval decision by the Governing Board.

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 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 institutions. However, the Governing Board recognizes 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. In such cases, the Governing Board may agree to fund salaries of permanent employees. However, a brief justification must be included in the proposal. The justification must be certified by an 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 below 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.

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. Project descriptions and deliverables must be available on the Internet.

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 must be submitted to the JFSP office by February 15 each year. A final report must be delivered to the program office 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.

Qualifications of Investigators

Include Curriculum Vitae for at least one PI and at least one Federal agency manager or research collaborator. 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.

D. Checklist of required items

Facsimile or e-mailed proposals will not be accepted.

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 pdf format) must be submitted with the packet.
- Problem statement written and signed by agency administrator.
- Federal cooperator or land manager (if different than the PI) as appropriate (see definitions of Federal cooperator and land manager), and a concurrence signature and contact information of the appropriate Federal Administrative or Contracting Officer.
- Signature and 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 Fiscal Representative (see definition).
- 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 must include the title and principal investigator of the project.
- 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 first year and total 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.

E. 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 compliment 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?

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. Is the proposed work cost effective?
5. 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?
6. Does the proposal address compliance with the National Environmental Policy Act, Threatened/Endangered Species Act, or similar statutes?
7. 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?
8. Is the problem statement written and signed by an Agency Administrator?

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," "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 individual 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, 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 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.

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 _____