



APPENDICES



APPENDIX A

THE OMNIBUS PUBLIC LANDS
MANAGEMENT ACT OF 2009

Appendix A

THE OMNIBUS PUBLIC LANDS MANAGEMENT ACT 2009

Subtitle B—Prehistoric Trackways National Monument

SEC. 2101. FINDINGS.

Congress finds that—

(1) in 1987, a major deposit of Paleozoic Era fossilized footprint megatrackways was discovered in the Robledo Mountains in southern New Mexico;

(2) the trackways contain footprints of numerous amphibians, reptiles, and insects (including previously unknown species), plants, and petrified wood dating back approximately 280,000,000 years, which collectively provide new opportunities to understand animal behaviors and environments from a time predating the dinosaurs;

(3) title III of Public Law 101–578 (104 Stat. 2860)—

(A) provided interim protection for the site at which the trackways were discovered; and

(B) directed the Secretary of the Interior to—

(i) prepare a study assessing the significance of the site; and

(ii) based on the study, provide recommendations for protection of the paleontological resources at the site;

(4) the Bureau of Land Management completed the Paleozoic Trackways Scientific Study Report in 1994, which characterized the site as containing “the most scientifically significant Early Permian tracksites” in the world;

(5) despite the conclusion of the study and the recommendations for protection, the site remains unprotected and many irreplaceable trackways specimens have been lost to vandalism or theft; and

(6) designation of the trackways site as a National Monument would protect the unique fossil resources for present and future generations while allowing for public education and continued scientific research opportunities.

SEC. 2102. DEFINITIONS.

In this subtitle:

(1) **MONUMENT.** — The term “Monument” means the Prehistoric Trackways National Monument established by section 2103(a).

(2) **PUBLIC LAND.** — The term “public land” has the meaning given the term “public lands” in section 103 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1702).

(3) **SECRETARY.** — The term “Secretary” means the Secretary of the Interior.

SEC. 2103. ESTABLISHMENT.

(a) **IN GENERAL.**—In order to conserve, protect, and enhance the unique and nationally important paleontological, scientific, educational, scenic, and recreational resources and values of the public land described in subsection (b), there is established the Prehistoric Trackways National Monument in the State of New Mexico.

(b) **DESCRIPTION OF LAND.**—The Monument shall consist of approximately 5,280 acres of public land in Doña Ana County, New Mexico, as generally depicted on the map entitled “Prehistoric Trackways National Monument” and dated December 17, 2008.

(c) **MAP; LEGAL DESCRIPTION.**—

(1) **IN GENERAL.**—As soon as practicable after the date of enactment of this Act, the Secretary shall prepare and submit to Congress an official map and legal description of the Monument.

(2) **CORRECTIONS.**—The map and legal description submitted under paragraph (1) shall have the same force and effect as if included in this subtitle, except that the Secretary may correct any clerical or typographical errors in the legal description and the map.

(3) **CONFLICT BETWEEN MAP AND LEGAL DESCRIPTION.**—In the case of a conflict between the map and the legal description, the map shall control.

(4) **AVAILABILITY OF MAP AND LEGAL DESCRIPTION.**—Copies of the map and legal description shall be on file and available for public inspection in the appropriate offices of the Bureau of Land Management.

(d) **MINOR BOUNDARY ADJUSTMENTS.**—If additional paleontological resources are discovered on public land adjacent to the Monument after the date of enactment of this Act, the Secretary may make minor boundary adjustments to the Monument to include the resources in the Monument.

SEC. 2104. ADMINISTRATION.

(a) **MANAGEMENT.**—

(1) **IN GENERAL.**—The Secretary shall manage the Monument—

(A) in a manner that conserves, protects, and enhances the resources and values of the Monument, including the resources and values described in section 2103(a); and

(B) in accordance with—

- (i) this subtitle;
- (ii) the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.); and
- (iii) other applicable laws.

(2) **NATIONAL LANDSCAPE CONSERVATION SYSTEM.**—The Monument shall be managed as a component of the National Landscape Conservation System.

(b) **MANAGEMENT PLAN.**—

(1) **IN GENERAL.**—Not later than 3 years after the date of enactment of this Act, the Secretary shall develop a comprehensive management plan for the long-term protection and management of the Monument.

(2) COMPONENTS.—The management plan under paragraph (1)—

(A) shall—

(i) describe the appropriate uses and management of the Monument, consistent with the provisions of this subtitle; and

(ii) allow for continued scientific research at the Monument during the development of the management plan; and

(B) may—

(i) incorporate any appropriate decisions contained in any current management or activity plan for the land described in section 2103(b); and

(ii) use information developed in studies of any land within or adjacent to the Monument that were conducted before the date of enactment of this Act.

(c) AUTHORIZED USES.—The Secretary shall only allow uses of the Monument that the Secretary determines would further the purposes for which the Monument has been established.

(d) INTERPRETATION, EDUCATION, AND SCIENTIFIC RESEARCH.—

(1) IN GENERAL.—The Secretary shall provide for public interpretation of, and education and scientific research on, the paleontological resources of the Monument, with priority given to exhibiting and curating the resources in Doña Ana County, New Mexico.

(2) COOPERATIVE AGREEMENTS.—The Secretary may enter into cooperative agreements with appropriate public entities to carry out paragraph (1).

(e) SPECIAL MANAGEMENT AREAS.—

(1) IN GENERAL.—The establishment of the Monument shall not change the management status of any area within the boundary of the Monument that is—

(A) designated as a wilderness study area and managed in accordance with section 603(c) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1782(c)); or

(B) managed as an area of critical environment concern.

(2) CONFLICT OF LAWS.—If there is a conflict between the laws applicable to the areas described in paragraph (1) and this subtitle, the more restrictive provision shall control.

(f) MOTORIZED VEHICLES.—

(1) IN GENERAL.—Except as needed for administrative purposes or to respond to an emergency, the use of motorized vehicles in the Monument shall be allowed only on roads and trails designated for use by motorized vehicles under the management plan prepared under subsection (b).

(2) PERMITTED EVENTS.—The Secretary may issue permits for special recreation events involving motorized vehicles within the boundaries of the Monument—

(A) to the extent the events do not harm paleontological resources; and

(B) subject to any terms and conditions that the Secretary determines to be necessary.

(g) WITHDRAWALS.—Subject to valid existing rights, any Federal land within the Monument and any land or interest in land that is acquired by the United States for inclusion in the Monument after the date of enactment of this Act are withdrawn from—

- (1) entry, appropriation, or disposal under the public land laws;
- (2) location, entry, and patent under the mining laws; and
- (3) operation of the mineral leasing laws, geothermal leasing laws, and minerals materials laws.

(h) **GRAZING.**—The Secretary may allow grazing to continue in any area of the Monument in which grazing is allowed before the date of enactment of this Act, subject to applicable laws (including regulations).

(i) **WATER RIGHTS.**—Nothing in this subtitle constitutes an express or implied reservation by the United States of any water or water rights with respect to the Monument.

SEC. 2105. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated such sums as are necessary to carry out this Act.



APPENDIX B

ACTS OF AUTHORITY AND MANDATES
FOR THE BLM

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ACTS OF AUTHORITY AND MANDATES FOR THE BLM

A number of Federal statutes have been enacted over time to establish and define the authority of the Bureau of Land Management (BLM) to make decisions on the management and use of resources on public land. Following is a list of major legal authorities relevant to BLM land use planning.

Federal Land Policy and Management Act (FLPMA) of 1976, as amended (43 United States Code [U.S.C.] 1701, et seq.) provides the authority for BLM's land use planning. This statute and its implementing regulations define principles for the management of public land and its resources. This Act directs the Secretary of the Interior to develop, maintain, and when appropriate, revise land use plans that provide for the use of public land managed on the basis of multiple-use and sustained yield unless otherwise specified by law. Through FLPMA, BLM is responsible for the balanced management of the public land and resources and their various values. FLPMA specifically states that public land will be managed under the principles of multiple-use, and it further indicates that multiple-use includes harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment.

- Section 102 (a) (7) and (8) sets forth the policy of the United States concerning the management of BLM land.
- Section 201 requires the Secretary of the Interior to prepare and maintain an inventory of all BLM land and its resources and other values, giving priority to areas of critical environmental concern and, as funding and workforce are available, to determine the boundaries of the public land, provide signs and maps to the public, and provide inventory data to State and local governments.
- Section 202 (a) requires the Secretary of the Interior, with public involvement, to develop, maintain, and when appropriate, revise land use plans that provide by tracts or areas for the use of the BLM land.
- Section 202 (c) (9) requires that land use plans for BLM land be consistent with Tribal plans and, to the maximum extent consistent with applicable Federal laws, with State and local plans.
- Section 202 (d) provides that all public land, regardless of classification, is subject to inclusion in land use plans, and that the Secretary of the Interior may modify or terminate classifications consistent with land use plans.
- Section 202 (f) and 309 (e) provide that Federal, State, and local governments and the public be given adequate notice and an opportunity to comment on the formulation of standards and criteria for, and to participate in, the preparation and execution of plans and programs for the management of the public land.
- Section 302 (a) requires the Secretary of the Interior to manage BLM land under the principles of multiple-use and sustained yield in accordance with (when available) land use plans developed under Section 202 of FLPMA, except that, where a tract of BLM land has been dedicated to specific uses according to any other provisions of law, it shall be managed in accordance with such laws.
- Section 603 specifically directs BLM to carry out a wilderness review of public land and directs the BLM to manage such land in a manner so as not to impair the suitability of such area for preservation as wilderness.

The **National Environment Policy Act of 1969**, as amended (42 U.S.C. 4321, et seq.), requires the consideration and public availability of information regarding the environmental impacts of major Federal actions significantly affecting the quality of the human environment. The law further requires the Federal authorized officers to identify and describe the significant environmental issues associated with their decisions and to develop alternatives to a proposed action (including the alternative of no action). Federal authorized officers must disclose the direct, indirect, and cumulative effects of the decisions; adverse environmental effects that cannot be avoided; the relationship between short-term uses of the human environment and the maintenance of long-term productivity; and any irreversible or irretrievable commitments of resources made by the decision.

The **Clean Air Act of 1990**, as amended (42 U.S.C. 7418), requires Federal agencies to comply with all Federal, State, and local requirements regarding the control and abatement of air pollution. This includes abiding by the requirements of State implementation plans. The Clean Air Act provides that each State is responsible for ensuring achievement and maintenance of air quality standards within its borders so long as such standards are at least as stringent as Federal standards established by the U.S. Environmental Protection Agency (EPA).

The **Clean Water Act (CWA) of 1987**, as amended (33 U.S.C. 1251), establishes objectives to restore and maintain the chemical, physical, and biological integrity of the Nation's water. Upon passage of the Environmental Quality Acts and adoption of the water quality standards, State agencies were empowered to enforce water quality standards as long as they are at least as stringent as the Federal standards established by the EPA. The State of New Mexico has not been delegated authority from the Federal Government for any of the major water quality programs under the CWA, including the National Pollutant Discharge Elimination System, Pretreatment, Sludge Management, and Wetlands. Also, Section 404 of the CWA, administered by the U.S. Army Corps of Engineers, requires that waters of the United States be protected by permits prior to dredge or fill activities in such areas. Waters include intermittent streams, mud flats, and sand flats. Wetlands that meet jurisdictional criteria of Section 404 of the CWA are partially protected in that a permit is required before any dredge or fill activity can occur in such areas.

The **Endangered Species Act (ESA) of 1973**, as amended (16 U.S.C. 1531, et seq.), provides a means whereby the ecosystems upon which threatened and endangered species depend may be conserved and to provide a program for the conservation of such threatened and endangered species (Section 1531(b), Purposes). The ESA requires all Federal agencies to seek to conserve threatened and endangered species, use applicable authorities in furtherance of the purposes of the ESA (Section 1531(c) (1), Policy), and avoid jeopardizing the continued existence of any species that is listed or proposed for listing as threatened and endangered or destroying or adversely modifying its designated or proposed critical habitat (Section 1536(a), Interagency Cooperation). The U.S. Fish and Wildlife Service (USFWS) is responsible for administration of this Act, which also requires all Federal agencies to consult (or confer) in accordance with Section 7 of the ESA with the Secretary of the Interior, through the USFWS and/or the National Marine Fisheries Service, to ensure that any Federal action (including land use plans) or activity is not likely to jeopardize the continued existence of any species listed or proposed to be listed under the provisions of the ESA, or result in the destruction or adverse modification of designated or proposed critical habitat (Section 1536(a), Interagency Cooperation, and Title 50 Code of Federal Regulations Part 402 [50 CFR 402]). Mitigation measures are developed through the consultation process and are put forth as suggested conservation measures included in a formal USFWS Biological Opinion, which addresses whether the proposed action would jeopardize the continued existence of any officially listed endangered or threatened species.

The Statewide Resource Management Plan Amendment/Environmental Impact Statement for New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (*Standards and Guidelines*) established a set of standards and guidelines for public land health and guidelines for livestock grazing management in New Mexico. Standards of land health are expressions of physical and biological conditions or degrees of function required for healthy and sustainable land and define minimum resource conditions that must be achieved. Standards describe conditions needed for healthy sustainable public rangelands and relate to all uses of public land. They provide the measure of resource quality and functioning condition by which the health of public land will be assessed. To measure the effectiveness of each standard, a set of indicators and associated criteria were identified. Specific standards and indicators are defined for upland sites, biotic communities (including native, threatened, endangered, and special status species), and riparian sites.

Guidelines are practices, methods, or techniques determined to be appropriate to ensure that standards can be met or that significant progress can be made toward meeting those standards. Guidelines are tools such as grazing systems, vegetative treatments, or improvement projects that help managers and permittees achieve standards. Guidelines for livestock grazing are described in the *Standards and Guidelines*. The livestock grazing guidelines were designed to improve public land health and are to be implemented at the watershed, allotment, or pasture level if it is determined that the standards are not being met and that livestock grazing is the cause. Guidelines for activities other than livestock grazing are not mandated through regulation; however, they may be developed should the need arise. If it is determined that the standards are not being met as a result of another activity (i.e., road placement, recreation, etc.), program leads would determine appropriate actions to ensure that standards can be met or that significant progress can be made toward meeting those standards.

The **Federal Water Pollution Control Act** (33 U.S.C. 1323) requires the Federal land manager to comply with all Federal, State, and local requirements, administrative authority, process, and sanctions regarding the control and abatement of water pollution in the same manner and to the same extent as any nongovernmental entity.

The **Safe Drinking Water Act** (42 U.S.C. 201) is designed to make the Nation's waters "*drinkable*" as well as "*swimmable*." Amendments in 1996 established a direct connection between safe drinking water and watershed protection and management.

The **Resource Conservation and Recovery Act of 1976** (Public Law [P.L.] 89-72) gave the EPA the authority to control hazardous waste from "*cradle to grave*." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. The Act also set forth a framework for the management of nonhazardous wastes.

The **Wilderness Act**, as amended (16 U.S.C. 1131, et seq.) authorizes the President to make recommendations to Congress for Federal land to be set aside for preservation as wilderness.

The **Antiquities Act of 1906** (16 U.S.C. 431-433) protects cultural and paleontological resources on Federal land and authorizes the President to designate national monuments on Federal land.

The **Archaeological Resources Protection Act of 1979** (16 U.S.C. 470) secures, for the present and future benefit of the American people, the protection of archaeological resources and sites that are on public land and American Indian land, to foster increased cooperation and exchange of information among governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data that were obtained before October 31, 1979.

The **National Historic Preservation Act**, as amended (16 U.S.C. 470), expands protection of historic and archaeological properties to include those of National, State, and local significance and directs Federal agencies to consider the effects of proposed actions on properties eligible for or included in the National Register of Historic Places. The Act mandates that when Federal undertakings (i.e., Federal projects or Federally-funded or licensed projects) are planned and implemented, the responsible Federal agencies give due consideration to historic properties (i.e., resources eligible for the National Register of Historic Places), regardless of land status. Regulations for *Protection of Historic Properties* (36 CFR 800) define a process for demonstrating such consideration by consulting with the State Historic Preservation Officers, Federal Advisory Council on Historic Preservation, and other interested organizations and individuals.

The **American Indian Religious Freedom Act of 1978** (42 U.S.C. 1996) establishes a National policy to protect and preserve the right of American Indians to exercise traditional Indian religious beliefs or practices.

The **Historic Sites Act of 1935** (16 U.S.C. 461-467) defines a National policy to identify and preserve historic sites, buildings, objects, and antiquities of National significance. The law authorizes the Secretary of the Interior to conduct surveys, collect and preserve data, and acquire historic and archaeological sites.

The **Archaeological and Historic Preservation Act of 1974** (16 U.S.C. 469-469c) provides for preservation of archaeological and historical information that might otherwise be lost as a result of Federal construction projects and other Federally-licensed activities and programs. This Act stipulates that up to 1 percent of the funding appropriated by Congress for Federal undertakings can be spent to recover, preserve, and protect archaeological and historical data. A subsequent amendment authorized the 1 percent limit to be administratively exceeded under certain circumstances.

The **Native American Grave Protection and Repatriation Act of 1990** (25 U.S.C. 3001-3013) protects the human remains of indigenous peoples and funerary objects, sacred objects, and items of cultural patrimony on Federal land. The Act also provides for the repatriation of such remains and cultural items previously collected from Federal land and in the possession or control of a Federal agency or Federally-funded repository.

The **Curation of Federally-Owned and Administered Archaeological Collections** (36 CFR 79) stipulates standards for facilities that curate Federally-owned archaeological collections, which include not only artifacts but also all associated records and reports, to ensure long-term preservation of such collections.

The **White House Memorandum on Government-to-Government Relations with Native American Tribal Governments of 1994** set forth guidelines requiring Federal agencies to adhere to directives designed to ensure that the rights of sovereign Tribal governments are fully respected.

The **Land and Water Conservation Fund (LWCF) of 1964** (16 U.S.C. 460l-4, et seq.) provides funding to assist in preserving, developing, and assuring accessibility to outdoor recreation resources including but not limited to parks, trails, wildlife land, and other land and facilities desirable for individual active participation. It also authorized BLM to collect fees for recreational use and to issue special recreation permits for group activities and recreation events and limits the services for which BLM may collect fees.

The **Federal Lands Recreation Enhancement Act (FLREA)** replaced LWCF as BLM's authority to collect fees in 2004. Under FLREA, Congress has authorized the BLM to collect two types of recreation fees, Amenity Recreation fees and Special Recreation Permit fees. FLREA also authorizes the BLM to retain these fees locally so they can be used to repair, maintain, and upgrade recreational facilities and services to meet public demand.

The **Taylor Grazing Act of 1934** (43 U.S.C. 315) establishes grazing districts of vacant, unappropriated and unreserved land in any parts of the public domain, excluding Alaska, that are not National forests, parks and monuments, American Indian reservations, railroad grant land, or revested Coos Bay Wagon Road grant land, and that are valuable chiefly for grazing and raising forage crops; the Act uses a permitting system to manage livestock grazing in the districts. In addition, the Act provides for the protection, administration, regulation and improvement of the grazing districts; promotes the adoption of regulations and cooperative agreements necessary to accomplish the purposes of the Act; regulates occupancy and use; preserves the land and resources from destruction or unnecessary injury; and provides for orderly improvement and development of the range. The Act also allows for the continuing study of erosion and flood control and performance of work to protect and rehabilitate areas subject to the Act. Willful violations of the Act, or of its rules and regulations, are punishable by fine.

The **Public Rangelands Improvement Act of 1978** (43 U.S.C. 1901) provides that the public rangeland be managed so that it becomes as productive as feasible in accordance with management objectives and the land use planning process established pursuant to 43 U.S.C. 1712.

The **Federal Cave Resource Protection Act of 1988** (43 CFR 37.11[C] and [F]) provides protection for caves containing significant geological, biological, historical, cultural, and other resources.

The **Carlson-Foley Act of 1968** (P.L. 90-583) directs Federal agencies to enter upon land under their jurisdiction that has noxious plants (weeds) and to destroy noxious plants growing on such land.

The **Federal Noxious Weed Act of 1974** (7 U.S.C. 2801-2814) provides for the control and management of nonindigenous weeds that injure or have the potential to injure the interests of agriculture and commerce, wildlife resources, or the public health. The Act requires that each Federal agency develop a management program to control undesirable plants on Federal land under the agency's jurisdiction; establish and adequately fund the program; implement cooperative agreements with State agencies to coordinate management of undesirable plants on Federal land; establish integrated management systems to control undesirable plants targeted under cooperative agreements. A Federal agency is not required to carry out management programs on Federal land unless similar programs are being implemented on State or private lands in the same area. The Act also directs the Secretaries of Agriculture and the Interior to coordinate programs for control, research, and educational efforts associated with noxious weeds. The Secretaries must identify regional control priorities and disseminate technical information to interested State, local, and private entities.

The **Plant Protection Act of 2000** (P.L. 106-224) prohibits the import, export, and movement in interstate commerce or mailing of any plant pest unless authorized by the Secretary of Agriculture; authorizes the Secretary to prohibit or restrict the import, export, or movement in interstate commerce of any plant, plant product, biological control organism, noxious weed, or means of conveyance to prevent the introduction or dissemination of a plant pest or noxious weed; and combines all or a portion of 11 Acts or resolutions into one Act.

The **Migratory Bird Treaty Act of 1918**, as amended (16 U.S.C. 703-712), implements various treaties and conventions between the United States and Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Under the Act, taking, killing, or possessing migratory birds is unlawful.

The **Fish and Wildlife Coordination Act of 1958**, as amended (16 U.S.C 661-667), proposes to assure that fish and wildlife resources receive equal consideration with other values during the planning of water resources development projects. The Act requires coordination with USFWS by the U.S. Department of Energy when a project is planned that may affect a body of water. It also requires coordination with the head of the State agency that administers wildlife resources in the affected state.

The **Sikes Act of 1960**, as amended (16 U.S.C. 670, et seq.), seeks to promote effectual planning, development, maintenance, and coordination of wildlife, fish, and game conservation and rehabilitation on military reservations.

The **Fish and Wildlife Conservation Act of 1980** (16 U.S.C. 2901-2911) authorizes financial and technical assistance to the States for the development, revision, and implementation of conservation plans and programs for nongame fish and wildlife.

Paleontological Resources Preservation Act - Public Law 111-11, Title VI, Subtitle D 270

Legislation establishing requirements that the Secretary of the Interior manage and protect paleontological resources on Federal land using scientific principals and expertise. This Act specifically requires the Secretary to develop plans for the inventory, monitoring, and scientific and educational use of paleontological resources; addresses the collection and curation of resources; identifies prohibited acts, and establishes criminal and civil penalties. This Act is contained in Public Law 111-11, Title VI, Subtitle D, which was enacted in March 2009.

Executive Order 11644: Use of Off-Road Vehicles on the Public Lands (as amended by Executive Order 11989) (37 *Federal Register* [FR] 2877 [1971]) establishes policies and provides for procedures that will ensure that the use of off-road vehicles on public land will be controlled and directed so as to protect the resources of those land, promote the safety of all users of those land, and minimize conflicts among the various uses of those land.

Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (49 FR 7629 [1994]) requires that each Federal agency consider the impacts of its programs on minority populations and low-income populations.

Executive Order 13007: Indian Sacred Sites (61 FR 26771 [1996]) requires Federal agencies to the extent practicable, permitted by law, and not clearly inconsistent with essential agency functions to accommodate access to and ceremonial use of American Indian sacred sites by Indian religious practitioners and avoid adversely affecting the physical integrity of such sacred sites.

Executive Order 13287: Preserve America directs Federal agencies to provide leadership in preserving the Nation's heritage by actively advancing the protection, enhancement and contemporary use of historic and paleontological properties owned by the Federal Government, emphasizing partnerships. Under this order, agencies shall cooperate with communities to increase opportunities for public benefit from, and access to, Federally-owned historic and paleontological properties.

Executive Order 13084: Consultation and Coordination with Indian Tribal Governments provides, in part, that each Federal agency shall establish regular and meaningful consultation and collaboration with Indian Tribal governments in the development of regulatory practices on Federal matters that significantly or uniquely affect their communities.

Executive Order 13112: Invasive Species provides that no Federal agency shall authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species unless, pursuant to guidelines that it has prescribed, the agency has determined and made public its determination that the benefits of such actions clearly outweigh the potential harm caused by invasive species; and that all feasible and prudent measures to minimize risk or harm will be taken in conjunction with the actions.

Executive Order 11988: Floodplain Management requires each agency to provide leadership and take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains. Each agency must evaluate the potential effects of any actions it may take in a floodplain; to ensure that its planning programs and budget requests reflect consideration of flood hazards and floodplain management; and to prescribe procedures to implement the policies and requirements of this order.

Executive Order 11990 Protection of Wetlands required each Federal agency to provide leadership and take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands.

Executive Order 12906: Coordinating Geographic Data Acquisition and Access: The National Spatial Data Infrastructure requires that the Federal Government avoids wasteful duplication of geospatial data and effort and promote effective and economical management of resources by Federal, State, local and Tribal government.

Secretarial Order 3206: American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act requires U.S. Department of the Interior agencies to consult with American Indian Tribes when agency actions to protect a listed species, as a result of compliance with the ESA, affect or may affect American Indian land, Tribal trust resources, or the exercise of American Indian Tribal rights.

Secretarial Order 3310: Protecting Wilderness Characteristics on Lands Managed by the BLM requires that the BLM, based on the input of the public and local communities through its existing land management planning process, to designate appropriate areas with wilderness characteristics under its jurisdiction as “*Wild Lands*” and to manage them to protect their wilderness values.

Regulations governing BLM’s Special Recreation Permit program can be found in *Title 43 Code of Federal Regulations, Part 2930 (43CFR2930)*.

INSTRUCTION MEMORANDUMS

Instruction Memorandum No. 2008-009 – (October 15, 2007) **Subject:** Potential Fossil Yield Classification (PFYC) System for Paleontological Resources on Public Lands This Instruction Memorandum (IM) transmits the Bureau of Land Management (BLM) classification system for paleontological resources on public land. The classification system is based on the potential for the occurrence of significant paleontological resources in a geologic unit, and the associated risk for impacts to the resource based on Federal management actions.

Instruction Memorandum (IM) 2009-110 -- Subject: Assessment and Mitigation of Potential Impacts to Paleontological Resources. This Instruction Memorandum (IM) provides guidelines for assessing potential impacts to paleontological resources in order to determine mitigation steps for Federal actions on public land under the Federal Land Policy and Management Act (FLPMA) and the National Environmental Policy Act (NEPA). These guidelines also apply where a Federal action impacts split-estate land. In addition, this IM provides field survey and monitoring procedures to help minimize impacts to paleontological resources from Federal actions in the case where it is determined that significant paleontological resources will be adversely affected by a Federal action.

Instruction Memorandum No. 2009-113 – (April 24, 2009) **Subject:** Casual Collecting of Common Invertebrate and Plant Paleontological Resources under the Paleontological Resources Preservation Act of 2009. This Instruction Memorandum (IM) provides guidelines regarding casual collecting under the provisions of the Paleontological Resources Preservation Act (PRPA) of 2009.

Instruction Memorandum No. 2009-138 – (June 5, 2009) - **Subject:** Confidentiality of Paleontological Locality Information under the Omnibus Public Lands Act of 2009 (123 Stat. 991), Title VI, Subtitle D, Paleontological Resources Preservation (OPLA-PRP). This Instruction Memorandum (IM) establishes policy regarding the confidentiality of paleontological locality information under the provisions of the OPLA-PRP.

Instruction Memorandum No. 2012-067 – **Subject:** Clarification of Cultural Resource Considerations for Off-Highway Vehicle Designations and Travel Management. As part of its comprehensive travel management program, the Bureau of Land Management (BLM) incorporates road and trail access guidance into every Land Use Plan (LUP). At a minimum, by regulation, every plan designates all public land as open, limited, or closed to off highway vehicle (OHV) use. For limited use areas, the BLM designates a network of roads and trails and may establish other limiting criteria, such as the volume and type of vehicular use and the time and season of use. The BLM considers designations of travel areas, roads and trails to be undertakings for the purposes of Section 106 of the National Historic Preservation Act (NHPA). Therefore, the Section 106 consultation process must be completed before the BLM authorized officer signs the decision record for the designation.

BLM HANDBOOKS

BLM Manual 8270 and BLM Handbook H-8270-1 contain the agency's guidance for the management of paleontological resources on public land. The Manual has more information on the authorities and regulations related to paleontological resources. The Handbook gives procedures for permit issuance, requirements for qualified applicants, information on paleontology and planning, and a classification system for potential fossil-bearing geologic formations on public land.

BLM Handbook 1601-1 Land Use Planning Handbook provides supplemental guidance to the Bureau of Land Management (BLM) employees for implementing the BLM land use planning requirements established by Sections 201 and 202 of the Federal Land Policy and Management Act of 1976 (FLPMA, 43 U.S.C. 1711-1712) and the regulations in 43 Code of Federal Regulations (CFR) 1600. Land use plans and planning decisions are the basis for every on-the-ground action the BLM undertakes. Land use plans include both resource management plans (RMPs) and management framework plans (MFPs).



APPENDIX C

PREHISTORIC TRACKWAYS NATIONAL
MONUMENT COMPREHENSIVE TRAILS
AND TRAVEL MANAGEMENT PLAN

APPENDIX C

PREHISTORIC TRACKWAYS NATIONAL MONUMENT COMPREHENSIVE TRAILS AND TRAVEL MANAGEMENT PLAN

INTRODUCTION AND BACKGROUND INFORMATION

The Prehistoric Trackways National Monument (PTNM) was created on March 30, 2009 by Congressional action as part of the 2009 Omnibus Public Land Management Act, more commonly referred to as Public Law 111-11. Title II, Subtitle B, Section 2103(a) of the Act states:

In order to conserve, protect, and enhance the unique and nationally important paleontological, scientific, educational, scenic, and recreational resources and values of the public land described in subsection (b), there is established the Prehistoric Trackways National Monument in the State of New Mexico.

The Monument encompasses approximately 5,280 acres in the southern Robledo Mountains in Doña Ana County, New Mexico. While the primary objectives of the Act are concerned with the unique fossil resources of the area, the Robledo Mountains have long provided the local recreational community with a variety of convenient opportunities to hike, ride horses, mountain bike, and enjoy the challenges of off-highway vehicle (OHV) activities. Management of OHVs within the Monument on BLM-managed public land is necessary to address resource protection and access needs, minimize conflicts between various user groups, and maintain recreational uses.

The Robledo Mountains Off-Highway Vehicle Implementation Plan (NM-036-1997-083) identified and designated routes by association with various chilies, i.e., Patzcuaro's Revenge Trail, Hopping Jalapeno, etc. Approximately 32 miles of these OHV routes are within the Monument. In addition to the designated system of OHV routes, there is a designated bicycle trail (SST) located within the Monument also.

PURPOSE AND NEED

On July 14, 2011 the BLM released Manual 1626 – Travel and Transportation Manual (Public). Section A(2)(a)(3)(b) states:

Travel Management Plans must be completed for all national monuments and congressionally designated national conservation areas, national recreation areas, cooperative management and protections areas, outstanding natural areas, forest reserves, and the Conservations Lands of the California Desert (in accordance with the establishing statute or Presidential Proclamation).

A Comprehensive Trails and Travel Management (CTTM) Plan is not a static document; it is a dynamic approach to resource management that can be adjusted and modified to accommodate changes in resource allocations. A Trails and Travel Management Plan is not intended to provide evidence bearing on or addressing the validity of any Revised Statute 2477 (R.S. 2477) assertions. R.S. 2477 rights are determined through a process that is entirely independent of the BLM's planning process. Consequently, travel management planning should not take into consideration R.S. 2477 assertions or evidence. Currently, the Monument does not have any R.S. 2477 assertions.

Considerations of both social and physical elements help define the criteria for a CTTM Plan. The social aspects include public demands, historical uses, existing rights-of-way, permitted uses, resource development, law enforcement and safety, conflicts between existing or potential users, recreation opportunities, and cultural and economic issues. Physical considerations include such things as terrain, soils, resource conflicts, vegetation, watersheds, special designations (such as Wilderness Study Areas), and public interest in specific types of vehicle use.

The Bureau of Land Management (BLM) has the responsibility to prepare a Resource Management Plan (RMP) for the Monument. The RMP establishes guidance, objectives, policies and management actions and contains two types of land management decisions: (1) land use decisions, and (2) implementation decisions. The land use decision for the Prehistoric Trackways National Monument is shown in Table C-1.

TABLE C-1 OHV USE CATEGORIES BY ALTERNATIVE				
CATEGORY	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C	ALTERNATIVE D
Closed	0 acres	5280 acres	0 acres	0 acres
Limited to Designated	5,280 acres	0 acres	5,280 acres	5,280 acres
Open	0 acres	0 acres	0 acres	0 acres
Total Acres	5,280	5,280	5,280	5,280

Federal regulations (43 CFR §8340) require the BLM to identify public land as *Open*, *Limited*, or *Closed* to OHV use. The BLM designates areas as “*Open*” for intensive OHV use where there are no compelling resource protection needs, user conflicts, or public safety issues to warrant limiting cross country travel.

The “*Limited*” designation is used where OHV use must be restricted to meet specific resource management objectives.

An area is designated as “*Closed*” if all vehicle use is prohibited as a necessary measure to protect resources, reduce user conflicts, or provide for public safety.

Management common to all alternatives includes the following:

- In *Limited* areas, only designated routes would be open for motorized and mechanical use.
- No cross-country travel by motorized and/or mechanical vehicles would be permitted. This includes cross-country travel associated with dispersed camping activities.
- Emergency fire, medical, and law enforcement vehicles are exempt from the prohibition of cross-country travel.
- Cross-country travel may be authorized for official use.

A CTTM Plan is a component of the RMP and incorporates by reference all analysis (including Alternative Analysis) contained in that RMP. CTTM planning is the comprehensive process of developing and managing access and travel systems on public land at the implementation level. While motorized and OHV activities are most frequently associated with travel management strategies, the CTTM planning process is an interdisciplinary approach that takes into account all resource values/uses along with all modes of transit; motorized, mechanical, pedestrian, and equestrian.

PLANNING AREA DESCRIPTION

The Monument's rugged terrain includes 32 miles of designated OHV routes within the Monument that have received National recognition by OHV communities as a prime and challenging place to drive. All of the routes within the Monument require high clearance, four-wheel drive vehicles; with approximately 50 percent of these trails rated as extreme, or difficult, requiring modified vehicles, knowledge and skills. Approximately 45 percent of these trails are rated as easy or moderate but still require a certain degree of skill and four-wheel drive vehicles. Five percent of the trails have no difficulty rating but still require four-wheel drive. Low clearance, two-wheel drive vehicles cannot navigate within this area. The Monument also offers a 5.5-mile mountain bike trail and many undesignated hiking trails, paths, and canyon bottoms that appeal to outdoor enthusiasts.

Two previously designated OHV routes parallel or intersect with the Robledo Mountain Formation of the Hueco Group, which is where trackways and other trace fossils are preserved in the red siltstones.

There are no designated OHV routes in the Wilderness Study Area (WSA) portion of the Monument. The Robledo Loop Road does form the southern boundary of the Robledo Mountains WSA within the Monument.

IMPLEMENTATION DECISIONS

The following information and implementation plan is presented as Alternative C (Preferred Alternative) for the PTNM Draft RMP/EIS.

As provided in Instruction Memorandum (IM) 2006-173, "*Implementation of the Roads and Trails Terminology Report*":

A linear route is defined as: a linear route declared a road by the owner, managed for use by low clearance vehicles having four or more wheels, and maintained for regular and continuous use.

A primitive road is defined as: A linear route managed for use by four-wheel drive or high-clearance vehicles. Primitive roads do not normally meet any BLM road design standards.

A trail is defined as: A linear route managed for human-powered, stock, or off-highway vehicle forms of transportation or for historical or heritage values. Trails are not generally managed for use by four-wheel drive or high clearance vehicles. The hybrid utilization of single routes by a variety of users (OHV rock crawlers, mountain bikers, casual day hikers, equestrian enthusiasts and livestock) provides for multiple-use access and minimum surface disturbance.

The implementation portion of the CTTM Plan designates routes (including length). See Table C-2 for a summary of the designated routes for Alternative C, with the common and the official BLM names. It also identifies sign placement, describes map content, and provides a monitoring strategy. See Map 2-3 for route placement within Monument.

**TABLE C-2
DESIGNATED ROUTES AND ALLOWED USES WITHIN THE PREHISTORIC TRACKWAYS NATIONAL
MONUMENT**

Route's Common Name	BLM Route Identification Name	UTMs (beginning and ending points if possible)	Length (miles)	Use: 1-motorized 2-mechanized 3-non-motorized/ non-mechanized	OHV Rating	Previously Designated (Yes or No)
Robledo Loop or Chile Canyons Loop	PTNM 1		8.0	1,2,3	Easy	Yes
Patzcuaro's Revenge	PTNM 2	E0323 994, N3582 775 to E0320 757, N3583 632	1.8	1,2,3	Extreme	Yes
Rocotillo Rapids	PTNM 3	E0323 762, N3582 772 to E0323 567, N3582 891. E0323 175, N3583 055 to E0322 350, N3583 545.	1.0	1,2,3	Extreme	Yes
Big Jim	PTNM 4	E0321 703, N3583 045 to E0322 118, N3583 650	0.7	1,2,3	Moderate	Yes
Hopping Jalapeno (up segment)	PTNM 5	E0321 388, N3583 207 to E0321 622, N3584 129	0.7	1,2,3	Moderate	Yes
Hopping Jalapeno (down segment)	PTNM 6	E0321 333, N3583 297 to E0321 372, N3584 255	0.7	1,2,3	Moderate	Yes
Amatista Ledges	PTNM 7	E0320 757, N3583 632 to E0320 733, N3584 668	1.6	1,2,3	Moderate	Yes
Habanero Falls (entrance)	PTNM 8	E0320 696, N3584 136 to E0320 130, N3584 635	0.6	1,2,3	Extreme	Yes
Habanero Falls	PTNM 9	E0320 751, N3583 636 to E0319 836, N3584 191	0.8	1,2,3	Extreme	Yes
Tabasco Twister	PTNM 10	E0322 234, N3580 901 to E0319 553, N3583 733	2.9	3	Extreme	Yes

**TABLE C-2
DESIGNATED ROUTES AND ALLOWED USES WITHIN THE PREHISTORIC TRACKWAYS NATIONAL
MONUMENT**

Route's Common Name	BLM Route Identification Name	UTMs (beginning and ending points if possible)	Length (miles)	Use: 1-motorized 2-mechanized 3-non-motorized/ non-mechanized	OHV Rating	Previously Designated (Yes or No)
Pasado	PTNM 11	E0322 305, N3581 980 to E0323 113, N3582 350	0.7	1,2,3	Easy	Yes
Sandia Gulch	PTNM 12	E0323 600, N3581 203	1.0	1,2,3	Difficult	Yes
Cayenne Crawler	PTNM 13	E0323 017, N3582 203 to E0322 894, N3582 508	0.4	3	Difficult	Yes
Unnamed	PTNM 14	E0323 309, N3581 566 to E0323 012, N3582 196	0.5	Will not be designated for any designated use.		Yes
Discovery Trail	PTNM 15	E0323658, N3583787 to E0323136, N3584384		3		No
Rocks Thru Time Trail	PTNM 16			3		No
Ridge Line Trail	PTNM 17	E0323763, N3583717 to E0321367, N3584299		3		No
Hidden Canyons Trail	PTNM 18	E0319661, N3585481 to E0319136, N3585350		3		No
SST	PTNM 19	Beginning point outside of Monument: E0323945, N3583196. Potential intersection of trail at Monument boundary: E0323183, N3583243		2		Yes

Whenever the authorized officer determines that OHV use will cause or is causing considerable adverse effects on resources (i.e., soil, vegetation, wildlife, wildlife habitat, cultural, paleontological, historic, scenic, recreation, or other resources), the area must be immediately closed to the type of use causing the adverse effects (43 CFR §8341.2). Such limitation or closure is not an OHV designation. By regulation (Executive Order 11644--Use of off-road vehicles on the public lands), any fire, military, emergency, or law enforcement vehicle when used for emergency purposes is exempted from OHV decisions.

Data collection and verification was accomplished using a combination of GIS and GPS technology. Designated routes were originally identified on 1:24,000 topographic maps. This data was systematically ground-truthed by BLM during the preparation of the Robledo Mountains Off-Highway Vehicle Trail System Implementation Plan. These routes were later digitized on 1:24,000 digital orthophoto-quads (DOQQ) map images. Inasmuch as the routes follow either drainage bottoms or ridge lines, visual confirmation of the relationship between the original topographic maps and the later aerial images was reliable. See Map 2-3.

The ultimate result of the proper application and interpretation of these combined technologies is a highly reliable map of the designated OHV routes in the PTNM. Detailed imagery enables accurate (± 5 meters) measurement of route distances. There is some latitude for route distance measurements owing to slight seasonal variations in drainage channel bottoms.

The quality of the data enabled subsequent identification of unauthorized “*braids*” or obstacle bypasses that have evolved through more than a decade of almost daily non-permitted use.

Signs and Maps

The BLM will establish a system of trail signs to identify designated routes. These signs will be positioned at trailheads and route intersections. Comprehensive Trail maps will be available at the BLM Las Cruces District Office and on-line. Implementation of trail signs and maps will be accomplished within 1 year of the approval of the RMP or of the BLM obtaining public access to the Monument, whichever is later. The combination of proper sign installation and maps with accompanying UTM descriptions will allow for confident public navigation of the Monument routes.

Current Levels of Utilization

The BLM does not have adequate data to estimate the level of annual recreational use within the Monument. Since 1997, an annual commercial OHV event (the Chile Challenge) has been authorized through the Special Recreation Permit program. This 4-day event typically attracts 200-300 participants. For the other 361 days out of the year, there are no estimates of non-permitted OHV use that takes place. The BLM has not issued any Special Recreation Permits for use of the SST mountain bike trail. There is no information regarding how frequently, or in what volumes, the local mountain bike community may use this trail.

Anecdotal information suggests that most camping activity occurs in direct association with OHV use, i.e., over-night trail runs.

Day hikes whether they are organized or casual, are usually confined to the eastern periphery of the Monument due to issues of motorized access and points of interest (the Discovery site is most accessible from the eastern edge of the Monument). In Alternative C, there are plans for designated hiking trails in the Monument. Currently, dispersed recreation enthusiasts may follow abandoned mining routes, designated OHV trails, or may choose to explore canyons and ridgelines where no formal pathways have

been worn. The BLM does not have adequate information regarding numbers of pedestrian visitors to venture estimates of daily or annual use.

Equestrian use of the Monument does occur, but again, there are no supporting statistics to estimate frequency and intensity of use. There are no designated bridle paths.

Monitoring and Issuance of No Fee-Day Pass

In 2009, the BLM began periodic monitoring of paleontological sensitive areas within the Monument. Those monitoring efforts have been largely photographic in nature, with monthly or quarterly photographic sequences from fixed UTM locations.

BLM modified the original monitoring regime by expanding the effort to better correspond with New Mexico Museum of Natural History and Science's (NMMNHS) documented paleontological resource sites. In addition, routes within the Monument that are accessible to conventional 4 wheel-drive vehicles have been added to the monitoring activity. Monument Rangers also conduct visual inspections of Monument boundary areas that receive frequent visitation. See the attached example of a route monitoring form.

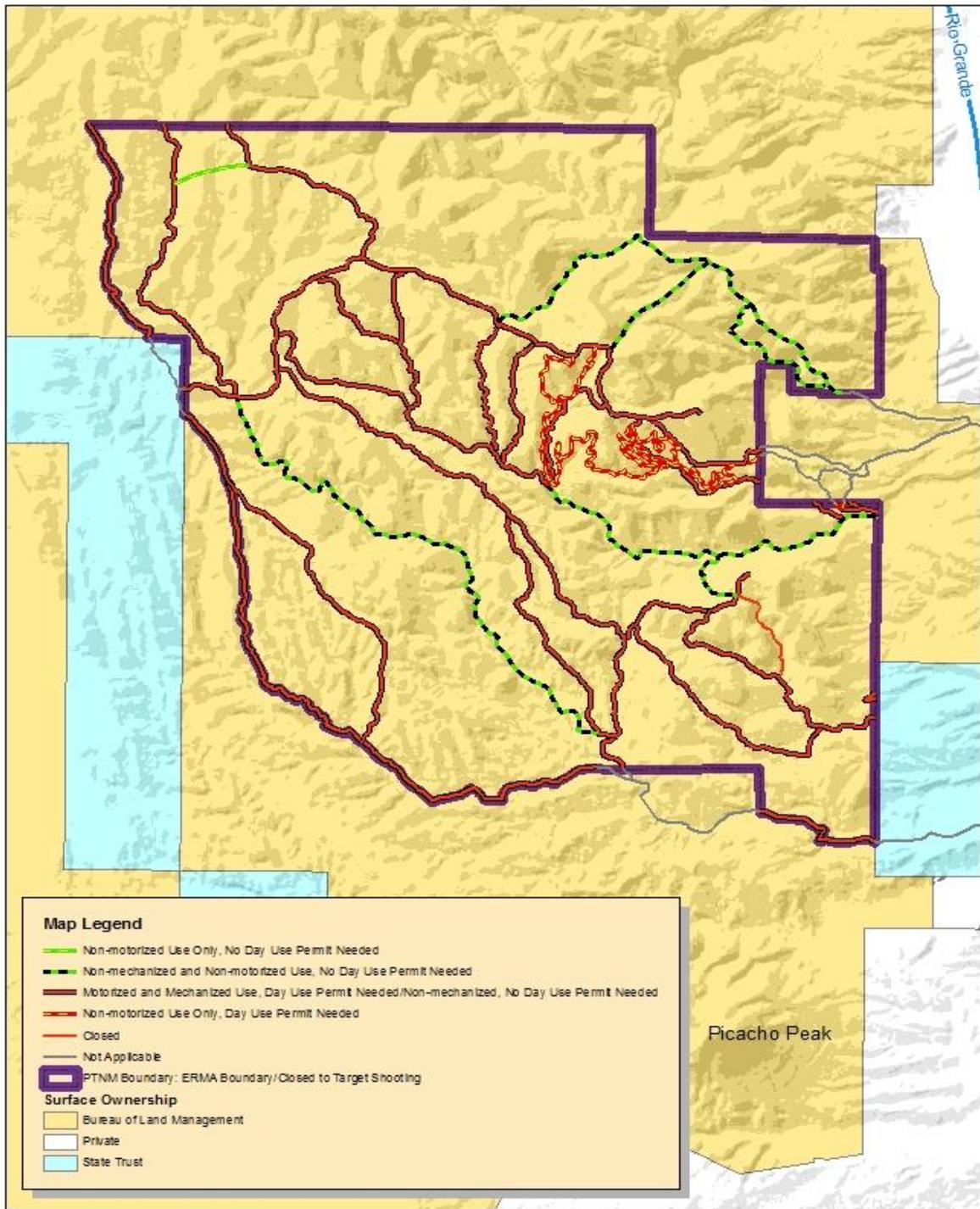
BLM will fill out the attached monitoring report form during each paleontological inspection visit. This form addresses an enhanced methodology for data collection and assessment of resource concerns such as paleontological resources, wildlife observations, grazing infrastructure, range improvements, and general land health conditions. BLM will complete these monitoring reports at least quarterly, with additional reports logged whenever there is an opportunity or need to provide supplementary information. BLM will mitigate any mitigate impacts or conditions that may threaten sensitive resources or endanger public safety according to 43 CFR 8365.1-6. Such actions will include, but will not be limited to, temporary restrictions on public access and/or activities through closures.

BLM will monitor and evaluate the number of visitors that are camping, hiking, enjoying motorized and mechanized access, which could lead to development of additional designated routes through 43 CFR 8365.1-6, Supplementary Rules. All proposed actions will be subject to the appropriate level of NEPA analysis.

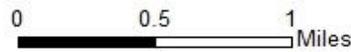
In order to assess the variety and nature of resource impacts, the BLM will institute a system of no-fee day passes for motorized and mechanized use of the Monument trails. This system of day passes is authorized through 43 CFR 8365.1-6, Supplementary Rules. Passes will be available at the BLM LCDO, on-line at the BLM web site and potentially at informational kiosk(s) at the approved access point(s) to the Monument. Statistics gathered from these passes will allow the BLM to accurately assess the level of public interest in motorized and mechanized activities within the Monument, and will contribute to the validity of periodic monitoring inspections designed to document and predict resource impacts and conditions. Each motorized (OHV) and mechanized (mountain bike) vehicle will be required to have a no-fee day pass to use routes within the Monument. Comprehensive trail maps will be a part of the day pass, as well as information on other recreational or educational activities, rules, and regulations. BLM will continue to administer organized groups and commercial ventures through the Special Recreation Permit program.

Required information for issuance of a no-fee day pass will include the name of the vehicle operator, the number of visitors in the vehicle, the license plate number (for OHV), proposed route(s) and destination if known, and expected length of visit. Optional information would include such things as the reason for the visit (OHV recreation, mountain biking, sightseeing, camping, etc.). Implementation of the no-fee day pass will occur within 1 year of approval of the RMP or of the BLM obtaining an easement for public access to the Monument, whichever is later.

Map 2-3 - Recreation, Trails & Travel Management, Alternative C



No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data, or for purposes not intended by the BLM. Spatial information may not meet National Map Accuracy Standards. This information is subject to change without notification.



Projection: UTM Zone 13
Datum: NAD 1983

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PREHISTORIC TRACKWAYS NATIONAL MONUMENT
ROUTE/RECREATION MONITORING FORM

TRAIL/ROUTE DESCRIPTOR

Date of Monitoring: ____/____/____ Initials of Monitor: ____

Trail/Route Name: _____

Narrative Description:

Are there numbers available of recreational users of the trail? YES NO

If so, what is the number over the past year? _____

DIGITAL IMAGE NUMBERS:	Beginning: _____	End: _____
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GIS COORDINATES:	Beginning: _____	End: _____
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LENGTH OF TRAIL [MILES]:	AVERAGE TRAIL WIDTH [FEET]:	AVERAGE TRAIL DEPTH [INCHES]:
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EVIDENCE OF RECREATIONAL USE ALONG ROUTE/TRAIL USE:

OHV Bicycle Hiking

Equestrian Use ATV Shooting

AMOUNT OF TRASH PRESENT:

Litter along Route—No. of pieces: 0 1 10-15 15-30 30+

Non-recreational trash dumping (# of incidents): 0 1 10-15 15+

LOCATION OF THE TRAIL/ROUTE:

Canyon bottoms Top of Canyons Both

If on tops of canyons, are there steep cliffs on edges?

Are points where there are dangerous conditions? Please describe and note any if conditions seem to be worsening.

SENSITIVE SITES LOCATED CLOSE TO OR ON ROUTE:

Paleontological

Cultural

Narrative Description (include GPS points and location of any pictures taken):

Any evidence of damage by vehicle traffic to the sensitive resources? YES NO

Please specify damage and note picture and/or GPS points taken of damage to resources:

*(**There is additional space to note sensitive sites on the last page of this Monitoring form)*

BRAIDS OFF DESIGNATED ROUTES

Number of braids: _____

Are they signed? _____

OBSTACLES:

If there are obstacles along the route, please describe type of surface and provide pictures of the obstacles from year-to-year to monitor the sites:

OHV anchors present?

Use the last few lines to describe any issues with the following, or other conditions not mentioned above that need to be addressed: trail surface, trail erosion, ruts, livestock impacts, graffiti / vandalism, camp fires present near trail, any vegetative damage, being used for shooting, signs, and overall impacts.

SENSITIVE SITES LOCATED CLOSE TO OR ON BRAID:

Paleontological

Cultural

Narrative Description (include GPS points and location of any pictures taken):

Any evidence of damage by vehicle traffic to the sensitive resources (i.e., tire marks, oil spills, fractures due to impacts)?

YES NO

Please list and note picture and/or GPS points taken of damage to resources:

Paleontological

Cultural

Narrative Description (include GPS points and location of any pictures taken):



APPENDIX D

PALEONTOLOGY

APPENDIX D PALEONTOLOGY



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Washington, D.C. 20240

<http://www.blm.gov>



In Reply Refer To:
8270, 1790 (240) P

October 10, 2008

EMS TRANSMISSION 10/29/2008
Instruction Memorandum No. 2009- 011
Expires: 09/30/2010

To: All State Directors

From: Assistant Director, Renewable Resources and Planning

Subject: Assessment and Mitigation of Potential Impacts to Paleontological Resources

Program Areas: Paleontological Resources Management, Environmental Assessment

Purpose: This Instruction Memorandum (IM) provides guidelines for assessing potential impacts to paleontological resources in order to determine mitigation steps for federal actions on public lands under the Federal Land Policy and Management Act (FLPMA) and the National Environmental Policy Act (NEPA). These guidelines also apply where a federal action impacts split-estate lands. In addition, this IM provides field survey and monitoring procedures to help minimize impacts to paleontological resources from federal actions in the case where it is determined that significant paleontological resources will be adversely affected by a federal action.

Policy/Action: It is the policy of the BLM that potential impacts from federal actions on public lands, including land tenure adjustments, be identified and assessed, and proper mitigation actions be implemented when necessary to protect scientifically significant paleontological resources. This policy also applies to federal actions impacting split-estate lands and is subject to the right of landowners to preclude evaluation and mitigation of paleontological resources on their land. Paleontological resources removed from public lands require a Paleontological Resources Use permit for collection. Significant paleontological resources collected from public lands are federal property and must be deposited in an approved repository. Paleontological resources collected from split-estate lands are the property of the surface-estate owner, and their disposition will be in accordance with the surface agreement between the landowner and the permittee.

Timeframe: This guidance is effective immediately for all BLM offices.

Background: Surface disturbing activities may cause direct adverse impacts to paleontological resources through the damage or destruction of fossils; or loss of valuable scientific information by the disturbance of the stratigraphic context in which fossils are found. Indirect adverse impacts may be created by increased accessibility to important

paleontological resources leading to looting or vandalism. Land tenure adjustments may result in the loss of significant paleontological resources to the public if paleontological resources pass from public ownership. Generally, the project proponent is responsible for the cost of implementing mitigation measures including the costs of investigation, salvage and curation of paleontological resources.

This IM together with the Potential Fossil Yield Classification system (PFYC; see IM 2008-009) will provide guidance for the assessment of potential impacts to paleontological resources, field survey and monitoring procedures, and recommended mitigation measures that will better protect paleontological resources impacted by federal actions. This guidance expands and clarifies the guidance in the Handbook H-8270-1 (General Procedural Guidance for Paleontological Resource Management) Chapter III (Assessment & Mitigation) and will be incorporated into the next Handbook revision.

Impact on Budget: Costs are minimal for implementation of this guidance since mitigation of paleontological resources is already part of any approval of surface-disturbing actions on public lands.

Manual/Handbook Affected: Supersedes Handbook H-8270-1 (General Procedural Guidance for Paleontological Resource Management) Chapter III.B.

Coordination: Washington Office Division of Cultural and Paleontological Resources and Tribal Consultation

Contact: For questions regarding application of this policy and guidance, please contact Lucia Kuizon, National Paleontologist, at (202) 452-5107 or lkuizon@blm.gov.



Edwin L. Roberson
Assistant Director
Renewable Resources and Planning

2 Attachments

- 1- Guidelines for Assessment and Mitigation of Potential Impacts to Paleontological Resources (19 pp)
- 2- Paleontological Resources Assessment Flowchart (2 pp)

Guidelines for Assessment and Mitigation of Potential Impacts to Paleontological Resources

Contents:

Introduction

- I. Assessment of Potential Impacts to Paleontological Resources
 - A. Scoping
 - B. Analysis of Existing Data
 - C. Determining the Need for Field Surveys and Mitigation
 - II. Procedures for Conducting a Paleontological Field Survey
 - A. Definition of Field Survey
 - B. Conducting Field Survey
 - C. Report of Survey Findings
 - D. Report Approval
 - III. Determination of Further Mitigation Requirements
 - A. Relocation
 - B. Deferred Fossil Collection
 - IV. Procedures for Field Monitoring
 - A. Monitoring Plan
 - B. Types of Monitoring
 - C. Types of Field Personnel
 - D. Work Stoppage
 - V. Final Project Report When Paleontological Resources are Collected
 - VI. Completion of Mitigation Responsibility
 - VII. Collections Resulting from Mitigation and Monitoring
 - VIII. Resource Management Updates
- Appendix A – Definitions

Introduction

Surface disturbing federal actions on public and split-estate lands may cause direct adverse impacts to paleontological resources through the damage or destruction of fossils or the disturbance of the stratigraphic context in which they are located. Indirect adverse impacts may be created from increased accessibility to fossils leading to looting or vandalism activities. Land tenure adjustments may result in the loss of significant paleontological resources to the public if fossils pass from public ownership.

Under the Federal Land Policy and Management Act (FLPMA) and the National Environmental Policy Act (NEPA), federal actions and land tenure adjustments that may impact or result in a loss of paleontological resources on public or split-estate lands are evaluated, and necessary mitigation is identified.

I. ASSESSMENT OF POTENTIAL IMPACTS TO PALEONTOLOGICAL RESOURCES

The following sections outline general steps designed to assist in the analysis and assessment of possible impacts to paleontological resources from proposed actions. These sections are sequential in order and provide for termination of the assessment at various stages if the analysis indicates no impacts are likely to occur.

A. Scoping. Field Offices must assess all proposed federal actions to identify possible effects to significant paleontological resources (see Appendix A for definition) that are potentially recoverable and are likely to be within the zone of expected surface disturbance or relatively close to the surface. The direct effects of all surface activities and the indirect effects of increased public access and land tenure adjustments must be considered in any paleontological assessment. The assessment will determine whether further analysis will be necessary. The Paleontology Program Coordinator (Paleontology Coordinator – see Appendix A for definition) has primary responsibility for the scoping process for projects within the Field Office area, but the Paleontology Program Lead (Paleontology Lead – see Appendix A for definition) may be responsible for projects that span multiple Field or District Offices, and can support the Paleontology Coordinator as requested.

1. Surface only activities – If the proposed project will not disturb potentially fossil-yielding bedrock or alluvium, no additional work is necessary. The project file should be documented as appropriate. Examples of such projects include weed spraying, mechanical brush treatment, geophysical exploration, or surface disturbing activities such as road construction when the fossil resource is expected to be buried well below project compression or excavation depth or when surface fossil resources would be left undamaged.

2. Land Tenure Adjustments – If parcels are identified to pass from public ownership in a proposed land tenure adjustment action but contain no potential for recoverable, significant paleontological resources, no additional work is necessary. The project file should be documented as appropriate, and conclusions addressed in the environmental document. This situation may arise, for example, in areas consisting only of granitic bedrock where paleontological resources would not normally occur.

3. Young alluvial deposits or deep soils may cover and obscure sedimentary bedrock, and any fossils that may occur in that bedrock would be unidentifiable or irretrievable prior to disturbance actions. In most of these cases, the fossil resources cannot be quantified, but the potential for impacting paleontological resources should be mentioned in the evaluation of the proposal, i.e., the planned disturbance will pass through the soil layer and impact a bedrock unit which is known to contain significant fossils elsewhere.

If the initial scoping identifies the possibility for adversely affecting significant paleontological resources, further analysis is necessary. If there will be no impact or potential impact based on the action or the fossil resource may be impacted, but is too deep to be recovered, e.g., deep well bore passing through a fossil formation, the project file must be documented, and no additional assessment is necessary.

B. Analysis of Existing Data. If scoping suggests the possibility of disturbing fossil-yielding bedrock or alluvium that is near to the surface and that may contain significant paleontological resources that are potentially recoverable, more in-depth analysis is necessary. Geologic mapping reflecting the Potential Fossil Yield Classification (PFYC) should be consulted, along with any other easily accessible information, such as GIS-based locality data, other known paleontological locality information, and existing paleontological reports for the area, aerial photos, or soils maps.

1. Potential Fossil Yield Classification (PFYC) – This is a system for categorizing the probability of geologic units to contain scientifically significant paleontological resources or noteworthy fossil occurrences. It has five levels or Classes, with Class 1 applied to geologic units that are not likely to contain significant fossils through Class 5 for geologic formations that have a high potential to yield scientifically significant fossils on a regular basis (see IM No. 2008-009). This classification does not reflect rare or isolated occurrences of significant fossils or individual localities, only the relative occurrence on a formation- or member-wide basis. Any rare occurrences may require additional assessment and mitigation if they fall within the area of anticipated impacts.

2. If the results of the preliminary analysis determine that the proposed project will only affect geologic units not likely to contain significant fossils or that have a very low or low potential for significant fossils (PFYC Class 1 or 2), and no scientifically important localities are known to occur in the area, the project file should be documented, and no additional paleontology assessment is necessary.

3. The results of an analysis of a proposed project may indicate the potential to disturb PFYC Class 3, 4, or 5 formations or potentially fossil-bearing alluvium, or known significant localities, which may then suggest the need for field surveys and/or other mitigation measures. The results may also identify areas where little or nothing is known of the fossil record so that additional attention may be given to these areas during field survey. The analysis should consider the likely impacts on the known or potential fossil resource and should be the basis for determining the need for or level of additional assessments.

C. Determining the Need for Field Surveys and Mitigation. The previously discussed procedures may result in the determination that the project may encounter bedrock or an alluvial zone that has a moderate or high potential to contain significant paleontological resources. However, it does not determine the appropriate action, such as a field survey, on-site monitoring, special stipulations, avoidance, or other mitigation.

1. If the need for further work is not clearly evident after the analysis, the Authorized Officer and/or Project Leader should be consulted for a final decision. The Paleontology Lead or Regional Paleontologist may also be consulted. A brief written report of findings should be prepared, including the rationale for supporting the decision not to require a field survey or additional monitoring. The report should be signed by the Authorized Officer and placed in the project file. For example, a seismic survey using vibroseis trucks may be proposed on areas of deep soils, or a temporary recreational event may be planned in an area of low fossil potential. These types of projects are not likely to have a reasonable potential to adversely affect important

paleontological resources. The file should be documented and a standard discovery stipulation attached to the permit proposal.

2. If the analysis in Sec. I.B indicates a reasonably high expectation of not just encountering a potential fossil-bearing zone and also causing adverse impacts to significant paleontological resources, the determination must be made as to (1) whether adverse effects cannot be avoided; (2) whether the adverse impacts can be avoided by altering the location or scope of the project; (3) whether the impacts can be mitigated through development of special stipulations such as requiring on-site monitoring; or (4) whether field surveys will be necessary to determine the presence or absence of significant paleontological resources.

3. In the case where it is known that significant paleontological resources will be adversely impacted, the preferred course of action is avoidance of the impact by moving or rerouting the site of construction, or eliminating or reducing the need for surface disturbance.

4. Application of specific stipulations may reduce or eliminate adverse impacts in many cases. A standard discovery stipulation should be included in any permit approval that is likely to affect significant paleontological resources. The stipulation should mandate an immediate work stoppage in the area of discovery, notification to the Authorized Officer, and protection of the material and geological context. Other stipulations may be appropriate on a case-by-case basis.

(a) A suggested standard discovery stipulation for a discretionary federal action is:

The permittee shall immediately notify the BLM Authorized Officer of any paleontological resources discovered as a result of operations under this authorization. The permittee shall suspend all activities in the vicinity of such discovery until notified to proceed by the Authorized Officer and shall protect the discovery from damage or looting. The permittee may not be required to suspend all operations if activities can be adjusted to avoid further impacts to a discovered locality or be continued elsewhere. The Authorized Officer will evaluate, or will have evaluated, such discoveries as soon as possible, but not later than 10 working days after being notified. Appropriate measures to mitigate adverse effects to significant paleontological resources will be determined by the Authorized Officer after consulting with the operator. Within 10 days, the operator will be allowed to continue construction through the site, or will be given the choice of either (1) following the Authorized Officer's instructions for stabilizing the fossil resource in place and avoiding further disturbance to the fossil resource, or (2) following the Authorized Officer's instructions for mitigating impacts to the fossil resource prior to continuing construction through the project area.

Note: C.1 and C.2 above would be conducted at the permittee's expense. By regulation, after a 3809 plan of operations is approved or where there is no plan, the BLM is responsible for the cost of any investigation and recovery of fossil materials.

(b) Other stipulations may be developed to reduce potential impacts, preferably in consultation with the project proponent. These may include (1) techniques to reduce surface

disturbance, (2) briefings for all personnel about the potential for discovery, (3) requiring all finds be reported, and (3) using a "light touch" in sensitive areas. These should be made a formal part of the authorization for the project and discussed at a preconstruction meeting or an on-site meeting in the case of oil and gas operations.

(c) All proponents should be directed to share the current rules and regulations regarding fossil theft and the limitations to free use collecting of invertebrate and plant fossils on BLM-administered lands with all employees and subcontractors under their direction. Unlawful removal, damage, or vandalism of paleontological resources will be prosecuted by federal law enforcement. Theft or damage to government property by a proponent, a proponent's employee, or a subcontractor that is under a proponent's direction may lead to legal actions against the proponent.

5. If avoidance actions or stipulating measures are insufficient to protect known paleontological resources, a written assessment must be completed to determine the need for field survey or monitoring. This assessment must include the anticipated direct or indirect impacts associated with the project, the inadequacies of avoidance or special stipulations to protect the resource, existing paleontological information and known localities, relevant geologic information, and the potential for additional discoveries. The assessment must be completed by the Paleontology Coordinator.

(a) In some cases, bedrock will not be visible at the surface in the project area (for example, where thin soils or alluvium obscure all outcrops), but the proposed excavation will likely penetrate into bedrock with known significant paleontological resources. Because fossil material will not be visible at the ground surface in these cases, it may be appropriate to forego a field survey prior to excavation, but require on-site monitoring or spot-checks when bedrock is finally encountered. If construction monitoring is proposed, the written assessment must include a thorough justification for the recommendation.

(b) The State Office may require the Paleontology Coordinator to notify the Paleontology Lead that a field survey or monitoring is deemed appropriate prior to the final decision to require the survey or monitoring. The notification should minimally include the name of the project, the legal description of the location or other locational information, a brief summary of the proposed action, reason(s) for the decision to require a survey or monitoring, and any other relevant information. Concurrence of the Paleontology Lead or Regional Paleontologist may be required prior to the final decision for requiring a survey or monitoring.

(c) A standardized assessment document may be developed that can be applied to projects that are similar in nature, relatively small, and repetitive in approach for use within a Field Office or District. This written assessment is intended to simplify the documentation process for those projects that are likely to have minimal impacts, and may be structured as a programmatic assessment, a form, a checklist, or other document with standard items. This assessment must include the name of the project, the legal description of the location or other locational reference, a brief summary of the proposed action, reason(s) for the decision, and any other relevant information. The parameters in the assessment should be designed to identify the need for a field survey. For example, the parameters may indicate a field survey may be required

for road and well pad construction activities occurring on Class 4 or 5 formations where the formation is likely to be encountered during surface disturbing activities. The Field Manager, in consultation with the Paleontology Lead, must approve the use of a programmatic assessment prior to initial implementation.

6. The decision to require a field survey or monitoring must be made by the Authorized Officer and documented in the project file. If required, a copy of the decision must be furnished to the Paleontology Lead.

II. PROCEDURES FOR CONDUCTING A PALEONTOLOGICAL FIELD SURVEY

If the assessment of existing data indicates: (a) the presence or high probability of occurrence of vertebrate fossils or uncommon nonvertebrate fossils (PFYC Class 4 or 5), or that the probability is unknown (Class 3), in the area of a proposed federal action or transfer of title, and (b) a reasonable probability that those resources will be adversely affected by the proposed action, a paleontological field survey should be conducted.

A. Definition of Field Surveys. Field Surveys are pedestrian surveys to be performed in areas where significant fossils can be expected to occur within the boundary and immediate vicinity of the anticipated disturbance, or where the probability of encountering significant fossils is unknown.

1. Field surveys are performed prior to any surface disturbing activities. Before conducting field surveys, the project location should be as final as possible and any staking of the location should be complete.

2. Surveys are conducted by a BLM Regional Paleontologist, Paleontology Lead, Paleontology Coordinator, appropriately trained and supervised BLM staff, or by a BLM-permitted consulting paleontologist hired by the project proponent.

(a) At the Field Manager's discretion, other qualified BLM staff may conduct surveys on small projects. Performance of surveys by BLM staff must also be approved by the Regional Paleontologist, Paleontology Lead, or Paleontology Coordinator.

(b) Surveys that are complex in nature, constrained by construction schedules, or otherwise cannot be performed by BLM staff should be performed by a consulting paleontologist holding a valid BLM Paleontological Resources Use Permit. Submission of reports may be done directly by the paleontologist to the BLM. The project proponent is also responsible for all costs associated with the survey, including the consulting paleontologist's fees and charges, all survey costs, fossil preparation to the basic identification stage, analyses, reports, and curation costs directly related to mitigation of the project's anticipated impacts. Any required monitoring and mitigation costs are also the responsibility of the project proponent. These costs are to be negotiated between the project proponent and the consulting paleontologist prior to beginning any data gathering, analysis, or field work, and these negotiations do not require BLM

involvement or approval. Any new, additional, or modified curation agreements between the paleontologist and the official repository must be in place prior to starting field work.

(c) Authorization for an activity to proceed cannot be given by a consulting paleontologist. Performance of the survey, either by a consulting paleontologist or BLM staff, or submission of the report DOES NOT constitute approval for the activity to proceed. The BLM must review the report, including adequacy of the field methods and findings. The Authorized Officer must approve the findings and determine the need for monitoring prior to approval to proceed.

B. Conducting Field Surveys. Field surveys must be performed by the Principal Investigator or an approved Field Agent or Field Monitor (see section IV.C., Types of Field Personnel for descriptions of these individuals) as authorized under a Paleontological Resource Use Permit, or by a BLM Regional Paleontologist or qualified BLM designee. Field surveys and collections performed as a mitigation measure are not intended to be scientific research studies, but are meant to identify, avoid, or recover paleontological resources to prevent damage or destruction from project activities. However, proper scientific techniques and procedures must be utilized during all mitigation efforts. Safety should be an important consideration; therefore, surveys should not be attempted on cliff faces, in open, non-reinforced trenches deeper than five feet, or other unsafe areas.

1. The scope of the survey is dependent upon the scale of the project. Small projects are defined as less than 10 acres, or, if linear, less than five miles; large projects exceed those dimensions.

2. At the start of field work, the consulting paleontologist (paleontologist) must contact the Paleontology Coordinator in each affected Field Office who may require a visit to that office. After an initial visit each year, the paleontologist may contact the Field Office by telephone or email prior to subsequent field trips, at the discretion of the Field Office. Information about the survey schedule, additional personnel, emergency field contact information, and any other pertinent data should be provided to the Paleontology Coordinator. The Field Office will inform the paleontologist of any conditions that may impact the survey, such as fire danger or restrictions, drought restrictions, wildlife timing restrictions, management restrictions, road restrictions or construction, and any other relevant information.

3. During the field survey, the paleontologist surveys, locates, and documents all paleontological resources within 200 feet of the proposed project location or corridor, or less distance upon approval.

(a) Where significant paleontological resources are at risk, data collection alone does not constitute mitigation of damage. All significant fossils that may be damaged or destroyed during project activities must be collected, along with all relevant contextual and locational data. Specimens must be collected during the survey or prior to commencement of any surface-disturbing activities.

(b) In many cases, isolated gar scales, chelonid (turtle) carapace or plastron fragments, crocodile and fish teeth, and unidentifiable bone fragments do not need to be collected. The location must be recorded and a description of the fossil material noted in the field notes and on a BLM Locality Form as part of the report. The context of these types of fossils should be considered, as they may represent rare occurrences or unusual faunal associations, and thus may be scientifically important and must be documented and voucher specimens collected where appropriate.

(c) Occurrences of plant or invertebrate fossils should be recorded and representative examples or voucher specimens collected where appropriate. Additional mitigation measures may be appropriate in some cases for these types of localities.

(d) If a large specimen or a concentration of significant fossils is located during the field survey, the available time and/or personnel may not allow for full recovery during the survey. The specimen(s) and locality(ies) should be stabilized as needed, and a determination made as to whether avoidance is necessary or whether full recovery of the specimen is required at a later time prior to disturbance activities. The Authorized Officer and project proponent must be notified, the mitigation alternatives discussed including funding for recovery, and a decision reached as soon as possible. If avoidance or later recovery is selected for mitigation, the find should be stabilized, buried if needed to protect the fossils and context, and appropriate measures implemented to reduce adverse effects from natural or human causes.

4. During the survey, locations or areas that exhibit a lithology suggesting a high probability of subsurface fossil material must be recorded, and a recommendation for the need for on-site monitoring, spot-checking, or testing should be made in the report. This may include areas where no fossil material was found on the surface during the survey. The recommendation should consider the size and type of planned disturbance, such as the depth of a trenching operation or the acreage of surface disturbance.

5. Surveys must be performed only during times when the ground is visible and not frozen. This will often preclude surveys during winter months in many areas. Biological timing restrictions, such as critical nesting or birthing times, may confine or delay field activities. Project proponents should be informed of BLM's requirement for performing any field surveys as soon as possible and should be advised of the possibilities for delays in survey completion based on seasonal weather conditions or other management restrictions to allow for adequate scheduling of available time.

C. Report of Survey Findings. After completion of the field survey, the paleontologist must file a written report with the BLM and the designated repository. If required, a copy should also be filed with the project proponent. This report must summarize the results of the survey as well as appropriate geological and paleontological background information as described below. It should also include any recommendations for on-site monitoring or other mitigation. For small projects (less than 10 acres), the report must be filed within 30 days after completion of the survey unless specific approval for a different time frame has been received from the BLM. The time frame for submission of the report for large projects should be negotiated during project scoping. On a case-by-case basis, approval to begin project activities may be granted for those

portions of the project area noted to be less paleontologically sensitive prior to final approval of the report.

1. Reports of the general findings and the background information must be submitted to the BLM project manager or Authorized Officer (if appropriate), the Paleontology Lead or Regional Paleontologist, and each affected Field Office. Reports must include the following details, as applicable. Items (a) and (b) should appear at the beginning of the report and may be presented as a title page in multi-page reports. Some of these categories may be combined.

- (a) Name, affiliation, address, date of report, and permit number (if consultant) of paleontologist doing the survey.
- (b) Project name and number (if used), name of proponent, and general location of project.
- (c) Date(s) of survey and names of any personnel assisting with the survey.
- (d) Brief description of the proposed project, emphasizing potential impacts to paleontological resources.
- (e) Description of background research conducted. (Include overview of known paleontological information, institutions consulted, previous surveys in the area, previous projects of similar nature in the area, and general description of survey techniques employed).
- (f) Summary of regional and local geology. May reference earlier projects for relevant information.
- (g) Summary of regional and local paleontology. May reference earlier projects for relevant information.
- (h) Summary of the survey results.
- (i) Significance of findings.
- (j) Potential impacts to paleontological resources resulting from the project.
- (k) Detailed mitigation recommendations that may lessen potential adverse impacts.
- (l) Potential fossiliferous areas to allow for future assessment of sites if applicable.
- (m) Cited and other pertinent references.
- (n) Map of project area, indicating areas surveyed, known localities, and new discoveries.
- (o) Relevant photos, diagrams, tables to aid in explaining, clarifying, or understanding the findings.
- (p) Listing of collected material, including field numbers, field identifications, and elements, cross-referenced to locality field numbers. This list may be submitted in electronic format, preferably in spreadsheet format.
- (q) BLM locality form (8270-3) or equivalent for each new locality (including localities where fossils were observed but not collected) with a 1:24000 scale map showing the localities (not reduced in scale during photocopying) (see items 2 and 3 below).

2. Exact locations of fossil localities contained in these reports are considered sensitive and must not be included in any public document. The BLM locality form (8270-3) or

equivalent, 1:24000 scale map showing the localities, and any other information containing specific fossil locations may be bound separately or placed in a separate section to allow for preservation of confidential locality data. A copy of this confidential section must be submitted to the Paleontology Lead (in some cases, two copies may be required). A copy for each affected Field Office may be required. Another copy must be submitted to the official repository with the collected materials.

3. BLM GPS recording and data standards must be used to report paleontological locality data. Existing USGS topographic maps are often based on the NAD27 standard, so locality data calculated from a map base must be converted before submission. Data must be recorded and reported with a mean error of +/- 12.5 meters or less, at a 95 percent confidence level. For small localities, data should be reported as point data. Larger polygonal localities should be reported using coordinates of a centroid and a description of the approximate size, or the key coordinate points of a bounding polygon. Linear features, such as roads or surveyed project boundaries, must be reported as line data. The 1:24000 scale map(s) accompanying the locality forms should graphically illustrate the locality, either as a point or an outline of the locality as appropriate, and be clearly labeled with the locality or field number.

D. Report Approval. The Authorized Officer will analyze the Survey Report for adequacy within 10 working days of receipt. Notification accepting the report, or explaining any identified deficiencies, will be sent to the consulting paleontologist and the project proponent with a copy placed in the project file. Any deficiencies must be corrected as soon as possible, usually initiated within five working days, and the report must be resubmitted for approval. Any resubmissions must be prompt, but consideration will be made for the amount of time needed for major corrections. Deficiencies directly affecting the survey, such as inadequate survey procedures or incomplete data, must be corrected before granting approval for the project to proceed. Deficiencies not directly affecting the survey, such as curation issues, will not prevent approval of the project, but must be corrected as soon as possible.

III. DETERMINATION OF FURTHER MITIGATION REQUIREMENTS

The need for additional mitigation to protect paleontological resources will be determined on a case-by-case basis. The Authorized Officer, in consultation with Regional Paleontologist or the Paleontology Lead, will analyze the Survey Report for survey findings and any mitigation recommendations. If no further mitigation is needed, the Authorized Officer will promptly notify the project proponent that there are no additional paleontological surveys or mitigation measures required, and the project may proceed pending any other approvals. The project file must be documented indicating acceptance of the survey report and identifying any additional mitigation requirements. If it is determined that additional mitigation efforts are needed to protect or preserve the paleontological resources, the project proponent will be notified as soon as possible. The Authorized Officer and/or the Paleontology Lead usually develop and approve the mitigation procedures or recommend a project be redesigned in consultation with the project proponent. Factors such as locality or specimen significance, economics, safety, and project urgency will be considered when developing mitigation measures. Additional mitigation

measures will be developed and implemented as timely as possible so as not to delay project actions.

A. Relocation. The preferred mitigation technique is to change the project location based on the results of the field survey. Relocation, however, may necessitate a field survey of the new area, as well as resurveys by other resource specialists. Anticipation of this contingency prior to or during the original survey may allow for survey of an expanded area at the same time. If relocation will eliminate impacts and is acceptable to all parties, then a report to the file, including a map showing the original and revised locations, must be completed documenting the change. Approval for the project to proceed in the revised location may then be granted by the Authorized Officer to the project proponent. When avoidance is not possible, appropriate mitigation may include excavation or collection (data recovery), stabilization, monitoring, protective barriers and signs, or other physical and administrative protection measures.

B. Deferred Fossil Collection. In some cases, fossil material may have been identified, but not completely collected during the initial field survey, such as a partial dinosaur or other large fossil assemblage. It may be possible to complete the recovery of this material and all related data prior to beginning construction activities, and thus mitigate the adverse impact. This may require a shift in the project schedule and must be coordinated with the project proponent. Approval by the Authorized Officer for the project to proceed will only be granted when recovery of the fossil material and field data is completed. A report to the file and the project proponent documenting the recovery and indicating that no further mitigation is required must be completed, and the report signed by the Authorized Officer. If the discovery cannot be fully collected within the available time frame, it may have to be avoided by relocating or redesigning the project.

IV. PROCEDURES FOR FIELD MONITORING

The purpose of on-site monitoring is to assess and collect any previously unknown fossil material uncovered during the project activities or soon after surface-disturbing actions. Based on the initial scoping, the field survey and recommendations, and the plan of operations, it may be necessary to require monitoring of surface-disturbing activities. Monitoring may be required as part of an overall mitigation for a project which was developed during the NEPA process, or upon the discovery of paleontological resources during project activities.

A. Monitoring Plan. A monitoring plan can be developed by a BLM paleontologist or a qualified paleontologist hired by the proponent. The plan must be appropriately scaled to the size and complexity of the anticipated monitoring. If developed by a third party, the appropriate Paleontology Lead or Regional Paleontologist shall review the plan for sufficiency prior to acceptance. Monitoring of the project may proceed when the monitoring plan is approved by the Authorized Officer. A monitoring plan indicates the treatments recommended for the area of the proposed disturbance and must minimally address the following:

1. The recommended approach to additional specimen collection, such as total or partial recovery or sampling; and

2. The specific locations and intensity of monitoring or sampling recommended for each geologic unit, stratigraphic layer, or area impacted.

Monitoring intensity is determined based on the analysis of existing data and/or field surveys and any previous monitoring efforts.

B. Types of Monitoring. There are two types of monitoring: 1) on-site, performed during ongoing operations, and 2) spot-checks, performed during or after disturbance, or at key times during the progress of the project.

1. On-site monitoring – In areas with a high probability for buried fossils, the presence of a monitor at the site of disturbance at all times that disturbance is occurring may be warranted. The need for a full-time monitor is based on the findings of the survey, the local geology, and the proposed actions. Efforts will be made to complete fossil recovery with minimal work stoppage. However, in some cases, an extended period of work stoppage may be required, so coordination with the project proponent or representative is important (see D below). Prior to beginning the monitoring work, the monitor, company supervisor, and machinery operators should agree on procedures for brief work stoppages to allow for examination of finds. It is critical that safety be of utmost concern because of the presence of heavy machinery and open trenches.

The monitor must assess any finds, collect loose fossil material and related data, and take appropriate steps to mitigate any current or potential damage. Consideration of the size of the expected fossils must also be considered; for example, microfossils may not be visible during excavation activities. It may be appropriate to collect samples of matrix for later recovery of microvertebrate fossils or other analyses. Activities planned to occur during night time should be assessed relative to the potential to uncover significant fossils. Fossils may not be visible at night in trenching or grading operations, so construction activities may need to be suspended during night time in sensitive areas.

2. Spot-checking – In areas with a moderate to high probability for unknown fossil material, it may be more appropriate to check only at key times rather than maintain continuous monitoring of operations. Key times for scheduling spot-checking are when the fossil-bearing bedrock is exposed to view or prior to placing spoil material back into the excavation. Examples of these key times may be when a pipeline trenching operation is complete but before pipe is placed and the trench backfilled or prior to redistribution of topsoil. Spot-checking requires close coordination with the project proponent and the paleontologist, and usually requires the paleontologist to be available on short notice. In some instances, it may be advantageous to allow rain and/or wind to erode away loose matrix and concentrate fossil material to increase visibility. The paleontologist will coordinate with the project proponent to allow sufficient time for this action to occur, as appropriate to conditions, expected fossil material, and construction schedules.

The paleontologist should report potentially fossiliferous areas in the final report to allow for future assessment of sites, even if no fossils were located during the project monitoring.

C. Types of Field Personnel. Depending on the complexity of the project, it may be necessary to employ a number of paleontology field personnel simultaneously. There may be a lack of fully qualified paleontologists to perform all the necessary monitoring during the scheduled times of construction. Use of additional personnel for field work is permissible, but Field Agents and Field Monitors (described below) must be requested by the Permittee and authorized by the BLM prior to field work.

1. **Principal Investigator** – The person listed as Permittee (Permit item 1a) on the Paleontological Resources Use Permit is the Principal Investigator (PI) and is responsible for all actions under the permit, for meeting all permit terms and conditions, and for the performance of all other personnel. This person is also the contact person for the project proponent and the BLM.

2. **Field Agent** – Other qualified paleontologists may perform field work independently of the PI under the conditions of this permit. Résumés must be submitted to BLM and must demonstrate qualifications equivalent to those of Permittees. Field Agents must be listed on the permit under “Name(s) of individual(s) responsible for planning, supervising, and carrying out fieldwork” (Permit item 8) or authorized in a separate letter from BLM. They must follow all the permit terms and conditions applicable to field work and must carry a copy of the permit, included terms and conditions, and separate authorizing letter (if used) while in the field. Field work results must be reported to the PI, who will then submit required reports.

3. **Field Monitor** – Field Monitors may be utilized for supplemental on-site monitoring of surface-disturbing activities when the PI or a Field Agent is performing field work elsewhere. Field Monitors must have sufficient field experience to demonstrate acceptable knowledge of fossil identification, collection methods, and paleontological techniques. The PI must supply a summary of each person’s experience to the BLM prior to field work. Field Monitors must be approved by the BLM prior to performing field work and must carry a copy of the permit while in the field. The PI or Field Agent must be in communication with the Field Monitor using a portable communication device, such as a cell phone or two-way radio, and are required to be near enough to the Field Monitor to allow for prompt examination of all fossil discoveries (no more than two hours away) by the PI or Field Agent.

4. **Field Assistant** – Additional personnel not meeting the previously cited experience or knowledge levels may be utilized during field work, but must be under direct, on-site supervision of either the PI or a Field Agent as part of a supervised crew. Field assistants must have at least four to eight hours of training or experience received from a qualified paleontologist in identifying paleontological resources prior to performing field work or when first utilized in this capacity. A listing of all Field Assistants (including contact information) must be supplied prior to any field work. All discoveries made by a Field Assistant must be immediately reported to the PI or Field Agent on site. To ensure proper supervision, an appropriate ratio of Field Assistants per PI or Field Agent must be maintained. The complexity of the project, the area to be covered, and the experience of the assistants are some of the factors that should be considered in determining the proper ratio, but commonly five to seven assistants is the maximum number that can be supervised by one PI or Field Agent.

D. Work Stoppage. If significant fossil material is discovered during construction activities, the PI, Field Agents, and Field Monitors have the authority to temporarily halt surface disturbing actions until an assessment of the find is completed and appropriate protection measures taken. Efforts will be made to complete fossil recovery with minimal work stoppage. However, in some cases, an extended period of work stoppage may be required. If the paleontological resource can be avoided, mitigated, or collected within approximately two hours, work may resume after approval from the PI or Field Agent, and the Authorized Officer must be notified as soon as possible of the discovery and any mitigation efforts that were undertaken. If the find cannot be mitigated within a reasonable time (two hours), the concurrence of the Authorized Officer or official representative for a longer work stoppage must be obtained. Work may not resume until approval is granted from both the PI or Agent and the Authorized Officer.

V. FINAL PROJECT REPORT

Upon completion of all field work, including survey and monitoring, the PI must submit within 30 days, a written final report to the Authorized Officer, Paleontology Lead, and the designated repository. A copy of the report may be provided to the project proponent if required, but without the BLM Locality forms. Reports must include the following details. Items 1 and 2 should appear at the beginning of the report, and may be presented as a title page in multi-page reports.

1. Name, affiliation, address, date of report, and permit number (if consultant) of the paleontologist doing the survey.
2. Project name and number (if used), name of proponent, and general location of project.
3. Date(s) of the survey and names of any personnel assisting with the survey.
4. Brief description of project and expected impacts to paleontological resources.
5. A summary of mitigation performed.
6. A summary of findings, including important discoveries.
7. A description of potentially fossiliferous areas to allow for future assessment of sites, even if no fossils were located during the project monitoring.
8. A completed BLM locality form 8270-3 or equivalent for each new locality using Universal Transverse Mercator (UTM) NAD 83 coordinates, and 1:24000 scale maps with new localities plotted using points or polygons as appropriate. Locality forms, maps, and any other information containing specific fossil locations should be bound separately or assembled as a separate section to allow for preservation of confidential locality data.
9. List of specimen field numbers and field identifications of collected material, cross-referenced to the locality field number. This list may be submitted in electronic format, preferably in a spreadsheet format.

If the survey was performed by BLM, a report similar in contents must be written and filed in the project file, and the project proponent notified as soon as possible upon completion.

VI. COMPLETION OF MITIGATION RESPONSIBILITY

When the final report with the specimen inventory and the signed receipt of confirmation of museum deposition are accepted by the BLM, mitigation for paleontological resources related to the project will be considered completed. The project proponent will be notified in writing as soon as possible by the Authorized Officer after consulting with the Paleontology Lead or Regional Paleontologist and a copy of the notification placed in the project file.

The responsibility of the project proponent ends when appropriate mitigation related directly to the project is completed and final approval is received from the Authorized Officer. Any additional field collection, quarrying, final specimen preparation, etc. will be considered to be research, and will be the responsibility of the consulting paleontologist or another approved party. The project proponent will not be held responsible for completion of any research project. However, the project proponent can choose to sponsor further research. A separate research permit will be required for additional research activities.

VII. COLLECTIONS RESULTING FROM ASSESSMENT AND MITIGATION

Fossil specimens and related data collected from public lands during field surveys and mitigation remain the property of the Federal government. They must be placed in the approved repository(s) identified on the Paleontological Resource Use Permit held by the consulting paleontologist as soon as practical and receipt(s) of collections submitted to the BLM, but no later than 60 days after all field work is completed. Written approval from the Paleontology Lead or Regional Paleontologist is required if additional time is needed for transfer of all specimens and field data.

VIII. RESOURCE MANAGEMENT UPDATES

Based on findings resulting from any of the above steps, the project file, locality and specimen information, and other BLM data should be updated to reflect any new or modified information. Paleontology permit files should be checked and updated, as well as any other administrative information.

The PFYC Class assignments can be assessed based on the analysis, survey, and monitoring results. New information may indicate a change in the PFYC Class is appropriate for one or several geologic units. Other applications of the PFYC system should be considered, such as the use for impact analyses in planning documents or for survey and mitigation determinations for other projects. Any changes in classification must be made in consultation with the Paleontology Lead or Regional Paleontologist to maintain consistency across Field Office boundaries.

APPENDIX A – DEFINITIONS

(As applicable to BLM management of paleontological resources)

Alluvium – A general term for clay, silt, sand, gravel, or similar unconsolidated detrital material [fragments of rock or mineral material derived from older rocks] deposited during relatively recent geologic time by a stream or other body of running water as a sorted or semi-sorted sediment in the bed of the stream or its flood plain or delta, or as a cone or fan at the base of a mountain slope; especially, such a deposit of fine-grained texture (silt or silty clay) deposited during a time of flood (*from American Geological Institute (AGI), Glossary of Geology, 1972 ed.*)

Alluvium may contain paleontological resources in older alluvial deposits. The location on the landscape often will provide clues to the potential for paleontological resources within alluvial deposits. As an example, alluvium developed near major river courses or lake margins has a much higher potential to contain significant paleontological resources than alluvium (colluvium) formed from slope wash.

Approved Repository – Meets the Department of the Interior 411 Departmental Manual (DM) provisions for museum property, including capability for providing adequate long-term curatorial services, such as a physically secure environment, and maintaining professional staff qualified to catalog, care for, preserve, retrieve, and loan, where appropriate, these materials and associated records.

Bedrock – A general term for the rock, usually solid, that underlies soil or other unconsolidated, surficial material (*from American Geological Institute (AGI), Glossary of Geology, 1972 ed.*) For paleontological purposes, bedrock generally excludes alluvium, colluvium, sand dunes, and loess (fine-grained blanket deposit of marl or loam). In certain situations, bedrock may contain recent soils/sediments with fossils.

Colluvium – A general term applied to any loose, heterogeneous, and incoherent mass of soil material or rock fragments deposited chiefly by mass-wasting, usually at the base of a steep slope or cliff; e.g., talus, cliff debris, and avalanche material. Also, alluvium deposited by unconcentrated surface run-off or sheet erosion, usually at the base of a slope (*from American Geological Institute (AGI), Glossary of Geology, 1972 ed.*)

Field Agent – Other qualified paleontologists may perform field work independently of the PI under the conditions of this permit. Résumés must be submitted to BLM and must demonstrate qualifications equivalent to those of Permittees. Field Agents must be listed on the permit under “Name(s) of individual(s) responsible for planning, supervising, and carrying out fieldwork” (Permit item 8) or authorized in a separate letter from BLM. They must follow all the permit terms and conditions applicable to field work and must carry a copy of the permit, included terms and conditions, and separate authorizing letter (if used) while in the field. Field work results must be reported to the PI, who will then submit required reports.

Field Assistant – Additional personnel not meeting the previously cited experience or knowledge levels may be utilized during field work, but must be under direct, on-site supervision

of either the PI or a Field Agent as part of a supervised crew. Field assistants must have at least 4 to 8 hours of training or experience received from a qualified paleontologist in identifying paleontological resources prior to performing field work or when first utilized in this capacity. A listing of all Field Assistants (including contact information) must be supplied prior to any field work. All discoveries made by a Field Assistant must be immediately reported to the PI or Field Agent on site. To ensure proper supervision, an appropriate ratio of Field Assistants per PI or Field Agent must be maintained. The complexity of the project, the area to be covered, and the experience of the assistants are some of the factors that should be considered in determining the proper ratio, but commonly five to seven assistants is the maximum number that can be supervised by one PI or Field Agent.

Field Monitor – Field Monitors may be utilized for supplemental on-site monitoring of surface-disturbing activities when the PI or a Field Agent is performing field work elsewhere. Field Monitors must have sufficient field experience to demonstrate acceptable knowledge of fossil identification, collection methods, and paleontological techniques. The PI must supply a summary of each person's experience to the BLM prior to field work. Field Monitors must be approved by BLM prior to performing field work and must carry a copy of the permit while in the field. The PI or Field Agent must be in communication with the Field Monitor using a portable communication device, such as a cell phone or two-way radio, and are required to be near enough to the Field Monitor to allow for prompt examination of all fossil discoveries (no more than two hours) by the PI or Field Agent.

Field Survey – Pedestrian (walking) surveys performed in areas where significant fossils are expected to occur within the boundary or immediate vicinity of an anticipated disturbance. Surveys are performed by a qualified paleontologist or BLM Regional Paleontologist or other officially appointed BLM employee prior to any surface disturbing activities. Survey activities also include concurrent collection of significant fossils.

Land Tenure Adjustments/Change in Title – Changes in ownership or administration of surface or mineral estates, typically exchanges or sales, which may result in a change in ownership or control of paleontological resources.

Monitoring – a) On-site observation during all surface disturbing activities to assess and collect any previously-unknown fossil material uncovered by the project activities. b) Examination of excavation or spoil piles at key times during project activities. Monitoring must be performed by a permitted paleontologist, field agent, or field monitor (see section *IV.C.*), Regional Paleontologist, or other officially appointed BLM employee, and occurs during or soon after surface disturbing actions.

Paleontological Locality (Locality) – A geographic point or area where a fossil or associated fossils are found in a related geological context. A paleontological locality is confined to a discrete stratigraphic layer, structural feature, or physiographic area.

Paleontology Program Coordinator (Paleontology Coordinator) – The employee designated by the local BLM Office Manager to manage paleontological resource issues, including planning, mitigation, budget, and other administrative duties. The local point of contact for

paleontological resource use permittees, the State Office Paleontology Program Lead, and the Regional Paleontologist. The employee is usually a geologist or archaeologist.

(a) In some offices, additional employees may be designated by the supervisor to determine the need for field surveys and monitoring for some projects, or other duties in support of the paleontology program. The scope of duties for these additional employees must be approved by the Paleontology Program Lead and closely coordinated with the Paleontology Coordinator.

(b) A few current BLM employees may meet the same professional qualifications that are required for a BLM Paleontological Resources Use Permit applicant. BLM-approved training and field experience may also allow employees to gain sufficient background to achieve competency in the field. With the approval of the Regional Paleontologist and the Office Manager or Deputy State Director, these employees may be designated as qualified to perform field surveys or monitoring. The current availability of these employees must also be approved by the unit manager or Deputy State Director, typically on a project-by-project basis or within a defined time period. Depending on official duties, local roles and responsibilities, and management preferences, these employees may or may not be the Paleontology Coordinator.

Paleontology Program Lead (Paleontology Lead) – Any one of the following: the Regional Paleontologist in the states with an identified position; the paleontologist at Grand Staircase-Escalante National Monument; or the State Office Archeologist in the states without a Regional Paleontologist.

Principal Investigator – The person listed as Permittee (Permit item 1a) on the Paleontological Resources Use Permit is the Principal Investigator (PI) and is responsible for all actions under the permit, for meeting all permit terms and conditions, and for the performance of all other personnel. This person is also the contact person for the project proponent and the BLM.

Regional Paleontologist – The BLM paleontologist that provides professional expertise in paleontology, and is responsible for interpreting relevant laws, authorities, and policy for the administration of the BLM paleontology program for all States in his/her respective region, and as the program interface between Field and/or District Offices, State Offices, and the Washington Office. In some cases, the Regional Paleontologist also serves as the State Office Paleontologist.

Significant Paleontological Resource (syn. Significant Fossil Resource) – Any paleontological resource that is considered to be of scientific interest, including most vertebrate fossil remains and traces, and certain rare or unusual invertebrate and plant fossils. A significant paleontological resource is considered to be scientifically important because it is a rare or previously unknown species, it is of high quality and well-preserved, it preserves a previously unknown anatomical or other characteristic, provides new information about the history of life on earth, or has identified educational or recreational value. Paleontological resources that may be considered to not have paleontological significance include those that lack provenience or context, lack physical integrity because of decay or natural erosion, or that are overly redundant or are otherwise not useful for research.

Vertebrate fossil remains and traces include bone, scales, scutes, skin impressions, burrows, tracks, tail drag marks, vertebrate coprolites (feces), gastroliths (stomach stones), or other physical evidence of past vertebrate life or activities.

Soil – The natural medium for growth of land plants (*from* American Geological Institute (AGI), Glossary of Geology, 1972 ed.) Generally, well-developed soils do not contain paleontological resources. However, the C horizon (the substratum above bedrock that is little affected by soil forming processes) may occasionally contain Pleistocene-aged fossils.

Stipulations – Written conditions that may restrict or impose limits on approved activities, or require that certain procedures be followed. The general usage herein encompasses several formal terms specific to other use authorizations such as Mitigation, Terms and Conditions, Conditions of Approval, and Standard Stipulations.

Surface disturbance – Disruption of the ground surface and subsurface. Disruption may damage or destroy significant paleontological resources and their geological context.

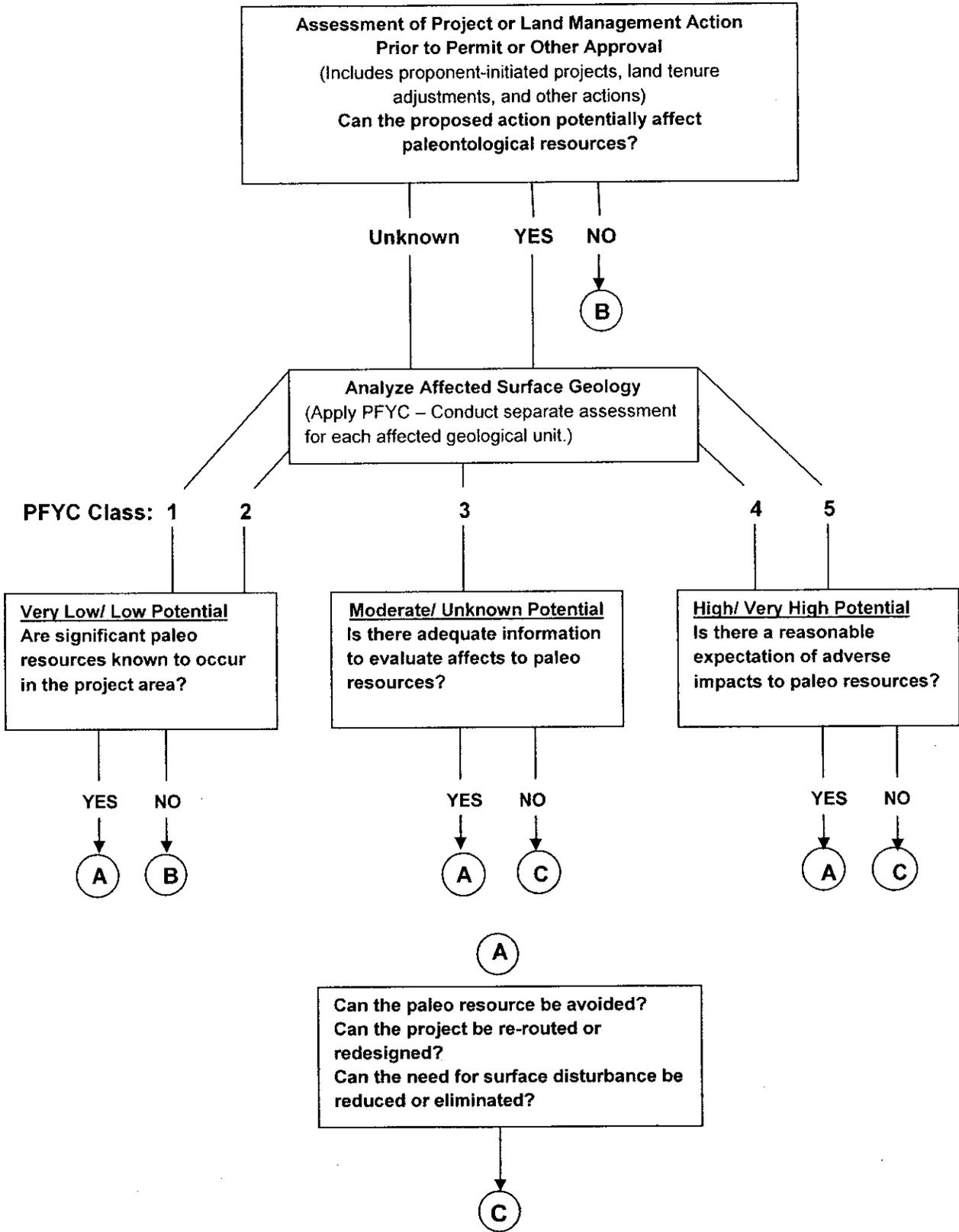
– Generally excludes: fire (but not fire activities, see below), vegetation mowing, weed spraying, grazing, natural erosion, fence building

– Some activities that may impact the ground surface and must be assessed on a case-by-case basis are:

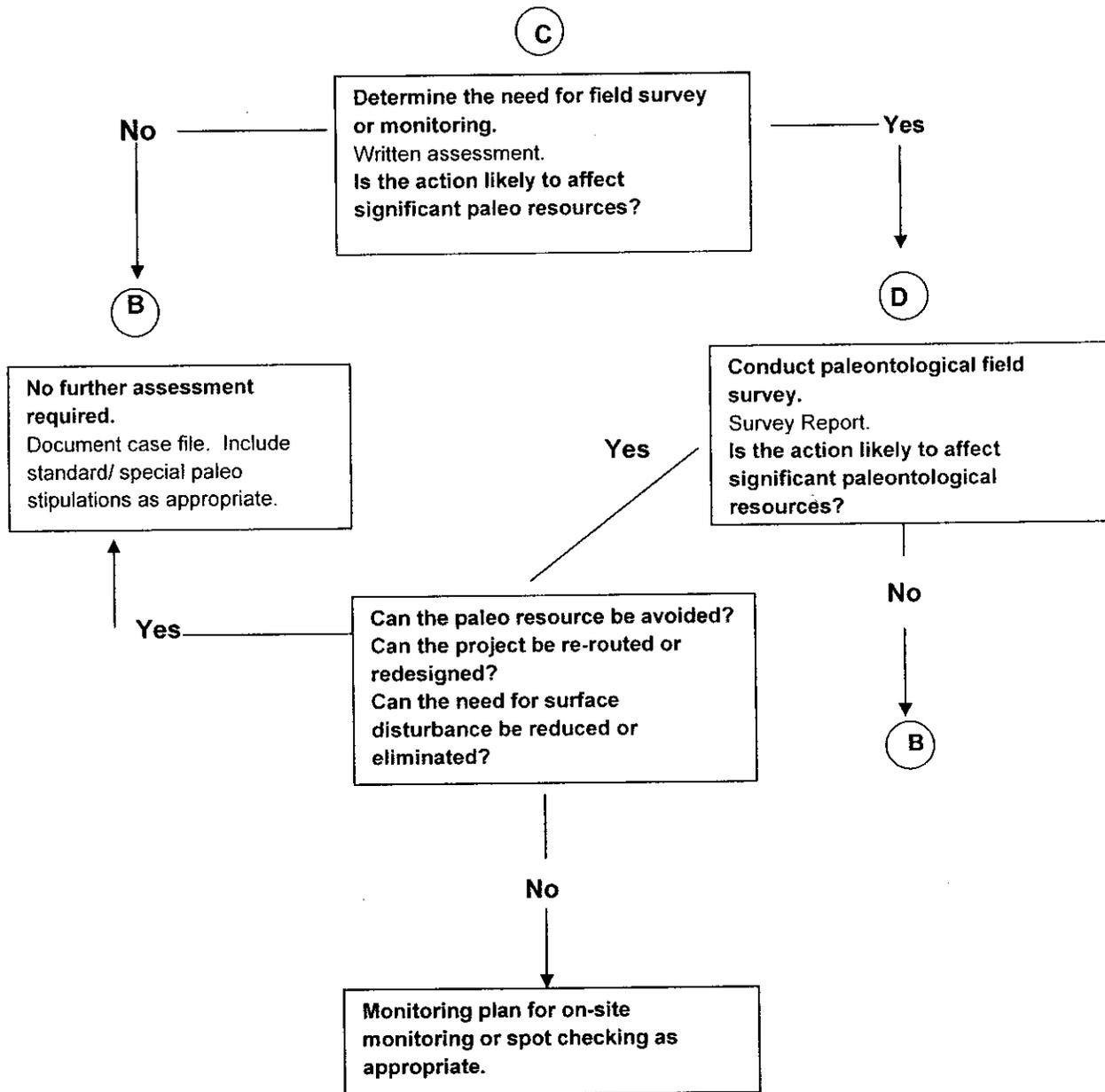
- * Mechanized vegetative treatments – chaining, sagebrush chopping, etc
- * Seismic activities – vibroseis techniques, cross-country travel
- * Fire management activities – line building, brush removal and thinning using mechanized equipment
- * Recreational activities – OHV, rock collecting, mountain biking, public events

Voucher Specimen – A representative sample that verifies the kind of fossil material found during a field survey, and is collected and curated in an approved repository along with its associated field data.

Paleontological Resources Assessment Flowchart



Paleontological Actions





APPENDIX E

BEST MANAGEMENT PRACTICES

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BEST MANAGEMENT PRACTICES

INTRODUCTION

Best management practices (BMPs) are those land and resource management techniques designed to maximize beneficial results and minimize negative impacts of management actions. BMPs are defined as methods, measures, or practices selected on the basis of site-specific conditions to provide the most effective, environmentally sound, and economically feasible means of managing an activity and mitigating its impacts. Interdisciplinary site-specific analysis is necessary to determine which management practices would be necessary to meet specific goals. Selection and implementation of any BMPs will be evaluated against the New Mexico Public Land Health Standards to ensure progress toward public land health attainment. BMPs include, but are not limited to, structural and nonstructural controls, operations, and maintenance procedures. BMPs can be applied before, during, and after pollution producing or surface-disturbing activities to reduce or eliminate the introduction of pollutants into receiving waters (40 Code of Federal Regulation 130.2(m), Environmental Protection Agency Water Quality Standards Regulation) or to prevent unnecessary or undue degradation of resources.

BMPs are identified as part of the National Environmental Policy Act process, with interdisciplinary involvement. Because the control of nonpoint sources of pollution and prevention of damage to other resources is an ongoing process, continual refinement of BMP design is necessary. This process can be described in five steps, which are:

1. selection of design of a specific BMP;
2. application of BMP;
3. monitoring;
4. evaluation; and
5. feedback.

Data gathered through monitoring are evaluated and used to identify changes needed in BMP design, application, or in the monitoring program.

BMPs described in this appendix are a compilation of existing policies and guidelines and commonly employed practices designed to assist in achieving the objectives for maintaining or minimizing water quality degradation from nonpoint sources; preventing the loss of soil productivity; providing guidelines for aesthetic conditions within watersheds; and mitigating impacts to soil, vegetation, or wildlife habitat from surface-disturbing activities. BMPs are selected and implemented as necessary, based on site-specific conditions, to meet a variety of resource objectives for specific management actions. Therefore, this document does not provide an exhaustive list of BMPs, as additional BMPs or modifications may be identified to minimize the potential for negative impacts when evaluating site-specific management actions through an interdisciplinary process.

In addition, implementation and effectiveness of BMPs need to be monitored to determine whether the practices are achieving resource objectives and accomplishing desired goals. Adjustments will be made as necessary.

Each of the following BMPs are a part of the coordinated development of land use plans in the Las Cruces District and may be updated as new information becomes available to ensure objectives are met and to conform with changes in Bureau of Land Management (BLM) regulations, policy, direction, or

new scientific information. Applicants also may suggest alternative procedures that could accomplish the same result. These guidelines will apply, where appropriate, to all use authorizations, including BLM initiated projects. Any BMP listed may be used in any program wherever it may be effective.

ROAD DESIGN AND MAINTENANCE

- Design roads to minimize total disturbance, to conform to topography, and to minimize disruption of natural drainage patterns.
- Base road design criteria and standards on road management objectives such as traffic requirements of the proposed activity, overall transportation objectives, and to meet environmental objectives such as minimizing damage to natural surroundings. Locate roads on stable terrain such as ridgetops, natural benches, the flatter transitional slopes near ridges and valley bottoms, and moderate sideslopes. Locate roads away from slumps, slide-prone areas, concave slopes, clay beds, and places where rock layers dip parallel to the slope. Locate roads on well-drained soil types; avoid wet areas.
- Construct cut-and-fill slopes to be approximately 3(h):1(v) or flatter where feasible. Locate roads to minimize heights of cutbanks. Avoid high, steeply sloping cutbanks in highly fractured bedrock.
- Avoid head walls; midslope locations on steep, unstable slopes; fragile soils; seeps; old landslides; sideslopes in excess of 70 percent; and areas where the geologic bedding planes or weathering surfaces are inclined with the slope. Implement extra mitigation measures when these areas cannot be avoided. Construct roads for surface drainage by using outslopes, crowns, grade changes, drain dips, waterbars, or in sloping to ditches as appropriate.
- Sloping the road base to the outside edge for surface drainage is normally recommended for local spurs or minor collector roads where traffic volume is low and low traffic speeds are anticipated. This is also recommended in situations where long intervals between maintenance will occur and where minimum excavation is wanted. Outsloping is not recommended on steep slopes. Sloping the road base to the inside edge is an acceptable practice on roads with steep sideslopes and where the underlying soil formation is very rocky and not subject to appreciable erosion or failure.
- Crowning and ditching are recommended for arterial and collector roads where traffic volume, speed, intensity, and user comfort are considerations. Recommended gradients range from 0 to 15 percent where crowning and ditching may be applied, as long as adequate drainage away from the road surface and ditch lines is maintained.
- Where possible, reroute or reengineer vehicle routes that divert overland flow and contribute to declines in public land health (watershed and vegetation standards).
- Minimize excavation when constructing roads through balancing earthwork, narrowing road widths, and end-hauling where sideslopes are between 50 and 70 percent.
- If possible, construct roads when soils are dry and not frozen. When soils or road surfaces become saturated to a depth of 3 inches, BLM-authorized activities should be limited or cease unless otherwise approved by the Authorized Officer.

- Consider improving inadequately surfaced roads that are to be left open to public traffic during wet weather by using gravel or pavement to minimize sediment production and maximize safety.
- Retain vegetation on cutslopes unless it poses a safety hazard or restricts maintenance activities. Roadside brushing of vegetation should be done in a way that prevents disturbance to root systems and visual intrusions (i.e., avoid using excavators for brushing).
- Retain adequate vegetation between roads and streams to filter runoff caused by roads. Avoid riparian/wetland areas where feasible; locate in these areas only if the roads do not interfere with the attainment of proper functioning condition and riparian management objectives.
- Minimize the number of unimproved stream crossings. When a culvert or bridge is not feasible, locate drive-thru (low-water crossings) on stable rock in the drainage channel. Harden crossings with rock and gravel if necessary. Use angular rock if available.
- Locate roads and limit activities of mechanized equipment within stream channels to minimize their influence on riparian areas. When stream crossing is necessary, design the approach and crossing perpendicular to the channel, where practical. Locate the crossing where the channel is well defined, unobstructed, and straight.
- Avoid placing fill material in a floodplain unless the material is heavy enough to remain in place during flood events.
- Use drainage dips instead of culverts on roads where gradients would not present a safety issue. Locate drainage dips in such a way that water will not accumulate or where outside berms will prevent drainage from the roadway.
- Locate and design drainage dips immediately upgrade of stream crossings and provide buffer areas and catchment basins to prevent sediment from entering the stream.
- Construct catchment basins, brush windrows, and culverts in such a way as to minimize sediment transport from road surfaces to stream channels. Install culverts in natural drainage channels in a way that conforms with the natural streambed gradients so the drainage flows to outlets that discharge onto rocky or hardened, protected areas.
- Design and locate water-crossing structures in natural drainage channels to offer adequate passage for fish, provide for minimum impacts to water quality, and be capable of handling a 100-year event for runoff and floodwaters.
- Use culverts that will withstand, at a minimum, a 50-year storm event and/or that have a minimum diameter of 24 inches for permanent stream crossings and a minimum diameter of 18 inches for drains that cross roads.
- Replace undersized culverts and repair or replace damaged culverts and downspouts. Provide energy dissipaters at culvert outlets or drainage dips.
- Locate culverts or drainage dips to avoid discharging onto unstable terrain such as head walls or slumps.

- Provide adequate spacing to avoid accumulation of water in ditches or road surfaces. Place culverts on solid ground to avoid road failures.
- Use properly sized aggregate and riprap during culvert construction. Place riprap at culvert entrance to streamline water flow and reduce erosion.
- Establish adapted vegetation on all cut-and-fill slopes immediately following road construction and maintenance.
- Remove berms from the downslope side of roads, consistent with safety considerations.
- Leave abandoned roads in a condition that provides adequate drainage without further maintenance. Close abandoned roads to traffic. Physically obstruct the road with gates, large berms, trenches, logs, stumps, or boulders as necessary to accomplish permanent closure.
- Abandon and rehabilitate roads no longer needed. Leave these roads in a condition that provides adequate drainage and remove culverts.
- When plowing snow for road use during winter, provide breaks in snow berms to allow for road drainage.
- Avoid plowing snow into streams. Plow snow only on existing roads.
- Perform maintenance to conserve existing surface material; retain the original crowned or outsloped, self-draining cross-section; and prevent or remove rutted berms (except those designed for slope protection) and other irregularities that retard normal surface runoff. Avoid casting loose ditch or surface material past the shoulder where it can cause stream sedimentation or weaken slump-prone areas. Avoid undercutting backslopes.
- Do not disturb the toe of cutslopes while pulling ditches or grading roads. Avoid side casting road material into streams.
- Grade roads only as necessary. Maintain drain dips, waterbars, road crown, insloping, and outsloping, as appropriate, during road maintenance
- Maintain roads in special management areas according to special management area guidance. Generally, retain roads within existing disturbed areas and side cast material away from the special management area.
- When landslides occur, save all soil and material usable for reclamation and stockpile it for future reclamation needs.
- Avoid side casting slide material where it can damage, overload, or saturate embankments or flow into downslope drainage courses.
- Reestablish vegetation as needed in areas where it has been destroyed due to side casting.
- Strip and stockpile topsoil before construction of new roads, if feasible. Reapply soil to cut-and-fill slopes prior to revegetation.

SURFACE-DISTURBING ACTIVITIES

- Require special design and reclamation measures, as appropriate, to protect scenic and natural landscape values. This may include transplanting trees and shrubs, mulching and fertilizing disturbed areas, removing surfacing material, imprinting, irrigating, using low-profile permanent facilities, and painting to minimize visual contrasts. Surface-disturbing activities may be moved to avoid sensitive areas or to reduce the visual effects of the proposal.
- Design aboveground facilities that requiring painting to blend in with the surrounding environment.
- Restrict surface disturbances in areas that have special topographic (steep or broken terrain and/or benches) and soil concerns in order to reduce impacts caused by soil erosion and habitat disturbance.
- Development in these areas will be considered on a case-by-case basis and will contain site-specific mitigation designed to prevent increased sediment from being transported into drainages and to prevent fragmentation of areas determined to provide important wildlife habitat.
- Excavate topsoil and subsoil only where it is absolutely necessary. Consider brush-beating, mowing, and/or parking on vegetation for surface disturbing activities.
- Contour disturbed areas to blend with the natural topography. Blending is defined as reducing form, line, and color contrast associated with surface disturbance. Disturbances should be contoured to match the original topography, where matching is defined as reproducing the original topography and eliminating the form, line, and color caused by the disturbance as much as possible.
- Implement interim reclamation concurrent with construction and site operations to the extent possible.
- Initiate final reclamation actions within six months of the termination of operations unless otherwise approved in writing by the Authorized Officer.
- Push the fill material into cut areas and over backslopes. Do not leave depressions that could trap water or form ponds unless the authorized officer has determined that dips or depressions may be used to assist reclamation and seed propagation efforts.
- Make certain that reclaimed soil is free of contaminants and has adequate depth, texture, and structure for successful reclamation of vegetation. Vegetation reclamation will be considered successful when healthy, mature perennials are established with a composition and density that closely approximates the surrounding vegetation, as prescribed by the BLM, and the reclamation area is free of noxious weeds.
- In compliance with E.O.13112 and BLM Manual 1745, and subject to future revisions to Bureau policy and guidance, where restoration, rehabilitation, or reclamation efforts (including Bureau authorized actions such as rights-of way) require reseeding activities, or use of other plant materials (such as potted plants, poles, etc.), non-native plant species would be used only if native species are not readily available in sufficient quantities. Care would be taken in selecting non-native species that are not likely to become invasive. If non-native plant species are used or

identified for use in restoration, rehabilitation, or reclamation projects, the BLM, through the Bureau Plant Conservation Program and partner organizations, would work to identify and develop native replacements for the non-native species. Additionally, seed mixes used in these actions would use the closest locally adapted selections, varieties, or cultivars of native species available to improve success of the seeding effort.

- Construct a BLM-standard barbed-wire fence if necessary to exclude livestock for a minimum of at least two successful growing seasons after reclamation.
- Include a restoration plan for habitat of special status species when the BLM determines it is appropriate. Develop the restoration plan, in consultation with BLM, for BLM approval.
- Require additional reclamation measures, if needed, based on the conditions existing at the time of abandonment.
- Carefully handle and dispose of oil and fuel from equipment and vehicles to prevent contamination of soil or water.
- Develop a spill contingency plan that identifies all actions to be taken in the event of a chemical spill, including phone numbers for Federal, State, and local agencies that must be notified.
- Time activities to avoid wet periods of the year, if possible.

RIGHTS-OF-WAY

- Use areas adjoining or adjacent to previously disturbed areas for rights-of-way whenever possible rather than traverse undisturbed vegetation communities.
- Construct waterbars or dikes on all rights-of-way and across the full width of the disturbed area, as directed by the Authorized Officer.
- Stabilize disturbed areas within road rights-of-way by implementing vegetation practices designed to hold soil in place and minimize erosion.
- Construct sediment barriers when needed to slow runoff, allow deposition of sediment, and prevent transport from the site. Employ straining or filtration mechanisms as needed for the removal of sediment from runoff.

FIRE SUPPRESSION

- Minimize surface disturbances and avoid the use of heavy earth-moving equipment where possible, on all fire suppression and rehabilitation activities, including mop-up, except where high value resources (including lives and property), are being protected.
- Install waterbars and seed all constructed firelines with native or adapted nonnative species as appropriate and in accordance with the BLM's *Emergency Fire Rehabilitation Handbook* (BLM 1999).

- Avoid dropping fire retardant that is detrimental to aquatic communities on streams, lakes, ponds and in riparian/wetland areas.
- Locate and construct handlines to result in minimal surface disturbance while effectively controlling the fire. Hand crews should locate lines to take full advantage of existing land features that represent natural fire barriers. Whenever possible, handlines should follow the contour of the slope to protect the soil, provide sufficient residual vegetation to capture and retain sediment, and maintain site productivity.

PRESCRIBED BURNING

- Protect soil productivity by using a low-intensity burn, if possible, to accomplish stated objectives. Burn only when the organic surface or duff layer has adequate moisture to minimize effects on the physical and chemical properties of the soil. When possible, maximize the retention of the organic surface or duff layer.
- Do not pile or burn slash within riparian/wetland areas. If riparian/wetland areas are within or adjacent to the prescribed burn unit, piles should be firelined or scattered prior to burning.
- Avoid piling concentrations of large logs and stumps when preparing the unit for burning; pile small material (3 to 8 inches in diameter) instead. Burn slash piles when soil and duff moisture are adequate to reduce potential damage to soil resources.
- All fire management activities will be subject to the BMPs identified in the *Decision Record and Resource Management Plan Amendment for Fire and Fuels Management on Public Land in New Mexico and Texas* (BLM 2004c). BMPs are identified in these documents, which can be viewed online at <http://www.nm.blm.gov>.

LIVESTOCK GRAZING MANAGEMENT

- All rangeland projects and vegetation land treatments will meet current BLM policy and objectives of the *Prehistoric Trackways National Monument Resource Management Plan*. This includes the BMPs for Surface Disturbing Activities and Invasive/Noxious Weed Management. Other BMPs may be required depending on the rangeland improvement project.
- Rangeland improvements projects and vegetation treatments are constructed as a portion of adaptive management to reduce resource conflicts and to achieve multiple-use objectives. They have been standardized over time to mitigate impacts and will be adhered to in the construction and maintenance of rangeland projects within the Planning Area. Rangeland improvements are structures, facilities, and practices intended to improve or facilitate grazing management and improve resources.
- Grazing management practices are developed through consultation on allotment-specific objectives and progress toward multiple-use objectives and sustainability of resources. Grazing management practices may include herding, grazing, and deferment periods; use of supplements; change of class of livestock; and increase or decrease of livestock numbers.

INVASIVE/NOXIOUS WEED MANAGEMENT

- Inspect and clean all surface-disturbing equipment prior to its coming onto public lands. This is especially important on vehicles from out of state or coming from a weed-infested area.
- Make sure the source of fill dirt or gravel brought onto public land is free of noxious weeds.
- Monitor construction sites for the life of the project for the presence of invasive/noxious weeds (including maintenance and construction activities). If weeds are found, the BLM Las Cruces District Office will be notified and will determine the best method for the control of the particular weed species.
- Certify all seed as noxious-weed free. Areas will be monitored to determine the success of re-vegetation and the presence of invasive/noxious weeds and will be reseeded if necessary.
- Consider livestock quarantine, removal, or timing limitations in areas infested with invasive/noxious weeds.
- Certify all seed, hay, straw, mulch, or other vegetation material transported and used on public land for site stability, rehabilitation, or project facilitation as free of all reproductive parts of noxious weeds upon the passage of a weed-free law by the State of New Mexico. All baled feed, pelletized feed, and grain used to feed livestock also shall be certified as free of the seeds of noxious weeds.
- Consider having all vehicles that travel in or out of weed-infested areas clean their equipment before and after use on public land, including off-road and all-terrain vehicles. (This precaution is recommended.)

DEVELOPED RECREATION

- Construct recreation sites and provide appropriate sanitation facilities to minimize impacts on resource values and on public health and safety and to minimize user conflicts concerning approved activities and access within an area, as appropriate.
- Minimize impacts on resource values or enhance the recreational setting and recreation experience.
- Harden sites and locations subject to prolonged/repetitive, concentrated recreational uses with selective placement of gravel or other porous materials and allow for dust abatement, paving, and engineered road construction.
- Use public education and/or physical barriers (such as rocks, posts, vegetation) to direct or preclude uses and to minimize impacts on resource values and the quality of recreation experience.
- Employ land use ethics programs and techniques such as “*Leave No Trace*” and “*Tread Lightly*” programs. Use outreach efforts of such programs to lessen needs to implement more stringent regulatory measures to obtain resource protection and a quality recreation experience.

WILDLIFE AND RIPARIAN HABITAT

- Before a surface-disturbing activity begins, the project area will be surveyed for raptor nests or active prairie dog towns. Surveys will be conducted by professional biologists approved by the Authorized Officer. All raptor nests and active prairie dog towns will be avoided by the following distances and seasonal periods:
 - Eagle – 0.5 mile, February 1-July 15
 - Prairie falcon – 0.5 mile, March 1-August 1
 - Ferruginous hawk – 0.5 mile, February 1-July 15
 - Aplomado falcon – 0.5 mile, January 1-July 31
 - Gunnison prairie dog – 0.25 mile, February 15-June 15
 - Black-tailed prairie dog – 0.25 mile, January 1-June 15
 - All other raptor species – 0.25 mile, during observed nest establishment through fledging
- Require site-specific mitigation to avoid disturbance within a half mile of occupied special status species habitat.
- Make all livestock waters on public land available to wildlife yearlong, so long as this meets grazing rotation objectives and there is no danger of damage to facilities from freezing.
- Situations where the rotation of livestock is achieved through turning off of water sources, a fence will be constructed around the watering facility to allow for opening/closing of a gate to facilitate movement of livestock. This will allow wildlife yearlong access to the watering facility. If freezing of the pipeline/trough system is a concern, fill up trough once a month during winter period to allow wildlife continued access to a water source. All watering facilities on public land will be fitted with an escape ramp to keep small mammals and birds from becoming trapped.
- Avoid constructing new roads within critical wildlife habitats. Permanent or seasonal closures may be instituted where problems exist or are expected. Where major road projects are proposed in wildlife corridors, use fencing and wildlife passes to mitigate wildlife impacts.
- Manage wildlife habitat on lands identified for disposal as a low priority, unless site specific analysis determines that changes in the existing situation have resulted in higher resource values warranting retention of these lands to protect fish and wildlife habitat values consistent with existing laws, regulations, and policies. Conduct a site specific assessment of environmental impacts before disposal of Department of Game and Fish (NMDGF).
- Construct protective exclosures/fences around riparian areas, wildlife watering facilities, and other areas of resource concern.
- Long-term land use activities will not be allowed within the species-specific buffer zones surrounding the active raptor nests or occupied prairie dog towns of the identified species. Short-term activities will be avoided within the species-specific buffer zones during the listed dates. Short-term activities will be limited to the buffer zone outside the boundary of an occupied prairie dog town and will not occur within the occupied town. All raptor nests, including those of non-listed species, will be avoided within the vicinity is defined as an activity that would begin outside a given breeding season and end prior to initiation of a given breeding season. A long-term activity is defined as an activity that would continue into or beyond a given nesting/breeding season. An active nest is defined as any nest that has been occupied in the last 7 years. A nest

will be determined active or inactive by the Authorized Officer. Surveys will be conducted by professional biologists approved by the Authorized Officer.

- Ensure that all fences are constructed to the fence specifications of the BLM Socorro Field Office to mitigate impacts on wildlife.
- Ensure that escape wildlife ramps are installed and maintained on all applicable water development projects on public lands (see the BLM *Water Developments Handbook* dated November 6, 1990 and IM No. 2004-156).
- Construct all new water improvements so they are located a minimum of 30 meters away from fences or other structures likely to pose a collision threat to bats.
- Do not allow surface disturbance within 0.5 mile of the outer edge of 100-year floodplains, playas, all artificial water developments (tanks, guzzlers, etc.), and riparian habitats (seeps, arroyos, etc.). Exceptions to this requirement will be considered on a case-by case basis.
- Avoided adverse impacts on the landscape by minimizing or excluding certain surface-disturbing activities that may degrade the objectives or intent of the project in areas where habitat or rangeland enhancement projects have been implemented, with the exception of large landscape projects (prescribed burns, chemical treatments, and mechanical treatments). Exceptions to this requirement will be considered on a case-by-case basis.
- Achieve habitat enhancement by limiting and/or mitigating existing and proposed commodity uses and by proactive habitat management practices including, but not limited to, fire management; water development; chemical, mechanical, or biological brush control; and fence modifications.
- Avoid all surface-disturbing activities, permanent or temporary, during the appropriate time periods in crucial calving, lambing, kidding, and fawning areas and wintering ranges.
- Survey the area for the presence of raptor nests prior to initiating geophysical or other preliminary surveys during the raptor breeding season.
- Follow these measures when siting facilities:
 1. In areas that constitute occupied or potential aplomado falcon habitat, a protocol survey for this species will be conducted along with the above general raptor nest survey prior to surveying/flagging locations.
 2. During operations at any time, all habitat features (pinnacles, cliffs, ledges, caves, and trees and shrubs greater than 6 feet high) containing or capable of containing raptor nests or bat habitat will be avoided by vehicular traffic or other surface-disturbing activities likely to remove or destroy them, unless approved by the BLM Authorized Officer.
 3. Tree and vegetation clearing will be limited to the minimum area required.
 4. Construction activities will be timed to avoid wet periods.

5. Power lines will be constructed to standards outlined in the most recent version of *Suggested Practices for Raptor Protection on Power Lines* published by the Edison Electric Institute/Raptor Research Foundation, unless otherwise agreed to by the Authorized Officer. The holder is responsible for demonstrating that power pole designs not meeting these standards are raptor safe. Such proof will be provided by a raptor expert approved by the Authorized Officer. BLM reserves the right to require modifications or additions to power line structures constructed under this authorization, should they be necessary to ensure the safety of large perching birds. The modifications or additions will be made by the holder without liability or expense to the United States.
 6. All equipment installed on Federal lands will be constructed to prevent birds and bats from entering them and, to the extent practical, to discourage perching and nesting.
 7. Open-top tanks, reserve pits, disposal pits, or other open pits will be required to be equipped to deter entry by birds, bats, or other wildlife.
- Continue to coordinate arroyo habitat management with other programs and activities throughout the Monument, as needed. Specific programs include Range, Wildlife, Watershed, Recreation, and Lands. Riparian and arroyo habitat values will be addressed in all surface and vegetation-disturbing actions.

VISUAL RESOURCES MANAGEMENT

BMPs to address visual resource concerns have been incorporated into the preceding resource discussions, as appropriate. To the extent practicable, existing facilities or substantial existing visual contrasts would be brought into visual resource management class conformance as the need or opportunity arises. Additional BMPs dealing with visual resource management considerations in oil and gas development can be found on the BLM Web site at www.blm.gov/bmp/.

BMPs dealing with visual resource management considerations in general are available at www.blm.gov/nstc/VRM/destech.



APPENDIX F

PUBLIC SCOPING REPORT

**PREHISTORIC TRACKWAYS NATIONAL
MONUMENT**

**Resource Management Plan/
Environmental Impact Statement**

July 2010

**United States Department of the Interior
Bureau of Land Management
Las Cruces District Office
1800 Marquess Street
Las Cruces, New Mexico 88005**



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Executive Summary

The Bureau of Land Management (BLM), Las Cruces District Office in Las Cruces, New Mexico is preparing the Prehistoric Trackways National Monument Resource Management Plan (RMP) and an associated Environmental Impact Statement (EIS). An RMP for public land is more effectively implemented if the management decisions made by BLM reflect the values and interests of the public. However, for this Monument, the management plan also must address and is guided by the Legislation designating the Monument.

The formal scoping process began with the publication of a Notice of Intent on January 5, 2010. This Notice indicated the Las Cruces District Office's intent to prepare an RMP, an associated EIS, and to hold a public scoping meeting in conjunction with that process. One formal scoping meeting was held on January 26, 2010 to share information about the Monument, preliminary issues, and the planning process. The BLM asked the public for comments and suggestions regarding the management of the natural, cultural, recreation, and scientific resources within the Monument. Approximately 100 people attended the public scoping meeting. BLM received 17,388 total comment submittals, of which 17,287 were a variety of repeat form letters. The themes expressed in these form letters are summarized as follows:

- the Legislation should take precedence over any multiple-use mandate
- move Off-Highway Vehicle (OHV) routes outside of the Monument in order to protect the trackways
- keep OHV trails within the Monument
- improve non-motorized access and interpretive information
- encourage public involvement, both do and do not incorporate "Expanded Boundary Possibilities for Adjacent Areas" within the RMP
- consider all cumulative impacts such as loss of motorized recreation opportunities and Community Pit #1 reclamation

The other 99 comments followed several common themes about the natural resources within the Monument and the management of those resources.

At their request, informal meetings with a number of groups and agencies have been held prior to and since the public meeting. The initial "formal scoping" period closed on February 10, 2010, and this report will address comments from this initial scoping period. Although the formal comment period has ended, BLM will continue to accept and consider all comments received throughout the planning process. The comments will become a part of the administrative record.

This Scoping Report is intended to provide a summary of the comments received, to refine the preliminary issues, and to identify new issues. The report will provide direction to the planning team in order to clearly identify issues and to aide in the development of alternatives for the environmental impact analysis.

Acronyms

ACEC	Area of Critical Environmental Concern
AMS	Analysis of the Management Situation
BLM	Bureau of Land Management
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
EIS	Environmental Impact Statement
FLPMA	Federal Land Policy and Management Act
GIS	Geographic Information System
GPS	Global Positioning System
LCDO	Las Cruces District Office
MOU	Memorandum of Understanding
NEPA	National Environmental Policy Act
NLCS	National Landscape Conservation System
NOI	Notice of Intent
OHV	Off-Highway Vehicle
RMP	Resource Management Plan
ROD	Record of Decision
VRM	Visual Resource Management
WSA	Wilderness Study Area

Introduction

1 Overview

Although the Prehistoric Trackways National Monument is relatively small (5,280 acres), there is considerable public interest in managing the area. Conflicting opinions regarding Off-Highway Vehicle (OHV) use and protection of paleontological resources in the Monument are of interest. In order to address these uses, resource protection, long-term management of the area, and to fully analyze all impacts, the Bureau of Land Management (BLM) Las Cruces District Office (LCDO) in New Mexico is preparing a Resource Management Plan (RMP) for the Prehistoric Trackways National Monument (Monument) as required by the Omnibus Public Lands Management Act of 2009 (Legislation). This Legislation, signed into law by the President on March 30, 2009, states: “Not later than 3 years after the date of enactment of this Act, the Secretary shall develop a comprehensive management plan for the long-term protection and management of the Monument.” Under the National Environmental Policy Act (NEPA) of 1969 (Public Law 91-190) and the Council on Environmental Quality (CEQ) regulations for implementing NEPA, Federal agencies are required to consider the environmental impacts of their proposed actions prior to taking action. Pursuant to NEPA, the BLM will prepare an Environmental Impact Statement (EIS) associated with the Monument RMP.

The BLM understands that an RMP for public land is more effectively implemented if the management decisions made by the BLM reflect the values and sentiment of the public. The first step in the BLM’s planning process is to identify issues from agency and public comments. These issues were identified during scoping, a process intentionally conducted early in the planning process to solicit comments and translate the information gathered into meaningful input into the planning process and to guide the BLM’s actions.

In accordance with 43 Code of Federal Regulations (CFR) 1610.2(d), the BLM must document the results of scoping. The BLM’s land use planning guidance (Handbook H-1601-1) requires the preparation of a Scoping Summary Report to capture public input into one document. This report summarizes the comments received during the formal external scoping period. It also must describe the issues and management concerns derived from the public scoping meeting, internal scoping meetings, the Preparation Plan; and discuss how these comments will be incorporated into the RMP. In addition, this report provides information about the purpose and need for the RMP/EIS, the Planning Area, and BLM’s collaborative planning process. This includes a description of the scoping process; an explanation of the planning criteria developed to guide and direct the planning effort; a brief description of the data available for the studies and data needs; and summary of the future steps in the planning process.

1.1 Background & Purpose and Need

The Monument was established by Congress in the Legislation as a unit of the National Landscape Conservation System (NLCS). It encompasses 5,280 acres and was established to conserve, protect, and enhance the unique and nationally important paleontological, scientific, educational, scenic, and recreational resources and values. The Legislation that designated the Monument directs the BLM to develop a management plan for the Monument. Current BLM policy dictates that for units of the NLCS,

of which the Monument is a part, a comprehensive management plan will be developed in the form of a “stand alone” RMP and an associated EIS.

The purpose of the Monument RMP is to address management of the natural, biological, and cultural resources and resource uses while protecting paleontological resources and being consistent with the Legislation. Specific legislative points to be addressed in the RMP include the following:

- Manage the Monument in a manner that conserves, protects, and enhances the resources and values of the Monument...
- The management plan...shall describe the appropriate uses and management of the Monument, consistent with the provisions of the Legislation.
- The use of motorized vehicles in the Monument shall be allowed only on roads and trails designated for use by motorized vehicles under the management plan.
- The Secretary may issue permits for special recreation events involving motorized vehicles within the boundaries of the Monument to the extent the events do not harm paleontological resources; and subject to any terms and conditions that the Secretary determines to be necessary.

The associated RMP/EIS will propose alternative solutions to planning issues, in addition to identifying potential impacts associated with each alternative. The RMP/EIS will also identify BLM’s preferred alternative, which will be based on both public input and BLM’s need to adhere to current laws, regulations, Legislation, and planning guidance. The direction developed in the plan will facilitate management of the Monument as a component of the NLCS.

1.2 Planning Area

1.2.1 Location

The Monument contains 5,280 acres of public land in Doña Ana County, New Mexico, and is approximately 5 miles northwest of Las Cruces in the southern third of the Robledo Mountains, see *Figure 1*.

1.2.2 Description

In 1987, a major deposit of Paleozoic Era fossilized footprint megatracks was discovered in the Robledo Mountains. The trackways contain footprints of numerous amphibians, reptiles, and insects (including previously unknown species), plants, and petrified wood dating back approximately 280 million years. This collectively provides new opportunities to understand animal behaviors and environments from a time predating the dinosaurs. It is also a popular regional recreation area for hiking, mountain biking, and off-highway use (OHV), and through special use permitting, it is used for annual OHV events, which have drawn as many as 1,000 participants for a multiple-day event.

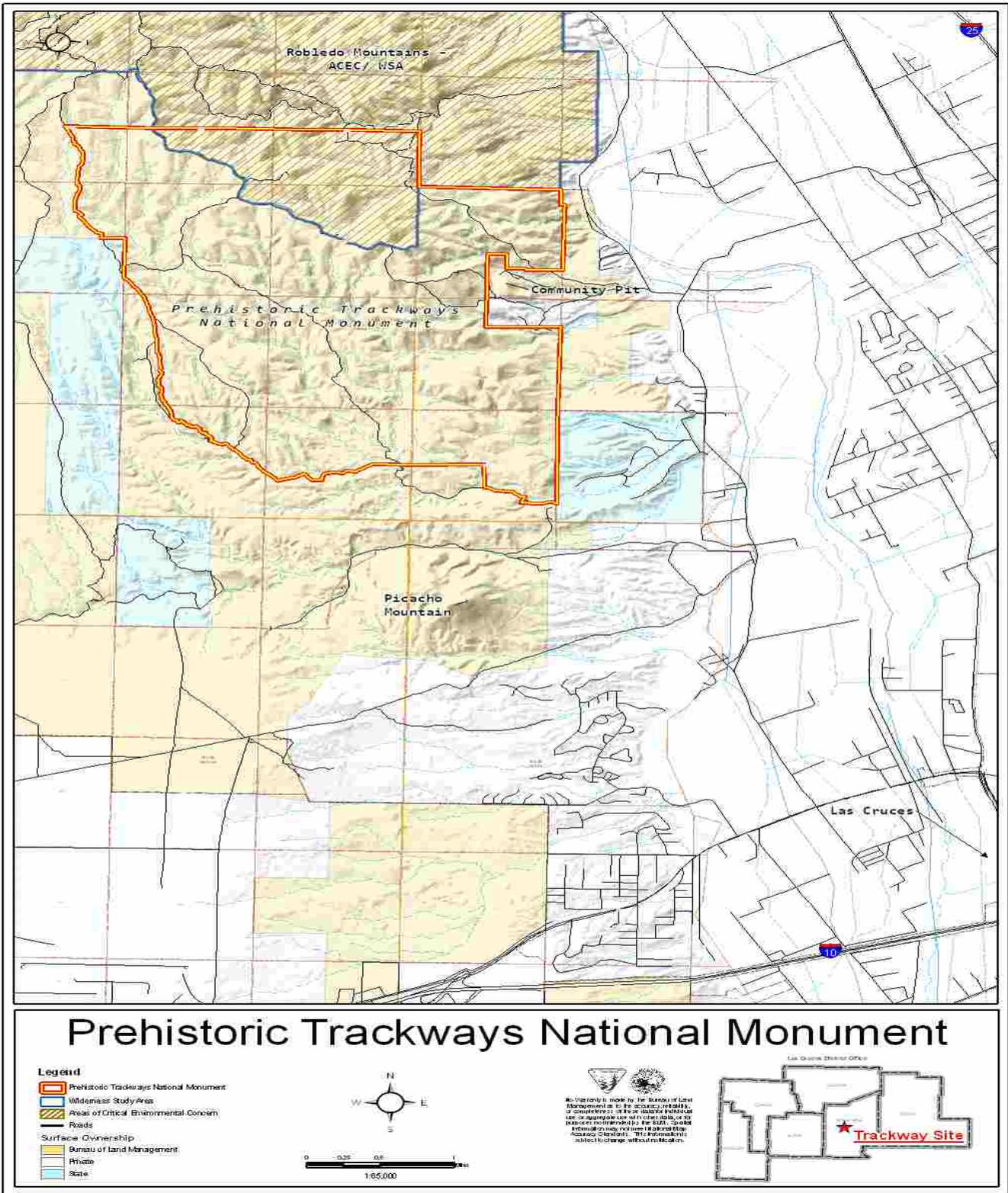


Figure 1 Map of Monument in relation to Las Cruces, New Mexico

1.2.2.1 Description of the Monument and Planning Area

The Planning Area is defined as Doña Ana County, which includes the Prehistoric Trackways National Monument, 8 Wilderness Study Areas (WSAs), 11 Areas of Critical Environmental Concern (ACECs), and several towns. The Planning Area includes both public, private, other government land, and consists of approximately 2,436,595 acres. The Decision Area, that is the area for which decisions will be made in the RMP, consists entirely of the 5,280 acres of public land, both surface and subsurface, within the designated National Monument.

1.3 Scoping Process

1.3.1 Description of Process

The formal scoping process began with the publication of a Notice of Intent (NOI) in the Federal Register on January 5, 2010 (Volume 75, Number 2, Pages 431-432). The NOI is contained in Appendix A and on the project web site, referenced below. This Notice indicated the Las Cruces District Office's intent to prepare an RMP, an associated EIS, and to hold a public scoping meeting in conjunction with that process. Press releases, flyers, paid advertisements in newspapers, and the BLM New Mexico, Las Cruces District project web site, http://www.blm.gov/nm/st/en/fo/Las_Cruces_District_Office/trackways_rmp.html announced the public scoping period and public scoping meeting also.

One formal scoping meeting was held to share information about the Monument, preliminary issues, and the planning process. The BLM asked the public for comments and suggestions regarding the management of the natural, cultural, recreation, and scientific resources within the Monument. At their request, informal meetings with a number of groups and agencies have been held prior to and since the public meeting. The initial "formal scoping" period closed on February 10, 2010, and this report will address comments from this initial scoping period. Although the formal comment period has ended, BLM will continue to consider all comments and information on resource management issues received during the planning process. The comments will become a part of the administrative record.

During scoping, preliminary planning issues and criteria were identified by BLM personnel, other agencies, and in meetings with individuals. These planning issues and criteria will be used to guide the identification and development of management alternatives. Preliminary planning issues and criteria may be refined or new ones added as a result of the public scoping process.

This scoping report describes the public scoping process for the Prehistoric Trackways National Monument RMP/EIS. It documents outreach efforts, summarizes the comments received, and identifies any issues raised and suggested alternatives. These issues are the scope of analysis for the RMP. The document does not make decisions nor does it set forth policies.

1.3.2 Mailings

An initial public scoping packet was sent to approximately 337 interested parties announcing the BLM’s intent to prepare an RMP/EIS for the Monument. Throughout the scoping period, an additional 82 scoping packets were mailed. The mailing list included adjacent landowners, grazing permittees, special recreation permittees, interested public, local agencies, government representatives, tribes, and interested organizations. The letter announced the beginning of the formal scoping period, the public Open House, and also requested comments regarding the Plan. Inserted in this mailing was a preaddressed “Scoping Comment Form” that interested individuals could complete and return to BLM. The form contained two questions, plus ample writing space to guide individuals as they submitted their comments regarding the Monument. The public scoping letter is presented in Appendix B.

1.3.3 Public Notices

Public notices in the form of Display Ads were published in the newspapers of record. Table 1 shows the newspapers that printed the public notice (contained in Appendix C) on the dates indicated.

Table 1 Public Notices in Newspapers of Record

TABLE 1 Public NOTICES IN NEWSPAPERS OF RECORD		
PUBLICATION DATE	PUBLICATION	PUBLICATION LOCATION
January 17, 2010	<i>Las Cruces Sun-News</i>	Las Cruces, NM
January 15, 2010	<i>Las Cruces Bulletin</i>	Las Cruces, NM

1.3.4 Media Releases and Public Service Announcements

Announcement regarding the public scoping meetings and scoping process were issued as news releases on January 5 and January 19, 2010, to local and regional newspapers, radio stations and TV stations in New Mexico.

1.3.4.1 Newspapers

Articles and feature stories announcing the Public Scoping Open House and scoping process were published in local newspapers.

Table 2 Articles in Newspapers of Record

TABLE 2. ARTICLES IN NEWSPAPERS OF RECORD		
PUBLICATION DATE	PUBLICATION	PUBLICATION LOCATION
January 7, 2010 January 8, 2010 January 25, 2010 January 27,2010	<i>Las Cruces Sun-News</i>	Las Cruces, NM
January 22, 2010	<i>Las Cruces Bulletin</i>	Las Cruces, NM
January 10, 2010	<i>Albuquerque Journal</i>	Albuquerque, NM

1.3.4.2 Informational Flyers

Flyers were distributed throughout Las Cruces, which advertised the location and time of the Public Scoping Open House. An example of the flyer can be found in Appendix D.

Locations where flyers were posted are as follows:

- Mesilla Park Post Office
- Thomas Branigan Library
- Las Cruces Natural History Museum
- Las Cruces BLM front desk
- Mesilla Valley Bosque State Park
- Doña Ana County Government Center
- Picacho Post Office, Las Cruces
- Dripping Springs Recreation Area (BLM)

1.3.4.3 Radio Stations

On January 21, 2010 at 4:00 p.m. the Prehistoric Trackways National Monument was the feature story for the live radio talk show called “The Bulletin on the Radio” on the local radio station, KSNM AM570. The planning process, public scoping meeting, and the paleontological resources were discussed for approximately an hour.

1.3.5 Web Site

BLM prepared news releases to introduce the project, announce the scoping period, and publicize the scoping meeting. The news releases and informational flyer were posted on the New Mexico BLM project web site (see BLM News Releases contained in Appendix E).

1.3.6 Public Meeting

BLM hosted one public meeting on January 26, 2010 to provide planning and NEPA information to the public and agencies and allow them to identify issues and concerns to BLM. The Public Scoping Meeting was advertised on the BLM project web site and through the local media. The meeting was conducted in an open-house style format including display materials concerning preliminary planning issues, natural resources, and the planning activities. Resource specialists were on-hand for discussion. Each individual was asked to sign in for the meeting and/or to request various materials that will be distributed throughout the planning process. Those not already on the mailing list were added to the project mailing list. Scoping packets were available to all who attended the public meeting and was also available on the BLM's web site. The public scoping packet is located in Appendix B.

As summarized in Table 3, approximately 100 members of the public attended the public meeting.

Table 3 Public Scoping Meeting Date, Location, Attendance

TABLE 3. PUBLIC SCOPING MEETING DATE, LOCATION, AND ATTENDANCE		
MEETING DATE	MEETING LOCATION	ATTENDANCE
January 26, 2010	Las Cruces, NM	100

1.4 Cooperating Agencies

In January and February 2010, letters were sent to the following agencies inviting recipients to become a cooperating agency for this project:

- City of Las Cruces
- Doña Ana County
- New Mexico Museum of Natural History and Science
- New Mexico Department of Game and Fish
- New Mexico State Parks

By definition, a cooperating agency is any Federal, state, or local government agency or Indian tribe that has either jurisdiction by law or special expertise regarding environmental impacts of a proposal. As a cooperating agency, it provides the formal framework for governmental units to engage in active collaboration with the lead Federal agency during the NEPA process. Although the request was sent to these agencies, no agency has pursued cooperating agency status as of yet.

1.5 Tribal Consultation

In February 2010, the BLM initiated consultation with the tribes. Included in the consultation letter was a request for the recipients to become a cooperating agency for the Monument RMP/EIS. The invitation will remain open to tribes as planning continues. Consultation/cooperating agency letters were sent to the following tribes:

- Fort Sill Apache Tribe of Oklahoma
- Comanche Indian Tribe
- White Mountain Apache
- Ysleta del Sur Pueblo
- Pueblo of Isleta
- Mescalero Apache Tribe
- Navajo Nation

Several tribes expressed interest in continued notification of planning activities, but no tribe has requested Cooperating Agency Status.

Issue Summary

2 Comment Summary

All scoping comments documented in this report were received or postmarked by March 23, 2010. However, BLM will continue to accept scoping comments throughout the planning process. BLM received 17,388 total submittals, of which 17,287 were a variety of repeat form letters. In summary, the themes expressed in these form letters included:

- the Legislation should take precedence over any multiple-use mandate
- move OHV routes outside of the Monument in order to protect the trackways
- keep OHV trails within the Monument
- improve non-motorized access and interpretive information
- encourage public involvement
- both do and do not incorporate “Expanded Boundary Possibilities for Adjacent Areas” within the RMP
- consider all cumulative impacts such as loss of motorized recreation opportunities and Community Pit #1 reclamation.

The other 99 comments followed several common themes about the natural resources within the Monument and the management of them.

2.1 Method of Comment Collection and Analysis

Individuals were encouraged to submit comments in writing to the Las Cruces District Office. Comments were collected through various sources including:

- Regular US Mail
- E-mail
- Fax
- Hand-delivery

Comments were organized by letter and issue. A majority of individual comment letters included numerous distinct comments. The form letters and the associated comments were analyzed and documented once per associated form letter, which resulted in a total of 101 comment forms/letters analyzed. There were a total number of 152 consolidated comments depicted for analysis. After all comments were received, reviewed, and documented, individual comments were entered into a database

to assist with the analytical review. The database is structured to depict comments into separate resource categories (issues), document the source of the submittal; and consolidate comments of those previously mentioned.

Then the issues were placed into one of three categories.

1. Issues to be resolved in the plan;
2. Issues to be resolved through policy or administrative action; or
3. Issues beyond the scope of the plan.

The focus of this report is to thoroughly review the comments and, based on this review, develop overarching themes in order to develop a list of possible alternatives based on public, BLM, and collaborative and cooperative agency and tribal input.

2.2 Summary of Public Comments Received

For this scoping report, the specific comments were grouped into similar topics and briefly summarized. As a result of the high volume and similarity of many comments, included is only a summary of the comments from each category and does not include all of the comments, suggestions, or concerns raised by the public. For a comprehensive summary, please refer to the Monument RMP Scoping Comment Table S-1. Copies of original comments are available for review at the Las Cruces District Office.

Comments were categorized into six planning issues. The following section represents a summary of public comments provided to the BLM during the public scoping period. Questions that need to be answered to aid in resolving the comments have been generated to help focus development of planning criteria, development of alternatives, and guide impact analysis.

Issues Identified Prior to and During Scoping

2.3 Issue 1- Paleontological and Cultural Resource Research and Protection

The Paleontological Resource section of the RMP will include a discussion of paleontological resources within the Monument. Resource protection and research will be an integral part of this section due to the Legislation stating that the BLM will provide for research and protection of paleontological resources. Cultural resource management also involves site protection, surveys for identification and evaluation, scientific research, interpretive development, and public education. A summary of the comments for paleontological and cultural resources follows.

- In favor of protecting the paleontological resources while allowing research to continue
- Emphasize protecting Monument objects as stated in the (paleontological, scientific, educational, scenic, and recreational resources) over other uses
- Preserve the ecology and natural resources to the extent that is compatible with scientific research activities

- Preserve cultural resources
- Make fossilized areas of the Monument off-limits to vehicles
- Improve awareness of cultural resources
- Provide adequate enforcement

2.3.1 Issue Questions

The following questions need to be addressed in resolving the Paleontological and Cultural Resources issue:

- How will paleontological and cultural objects located within the Monument be protected?
- How will BLM address inadvertent paleontological discoveries within the Monument?
- How will user groups be educated through paleontological objects located within the Monument?
- How will paleontological and cultural objects contained within the Monument be interpreted?
- Will the Plan encourage the preservation for *in situ* paleontological objects and sites?
- How can the public become more invested in the protection of these resources?
- What is a long-term strategy for the implementation of resource protection?
- How will paleontological resources be managed to allow for research and preservation to co-exist?
- What is the strategy for the identification of paleontological resources in un-surveyed areas?
- Where and how should paleontological resources be curated?
- Where and how should paleontological resources be displayed to allow for viewing and education by the local public?
- How will Native American interests and knowledge be conserved, encouraged, fostered, respected, and applied to interpretation of sites?
- What type of law enforcement and monitoring is necessary to protect the Monument's resources?

2.4 Issue 2- Interpretation and Education

As stated in the Legislation, “the Secretary shall provide for public interpretation of, and education and scientific research on, the paleontological resources of the Monument...” A majority of the comments supported interpretation of the trackways and other resources within the Monument. The ideas for interpretation and education varied from interpretive park rangers, signs, visitor center, brochures, and websites. A summary of the comments follows.

- Include interpretive information to improve visitor experiences
- Have interpretive park rangers
- Display the paleontological resources *in-situ*
- Construct an on-site visitor center
- Do not construct an on-site visitor center
- Create an appealing and educational website
- Prepare publications on the resources
- Permanent housing for the Monument personnel and/or volunteers

2.4.1 Issue Questions

The following questions need to be addressed in resolving the Interpretation and Education issue:

- How should educational/interpretation opportunities be accomplished?
- Where should visitors increase their knowledge of the Monument's resources?
- Is there an opportunity for local community members to assist with monitoring?

2.5 Issue 3- Travel and Access

Comments regarding travel and access were widely varied and covered many concerns. Travel and access comments varied from wanting improved access to keeping the Monument primitive. Others want the Monument to be closed to vehicular access. Comments associated with this issue are as follows.

- Put specific conditions on all forms of motorized use
- Consider and improve access from Interstate 10 and/or Rocky Acres Trail
- Build a parking lot
- Create a driving route with short hikes to the resources
- Keep the roads and trails primitive
- Build a fence to keep vehicular traffic out of the Monument
- Install signs to inform users to stay on existing, designated routes

2.5.1 Issue Questions

The following questions need to be addressed in resolving the Travel and Access issue:

- What is the current demand for motorized and non-motorized access and what is it likely to be in the future?
- What is the best way to provide for that access?
- Is there a need to provide vehicle access to exposed or excavated locations?
- Where should the main access points of the Monument be located?
- How will motorized vehicular use be managed within the Monument?

2.6 Issue 4-Habitat and Its Users

BLM guidance requires that desired outcomes for vegetative resources are identified in land use plans. This includes desired mix of vegetative types, structural stages, and landscape functions, and to provide for wildlife habitat and livestock forage. The Robledo Mountains contain habitat that is associated with a great number of mammals, birds, reptiles and several plants and other wildlife species. Currently and prior to the enactment of the Legislation, the Monument is grazed by livestock. The Legislation states BLM “may allow grazing to continue in any area of the Monument in which grazing is allowed before the date of enactment of this Act, subject to applicable laws (including regulations).” There are no known special status species that are specific to the Monument although the habitat is present.

Only a few comments were made on vegetation, wildlife, and livestock grazing.

- Protect the cactus
- Protect the wildlife
- Consider mule deer for hunting in the Plan
- Cattle grazing should not be allowed or set more stringent limits in order to promote natural plant communities
- Allow cattle grazing in the Monument
- Remove cattle in the Monument

2.6.1 Issue Questions

The following questions need to be addressed in resolving the Habitat and Its Users issue:

- Are special status species plants present, and if so, how should they be managed?
- What is current grazing use within the Monument boundary and can this use be continued without impacting Paleozoic resources?

- Will public use of the Monument impact livestock grazing?
- What are the economic impacts to the grazing permittee due to the Monument designation?
- How will habitat be managed for vegetation, wildlife and livestock?
- Are special status wildlife species and associated habitat present and if so, how should they be managed?
- How will management of domestic livestock be accomplished in consideration of wildlife needs?
- How can public safety be assured while providing the full spectrum of recreational opportunities?

2.7 Issue 5- Visual Resources

BLM guidance requires that visual resources are managed in accordance with visual resource management (VRM) objectives. Currently, the Monument is classified and managed as VRM Classes I, II, and III. A limited number of comments were received on visual resources and are as follows.

- Preserve visual resources

2.7.1 Issue Questions

The following list identifies issue statements for Visual Resources:

- How will the visual nature of the Monument be preserved while providing protection for the resources within the Monument?
- How will the visual nature of the Monument be preserved while providing areas for paleontological research and recreational use?

2.8 Issue 6- Socioeconomic

Comments regarding the opportunities for economic benefit to the community via the Monument were noted by a number of citizens. A representative group of comments follows.

- There are opportunities for cultural heritage economic opportunities with the local community
- Consider local guides, horseback tours, safaris, etc.
- There is a socioeconomic benefit to Las Cruces from having visitor services located locally
- There are socioeconomic benefits to Las Cruces from having the existing OHV trails
- Include tourism in the Plan

2.8.1 Issue Questions

The following questions need to be addressed in resolving the Socioeconomic issue:

- What opportunities for economic growth are available for the communities that are associated with the Monument?

2.9 Issue 6- Recreation

The Robledo Mountains have historically been used for many recreational pursuits such as hiking, biking, OHV use, fossil hunting, target-practicing, hunting, and camping. The Legislation states that recreational resources and values within the Monument will be conserved, protected, and enhanced. It also states *“The Secretary may issue permits for special recreation events involving motorized vehicles within the boundaries of the Monument- (A) to the extent the events do not harm paleontological resources; and (B) subject to any terms and conditions that the Secretary determines to be necessary.”* A concern in years past with the issuance of a BLM special recreation permit for an annual OHV event called the Chile Challenge was about spectators in reference to their safety and the possibility of resource damages. With the designation of the Monument, along comes the quandary of entrance fees also.

A summary of the comments follows:

- Continue to allow recreational activities within the Monument
- Restrict target shooting within the Monument
- Cross-country dog, horse, and foot traffic should be allowed
- Dispersed camping should continue to be allowed
- Disperse the recreation instead of concentrating it
- Prevent any group event that risks damage to the resources
- Recreational use should be restricted to hiking only
- Maintain primitive atmosphere
- Move the Chile Challenge outside the Monument
- Continue the Chile Challenge as it has in the past
- Evaluate alternatives for this event, which would still allow the Chile Challenge and protect the Monument
- Restrict the Chile Challenge to participants only

- Observers of the OHV event should be restricted to an observation site
- Build a self-pay station at the parking lot
- No fees

2.9.1 Issue Questions

The following questions need to be addressed in resolving the Recreation issue:

- How can recreational demands be met while ensuring that irreplaceable paleontological and cultural resources are not damaged?
- What range of recreational opportunities should be provided to meet visitors' needs?
- What facilities will be needed to support the full spectrum of recreational opportunities provided by Monument resources?
- Should the Monument be advertised for tourism and recreation?
- What level/amount of use is appropriate for each recreational use to allow for varied activities and to meet resource objectives?
- How should recreationists be educated to protection of the Monument's resources?
- How should multiple recreational uses (for foot, horseback, motorized, mechanized) be managed?
- How can primitive recreational experiences be provided within Monument?
- How is firearm use, including hunting, to be managed?
- How will law enforcement on Monument land affect hunting?
- How will safety risks resulting from hunting be managed?
- How will transportation associated with hunting and game retrieval be addressed?
- What is the current demand for off-highway use (OHV)?
- What range of recreational opportunities should be provided to meet OHV user needs?
- What is the best way to accommodate this use and still be consistent with the Legislation?
- Should OHV use continue within the Monument boundary?
- What learning opportunities about the Monument's natural resources will be available for OHV users?
- During special permitted events how will spectators be managed in order to protect the Monument's resources?
- How should the Special Recreation Permit System be addressed and managed to meet the goals of the Monument?
- Should the BLM charge an entrance fee for the Monument? If yes, how, where, and how much?

2.10 RMP/EIS Process

Several comments received were in the interest of how the BLM should manage the RMP/EIS process. A representation of the comments follows.

- Maximize public involvement in the RMP process
- Make analysis available to the public before issuing the Draft RMP
- Planning Area should be limited to the Decision Area
- Incorporate “Cumulative Loss of Motorized Recreation Opportunities”, this would include more than just BLM land
- Take a landscape view approach
- Planning process needs to approach it as if there are no monetary constraints for ideas
- Compromise, so all parties get something

2.11 Issues Raised That Will Not Be Addressed

As a result of scoping, the BLM has refined the preliminary planning issues and has determined which issues are to be carried forward and which issues will not be addressed in the RMP process.

Some comments received refer to implementation decisions made through administrative or resource program guidance and do not require land use planning decisions in order to be resolved. Other comments are beyond the scope of this planning effort and/or outside of the BLM’s decision making authority (Authority is with another agency or entity).

Comments urging the BLM to organize or support a volunteer and/or advisory group for the Monument were documented in the Scoping Report Summary Table, but will not be addressed in the RMP/EIS. Such actions can be resolved through administration or policy action. The BLM is committed to coordinating and collaborating with local groups, clubs, educational institutions, and agencies to promote the resources of the Monument.

A management concern for the BLM is the possibility of the Monument boundary changing due to new Legislation. This concern was mentioned in the Scoping Packet to bring to light this possibility. There were several comments regarding this issue stating that BLM should not consider upcoming Legislation in the RMP. This issue will be documented in the RMP as an Issue Considered, but Not Further Analyzed.

Actions regarding the adjacent Community Pit #1 are beyond the scope of the RMP because the Community Pit #1 is outside the RMP Decision Area. Cumulative Impacts from the actions taken in Community Pit #1 will be addressed in the RMP/EIS.

The Legislation allows the Secretary of the Interior to make minor boundary adjustments to the Monument if additional paleontological resources are discovered on public land adjacent to the Monument. The Secretary of the Interior has the authority to make these adjustments, outside the RMP/EIS process. This issue is beyond the scope of this planning effort and will not be addressed in detail in the RMP.

As discussed earlier in this document, the development of the Monument Plan will occur in the following phases according to the BLM Land Use Planning Handbook, H-1601:

- Making pre-scoping preparations and organizing the staff
- Identifying issues and data gaps, conducting scoping, and completing a Scoping Report
- Formulating alternatives, doing impact analysis, and identifying mitigation measures, monitoring and evaluation requirements
- Preparing and releasing the Draft Monument Plan/EIS
- Conducting public review and comment on Draft Monument Plan/EIS
- Analyzing public comment and preparing the Proposed Monument Plan and Final EIS
- Releasing the Proposed Monument Plan/Final EIS and initiating the protest period and Governor's consistency review
- Responding to any protests
- Completing and releasing the approved Monument Plan/EIS/ROD

The public are encouraged to participate throughout the planning process and the BLM is mandated to support and allow for public participation and review.

Draft Planning Criteria

The BLM's land use planning guidance (Handbook H-1601-1) states that planning criteria are the constraints or ground rules that guide and direct the development of the plan. The draft planning criteria ensure that plans are tailored to the identified issues and ensure that unnecessary data collection and analyses are avoided. Draft planning criteria for the Monument RMP/EIS are as follows:

- The RMP will be in compliance with the Federal Land Policy and Management Act (FLPMA), NEPA, New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management and all other applicable laws, regulations, and policies.
- The RMP will be in compliance with the Omnibus Public Land Management Act of 2009 (Legislation). While the multiple-use mandates of FLPMA, NEPA, and all other applicable laws, regulations, and policies will be followed to the extent appropriate, the provisions of the Legislation will prevail in managing the Monument.
- The Monument Plan will be in compliance with the Potential Fossil Yield Classification (PFYC) Manual and Handbook.
- Land use decisions in the Monument Plan will apply to the surface and subsurface estate managed by the BLM.
- For program-specific guidance for decisions at the land use planning level, the process will follow the BLM's policies in the Land Use Planning Handbook, H-1601.
- BLM staff will strive to make decisions in the plan compatible with the existing plans and policies of adjacent local, state, and Federal agencies and local American Indian tribes, as long as the decisions are consistent with the Legislation.
- The BLM and cooperating agencies will jointly develop alternatives for resolution of resource management issues and management concerns.
- BLM staff will work cooperatively and collaboratively with cooperating agencies and all other interested groups, agencies, tribal entities, and individuals.
- The planning process will provide for ongoing consultation with American Indian tribal governments and the public regarding strategies for protecting recognized traditional uses and heritage resources.
- Broad-based public participation and collaboration will be an integral part of the planning process.
- In the RMP, the BLM will recognize the state's responsibility and authority to manage wildlife. The BLM will consult with the New Mexico Department of Game and Fish.
- The Monument Plan will recognize valid existing rights.

- The Monument Plan will incorporate, where applicable, management decisions brought forward from existing planning documents.
- The BLM will consider public welfare and safety when addressing hazardous materials and fire management.
- Wilderness Study Areas will continue to be managed under the BLM's Interim Management Policy for Lands under Wilderness Review (IMP) until Congress either designates all or portions of the WSAs as wilderness or releases the land from further wilderness consideration.
- Where practicable and timely for the planning effort, the best available scientific information, GIS and metadata information will meet Federal Geographic Data Committee (FGDC) standards, as required by Executive Order 12906. All other applicable BLM data standards will also be followed.
- Fire management strategies will be consistent with the Las Cruces District Fire Management Plan (2009)
- Planning and management direction will focus on the relative values of resources and not the combination of uses that will give the greatest economic return or economic output.
- Actions must comply with all applicable laws and regulations and must be reasonable, achievable, and allow for flexibility while supporting adaptive management principles.
- The Economic Profile System (EPS) will be used as one source of demographic and economic data for the planning process. EPS data will provide baseline data and contribute to estimates of existing and projected social and economic conditions.
- The Monument Plan will identify specific goals, objectives, and actions for the use, conservation, protection, and possible restoration of the Monument's resources.
- The Monument Plan will identify Best Management Practices and/or mitigation measures to be applied to existing uses and planned uses to ensure protection of the Monument's objects, such as the paleontological, scientific, educational, scenic, and recreational resources and values of the Monument.

As stated in Instruction Memorandum No. 2009-215, "according to Section 302(a) of FLPMA, the National System of Public Lands is to be managed under the principles of multiple use and sustained yield "except that where a tract of such public land has been dedicated to specific uses according to any other provisions of law it shall be managed in accordance with such law." This section of FLPMA directs that when an area of public land is set aside by a presidential proclamation issued under the Antiquities Act of 1906 or an Act of Congress, the designating language is the controlling law. Therefore, as a general rule, if the management direction of the proclamation or Act of Congress conflicts with FLPMA's multiple-use mandate, the designating language supersedes that section of the FLPMA."

Data Summary/Data Gaps

Geographical Information System (GIS) maps are the building blocks to quantify resources and display information during alternative formulation. Existing and available resource information will be used in formulating resource objectives and management alternatives. Additionally, the data will be used as the basis for analyzing unresolved conflicts. Most of this information needs to be compiled and put into digital format for use in the planning process and developing resource maps. This must be done before actual analysis can begin.

Data gaps were not specifically identified during scoping; however, data for GIS layers associated with the Las Cruces District Office are routinely updated and can be found in the Las Cruces GIS Corporate Data List.

Additional information on the geospatial database and development, GIS applications, and data standards is contained in the Prehistoric Trackways National Monument RMP Preparation Plan (January 2010), which is available upon request.

Summary of Future Steps in the Planning Process

A concurrent step in the planning process is to complete the “Analysis of the Management Situation” (AMS). The AMS analyzes available inventory data, portrays the existing management situation, and identifies management opportunities to respond to identified issues. As stated in 43 CFR 1610.4-4, this is the basis for formulating reasonable alternatives, including the types of resources for development or protection. This analysis will also result in identification of the “No Action Alternative” - the baseline (current) management condition, which includes management designated thru the Legislation.

Following development of the AMS and the Scoping Report, the next phase of the BLM’s planning process is to develop management alternatives based on the issues presented in the Issue Summary section of this report. These alternatives will address planning issues identified during both internal and external scoping and will be designed to meet the goals and objectives developed by the interdisciplinary team. In compliance with NEPA, CEQ regulations, and the BLM planning regulations and guidance, alternatives should be reasonable and capable of implementation. The BLM will also continue to meet with collaborating agencies, interested tribes, community groups and individuals during development of the alternatives.

A detailed analysis of the alternatives will be documented in a Draft RMP/EIS. Based on the analyses of the alternatives, the BLM’s Preferred Alternative will then be selected. The Preferred Alternative, a stand-alone Alternative, is often made up of a combination of management options from the various alternatives to provide the best management for the resources and Monument objects, which would also implement the guidance from the Legislation.

Although the BLM welcomes public input at any time during the planning process, the next official public comment period will begin when the Draft RMP/EIS is published, which is anticipated for Spring 2011. The draft document will be widely distributed to elected officials, regulatory agencies, and members of the public, and will be available on the project website (http://www.blm.gov/nm/st/en/fo/Las_Cruces_District_Office/trackways_rmp.html).

The availability of the draft document will be announced via a Notice of Availability in the Federal Register and local news media. A 90-day public comment period will follow. A public meeting will be held during this 90-day period.

At the conclusion of the public comment period, the Draft RMP/EIS will be revised as necessary based on public comment. A Proposed RMP/Final EIS will then be published. The availability of the proposed document will be announced in the Federal Register, and a 30-day public protest period will follow. Concurrently, the Governor of New Mexico will review the document for consistency with approved state or local plans, policies, or programs. At the conclusion of the public protest period and Governor's consistency review, the BLM will resolve all protests and any inconsistencies and revise the document as needed. The Record of Decision/RMP will be approved by the State Director and published. The availability of these documents will be announced in the Federal Register and local news media. Figure 2 outlines the major milestones of the Monument RMP/EIS planning process and public participation. All publications, including this report, newsletters, the Draft RMP/EIS, and the Notices of Availability, will be available on the official Prehistoric Trackways National Monument RMP web site (http://www.blm.gov/nm/st/en/fo/Las_Cruces_District_Office/trackways_rmp.html) as they are completed.

For Further Information

The public is invited and encouraged to participate throughout the planning process for the RMP. Some ways to participate include:

- Reviewing the progress of the RMP at the official Prehistoric Trackways National Monument RMP/EIS web site at http://www.blm.gov/nm/st/en/fo/Las_Cruces_District_Office/trackways_rmp.html
- The website will be updated with information, documents, and announcements throughout the duration of the RMP preparation; and
- Requesting to be added to or to remain on the official RMP project mailing list in order to receive future mailings and information.

Anyone wishing to be added to or deleted from the distribution list or requesting further information may e-mail their request to Lori_Allen@blm.gov or contact Lori Allen, RMP Planner at (575) 525-4454. Please provide your name and mailing address.

Sequence of Planning Activities

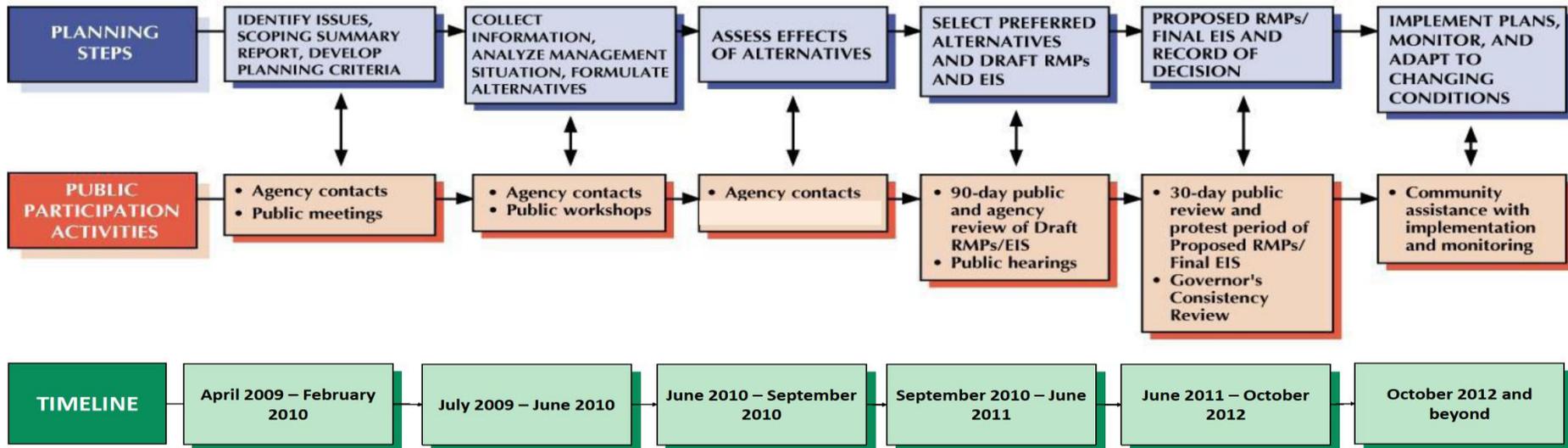


Figure 2 Sequence of Planning Activities for the Prehistoric Trackways National Monument RMP

Appendix A: Notice of Intent

until February 19, 2010. The date(s) and location(s) of any scoping meetings will be announced at least 15 days in advance through local media, newspapers, and the BLM Web site at: http://www.blm.gov/ut/st/en/fo/cedar_city/planning.html. In order to be considered in the Draft EIS, all comments must be received prior to the close of the scoping period or 15 days after the last public meeting, whichever is later. The BLM will provide additional opportunities for public participation upon publication of the Draft EIS.

ADDRESSES: You may submit comments related to the Sigurd-Red Butte 345 Transmission Line Project by any of the following methods:

- *Web site:* http://www.blm.gov/ut/st/en/fo/cedar_city/planning.html.
- *Mail:* Bureau of Land Management, Cedar City Field Office, 176 East D.L. Sargent Drive, Cedar City, Utah 84721, Attention: Lucas Lucero.

- *E-mail:* utsrbproj@blm.gov.

Documents pertinent to the right-of-way (ROW) application for the transmission line project may be examined at:

- U.S. Forest Service, Dixie Office, 1789 North Wedgewood Lane, Cedar City, Utah 84721.
- U.S. Forest Service, Fishlake Office, 115 East 900 North, Richfield, Utah 84701.
- BLM, Cedar City Field Office, 176 D.L. Sargent Drive, Cedar City, Utah 84721.

FOR FURTHER INFORMATION CONTACT: For further information and/or to have your name added to our mailing list, contact Lucas Lucero, BLM Project Manager; telephone (702) 515-5059; e-mail Lucas.Lucero@blm.gov; address BLM, Cedar City Field Office, 176 East D.L. Sargent Drive, Cedar City, Utah 84721.

SUPPLEMENTARY INFORMATION: PacifiCorp, doing business as Rocky Mountain Power Company, has filed a ROW application seeking authorization to construct, operate, maintain, and decommission a 345 kV single-circuit overhead electric transmission line on Federal lands. The project would provide an additional 600 megawatts of reliable electrical capacity by 2014 to respond to anticipated load growth in Southwestern Utah. The proposed project begins at the existing Sigurd Substation near Richfield, Utah, and terminates at the existing Red Butte Substation near the town of Central, Utah. The project area spans approximately 160 miles. Rocky Mountain Power Company has identified multiple alternative routes between the two substations.

Alternative routes identified so far would affect Federal, State, and private lands. The requested ROW width on Federal lands is 150 feet. Rocky Mountain Power Company proposes to predominantly use steel H-frame towers approximately 80 to 130 feet in height with average spans between towers of 1,000 to 1,200 feet. Permanent access roads approximately 14 feet wide would be needed. Temporary work space would be needed during construction for material storage, conductor tensioning sites, and to accommodate vehicles and equipment. Alternative routes currently identified would use portions of utility corridors on Federal lands and parallel portions of existing overhead and underground utilities and roadways.

The BLM is the designated lead Federal agency for preparation of the EIS. Other agencies with legal jurisdiction or special expertise have been invited to participate as cooperating agencies in preparation of the EIS. Currently, the U.S. Forest Service (Dixie and Fishlake National Forests), State of Utah, Millard County, Sevier County, Beaver County, Utah Division of Wildlife Resources, City of St. George, and City of Enterprise have agreed to participate as cooperating agencies.

The purpose of the public scoping process is to determine relevant issues that will influence the scope of the environmental analysis, including alternatives, and guide the process for developing the EIS. At present, the BLM has identified the following preliminary issues: public health and safety, noise, visual intrusions, migratory bird habitat, crucial deer and elk habitat, Utah Prairie Dog habitat, socioeconomic impacts, cultural and historic sites, National Scenic and Historic Trails, and nearby inventoried roadless areas on National Forests.

The BLM will use and coordinate the NEPA commenting process to satisfy the public involvement process for Section 106 of the National Historic Preservation Act (16 U.S.C. 470f) as provided for in 36 CFR 800.2(d)(3). Native American Tribal consultations will be conducted and Tribal concerns will be given due consideration, including impacts on Indian trust assets. Federal, State, and local agencies, along with other stakeholders that may be interested or affected by the BLM's decision on this project are invited to participate in the scoping process and, if eligible, may request or be requested by the BLM to participate as a cooperating agency.

Before including your address, phone number, e-mail address, or other

personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Authority: 40 CFR 1501.7.

Selma Sierra,

State Director.

[FR Doc. E9-31239 Filed 1-4-10; 8:45 am]

BILLING CODE 4310-00-P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[LLNML00000 L16100000.D00000]

Notice of Intent To Prepare a Resource Management Plan for the Prehistoric Trackways National Monument, Las Cruces District Office, New Mexico and Associated Environmental Impact Statement

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of intent.

SUMMARY: In compliance with the National Environmental Policy Act of 1969 (NEPA), as amended, and the Federal Land Policy and Management Act of 1976 (FLPMA), as amended, the Bureau of Land Management (BLM) Las Cruces District Office, Las Cruces, New Mexico, intends to prepare a Resource Management Plan (RMP) with an associated Environmental Impact Statement (EIS) for the Prehistoric Trackways National Monument and by this notice is announcing the beginning of the scoping process to solicit public comments and identify issues. The RMP will replace the existing Mimbres RMP (1993).

DATES: This notice initiates the public scoping process for the RMP with associated EIS. Comments on issues may be submitted in writing until February 4, 2010. The dates and locations of any scoping meetings will be announced at least 15 days in advance through local media, newsletters, and the BLM Web site at: http://www.blm.gov/nm/st/en/fo/Las_Cruces_District_Office.html. In order to be included in the Draft EIS, all comments must be received prior to the close of the scoping period or 15 days after the last public meeting, whichever is later. We will provide additional opportunities for

public participation upon publication of the Draft RMP/EIS.

ADDRESSES: You may submit comments on issues and planning criteria related to Prehistoric Trackways National Monument RMP/EIS by any of the following methods:

- *Web site:* http://www.blm.gov/nm/st/en/fo/Las_Cruces_District_Office.html.
- *E-mail:* lcfp_rmp@nm.blm.gov.
- *Fax:* (575) 525-4412.
- *Mail:* BLM, Las Cruces District Office, 1800 Marquess Street, Las Cruces, New Mexico 88005.

Documents pertinent to this proposal may be examined at the Las Cruces District Office.

FOR FURTHER INFORMATION CONTACT: For further information and/or to have your name added to our mailing list, contact Lori Allen; telephone (575) 525-4454; address BLM, Las Cruces District Office, 1800 Marquess Street, Las Cruces, New Mexico 88005; e-mail Lori_Allen@blm.gov.

SUPPLEMENTARY INFORMATION: This document provides notice that the BLM District Office, Las Cruces, New Mexico, intends to: (1) Prepare an RMP with an associated EIS for the Prehistoric Trackways National Monument; (2) announce the beginning of the scoping process; and (3) seek public input on issues and planning criteria.

The planning area is located in Doña Ana County, New Mexico and encompasses approximately 6,000 acres of public land.

The purpose of the public scoping process is to determine relevant issues that will influence the scope of the environmental analysis, including alternatives, and guide the planning process. Preliminary issues for the planning area have been identified by BLM personnel, Federal, State, and local agencies, and other stakeholders and include Paleozoic resource protection, scientific research, off-highway vehicle use/recreation, and interpretation and education. Preliminary planning criteria will include the following:

1. The RMP will be in compliance with the Omnibus Public Land Management Act of 2009, FLPMA, NEPA, and all other applicable laws, regulations, and policies;
2. Land use decisions will apply to the surface and subsurface estate managed by the BLM;
3. The planning process will follow the BLM Land Use Planning Handbook, H-1601-1 and NEPA Handbook, H-1790-1 for program specific guidance;
4. Public participation and collaboration will be an integral part of the planning process;

5. The BLM will strive to make decisions in the plan compatible with the existing plans and policies of adjacent local, State, and Federal agencies and tribal entities, as long as the decisions are consistent with the purposes, policies, and programs of Federal law and regulations applicable to public land;

6. The RMP will recognize valid existing rights;

7. The RMP will incorporate, where applicable, management decisions brought forward from existing planning documents;

8. The BLM will work cooperatively and collaboratively with cooperating agencies and all other interested groups, agencies, and individuals;

9. The BLM will consider public welfare and safety when addressing hazardous materials and fire management;

10. Geographic Information System and metadata information will meet Federal Geographic Data Committee standards, as required by Executive Order 12906;

11. The planning process will provide for ongoing consultation with tribal entities and strategies for protecting recognized traditional uses;

12. Planning and management direction will focus on the relative values of resources and not the combination of uses that will give the greatest economic return or economic output;

13. Where practicable and timely for the planning effort, the best available scientific information, research, and new technologies will be used; and

14. The Economic Profile System will be used as one source of demographic and economic data for the planning process.

You may submit comments on issues and planning criteria in writing to the BLM at any public scoping meeting, or you may submit them to the BLM using one of the methods listed in the **ADDRESSES** section above. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so. The minutes and list of attendees for each scoping meeting will be available to the public and open for 30 days after the meeting to any participant who wishes to clarify the views he or she expressed. The BLM will evaluate

identified issues to be addressed in the plan, and will place them into one of three categories:

1. Issues to be resolved in the plan;
2. Issues to be resolved through policy or administrative action; or
3. Issues beyond the scope of this plan.

The BLM will provide an explanation in the Draft RMP/Draft EIS as to why an issue was placed in category two or three. The public is also encouraged to help identify any management questions and concerns that should be addressed in the plan. The BLM will work collaboratively with interested parties to identify the management decisions that are best suited to local, regional, and national needs and concerns.

The BLM will use an interdisciplinary approach to develop the plan in order to consider the variety of resource issues and concerns identified. Specialists with expertise in the following disciplines will be involved in the planning process: Planning and NEPA, Paleontology, Outdoor Recreation, Minerals and Geology, Archeology, Wildlife, and others as may be needed.

Authority: 40 CFR 1501.7; 43 CFR 1610.2.

Linda S. C. Rundell,

State Director, New Mexico.

[FR Doc. E9-31248 Filed 1-4-10; 8:45 am]

BILLING CODE 4310-VC-P

DEPARTMENT OF THE INTERIOR

National Park Service

Notice of Extension of Concession Contracts

AGENCY: National Park Service, Interior.
ACTION: Public notice.

DATES: *Effective Date:* January 1, 2010.

FOR FURTHER INFORMATION CONTACT: Jo A. Pendry, Chief, Commercial Services Program, National Park Service, 1201 Eye Street, NW., 11th Floor, Washington, DC, 20005, Telephone 202/513-7156.

SUMMARY: Pursuant to 36 CFR 51.23, public notice is hereby given that the National Park Service proposes to extend the following expiring concession contracts for a period of up to 1 year, or until such time as a new contract is executed, whichever occurs sooner.

SUPPLEMENTARY INFORMATION: All of the listed concession authorizations will expire by their terms on or before December 31, 2009. The National Park Service has determined that the proposed short-term extensions are necessary in order to avoid interruption

Appendix B: Scoping Letter and Packet



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Las Cruces District Office
1800 Marquess
Las Cruces, New Mexico 88005
www.blm.gov/nm



In Reply Refer To:
1610 (03100)

January 8, 2009

Dear Interested Party:

In March 2009, Congress designated the Prehistoric Trackways National Monument (Monument) through the Omnibus Public Land Management Act of 2009 (the Act). The Monument encompasses 5,280 acres and was established to conserve, protect, and enhance the unique and nationally important paleontological, scientific, educational, scenic, and recreational resources and values. The Monument is located in Doña Ana County, New Mexico, and is approximately 5 miles northwest of Las Cruces in the southern third of the Robledo Mountains (see enclosed map).

As stated in the Act "Congress finds that-

- (1) in 1987, a major deposit of Paleozoic Era fossilized footprint megatrackways was discovered in the Robledo Mountains in southern New Mexico;*
- (2) the trackways contain footprints of numerous amphibians, reptiles, and insects (including previously unknown species), plants, and petrified wood dating back approximately 280,000,000 years, which collectively provide new opportunities to understand animal behaviors and environments from a time predating the dinosaurs;"*

The Act requires the Bureau of Land Management (BLM) to develop a comprehensive management plan for the long-term protection and management of the Monument. In order to address resource uses versus resource protection as well as the long-term management of the area, and to fully analyze all impacts, the BLM will develop a Resource Management Plan and Environmental Impact Statement (RMP/EIS) for the Monument. Two terms will be used in this process to describe areas being addressed: they are Planning Area and Decision Area. Both are within the Robledo Mountains. The Planning Area includes the Robledo Mountains and immediately surrounding areas where actions may impact the Monument or where resources may be impacted by Monument management. The Decision Area, that is the area for which decisions will be made in the RMP, consists entirely of the 5,280 acres of public land, both surface and subsurface, within the designated National Monument.

Several management mandates are stated in the Act and are quoted below:

"The Secretary shall manage the Monument (A) in a manner that conserves, protects, and enhances the resources and values of the Monument ..."

“(2) National Landscape Conservation system – the Monument shall be managed as a component of the National Landscape Conservation System.”

“The Secretary shall provide for public interpretation of, and education and scientific research on, the paleontological resources of the Monument, with priority given to exhibiting and curating the resources in Doña Ana County, New Mexico”

“Except as needed for administrative purposes or to respond to an emergency, the use of motorized vehicles in the Monument shall be allowed only on roads and trails designated for use by motorized vehicles under the management plan ...”

“The Secretary may issue permits for special recreation events involving motorized vehicles within the boundaries of the Monument—

*(A) to the extent the events do not harm paleontological resources; and
(B) subject to any terms and conditions that the Secretary determines to be necessary.”*

“The Secretary may allow grazing to continue in any area of the Monument in which grazing is allowed before the date of enactment of this Act, subject to applicable laws (including regulations).”

As the planning process begins, the BLM’s goal is to reach out and involve the public. The first opportunity for you to participate in this planning process will be the upcoming public scoping open house. The open house format will allow staff to provide information explaining the planning and EIS study process, as well as information regarding the resources and uses that occurs in the Planning Area. The open house will be:

JANUARY 26, 2010
3:00 P.M. – 7:00 P.M.
BEST WESTERN MISSION INN
EL PUEBLO ROOM
1765 S. MAIN STREET
LAS CRUCES, NEW MEXICO

Your thoughts, ideas, and comments are important to us throughout the process. Please attend the scoping meeting or send us your written comments on the enclosed pre-addressed comment form before the scoping period ends, which is February 10, 2010.

Also, if you wish to be removed from the mailing list, please let us know by checking the box on the comment form. Otherwise your name will be retained on the list and you will receive information on the Monument RMP/EIS in the future.

BLM will provide you an opportunity later in the process to review the Draft RMP/EIS, which is scheduled for release in Spring 2011. During the public review period, BLM will conduct a

public meeting to accept comments on the adequacy of the Draft RMP/EIS. Written comments will also be accepted during the review period.

Informational materials like this letter will be available on the Las Cruces District Office website at www.blm.gov/nm/st/en/fo/Las_Cruces_District_Office. If you have any questions, would like to be on the mailing list, or would like to speak with someone, please call Lori Allen at (575) 525-4454.

Sincerely,

/s/ Bill Childress

Bill Childress
District Manager

3 Enclosures

PREHISTORIC TRACKWAYS NATIONAL MONUMENT RMP/EIS

PLANNING ISSUES AND MANAGEMENT CONCERNS

The process for developing a Monument Plan begins with identification of planning issues (40 CFR 1502.7 and 43 CFR 1610.4-1).

Planning issues express opportunities, conflicts and problems associated with the management of public land. Issues also reflect new data, new or revised policies, and changes in resource uses that affect a Resource Management Plan - issues are considered generally external to the BLM

Management concerns are topics or points of dispute that involve a resource

management activity or land use and often are internal to the agency. While some of these concerns may overlap issues, a management concern is generally more important to BLM staff, an individual or group, whereas a planning issue has the potential to be a more widespread source of conflict or opportunity.

The issues and management concerns presented below are preliminary, based on the best available information. The issues or concerns will be refined and new ones may be identified during public scoping and throughout the planning process.

Preliminary Planning Issues and Management Concerns

Paleozoic Resource Research and Protection
Interpretation and Education
Recreation Use and Paleozoic Resource Protection
Travel and Access
Off-Highway Use
Livestock Grazing
Special Designations
Community Pit #1
Expanded Boundary Possibilities for Adjacent Areas
Possible Upcoming Legislation

PLANNING CRITERIA

The BLM planning regulations (at 43 CFR 1610.4-2) require development of planning criteria to guide preparation of an RMP. *Planning criteria* are the standards, rules, and other guidelines developed by managers and interdisciplinary teams, with public input, for use in forming judgments about plan-level decision making, analysis and data collection. These criteria are used to establish the parameters or “ground rules” for making planning decisions and

simplifying RMP actions. The criteria may be adjusted during RMP development based on management concerns and the results of the public scoping process.

Potential cooperative agencies, such as Federal and State regulatory agencies, local governments, and tribal governments, will be invited to participate as a cooperating agency in preparation of the Monument RMP/EIS.

Preliminary Planning Criteria

- **The Monument Plan will be in compliance with the Omnibus Public Land Management Act of 2009 (the Act).**
- **The Monument Plan will be in compliance with the Potential Fossil Yield Classification (PFYC) Manual and Handbook.**
- **While the multiple-use mandates of, Federal Land Policy & Management Act (FLPMA), National Environmental Policy Act (NEPA), and all other applicable laws, regulations, and policies will be followed to the extent appropriate, the provisions of the Act will prevail in managing the Monument.**
- **Land use decisions in the Monument Plan will apply to the surface and subsurface estate managed by the BLM.**
- **The planning process will follow the BLM’s policies in the Land Use Planning Handbook, H-1601-1 for program specific guidance.**
- **Public participation and collaboration will be an integral part of the planning process and will involve all interested groups, individuals and agencies.**

Appendix C: Public Notice



PUBLIC NOTICE

PREHISTORIC TRACKWAYS NATIONAL MONUMENT MANAGEMENT PLAN

BLM PUBLIC OPEN HOUSE
JANUARY 26, 2010
3:00 P.M. to 7:00 P.M.
BEST WESTERN MISSION INN
EL PUEBLO ROOM
1765 S MAIN STREET
LAS CRUCES NEW MEXICO

BLM will be hosting an open house to provide information explaining the planning and Environmental Impact Statement (EIS) study process, as well as information regarding the resources and uses that occur in the area. The Monument is located in Doña Ana County, New Mexico and is approximately 5 miles northwest of Las Cruces in the southern third of the Robledo Mountains.

For information contact: Lori Allen, BLM Las Cruces District Office, (575) 525-4454.

Appendix D: Public Meeting Flyer



PUBLIC NOTICE

PREHISTORIC TRACKWAYS NATIONAL MONUMENT MANAGEMENT PLAN

**BLM PUBLIC OPEN HOUSE
JANUARY 26, 2010
3:00 P.M. to 7:00 P.M.
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***For information contact:
Lori Allen, BLM Las Cruces District Office, (575) 525-4454.***

Appendix E: BLM News Release



BLM NEWS RELEASE

US DEPARTMENT OF THE INTERIOR ■ BUREAU OF LAND MANAGEMENT
NEW MEXICO STATE OFFICE ■ 1474 RODEO RD ■ SANTA FE, NM 87505
Hans Stuart ■ External Affairs Chief ■ 505.438.7510

For Immediate Release
January 5, 2010

For Additional Information
Tom Phillips 575.525.4377

BLM to Prepare Management Plan for Prehistoric Trackways National Monument

The Bureau of Land Management's Las Cruces District Office will prepare a Resource Management Plan for the Prehistoric Trackways National Monument that will guide future management of the 5,280-acre area northwest of Las Cruces.

A public scoping process opened today in order to solicit public comments and identify issues (e.g., natural resource and public use issues) anticipated within the Monument, which was created under the Omnibus Public Land Management Act of 2009.

Comments on issues may be submitted in writing by any of the following methods:

- Website: http://www.blm.gov/nm/st/en/fo/Las_Cruces_District_Office.html
- E-mail: lco_rmp@nm.blm.gov
- Fax: (575) 525-4412
- Mail: BLM, Las Cruces District Office
Prehistoric Trackways National Monument Planner
1800 Marquess Street
Las Cruces, New Mexico 88005

In addition, a public scoping meeting will be scheduled in Las Cruces in early February to present information about the effort and receive input from the public. The meeting will be announced within the next 2 weeks and notices will be published in Las Cruces newspapers. The comment period will close 15 days after the date the public scoping meeting is held.

For further information about this effort contact and/or to have your name added to the BLM's Prehistoric Trackways mailing list, contact Lori Allen at (575) 525-4454 or write the BLM at the address listed above; you can also e-mail Lori at Lori.Allen@blm.gov.

The purpose of the public scoping process is to determine relevant issues that will influence the scope of the environmental analysis, including alternatives, and guide the planning process. Preliminary issues for the planning area that have been identified by the BLM, other agencies, and other stakeholders include Paleozoic resource protection, scientific research, off-highway vehicle use/recreation, plus interpretation and education.

-more-

www.blm.gov/nm

The BLM will work collaboratively with interested parties to identify the management decisions that are best suited to local, regional, and national needs and concerns within the scope of the BLM's legal authorities. The agency will use an interdisciplinary approach to develop the plan in order to consider the variety of resource issues and concerns identified. Specialists with expertise in the following disciplines will be involved in the planning process: Planning and NEPA, Paleontology, Outdoor Recreation, Minerals and Geology, Archeology, Wildlife, and others as may be needed.

X X X

The BLM manages more land -- 253 million acres -- than any other Federal agency. This land, known as the National System of Public Lands, is primarily located in 12 Western states, including Alaska. The Bureau, with a budget of about \$1 billion, also administers 700 million acres of subsurface mineral estate throughout the nation. The BLM's multiple-use mission is to sustain the health and productivity of the public lands for the use and enjoyment of present and future generations. The Bureau accomplishes this by managing such activities as outdoor recreation, livestock grazing, mineral development, and energy production, and by conserving natural, historical, cultural, and other resources on public lands.

www.blm.gov/nm

APPENDIX G

SAFETY ZONES FOR RECREATIONAL
TARGET SHOOTING ANALYSIS

APPENDIX G

SAFETY ZONES FOR RECREATIONAL TARGET SHOOTING ANALYSIS

Recreational target shooting contains many hazards based on predictable projectile physics and unpredictable human behavior. The following information depicts industry standards for predictable projectile physics, given a single point of weapon discharge. These standards are used during construction of safe shooting ranges. Surface Danger Zone (SDZ) is a depiction of the mathematically predicted area a bullet will return to earth by direct fire (Gun Target Line or GTL) or ricochet.

PROJECTED AMMUNITION CAPABILITIES

Standardized industry tables exist identifying a host of variations in Distance X, Distance Y, and Distance W for different calibers, types of bullets, and powder charges resulting in a wide range of variability in SDZs. Distance X provides for the maximum distance along GTL that a projectile will travel. Distance Y provides the depth of ricochet area along the GTL and likewise is not a significant concern because most likely the target location is against a hillside. Distance W defines the ricochet area width where uncontrolled projectiles can place the public in harm. However, Distance W is the dominant factor when considering target shooting on public land near developed recreations sites or areas where the public congregate for extended periods of time. Distance W varies from 1/16-mile for the .45 caliber to 1/2-mile for the 7.62 or .30 caliber, which is North America's most common rifle caliber.

Table G-1 identifies distances, in meters, used to construct a typical SDZ for commonly used calibers and factory ammunition.

TABLE G-1				
SDZ ELEMENT DISTANCES, IN METERS				
Caliber	Distance X	Distance Y	Distance W	Distance W + Area A
.22 long rifle	1400	1125	386	404
9 mm	1800	1211	399	579
.38	1806	1258	389	569
.45	1690	1111	290	470
5.56 (or .223)	3437	2029	462	642
7.62 (or .30)	4100	4053	861	1041

RICOCHET AREA

The types of ammunition, targets, and firing activities dictate SDZ dimensions. A basic SDZ consists of three parts: impact area (dispersion area), ricochet area (Area W), and secondary danger area (Area A and Area B) (see Figure 1). The primary dispersion area established for the impact of all rounds extends five degrees to the left and right limits of weapon discharge and downrange to the maximum range of the ammunition (Gun Target Line or GTL) used. The ricochet area lies to both sides of the dispersion area and extends downrange to the maximum distance of the ammunition used. The ricochet area contains two angles determined specifically by the type and caliber of ammunition being fired. This analysis assumes the following: a single firing point, compliance with shooting safety protocol, using a hillside for a target backdrop, predictable human behavior, and no steel targets. Any of these assumptions, when violated, could greatly increase distance and negate the previously described SDZ. Distance W plus Area A identifies a secondary danger area with decreasing probability of receiving a projectile or debris. This secondary danger area is that area paralleling and 90 meters outside of the outermost limits of the ricochet area and extending downrange to the maximum distance of any ammunition used.

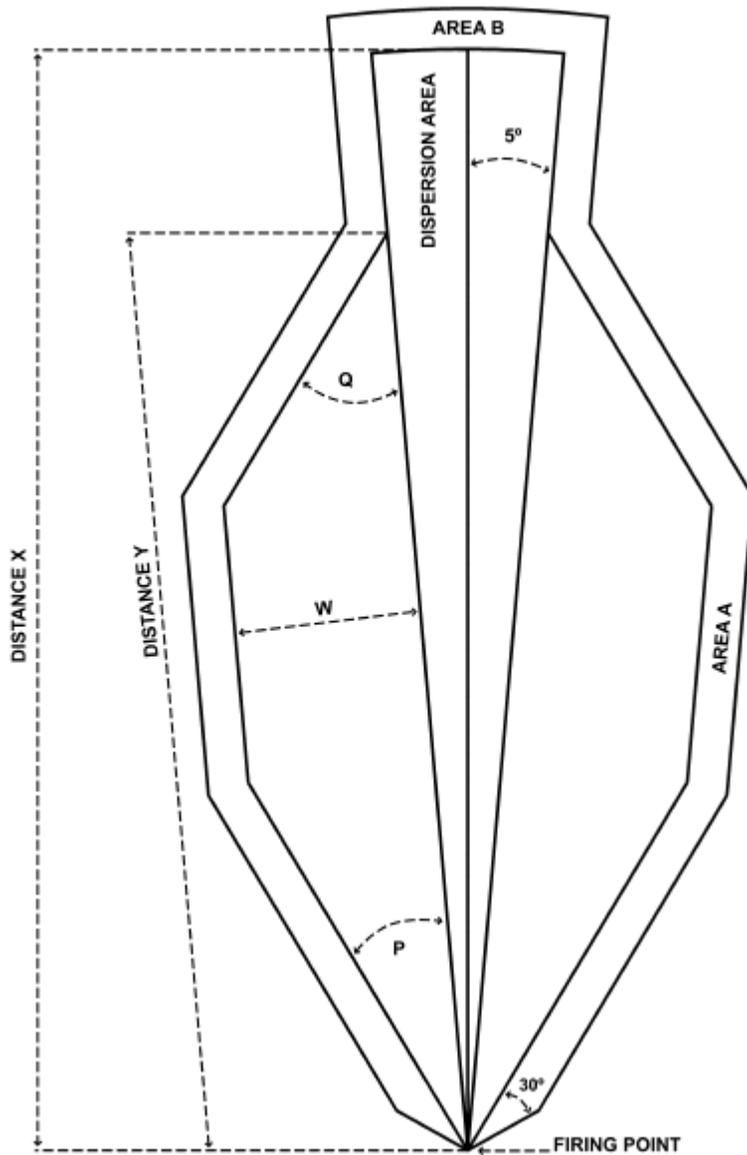


FIGURE 1. BATWING SURFACE DANGER ZONE (SDZ) FOR FIRING SMALL ARMS DIRECT-FIRE WEAPONS.

Distance X: maximum distance along GTL that a projectile will travel.

Distance Y: maximum distance downrange of which a lateral ricochet is expected to occur when a projectile is fired given elevation.

Angle P: beginning angle for the ricochet area measured from the firing point downrange along the edge of the dispersion area.

Angle Q: angle measurement downrange, beginning at distance Y along the edge of the dispersion area.

Distance W: distance between the outside edge or border of the ricochet area and the outside edge or border of the dispersion area on the SDZ.

Area A: identifies a secondary danger area with decreasing probability of receiving a projectile or debris

CONCLUSION

The development of SDZs is used primarily for the construction and management of outdoor shooting ranges, but the BLM used this data to determine a safety zone around areas where the public congregates. In regards to the most common North American rifle caliber, the maximum Distance X for a .30 caliber is approximately 2¼-mile although typical target shooting occurs at distances of 25 to 100 yards. Typically, shooters use hills for backstops and identify their targets so the Distance X is not the main concern regarding target shooting on public land around developed recreation sites or areas where the public congregate. However, this technical data is used to synthesize a practical definition of a rectangle entailing a 2¼-mile by ½-mile SDZ for the most commonly owned rifle caliber. Again, the greatest concern for an area used for target shooting would be the ½-mile lateral deflection or ricochet area.

REFERENCES:

- 1) Department of Army Pamphlet 385-63. Range Safety. 30 January 2012.
- 2) Range Design Criteria. US Department of Energy-Office of Health, Safety and Security. 18 November 2008.
- 3) USMC Range Safety Pocket Guide-Version 1.0. Full version of MCO 3570.1B and DA PAM 385-63.