

Announcement for Proposals, 2007-3

Joint Fire Science Program

U.S. Department of the Interior

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

U.S. Department of Agriculture

Forest Service

Opens June 25, 2007

Closes July 25, 2007

**NOTE TO PROPOSERS:
Please read the AFP carefully.**

This announcement for proposals (AFP) contains three specific tasks under the broad heading of biomass removal:

- 1) Biomass estimators
- 2) Biomass removal case studies
- 3) Economic and financial effects of biomass removal as a fire hazard treatment

A. Proposal Submission

The JFSP program office must receive the proposal package by close of business (5:00 pm MST) July 25, 2007. There will be no exceptions to this closing date.

Please note:

- **Incomplete proposals will not be considered.**
- **Faxed or e-mailed proposals will not be accepted.**
- **Proposals longer than 4 pages (excluding C.V.'s) will not be considered.**

The following items must be included to be considered:

1. One original and **two** stapled unbound 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. Proposals must be submitted without MSWord "Track Changes" artifacts.
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.
4. Signature and complete address including phone number, mailing address, surface mail address (if different than mail address) and e-mail address of Federal Cooperator (if different than principal investigator).
5. Name and complete address including phone number, mailing address, surface mail address (if different than mail address) and e-mail address of Federal Fiscal Representative.
6. Salary Justification(s) are required if funds are requested for salary of permanent or tenured employees.
7. Letters of support are not required. 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.

The proposal must clearly state the primary task statement addressed. Proposals will be judged in the context of this one task statement.

Questions and proposals should be directed to:

John Cissel, Program Manager
Joint Fire Science Program
National Interagency Fire Center
3833 S. Development Ave.
Boise ID 83705
Phone: (208) 387-5349
email: John_Cissel@nifc.blm.gov

B. Areas of Interest

Background

To enhance the value of its work and work products, the Joint Fire Science Program (JFSP) is sponsoring a series of roundtables on key questions in order to better define and focus its lines of work. Results of these roundtables will be topic-specific problem statements that will inform the JFSP Governing Board's funding decisions and influence the scope, magnitude and direction of JFSP activities.

In January of 2007, the JFSP conducted a biomass roundtable with a group of 24 managers and scientists from partner agencies and stakeholder groups. These participants shared their thoughts on issues, problems, and research needs related to biomass removal from the perspective of fuels management. The group considered two primary questions:

- How do you determine when it is the right management decision to cut and remove biomass from a landscape compared to other fuels treatment options?
- Once a decision is made to cut and remove biomass, what challenges do you encounter?

An additional group of over 50 stakeholders provided review and comment on the draft document. Based on the biomass removal problem statement, the JFSP would like to 'take-stock' on three priority issues:

- Biomass estimators
- Inventory and evaluation of biomass removal case studies
- Economic and financial effects of biomass removal fire hazard reduction treatments

These first efforts are focused at synthesis of existing information rather than new research. JFSP plans to invest in these topics in fiscal year 2007, with the potential for additional funding in fiscal year 2008 on additional biomass removal syntheses (e.g., social science issues related to biomass removals) and/or new research in any of these initial tasks. We envision that these projects will be completed in a relatively short timeframe, i.e., **18 months or less**.

Task 1 - Biomass estimators

Current policies in many agencies encourage the removal of biomass to achieve fire hazard reduction goals. Land management agencies often find it difficult to estimate the amount (typically green weights, dry weights, and the relation between them) of non-commercial species and currently unmerchantable parts of commercial species that will be removed during fire hazard reduction treatments. This creates a problem in adequately describing work in planning and contracting for use of the removed materials.

There are scattered bodies of literature, some of which are extensive, about the weight of plants. This information has been collected by researchers in a variety of disciplines over many decades. Some examples are: bioenergy research during the energy crisis of the 1970s, ecological research aimed at biomass allocation to different plant parts (roots, shoots, leaves, etc.) or within plant communities, range forage quality and abundance, and estimation of surface fuel loads.

A successful proposal for this task should describe methods to:

- 1) work with JFSP clients to thoroughly frame the need for this information
- 2) gather and synthesize the available literature
- 3) package the synthesized information in ways that are suitable for use by land management agencies to estimate biomass removals as they plan for and implement fire hazard reduction treatments.

A successful proposal will deliver a set of methods, procedures, protocols, or existing tools that will allow agency personnel to estimate the amount of plant materials they propose to remove during fire hazard reduction treatments.

A successful proposal will recognize the wide variation in ecosystems embodied in lands managed by JFSP partners (BIA, BLM, NPS, USDA-FS, USF&WS) across the nation, and encompass the wide range of mandates that govern management of those lands. As driven by the results of this initial synthesis, the report should include recommendations for new research, validation, or application development if applicable.

The JFSP Program Office will work with the successful Principal Investigator to help identify a small group of managers interested in defining and guiding the synthesis. This group will also help describe ways to summarize the information in forms useful to managers. Your proposal should include travel costs to support these interactions.

Task 2 - Biomass removal case studies

The JFSP seeks proposals that will inventory and evaluate existing and ongoing biomass removal case studies. The purpose of this review is to provide land managers information about the range of approaches used to implement biomass removal treatments and the likely effectiveness of these treatments.

Many biomass removal projects have been implemented, but practitioners are often not aware of the experiences of others, or there is insufficient information available to determine the lessons learned. Land managers need information about the types of activities that are effective in terms of stand or landscape scale fire hazard reduction as well as the type of maintenance that will likely be required. In addition, information about innovative operational practices and techniques to build effective collaborative partnerships with others may help land managers to better plan and implement biomass removal treatments.

Land managers need information in the short-term, often before hard data from field experiments are available. Case studies provide a means to identify innovative approaches and short-term observations concerning project effectiveness that may be useful to land managers.

For this review, we define case studies as projects that have been implemented, or partially implemented, that exemplify some aspect of successful project implementation or provide a useful lesson to others contemplating biomass removal projects. Case studies may involve some level of monitoring or research, or may demonstrate an operational implementation technique or collaborative partnership with others in the community.

Successful proposals will examine the full range of ecosystems across the US where biomass removal treatments are being planned. The inventory should characterize each case study by geographic, ecological, economic, and social parameters that will help other land managers determine if a particular case study is likely to be relevant to them. The inventory should also identify locations or ecosystems where additional case studies would be useful.

Each case study should be evaluated to assess the key aspect(s) of project planning or implementation that led to success or provided a lesson for others. Evaluations should be presented in sufficient detail that land managers can readily determine the relevance of the lesson(s) learned for them.

This task statement is well-suited for a small team of scientists and land managers. Scientists provide skills to assess the strength of the information base to judge treatment effectiveness while land managers may better understand operational factors and collaborative partnerships needed for project success.

Task 3 - Economic and financial effects of biomass removal as a fire hazard treatment

JFSP Biomass Roundtable participants posed a range of questions about the finances and economics of biomass removal treatments. These questions covered what are generally considered financial issues, i.e., those that involve cash flow and budgeting, as well as those that are generally considered economic issues, such as tradeoffs over time among different options. The following four questions typify the areas identified by roundtable participants:

- How can I conduct a thorough financial or economic analysis of costs of different treatments including avoided costs?
- What are the financial and economic implications of various biomass utilization opportunities and product choices?
- Where on the landscape is biomass removal most financially viable?
- How do I determine cost effectiveness of strategically placed treatments, versus randomly placed treatments, versus artificially constrained treatments?

It is important for applicants to realize that these questions are asked from the perspective of federal land managers not from that of local businesses or community development groups.

Decision makers and planners in these agencies want easy-to-use methods to evaluate the costs and revenues of implementing fire hazard reduction treatments that involve the removal of biomass. They want methods to compare costs with treatments that do not remove biomass. In many cases they are concerned about avoided costs such as the potential for escaped fire or the impacts of smoke on the local community. They need better ways to understand the product options that are available in their local area and what this means in terms of opportunities to dispose of different types of biomass.

Decision makers and planners want to know how they can look across the landscape they manage and evaluate the places where biomass removal and sale might be financially viable, or at least reduce the costs of treatments as opposed to places where it might actually increase the costs of treatments. Finally, they are interested in understanding how strategic placement of

treatments across the landscape to reduce fire spread or fire effects might influence the financial viability of large scale fire hazard reduction programs that involve biomass removal.

A successful proposal will recognize the wide variation in ecosystems embodied in lands managed by JFSP partners (BIA, BLM, NPS, USDA-FS, USF&WS) across the nation, and encompass the wide range of mandates that govern management of those lands. As driven by the results of this initial synthesis, the report should include recommendations for new research, validation, or application development if applicable.

This Task includes two stages: 1) work with a select group of managers to more completely define their needs, and 2) find and summarize the existing information in ways that address the needs of the management group. These stages may require very different skills so proposals that clearly lay out the steps needed to fully define managers' needs, locate and evaluate the existing data or protocols, and create methods to use those data and protocols to answer the questions posed above will be given priority.

The Program Office will work with the successful PI to establish an initial contact list for Stage 1, but we anticipate that the PI will expand this list as necessary to ensure that the needs of land management agencies are adequately covered. Your proposal should include travel costs to support these interactions.

Successful completion of this project will result in a set of methods, procedures, protocols, or tools that will allow agency personnel to answer the four questions listed above as clarified by the agency participants.

C. Format Overview

The proposal should specify methodologies, deliverables, and proposed mechanisms for interactions with land managers in sufficient detail to allow an informed reader to assess the proposal's validity in addressing the task statements.

The proposal text exclusive of curriculum vitae, must be limited to **four pages**. Principal Investigator Curriculum Vitae should be no longer than two pages; Co-PI and collaborator Curriculum Vitae should not be longer than one page. Proposals must use at least 11-point font.

All proposals must be submitted in the attached format (**Appendix A**) to be considered.

Proposals must be submitted in clear text without MSWord "Track Changes" artifacts.

Successful proposals will be completed in a relatively short timeframe, i.e., 18 months or less.

Title Page

The attached template (**Appendix A**) must be used for the proposal. The information required to be completed on the title page is:

- Project title (Title must be limited to **15 words or less**)
- **Announcement for proposals and task statement you are responding to**
- Principal Investigator: Include full mail and e-mail address as well as phone and fax

- number
- Federal Cooperator: Include full mail and e-mail address as well as phone and fax number
- Federal Fiscal Representative: Include full mail and e-mail address as well as phone and fax number
- Publishing outlet
- Total funding requested from the Joint Fire Science Program
- Total value of in-kind and financial contributions
- Signature of Principal Investigator
- Signature of Federal Cooperator (if different than PI)

I. Methods

Briefly describe your approach to conducting this synthesis.

II. Data sources

What sources of information are available to support a synthesis? Seminal publications and other highly referenced scientific papers should be part of the collection of information.

III. Interaction with land managers

Please describe activities you would conduct to solicit manager's input to help refine the scope of your work, to help identify and describe management implications, and to share the outcome of your assessment. Consider the use of a management advisor to strengthen the link to land managers.

IV. General outline

Please list the major section headings you anticipate using in your manuscript.

V. Schedule

Please list the dates for major phases or milestones of your work.

VI. Deliverables

Please list the products you plan to produce. Multimedia DVDs are encouraged.

VII. Budget

Proposals must use the format found in **Appendix A** which must be included in the body of the proposal.

- Contributed costs and the source of those costs should be included in the budget.
- Annual and total costs should be specified.

The Governing Board of the Joint Fire Science Program reserves the right to negotiate budget amounts and deliverables with proposing organizations.

D. 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 **two** stapled unbound 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. Proposals must be submitted without MSWord “Track Changes” artifacts.
- 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.
- Signature and complete address including mailing address, surface mail address (if different than mail address), phone numbers and e-mail address of the federal cooperator (if different than the principal investigator).
- Name and complete address including mailing address, surface mail address (if different than mail address), phone numbers and e-mail address of the federal fiscal representative.
- Proposal must use the template provided in this AFP to be considered.
- Proposals longer than 4 pages (excluding C.V.’s and salary justification (if needed)) will not be considered

E. Review and Evaluation

Proposals will be reviewed by JFSP Program Office and Governing Board. All proposals will be considered using the following criteria:

Proposals will be reviewed for:

- Relevancy
- Products, Delivery and Science Application

Relevancy:

- Importance of the proposal to land managers.
- Does the proposal directly address the AFP and task statement?

Products, Deliverables and Science Application

- Are the products useful for land managers?
- How will the product be delivered?

H. Definitions

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

Federal Fiscal Representative: Employee of the federal agency sponsoring the proposal who will be responsible for the review and approval of the proposed project's budget. This individual may also serve as the administrative and/or fiscal point of contact for the proposed project if funding is awarded. This individual is typically an Administrative Officer or Budget Analyst.

Principal Investigator (or PI): The individual identified in a proposal who is the research lead for the project. This individual is responsible for coordinating all research related activities and will be the primary science contact for the project. The PI is responsible for communicating and coordinating with co-PIs and others on the research team.

Federal Cooperator: This individual must be a Federal Employee and is responsible for coordinating with the principal investigator and the grants and agreements staff on administrative activities for this project. The federal cooperator will be one of the primary contacts for the project and should stay informed and involved in project activities.

Indirect Costs: A portion of overall fixed administrative and business costs necessary to conduct the project (e.g., janitorial, phone, and clerical services). These are normally charged as a set percentage. 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. The Board is responsible for program strategy, funding decisions, and overall direction of the program.

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.

APPENDIX A – PROPOSAL TEMPLATE

Proposals must use the following template to be considered.

JFSP Synthesis Proposal

Synthesis Title: (15 words or less)	
Task statement this proposal is responding to:	
Principal Investigator:	<Name>
Affiliation:	<Organization/Unit/Institution>
Address:	<Mailing Address>
Phone:	<000-000-0000>
Email:	<smokey@bear.com>
Federal Cooperator:	<Name> <Affiliation> <Mailing Address> Email: <woods@owl.com> Phone: <000-000-0000> Fax: <000-000-0000>
Co-Principal Investigators - name and affiliation (if applicable)	
Federal Fiscal Representative	<Name> <Affiliation> <Mailing Address> Email: <woods@owl.com> Phone: <000-000-0000> Fax: <000-000-0000>
Publishing outlet:	
Funding Requested:	\$
Total Value of In-Kind Contributions:	\$
Signature of PI: <Signature>	<Date>
Signature of Federal Cooperator: <Signature> (if different than PI)	<Date>

I. Methods

Briefly describe your approach to conducting this synthesis.

II. Data sources

What sources of information are available to support a synthesis? Seminal publications and other highly referenced scientific papers should be part of the collection of information.

III. Interaction with land managers

Please describe activities you would conduct to solicit manager's input to help refine the scope of your work, to help identify and describe management implications, and to share the outcome of your assessment. Consider the use of a management advisor to strengthen the link to land managers.

IV. General outline

Please list the major section headings you anticipate using in your manuscript.

V. Schedule

Please list the dates for major phases or milestones of your work.

VI. Deliverables

Please list the products you plan to produce. Multimedia DVDs are encouraged.

VII. Budget

Proposal Budget Summary:

Budget Item	200x		TOTAL
	Requested	Contributed	
Labor:			
Travel:			
Materials and Supplies:			
Publishing costs			
Other			
Total Direct Costs			
Indirect Costs: XX% - all costs			
Total Contributed Funding all years		xxxxxxx	xxxxxxx
Total Requested Funding all years	xxxxx		xxxxxxx

NOTES:

- Please keep your response to the above topics brief
- The JFSP Program Office must review and comment on a complete draft of your manuscript
- JFSP may want to include design elements in the cover of your publication that identifies it as a JFSP synthesis product. This can be negotiated depending on the needs of your publisher.
- While there is no specified template for writing synthesis documents, authors must write for the management community. Photographs supporting the text are strongly encouraged.
- Consider using science writer and/or editorial support staff in your proposal.

APPENDIX B – 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 _____