



National Conservation Lands Science Plan

National Monuments, National Conservation Areas & Similar Designations

SECTION 1: INTRODUCTION AND SCIENTIFIC MISSION

Purpose: Introduce the plan and defining the scientific mission of the unit

- **Purpose of National Conservation Lands science plans**
 - Introduce National Conservation Lands
 - Outline objectives of plan
 - Discuss the plan as a living document (e.g. revised and updated every 3-5 years)
 - Include a definition of science (see *Advancing Science in the BLM: An Implementation Strategy*; *National Conservation Lands Science Strategy*)
- **Unit and geographic area description**
 - Describe unit's location and include a map
 - Discuss the resources, objects, and values for which the unit was designated, including reference to the designating language
 - Discuss the unit's resource management plan
- **Scientific mission of the unit**
 - E.g. science to inform management
 - E.g. science to understand or protect the resources, objects, and values for which the unit was designated

SECTION 2: SCIENTIFIC BACKGROUND OF THE NATIONAL CONSERVATION LANDS UNIT

Purpose: Provide a clear, concise, up-to-date summary of existing research and scientific information on the National Conservation Lands unit

- **Provide the current scientific baseline of the unit**
 - Be brief, with a minimalist summary of findings and several citations to relevant reports or articles, similar to the background of a scientific journal article

- May be useful to subdivide this section by topic area (e.g. wildlife, vegetation, sociocultural)
- Include distinct discussion of the resources, objects, and values for which the unit was designated and describe the scientific understanding we have of these resources, objects, and values (e.g. status, trend, other research results)
- Include discussion of the understanding gained from landscape-scale assessments that include the National Conservation Lands unit (e.g. Rapid Ecoregional Assessments). For example, what do landscape-scale assessments tells us about:
 - The integrity of the unit
 - The threats to the unit
 - The role that the National Conservation Lands unit plays in the broader landscape (e.g. as a wildlife corridor or refuge)
- Identify ongoing inventory and monitoring efforts (e.g. land health evaluations, Assessment, Inventory, and Monitoring (AIM) Strategy implementation)

SECTION 3: MANAGEMENT DECISIONS AND SCIENCE NEEDS

Purpose: Identify and prioritize management questions and science needs

- Describe the management decisions that the BLM expects to make in the next five-plus years for the unit
- Describe the scientific knowledge needed to support those management decisions
- Of the scientific knowledge needed, identify which knowledge is already accessible and which knowledge needs more scientific effort. The latter are the unit's science needs
- Science needs should:
 - Be kept up-to-date and responsive to changing priorities
 - Consider both local and landscape-level issues
 - Build from information provided in Section 2
- Prioritize the science needs
 - Describe the prioritization criteria

- Acknowledge that science needs can change in priority, when appropriate
- Display the prioritized science needs in a concise and clear format, accessible to both internal and external audiences

SECTION 4: MEETING SCIENCE NEEDS

Purpose: Develop a clear plan to meet priority science needs

- Internal organization
 - Establish a point-of-contact for scientific inquiries, both from internal and external sources (e.g. a science coordinator)
 - Communicate the contact information for this point-of-contact
 - Define the roles and responsibilities of the point-of-contact
 - Define a process for requesting and utilizing available BLM funds for meeting science needs
- Collaboration and partners
 - Develop a plan for outreach to science partners, which includes identifying a list of past and potential future partners such as universities, CESUs, NGOs, and friends groups. One aspect of this plan should be to post the science plan on the unit's website
 - Externally initiated and funded science should be encouraged even if it does not meet a priority science need, as long as it is consistent with the unit's designating language and resource management plan

SECTION 5: SCIENCE PROTOCOLS

Purpose: Develop clear and consistent science protocols

- Develop general science guidelines
 - E.g. science should comply with relevant laws and regulations

- E.g. encourage adoption of standardized data collection methods (e.g. AIM Strategy protocols)
- Develop a science authorization and tracking process
 - Avoid redundancy or excessive complication with a science authorization and tracking process
 - Ensure that the process is consistent and transparent
 - Adopt a web-based and geospatial approach, if possible
 - Establish clear reporting requirements for science projects on the unit, including AIM projects (e.g. an annual report, a manager's summary or research results, data sharing, copies of publications, etc.)

SECTION 6: ORGANIZATION AND COMMUNICATION OF COMPLETED SCIENCE

Purpose: Create a system for organizing and communicating completed scientific efforts

- Internal organization of science
 - Science reports should be organized and accessible within the unit's file system
 - Sensitive data should be redacted, if appropriate
 - When feasible, the unit should work with partners to write synthesis reports on scientific findings
- Contribution to broader BLM organization of science
 - Science reports should be available for inclusion in a national database
- Communication of scientific results to the public
 - The unit should plan to make scientific results available to the public
 - The unit should plan to interpret to the public scientific projects and/or results

SECTION 7: INTEGRATING SCIENCE INTO MANAGEMENT

Purpose: Create a process to make relevant science easily available during the decision-making process

- Ensure decision-makers have access to relevant science and are familiar with the format, applicability, and limitations
- Take all opportunities to share science results in a variety of mediums (e.g. email newsletters, presentations, seminars)
- The process of using science in decision-making should provide an opportunity to identify further science needs
- The unit science point-of-contact should strive to communicate scientific results with other staff

SECTION 8: SCIENCE PLAN REVIEW AND APPROVAL

Purpose: Ensure a quality product that has been well-reviewed

- Reviewers can include all appropriate parties, both internal and external to the BLM
- Signers on the Science Plan should include, but are not limited to:
 - Unit Manager, Field Manager, State National Conservation Lands Lead, National Conservation Lands Science Advisor, National Conservation Lands Division Chief

SECTION 9: BIBLIOGRAPHY

- A bibliography for citations from the science plan
- A bibliographic list of completed science reports from the units

SECTION 10: UNIT'S LEGISLATION

- *Include a copy of the unit's designating legislation*

