

Appendix K

Fluid Minerals Leasing Stipulations

Exceptions, Waivers, and Modifications Canyons of the Ancients National Monument

Fluid Minerals Leasing Stipulations Exceptions, Waivers, and Modifications Canyons of the Ancients National Monument

Overview

This report discusses the fluid minerals leasing decisions, stipulations, exceptions, waivers, and modifications proposed as part of the effort to develop the Draft Resource Management Plan/Draft Environmental Impact Statement (DRMP/DEIS) for the Canyons of the Ancients National Monument (the Monument). This report covers fluid minerals leasing on public lands administered by the Bureau of Land Management (BLM) within the planning area.

Key definitions for this report include:

- **Acquired lands:** Lands under Federal ownership that the BLM (in this case) obtained through the means of, including, but not limited to; deed, purchase, gift, or exchange.
- **Competitive leasing:** The BLM (in this case) issues leases on Federal onshore lands where there are known mineral deposits, or where inference of probable mineralization may be derived from knowledge of the geology of the land. The lands are offered for competitive lease bidding following publication of the offer of the lands for lease. A lease is issued to the highest bidder at a sale by public auction.
- **Fluid minerals:** Fluid minerals include oil, gas, and geothermal resources.
- **Gas:** Gas means any fluid, either combustible or non-combustible, that has neither independent shape nor volume and tends to expand indefinitely if unconfined. Gas is any substance that exists in a gaseous stage at the surface under normal conditions. Gas includes methane, carbon dioxide, other gaseous hydrocarbons, and nitrogen.
- **Gas well:** A well completed for the production of natural gas from one or more gas zones or reservoirs.
- **Geothermal resource:** Hot water, steam, by-products, and associated energy extracted from geothermal reservoirs in the Earth's crust.
- **Lease:** A legal document executed between the BLM, as lessor (in this case), and a company or individual, as lessee, that conveys the right to exploit the premises for minerals or other products for a specified period of time over a given area.
- **Lease sale:** A process conducted by the BLM (in this case) for Federal onshore lands in which leases of certain mineral tracts are offered for lease by competitive sealed bidding. During a lease sale, bids are received, announced, and recorded.
- **Lease term:** The duration of the contract specified in the lease.

- **Lessee:** The person or company authorized by the lease terms to produce specific minerals from the leased land.
- **Lessor:** The owner or administrator (the BLM, in this case) of the leased land or mineral rights.
- **Locatable minerals:** Valuable mineral deposits that are not excluded by the Mining Law of 1872, by the Mineral Leasing Act of 1920, by the Mineral Leasing Act for Acquired Lands of 1947, or by the Mineral Materials Act of 1947 (see Authorities and Guidelines below). Locatable minerals include base metals, precious metals, light metals, ferrous metals, precious and semi-precious stones, and a wide array of industrial minerals.
- **Mineral:** Naturally occurring organic or inorganic substances with characteristics and uses that bring them within the purview of mineral laws. Minerals may be obtained under applicable laws from public lands by purchase, lease, or preemptive entry.
- **Natural gas:** A compressible and expansible mixture of hydrocarbons having a low specific gravity and occurring naturally in a gaseous form. Natural gas ordinarily consists principally of methane and heavier entrained hydrocarbons, and may contain appreciable quantities of nitrogen, helium, carbon dioxide, and contaminants (such as hydrogen sulfide and water vapor). Some of the gases may be found either in a gaseous state or as liquids under suitable conditions of temperature and pressure.
- **Non-competitive leasing:** Leases issued to qualified applicants for land not specifically known or presumed to contain mineral or petroleum deposits in quantity.
- **Oil well:** A well completed for the production of crude oil from one or more zones or reservoirs.
- **Operating agreement:** A written document between parties holding operating rights, with one of the parties normally designated as the operator. The agreement contains detailed provisions for the drilling of a well, the sharing of expenses, and acceptable accounting methods.
- **Operator:** The individual, partnership, firm, or corporation having control or management of operations on a leased area, or on a portion thereof. The operator may be a lessee, designated agent of the lessee, a holder of rights under an approved operation agreement, or an agent of an operating rights holder.
- **Petroleum:** A naturally occurring complex liquid hydrocarbon that may contain varying degrees of impurities. Petroleum is obtained from the rocks below the surface of the Earth by drilling down into a reservoir rock and piping the minerals to the surface.
- **Producible lease:** A lease where one well, or where several wells, have discovered hydrocarbons in paying quantities, but for which there is no production during the reporting period.
- **Producing lease:** A lease that is producing oil, gas, or other minerals in quantities sufficient to generate royalties.

- **Public lands:** Any land and/or interest in land owned by the United States and administered by the Secretary of the Interior through the BLM (in this case), without regard to the manner through which the BLM acquired ownership, except: 1) lands located on the Outer Continental Shelf, and 2) lands held for the benefit of Indians, Aleuts, and Eskimos. The BLM considers acquired lands to be a category of public lands.

(Source: the Glossary of Terms for the Minerals Management Service. Available at <http://www.mrm.mms.gov/stats/statsrm.htm>).

Authorities and Guidelines

In addition to all applicable laws, rules, regulations, policies, and guidelines, the following specifically guide the evaluation process for fluid minerals leasing decisions, stipulations, exceptions, waivers, and modifications:

- **The General Mining Law of 1872, as amended:** This Act (30 USC 29 and 43 CFR 3860) is the principal Federal law governing locatable minerals in the United States. The law provides U.S. citizens with an opportunity to explore, discover, and purchase certain valuable metallic and non-metallic minerals on Federal lands that are not closed to mineral entry. The law establishes standards and guidelines covering the claiming of mineral rights, and includes provisions for local rules to be developed, consistent with Federal laws. This Act provides the successful mining claimant the right to patent (acquire absolute title to the land) mining claims or sites if they meet the statutory requirements.
- **The Mineral Leasing Act of 1920, as amended:** This Act (30 USC 181 et seq.) gives the BLM responsibility for oil and gas leasing on BLM, U.S. Forest Service (USFS), and other Federal lands, as well as on State and private surface lands where mineral rights have been retained by the Federal Government. This Act authorizes, and governs, the leasing of public lands for the development of deposits of coal, oil, gas (and other hydrocarbons), sulphur, phosphate, potassium, and sodium. This Act establishes qualifications for mineral lessees, sets out maximum limits on the number of acres of a particular mineral that can be held by a lessee, and prohibits alien ownership of leases (except through stock ownership in a corporation). Rental and royalty terms are specified for each mineral; general conditions are established for pipeline right-of-way (ROW), lease diligence, royalty disposition, and holding restrictions. The Act requires sharing royalty and other lease revenues with the States. The Secretary of the Interior is authorized to promulgate rules and regulations to implement and enforce the Act.
- **The Mineral Leasing Act for Acquired Lands of 1947, as amended:** Mineral leases on acquired lands cannot be issued without the concurrence of the acquiring agency. This Act (30 USC 351-359) requires disbursement of mineral receipts from acquired lands in the manner prescribed by legislation governing the type of land in question, including acquired national grasslands and acquired national forest lands.
- **The Federal Oil and Gas Royalty Management Act (FOGRMA) of 1982:** This Act (PL 97-451; 30 USC 1701 et seq.) ensures that all oil and gas activities on public lands, as well as on the Outer Continental Shelf, are properly accounted for under the direction of

the Secretary of the Interior. The Act requires oil and gas operators on Federal lands to construct and operate wells in such a manner as to protect the environment and to conserve Federal resources. It also requires the Department of the Interior to establish a comprehensive system, including inspections, for accurately determining oil and gas royalties. The FOGRMA requires the Secretary of the Interior to “audit and reconcile, to the extent practicable, all current and past lease accounts for leases of oil or gas and take appropriate actions to make additional collections or refunds as warranted” (Section 1711(c)(1)). The Secretary, in turn, has assigned these duties to the Minerals Management Service (MMS).

- **The Federal Onshore Oil and Gas Leasing Reform Act (FOOGLRA) of 1987:** This Act (PL 100-203, 101 Stat. 1330-256) amends the Mineral Leasing Act of 1920. It requires each BLM State Office to conduct oil and gas lease sales on at least a quarterly basis where there is interest to do so. The Act also requires that all public lands that are available for oil and gas leasing be offered first by competitive leasing. Non-competitive oil and gas leases may be issued only after the lands have been offered competitively at an oral auction and have not received a bid.
- **The Federal Oil and Gas Royalty Simplification and Fairness Act (FOGRS&FA) of 1996:** This Act (PL 104-185, 110 Stat. 1717) amends the FOGRMA. It revises and expands the guidelines under which the authorities of the Secretary of the Interior, with regard to the collection of oil and gas receipts and related activities, may be delegated to a State. The Act prescribes procedural guidelines for Secretarial and delegated States' actions and limitation periods, including royalty adjustments and refunds. The Act renders inapplicable, except to American Indian leases: 1) the current statute of limitations governing the recovery of penalties, and 2) the Secretary's authority to enter into cooperative agreements with any State (or American Indian tribe) with respect to oil or gas royalty activities.
- **The Energy Policy Act of 2005:** This Act (PL 109-58, 119 Stat. 624) sets forth an energy research and development program covering energy efficiency; renewable energy; oil and gas; coal; American Indian energy; nuclear matters and security; vehicles and motor fuels, including ethanol; hydrogen; electricity; energy tax incentives; hydropower and geothermal energy; and climate change technology.
- **The Federal Land Policy and Management Act (FLMPA) of 1976, as amended:** This Act establishes the land management authority of the BLM and provides guidance for how public lands are to be managed by the BLM. The BLM manages public lands on the basis of multiple use and sustained yield (Section 202(c)(1)). The FLPMA requires the development, maintenance, and revision of Resource Management Plans (RMPs) for public lands. It requires that the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values be protected. Section 302(b) (43 USC 1732(b) and 603(c)) concern authorizing and permitting of mineral exploration, mining, and reclamation actions on public lands administered by the BLM. With regard to oil and gas leasing, the FLPMA requires that RMPs address: 1) the identification of areas available for oil and gas development; and 2) related management directions (including stipulations, exceptions, waivers, and modifications).

- **The National Environmental Policy Act (NEPA) of 1969:** This Act (PL 91-190, 42 USC Section 4321-4347) establishes national environmental policy, including a multidisciplinary approach to considering environmental amenities in decision-making. The law also established the President's Council on Environmental Quality (CEQ). The CEQ prepares the regulations implementing the law that apply to all agencies, including the BLM. (These regulations are found at 40 CFR Parts 1500 to 1508.) The NEPA requires Federal agencies to prepare an Environmental Impact Statement (EIS) for all "major federal actions significantly affecting the human environment." Thus, before implementing any "major" or "significant" or "Federal" action, the BLM must consider the environmental impacts of that action, identify unavoidable environmental impacts, and make this information available to the public in the EIS. All of these conditions must be satisfied before implementing a proposed action.
- **The Code of Federal Regulations (CFR):** Title 43 of the Code of Federal Regulations, subchapter 3, provides guidance on Minerals Management (subparts 3100, Onshore Oil and Gas Leasing, General; 3101, Issuance of Leases; 3102, Qualifications of Lessees; 3103, Fees, Rentals, and Royalty; 3104, Bonds; 3105, Cooperative Conservation Provisions; 3106, Transfer by Assignment, Sublease, or Otherwise; 3107, Continuation, Extension, or Renewal; 3108, Relinquishment, Termination, Cancellation; and 3109, Leasing under Special Acts). Part 3150 provides guidance on Onshore Oil and Gas Geophysical Exploration; Part 3180 provides guidance on Onshore Oil and Gas Unit Agreements: Unproven Areas. Part 3200 addresses Geothermal Leasing. Title 43 CFR 3800 addresses mining claims under the General Mining Laws for the BLM.
- **BLM National Onshore Oil and Gas Operating Orders:** Order No. 1 covers the approval of operations, Federal Register Notice(s), and correction(s) to Federal Register Notice(s); Order No. 2 covers drilling; Order No. 3 covers site security; Order No. 4 covers the measurement of oil; Order No. 5 covers the measurement of gas; Order No. 6 covers H₂S Operations; and Order No. 7 covers the disposal of water.
- **BLM National Notice-to-Lessee(s) (NTLs):** NTL 3a covers the reporting of undesirable events; NTL 4A covers royalty or compensation for oil and gas lost.
- **BLM Manual and Handbook 1601-1 - Land Use Planning:** This Manual and Handbook provide guidance with regard to the requirements of the FLPMA (Sections 201 and 202), the BLM's Planning Regulations (43 CFR 1600), and the NEPA. They provide guidance for preparing new RMPS (as well as plan revisions, plan amendments, and subsequent implementation-level plans) so that such plans can help ensure that the public lands are managed in accordance with the principles of multiple use and sustained yield in a manner that recognizes the Nation's need for domestic sources of minerals, food, timber, and fiber; and in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water, and archaeological values.
- **National Historic Preservation Act (NHPA) of 1966, as amended**
The NHPA is the primary Federal law providing for the protection and preservation of cultural resources. The NHPA established the National Register of Historic Places (NRHP), the Advisory Council on Historic Preservation (ACHP), and the State Office of Historic Preservation (SHPO).

- **BLM Manual 3150 - Onshore Oil and Gas and Geophysical Exploration:** This Manual establishes procedures for processing Notice(s) of Intent (NOIs) to Conduct Oil and Gas Geophysical Exploration Operations, as well as for conducting oil and gas geophysical exploration on BLM-administered lands in the lower 48 States. It describes the functions and responsibilities of the BLM as they pertain to authorization of oil and gas geophysical exploration.
- **BLM Manual 3109; BLM Handbook H-3109-1 -- Leasing Under Special Acts:** This Manual and Handbook contain guidance and procedures for processing Federal oil and gas leases and compensatory royalty agreements.
- **BLM Handbook 1624-1 -- Planning for Fluid Mineral Resources:** This Handbook provides guidance related to oil and gas, coal, and other leasable and locatable minerals.
- **BLM Handbook H-3110-1 -- Non-Competitive Leases:** This Handbook provides procedures, in accordance with the Mineral Leasing Act of 1920 and the Federal Onshore Oil and Gas Leasing Reform Act of 1987, regarding non-competitive leasing of BLM-administered lands. Guidance concerning the adjudication and issuance of future interest non-competitive leases is also provided.
- **BLM Handbook 3150-1 -- Onshore Oil and Gas Geophysical Exploration Surface Management Requirements:** This Handbook provides guidance related to identifying any potential surface-use conflicts between the proposed operation and land use plan restrictions (stipulations), for wildlife habitat areas, range improvements, ROW structures, fire danger, population areas, hunting seasons, off-road vehicle restrictions, and/or any other special designations.
- **BLM Handbook H-3203-1; H-3210-1; H-3220-1 -- Leasing Terms:** These handbooks provide guidelines related to adjudication where lease terms have been continued by reason of production, or where leases qualify for extensions. Guidance is also provided regarding the diligent exploration expenditure requirement, consolidation of leases, and the readjustment of lease terms and conditions. The procedures concerning the dating of leases, lease acreage limitations, and descriptions of lands in lease applications or offers are covered in H-3210-1 and H-3220-1.
- **BLM IM No. 2007-021, dated November 8, 2006 -- Integration of Best Management Practices into Application for Permit to Drill Approvals and Associated Rights-of-Way for Oil & Gas Operations; Geothermal Operations; Helium Operations; Lands and Realty:** This IM requires that BLM Field Offices use appropriate environmental Best Management Practices (BMPs) for mitigating anticipated impacts to surface and subsurface resources.
- **BLM IM. No. 2008-032, dated November 19, 2007 -- Exceptions, Waivers, and Modifications of Fluid Minerals Stipulations and Conditions of Approval, and Associated Rights-of-Way Terms and Conditions for Oil and Gas Exploration and Operations; Geothermal Operations; Land Use Planning and Environmental Coordination; Lands and Realty; Wildlife Management:** This IM (and attached instructions) provides guidance related to: 1) incorporating exception, waiver, and modification criteria into a land use plan; 2) making changes to fluid minerals leasing decisions/stipulations in the land use plan; and 3) reviewing and approving lease

stipulation exceptions, waivers, and modifications for oil, gas, and geothermal leases that have been issued. Guidance is also provided for adapting the exception, waiver, and modification process to permits (including for oil and gas Applications for Permit to Drill (APD), Geophysical NOIs, and Geothermal Drilling Permit Conditions of Approval), as well as for energy-related ROW Terms and Conditions. This policy consolidates and further refines the exception, waiver, and modification guidance contained in law, regulations, handbooks, and other guidance documents.

- **The Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development (“The Gold Book”), Fourth Edition (2007):** The Gold Book provides information on the requirements for obtaining permit approval and for conducting environmentally responsible oil and gas operations on Federal lands, as well as on private surface over Federal minerals (split-estate). In 2007, the Gold Book was updated to incorporate changes resulting from the new Onshore Oil and Gas Order No. 1 regulations.
- **Uniform Format for Oil and Gas Lease Stipulations, dated March 1989, Rocky Mountain Regional Coordinating Committee:** This document provides oil- and gas-related definitions, policies, and examples of: No Surface Occupancy (NSO) stipulations, Timing Limitation (TL) stipulations, Controlled Surface Use (CSU) stipulations, special administrative stipulations, and lease notices. It also provides a copy of the standardized stipulation forms to be used for planning purposes.

Fluid Minerals Leasing on Public Lands

Historical Background

Until the early Twentieth Century, the Federal government allowed private individuals/entities to explore and develop public lands containing oil and gas with relative ease, and without charge. Full ownership of oil and gas lands could be purchased for a nominal amount. In 1920, however, Congress enacted the Mineral Leasing Act, and ended the private acquisition of title to Federal lands. The Act authorized the Secretary of the Interior to issue permits for exploration, and to lease lands containing oil and gas. Under the Act, the Federal government retained title to the lands.

The Minerals Leasing Act of 1920 created a two-track leasing process: competitive and non-competitive leasing. Competitive leases were issued when the lands were within the known geologic structure of a producing oil and gas field. Non-competitive leases were issued to the person/entity “first making application” (30 USC 226). All leasing, competitive and non-competitive, was at the discretion of the Secretary of the Interior, who could lease lands with, or without, conditions (stipulations), and who could withhold lands from leasing entirely.

In the 1950s, interest in leasing public lands grew dramatically. Finding it increasingly difficult to determine exactly who was the “first making application” for a lease, the Secretary of the Interior established a lottery system where one application was chosen at random in order to determine the lessee. At the time, the lottery system was widely used because a majority of the leases were issued non-competitively.

In the 1960s and 1970s, there was an increasing demand for the protection and preservation of public lands “undisturbed” for present and future generations. As a result, several major

environmental laws were enacted, including the Wilderness Preservation Act of 1964, the National Environmental Policy Act of 1970, the National Historic Preservation Act of 1966, and the Endangered Species Act of 1973. As a result of this increased interest in environmental protection, the U.S. Congress overhauled the land use planning process governing public lands. The goal was to encourage land management agencies, including the BLM, to meet society's increasing demand for materials and energy (in order to support economic growth), and to protect and preserve non-economic values (including of wildlife, outdoor recreation, scenery, air and water quality, cultural resources, etc.) (Watson 2005).

Fluid Minerals Leasing -- BLM Process and Procedure

Overview

The Federal Land Policy and Management Act (FLPMA) of 1976 established the land management authority of the BLM and provided guidance for how public lands are to be managed by the BLM. Based on the FLPMA, the BLM is required to manage public lands on the basis of multiple use and sustained yield (Section 202(c)(1)). Multiple use is to be considered in the context of the best combination of land uses that meet the present and future needs of the nation with respect to "recreation, range, timber, minerals, watershed, wildlife and fish, and natural, scenic, scientific, and historical values."

The Mineral Leasing Act of 1920, the Mineral Leasing Act for Acquired Lands of 1947, and the Federal Onshore Oil and Gas Leasing Reform Act of 1987, give the BLM responsibility for oil and gas leasing on approximately 570 million acres of BLM, U.S. Forest Service (USFS), and other Federal lands, as well as on private lands where mineral rights have been retained by the Federal Government ("split-estate" lands).

Under the FLMPA, resource values, including fluid minerals, on BLM-administered lands are to be managed in a "harmonious and coordinated" manner that does not lead to "permanent impairment of the productivity of the land and the quality of the environment." The BLM is required to protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values for present and future generations.

Types of Fluid Minerals Leases

The BLM issues two types of leases for oil and gas exploration and development on lands owned or controlled by the Federal Government: competitive and non-competitive. After Congress passed the Federal Onshore Oil and Gas Leasing Reform Act of 1987, all public lands available for oil and gas leasing were offered first through a competitive leasing process. Non-competitive oil and gas leases are only issued after the lands have been offered competitively at an oral auction and have not received a bid.

- **Competitive Leasing Process:** When parcels are available, the BLM conducts oral auctions of all oil and gas leases on a quarterly basis. A Notice of Competitive Lease Sale (Sale Notice), which lists lease parcels to be offered at the auction, is published by each BLM State Office at least 45 days before the auction is held. Lease stipulations applicable to each parcel are specified in the Sale Notice (See Fluid Minerals Leasing -- Stipulations below.). Lands included in the auction process come from the following sources:

- lands identified by informal expressions of interest from the public;
 - lands identified by the BLM for management reasons; and/or
 - lands included in offers filed for non-competitive leases.
- **Non-Competitive Leasing Process:** Non-competitive leases are only issued for parcels that have been offered competitively but have failed to receive a bid. Lands in expired, terminated, relinquished, or cancelled leases are not available for non-competitive leasing until they have been offered competitively, and have failed to receive a bid. A non-competitive pre-sale offer may be filed on such lands only if the prior lease expired (or was terminated, relinquished or cancelled) at least 1 year before the pre-sale offer was submitted to the BLM State Office.

The BLM cannot place for sale lands already under lease, or lands where mineral ownership is not federally owned. Additional lands unavailable for leasing include, but are not limited to, the following:

- lands within city limits;
- lands withdrawn from mineral leasing;
- lands designated as Wilderness or Wilderness Study Areas (WSAs);
- lands within a Native American Indian Reservation;
- lands with mineral entry applications;
- lands in patented mining claims; and/or
- lands posted in a Notice of Competitive Lease Sale.

In the lower 48 States, the maximum competitive lease size is 2,560; it is 5,760 acres in Alaska. A non-competitive offer (NCO) must be made for a minimum of 640 acres, or for one full section, whichever is larger. A NCO may be made for a maximum of 10,240 acres (entirely within six miles square). Since the passage of the Energy Policy Act of 1992, both competitive and non-competitive leases are issued for a 10-year period. Both types of leases continue for as long as oil or gas is produced in paying quantities.

A lease grants the lessee the right to explore and drill for (and extract, remove, and dispose of) oil and gas deposits (except helium) that may be found in the leased lands. Subject to special restrictions or “stipulations,” the leases are granted on the condition that the lessee will have to obtain BLM approval before conducting any surface-disturbing activities. The oil and gas lease conveys the right to develop those resources on the leased land. The lessee(s) or operator(s) may not build a house on the land, cultivate the land, or remove any minerals other than oil and gas from the leased land.

Land Use Planning for Fluid Minerals Leasing -- The Planning Process

To help ensure proper land management that meets the goals of multiple use and sustained yield, the FLPMA requires the development, maintenance, and revision of land use plans for public lands. The land use planning process is the key tool used by the BLM to protect resources and designate uses on BLM-administered lands. Resource Management Plans (RMPs) help ensure that the public lands are managed in a manner that recognizes the Nation's need for domestic sources of minerals, food, timber, and fiber in a manner that protects the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water, and archaeological values for present and future generations.

Preparation of RMPs by the BLM is a major Federal action; therefore, under the provisions of the NEPA, it requires the preparation of an associated Environmental Impact Statement (EIS). The NEPA requires Federal agencies to fully disclose the nature and condition of the environment within the area of interest. The development of an RMP, and the associated EIS, is an interactive process whereby a BLM Interdisciplinary (ID) Team works with all interested parties (including other government agencies, private organizations, groups, and individuals) in order to identify all of the values and resources associated with the public lands, including fluid minerals, and how they would be potentially managed.

In accordance with the NEPA, the BLM must formulate various alternatives for proposed management, and must compare those alternatives to a "no-action" alternative (which is a "baseline" alternative that proposes the continuation of the current management scheme). Working within the ID team process, these "action alternatives" are developed that present different potential planning scenarios. Each alternative is analyzed in the RMP, specifically in relation to how well it would meet the legal and regulatory mandates of the BLM, including for multiple use and sustained yield. At the same time, the BLM conducts a NEPA analysis of the various alternatives, and discloses the expected environmental, economic, and social impacts of the proposed management alternatives. The NEPA specifically requires the agency preparing the EIS to seek decisions that, among other things, "attain the widest range of beneficial uses of the environment without degradation;" that "preserve important historic, cultural, and natural aspects of our national heritage;" and that "achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities" (42 U.S.C. 4331(b)).

With regard to oil and gas leasing (Section 302(b) (43 USC 1732(b) and 603(c)), the FLPMA requires that RMPs address: 1) the identification of areas available for oil and gas development; and 2) specify related management directions (including stipulations, exceptions, waivers, and modifications) by alternative.

Fluid Minerals Leasing -- Stipulations

Public lands are available for oil and gas leasing only after they have been evaluated through the BLM's multiple-use/sustained-yield planning process. In areas where development of oil and gas resources would conflict with the protection or management of other resources or public land uses, mitigating measures are identified and may appear on leases as either stipulations to uses or as restrictions on surface occupancy.

Stipulations are conditions, promises, or demands that are to be made part of a lease when the environmental and planning record demonstrates the necessity for the stipulations. Stipulations,

as such, are neither "standard" nor "special." They are a necessary modification of the terms of the lease. In order to accommodate the variety of resources encountered on BLM-administered lands, these stipulations are categorized as to how the stipulation modifies the lease rights, not by the resource(s) to be protected (Rocky Mountain Regional Coordinating Committee 1989). The specifics as to what, why, and how this mitigation/protection is to be accomplished is determined by the land management agency through the development of the RMP and through the NEPA analysis, in this case by the BLM management and staff at the Monument.

If upon weighing the relative resource values, uses, and/or users during the development of the DRMP/DEIS, it is determined that conflict with oil and gas operations exist that cannot be adequately managed under the BLM Standard Lease Terms (SLTs), a lease stipulation is deemed necessary. Documentation of the necessity for a stipulation is disclosed in planning documents, such as in this one, or through site-specific analysis. RMPs, and/or NEPA documents, establish the guidelines by which future waivers, exceptions, and/or modifications may be granted (see definitions below).

Stipulations may be necessary if the authority to control the activity on the lease does not already exist under laws, regulations, and/or orders. The authorized officer, the Monument Manager (in this case), has the authority to modify the site location and design of facilities, control the rate of development and timing of activities, and require additional mitigation under Sections 2 and 6 of the SLTs (BLM Form 3100-11) and 43 CFR 3101.1-2.

Key definitions related to fluid minerals leasing stipulations are as follows:

- **Lease Stipulation:** A lease stipulation, developed during the land planning process, is a condition of lease issuance designed to provide a level of protection for other resource values and/or land uses. This is achieved by restricting lease operations (such as during certain times of the year or by locations) in order to avoid unacceptable impacts to a greater extent than provided by standard lease terms or regulations. A stipulation is an enforceable term of the lease contract. It supersedes any inconsistent provisions of the standard lease form. A lease stipulation is attached to, and made a part of, the lease. Lease stipulations further implement the BLM's regulatory authority to protect resources or resource values.
- **Stipulation Standards:** Stipulation standards are the physical and temporal conditions, resources, or resource values that must be present, and met, for application of a specific stipulation to a specific lease.
- **Condition of Approval (COA):** A COA is a site-specific and enforceable requirement included in an approved Application for Permit to Drill (APD) or in a Sundry Notice that may limit or amend the specific actions proposed by the operator. COAs are designed to minimize, mitigate, or prevent impacts to resource values or other uses of public lands.
- **Information Notice (IN):** An IN provides detailed information concerning limitations that already exist in law, lease terms, regulations, and/or operational orders. An IN also addresses special items that the lessee should consider when planning operations. It does not, however, impose new or additional restrictions. INs attached to leases should not be confused with Notices to Lessees (NTLs).

- **Notice to Lessees (NTL):** A NTL is a written notice issued by the BLM (in this case) authorized officer. NTLs implement regulations and operating orders. They serve as instructions on specific item(s) of importance within a State, District, or Area.
- **No Surface Occupancy (NSO):** Under a NSO stipulation, use or occupancy of the land surface for fluid minerals exploration or development is prohibited in order to protect identified resource values. The NSO stipulation includes stipulations that may have been worded as “No Surface Use/Occupancy,” “No Surface Disturbance,” “Conditional NSO,” and/or “Surface Disturbance or Surface Occupancy Restriction (by location).” The NSO stipulation is intended for application only when other stipulations are deemed insufficient to achieve the level of resource protection necessary in order to protect the public interest.
- **Controlled Surface Use (CSU):** Under a CSU stipulation, use and occupancy is allowed unless restricted by another stipulation. Identified resource values requiring special operational constraints may modify the lease rights. A CSU stipulation is used for operating guidance, not as a substitute for the NSO or for TL stipulations. The CSU stipulation is intended for application where standard lease terms and permit-level decisions are deemed insufficient to achieve the level of resource protection necessary in order to protect the public interest, but where an NSO stipulation is deemed overly restrictive. A CSU stipulation allows the BLM to require that a proposed facility or activity be relocated, if necessary, in order to achieve the desired level of protection.
- **Timing Limitation (TL):** A TL stipulation prohibits surface use during specified time periods in order to protect identified resource values. This stipulation does not apply to the operation and maintenance of production facilities unless the findings of analysis demonstrate the continued need for such mitigation and that less stringent, project-specific mitigation measures would be insufficient. A TL stipulation is intended for application where standard lease terms are deemed insufficient to achieve the level of resource protection necessary in order to protect the public interest, but where an NSO is deemed overly restrictive. The scope of the TL stipulation goes beyond ground-disturbing activities to encompass any source of protracted or high-intensity disturbance that may interfere with normal wildlife behavior and/or adversely affect (impact) habitat use. Typically, the limitation is applied annually for a specified period of time.

Fluid Minerals Leasing -- Exceptions, Modifications, and Waivers

Fluid minerals lease stipulations and related exceptions, waivers, and modifications are developed during the land use planning process. Exceptions, waivers, and modifications provide an effective means of applying “Adaptive Management” techniques in order to meet changing circumstances. The criteria for approval of exceptions, waivers, and modifications must be supported by the NEPA analysis, either through the land use planning process or through site-specific environmental review. (Regulations covering exceptions, modifications, and waivers are found in 43 CFR 3101.1-4; BLM IM No. 2008-032, dated November 19, 2007.)

Key definitions related to lease exceptions, modifications, and waivers are as follows:

- **Exceptions:** A one-time exemption from a stipulation for a particular site within the leasehold. Exceptions are determined on a case-by-case basis and, if granted, suspend the restrictions of a stipulation for a specified period, location, and/or activity. The

stipulation continues to apply to other sites within the stipulation area. Exceptions that conform to the RMP do not require public notice. Non-conforming exceptions are granted only upon RMP amendment and do require public notice.

- **Modifications:** A modification is a fundamental change to the provisions of a lease stipulation. Modifications may be temporary, or they may be for the term of the lease. Depending upon the specific modification, the stipulation may, or may not, apply to all sites within the leasehold to which the restrictive criteria are applied. Modifications are made if it is determined that the stipulation is no longer required as written (for example, when it is based upon the results of monitoring data). Modifications require an environmental assessment in order to determine the potential impacts, and in order to evaluate whether or not an RMP amendment is needed. If deemed substantial, a modification requires a 30-day public notice period prior to implementation.
- **Waivers:** Waivers are permanent exemptions to a stipulation. Under a waiver, the stipulation no longer applies anywhere within the leasehold. Waivers apply to an entire stipulation area. They are applied only after preparation of an environmental assessment and after a subsequent decision has been made that a stipulation is no longer required to protect a specific resource. The decision to waive a substantial stipulation requires an RMP amendment and a 30-day public notice period prior to implementation.

A lease stipulation shall be subject to modification, exception, or waiver if:

- the authorized officer determines that the factors leading to its inclusion in the lease have changed sufficiently to make the protection provided by the stipulation no longer justified (when the authorized officer determines that impact will be acceptable); or
- if the proposed operations would not cause unacceptable impacts (43 CFR 3101.1-4).

Such determinations must be fully supported by an appropriate level of environmental review, and must be made on a case-by-case basis based on the following questions:

- Would the BLM remain in compliance with all applicable laws, regulations, rules, policies, and guidelines?
- Is the proposal in conformance with the objectives of the RMP?
- What would be the level of harm (impacts) to the protected resource, both locally and regionally?
- What would be the economic or public safety concerns if an active operation near completion was shut down in order to comply with a seasonal closure?
- Are the impacts temporary, rather than long term?
- Is the resource being protected rare, or is it relatively common? Is it a special status species?

- Based on existing knowledge of a species and of its use of an area, would impacts be confined to single or to a small number of individuals, or would there be impacts on local or regional populations? Would such impacts be allowed under existing law and policy?
- Is off-site mitigation an appropriate option? (For example, where individual or cumulative impacts cannot be effectively mitigated on site.)
- Can the impacts be reduced to an acceptable level through intensive use of environmental Best Management Practices (BMPs)?

Fluid Minerals Leasing - Canyons of the Ancients National Monument

Overview

On June 9, 2000, the Canyons of the Ancients National Monument (the Monument) was established by Presidential Proclamation Number 7317 (the Proclamation), which states:

Containing the highest known density of archaeological sites in the Nation...natural resources and spectacular landforms...rugged and dissected geology...and wildlife species...I proclaim for the purpose of protecting the objects identified above...Canyons of the Ancients National Monument.

The BLM manages the Monument pursuant to its basic organic authorities, the primary one being the Federal Land Policy and Management Act of 1976 (FLPMA). The management of the Monument is subject to the overriding purpose of protecting the objects of the Monument, as described in the Proclamation. The area within the boundaries of the Monument includes approximately 166,000 acres of BLM-administered land, approximately 17,560 acres of private land, and approximately 400 acres of Federal land managed by the National Park Service (as Hovenweep National Monument). The Monument designation does not apply to private lands, but the Proclamation provides that if any of these lands within the outer boundaries are acquired into Federal ownership in the future, they would become part of the Monument. In the absence of acquisition, the laws applicable to the use of private lands prior to the establishment of the Monument continue to apply.

The FLPMA requires the development, maintenance, and, as appropriate, revision of RMPs for public lands. The NEPA requires Federal agencies to prepare an EIS for major Federal actions that could significantly affect (impact) the environment. In addition, the BLM Interim Management for all National Monuments (BLM 2001g) requires the completion of land use plan evaluations and stand-alone RMPs for all national monuments. In fulfillment of these requirements, the DRMP/DEIS documents the comprehensive analysis of alternatives and environmental impacts for the planning and management of public lands and resources, including fluid minerals, administered by the BLM at the Monument. The purpose, or goal, in developing this land use plan is to ensure that public lands and mineral estate administered by the BLM at the Monument are managed in accordance with applicable laws, as well as with the principles of multiple use and sustained yield.

The DRMP/DEIS will meet the requirement of the Proclamation to protect the objects of geological, archaeological, historical, and biological value within the Monument. All explicit land use planning and management statements included in the Proclamation will be addressed. In relation to fluid minerals leasing, these include:

- Direction that the Monument appropriate and withdraw all Federal lands within the Monument from “all forms of entry, location, selection, sale, or other disposition under the public land laws including, but not limited to, withdrawal from location, entry, and patent under the mining laws, and from disposition under all laws relating to mineral leasing, other than by exchange that furthers the protective purposes of the Monument and except for oil and gas leasing.”
- Direction that the Monument “...shall remain open to oil and gas leasing and development; provided, the Secretary of the Interior shall manage the development, subject to valid existing rights, so as not to create any new impacts that interfere with the proper care and management of the objects protected by this proclamation; and provided further, the Secretary may issue new leases only for the purpose of promoting conservation of oil and gas resources in any common reservoir now being produced under existing leases, or to protect against drainage.”

Fluid Minerals Leasing on the Monument

The Monument lies within a geologic region called the Paradox Basin, which covers portions of southwestern Colorado, southeastern Utah, northwestern New Mexico, and northeastern Arizona. The area has high oil, natural gas, and CO₂ potential and is currently producing oil and gas from the Paradox, Leadville, and Pennsylvanian Honaker Trail Formations on the Monument.

The Paradox Basin is typically defined by the existence of evaporite deposits underlain by thick deposits of Devonian and Mississippian Period carbonates, which are unconformably overlain by Pennsylvanian Period strata. The Paradox Basin is a mature oil and gas province, with known oil and gas reservoirs within the Leadville Formation and various carbonate members of the Paradox Formation. The Leadville Formation is the largest CO₂-containing reservoir in the country, and the Desert Creek and Ismay members of the Paradox Formation are the primary source of oil and natural gas on the Monument.

Oil was first discovered in the Paradox Basin in 1908 near Mexican Hat, Utah, where shallow wells were drilled near an existing oil seep along the San Juan River. Natural gas was first discovered along the southeastern edge of the Paradox Basin in 1921, at the Ute Dome in New Mexico. On the Monument boundary, several old, very mature oil and gas fields exist. The larger fields are the Cache, Flodine Park, McClean Basin (Cutthroat), McElmo Dome, Island Butte, and Papoose Canyon Fields. There are several smaller fields, usually consisting of one or two producing wells. Oil and gas development commenced in 1948, with the discovery of natural gas in the Shinarump Formation.

Oil and natural gas production on the Monument is primarily from algal mounds or oolitic shoals that originated in the shallow shelf environments and are surrounded by low-permeability carbonate muds. As a result, oil and gas production on the Monument depends on localized depositional environments and diagenetic trends in carbonates of the Desert Creek and Ismay members. Although these members extend beneath the entire Monument area, only areas with higher porosity and permeability contain exploitable oil and gas reservoirs, which accounts for the somewhat discontinuous and isolated nature of commercial production. Source rocks for oil and gas are the carbonaceous shales of the Paradox Formation and, possibly, the Cambrian Bright Angel Shale and the Hovenweep Shale, all of which underlie the Monument. There may also be some future potential for natural gas discoveries in the Permian Cutler Formation and increased production in the Pennsylvanian Honaker Trail Formation.

In general, management of the Monument's oil and gas resources is guided by the Monument Proclamation and by the 1991 Oil and Gas Leasing Amendment to the San Juan/San Miguel RMP (BLM 1985). The 1991 Oil and Gas Leasing Amendment to the San Juan/San Miguel RMP (BLM 1991a) set forth stipulations that apply to all new leases. These relate to surface occupancy, timing of operations, controlled surface use, lease notices, and conditions of approval. (See Authorities and Guidelines for additional laws, regulations, and policies that pertain to fluid minerals leasing).

Current Conditions and Trends

Drilling and Production

According to the Colorado Oil and Gas Conservation Commission, 185 oil, natural gas, and CO₂ wells have been drilled on the Monument since the 1940s. Of these wells, 125 are currently active; 60 have been plugged and abandoned. Eighty-one active wells are producing from five units on the Monument: Island Butte II, Cutthroat, McElmo Dome, Cache, and Canyon (Shallow). The remaining 44 wells are producing from Monument land not in a unit. From 1950 through 2003, the average number of wells drilled per year was four. The most wells drilled in a year was 19, and there have been several years of no drilling activity. The overall success rate of all wells is 60 percent, with success rates for CO₂ wells at 65 percent and oil and natural gas wells at 57 percent. Drilling and completion costs are typically in the range of \$700,000 to \$1,500,000 per well.

Current daily production from wells on the Monument is approximately 550 barrels of oil, 3,850 million cubic feet (mcf) of natural gas, and 750,000 mcf of CO₂. Peak production since 1970 was 3,220 barrels of oil per day in 1994, and 9,200 mcf of natural gas per day in 1997. Oil and natural gas production has been declining steadily since the mid-1990s from wells on the Monument. The production of CO₂ from McElmo Dome Unit wells on the Monument has remained relatively constant over the last 10 years, with production ranging from approximately 700,000 to 800,000 mcf/day.

Most oil and gas fields on the Monument have produced to near their estimated ultimate recovery and are now considered near depletion, even considering current high energy prices. The estimated reserves from existing fields (both inside and outside of the Monument) are 551,125 barrels of oil and 2,953,553 mcf of natural gas (see Table below). Considering fields as a whole, this corresponds to approximately three years of oil production and two years of natural gas production at current daily production rates. With work-overs and recompletions occurring in the Pennsylvanian Honaker Trail Formation, production will continue indefinitely:

Estimated Oil and Gas Reserves of Units Inside and Outside of the Monument						
Field	Cumulative Production		Estimated Ultimate Recovery		Estimated Remaining Reserves	
	Oil, bbl	Gas, mcf	Oil, bbl	Gas, mcf	Oil, bbl	Gas, mcf
Cutthroat	5,603,914	19,300,181	5,842,632	20,734,357	238,718	1,434,176
Cache	4,570,047	7,606,130	4,703,626	7,900,021	133,579	293,891
Island Butte	2,213,239	5,948,770	2,222,143	5,956,710	8,904	7,940

Estimated Oil and Gas Reserves of Units Inside and Outside of the Monument						
Field	Cumulative Production		Estimated Ultimate Recovery		Estimated Remaining Reserves	
	Oil, bbl	Gas, mcf	Oil, bbl	Gas, mcf	Oil, bbl	Gas, mcf
Flodine Park	2,772,600	16,876,098	2,839,511	17,348,207	66,911	472,109
Papoose Canyon	6,459,776	35,890,976	6,562,572	36,510,415	102,796	619,439
Canyon (Shallow)	7,922	809,647	8,139	935,645	217	125,998
TOTAL	21,627,498	86,431,802	22,178,623	89,385,355	551,125	2,953,553

Bbl = barrels

The most significant mineral resource on the Monument is CO₂ reserves in the McElmo Dome Unit. To date, approximately 4.4 trillion cubic feet (tcf) of CO₂ has been produced, which represents only 29 percent of the projected ultimate recovery of 15.3 tcf. The field has an expected economic life of at least 50 more years from proven, producing reserves. A significant amount of acreage within the unit, as well as large portions of the unit that are not currently being produced, is available for future development. Continued high oil prices could increase demand for CO₂ in West Texas tertiary recovery operations, resulting in additional wells and facilities in the McElmo Dome Unit.

At least 54 separate seismic surveys have been approved and completed on the Monument, with three 3-D surveys and 51 2-D surveys. Most individual lines on 2-D surveys were from between three to eight miles long. The highest levels of seismic activity on the Monument are within the Cutthroat and Island Butte II Units.

Leasing

The Monument encompasses 182,876 acres of land, of which approximately 166,000 acres is under Federal surface ownership, managed by the BLM. Of the 182,876 acres, 143,503 acres are leased for oil and gas development under 334 leases; 39,373 acres are not leased. Of the 334 total leases, 31 are private (non-Federal minerals):

Lease Status of Federal Mineral Estates on the Monument			
Land/Mineral Status	Total Area (acres)	Leased (acres)	Unleased (acres)
Federal surface/Federal minerals	164,357	132,353	32,004
Federal surface/private minerals	456	279	177
Private surface/private minerals	4,975	0	4,975
Private surface/Federal minerals	13,088	10,871	2,217
TOTAL	182,876	143,503	39,373

Approximately 81 percent (143,503 acres) of the Federal mineral estate on the Monument is leased for oil and gas exploration and development, while 19 percent is currently not leased. Leases entitle the lessee to develop all oil and gas, including natural gas, oil, condensate, and CO₂. The six oil, natural gas, and CO₂ units cover the majority of leased acreage on the Monument. Lease operators are required to exercise due care and diligence in order to ensure

that leasehold operations do not result in undue damage to surface and subsurface resources, or any surface improvements.

Units are typically from 160 acres to several thousand acres in size, and usually consist of several leases. A unit is a “joining of all or substantially all interests in a reservoir or field, rather than a single tract, to provide for efficient development and operation of a common reservoir without regard to separate property interests.” Leases are generally unitized at the convenience of the government or when geologic conditions do not permit the drilling of wells at conventional locations. Well sites are selected based upon geologic conditions. Unitization provides operators the flexibility to explore, develop, and manage the reservoir properly. As long as there is production within the unit, the individual leases in the unit are held by production and do not expire.

The Monument Proclamation includes guidance as to oil-and-gas management for both existing and potential (new) leases. In terms of existing leases, development will continue, subject to valid and existing rights, provided that the activities do not create new impacts that interfere with the proper care and management of the objects of the Monument protected by the Proclamation. The 1991 Oil and Gas Leasing Amendment to the San Juan/San Miguel RMP (BLM 1991a) set forth stipulations that apply to all new leases. These relate to surface occupancy, timing of operations, controlled surface use, lease notices, and conditions of approval.

The stipulation of No Surface Occupancy (NSO) currently applies to 59,278 acres, or to approximately 32 percent of the total land area on the Monument. However, none of these stipulations apply to leases issued before 1991. They apply to only 15 of the total 334 leases on the Monument. In addition, the 1991 Amendment to the San Juan/San Miguel RMP (BLM 1991a) prohibited additional leasing inside the Wilderness Study Areas (WSAs) (Cahone Canyon, Cross Canyon, and Squaw/Papoose Canyon) on the Monument.

Except for oil-and-gas leasing, the Proclamation reserved and appropriated all Federal lands and interests in lands on the Monument and withdrew them from all forms of entry, location, selection, sale, leasing, or other disposition under the public-land laws, including the mineral-leasing and mining laws. Thus, with the exception of oil-and-gas leases, no new Federal mineral leases will be issued on the Monument. Authorization of activities on existing mineral leases will be governed by valid existing rights.

Oil and gas leases issued pursuant to the approval and implementation of any of the alternatives analyzed under this DRMP/DEIS grant the lessee the right to extract oil and gas resources on BLM-administered lands within the Monument. In accordance with Section 6 of the standard BLM lease document, the BLM would restrict the lease rights granted by requiring that the lessee conduct operations in a manner that minimizes adverse (negative) environmental impacts. The BLM would also require that the lessee take reasonable measures, as deemed necessary by the lessor (the BLM), in order to accomplish this intent. These prudent measures would be applied through a Condition of Approval (COA) during the permit process for oil and gas development on the Monument.

If the BLM deems it necessary to place additional restrictions on the rights of lessees in order to protect the objects of the Monument, stipulations would be appended to the lease. Stipulations clarify the BLM’s intent to protect known resources, and/or resource values. Stipulations, modifications, exceptions, and waivers that would be applied to new oil and gas leases under

any of the action alternatives (Alternatives II through V) analyzed in the DRMP/DEIS are listed and described in Table K-1.

Existing stipulations required under the Record of Decision: Oil and Gas Plan Amendment to the San Juan/San Miguel Resource Management Plan (BLM 1991a) would apply to existing leases, and would be carried-forward on new leases. The new stipulations, discussed below, would apply only to new oil and gas leases. Equivalent levels of protection would be applied to other land uses and management actions as a condition of their approval. Additional protective measures, such as special mitigation requirements, may also be applied to land uses and management actions other than to oil and gas development (as described above, they could be required for oil and gas as a COA during the permitting process).

The conditions under which each stipulation, modification, exception, or waiver would apply are explicitly stated in Table K-1. Stipulations may be modified, as necessary, in order to provide the protections to resources for which they were intended. Exceptions to stipulations may be applied, as necessary, should unforeseen circumstances arise or should new information become available. Likewise, following a rigorous testing process, modifications and waivers may be applied.

Table K-1. Fluid Minerals Stipulations, Modifications, Exceptions, and Waivers

Type of Stipulation	Protected Resource	Stipulation Description
NSO	Cultural resources (CODE: <u>NSO1</u>)	<p>STIPULATION -- Under Alternatives II, III, and V, a NSO stipulation will be applied to cultural resources, including for communities and sites. Under Alternatives II, this will include communities, sites, and isolated finds.</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> • Ensure that the cultural objects of the Monument are protected at the landscape level, and that all multiple-use resource management and authorizations for land and resource uses are conducted in compliance with the Proclamation, and with Section 106 and Section 110 of the NHPA, as amended. • Manage all sources of noise in order to maintain the acoustic aspect of the traditional cultural landscape. <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> • Determine the potential for presence of cultural resources. • Require a Class III Inventory (100 percent on-the-ground survey) in areas of proposed ground-disturbing projects. • Prohibit ground-disturbing activities within 100 meters of cultural resources, which are defined as communities and sites (and isolated finds under Alternative II). • Design or modify multiple-use projects or activities, when possible, in order to avoid significant cultural resources for “no historic properties affected” or “no adverse effect” determinations. • Require monitoring during implementation of ground-disturbing projects, even in areas having received Class III inventory where no sites were located (due to the potential for buried subsurface cultural deposits with no surface indications within the Monument). The Monument Manager may grant

Type of Stipulation	Protected Resource	Stipulation Description
		<p>exceptions. Post-project monitoring may be required at Manager's discretion.</p> <ul style="list-style-type: none"> • Manage maximum permissible noise levels in order to meet compliance with State of Colorado standards (State of Colorado Revised Statute [CRS]: Title 25 Health/Environmental Control: Article 12 Colorado Noise Statute - CRS§ 25-10-103). <p>EXCEPTIONS: None.</p> <p>MODIFICATIONS: None.</p> <p>WAIVERS: None.</p>
<p>NSO</p>	<p>Areas with slopes greater than 30 percent and/or soils with high erosion potential (CODE: <u>NSO2</u>)</p>	<p>STIPULATION -- Under all of the alternatives, a NSO stipulation will be applied in areas with slopes greater than 30 percent and/or in relation to soils with high erosion potential.</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> • Manage soil resources in order to sustain multiple uses and to preserve and/or enhance existing ecological integrity and function. • Manage uses in order to prevent damage to soil resources from surface disturbance. • Maintain vegetation cover on slopes greater than 30 percent (as well as in all other areas with high erosion potential). <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> • Prohibit ground-disturbing activities on slopes steeper than 30 percent and/or on soils with high erosion potential. • Prohibit ground-disturbing activities in areas with slopes steeper than 30 percent for access to areas with slopes less than 30 percent. <p>EXCEPTIONS: None.</p> <p>MODIFICATIONS: None.</p>

Type of Stipulation	Protected Resource	Stipulation Description
		WAIVERS: None.
NSO	Southwestern willow flycatcher habitat (CODE: <u>NSO3</u>)	<p>STIPULATION -- Under Alternative II, a NSO stipulation will be applied to Southwestern willow flycatcher habitat, including a 0.25-mile buffer.</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> • Contribute to the recovery of the Southwestern willow flycatcher. • Implement recovery actions (as described in the August 2002 Southwestern Willow Flycatcher Final Recovery Plan, or in the most recent version of the Recovery Plan). <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> • Prohibit ground-disturbing activities or other sources of major noise disturbance within Southwestern willow flycatcher habitat, including a 0.25-mile buffer of habitat patches. <p>EXCEPTIONS:</p> <ul style="list-style-type: none"> • Ground-disturbing activity may be permitted if the Monument Manager determines, following Endangered Species Act (ESA) Section 7 consultation with the USFWS, that the requested activity would not impair values associated with maintenance or recovery of the Southwestern willow flycatcher habitat. <p>In making this determination, the Monument Manager will consider the following resource factors:</p> <ul style="list-style-type: none"> • the behavioral and ecological requirements of the species; • the type, amount, and duration of the surface disturbance; • the relative extent of available habitat; • the relationship to topography and vegetation screening; • the current baseline data; • the type, location, duration, and intensity of potential adverse effects (impacts); • the mitigation and conservation measures designed to avoid,

Type of Stipulation	Protected Resource	Stipulation Description
		<p>minimize, or off-set the adverse effects; and</p> <ul style="list-style-type: none"> • other factors that may affect maintenance or recovery of the species or cause habitat to become unusable. <p>Approval of ground-disturbing activities granted in any given year may not constitute approval for subsequent years. Approval for ground-disturbing activities must be granted (or extended) annually by the BLM. The proponent of any ground-disturbing activity will provide an assessment with their proposal that: 1) documents anticipated compliance or non-impairment of resource values protected by this stipulation, and 2) considers the above-mentioned resource factors.</p> <p>During, and following, the project activities covered by this provision, on-going monitoring data will be collected using widely accepted scientific methods. This data will be reported to the BLM not less often than annually. If unanticipated types or levels of adverse effects (impacts) are noted during monitoring, the BLM will be promptly notified. Corrective measures, as approved by the BLM, will be identified and implemented by the proponent. This information will be used through an adaptive management process in order to refine the project components. Associated mitigation measures will be applied to future proposed activities.</p> <p>If the Southwestern willow flycatcher is removed from the Federal ESA list, this stipulation would not apply to such habitat. However, other requirements would apply if the species remains classified as sensitive, or is otherwise protected.</p> <p>MODIFICATIONS: None.</p> <p>WAIVERS: None.</p>
NSO	Special Status Species – Gunnison Sage Grouse (CODE: __NSO4__)	STIPULATION -- Under Alternative II, III, IV, V, and VI an NSO stipulation will be applied if habitat is determined to be occupied by sage grouse, no surface

Type of Stipulation	Protected Resource	Stipulation Description
		<p>disturbing activities will be allowed.</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> To protect and conserve Gunnison Sage Grouse and their habitat. <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> Require special design, construction, operation, mitigation, and/or reclamation measures. <p>EXCEPTIONS:</p> <ul style="list-style-type: none"> An exception could be granted by the Monument Manager if impacts could be fully mitigated or, the action is designed to enhance the resource values. <p>MODIFICATIONS: None.</p> <p>WAIVERS: None.</p>
<p>NSO</p>	<p>Locations known to support native amphibian breeding habitat (CODE: <u>NSO5</u>)</p>	<p>STIPULATION -- Under Alternative II, a NSO stipulation will be applied to locations known to support native amphibian breeding habitat (potholes, seasonal pools, stock ponds, streams, and/or other areas of surface water), including a 150-foot buffer.</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> Maximize biological diversity by managing habitat for native amphibian species. Protect breeding habitat for amphibians. <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> Prohibit ground-disturbing activities of locations (including a 150-foot buffer) known to support native amphibian breeding habitat. This includes potholes, seasonal pools, stock ponds, streams, and/or other areas of surface water. <p>EXCEPTIONS:</p> <ul style="list-style-type: none"> Ground-disturbing activity may be permitted if the Monument Manager determines that:

Type of Stipulation	Protected Resource	Stipulation Description
		<ul style="list-style-type: none"> • the activity would result in no loss of riparian vegetation or, if riparian vegetation were lost, that the loss would be limited to no more than 0.1 acre, and 100 linear feet, per mile of stream; • any temporarily disturbed areas would be revegetated with existing or similar species (including with the use of containerized nursery stock, rather than seeds, to replace woody plants on a one-to-one basis (trees) or area-for-area basis (shrubs)); • revegetation success could be achieved within 2 years; • the activity would not impair water quality, flow regime, aquatic habitat quality, and/or channel and bank stability; and • no practicable alternative was available. <p>In making this determination, the BLM will consider the following resource factors:</p> <ul style="list-style-type: none"> • the type, amount, and duration of the surface disturbance; • the topography and vegetation screening; • the current baseline data; • the type, location, duration, and intensity of potential adverse effects (impacts); • the mitigation and conservation measures designed to avoid, minimize, or off-set the adverse effects; and • other factors that may affect maintenance or recovery of the species or cause habitat to become unusable. <p>Approval of ground-disturbing activities granted in any given year may not constitute approval for subsequent years. In such instances, approval for ground-disturbing activities must be granted (or extended) annually by the BLM. The proponent of any ground-disturbing activity will provide an assessment with their proposal that: 1) documents anticipated</p>

Type of Stipulation	Protected Resource	Stipulation Description
		<p>compliance or non-impairment of resource values protected by this stipulation; and 2) considers the above-mentioned resource factors.</p> <p>During, and following, the project activities covered by this provision, on-going monitoring data will be collected using widely accepted scientific methods. This data will be reported to the BLM not less often than annually. If unanticipated types or levels of adverse effects are noted during monitoring, the BLM will be promptly notified. Corrective measures, as approved by the BLM, will be identified and implemented by the proponent. This information will be used through an adaptive management process in order to refine the project components. Associated mitigation measures will be applied to future proposed activities.</p> <p>MODIFICATIONS: None.</p> <p>WAIVERS: None.</p>
<p>NSO</p>	<p>Occupied and potential habitat for threatened, endangered, candidate, or other special-status plant species (CODE: <u>NSO6</u>)</p>	<p>STIPULATION -- Under all of the alternatives, a NSO stipulation will be applied to occupied and potential habitat for threatened, endangered, candidate, and/or other special-status plant species.</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> • Provide for maintenance or recovery of plant species listed under the ESA (including proposed or candidate species) or those listed as sensitive by the BLM State Director. • Protect occupied and potential habitat crucial for the maintenance or recovery of species listed under the ESA (including proposed or candidate species), or those listed as sensitive by the BLM State Director. <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> • Prohibit ground-disturbing activities within, or immediately adjacent to, occupied or potential habitat necessary for the maintenance or recovery of the species.

Type of Stipulation	Protected Resource	Stipulation Description
		<p>EXCEPTIONS:</p> <ul style="list-style-type: none"> • Ground-disturbing activity may be permitted if the Monument Manager determines, following ESA Section 7 consultation with the USFWS (for species listed under the ESA) or Field Office technical personnel, that the requested activity would not impair values associated with maintenance or recovery of the species. <p>In making this determination, the BLM will consider the following resource factors:</p> <ul style="list-style-type: none"> • the behavioral and ecological requirements of the species; • the type, amount, and duration of the surface disturbance; • the relative extent of available habitat; • the relationship to topography and vegetation screening; • the current baseline data; • the type, location, duration, and intensity of potential adverse effects (impacts); • the mitigation and conservation measures designed to avoid, minimize, or off-set the adverse effects; and • other factors that may affect maintenance or recovery of the species or cause habitat to become unusable. <p>Approval of ground-disturbing activities granted in any given year may not constitute approval for subsequent years. Approval for ground-disturbing activities must be granted (or extended) annually by the BLM. The proponent of any ground-disturbing activity will provide an assessment with their proposal that: 1) documents anticipated compliance or non-impairment of resource values protected by this stipulation; and 2) considers the above-mentioned resource factors.</p> <p>During, and following, the project activities covered by this provision, on-going monitoring data will be collected using widely accepted scientific methods. This</p>

Type of Stipulation	Protected Resource	Stipulation Description
		<p>data will be reported to the BLM not less often than annually. If unanticipated types or levels of adverse effects are noted during monitoring, the BLM will be promptly notified. Corrective measures, as approved by the BLM, will be identified and implemented by the proponent. This information will be used through an adaptive management process in order to refine the project components. Associated mitigation measures will be applied to future proposed activities.</p> <p>If a species affected by this stipulation is removed from the ESA list, this stipulation would not apply to that species. However, other requirements will apply if the species remains classified as sensitive or is otherwise protected.</p> <p>This stipulation will apply to all species subsequently added to ESA list (including proposed or candidate species) or those listed as sensitive by the BLM State Director.</p> <p>MODIFICATIONS: None.</p> <p>WAIVERS: None.</p>
<p>NSO</p>	<p>Riparian/wetlands area habitat (CODE: <u>NSO7</u>)</p>	<p>STIPULATION -- Under Alternatives II, III, and V, a NSO stipulation will be applied to riparian/wetlands area habitat.</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> • Maintain or improve riparian/wetlands area habitat. • Preserve, protect, and, if necessary, restore natural functions of floodplains, wetlands, and/or aquatic/riparian habitats. • Improve tributaries that would contribute to restoring threatened and endangered fish populations within the San Juan River. • Maintain proper hydrologic function and protect adjacent riparian/wetlands areas that provide habitat for special-status fish and wildlife species, as well as amphibian breeding/feeding, or that provide important water quality, scenic,

Type of Stipulation	Protected Resource	Stipulation Description
		<p>and/or recreation values.</p> <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> • Prohibit ground-disturbing activities within the widest boundary of riparian/wetland area habitat. These areas include springs, and a combination of canyon bottoms, riparian areas, and floodplains associated with perennial, intermittent, and ephemeral streams. • Prohibit ground-disturbing activities in springs with well-developed riparian vegetation (i.e., Blue Water, H-O, and Confluence Springs), including a 300-foot buffer, in order to protect adjoining wetlands. • For remaining springs, prohibit ground-disturbing activities in the springs, including a 100-foot buffer, in order to protect adjoining wetlands. <p>EXCEPTIONS: None.</p> <p>MODIFICATIONS: None.</p> <p>WAIVERS: None.</p>
<p>NSO</p>	<p>Riparian/wetlands area habitat (CODE: <u>NSO8</u>)</p>	<p>STIPULATIONS -- Under Alternative IV, a NSO stipulation will be applied to riparian/wetlands area habitat.</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> • Maintain or improve riparian/wetlands area habitat. • Preserve, protect, and, if necessary, restore natural functions of floodplains, wetlands, and/or aquatic/riparian habitats. • Improve tributaries that would contribute to restoring threatened and endangered fish populations within the San Juan River. • Maintain proper hydrologic function and protect adjacent riparian/wetlands areas that provide habitat for special-status fish and wildlife species, as well as amphibian breeding/feeding areas, or that provide important water quality, scenic, and/or recreation values.

Type of Stipulation	Protected Resource	Stipulation Description
		<p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> • Prohibit ground-disturbing activities within the widest boundary of riparian/wetlands area habitat. These areas include springs and a combination of canyon bottoms, riparian areas, and floodplains associated with perennial, intermittent, and ephemeral streams. • Prohibit ground-disturbing activities in springs with well-developed riparian vegetation (i.e., Blue Water, H-O, and Confluence Springs), including a 300-foot buffer, in order to protect adjoining wetlands. • For remaining springs, prohibit ground-disturbing activities in the springs, including a 100-foot buffer, in order to protect adjoining wetlands. <p>EXCEPTIONS:</p> <ul style="list-style-type: none"> • Ground-disturbing activity may be permitted if the Monument Manager determines that: <ul style="list-style-type: none"> • the activity would result in no loss of riparian vegetation or, if riparian vegetation were lost, that the loss would be limited to no more than 0.1 acre, and 100 linear feet, per mile of stream; • any temporarily disturbed areas would be revegetated with existing or similar species (including with the use of containerized nursery stock, rather than seeds, to replace woody plants on a one-to-one basis (trees) or area-for-area basis (shrubs)); • revegetation success could be achieved within 2 years; • the activity would not impair water quality, flow regime, aquatic habitat quality, and/or channel and bank stability; and • no practicable alternative is available. <p>In making this determination, the BLM will</p>

Type of Stipulation	Protected Resource	Stipulation Description
		<p>consider the following resource factors:</p> <ul style="list-style-type: none"> • the topography and vegetation screening; • the current baseline data; • the type, location, duration, and intensity of potential adverse effects (impacts); • the mitigation and conservation measures designed to avoid, minimize, or off-set the adverse effects; and • other factors that may affect maintenance or enhancement of the resource values. <p>Approval of ground-disturbing activities granted in any given year may not constitute approval for subsequent years. Approval for ground-disturbing activities must be granted (or extended) annually by the BLM. The proponent of any ground-disturbing activity will provide an assessment with their proposal that: 1) documents anticipated compliance or non-impairment of resource values protected by this stipulation; and 2) considers the above-mentioned resource factors.</p> <p>Ground-disturbing projects that are planned in order to benefit the health of riparian systems (i.e., enclosure fences, etc.) will be reviewed on a case-by-case basis and authorized by the Monument Manager.</p> <p>During, and following, the project activities covered by this provision, on-going monitoring data will be collected using widely accepted scientific methods. This data will be reported to BLM not less often than annually. If unanticipated types or levels of adverse effects are noted during monitoring, the BLM will be promptly notified. Corrective measures, as approved by the BLM, will be identified and implemented by the proponent. This information will be used through an adaptive management process in order to refine the project components. Associated mitigation measures will be applied to future proposed activities.</p>

Type of Stipulation	Protected Resource	Stipulation Description
		<p>MODIFICATIONS: None.</p> <p>WAIVERS: None.</p>
<p>NSO</p>	<p>Potential Areas of Critical Environmental Concern(ACECs)/Research Natural Areas (RNAs) (CODE: <u>NSO9</u>)</p>	<p>STIPULATION -- Under Alternatives V and VI, a NSO stipulation will be applied to potential Areas of Critical Environmental Concern (ACECs)/Research Natural Areas (RNAs). This includes the McElmo ACEC/RNA; the Expanded McElmo ACEC/RNA, the Cannonball Mesa ACEC/RNA, and the Sand Canyon ACEC/RNA.</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> • Provide a natural and undisturbed setting for conservation of habitat within the proposed ACECs/RNAs. • Protect the proposed ACECs/RNAs from activities that would disturb, alter, or impair these areas. <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> • Prohibit ground-disturbing activities within the proposed ACECs/RNAs. The BLM may require special design, construction, operation, mitigation, and/or reclamation measures, and/or relocation by more than 200 meters for any ground-disturbing activities, electric transmission lines, and other sources of disturbance within the ACECs/RNAs. <p>EXCEPTIONS:</p> <ul style="list-style-type: none"> • Site-specific locations for ground-disturbing activities would only be allowed within the proposed ACECs/RNAs if the Monument Manager determines that the specific activity or requested change would not impair the natural and undisturbed qualities of the areas. <p>In making this determination, the BLM will consider the following resource factors:</p> <ul style="list-style-type: none"> • the potential impacts to the natural and undisturbed qualities of the proposed ACECs/RNAs; • the potential impacts related to scientific research and public

Type of Stipulation	Protected Resource	Stipulation Description
		<p>education; and</p> <ul style="list-style-type: none"> the potential impairments to conservation area designation. <p>Approval of ground-disturbing activities granted in any given year may not constitute approval for subsequent years. Approval for ground-disturbing activities must be granted (or extended) annually by the BLM. The proponent of any ground-disturbing activity will provide an assessment with their proposal that: 1) documents anticipated compliance or non-impairment of resource values protected by this stipulation; and 2) considers the above-mentioned resource factors.</p> <p>During, and following, the project activities covered by this provision, on-going monitoring data will be collected using widely accepted scientific methods. This data will be reported to the BLM not less often than annually. If unanticipated types or levels of adverse effects are noted during monitoring, the BLM will be promptly notified. Corrective measures, as approved by the BLM, will be identified and implemented by the proponent. This information will be used through an adaptive management process in order to refine the project components. Associated mitigation measures will be applied to future proposed activities.</p> <p>MODIFICATIONS: None.</p> <p>WAIVERS: None.</p>
<p>NSO</p>	<p>Areas with wilderness characteristics outside of Wilderness Study Areas (WSAs) (CODE: <u>NSO10</u>)</p>	<p>STIPULATION -- Under Alternatives II and IV, a NSO stipulation will be applied to areas with wilderness characteristics outside of WSAs (including Cross Canyon, Mare's Tail Canyon, and Tin Cup Mesa).</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> Protect and preserve wilderness characteristics (including naturalness, outstanding opportunities for solitude, and primitive and unconfined recreation) where they occur in identified areas with wilderness

Type of Stipulation	Protected Resource	Stipulation Description
		<p>characteristics outside of WSAs.</p> <ul style="list-style-type: none"> Maintain the non-impairment standard for WSAs, in accordance with the FLPMA, in order to prevent undue and unnecessary degradation of wilderness characteristics within the areas with wilderness characteristics outside of WSAs. <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> Prohibit ground-disturbing activities in areas with wilderness characteristics. <p>EXCEPTIONS: None.</p> <p>MODIFICATIONS: None.</p> <p>WAIVERS: None.</p>
<p>NSO</p>	<p>Foreground viewshed of the Trail of the Ancients (CODE: <u>NSO11</u>)</p>	<p>STIPULATION -- Under all of the alternatives, a NSO stipulation will be applied for the identified foreground viewshed, including up to one-half mile on either side, of the following designated trail: the Trail of the Ancients Scenic and Historic Byway.</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> To prevent undue and unnecessary degradation of the viewshed within the trail corridor. <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> Require special design, construction, operation, mitigation, and/or reclamation measures, and/or relocation by more than one-half mile on either side, for any ground-disturbing activities and/or other sources of disturbance within the trail corridor that would disturb, alter, or impair these areas. <p>EXCEPTIONS: None.</p> <p>MODIFICATIONS: None.</p> <p>WAIVERS: None.</p>

Type of Stipulation	Protected Resource	Stipulation Description
<p align="center">CSU</p>	<p>Potential ACECs/RNAs (CODE: <u>CSU1</u>)</p>	<p>STIPULATION -- Under Alternative IV, a CSU stipulation will be applied to potential ACECs/RNAs (including the McElmo ACEC/RNA; the Expanded McElmo ACEC/RNA, the Cannonball Mesa ACEC/RNA, and the Sand Canyon ACEC/RNA).</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> • Provide a natural and undisturbed setting for conservation of habitat within the proposed ACECs/RNAs. • Protect proposed ACECs/RNAs from activities that would disturb, alter, or impair these areas. <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> • Require special design, construction, operation, mitigation, and/or reclamation measures, and/or relocation by more than 200 meters, for any ground-disturbing activities and/or other sources of disturbance within the proposed ACECs/RNAs that would disturb, alter, or impair these areas. <p>EXCEPTIONS: None.</p> <p>MODIFICATIONS: None.</p> <p>WAIVERS: None.</p>
<p align="center">TL</p>	<p>Mexican spotted owl nest sites (CODE: <u>TL1</u>)</p>	<p>STIPULATION -- Under all of the alternatives, a TL stipulation will be applied to Mexican spotted owl nest sites (occupied or historic) from March 15 to September 1 of every year.</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> • Contribute to the recovery of the Mexican spotted owl. • Protect Mexican spotted owl nest sites. <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> • Prohibit ground-disturbing activities or other sources of disturbance activities

Type of Stipulation	Protected Resource	Stipulation Description
		<p>(excluding research, monitoring, and/or routine livestock management) and/or excessive noise disturbance that could result in a nest not being used; or that could lead to nest abandonment, failure, or mortality of fledglings, from March 15 to September 1 of every year.</p> <p>EXCEPTIONS:</p> <ul style="list-style-type: none"> • Limit permitted or ground-disturbing activities within Mexican spotted owl Protected Activity Centers (PACs), including a 0.5 mile buffer, to mesa tops and rims in order to reduce impacts to canyon floors. <p>Prior to approving any permissible activity within a PAC (including tree removal, fuel reduction, vegetation treatments, etc.), a nesting survey will be required for two consecutive breeding seasons, using the protocol approved by the USFWS. If management actions (including tree removal, fuel reduction, vegetation treatments, etc.) are deemed critical to another resource value within the PAC, consultation with the USFWS would be required in order to establish design standards for these activities.</p> <p>In making this determination, the BLM will consider the following resource factors:</p> <ul style="list-style-type: none"> • the meteorological or ecological conditions during the period requested; • the status of the nest (active or inactive); • the type, intensity, and duration of disturbance; • the measures required by the USFWS; • the potential for the activity to result in the roost or nest to not be used; • the potential for nest failure; • the abandonment of the nest; • the mortality of fledglings; • the behavioral and ecological requirements of the species; • the type, amount, intensity, and duration of the surface disturbance; • the relative extent of available nesting

Type of Stipulation	Protected Resource	Stipulation Description
		<p>and fledgling habitat;</p> <ul style="list-style-type: none"> • the relationship to topography and vegetation screening; • the current baseline data; • the type, location, intensity, and duration of potential adverse effects (impacts); • the mitigation measures proposed designed to avoid, minimize, or off-set the adverse effects; and • other factors that may affect roosting or nesting success. <p>Approval of ground-disturbing activities granted in any given year may not constitute approval for subsequent years. Approval for ground-disturbing activities must be granted (or extended) annually by the BLM. The proponent of any ground-disturbing activity will provide an assessment with their proposal that: 1) documents anticipated compliance or non-impairment of resource values protected by this stipulation; and 2) considers the above-mentioned resource factors.</p> <p>During, and following, the project activities covered by this provision, on-going monitoring data will be collected using widely accepted scientific methods. This data will be reported to the BLM not less often than annually. If unanticipated types or levels of adverse effects are noted during monitoring, the BLM will be promptly notified. Corrective measures, as approved by the BLM, will be identified and implemented by the proponent. This information will be used through an adaptive management process in order to refine the project components. Associated mitigation measures will be applied to future proposed activities.</p> <p>MODIFICATIONS: None.</p> <p>WAIVERS: None.</p>
<p>TL</p>	<p>Active bald eagle or golden eagle nests (CODE: ___TL2___)</p>	<p>STIPULATION -- Under all of the alternatives, a TL stipulation will be applied to active bald eagle or golden eagle nests, including a 0.5 mile buffer, from March 1 to July 15 of every year.</p>

Type of Stipulation	Protected Resource	Stipulation Description
		<p>PURPOSE:</p> <ul style="list-style-type: none"> • Protect bald and golden eagle habitat. • Protect bald and golden eagle nesting and fledging habitat. <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> • Prohibit ground-disturbing activities or other sources of disturbance activities (excluding research, monitoring, and/or routine livestock management) and/or excessive noise disturbance that could result in an active nest not being used; or that could lead to nest abandonment, failure, or mortality of fledglings within a 0.5 mile buffer of an active nest, from March 1 to July 15 of every year. <p>EXCEPTIONS:</p> <ul style="list-style-type: none"> • From March 1 to July 15, site-specific ground-disturbing activity may be allowed if the Monument Manager determines, following consultation with the USFWS, that the requested activity would not impair values associated with maintenance or recovery of the species or behaviors associated with winter roosting, nesting, fledging, and/or fledging habitat. <p>In making this determination, the BLM will consider the following resource factors:</p> <ul style="list-style-type: none"> • the meteorological or ecological conditions during the period requested; • the status of the nest (active or inactive); • the type, intensity, and duration of disturbance; • the measures required by the USFWS; • the potential for the activity to result in the roost or nest to not be used; • the potential for nest failure; • the abandonment of the nest; • the mortality of fledglings; • the behavioral and ecological

Type of Stipulation	Protected Resource	Stipulation Description
		<p>requirements of the species;</p> <ul style="list-style-type: none"> • the type, amount, intensity, and duration of the surface disturbance; • the relative extent of available nesting and fledgling habitat; • the relationship to topography and vegetation screening; • the current baseline data; • the type, location, intensity, and duration of potential adverse effects (impacts); • the mitigation measures proposed designed to avoid, minimize, or off-set the adverse effects; and • other factors that may affect roosting or nesting success. <p>Approval of ground-disturbing activities granted in any given year may not constitute approval for subsequent years. Approval for ground-disturbing activities must be granted (or extended) annually by the BLM. The proponent of any ground-disturbing activity will provide an assessment with their proposal that: 1) documents anticipated compliance or non-impairment of resource values protected by this stipulation; and 2) considers the above-mentioned resource factors.</p> <p>During, and following, the project activities covered by this provision, on-going monitoring data will be collected using widely accepted scientific methods. This data will be reported to the BLM not less often than annually. If unanticipated types or levels of adverse effects are noted during monitoring, the BLM will be promptly notified. Corrective measures, as approved by the BLM, will be identified and implemented by the proponent. This information will be used through an adaptive management process in order to refine the project components. Associated mitigation measures would be applied to future proposed activities.</p> <p>MODIFICATIONS: None.</p> <p>WAIVERS: None.</p>

Type of Stipulation	Protected Resource	Stipulation Description
<p>TL</p>	<p>Known bald and golden eagle winter roost or winter concentration areas (CODE: <u>TL3</u>)</p>	<p>STIPULATION -- Under all of the alternatives, a TL stipulation will be applied to known bald and golden eagle winter roost or winter concentration areas, including a 0.5 mile buffer, from November 16 to April 15 of every year.</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> • Protect bald and golden eagle habitat. • Protect bald and golden eagle winter roost or winter concentration area habitat. <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> • Prohibit ground-disturbing activities or other sources of disturbance activities (excluding research, monitoring, and/or routine livestock management) and/or excessive noise disturbance that could result in a winter roost or winter concentration not being used, including a 0.5 mile buffer of such habitat, from November 16 to April 15 of every year. <p>EXCEPTIONS:</p> <ul style="list-style-type: none"> • From November 16 to April 15, site-specific ground-disturbing activity may be allowed if the Monument Manager determines, following consultation with the USFWS, that the requested activity would not impair values associated with maintenance or recovery of the species or behaviors associated with winter roosting, nesting, fledging, and/or fledging habitat. <p>In making this determination, the BLM will consider the following resource factors:</p> <ul style="list-style-type: none"> • the meteorological or ecological conditions during the period requested; • the status of the nest (active or inactive); • the type, intensity, and duration of disturbance; • the measures required by the USFWS;

Type of Stipulation	Protected Resource	Stipulation Description
		<ul style="list-style-type: none"> • the potential for the activity to result in the nest not being used; • the ecological requirements of each species; • the type, amount, intensity, and duration of the surface disturbance; • the relative extent of available winter roosting or concentration area habitat; • the relationship to topography and vegetation screening; • the current baseline data; • the type, location, intensity, and duration of potential adverse effects (impacts); • the proposed mitigation measures designed to avoid, minimize, or offset the adverse effects; and • other factors that may affect roosting or winter concentration areas. <p>Approval of ground-disturbing activities granted in any given year may not constitute approval for subsequent years. Approval for ground-disturbing activities must be granted (or extended) annually by the BLM. The proponent of any ground-disturbing activity will provide an assessment with their proposal that: 1) documents anticipated compliance or non-impairment of resource values protected by this stipulation; and 2) considers the above-mentioned resource factors.</p> <p>During, and following, the project activities covered by this provision, on-going monitoring data will be collected using widely accepted scientific methods. This data will be reported to the BLM not less often than annually. If unanticipated types or levels of adverse effects are noted during monitoring, the BLM will be promptly notified. Corrective measures, as approved by the BLM, will be identified and implemented by the proponent. This information will be used through an adaptive management process in order to refine the project components. Associated mitigation measures will be applied to future proposed activities.</p> <p>MODIFICATIONS: None.</p>

Type of Stipulation	Protected Resource	Stipulation Description
		<p>WAIVERS: None.</p>
<p>TL</p>	<p>Southwestern willow flycatcher habitat (CODE: <u>TL4</u>)</p>	<p>STIPULATION -- Under Alternative III, a TL stipulation will apply to Southwestern willow flycatcher habitat, including a 0.25-mile buffer, from April 15 to July 15 of every year.</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> • Contribute to the recovery of the Southwestern willow flycatcher. • Implement recovery actions, as described in the August 2002 Southwestern Willow Flycatcher Final Recovery Plan, or in the most recent version of the Recovery Plan. <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> • Prohibit ground-disturbing activities or other sources of major noise disturbance within Southwestern willow flycatcher habitat, including a 0.25-mile buffer of habitat patches, from April 15 to July 15 of every year. <p>EXCEPTIONS:</p> <ul style="list-style-type: none"> • Ground-disturbing activity may be permitted if the Monument Manager determines, following ESA Section 7 consultation with the USFWS, that the requested activity would not impair values associated with maintenance or recovery of the Southwestern willow flycatcher. <p>In making this determination, the BLM will consider the following resource factors:</p> <ul style="list-style-type: none"> • the behavioral and ecological requirements of the species; • the type, amount, and duration of the surface disturbance; • the relative extent of available habitat; • the relationship to topography and vegetation screening; • the current baseline data; • the type, location, duration, and intensity of potential adverse effects (impacts);

Type of Stipulation	Protected Resource	Stipulation Description
		<ul style="list-style-type: none"> • the mitigation and conservation measures designed in order to avoid, minimize, or off-set the adverse effects; and • other factors that may affect maintenance or recovery of the species or cause habitat to become unusable. <p>Approval of ground-disturbing activities granted in any given year may not constitute approval for subsequent years. Approval for ground-disturbing activities must be granted (or extended) annually by the BLM. The proponent of any ground-disturbing activity will provide an assessment with their proposal that: 1) documents anticipated compliance or non-impairment of resource values protected by this stipulation; and 2) considers the above-mentioned resource factors.</p> <p>During, and following, the project activities covered by this provision, on-going monitoring data will be collected using widely accepted scientific methods. This data will be reported to the BLM not less often than annually. If unanticipated types or levels of adverse effects are noted during monitoring, the BLM will be promptly notified. Corrective measures, as approved by the BLM, will be identified and implemented by the proponent. This information will be used through an adaptive management process in order to refine the project components. Associated mitigation measures will be applied to future proposed activities.</p> <p>If the Southwestern willow flycatcher is removed from the Federal ESA list, this stipulation would not apply to that species. However, other requirements will apply if the species remains classified as sensitive, or is otherwise protected.</p> <p>MODIFICATIONS: None.</p> <p>WAIVERS: None.</p>
TL	Locations known to	STIPULATION -- Under Alternatives II and

Type of Stipulation	Protected Resource	Stipulation Description
	<p>support native amphibian breeding habitat (CODE: <u> TL5 </u>)</p>	<p>III, a TL stipulation will apply to locations known to support native amphibian breeding habitat (potholes, seasonal pools, stock ponds, streams, and/or other areas of surface water), including a 150-foot buffer, during the breeding season from April 1 to July 31 of every year.</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> • Maximize biological diversity by managing habitat for native amphibian species. • Protect breeding habitat for amphibians. <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> • Prohibit ground-disturbing activities within native amphibian breeding habitat (potholes, seasonal pools, stock ponds, streams, and/or other areas of surface water), including a 150-foot buffer, from April 1 through July 31 of every year. <p>EXCEPTIONS:</p> <ul style="list-style-type: none"> • Ground-disturbing activity may be permitted if the Monument Manager determines that: <ul style="list-style-type: none"> • the activity will cause no loss of riparian vegetation or, if riparian vegetation is lost, that the loss is limited to no more than 0.1 acre, and 100 linear feet, per mile of stream; • any temporarily disturbed areas are revegetated with existing or similar species (including with the use of containerized nursery stock, rather than seeds, to replace woody plants on a one-to-one basis (trees) or area-for-area basis (shrubs)); • revegetation success can be achieved within 2 years; • the activity will not impair water quality, flow regime, aquatic habitat quality, and/or channel and bank stability; and • no practicable alternative is available.

Type of Stipulation	Protected Resource	Stipulation Description
		<p>In making this determination, the BLM will consider the following resource factors:</p> <ul style="list-style-type: none"> • the topography and vegetation screening; • the current baseline data; • the type, location, duration, and intensity of potential adverse effects (impacts); • the mitigation and conservation measures designed to avoid, minimize, or off-set the adverse effects; and • other factors that may affect maintenance or enhancement of the resource values. <p>Approval of ground-disturbing activities granted in any given year may not constitute approval for subsequent years. Approval for ground-disturbing activities must be granted (or extended) annually by the BLM. The proponent of any ground-disturbing activity will provide an assessment with their proposal that: 1) documents anticipated compliance or non-impairment of resource values protected by this stipulation; and 2) considers the above-mentioned resource factors.</p> <p>During, and following, the project activities covered by this provision, on-going monitoring data will be collected using widely accepted scientific methods. This data will be reported to the BLM not less often than annually. If unanticipated types or levels of adverse effects are noted during monitoring, the BLM will be promptly notified. Corrective measures, as approved by the BLM, will be identified and implemented by the proponent. This information will be used through an adaptive management process in order to refine the project components. Associated mitigation measures will be applied to future proposed activities.</p> <p>MODIFICATIONS: None.</p> <p>WAIVERS: None.</p>
Lease Notice	Regarding physical cultural	STIPULATION -- Under all of the

Type of Stipulation	Protected Resource	Stipulation Description
	<p>remains (CODE: <u>LN1</u>)</p>	<p>alternatives, a Lease Notice will be issued in order to alert lessees that no APDs will be granted where physical cultural remains are dense, continuous, and/or chronologically related and determined to be communities, throughout the survey area (constant-no breaks).</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> • Ensure that the objects of the Monument are protected at the landscape level, and that all multiple-use resource management and authorizations for land and resource uses are conducted in compliance with the Proclamation, and with Section 106 and Section 110 of the NHPA, as amended. • Alert lessees that no APDs will be granted where physical cultural remains are dense, continuous, and chronologically related and determined to be communities, throughout the survey area (constant-no breaks). <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> • Advise lessees that no APDs will be granted where physical cultural remains are dense, continuous, and chronologically related and determined to be communities, throughout the survey area (constant-no breaks). <p>EXCEPTIONS: None.</p> <p>MODIFICATIONS: None.</p> <p>WAIVERS: None.</p>
<p>Lease Notice</p>	<p>Regarding NSO and TL stipulations on Southwestern willow flycatcher habitat (CODE: <u>LN2</u>)</p>	<p>STIPULATION -- Under Alternatives II and III, a Lease Notice will be issued in order to alert lessees to NSO or TL stipulations for Southwestern willow flycatcher habitat, including a 0.25-mile buffer.</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> • Contribute to the recovery of the

Type of Stipulation	Protected Resource	Stipulation Description
		<p>Southwestern willow flycatcher.</p> <ul style="list-style-type: none"> Implement recovery actions, as described in the August 2002 Southwestern Willow Flycatcher Final Recovery Plan, or in the most recent version of the Recovery Plan. <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> Advise lessees of NSO and TL stipulations for Southwestern willow flycatcher habitat, including a 0.25-mile buffer, as defined in the most recent Final Recovery Plan. <p>EXCEPTIONS: None.</p> <p>MODIFICATIONS: None.</p> <p>WAIVERS: None.</p>
<p>Lease Notice</p>	<p>Regarding TL stipulation on active or historic bald or golden eagle nest sites (CODE: <u>LN3</u>)</p>	<p>STIPULATION -- Under all of the alternatives, a Lease Notice will be issued in order to alert lessees to TL stipulation on active or historic bald or golden eagle nest sites; as well as on active bald or golden eagle winter roost or winter concentration habitat.</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> Protect bald and golden eagle nest sites and/or winter roost sites and winter concentration areas. Protect bald and golden eagle winter roost or winter concentration area habitat. <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> Advise lessees that within a 0.5-mile radius of a nest, ground-disturbing activities or other sources of disturbance that could result in a nest not being used; or that could lead to nest abandonment, failure, or mortality of fledglings, are prohibited. <p>EXCEPTIONS: None.</p> <p>MODIFICATIONS: None.</p>

Type of Stipulation	Protected Resource	Stipulation Description
		<p>WAIVERS: None.</p>
<p>Lease Notice</p>	<p>Regarding NSO and/or TL stipulations on locations known to support native amphibian breeding habitat (CODE: <u>LN4</u>)</p>	<p>STIPULATION -- Under alternatives II and III, a Lease Notice will be issued in order to alert lessees to NSO and/or TL stipulations on locations known to support native amphibian breeding habitat (potholes, seasonal pools, stock ponds, streams, and/or other areas of surface water), including a 150-foot buffer, during the breeding season from April 1 to July 31 of every year.</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> • Maximize biological diversity by managing habitat for native amphibian species. • Protect breeding habitat for amphibians. <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> • Advise lessees of NSO and TL stipulations for locations known to support native amphibian breeding habitat during the breeding season from April 1 to July 31 of every year. This includes potholes, seasonal pools, stock ponds, streams, or other areas of surface water, as well as a 150-foot buffer. <p>EXCEPTIONS: None.</p> <p>MODIFICATIONS: None.</p> <p>WAIVERS: None.</p>
<p>Lease Notice</p>	<p>Regarding NSO stipulation on occupied and potential habitat for threatened, endangered, candidate, or other special-status plant species (CODE: <u>LN5</u>)</p>	<p>STIPULATION -- Under all of the alternatives, a Lease Notice will be issued in order to alert lessees of NSO stipulation on occupied and potential habitat for threatened, endangered, candidate, or other special-status plant species.</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> • Provide for maintenance or recovery of plant species listed under the ESA (including proposed or candidate

Type of Stipulation	Protected Resource	Stipulation Description
		<p>species) or those listed as sensitive by the BLM State Director.</p> <ul style="list-style-type: none"> • Protect occupied and potential habitat crucial for the maintenance or recovery of species listed under the ESA (including proposed or candidate species) or those listed as sensitive by the BLM State Director. <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> • Advise lessees of NSO stipulation prohibiting ground-disturbing activities within, or immediately adjacent to, occupied or potential habitat necessary for maintenance or recovery of the species. <p>EXCEPTIONS: None.</p> <p>MODIFICATIONS: None.</p> <p>WAIVERS: None.</p>
<p>Lease Notice</p>	<p>Regarding additional required Conditions of Approval (COAs) (CODE: <u>LN6</u>)</p>	<p>STIPULATION -- Under all of the alternatives, a Lease Notice will be issued for additional required Conditions of Approval (COAs).</p> <p>PURPOSE:</p> <ul style="list-style-type: none"> • Meet overall resource and multiple-use objectives of the Canyons of the Ancients National Monument RMP. • Alert lessee of additional COAs that are to be applied to permitted activities, in addition to lease-level stipulations. These will take the form of management prescriptions specific to defined areas, Best Management Practices (BMPs) specific to resource values, as well as required reclamation standards and monitoring. <p>MANAGEMENT ACTIONS:</p> <ul style="list-style-type: none"> • Advise lessees of additional COAs and of the location of land use management prescriptions analyzed in the DRMP/DEIS.

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