

MEMORANDUM OF UNDERSTANDING:
SCIENCE IN SUPPORT OF FIRE MANAGEMENT

Between the

BUREAU OF LAND MANAGEMENT

and the

U.S. GEOLOGICAL SURVEY

of the

UNITED STATES DEPARTMENT OF THE INTERIOR

I. Introduction

Fire management in the Nation's wild lands is a matter of continuing concern to the American public and to the Bureau of Land Management (BLM) as a land management agency of the Department of the Interior (DOI). For nearly 100 years, Federal policy has been to suppress all wildfires, regardless of origin. An increasing awareness of the need for fire as a natural agent in the management of ecosystems, coupled with agency activities related to suppression of wildfires in the wild land-urban interface, lead to a need for a better scientific understanding of the role of fire as a natural agent, impacts of fire on ecosystems, natural hazards that can result from wildfires in selected environments, and appropriateness and usefulness of rehabilitation and restoration techniques for burned areas. Although considerable progress has been made in fire management planning, fire use, fire suppression, and fire research by the land management agencies, significantly more progress is possible through additional scientific research of natural processes related to fire and the impacts of human efforts to assist or control those processes.

This Memorandum of Understanding (MOU) establishes the framework for coordination and cooperation between the BLM and the United States Geological Survey (USGS) (collectively "Bureaus") on science in support of fire management. The purpose of this MOU is to provide for collaborative and coordinated fire-science efforts between the two Bureaus to avoid duplication of effort, to ensure that fire-science research provides relevant and applicable information, and to ensure information useful to the programs of both agencies is shared in a timely manner. These efforts will support the National Fire Plan, the Joint Fire Science Program, and activities of the National Wildfire Coordinating Group. A major function of this MOU is to provide a means whereby the two Bureaus may clarify their roles and responsibilities in the national fire science agenda. This MOU also delineates potential mechanisms the Bureaus may pursue in complementing each other's missions and supporting national fire science requirements.

II. Definitions

For the purposes of this MOU, and for all interagency agreements pursuant to this document, the following definitions of terms shall apply:

"Interagency agreement" means an agreement or ordering document between Federal agencies in which one agency transfers its appropriated funds to another agency for the purpose of obtaining products or services.

"Fire science" means scientific research and analysis contributing to understanding fire processes and evaluating needs of fire management and suppression.

"Urban-urban interface" means those locations where humans and their infrastructure development meet or intermix with wild land fuel.

"Fire management" means activities undertaken for the protection of wild lands from fire and the use of prescribed fire to meet land management objectives.

"Fire suppression" means the work of extinguishing or confining a fire, beginning with its discovery.

"Post-fire rehabilitation" means the short- and long-term (no greater than 3 years) activities necessary to repair damage or disturbance caused by wildfire or the wildfire suppression activity.

III. Scope

This MOU provides general terms and conditions for coordination and cooperation between the BLM and the USGS on scientific research and analysis pertaining to fire management and on sharing information regarding fire-management applications. Cooperation and coordination pertaining to fire management applications is encouraged at the national, regional, and local levels, as needed, to ensure that the highest priority scientific information needs of the BLM are addressed. Areas of scientific research and analysis and information sharing may include, but are not limited to:

- The role of fire as a natural agent and disturbance process; Fire history of selected area;
- The impact of fire on natural processes;
- The impact of fire on watersheds and water quality;
- The impact of fire on soils and slope stability;
- The impact of fire and fire suppression chemicals on flora and fauna and aquatic and terrestrial habitats;
- The impact of fire on threatened and endangered species;
- The role of fire in managing invasive species;
- The potential for post-fire flood and debris-flow hazards;
- The impact of fire on cultural and historical resources; Fire fuels mapping and vegetation mapping;
- Climate and weather models for planning fuels treatments;
- The effectiveness of post-fire rehabilitation techniques;
- The effectiveness of post-fire restoration policies and techniques;

- The effectiveness of fire suppression techniques; Firefighting safety and security techniques, and;
- The psychology and social science of fire management.

IV. Agreements/Responsibilities

The BLM and the USGS have interests in the quality and quantity of scientific information available for decisionmaking regarding public lands with respect to fire management, including fostering a better understanding of the influences of fire on the physical environment and of the effectiveness of fire suppression and post-fire treatment methods. Increasing such scientific knowledge provides the land managers with an enhanced ability to:

- A. Maintain healthy ecosystems;
- B. Develop fire management plans and mitigate deleterious effects of wild land fires; especially post-fire hazards such as debris flows and floods; and
- C. Facilitate the integration of sound scientific information about fire ecology into the interdisciplinary planning and decisionmaking processes of Federal land management.

As the science bureau of the DOI, the scientific programs of the USGS provide important scientific information about earth surface processes, including wild land fire, which can affect land and resource management policies and practices of the land management agencies, such as the BLM. To ensure the effectiveness of its fire program activities, the BLM conducts studies and analyses of selected fire suppression techniques and post-fire treatment methods. The BLM and the USGS agree to coordinate and communicate to the extent possible regarding their programs of fire science to address information needs related to fire management. Mutual responsibilities as part of this coordination may include:

- Coordinating related programs at appropriate operational levels;
- Cooperating to the extent allowed under existing law in the operational conduct of related programs;
- Exchanging data, information, and findings; and
- Exchanging budget information during the budget-preparation stages and sharing information with budget implications whenever appropriate in order to assure efficient use of Federal funds and facilitate planning for highest priority needs.

V. Implementation

The BLM and the USGS agree to meet annually or more often as needed to:

- Share priority needs;
- Provide updates on science projects, information application, and program developments and policies; and
- Facilitate the gathering of scientific information in a way that is efficient, coordinated, and reduces redundancy.

Each Bureau, on a rotational basis, will host the annual meeting, with the first one hosted by the USGS.

The agencies anticipate developing future interagency agreements under the Economy Act that support the goals of this MOU. As appropriate, interagency agreements may be developed for, but not be limited to, the following purposes:

- Information and on-site support for Burned Area Emergency Response (BAER) teams;
- Information and on-site support for fire suppression activities, post-fire assessment, rehabilitation and restoration activities;
- Information to support rangeland ecology and prescribed fire activities, and geospatial information systems support for fire management, fire suppression, and post-fire activities.

Future Interagency Agreements in support of the goals of this MOU will conform with provisions of the BLM and the USGS Manual sections pertaining to Interagency Agreements. The manuals call for the inclusion of information such as:

- Bureau responsibilities;
- Description of products or services to be supplied;
- Production or delivery schedules;
- Standards and technical specifications, as necessary;
- Duration of the plans or projects;
- Description of financial arrangements; and
- Programmatic or technical points of contact.

This MOU does not preclude the parties from developing independent agreements with other agencies or entities to meet agency-specific fire science needs. However, the BLM and the USGS should share the subject matter of the agreements with each other in advance and shall report at the annual meeting on the progress and results of independent research efforts to ensure the timely sharing of information that may benefit research ongoing under this MOU.

VI. Financial Arrangements

This MOU is neither a fiscal nor funds obligation document. This MOU does not commit the BLM or the USGS to enter into any specific interagency agreements for the purposes of this MOU. Projects involving cost sharing between the two Bureaus, including billing procedures may be included in future interagency agreements. Both parties shall ensure that interagency agreements drafted pursuant to this MOU shall comply with the provisions of the Economy Act.

This MOU does not restrict the BLM and the USGS from participating in similar fire-science arrangements with other public or private agencies, organizations, or individuals. Neither does this MOU require the BLM and the USGS to expend appropriations or enter into any contracts or other obligations.

VII. Terms of Understanding

This MOU will take effect on the date of the last signature and remain in effect for 5 years from that date.

The BLM and the USGS will conduct a formal review of this MOU at least every 5 years. Renewal of this MOU shall be contingent upon a formal review by the BLM and the USGS and the signing of a renewal statement.

Either party may initiate amendments and modifications to this MOU. The amendments or modifications will take effect on the date of the last signature on the documentation of the amendment or modification.

Either party may terminate their participation in this MOU by 30 days written notice to the other.

Authorities and Related Laws

Protection Act of 1922 (16 U.S.C. 594).

Economy Act of June 30, 1932 (47 Stat. 417; 31 U.S.C. 1535), as amended.

Reciprocal Fire Protection Act of May 27, 1955 (69 Stat. 66; 42 U.S.C. 1856a).

Disaster Relief Act of 1974 (42 U.S.C. 1521).

Federal Land Policy and Management Act of 1976 (43 U.S.C. 1702).

Cooperative Forestry Assistance Act of 1978 (P.L. 95-313, 92 Stat, 365 as amended; 16 U.S.C. 2101 (note), 2101-2103, 2103a, 2103b, 2104-2105).

IX. Publications and Release of Information

It is the intent of the Bureaus that data and information obtained as a result of future interagency agreements pursuant to this MOU will be available for use by the Bureaus in connection with their ongoing programs. This includes publication of results, except in cases prohibited by proprietary or security considerations.

Publications resulting from cooperative fire-science efforts may be prepared by either party, or jointly, provided that both Bureaus have an opportunity to review manuscripts prior to publication. To the extent possible, decisions involving authorship, review of reports, and other conditions and circumstances will be addressed during the preparation of agreements pursuant to this MOU.

Should differences of scientific viewpoint occur, an effort would be made to reconcile them. However, the parties understand that each agency may publish separately the data, information, and interpretations that may be developed as part of future interagency agreements pursuant to this MOU provided appropriate responsibility and attribution are acknowledged.

The BLM and the USGS agree that it is mutually beneficial to acknowledge the work of each agency. Accordingly, each agency shall make every effort to assure the appropriate citation and attribution for all work documents including technical reports, data, publicity, and public information products that may be prepared as part of future interagency agreements pursuant to this MOU.

Any commitment to preserve the confidentiality of information is subject to applicable United States laws and regulations and should include a statement that information may be required to be released under laws such as the Freedom of Information Act.

X. Authorized Representatives

The following individuals shall represent their respective Bureaus for all matters related to the activities conducted under this MOU:

For the Bureau of Land Management: Director, National Office of Fire and Aviation
National Interagency Fire Center
Boise, Idaho

For the U.S. Geological Survey: Coordinator, Bureau Fire-Science Program
U.S. Geological Survey
Reston, Virginia

XI. Provisions

All signatory parties intend that this MOU and any future agreements referencing it will comply with: the nondiscrimination provisions contained in Title VI and VII of the Civil Rights Act of 1964, as amended; the Civil Rights Restoration Act of 1987 (Public Law 100-259); and other nondiscrimination statutes, such as, Section 504 of the Rehabilitation Act of 1973, Title IX of the Education amendments of 1972, and the Age Discrimination Act of 1975. Regulations of the Secretary of the Interior (43CFR 17) provide that no person in the United States shall, on the grounds of race, color, national origin, age, or disability be excluded from participating in, be denied the benefits of, or be otherwise subject to discrimination under any program or activity receiving Federal financial assistance from the DOI, or any agency thereof; and this MOU and any agreements will be in accordance with such regulations. Furthermore, this MOU shall comply with Executive Order 13087, prohibiting discrimination on the basis of sexual orientation.

XII. Approval

Signature on File

7/12/01

Nina Hatfield
Acting Director, Bureau of Land Management

Signature on File

7/2/01

Charles G. Groat
Director, U.S. Geological Survey