

Application of Science Program

The Application of Science Program was begun in fiscal year 2003 with the appropriation of \$1,000,000. This program has four focus areas: (1) Improved Access to BLM's Natural Resource Information, (2) Partnerships in Science, (3) Public Lands as Laboratories, and (4) Sharing of Knowledge.

General Guidelines:

Proposers are encouraged to partner with universities, non-governmental organizations, and other research institutions. Funding will be awarded directly to the BLM offices that will take full responsibility for implementing proposed work through the partnerships described in the proposal. Personnel are encouraged to work across office, State, and regional boundaries to develop integrated science approaches when appropriate to the project's needs.

Proposals should be tied to one of the four focus areas identified above which are also the basis of the evaluation criteria below. Within the proposal, the author should identify the objective, timeframes, budget, and deliverables; one of which must be a technology transfer component. Preparers are encouraged to closely estimate the actual cost of the proposal, as reviewers will evaluate the cost-effectiveness of the proposed work. Each proposal must designate a BLM project lead and the manager to whom he/she reports. Each proposal should describe external partners, their commitments, and their roles in the proposed initiative.

Proposals should be entered in the Budget Planning System by the most appropriate Field Office, State Office, Center Assistant Director's or the Headquarter's Office. State and Center Directors can submit up to ten proposals. These should be clearly ranked: 1 being the highest priority and 5 being the lowest priority.

Project Review:

A project review team composed of the Director of the National Science and Technology Center and representatives from State and Field offices, will rank projects from among those advanced by the States in the Budget Planning System. Proposals will be considered for each of the four focus areas and evaluated based on their responsiveness to the intended purpose of the area. The focus areas are:

1. Improved Access to BLM's Natural Resource Information: BLM scientists and others have collected a great amount of data and information, as well as numerous observations from the public lands. Under this initiative, resource managers would be provided better access to information. Automating information and applying uniform information management standards are the first steps in making a wealth of information available to scientists and managers.

Example of possible projects include:

- a. Locating and retrieving stored Bureau data and information and updating, standardizing, and automating the data.
- b. Compiling historical and current information in similar formats to enable the detection of changed conditions.
- c. Synthesizing, interpreting, and distributing relevant scientific information from all sources to help ensure that existing knowledge can be employed and wasteful duplication of data avoided.
- d. Developing more uniform multi-jurisdictional data bases to enable landscape-level approaches to science and decision making.

2. Partnerships in Science: The BLM must rely heavily on scientific information in carrying out its mission; therefore, the BLM will partner with various science providers to meet specific science needs of the public lands. These needs include improving inventory and monitoring protocols, addressing specific research topics, and acquiring and analyzing spatial data. As the U.S. Geological Survey is the designated science bureau in the Department of the Interior, it will be the primary partner in addressing BLM's science needs.

Examples of possible projects include:

- a. Projects that help managers understand changes in the landscape over time.
- b. Developing inventory and monitoring protocols.
- c. Acquiring and analyzing spatial data.
- d. Projects that help managers understand the functions of various natural resource systems.

3. Public Lands as Laboratories: The BLM will encourage the use of public lands for studying natural resource issues. Public lands managed by the BLM provide a tremendous and largely untapped opportunity for scientific investigation, observation, and documentation of ecological processes. By making the 264 million acres of public lands more widely available to scientists, the BLM will benefit from scientific study directly related to land management issues. Knowledge acquired from scientific studies on BLM lands will be particularly relevant for application to the needs of BLM managers and the decisions they make.

Examples of projects may include:

- a. Developing reference areas to assist the Bureau and others in understanding the range of natural variability and studying the effects of disturbances on natural systems.
- b. Identifying and studying long-term research sites on public lands in partnership with academic institutions and others to promote multi-year studies.
- c. The testing of potential “best management practices” to determine which one(s) has broad application to the Bureau.

4. Sharing of Knowledge: Public land management will benefit from the sharing of knowledge among State and Federal land managers, other land management organizations and providers of scientific information, Federal and private resource management practitioners, educators, and the public at large and within the BLM itself. The Application of Science program invites and facilitates dialogue on science-based “best management practices” for the public lands.

Examples of projects may include:

- a. Sponsoring science-based meetings, workshops, and professional conferences on natural resource management issues to enable the exchange of ideas and current knowledge.
- b. Creating “best management practices” demonstration areas to provide opportunities for field personnel, cooperators, and the public to observe on-the-ground actions and results and to learn how these practices can be applied within their own areas of influence.
- c. Inviting science-based dialogue and learning through targeted educational programs to increase the understanding and support of Bureau management actions and nurture the next generation of scientists and educators.

Project Selection Criteria:

Projects will be ranked highest that best demonstrate a combination of:

1. Scientific or technological approach that addresses the needs associated with the focus area.
2. Delivery of useful projects.
3. Reasonableness of funding estimates for the scope of work and a high return on the investment.

4. Effectiveness of the proposal in building partnerships with other science organizations.
5. Attention to local, regional, or national priority needs.
6. Integration of the proposal within the Bureau and with other agencies or interested parties.