

Request for Proposals, 2001-3
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 February 22, 2001

(This RFP will remain open until further notice. Proposals will be accepted continuously but acted on twice each year - April 23, 2001 and October 15, 2001. That is, proposals in hand on April 23, 2001 will be peer reviewed for Joint Fire Science Program Governing Board action in June.)

Includes Task Statements on demonstration sites, administrative studies, and local projects.

Request 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 accumulating wildland fuels (combustible material, generally living and dead plant materials) on lands administered by the partners. The partners 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 Request for Proposals (RFP), "wildlands" are considered to be forests and 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 the wildland fires of 2000, 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 remain high.

The 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. 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://www.nifc.gov/joint_fire_sci/jointfiresci.html. In addition, the JFSP issued RFPs in June 1998, February 1999, and February 2000, and subsequently selected and funded over 70 projects. Previous RFPs and lists of the funded projects can also be found at the web site.

This RFP contains three Task Statements for which proposals are solicited. 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 the cooperation of a Federal cooperator must be included in all

proposals. That is, non-Federal proposers are asked to ensure that a Federal cooperator participates in development and submission of proposals. The Federal cooperator is also the direct recipient of funding.

This RFP will remain open until further notice, and proposals will be accepted continuously. However, proposals will only be peer reviewed and prepared for Governing Board action twice each year. That is, proposals submitted in response to this RFP that are received on or before April 23, 2001 will be peer reviewed and prepared for Board action in June, 2001. Proposals received after April 23, 2001 will be held for peer review and Board action after October 15, 2001. Questions should be directed, and proposals forwarded 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
facsimile (208) 387-5960

Electronic submissions are acceptable provided they are followed by a hard copy of the title/signature page with original signature(s). The proposal and signature page must be received by April 23, 2001 for immediate action. Incomplete proposals or lack of original signatures will cause the proposal to be held and treated as an October 15, 2001 submission. Please e-mail electronic proposals, in WordPerfect, Microsoft Word, or Rich Text Format, to Bob_Clark@nifc.blm.gov.

Finally, the Governing Board hosts annual workshops for Principal Investigators (PIs) of active projects. Proposals responding to this RFP should note that the Governing Board may request PI participation or a poster summarizing the project at the annual workshop. These costs should be reflected in all proposed budgets.

B. Areas of Interest for Proposals

This RFP contains three Task Statements. The RFP will remain open until further notice. However, peer reviews and Governing Board action will occur twice each year (April 23, 2001 and October 15, 2001). That is, complete proposals in hand on April 23, 2001 will be peer reviewed and submitted for Governing Board action in June, 2001. Proposals responding to this RFP are specifically solicited from field units of the JFSP partners and other public wildland management agencies. Also, all proposals are expected to address wildland/urban interface issues as appropriate. In addition, proposers may find it useful to submit proposals that address more than one Task Statement. Finally, all proposals must address one or more aspects of wildland fire and/or wildland fuels issues.

Task 1: *Develop demonstration sites in various ecosystems across the United States that can serve to illustrate various fuels treatment practices or techniques, their cost effectiveness, and/or environmental effects.*

The Governing Board of the JFSP envisions a series of demonstration sites developed by land managers in various ecosystems/fuel types across the United States that can be used to demonstrate the application of different fuel management methods or techniques, including the economic costs of such treatments, support the national effort to study the consequences of fire and fire surrogate treatments (<http://ffs.psw.fs.fed.us/>), support other aspects of the National Fire Plan (<http://www.nifc.gov/fireplan/index.htm>), or demonstrate post-fire stabilization/rehabilitation methods. Sites should be used to demonstrate different wildland fuel management options or stabilization/rehabilitation efforts, associated costs, and/or ecological effects to agency and elected officials, research scientists, fuels management practitioners, and other interested persons and groups. Confirmation of site access, and description of treatments, are required. Site integrity must be ensured for a minimum of seven years to provide for review and site visitation. Proposals are solicited for all major fuel types and fire regimes, including forests and woodlands, shrublands, grasslands, and wetlands/riparian areas. A minimum of one treatment and an untreated control must be demonstrated on each site. JFSP funding will not be awarded for the operational installation (treatment cost) of the sites but will be limited to the monitoring component including: study design, data gathering, analysis, reporting and technical transfer of information. Some type of on-site interpretation, such as signs, brochures, or other forms of on-site treatment interpretation, as well as use of the Internet to disseminate information, is required. The focus of these sites is demonstration and interpretation; consequently, the involvement of professional interpreters and/or public information specialists is encouraged. Demonstration sites must be located close enough to communities to assure ease of visitation by as many interested visitors as possible. Partnering with cooperators to broaden or expand the sites is also encouraged. The Governing Board anticipates that the monitoring and interpretation components for such demonstrations can be accomplished for a total of \$50,000 or less per site. Multiple sites in each project will be considered, provided that inclusion of additional sites will result in significant additional information. The maximum funding level of \$50,000 per site will comprise the total JFSP funding per project, regardless of project duration.

Task 2: *Develop and implement administrative studies to determine local biological, social, physical, or other effects of wildland fire, fuel treatments, or post-fire stabilization/rehabilitation actions. Administrative studies (sometimes called management studies) are typically limited in terms of the number and complexity of measurement variables and the focus is usually on response rather than process. However, proposed work must be of high quality, defensible, replicated, and*

subject to peer review.

JFSP partners and other wildland management agencies often have limited ability to develop and implement administrative studies on wildland fire incidents, fuels treatments, or post-fire stabilization/rehabilitation actions because of funding shortfalls, lack of specific skills, or workload commitments. However, such studies can focus on important issues that are locally important for appropriate implementation of wildland fire, fuels treatment, or post-fire treatment actions, and therefore may be extremely valuable. The Governing Board encourages agencies, in conjunction with research scientists, to develop and submit proposals for administrative studies related to wildland fire and/or fuels treatments.

Administrative studies may include such interests as the ecological, physical, or chemical effects of wildland fire, fuels management, or stabilization/rehabilitation treatments and must document treatment method(s), effects, costs, results, and conclusions. Sites should be of adequate size and contain sufficient treatment replications to ensure sound conclusions and recommendations. The study design process must include participation or written review by qualified scientists, and proposed project documentation must be designed to withstand peer review. Proposals are solicited for administrative studies in all major fuel and fire regime types, including forests and woodlands, shrublands, grasslands, wetlands, and/or riparian areas. Partnering with cooperators to broaden or expand the administrative studies is encouraged. The Governing Board anticipates that these administrative studies can be accomplished for a total of \$100,000 or less per year for a maximum of three years. At a minimum, deliverables should include a technical report to management or published paper so the results are widely available.

Task 3. *Address local knowledge gaps that are significant to fire management plan development and implementation.*

Scientific research support is often needed to clarify or understand issues associated with fire management planning and program implementation at the local level. These issues may include, for example, effects of fire on endemic flora or fauna (including threatened or endangered species), site-specific fire history information, seasonality of fire and fire effects, or interactions between invasive plants and fire where such information is lacking in administrative studies, the scientific literature, or databases such as the Fire Effects Information System. Proposals for such work are expected to be of short duration and relatively inexpensive. The Governing Board anticipates that these local projects can be accomplished for a total of \$100,000 or less per year for a maximum of three years. Close collaboration between land managers and research scientists is required. 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. At a minimum, deliverables should include a technical report to management or published paper so the results are widely available.

C. Format for Proposals

Overview of the Proposal Format

The proposal should specify rationale, objectives, methodologies, and deliverables in sufficient detail to allow an informed peer to assess the proposal's validity in addressing the task statement in the RFP. 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 10 pages. Complete annual and total budgets and a timeline for completion of the proposed work must be included, as well as a mechanism for "technology transfer" to appropriate end users. Contributed/in kind funding should be identified. 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:
Principal Investigator(s):
Affiliation:
Address:
Telephone/Facsimile Number(s):
E-mail:
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 the task statement in the Request for Proposals, objectives, appropriate methodology, and applicability of results.

E-mail or facsimile proposals are acceptable provided that the e-mail or facsimile transmission is followed by a hard copy of the title page with original signature(s). If hard copy is provided only one copy is necessary.

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 in the Request for Proposals), 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 what information or products will be provided at the end of the project and how the information or product can be used to further understanding of wildland fire and/or fuels issues.
- 3) Background. This section includes a concise review and synthesis of existing knowledge and previous research or other pertinent background.

The introductory section is intended to provide peer reviewers and the Governing Board with evidence that the proposed work is applicable to the task statement in the Request for Proposals. Although the literature may be extensive, the synthesis should generally include reference to no more than about 8-10 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 project. A brief description of the study site(s) (as applicable) should be included.

Project Duration

Proposals will generally not be funded for longer than three years from date of selection and award, although requests for extensions or additional work may be considered.

Budget

The proposed budget should be provided in sufficient detail to identify indirect costs and related surcharges, to separate labor costs from operational costs, and to identify salaries associated with funded scientists or other funded full-time employees. Annual costs should be provided. Separate line items for "capitalized" equipment should be included. Outyear projections should be included for multi-year proposals. Proposed budgets should include travel expenses for at least one Principal Investigator (PI) to participate in an annual 2-3 day PI workshop or to develop a poster for presentation at the workshop.

Deliverables

Provide specific details on the information or product(s) that would be provided by the proposed project, and realistic time tables for delivery dates. It is expected that reports and other written materials will include an electronic version suitable for distribution, posting, etc. Descriptions in English units, with metric

equivalents in parenthesis, are required. Annual progress reports are required.

Technology Transfer

It is imperative that information and site access be available to managers, officials, and other interested parties. Therefore, each proposal should include a description of how relevant information and site access would be made available.

Qualifications of Investigators

It is anticipated that demonstration sites would be developed by land owners/managers and technical specialists in cooperation with scientists and appropriate officials. Please include a statement of qualifications for the principle specialists and scientists, and a statement of commitment by the appropriate land owners/managers to support and protect the demonstration site.

Checklist for Proposal Submissions

Does the proposal:

- * include an introduction or background section that includes the specific objectives of the project and describes how the proposed work is relevant to one the task statement in the RFP?
- * include a list of cooperators and their proposed contribution, including the original signature of the principal investigator and an authorized signature from a cooperating federal unit (See Proposal Format, Title Page)?
- * include a relevant Curriculum Vitae or other description of credentials of the Principal Investigator(s) which demonstrates ability to complete the proposed work?
- * include a brief review and synthesis of related past and current literature and work?
- * include an adequate description of the specific location of the proposed work?
- * include a description of the materials and methods of the proposed work including (as appropriate) experimental design and statistical analysis(es)?
- * include a detailed annual and total budget, including identification of salaries and indirect costs?
- * include a "Justification of Need for Salary Support," approved by appropriate authority, if needed? (See Salary Policy Section)
- * include a description and cost of equipment which needs to be purchased to support the work?
- * include a list of deliverables with proposed dates of delivery?
- * include a technology transfer mechanism?

D. Review and Evaluation of Proposals

The following factors will be considered in reviews and evaluations of proposals to the Joint Fire Science Program:

1. How well does the proposal address the task statement in the RFP?
2. Does the proposal follow the requested format and include all the requested information?
3. Will the proposed work provide information or products that are useful across agency jurisdictions, fuel types, and geographic areas?
4. Does the proposal provide for adequate transfer of information or products, consider general availability and usefulness of proposed technology, and, as appropriate, provide for a feedback mechanism to the study team for product testing and improvement?
5. Does the proposal provide for adequate collaboration among agencies, between fire and land management personnel and researchers or other collaborators, and between disciplines to ensure broad integration of existing knowledge and approaches as well as applicability of results and recommendations?
6. Are study approaches or design and statistical analysis(es) appropriate and adequate to meet stated objectives?
7. What are the qualifications of the team to do the proposed work? Are adequate institutional resources and support available?
8. Are proposed timeframes and budget reasonable and adequately justified, including budgets for proposed sub-agreements?
9. If formal cooperative arrangements are proposed (e.g., with universities or other non-federal organizations), is there evidence that these will be feasible and agreeable to the cooperators?

E. Indirect Costs and Salary Policy

Indirect Costs

The JFSP recognizes the need of participating organizations to recover reasonable indirect costs. Indirect costs up to 15 percent (for the unit performing the work) may be included in proposals without detailed justifications, however, any indirect costs exceeding 15 percent must be justified. Similarly, indirect costs in excess of 10 percent on pass-through arrangements from federal units to cooperating federal or non-federal units must be justified. The Governing Board of the JFSP reserves the right to negotiate budget amounts and deliverables (including indirect costs over 15 percent) with proposing organizations.

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 that there can be mitigating circumstances arising from the need to fill in behind these employees when they are reassigned to JFSP funded activities, or due to policies of individual organizations. In such cases, the JFSP 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 Principal Investigator or other cooperator on the proposal, at the employee's 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 project budget. The JFSP 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.

**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.

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 _____

Title _____