

U.S. DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

U.S. DEPARTMENT OF AGRICULTURE **FOREST SERVICE**

BLM Mission

The BLM's mission is to sustain the health, diversity, and productivity of public lands for the use and enjoyment of present and future generations.

USDA Forest Service Mission

The mission of the USDA Forest Service is to sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations.

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Actual use (grazing): Where, how many, what kind or class of livestock, and how long livestock graze on an allotment, or on a portion or pasture of an allotment (from 43 Code of Federal Regulations [CFR] 4100.0-5).

Air pollution: The addition of any material to the atmosphere that may have deleterious effect on life on Earth.

Air quality: A measure of the health-related and visual characteristics of the air, often derived from quantitative measurements of the concentrations of specific injurious or contaminating substances.

Air quality maintenance area: A geographic area that had a history of nonattainment but is now consistently meeting the National Ambient Air Quality Standards (NAAQS). Maintenance areas have been redesignated by the U.S. Environmental Protection Agency (EPA) from "nonattainment" to "attainment with a maintenance plan," or designated by the Environmental Quality Commission.

Air quality related values: Resources such as visibility, water, soils, flora, fauna, cultural resources, or odor that have the potential to be changed by air pollution.

Air quality standard: Level of air pollutants prescribed by regulations that may not be exceeded during a specified time in a defined area.

Allotment: An area of land where one or more livestock operators graze their livestock. Allotments generally consist of Bureau of Land Management (BLM)-administered and National Forest System (NFS) lands but may also include other federally managed, state-owned, or private lands. An allotment may include one or more separate pastures. Livestock numbers and periods of use are specified for each allotment.

Ambient air: The surrounding atmospheric conditions to which the general public has access.

Ambient air quality: The state of the atmosphere at ground level as defined by the range of measured or predicted ambient concentrations of all significant pollutants for all averaging periods of interest.

American Indian Tribe: Any Indian or Alaska Native tribe, band, nation, pueblo, village, or community that the Secretary of the Interior acknowledges to exist as an Indian tribe pursuant to the Federally Recognized Indian Tribe List Act of 1994 (Public Law 103-454; 108 Stat. 4791; 25 United States Code 479a-1.).

Animal unit month: A standardized measurement of the amount of forage necessary for the sustenance of one cow unit or its equivalent for 1 month. Approximately 800 pounds of forage.

Areas of Critical Environmental Concern (ACECs): Areas within the public lands where special management attention is required to 1) protect and prevent irreparable damage to important historical, cultural, or scenic values; fish and wildlife resources; or other natural systems or processes or 2) protect life and safety from natural hazards.

Astrotourism: A type of tourism focused on the viewing of celestial objects, space, and the physical universe within areas of dark night skies where the influence of light pollution is limited.

Attainment area: An area that meets a federal primary or secondary ambient air quality standard for a specified pollutant.

Authorized Officer: The federal employee who has the delegated authority to make a specific decision.

Avoidance areas: Areas with sensitive resource values where rights-of-way (ROWs) or special use permits (SUPs) would be strongly discouraged. Authorization made in avoidance areas would have to be compatible with the purpose for which the area was designated and not is otherwise feasible on lands outside the avoidance area.

Backpacking: Backpacking refers to self-supported trips of one or more nights in the backcountry and away from vehicle support.

Best management practices (BMPs): A suite of techniques that guide, or may be applied to, management actions to aid in achieving desired outcomes. BMPs are often developed in conjunction with land use plans, but they are not considered a land use plan decision unless the land use plan specifies that they are mandatory. They may be updated or modified without a plan amendment if they are not mandatory.

Big game: Large species of wildlife that are hunted, such as elk, deer, bighorn sheep, and pronghorn antelope.

Biological soil crusts: Biological communities that form a surface layer or crust on some soils. These communities consist of cyanobacteria (blue-green bacteria), micro fungi, mosses, lichens, and green algae and perform many important functions, including fixing nitrogen and carbon, maintaining soil surface stability, and preventing erosion. Biological soil crusts also influence the nutrient levels of soils and the status and germination of plants in the desert. These crusts are slow to recover after severe disturbance, requiring 40 years or more to recolonize even small areas.

Bortle scale: A nine-level numeric scale that measures the brightness of night skies and stars at a particular location. Lower Bortle classes correspond with pristine, dark night skies.

Browse: To browse (verb) is to graze; also, browse (noun) is the tender shoots, twigs, leaves, and shrubs often used as food by livestock and wildlife.

Camping: Unless otherwise specified, camping in this document refers to vehicle-supported camping, whether at developed or dispersed sites.

Carbon dioxide: A colorless, odorless gas produced by burning carbon and organic compounds and by respiration. It is naturally present in air (approximately 0.03%) and is absorbed by plants in photosynthesis. Carbon dioxide is removed from the atmosphere (or sequestered) when it is absorbed by plants as part of the biological carbon cycle.

Carbon monoxide: A colorless, odorless, poisonous gas produced by incomplete burning of carbon-based fuels, including gasoline, oil, and wood. Carbon monoxide is also produced from incomplete combustion of many natural and synthetic products.

Casual collecting: The collecting of a reasonable amount of common invertebrate and plant paleontological resources for non-commercial personal use, either by surface collection or the use of non-powered hand tools resulting in only negligible disturbance to the Earth's surface and other resources.

Casual use: Any short-term non-commercial activity that does not cause appreciable damage or disturbance to the public lands, their resources or improvements, and that is not prohibited by closure of the lands to such activities.

Class I area (for air quality): Certain wilderness areas greater than 5,000 acres, national memorial parks greater than 5,000 acres, national parks greater than 6,000 acres, and international parks that were in existence on or before August 7, 1977.

Class II area (for air quality): By default, all areas not designated as Class I areas.

Clean Air Act (CAA): Federal legislation governing air pollution. The CAA established NAAQS for carbon monoxide, nitrogen dioxide, ozone, particulate matter, sulfur dioxide, and lead. Prevention of significant deterioration classifications define the allowable increased levels of air quality deterioration above legally established levels. They consist of the following:

- Class I: Minimal additional deterioration in air quality (certain national parks and wilderness areas)
- Class II: Moderate additional deterioration in air quality (most lands)
- Class III: Greater deterioration for planned maximum growth (industrial areas)

Climate change: Any significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period (decades or longer). Climate change may result from the following:

- Natural factors, such as changes in the sun's intensity or slow changes in the Earth's orbit around the sun
- Natural processes within the climate system (e.g., changes in ocean circulation)
- Human activities that change the atmosphere's composition (e.g., burning fossil fuels) and the land surface (e.g., deforestation, reforestation, urbanization, and desertification)

Closed: Generally denotes that an area is not available for a particular use or uses; refer to specific definitions found in law, regulations, or policy guidance for application to individual programs.

Code of Federal Regulations (CFR): The official, legal tabulation or regulations directing federal government activities.

Collaboration: Entities shall seek consensus.

Communities of shared interest: Organizations and groups of individuals who have common interests in the use and management of BLM and NFS public resources; many organizations or groups of individuals fall under multiple types of communities of interest.

- Habitat and resource preservation communities of interest: Organizations and groups of
 individuals who have a number of conservation objectives, but most believe broadly that
 protecting at-risk species and maintaining habitats and ecosystems for all species is a
 fundamental value and should be a high priority for public policy.
- Mineral development and production communities of shared interest: Organizations and groups of individuals who believe mineral development is a vital component of national, state, and local economies—creating jobs, generating income, and contributing tax and royalty payments to all levels of government.
- Recreation communities of shared interest: Organizations and individuals that seek
 protection of areas with high recreation values so that future generations can enjoy these
 values.
- Tribal and cultural resource communities of interest: Organizations and groups of individuals who value Bears Ears National Monument (BENM) for its cultural and spiritual significance.

 Visual resource communities of shared interest: Organizations and individuals who focus on the scenic qualities of the area. They consider visual resources as a unique and valuable asset and emphasize that the visual integrity of the area needs to be maintained.

Conformance: That a proposed action shall be specifically provided for in the land use plan or, if not specifically mentioned, shall be clearly consistent with the goals, objectives, or standards of the approved land use plan.

Consumer surplus (value): The maximum dollar amount, above any actual payments made, that a consumer would be willing to pay to enjoy a good or service

Contiguous: Lands or legal subdivisions having a common boundary; lands having only a common corner are not contiguous.

Cooperating agency: Assists the lead federal agency in developing an environmental assessment or environmental impact statement (EIS). The Council on Environmental Quality regulations implementing the National Environmental Policy Act of 1969 (NEPA) defines a cooperating agency as any agency that has jurisdiction by law or special expertise for proposals covered by NEPA. Any Tribe or federal, state, or local government jurisdiction with such qualifications may become a cooperating agency through an agreement with the lead agency.

Corridor: A wide strip of land within which a proposed linear facility could be located.

Council on Environmental Quality: An advisory council to the president of the United States established by NEPA. It reviews federal programs for their effect on the environment, conducts environmental studies, and advises the president on environmental matters.

Criteria air pollutant: The CAA required the EPA to set NAAQS for pollutants known to be hazardous to human health and the public welfare. Six pollutants were identified: ozone, carbon monoxide, particulate matter (defined as having diameters less than or equal to 10 microns or to 2.5 microns), sulfur dioxide, lead, and nitrogen oxides. The term "criteria pollutant" derives from the requirement that the EPA must describe the characteristics and the potential health and welfare effects of these pollutants. It is on the basis of such criteria that the NAAQS are set or revised.

Critical habitat: For listed species, consists of 1) the specific areas within the geographical area occupied by the species at the time it is listed in accordance with the provisions of Section 4 of the Endangered Species Act (ESA), on which are found those physical or biological features (constituent elements) (a) essential to the conservation of the species and (b) which may require special management considerations or protection; and 2) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of Section 4 of the ESA upon a determination by the Secretary of the Interior that such areas are essential for the conservation of the species. Designated critical habitats are described in 50 CFR 17 and 226.

Crucial habitat: Habitat on which a species depends for survival because there are no alternative ranges or habitats available.

Cultural resources: A definite location of human activity, occupation, or use identifiable through field inventory (survey), historical documentation, or oral evidence. The term includes archaeological, historic, or architectural sites, structures, or places with important public and scientific uses, and may include definite locations (sites or places) of traditional cultural or religious importance to specified social and/or cultural groups. Cultural resources are concrete, material places and things that are located, classified, ranked, and managed through the system of

identifying, protecting, and utilizing for public benefit. They may be but are not necessarily eligible for the National Register of Historic Places (NRHP).

Cultural site: Any location that includes pre-contact and/or historic evidence of human use or that has important sociocultural value.

Cumulative impact: The impact to the environment that results from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of the agency (federal or non-federal) or person that undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Deciview: A measure of visibility derived from light extinction that is that is designed so that incremental changes in the haze index correspond to uniform incremental changes in visual perception across the entire range of conditions from pristine to highly impaired. The change in visibility that is just perceptible to an average person is 1 deciview, or equivalent to an approximately 10% change in light extinction.

Designated routes: Specific roads and trails identified by the BLM where some type of use is appropriate and allowed. Route designations are implementation decisions that govern only off-highway vehicle (OHV) activities on routes. The BLM designates routes as open, limited, or closed for OHV travel.

Desired condition: Description of those factors that should exist within ecosystems both to maintain their survival and to meet social and economic needs.

Dispersed camping: Vehicle-accessed and -supported camping occurring outside of developed campgrounds.

Dispersed recreation: Recreation activities of an unstructured type, which are not confined to specific locations such as recreation sites. Example of these activities may be hunting, fishing, OHV use, hiking, and sightseeing.

Drought: Drought is a protracted period of deficient precipitation resulting in extensive damage to crops, resulting in loss of yield.

Endangered species: A plant or animal species whose prospects for survival and reproduction are in immediate jeopardy, as designated by the Secretary of the Interior, and as further defined by the ESA.

Environmental impact statement (EIS): A detailed written statement required by NEPA when an agency proposes a major federal action significantly affecting the quality of the human environment.

Erosion: The wearing away of the land surface by running water, wind, ice, or other geological agents.

Exclusion area: An area with sensitive resource values where ROWs would not be authorized.

Existing scenic integrity (USDA Forest Service): Measure of the intactness associated with the visual elements that define a particular landscape.

Extensive recreation management area: An area where significant recreation opportunities and problems are limited and explicit recreation management is not required. Minimal management actions related to the BLM's stewardship responsibilities are adequate in these areas.

Federal Land Policy and Management Act of 1976 (FLPMA): Public Law 94-579. October 21, 1976, often referred to as the BLM's "Organic Act," which provides the majority of the BLM's legislated authority, direction, policy, and basic management guidance.

Federal Register: A daily publication that reports presidential and federal agency documents.

Fire management plan: A plan that identifies and integrates all wildland fire management and related activities within the context of approved land/resource management plans. A fire management plan defines a program to manage wildland fires (wildfire and prescribed fire). The plan is supplemented by operational plans, including preparedness plans, preplanned dispatch plans, prescribed fire burn plans, and prevention plans. Fire management plans assure that wildland fire management goals and components are coordinated.

Floodplain: The relatively flat area or lowlands adjoining a body of standing or flowing water, which has been or might be covered by floodwater.

Formation: The primary unit in stratigraphy consisting of a succession of strata useful for mapping or description. Most formations possess certain lithologic features that may indicate genetic relationships.

Fossil: Any remains, traces, or imprints of pre-contact non-human organisms preserved in or on the Earth's crust that provide information about the history of life on Earth.

Free-flowing and water quality: These rivers, or sections of rivers and tributaries, are preserved in their free-flowing condition and are not dammed or otherwise impeded. The national wild and scenic designation essentially vetoes the licensing of new hydropower projects on or directly affecting these rivers. The designation also provides very strong protection against bank and channel alterations that adversely affect river values; protects riverfront public lands from oil, gas, and mineral development; and creates a federal reserved water right to protect flow-dependent values.

Fugitive dust: Airborne particles emitted from any source other than through a stack or vent.

Goal: A broad statement of a desired outcome. Goals are usually not quantifiable and may not have established time frames for achievement.

Grazing permit: A document authorizing use of the BLM-administered lands within an established grazing district. Grazing permits specify all authorized use, including livestock grazing and suspended use. Permits specify the total number of animal unit months apportioned, the area authorized for grazing use, or both (from 43 CFR 4100.0-5).

Greenhouse gas: A gas in an atmosphere that absorbs and emits radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect. The primary greenhouse gases in the Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone.

Guidelines: Actions or management practices that may be used to achieve desired outcomes, sometimes expressed as BMPs. Guidelines may be identified during the land use planning process,

but they are not considered a land use plan decision unless the plan specifies that they are mandatory.

Habitat: A specific set of physical conditions that surround a species, group of species, or a large community. In wildlife management, the major constituents of habitat are considered to be food, water, cover, and living space.

Habitat fragmentation: The disruption (by division) of extensive habitats into smaller habitat patches. The effects of habitat fragmentation include loss of habitat area and the creation of smaller, more isolated patches of remaining habitat.

Hazardous air pollutant: Pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects.

Historic property: Any pre-contact or historic district, site, building, structure, or object included in, or eligible for inclusion in, the NRHP maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to a Tribal Nations or Native Hawaiian organizations and that meet the NRHP criteria (36 CFR 800.16(I)(1)).

Impact: A modification of the existing environment caused by an action. These environmental consequences are the scientific and analytical basis for comparison of alternatives. Effects may be either direct, which are caused by the action and occur at the same time and place, or indirect, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable, or cumulative.

Implementation decisions: Decisions that take action to implement land use plan decisions. They are generally appealable to Interior Board of Land Appeals.

Implementation plan: A site-specific plan written to implement decisions made in a land use plan. An implementation plan usually selects and applies BMPs to meet land use plan objectives. Implementation plans are synonymous with "activity" plans. Examples of implementation plans include interdisciplinary management plans, habitat management plans, Management of Land Boundary plans, and allotment management plans.

Inholding: Land owned or managed by an entity other than the BLM or USDA Forest Service that is completely surrounded by a wilderness study area (WSA) boundary. If two or more contiguous parcels owned by different parties are completely surrounded by a WSA except for their common borders, each is considered an inholding.

Interdisciplinary team: A group of individuals with different training, representing the physical sciences, social sciences, and environmental design arts, assembling to solve a problem or perform a task. The members of the team proceed to a solution with frequent interaction so that each discipline may provide insights to any stage of the problem and disciplines may combine to provide new solutions. The number and disciplines of the members preparing the plan vary with circumstances. A member may represent one or more disciplines or BLM program interests.

Invertebrate species: Any animal without a backbone or spinal column.

Irretrievable: An environmental effect caused by an action, or series of actions, that cannot be reversed or undone, until or unless the cause of the effect is removed or the effect is restored or rehabilitated (e.g., inundating a river canyon by construction of a dam, clear-cut logging a forest). The loss of production of renewable resources during the life of a land use plan.

L50 (A-weighted decibels): A descriptor of loudness that represents the existing ambient noise levels where the sound level is exceeded 50% of the time.

L90 (A-weighted decibels): A descriptor of loudness that represents the existing ambient noise levels where the sound level is exceeded 90% of the time.

Land use allocation: The identification in a land use plan of the activities that are allowed, restricted, or excluded for all or part of the Planning Area, based on desired future conditions.

Land use plan or resource management plan: A set of decisions that establish management direction for land within an administrative area, as prescribed under the planning provisions of FLPMA and the National Forest Management Act (NFMA); an assimilation of land use plan-level decisions developed through the planning process, regardless of the scale at which the decisions were developed.

Land use plan decision: Establishes desired outcomes and the actions needed to achieve them. Decisions are reached using the BLM and USDA Forest Service planning process. When they are presented to the public as proposed decisions, they can be protested to the BLM director. They are not appealable to Interior Board of Land Appeals.

Light on the land: Implementation strategies that utilize non-intensive restoration techniques to protect BENM objects. These strategies would include emphasis on non-motorized and non-mechanized (boots on the ground) work, use of hand tools wherever applicable, safe herbicide use, and minimal disruption of existing soil communities and native vegetation.

Limited roads and trails designation: Designated areas where the use of OHVs is subject to restrictions, such as limiting the number or types or vehicles allowed, dates and times of use (seasonal restrictions), and limiting all use to designated roads and trails. Under the designated roads and trails designation, use would be allowed only on roads and trails that are signed for use. Combinations of restrictions are possible, such as limiting use to certain types of vehicles during certain times of the year.

Local residents: Individuals who reside near BENM consisting of Indigenous people and people of Euro-American descent.

Management decision: A decision made by the BLM or USDA Forest Service to manage public lands. Management decisions are made on both land use plan decisions and implementation decisions.

Management of Land Boundary plan: A high level boundary evidence risk assessment for a special management area, generally focused on high risk boundaries of high valued lands or resources; used in outyear budget and workforce planning documents.

Management opportunities: A component of the analysis of the management situation; actions or management directions that could be taken to resolve issues or management concerns.

Mechanized travel: Travel by use of a machine, either motorized or non-motorized.

Methane: Methane is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock, other agricultural practices, and land use and from the decay of organic waste in municipal solid waste landfills.

Minimize: To reduce the adverse impact of an operation to the lowest practical level.

Mitigation measures: Methods or procedures that reduce or lessen the impacts of an action.

Monument management plan: A land use plan as prescribed by FLPMA and NFMA, which establishes, for a national monument and given area of land, land use allocations, coordination guidelines for multiple-use, objectives, and actions to be achieved.

Motorized vehicles or uses: Vehicles that are motorized, such as Jeeps, all-terrain vehicles (e.g., four-wheelers and three-wheelers), trail motorcycles or dirt bikes, and aircraft.

Multiple use: The management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the lands for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some lands for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including recreation, range, minerals, watershed, wildlife and fish, and natural scenic, scientific, and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the lands and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or greatest unit output.

National Ambient Air Quality Standards (NAAQS): The allowable concentrations of air pollutants in the air specified by the federal government. The air quality standards are divided into primary standards (based on the air quality criteria and allowing an adequate margin of safety to protect the public health) and secondary standards (based on the air quality criteria and allowing an adequate margin of safety to protect the public welfare) from any unknown or expected adverse effects of air pollutants.

National Environmental Policy Act of 1969 (NEPA): An act that encourages productive and enjoyable harmony between humans and their environment and promotes efforts to prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of humans; enriches the understanding of the ecological systems and natural resources important to the nation, and establishes the Council on Environmental Quality.

National monument: An area created from any land owned or controlled by the federal government for the protection of objects of historical, cultural, and/or scientific interest. National monuments can be created by proclamation of the president of the United States or by Congress.

Nitrous oxide: Emitted during agricultural, land use, and industrial activities; combustion of fossil fuels and solid waste; and wastewater treatment.

Nitrous oxides: Produced from burning fuels, including gasoline and coal. Nitrogen oxides are smog formers, which react with volatile organic compounds to form smog. Nitrogen oxides are also major components of acid rain.

Nonattainment area: An area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) any of the federal primary or secondary ambient air quality standards for the pollutant.

Nonmarket values: The benefits that individuals attribute to experiences of the environment or uses of natural and cultural resources that do not involve market transactions and, therefore, lack prices.

Non-mechanized travel: Travel by foot or on an animal.

Nonuse value: The utility or psychological benefit some people derive from the existence of some environmental condition that may never be directly experienced, such as an unspoiled landscape or the continued presence of an endangered species.

Non-wilderness study area (WSA) lands with wilderness characteristics: Undeveloped federal land that has been inventoried and/or reviewed by a BLM interdisciplinary team and determined to possess wilderness characteristics such as those listed in Section 2(c) of the Wilderness Act of 1964. These lands do not possess special management designations like WSA.

Noxious weeds: A plant species designated by federal or state law as generally possessing one or more of the following characteristics: aggressive and difficult to manage; parasitic; a carrier or host of serious insects or disease; or nonnative, new, or not common to the United States.

Objective: A description of a desired condition for a resource. Objectives can be quantified and measured and, where possible, have established time frames for achievement.

Off-highway vehicle (OHV): Any motorized vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain, excluding: 1) any nonamphibious registered motorboat; 2) any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes; 3) any vehicle whose use is expressly authorized by the Authorized Officer or otherwise officially approved; 4) vehicles in official use; and 5) any combat or combat support vehicle when used in times of national defense emergencies.

Off-highway vehicle (OHV) area designations: Lands designated as open, limited, or closed for OHV use:

- Open: Designated areas where all types of motorized vehicles (Jeeps, all-terrain vehicles, motorized dirt bikes, etc.) are permitted at all times, anywhere in the area, on roads or cross country, subject to the operating regulations and vehicle standards set forth in 43 CFR 8341 and 8342.
- Limited: Designated areas where motorized vehicles are restricted to existing and designated routes. Off-road, cross-country travel is prohibited in limited areas, unless an area is specifically identified as an area where cross-country, over-snow travel is allowed. Some existing routes may be closed in limited areas.
- Closed: Designated areas where off-road motorized vehicle travel is prohibited year-round. Emergency use of vehicles is allowed year-round.

Off-highway vehicle (OHV) route designations: Management designations applied to individual routes (as opposed to OHV areas) during interdisciplinary route evaluation sessions. The BLM designates routes as open, limited, or closed, and the designation must be included in all route-specific decisions and recorded in the national ground transportation linear feature data set(s). Definitions and the designation criteria used in this decision-making process stem from those provided for OHV areas in 43 CFR 8340.0-5(f), (g), and (h).

- OHV open: OHV travel is permitted where there are no special restrictions or no compelling resource protection needs, user conflicts, or public safety issues to warrant limiting the timing or season of use, the type of OHV, or the type of OHV user.
- OHV limited: OHV travel on routes, roads, trails, or other vehicle ways is subject to
 restrictions to meet specific resource management objectives. Examples of restrictions
 include numbers or types of vehicles; time or season of use; permitted or licensed use only;

- or other restrictions necessary to meet resource management objectives, including certain competitive or intensive uses that have special limitations.
- OHV closed: OHV travel is prohibited on the route. Access by means other than OHVs, such
 as by motorized vehicles that fall outside the definition of an OHV or by mechanized or
 nonmechanized means, is permitted. The BLM designates routes as closed to OHVs if
 necessary to protect resources, promote visitor safety, reduce use conflicts, or meet a
 specific resource goal or objective.

Open: Generally denotes that an area is available for a particular use or uses. Refer to specific program definitions found in law, regulations, or policy guidance for application to individual programs.

Outstandingly remarkable value (ORV): Each designated wild and scenic river (WSR) requires that ORVs are protected. An ORV must be a river-related value that is rare, unique, or an exemplary feature on a regional or national scale. ORVs may include scenic, recreational, geological, fish and wildlife, historical, cultural, or other similar values.

Ozone: A gas that is a variety of oxygen. The oxygen gas found in the air consists of two oxygen atoms stuck together; this is molecular oxygen. Ozone consists of three oxygen atoms stuck together into an ozone molecule. Ozone occurs in nature; it produces the sharp smell near a lightning strike. High concentrations of ozone gas are found in a layer of the atmosphere—the stratosphere—high above the Earth. Stratospheric ozone shields the Earth against harmful rays from the sun, particularly ultraviolet B. Smog's main component is ozone; this ground-level ozone is a product of reactions among chemicals produced by burning coal, gasoline, and other fuels, and chemicals found in products, including solvents, paints, and hairsprays.

Paleontological resources (fossils): Any fossilized remains, traces, or imprints of organisms, preserved in or on the Earth's crust that are of paleontological interest and that provide information about the history of life on Earth.

Paleontology: The scientific study of pre-contact life based on the fossil record.

Particulate matter: Includes dust, soot, and other tiny bits of solid materials that are released into and move around in the air. Particulates are produced by many sources, including burning of diesel fuels by trucks and buses; incineration of garbage; mixing and application of fertilizers and pesticides; road construction; industrial processes, such as steel making, mining operations, and agricultural burning (field and slash burning); and operation of fireplaces and woodstoves.

Permitted use: Any use that requires a permit or other special authorization.

Permitted use (grazing): The forage allocated by, or under the guidance of, an applicable land use plan for livestock grazing in an allotment under a permit or lease, expressed in animal unit months (43 CFR 4100.0-5) (BLM Manual H-4180-1).

Permittee (livestock operator): A person or organization legally permitted to graze a specific number and class of livestock on designated areas of BLM-administered or NFS lands during specified seasons each year.

Petrified wood: Fossilization of wood through introduction or replacement by silica (silicified wood) in such a manner that the original form and structure of the wood is preserved.

Planning Area: The entire land area within the perimeter of BENM.

Planning criteria: The standards, rules, and other factors developed by managers and interdisciplinary teams for their use in forming judgments about decision-making, analysis, and data collection during planning. Planning criteria streamline and simplify the resource management planning actions.

Prescribed fire: Any fire intentionally ignited by management actions in accordance with applicable laws, policies, and regulations to meet specific objectives.

Primitive and unconfined recreation: Non-motorized, non-mechanized, and undeveloped types of recreational activities.

Public land: Land or interest in land owned by the United States and administered by the Secretary of the Interior through the BLM or Secretary of Agriculture through the USDA Forest Service, except lands located on the Outer Continental Shelf and land held for the benefit of American Indians, Aleuts, and Eskimos.

Range development: A structure, excavation, treatment, or development to rehabilitate, protect, or improve lands to advance range betterment.

Rangeland: Land used for grazing by livestock and big game animals on which vegetation is dominated by grasses, grass-like plants, forbs, or shrubs.

Raptor: Bird of prey with sharp talons and strongly curved beak (e.g., hawks, owls, vultures, and eagles).

Record of decision: A document signed by a responsible official recording a decision that was preceded by the preparing of an EIS.

Relict: A remnant or fragment of the vegetation of an area that remains from a former period when the vegetation was more widely distributed.

Resource: The natural, biological, and cultural components of the environment, including air, soil, water, vegetation, wildlife, minerals, historic and pre-contact (cultural) sites and features, and fossils. Land use plans set goals and objectives for desired outcomes for management of the various resources in a planning area.

Resource management plan (RMP): A land use plan as prescribed by FLPMA and the NFMA that establishes, for a given area of land, land use allocations, objectives, and actions to be achieved.

Resource use: Human uses of resources for the social and economic benefit of society, including mining, energy production, livestock production (grazing), recreation (motorized, non-motorized), forest production (timber, fire wood, fence posts), utility corridors (power lines, pipelines, roads), and communication sites. Land use plans identify allowable uses of the public lands and set goals and objectives for desired outcomes for resource uses.

Right-of-way (ROW): A ROW grant is an authorization to use a specific piece of BLM-administered land for a specific project. The grant authorizes rights and privileges for a specific use of the land for a specific period of time.

Riparian area: A form of wetland transition between permanently saturated wetlands and upland areas. Riparian areas exhibit vegetation or physical characteristics that reflect the influence of permanent surface or subsurface water. Typical riparian areas include lands along, adjacent to, or contiguous with perennially and intermittently flowing rivers and streams, glacial potholes, and the

shores of lakes and reservoirs with stable water levels. Excluded are ephemeral streams or washes that lack vegetation and depend on free water in the soil.

River classification: Specific management strategies will vary according to WSR classification but will always be designed to protect and enhance the values of the river area. Every WSR is classified into one of three categories as follows:

- Wild rivers: Those rivers or sections of rivers that are free of impoundments and generally
 inaccessible except by trail, with watersheds or shorelines essentially primitive and waters
 unpolluted. These represent vestiges of primitive America.
- Scenic rivers: Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.
- Recreational rivers: Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

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

Route: A linear line for motorized travel.

Routes: Roads, trails, and primitive roads. Generically, components of the transportation system are described as routes.

Scenic attractiveness (USDA Forest Service): Measure of the scenic importance of a landscape based on human perceptions of the intrinsic beauty.

Scenic byways: Highway routes that have roadsides or corridors of special aesthetic, cultural, or historical value. An essential part of the highway is its scenic corridor. The corridor may contain outstanding scenic vistas, unusual geological features, or other natural elements.

Scenic character (USDA Forest Service): A combination of the physical, biological and cultural images that gives an area its positive scenic identity. Scenic Character provides a frame of reference from which to determine Scenic Attractiveness and to measure Scenic Integrity and Scenic Stability.

Scenic Integrity Objective (USDA Forest Service): Established during the land use planning process by balancing inventoried visual values with other resource needs and uses to establish the future desired condition of a given landscape area.

Scenic Quality (BLM): A measure of the visual appeal of a tract of land.

Scoping: The process of identifying the range of issues, management concerns, preliminary alternatives, and other components of an EIS or land use planning document. It involves both internal and public viewpoints.

Section 106 compliance: The requirement of Section 106 of the National Historic Preservation Act that any project funded, licensed, permitted, or assisted by the federal government be reviewed for impacts to significant historic properties and that the State Historic Preservation Officer and the Advisory Council on Historic Preservation be allowed to comment on a project.

Section 7 consultation: The requirement of Section 7 of the ESA that all federal agencies consult with the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) if a proposed action might affect a federally listed species or its critical habitat.

Sensitive species: All species that are under status review, have small or declining populations, live in unique habitats, or need special management. Sensitive species include threatened, endangered, and proposed species as classified by the U.S. Fish and Wildlife Service and National Marine Fisheries Service.

Sensitivity Levels (BLM): Measures of public concern (i.e., high, medium, low) for the maintenance of scenic quality.

Significant: An effect that is analyzed in the context of the proposed action to determine the degree or magnitude of importance of the effect, whether beneficial or adverse. The degree of significance can be related to other actions with individually insignificant but cumulatively significant impacts.

Sky glow (ratio of artificial brightness to natural sky brightness): Increased apparent brightness of the night sky, compared with natural levels of brightness produced by the Milky Way and zodiacal light, associated with artificial sources of light that reduce visibility for astronomical observation. Lower ratio to natural brightness values correspond to less sky glow, and deviation from the natural condition high values correspond to skies with increased light pollution.

Sky luminance: Measurement of visible light on a clear moonless night, which for pristine night skies is typically measured as 21.9 to 22.0 magnitudes per square arcsecond. Lower values correspond to artificially brighter night skies, obscuring visibility of natural night sky phenomena, whereas higher values (closer to 22.0) correspond to more pristine night skies.

Slope: The degree of deviation of a surface from the horizontal.

Sound attenuation features: Equipment installed on noise-generating facilities to suppress sound and/or reduce noise levels during their operation.

Soundscapes: Human perception of the acoustic environment composed of both natural ambient sounds and a variety of human-made sounds.

Snow course: A location where manual snow measurements are taken during the winter season to determine the depth and water content of the snowpack. Snow courses are permanent locations and represent the snowpack conditions at a given elevation in a given area. Generally, snow courses are approximately 1,000 feet (300 meters) long and are situated in small meadows protected from the wind. They consist of a variable number of individual sample points, typically five to 10, which are evenly spaced between points.

Special recreation management area: Areas that require explicit recreation management to achieve recreation objectives and provide specific recreation opportunities.

Special status species: Includes proposed species, listed species, and candidate species under the ESA; state-listed species; and BLM state director-designated sensitive species (BLM Manual 6840).

Special use permit (SUP): An SUP is an authorization to use a specific piece of NFS land for a specific project. The SUP authorizes rights and privileges for a specific use of the land for a specific period of time.

Stipulations: Requirements that are part of the terms of a BLM or NFS land use approval. Some stipulations are standard on all approvals. Other stipulations may be applied to the lease at the discretion of the surface management agency to protect valuable surface resources and uses.

Sulfur dioxide: A gas produced by burning coal, most notably in power plants. Some industrial processes, such as production of paper and smelting of metals, produce sulfur dioxide. Sulfur dioxide is closely related to sulfuric acid, a strong acid. Sulfur dioxide plays an important role in the production of acid rain.

Surface disturbance: Activities that normally result in more than negligible disturbance to public lands and that accelerate the natural erosive process. These activities normally involve use and/or occupancy of the surface, cause disturbance to soils and vegetation, and are usually caused by motorized or mechanical actions. Surface disturbance may result from activities using earthmoving equipment; off-road vehicle travel; the use of pyrotechnics and explosives; and construction of facilities like power lines, pipelines, recreation sites, livestock facilities, wildlife waters, or new roads. Surface disturbance is not normally caused by casual use. Activities that are not typically surface disturbing include proper livestock grazing, cross-country hiking, minimum-impact filming and vehicle travel on designated routes.

Sustainability: The ability of an ecosystem to maintain ecological processes and functions, biological diversity, and productivity over time.

Threatened species: Any plant or animal species defined under the ESA as likely to become endangered within the foreseeable future throughout all or a significant portion of its range; listings are published in the *Federal Register*.

Traditional Ecological Knowledge: As a component of Traditional Indigenous Knowledge (see entry below), Traditional Ecological Knowledge is the culturally and spiritually based way in which Indigenous peoples relate to their ecosystems. Traditional Ecological Knowledge amassed by the Indigenous peoples whose ancestors inhabited this region, passed down from generation to generation, offers critical insight into the historical and scientific significance of the area. Such knowledge is, itself, a resource to be protected and used in understanding and managing this landscape sustainably for generations to come (Proclamation 10825).

Traditional Indigenous Knowledge: Traditional Indigenous Knowledge is a core part of Indigenous peoples' identities and ways of life, is highly spiritual, and carries responsibilities for its appropriate uses. Traditional Indigenous Knowledge includes the use of medicinal plants, knowledge of traditional habitats, proper care of ancestral dwellings and structures, and relationships with the built and natural elements of a cultural landscape. Some Traditional Indigenous Knowledge is so sacred that it cannot be shared outside of Tribal societies and traditional holders. It is often passed from one generation to another verbally and not documented in writing (see the 2022 BEITC LMP provided in Appendix L).

Trail: A linear route managed for human power (for example, hiking or bicycling), stock (for example, horseback riding), OHV forms of transportation, or for historical or heritage values. Trails are not generally managed for use by four-wheel drive or high-clearance vehicles.

Travel network: Routes occurring on public lands or within easements granted to the BLM that are recognized, designated, decided upon, or otherwise authorized for use through the planning

¹ LaDuke, W. 1994. Traditional Ecological Knowledge and Environmental Futures. *Colorado Journal of International Environmental Law and Policy* 5:127.

process or other travel management decisions. These may be part of the transportation system and may be administered by the BLM.

Undertaking: (54 United States Code 300320): A project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including those carried out by or on behalf of a federal agency; those carried out with federal financial assistance; those requiring a federal permit, license or approval; and those subject to state or local regulation administered pursuant to a delegation or approval by a federal agency.

Unique geological features: Unique geologic features include mesas, towers, arches, hoodoos, and cliffs found in the Indian Creek Canyon, Cedar Mesa, Mancos Mesa, Beef Basin, the Abajo Mountains, Elk Ridge, the Dark Canyon and Dry Mesa complex, and Valley of the Gods.

User day: Any calendar day, or portion thereof, for each individual accompanied or serviced by an operator or permittee on public lands or related waters; synonymous with passenger day or participant day.

Use value: The benefits an individual derives from some direct experience or activity, such as climbing a peak, hunting, or viewing wildlife.

Utility corridor: A parcel of land that has been identified by law, Secretarial order, land use plan, or by other management decision as being the preferred location for existing and future ROW grants and suitable to accommodate one type of ROW or one or more ROWs that are similar, identical, or compatible.

Vegetation type: A plant community with distinguishable characteristics described by the dominant vegetation present.

Vertebrate species: Animals with a backbone or spinal column.

Visibility (air quality): A measure of the ability to see and identify objects at different distances.

Visual Quality Objective (USDA Forest Service): A desired level of excellence based on physical and sociological characteristics of an area. Refers to degree of acceptable alteration of the characteristic landscape.

Visual Resource Management (BLM): The inventory and planning actions taken to identify visual values and to establish objectives for managing those values and the management actions taken to achieve the visual management objectives.

Visual resources: The visible physical features of a landscape (topography, water, vegetation, animals, structures, and other features) that constitute the scenery of an area.

Visual Resource Inventory (BLM): The inventory of scenic values based on the factors of scenic quality, sensitivity levels, and distance zones, which, when combined, form Visual Resource Inventory classes, indicating the existing scenic values of BLM-administered lands.

Volatile organic compounds: Organic chemicals all contain the element carbon. Organic chemicals are the basic chemicals found in living things and in products derived from living things, such as coal, petroleum, and refined petroleum products. Volatile chemicals readily produce vapors; at room temperature and normal atmospheric pressure, vapors escape easily from volatile liquid chemicals. Volatile organic chemicals include gasoline, industrial chemicals such as benzene,

solvents such as toluene and xylene, and tetrachloroethylene (perchloroethylene is the principal dry-cleaning solvent). Many volatile organic chemicals are also hazardous air pollutants.

Water quality: The chemical, physical, and biological characteristics of water with respect to its suitability for a particular use.

Watershed: All lands that are enclosed by a continuous hydrologic drainage or divide and lay upslope from a specified point on a stream.

Way (now known as a *primitive route*): A vehicle route within a WSA that was in existence and identified during the FLPMA Section 603–mandated wilderness inventory. The term is also used during wilderness inventory to identify routes that are not roads. The term developed from the definition of the term "roadless" provided in the Wilderness Inventory Handbook (September 27, 1978), is as follows: "roadless refers to the absence of roads which have been improved and maintained by mechanical means to insure relatively regular and continuous use. A way maintained solely by the passage of vehicles does not constitute a road."

Wild and Scenic Rivers Act: The National Wild and Scenic Rivers System was established by the Wild and Scenic Rivers Act of 1968 and authorizes Congress to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. It safeguards the special character of these rivers, while also recognizing the potential for their appropriate use and development. It encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection.

Wilderness: A Congressionally designated area of undeveloped federal land retaining its primeval character and influence, without permanent improvements or human habitation that is protected and managed to preserve its natural conditions as described in Section 2A of the Wilderness Act of 1964.

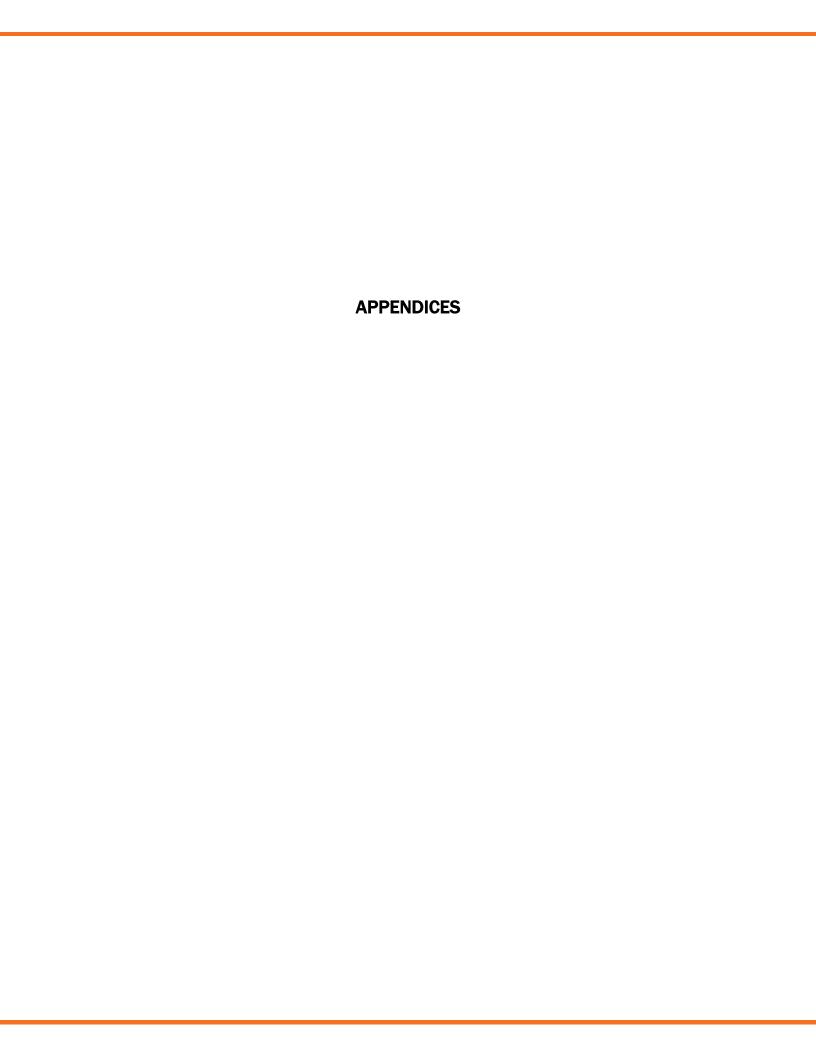
Wilderness characteristics: Features of the land associated with the concept of wilderness that specifically deal with naturalness and opportunities for solitude and primitive and unconfined recreation. These characteristics may be considered in land use planning when the BLM determines that those characteristics are reasonably present, of sufficient value (condition, uniqueness, relevance, importance), and need (trend, risk), and are practical to manage. Key characteristics of wilderness listed in Section 2(c) of the Wilderness Act of 1964 were used by the BLM in conducting wilderness inventories. These characteristics are features of land associated with the concept of wilderness.

Wilderness Study Area (WSA): A roadless area or island of undeveloped federal land that has been inventoried and found to possess wilderness characteristics described under Title VI, Section 603 of FLPMA and Section 2(c) of the Wilderness Act of 1964. These characteristics are 1) generally appears to have been affected mainly by the forces of nature, with human imprints substantially unnoticeable; 2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; 3) has at least 5,000 acres or is large enough to make practicable its preservation and use in an unimpaired condition; and 4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historic value.

Wildfire: Unplanned ignition of a wildland fire (such as a fire caused by lightning, volcanoes, and unauthorized and accidental human-caused fires) and escaped prescribed fires.

Wildland fire: A general term describing any non-structure fire that occurs in the wildland.

Woodland: A forest community occupied primarily by noncommercial species such as juniper, mountain mahogany, or quaking aspen groves; all western juniper forestlands are classified as woodlands, because juniper is classified as a noncommercial species.





APPENDIX A

Figures



CHAPTER 1. FIGURES

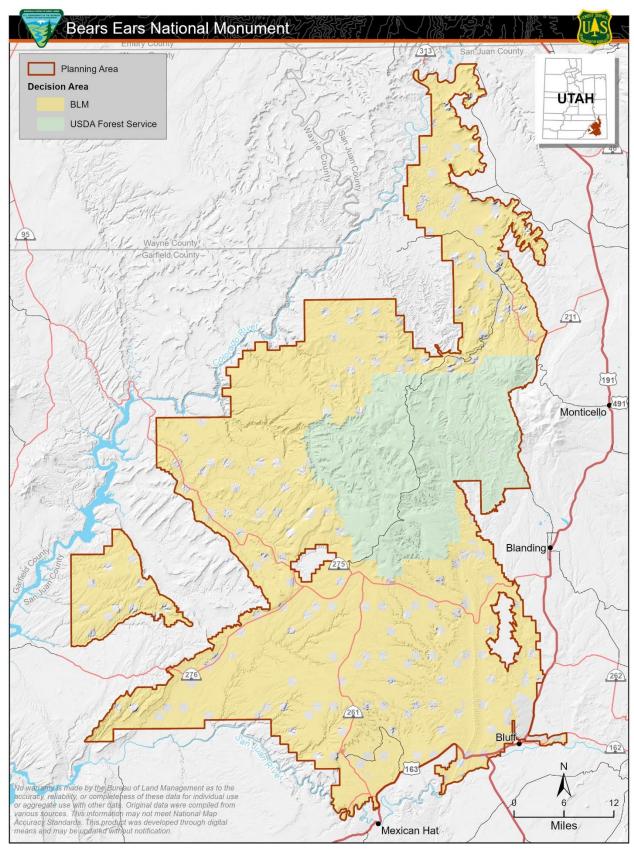


Figure 1-1. Planning Area and Decision Area.

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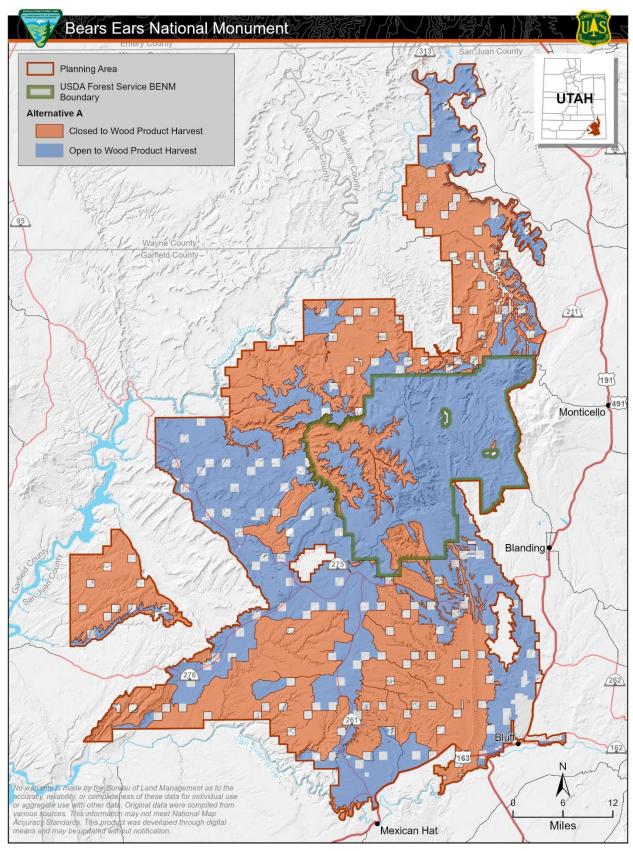


Figure 2-1. Areas open and closed to wood product harvest under Alternative A.

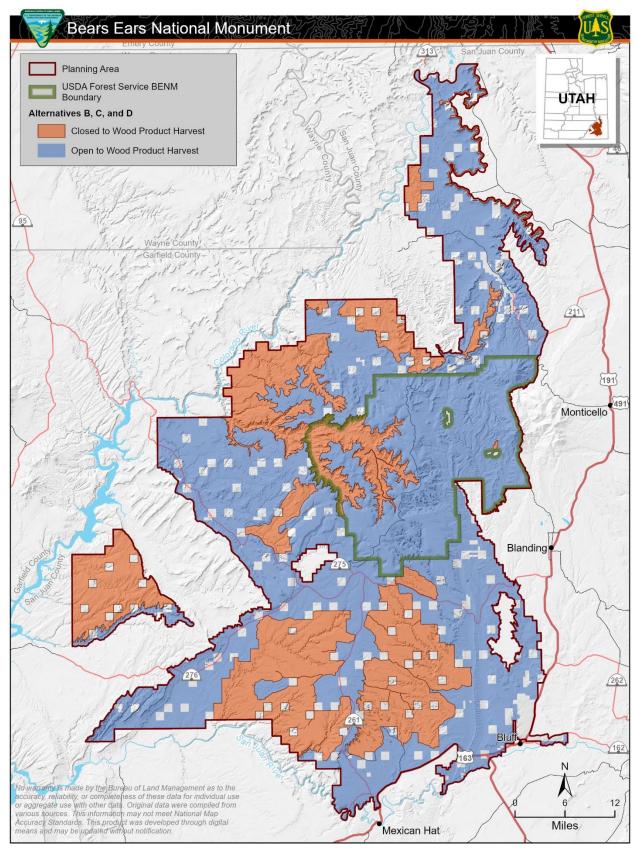


Figure 2-2. Areas open and closed to wood product harvest under Alternatives B-D.

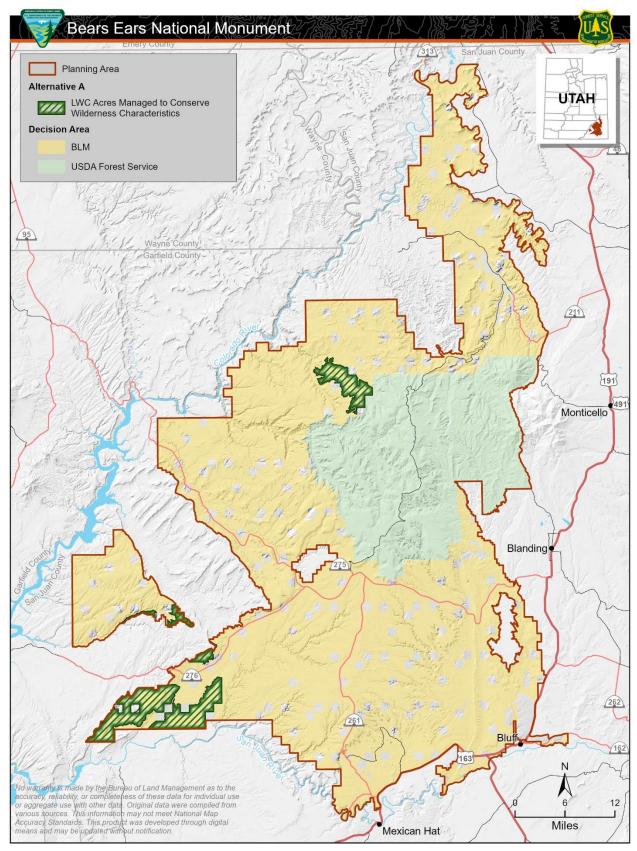


Figure 2-3. Alternative A, lands with wilderness characteristics.

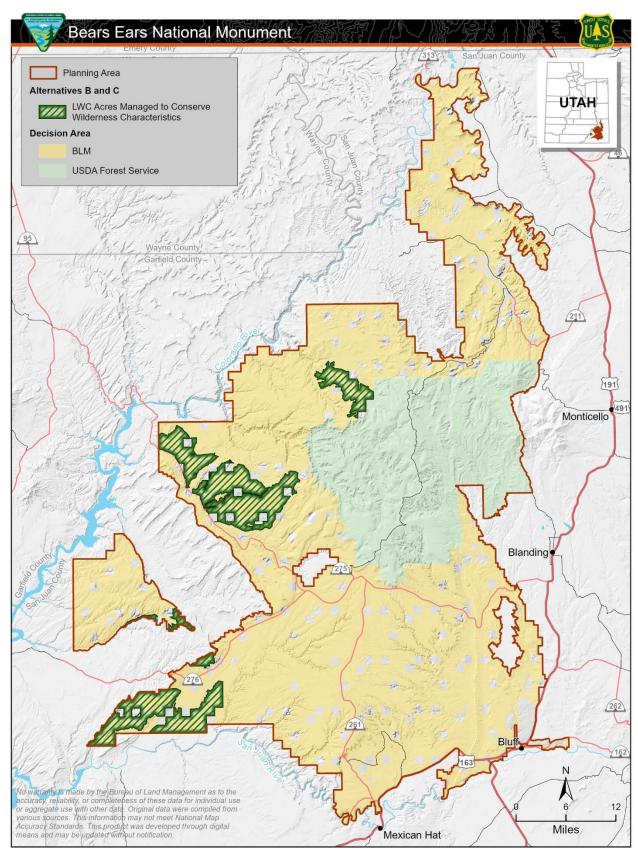


Figure 2-4. Alternatives B and C, lands with wilderness characteristics.

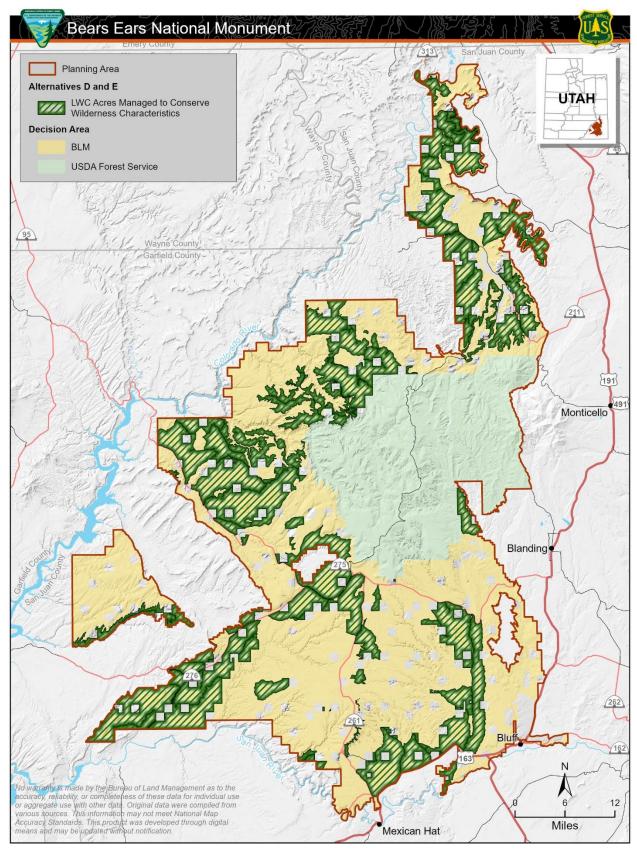


Figure 2-5. Alternatives D and E, lands with wilderness characteristics.

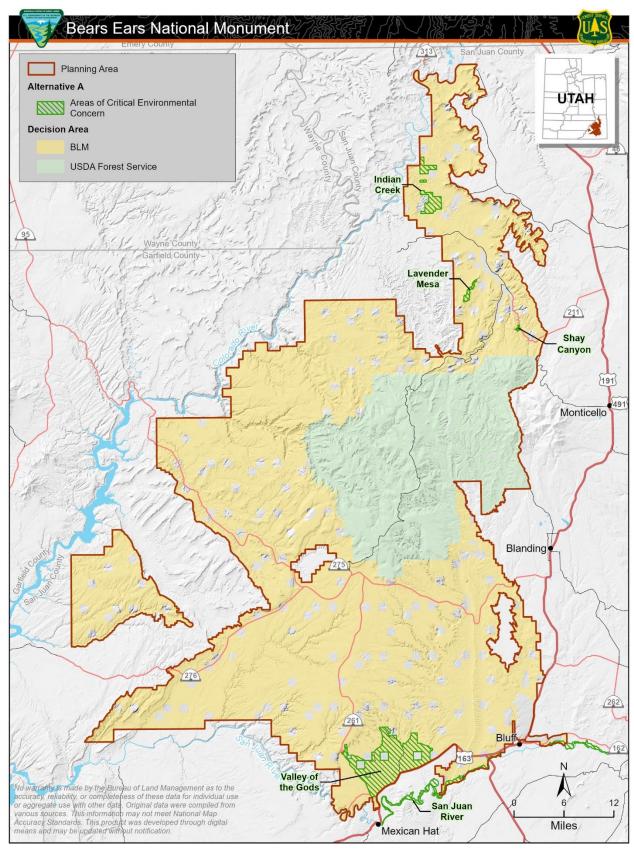


Figure 2-6. Alternative A, Areas of Critical Environmental Concern.

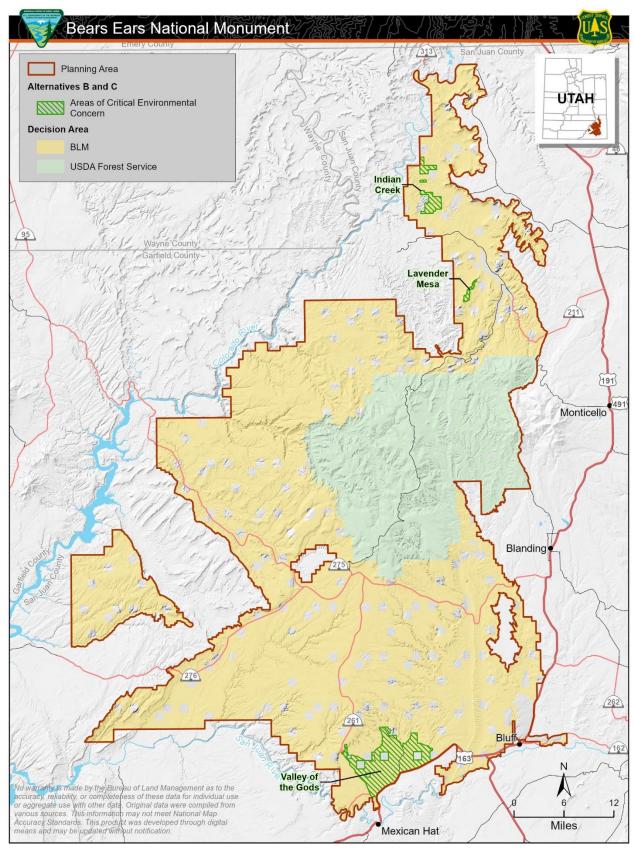


Figure 2-7. Alternatives B and C, Areas of Critical Environmental Concern.

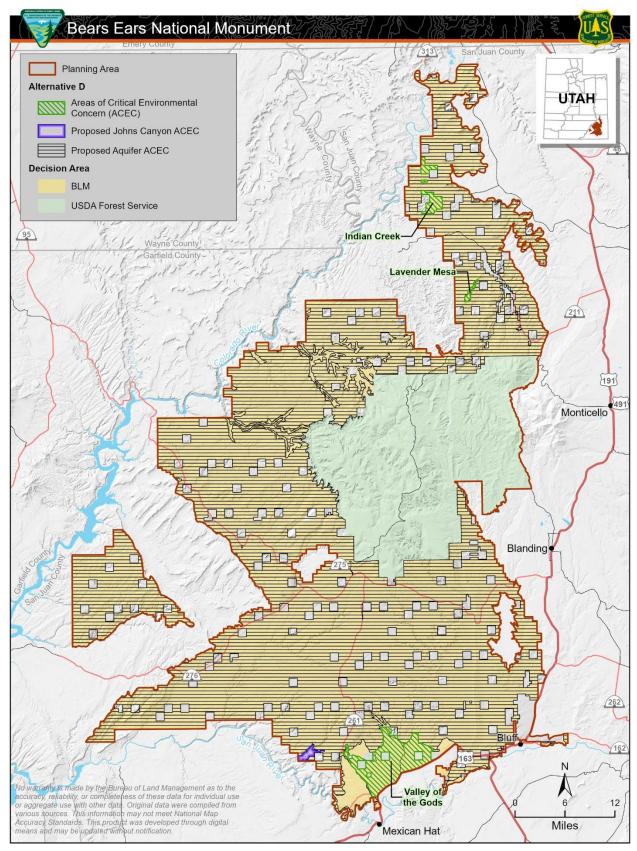


Figure 2-8. Alternative D, Areas of Critical Environmental Concern.

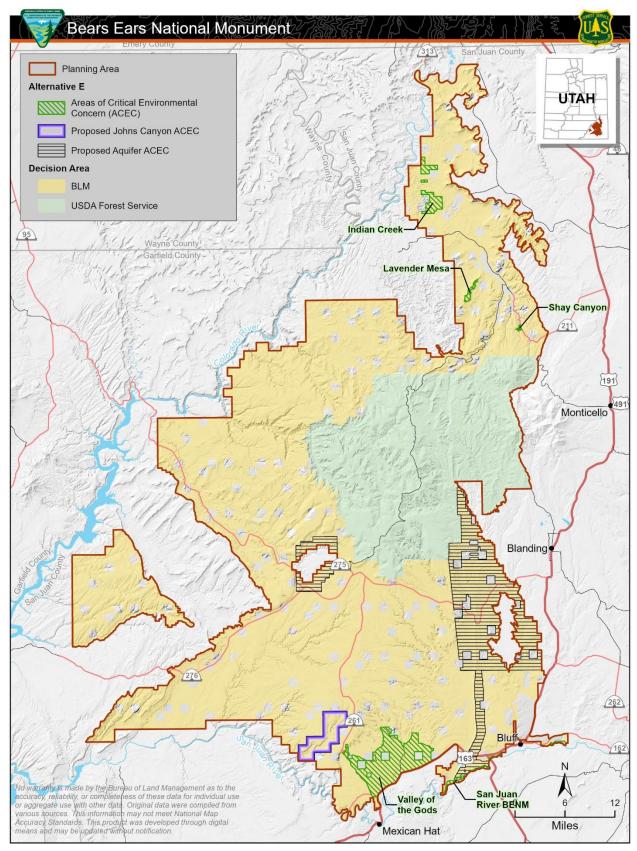


Figure 2-9. Alternative E, Areas of Critical Environmental Concern.

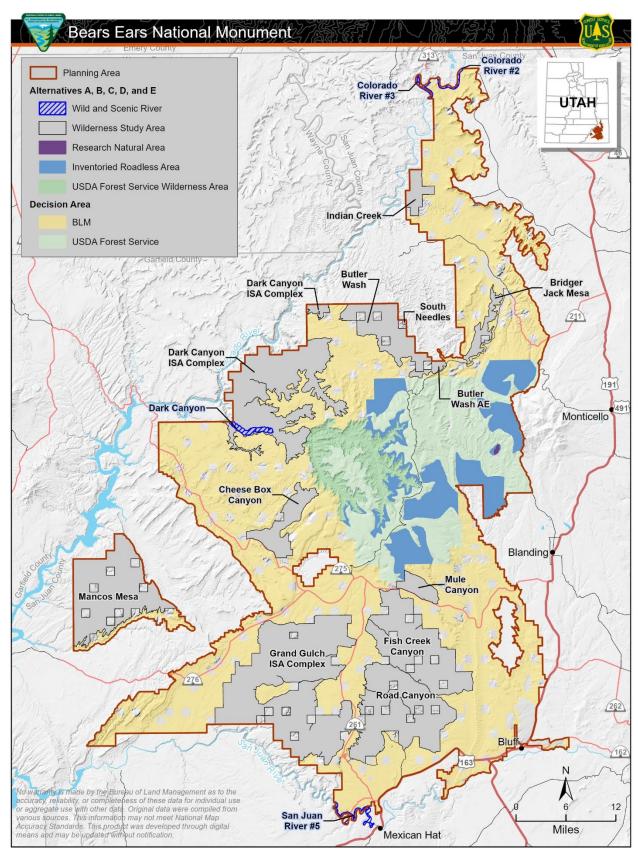


Figure 2-10. Alternatives A–E, special designations.

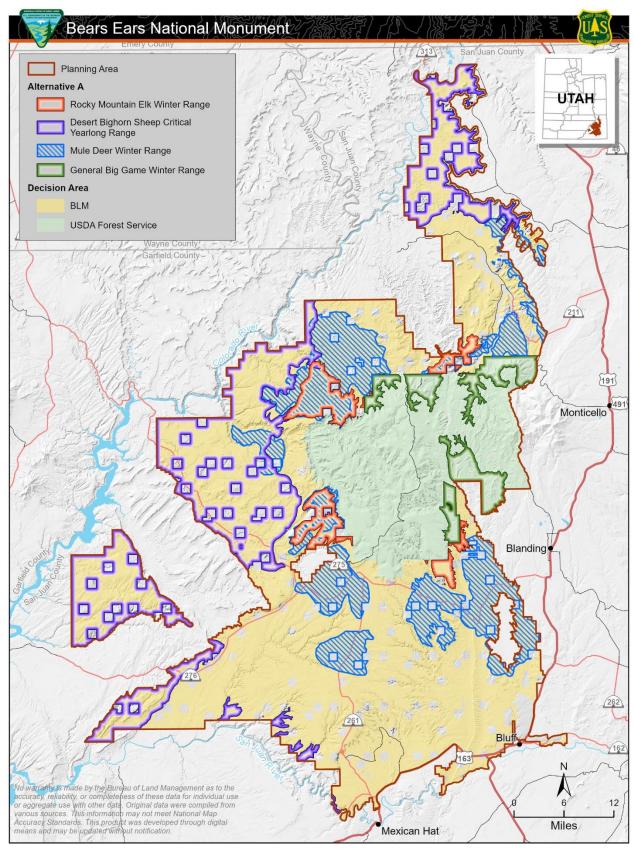


Figure 2-11. Alternative A, wildlife range.

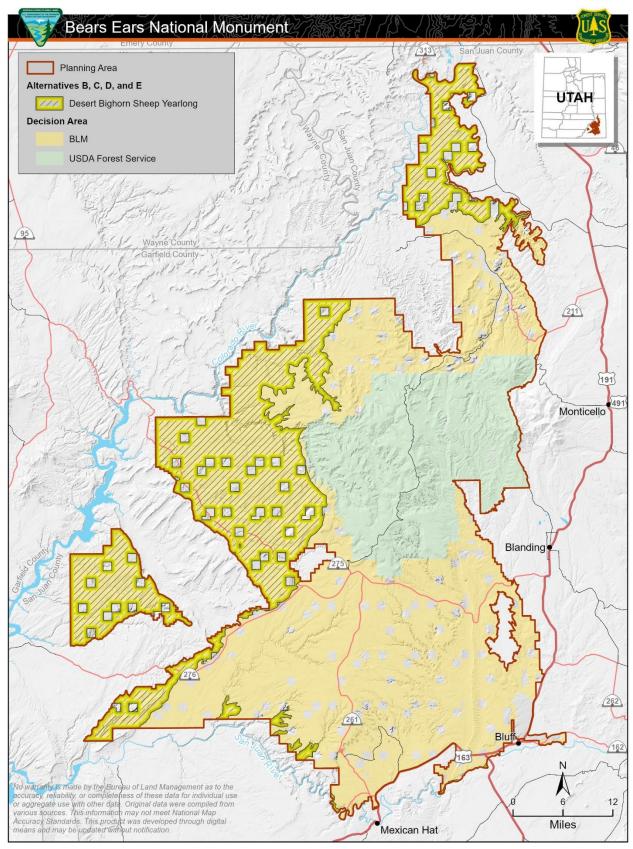


Figure 2-12. Alternatives B-E, bighorn sheep habitat.

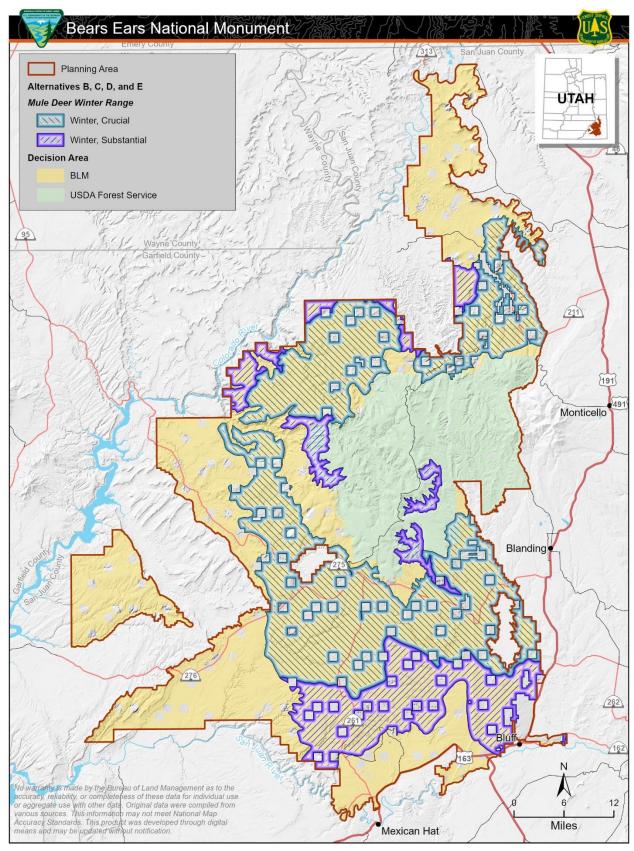


Figure 2-13. Alternatives B-E, mule deer winter range.

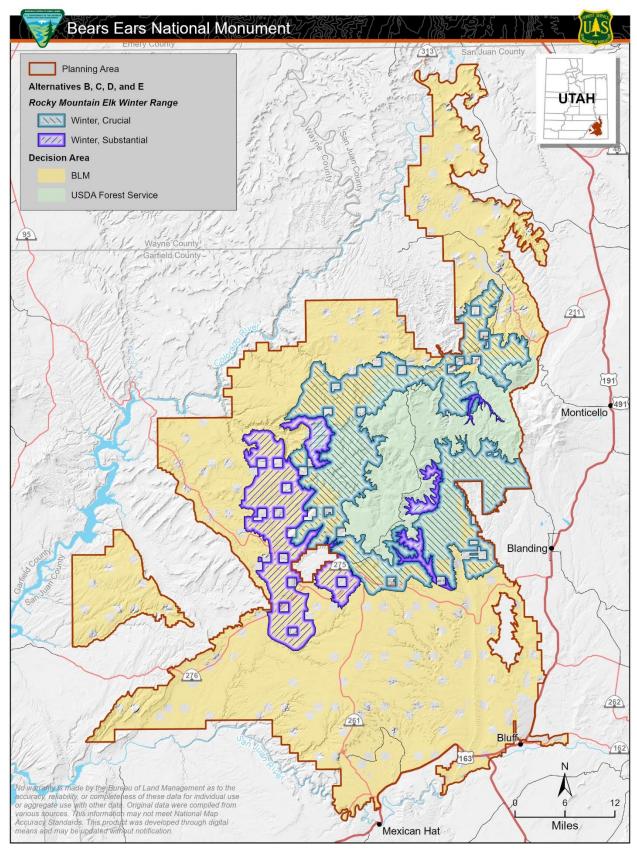


Figure 2-14. Alternatives B-E, Rocky Mountain elk winter range.

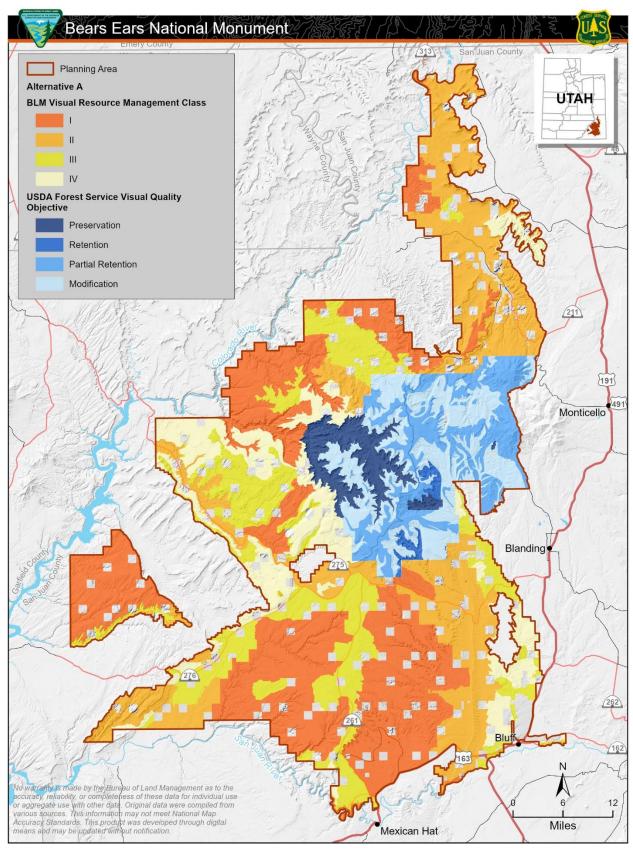


Figure 2-15. Alternative A, Visual Resource Management classes and scenic integrity objectives.

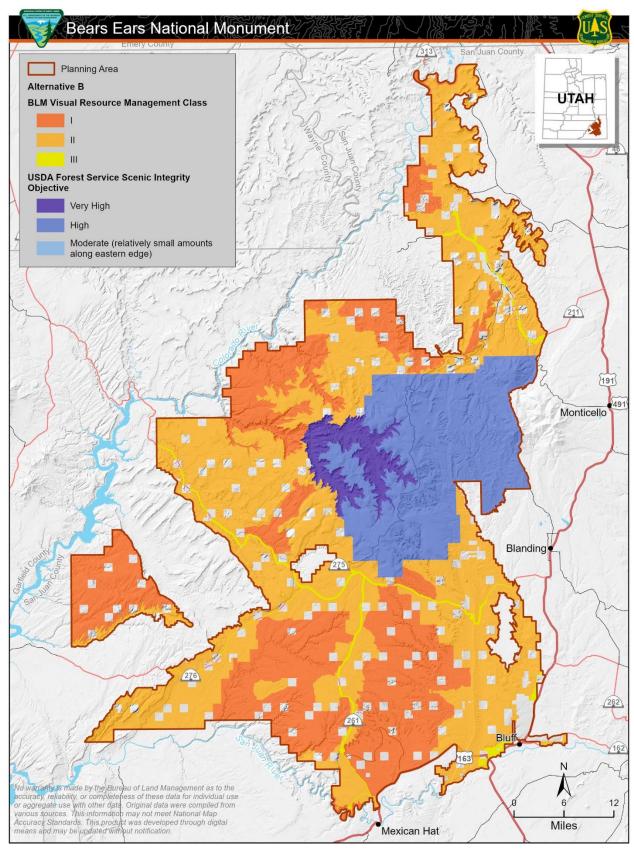


Figure 2-16. Alternative B, Visual Resource Management classes and scenic integrity objectives.

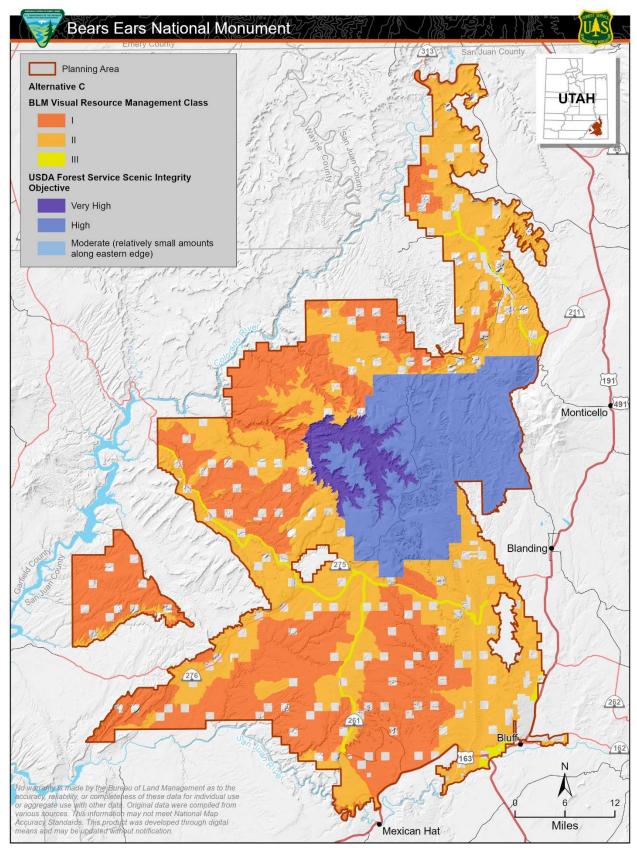


Figure 2-17. Alternative C, Visual Resource Management classes and scenic integrity objectives.

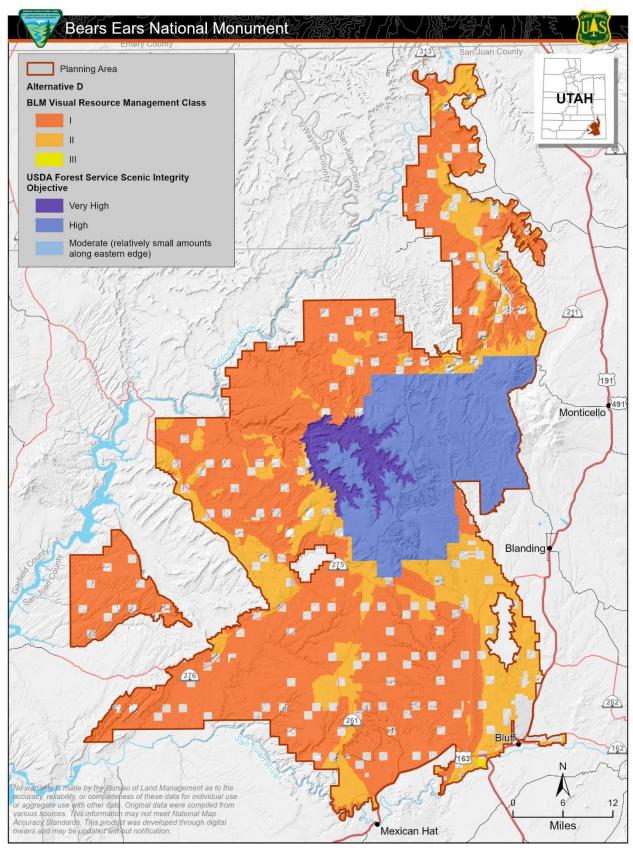


Figure 2-18. Alternative D, Visual Resource Management classes and scenic integrity objectives.

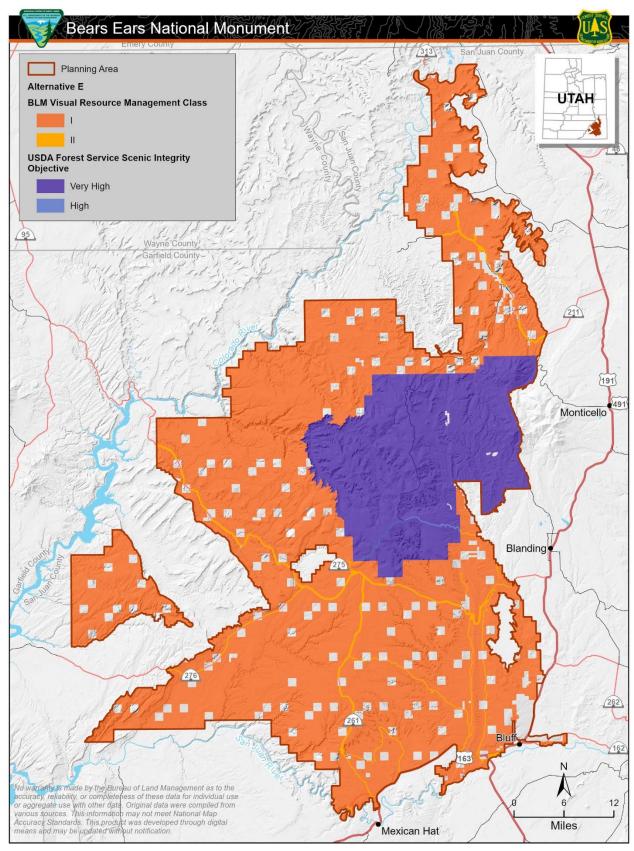


Figure 2-19. Alternative E, Visual Resource Management classes and scenic integrity objectives.

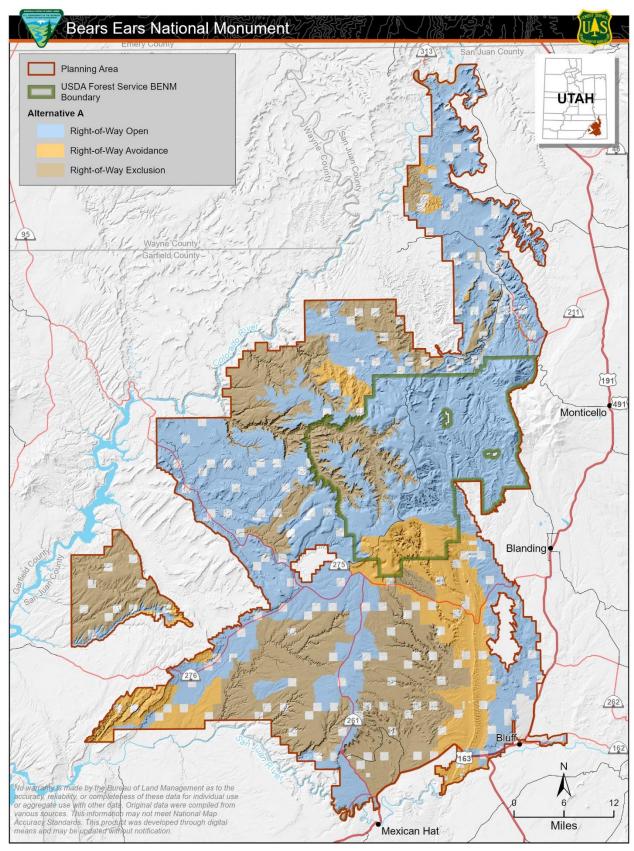


Figure 2-20. Alternative A, rights-of-way and authorizations.

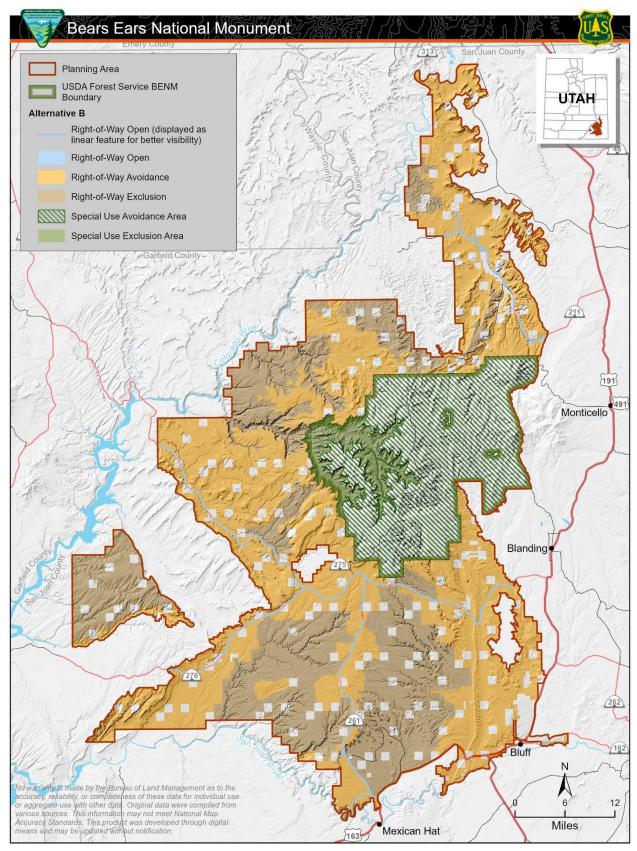


Figure 2-21. Alternative B, rights-of-way and authorizations.

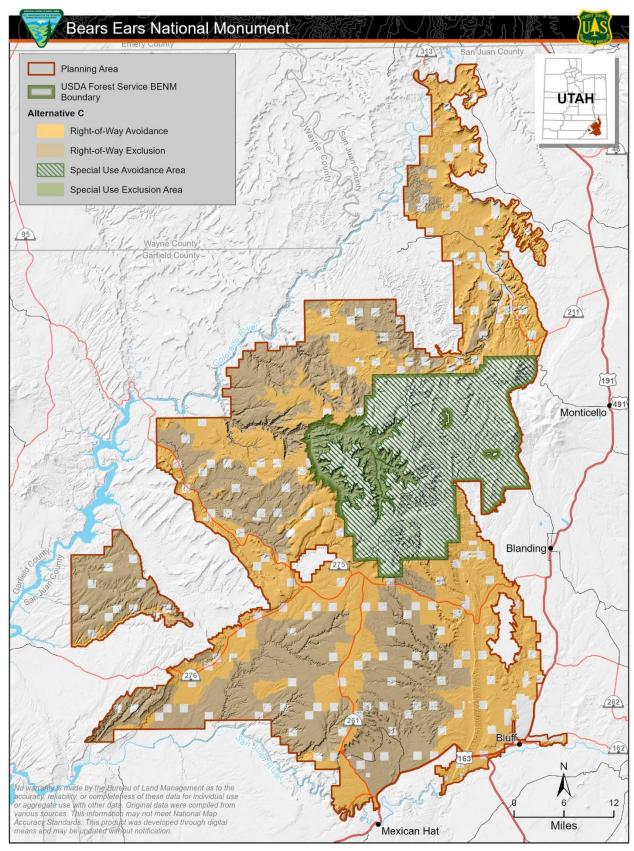


Figure 2-22. Alternative C, rights-of-way and authorizations.

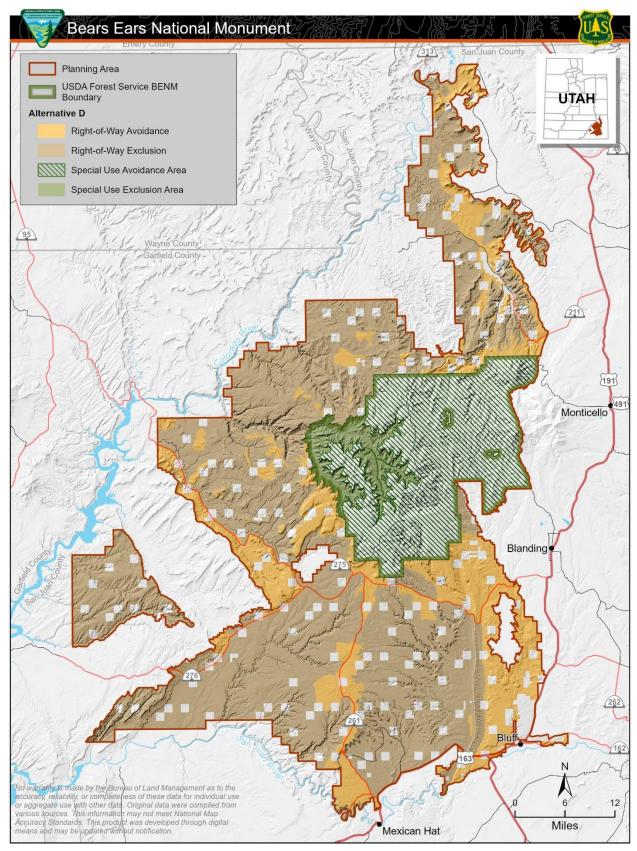


Figure 2-23. Alternative D, rights-of-way and authorizations.

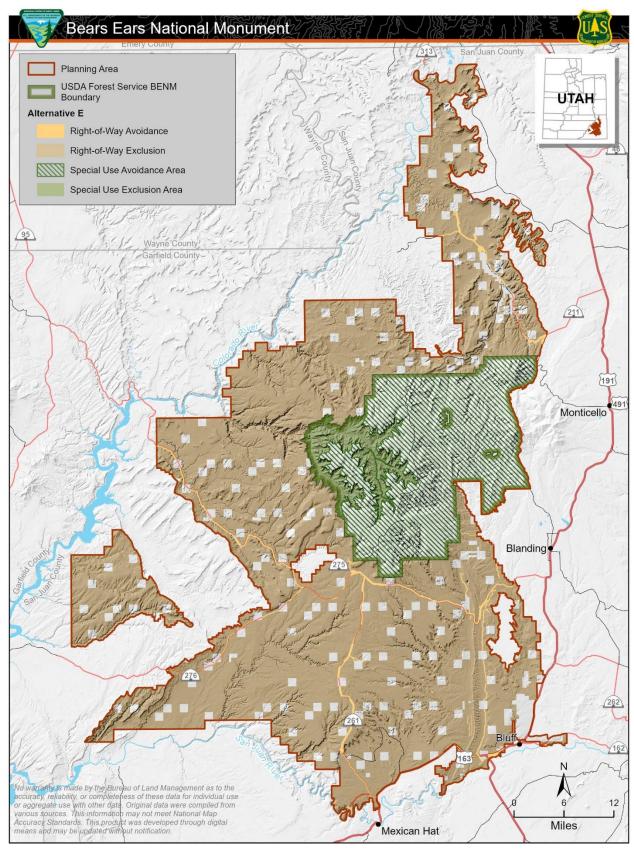


Figure 2-24. Alternative E, rights-of-way and authorizations.

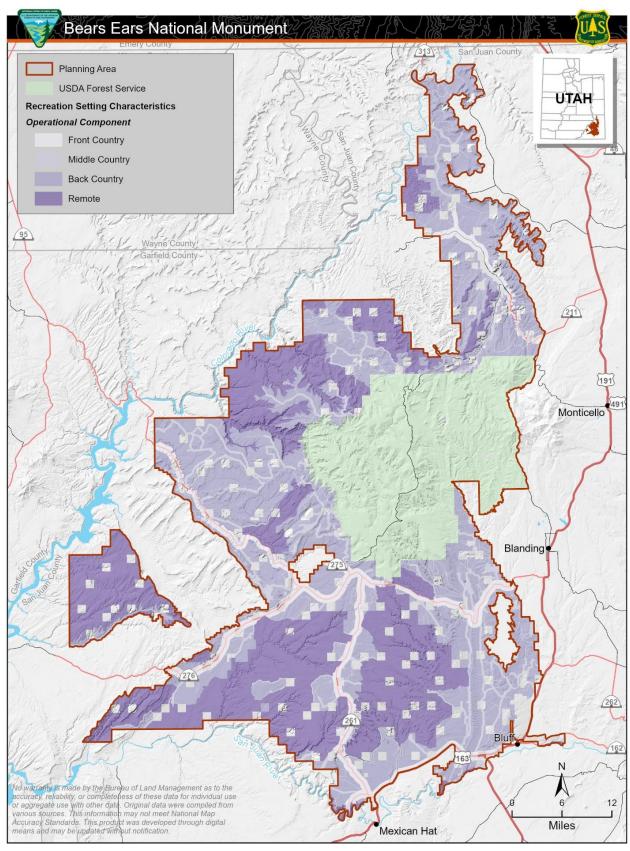


Figure 2-25. Recreation setting characteristics for operational components.

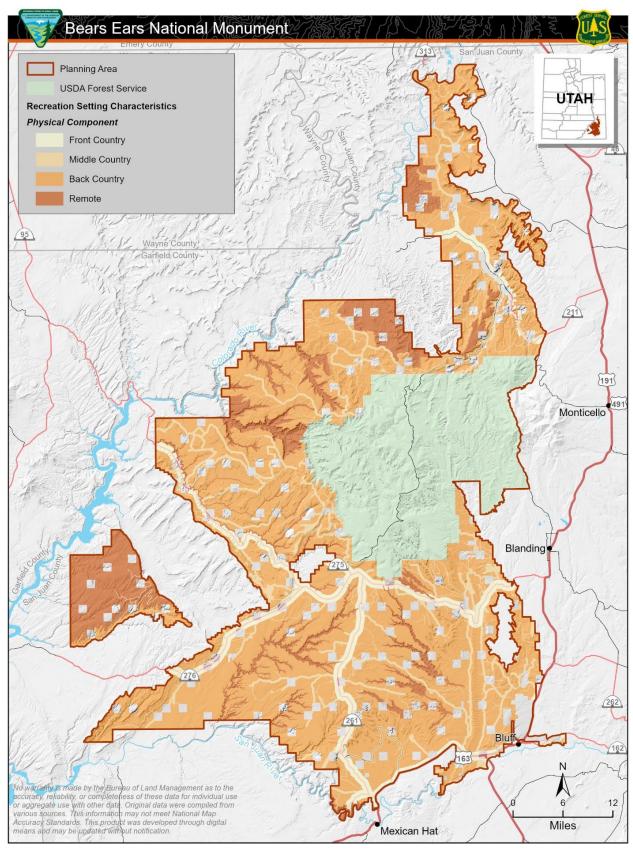


Figure 2-26. Recreation setting characteristics for physical components.

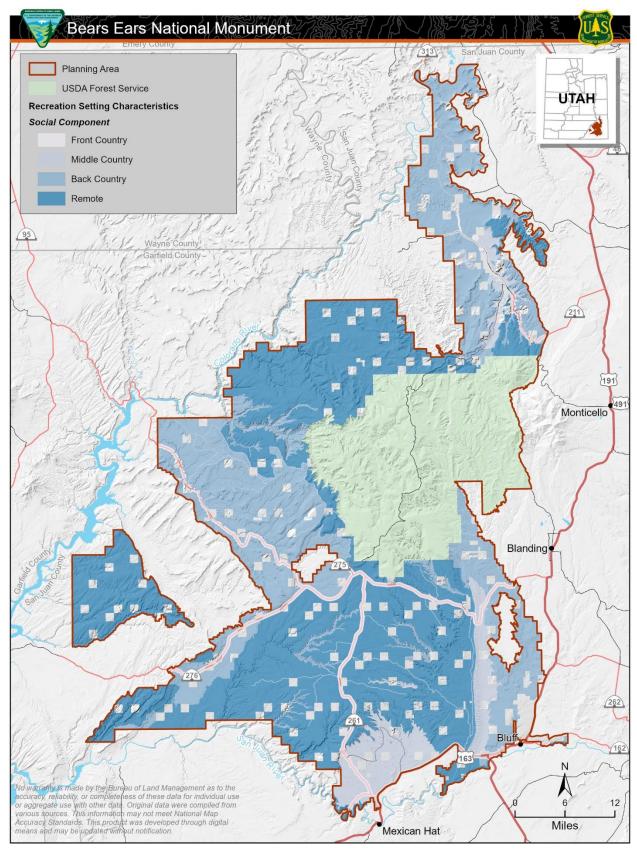


Figure 2-27. Recreation setting characteristics for social components.

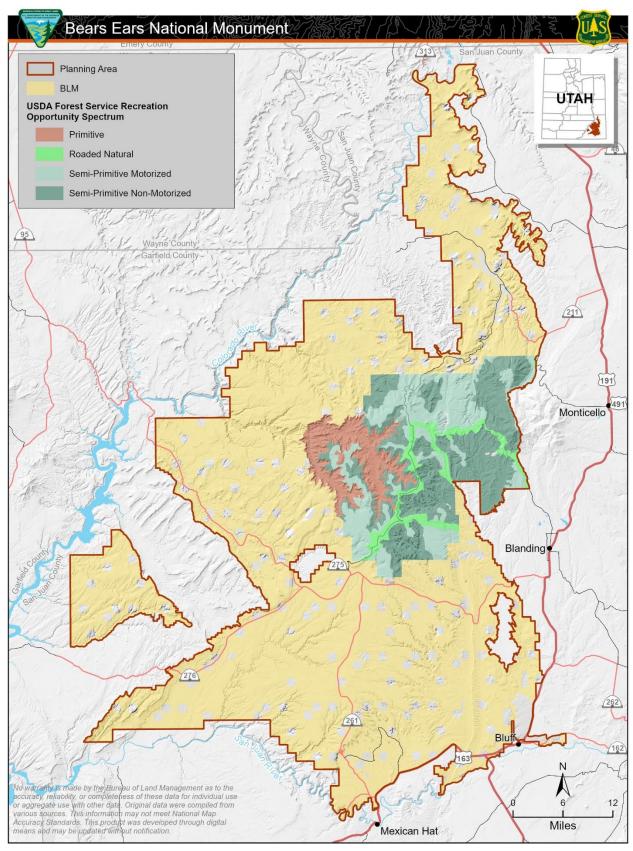


Figure 2-28. Recreation Opportunity Spectrum.

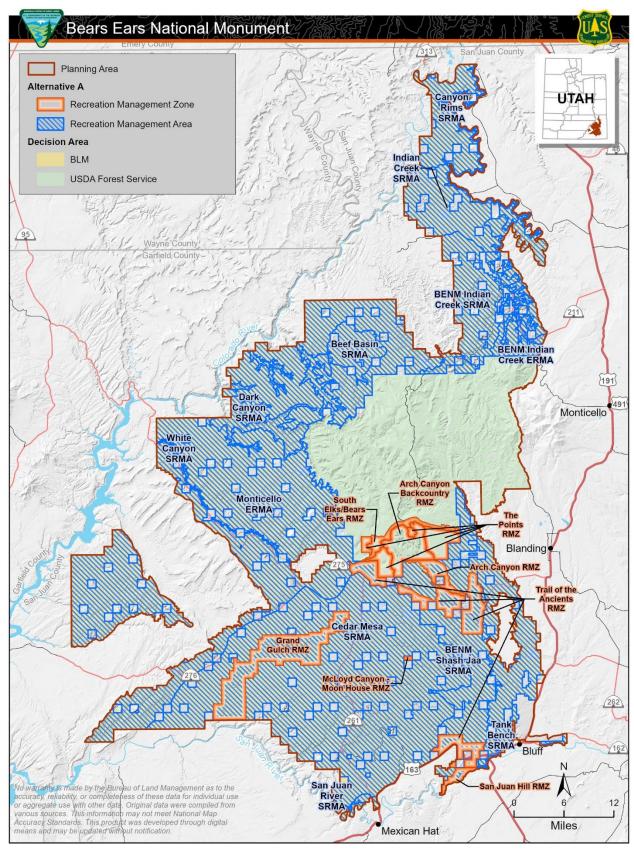


Figure 2-29. Alternative A, recreation management zones and recreation management areas.

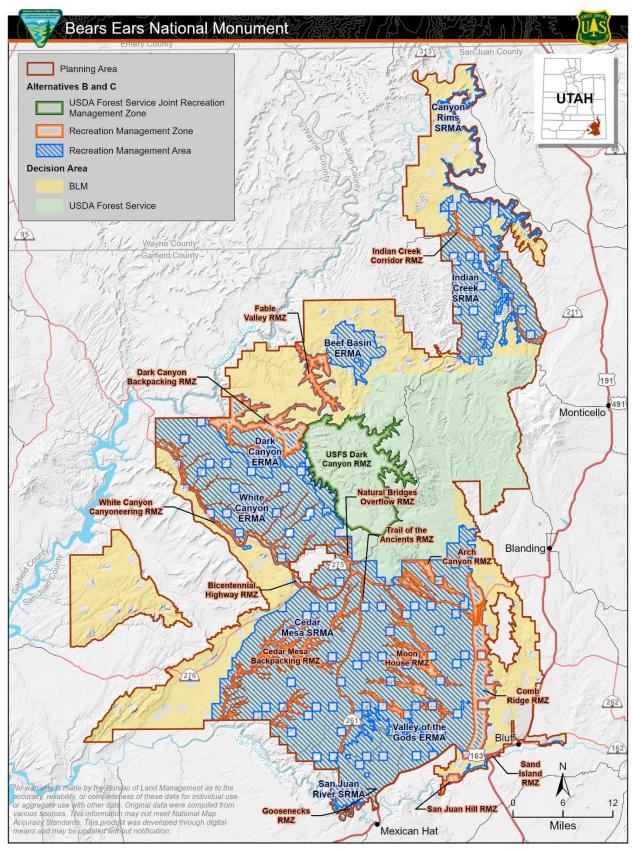


Figure 2-30. Alternatives B and C, recreation management zones and recreation management areas.

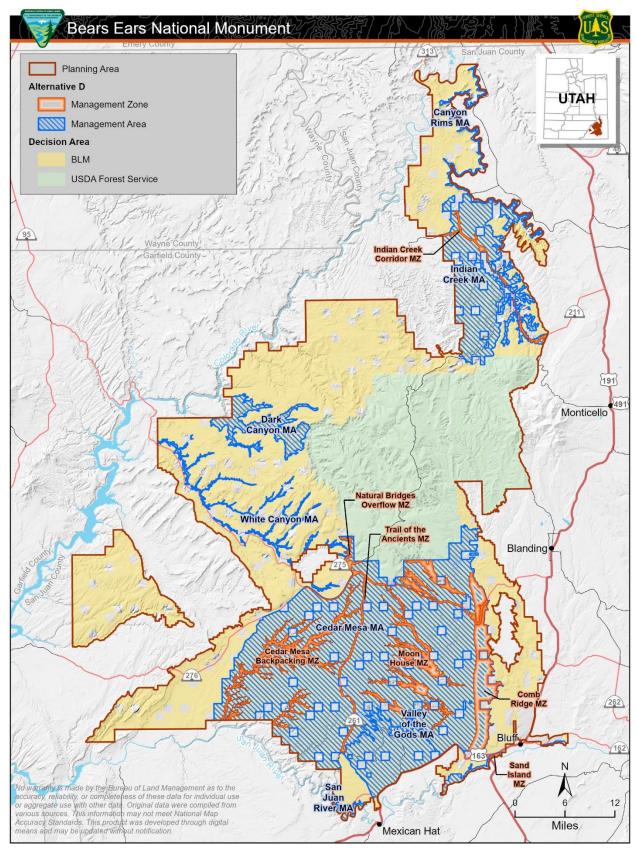


Figure 2-31. Alternative D, management zones and management areas.

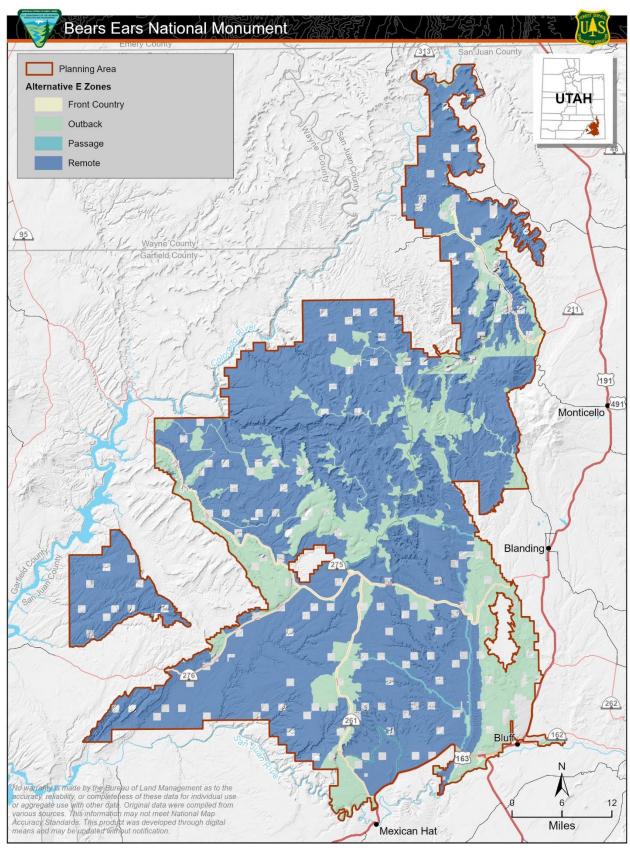


Figure 2-32. Alternative E, zones.

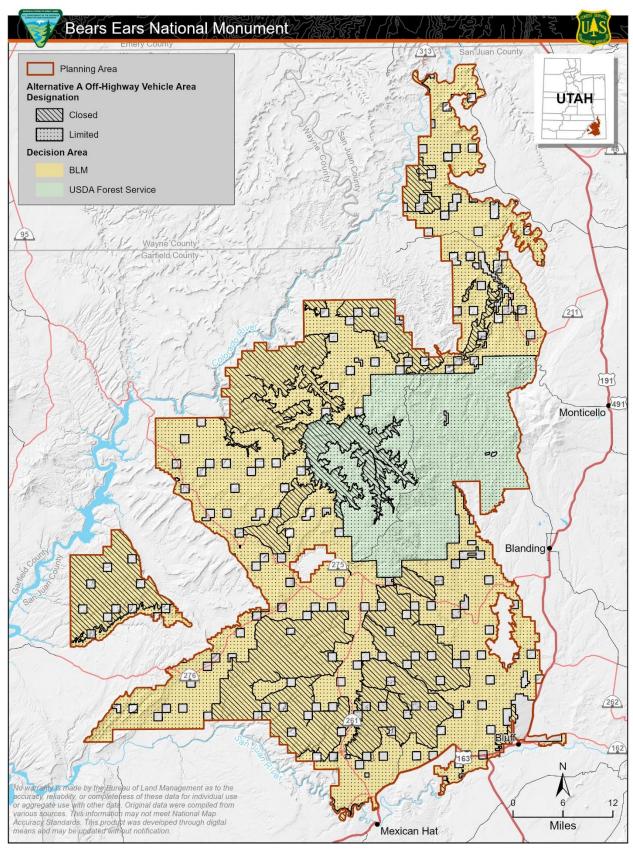


Figure 2-33. Alternative A, off-highway vehicle area designation.

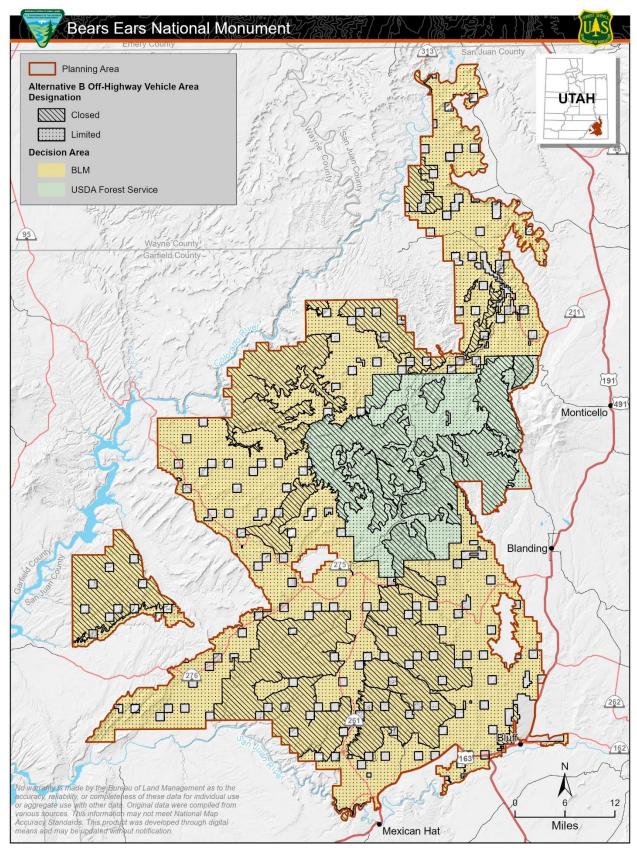


Figure 2-34. Alternative B, off-highway vehicle area designation.

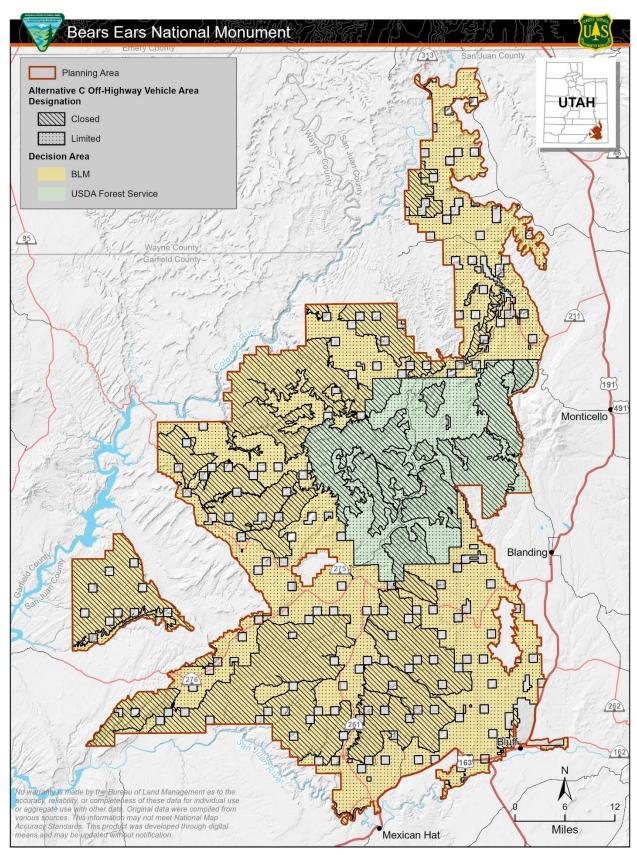


Figure 2-35. Alternative C, off-highway vehicle area designation.

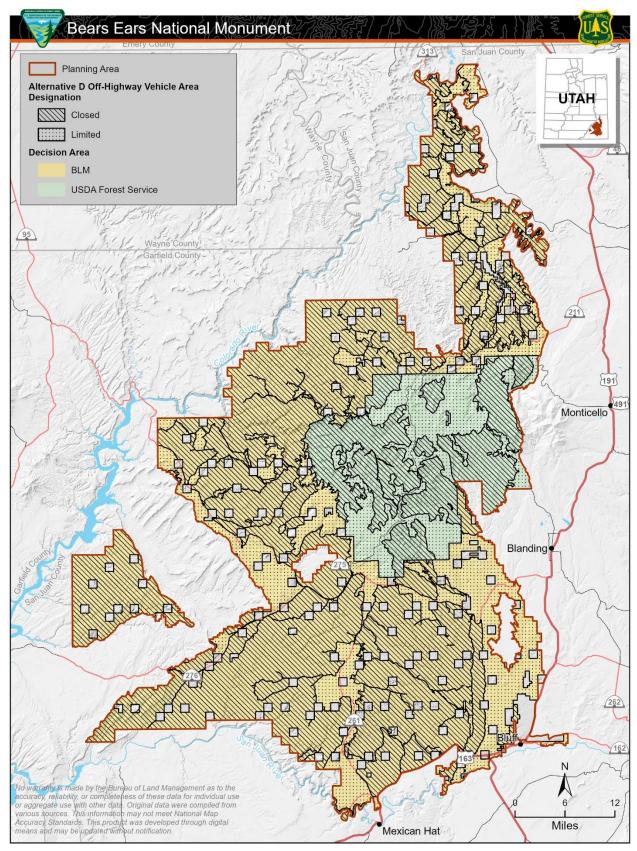


Figure 2-36. Alternative D, off-highway vehicle area designation.

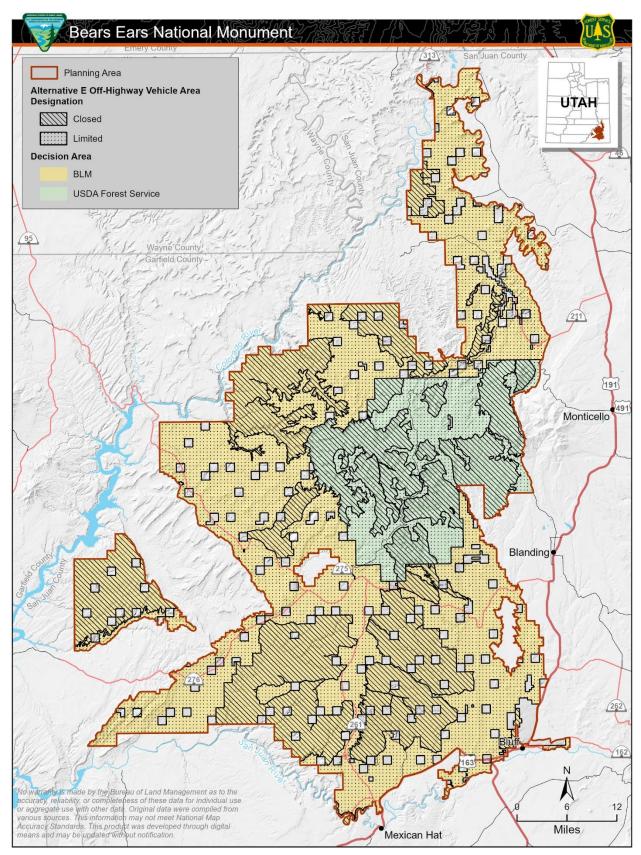


Figure 2-37. Alternative E, off-highway vehicle area designation.

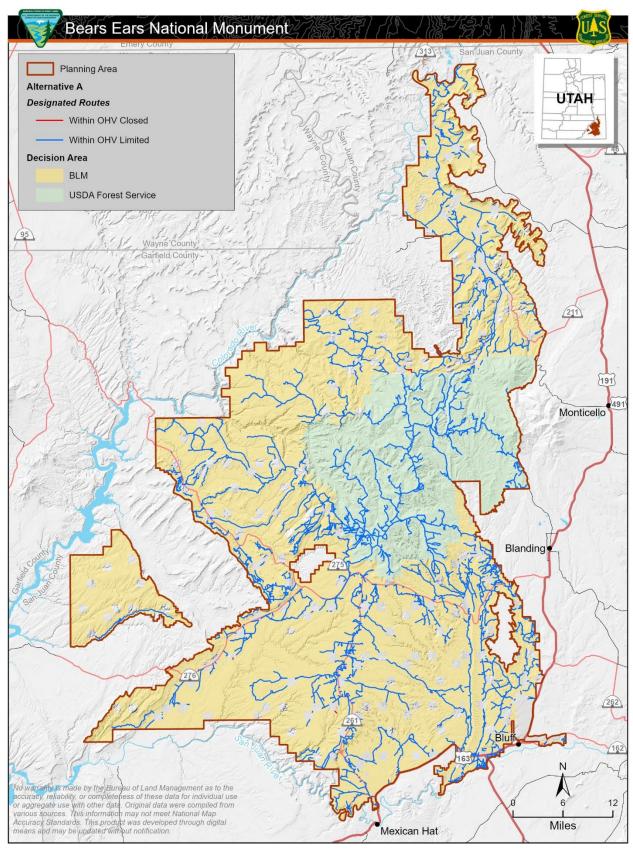


Figure 2-38. Alternative A, routes within off-highway vehicle area designation.

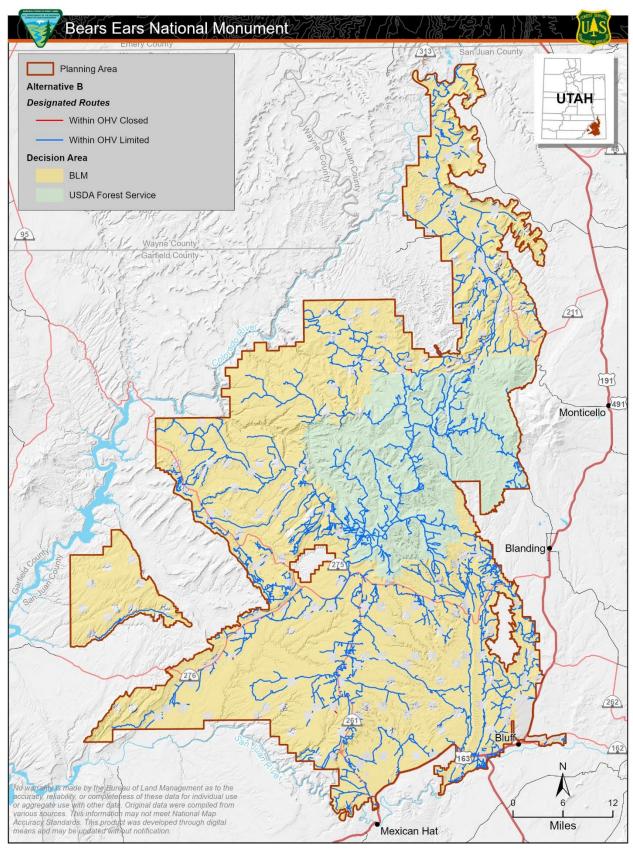


Figure 2-39. Alternative B, routes within off-highway vehicle area designation.

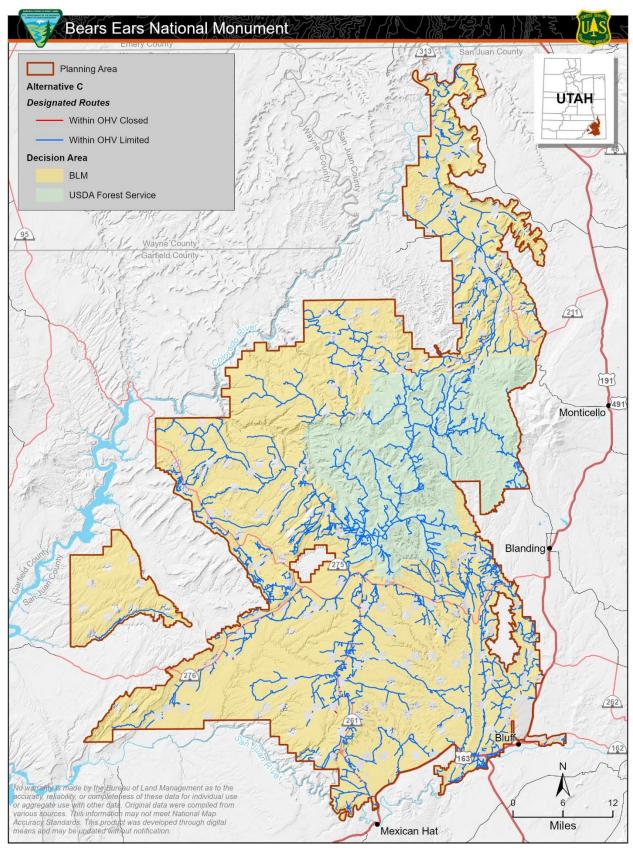


Figure 2-40. Alternative C, routes within off-highway vehicle area designation.

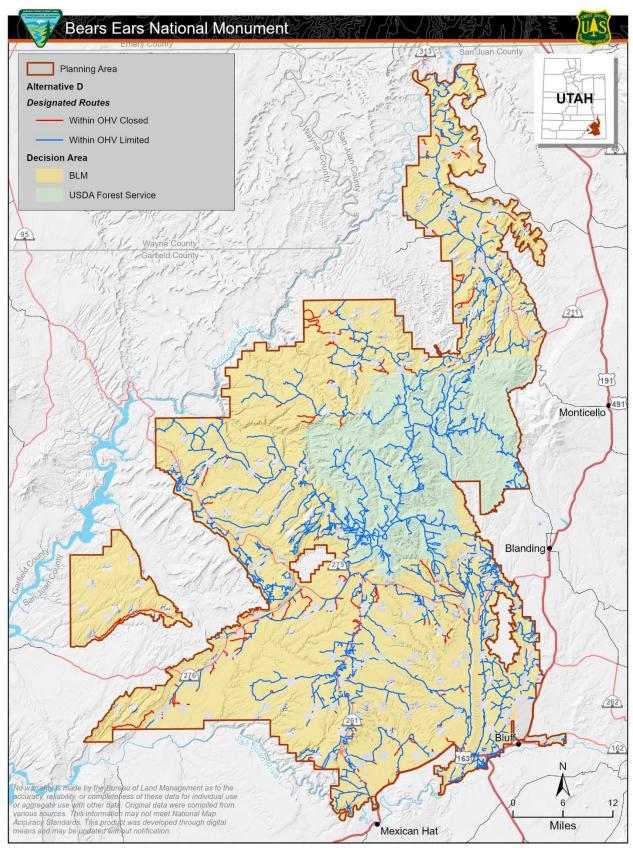


Figure 2-41. Alternative D, routes within off-highway vehicle area designation.

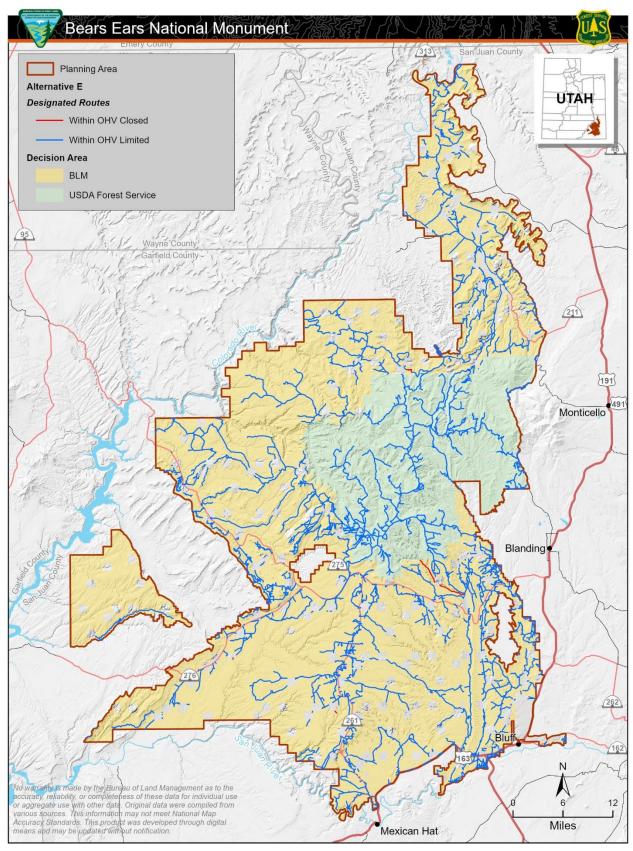


Figure 2-42. Alternative E, routes within off-highway vehicle area designation.

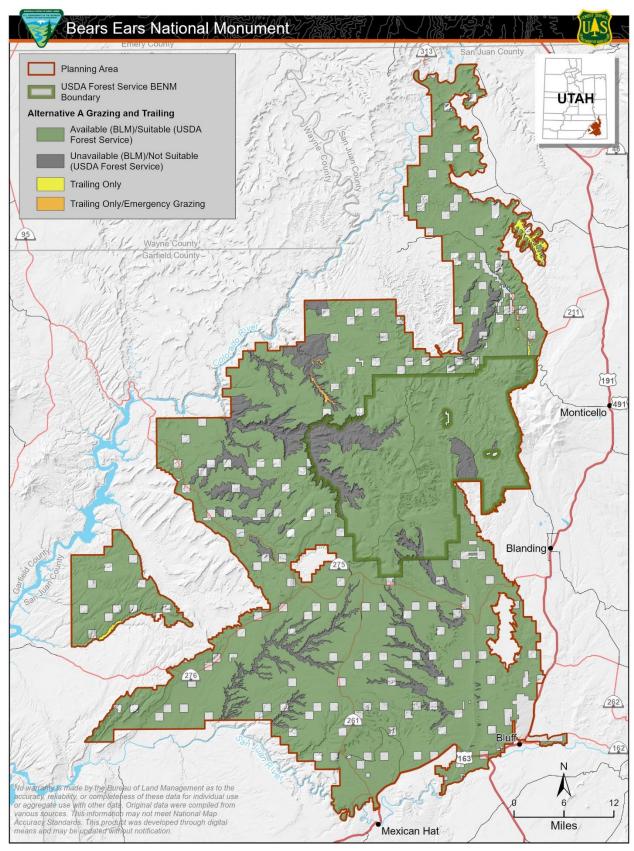


Figure 2-43. Alternative A, grazing and trailing.

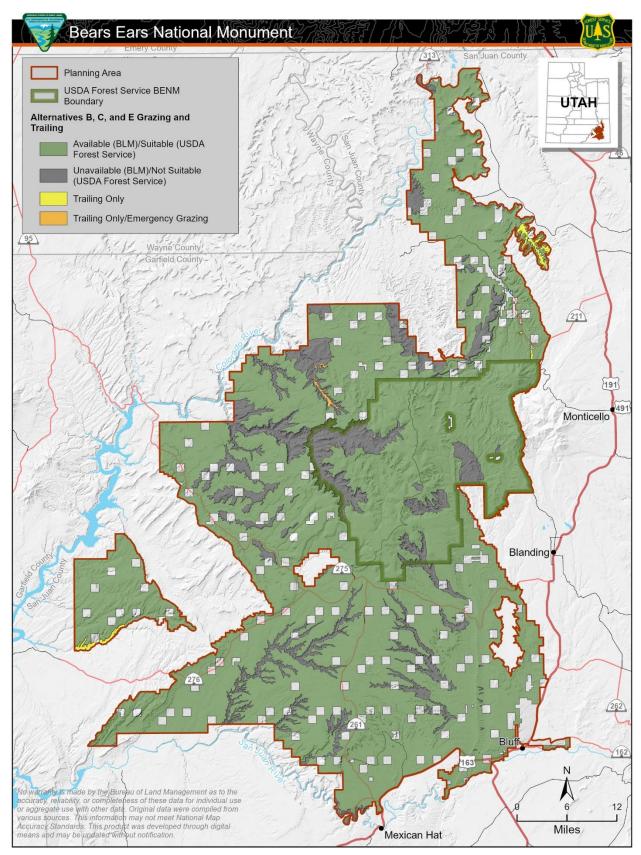


Figure 2-44. Alternatives B, C, and E, grazing and trailing.

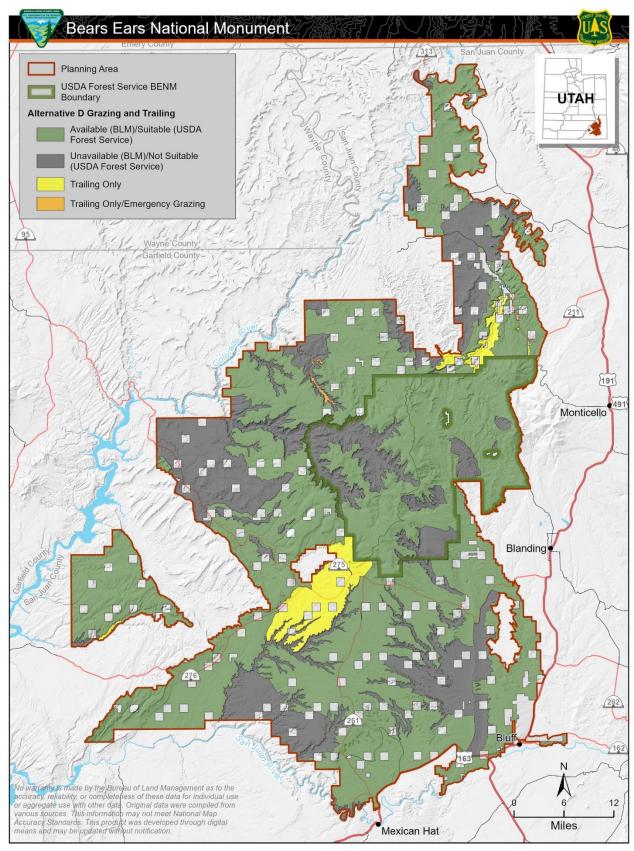


Figure 2-45. Alternative D, grazing and trailing.

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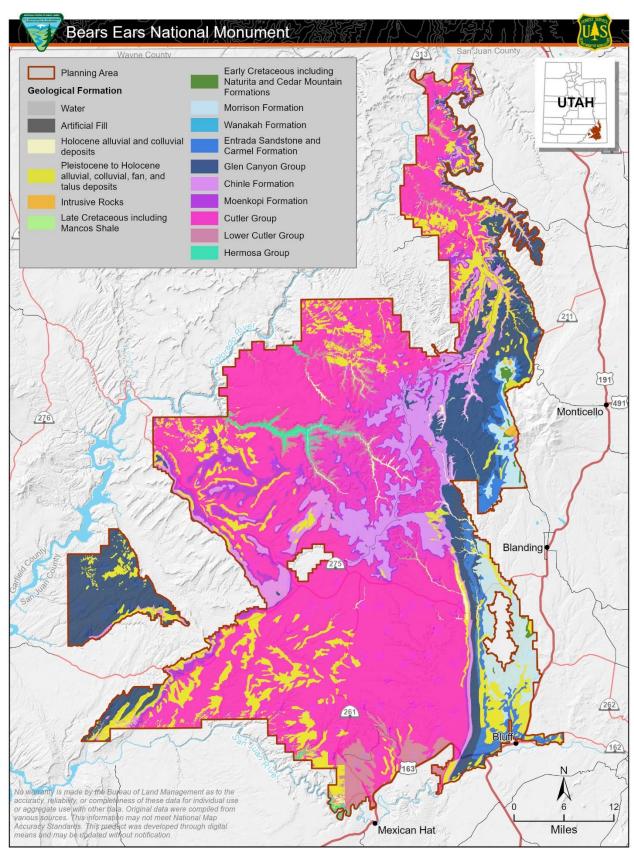


Figure 3-1. Geological units in the Planning Area.

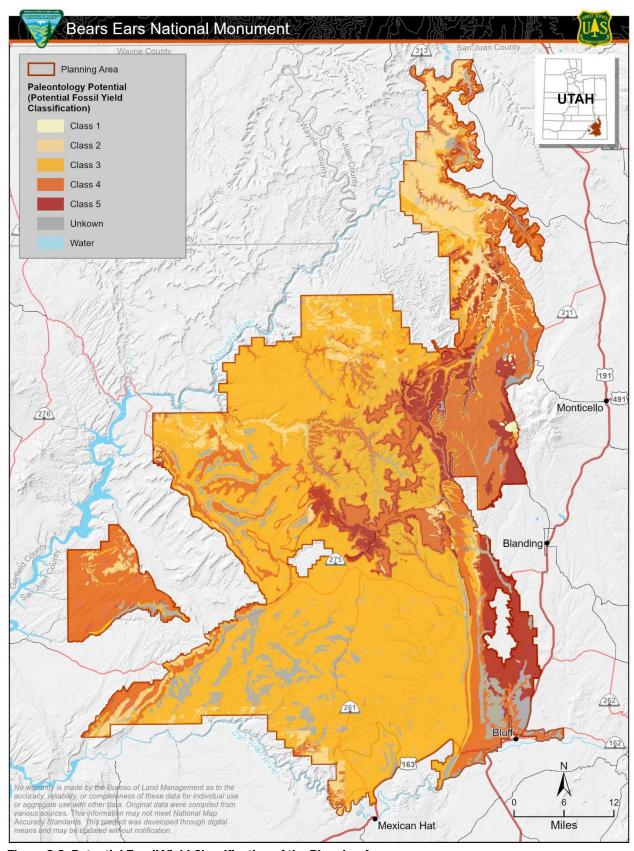


Figure 3-2. Potential Fossil Yield Classification of the Planning Area.

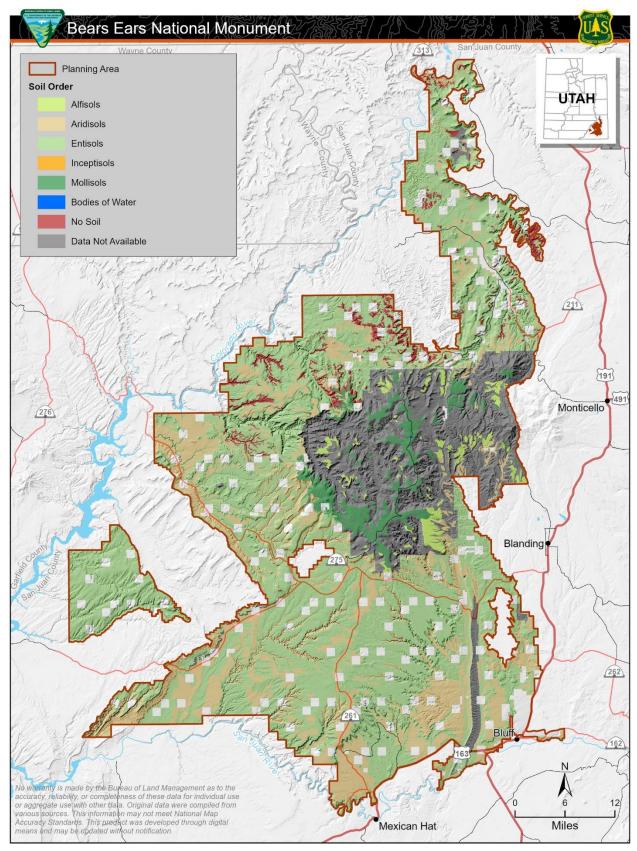


Figure 3-3. Soil order classification within the Planning Area.

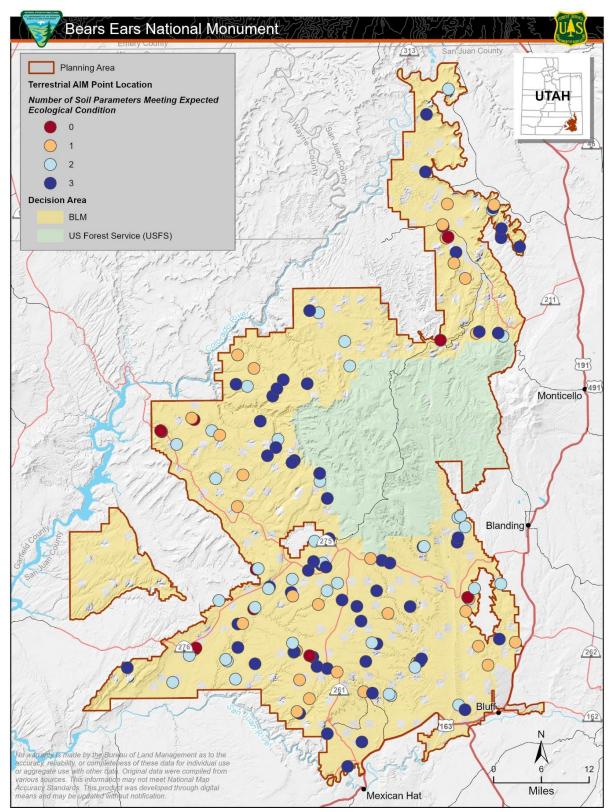


Figure 3-4. Spatial distribution of departures from expected soil conditions generated using inverse distance weighted interpolation of terrestrial AIM points. Parameters were identified as not meeting expected ecological condition if the observation was below the 25th percentile (litter cover and soil stability) or above the 75th percentile (bare soil cover) of terrestrial AIM data for its respective LANDFIRE biophysical setting.

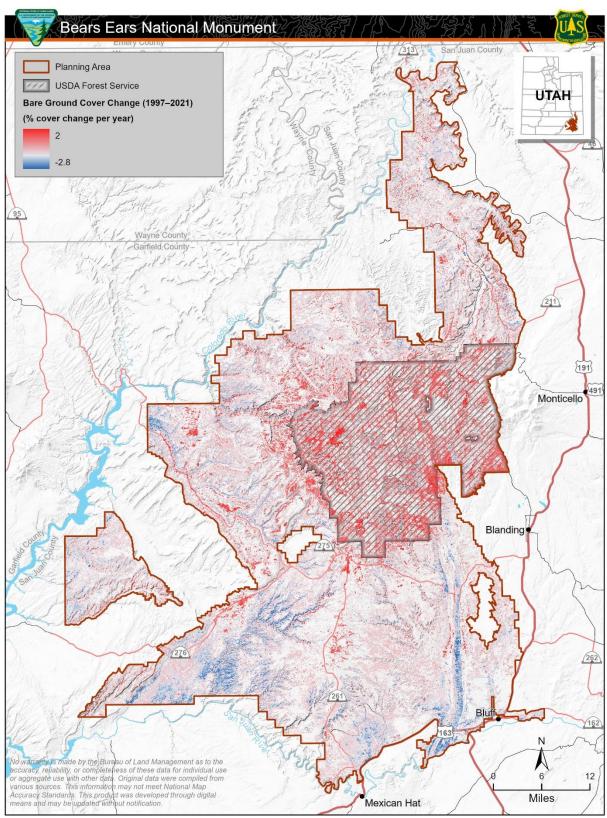


Figure 3-5. Change in BENM bare ground cover from the Rangeland Analysis Platform from 1997 to 2021. Blue and red pixels represent a statistically significant (Mann-Kendall at α = 0.05) decrease and increase, respectively, in bare soil cover whereas white pixels represent a statistically nonsignificant trend.

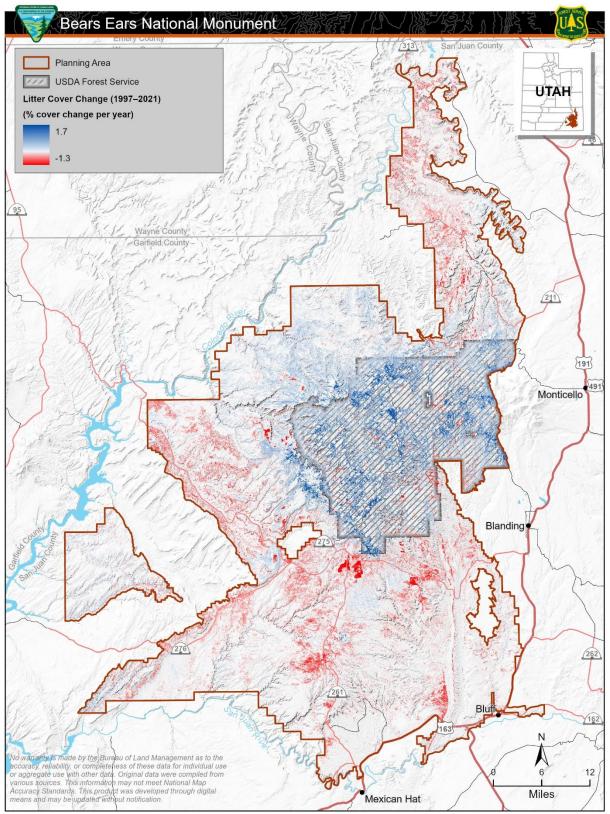


Figure 3-6. Change in BENM litter cover from the Rangeland Analysis Platform from 1997 to 2021. Blue and red pixels represent a statistically significant (Mann-Kendall at α =0.05) increase and decrease, respectively, in litter cover whereas white pixels represent a statistically nonsignificant trend.

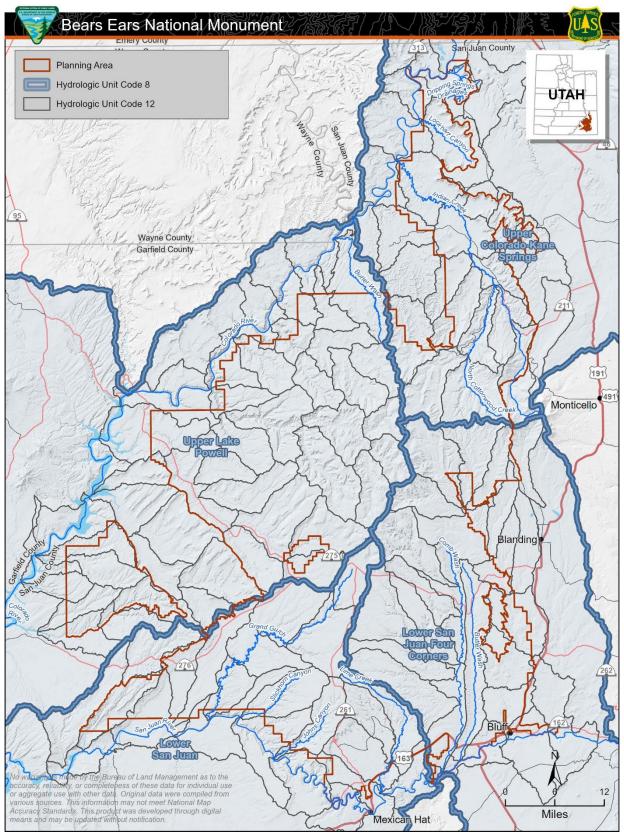


Figure 3-7. Planning Area hydrologic unit code 8 subbasins and hydrologic unit code 12 watershed boundaries.

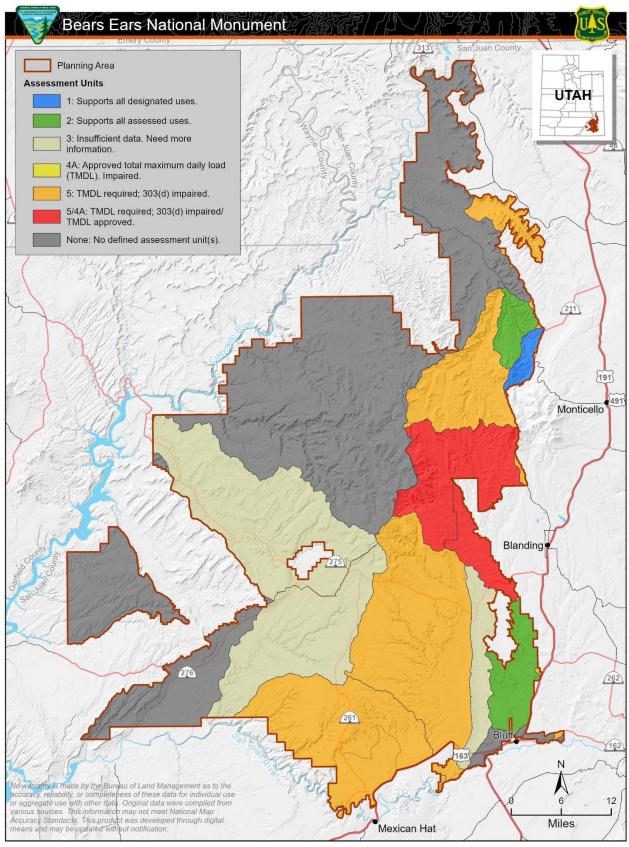


Figure 3-8. BENM Planning Area and Utah Division of Water Quality assessment units.

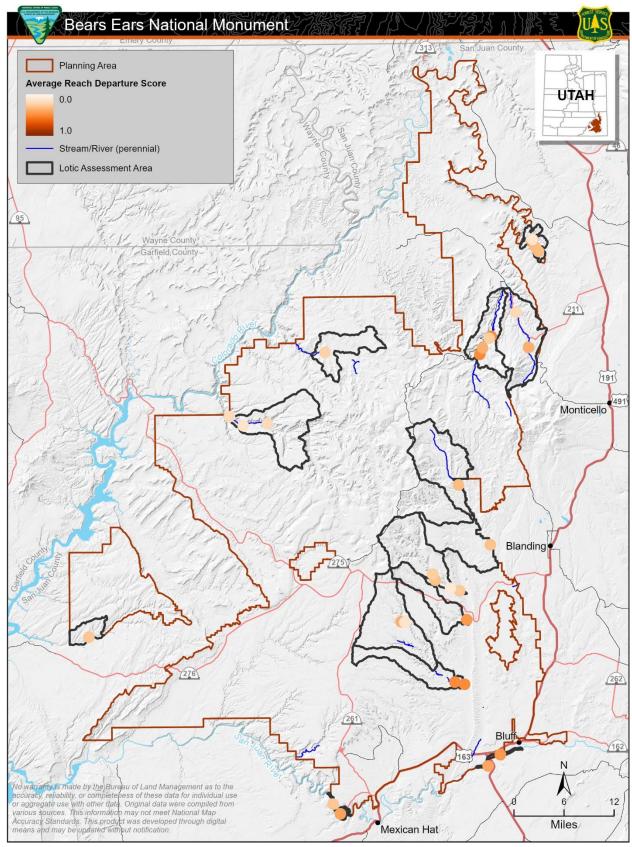


Figure 3-9. BENM site condition scores and hydrologic unit code 12 average condition score.

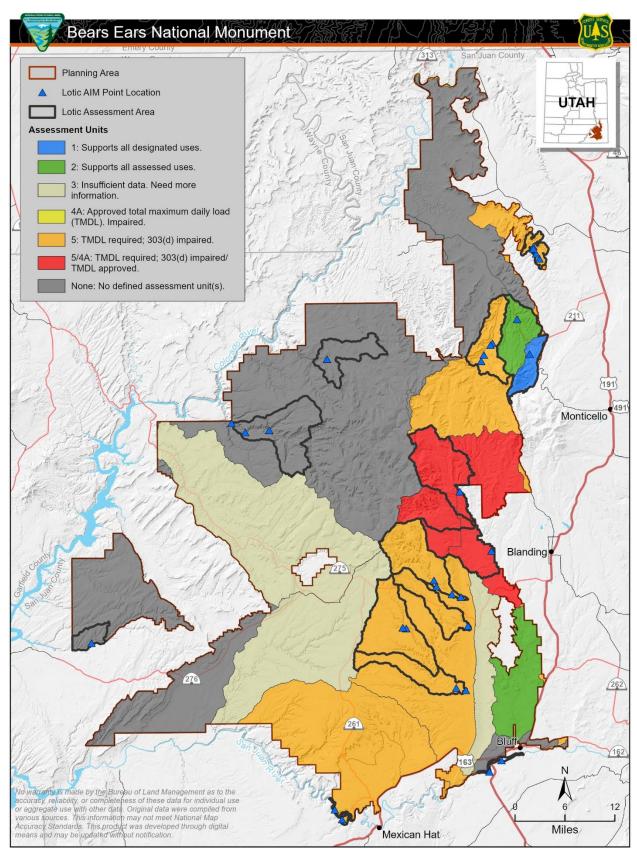


Figure 3-10. Assessment units, lotic assessment areas, and lotic AIM point locations.

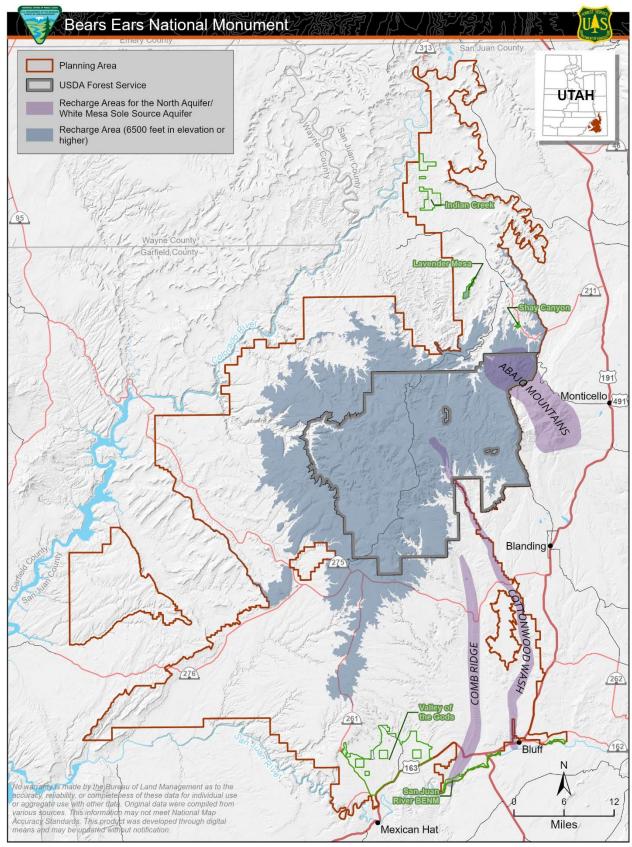


Figure 3-11. Areas of Critical Environmental Concern and Recharge Areas.

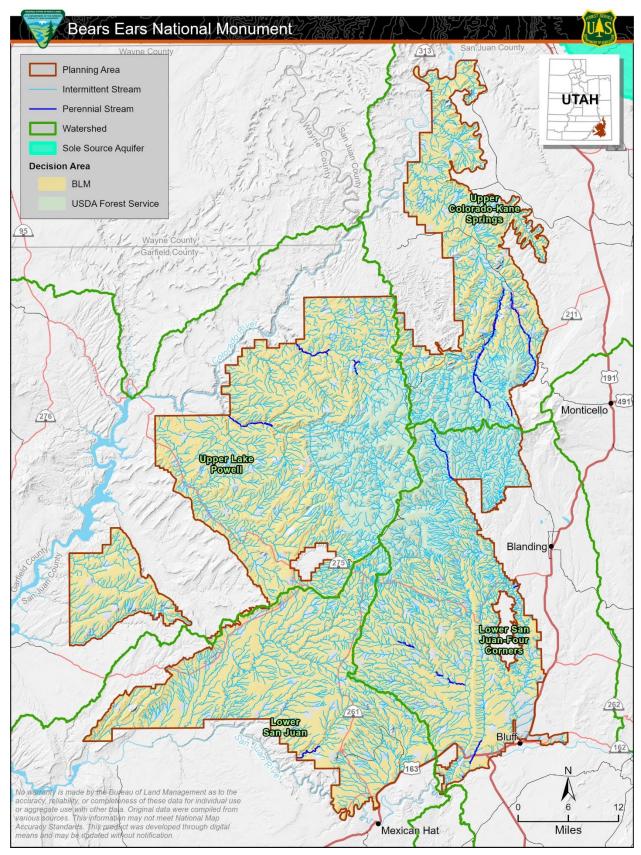


Figure 3-12. National Hydrography Dataset data for the Planning Area.

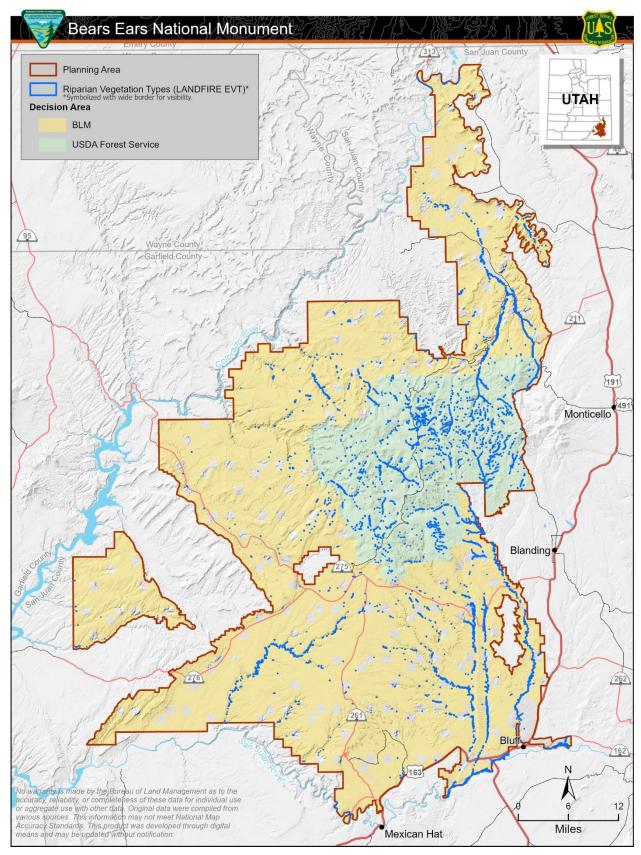


Figure 3-13. Riparian LANDFIRE vegetation types within the Planning Area.

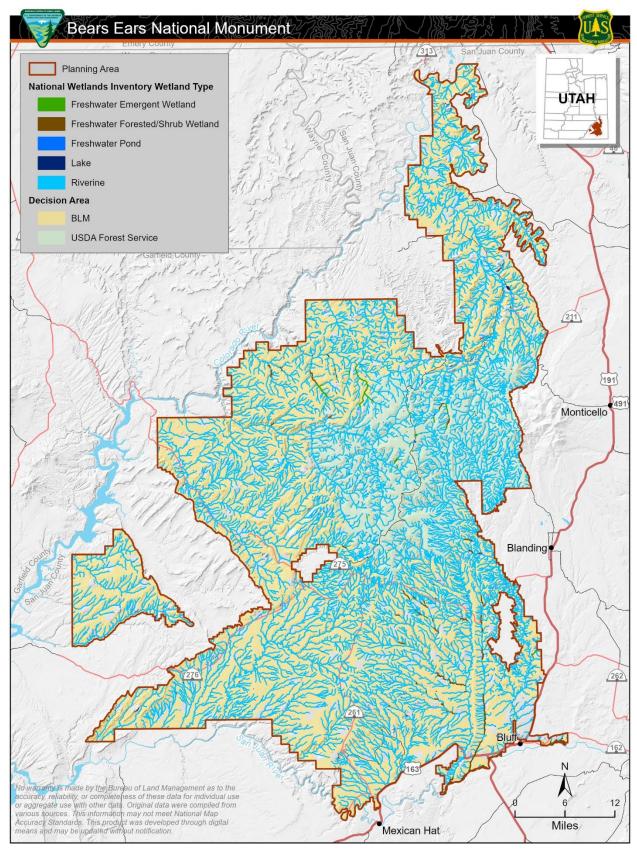


Figure 3-14. National Wetlands Inventory wetland types within the Planning Area.

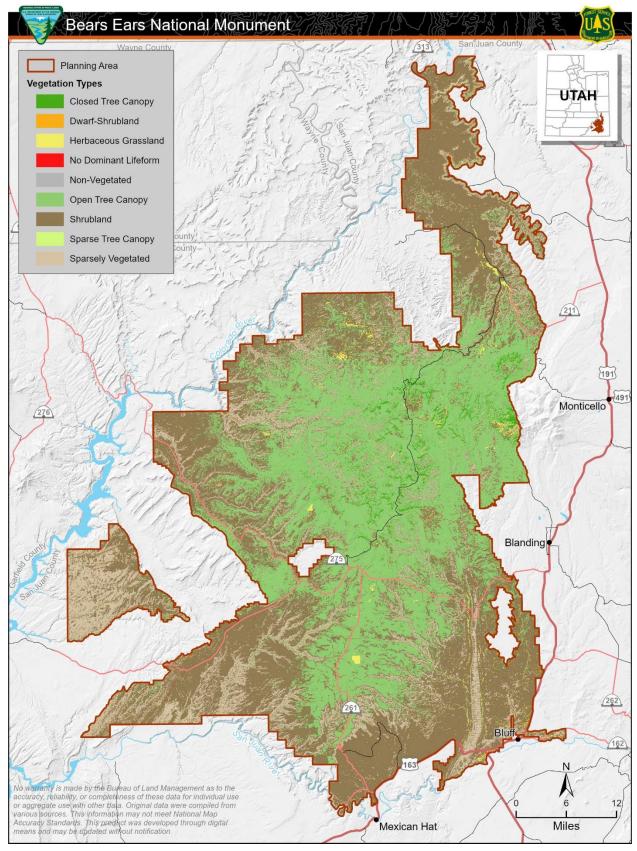


Figure 3-15. Vegetation types in the Planning Area.

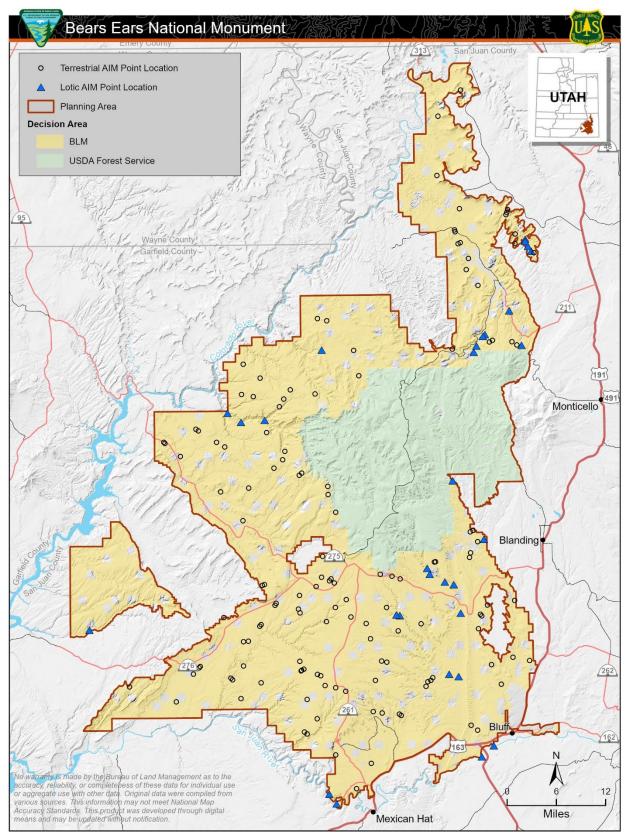
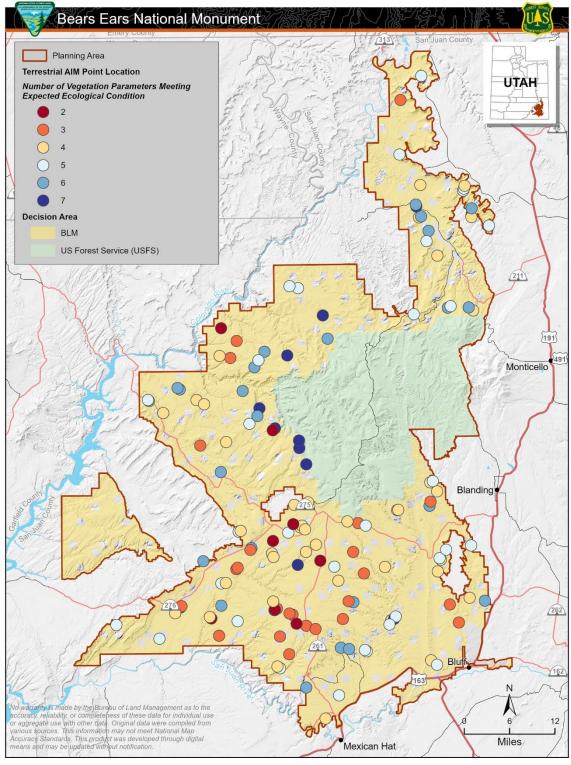


Figure 3-16. Terrestrial and lotic AIM data points within BENM administrative boundaries.



Source: BLM and USDA Forest Service GIS (2022).

Figure 3-17. Spatial distribution of departures from expected vegetation conditions generated using inverse distance weighted interpolation of terrestrial AIM data points. Parameters were identified as not meeting expected ecological condition if the observed value was below the 25th percentile (perennial, total foliar, and shrub cover) or above the 75th percentile (annual grass, canopy gap, and tree cover) of terrestrial AIM data for its respective LANDFIRE biophysical setting.

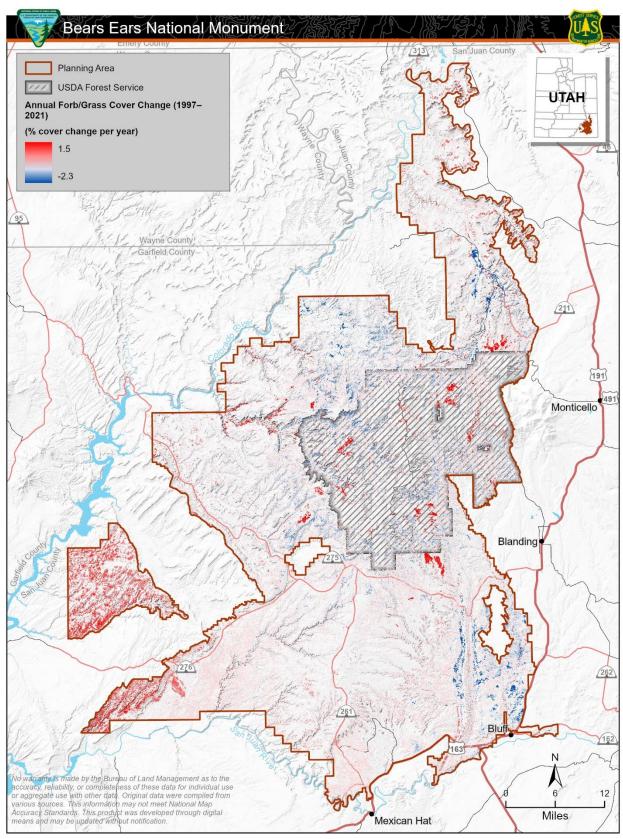


Figure 3-18. AIM data for annual forb/grass cover changes from 1997 to 2021.

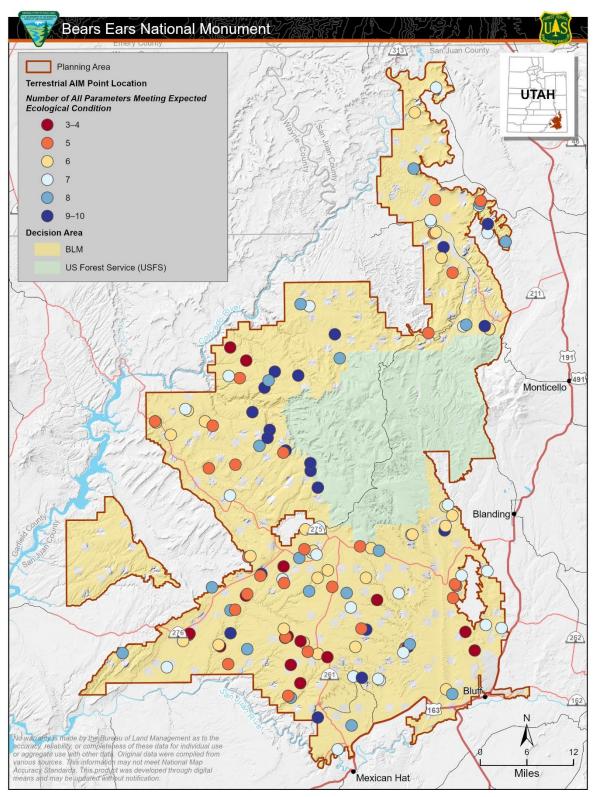


Figure 3-19. Spatial distribution of departures from expected vegetation and soil conditions generated using inverse distance weighted interpolation of terrestrial AIM data points. Parameters were identified as not meeting expected ecological condition if the observed value was below the 25th percentile (perennial, total foliar, and shrub cover) or above the 75th percentile (annual grass, canopy gap, and tree cover) of terrestrial AIM data for its respective LANDFIRE biophysical setting.

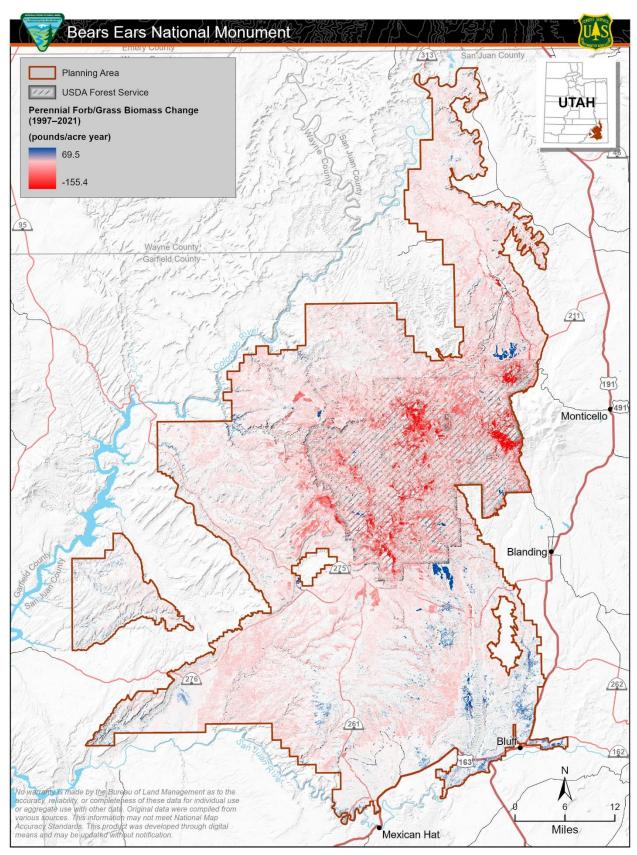


Figure 3-20. AIM data for perennial forb/grass biomass changes from 1997 to 2021.

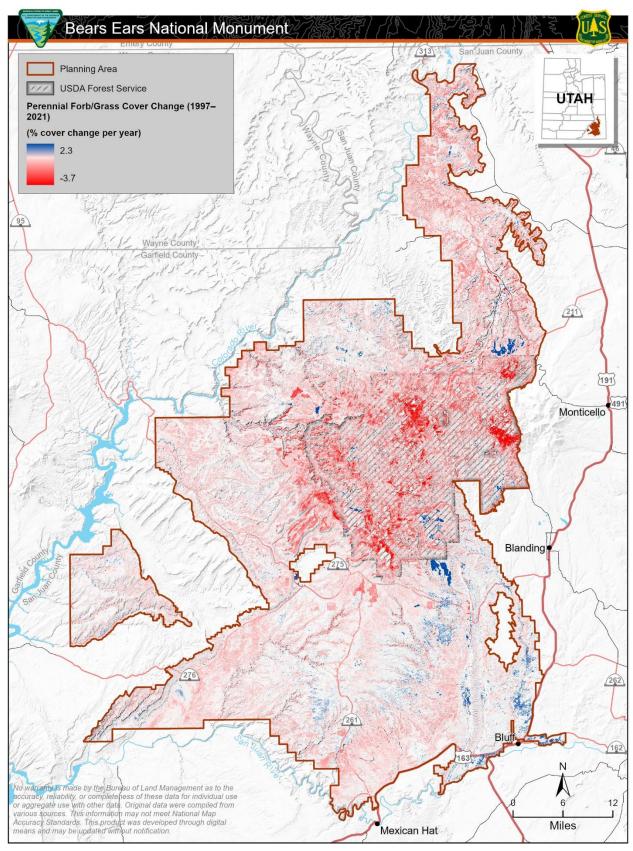


Figure 3-21. AIM data for perennial forb/grass cover changes from 1997 to 2021.

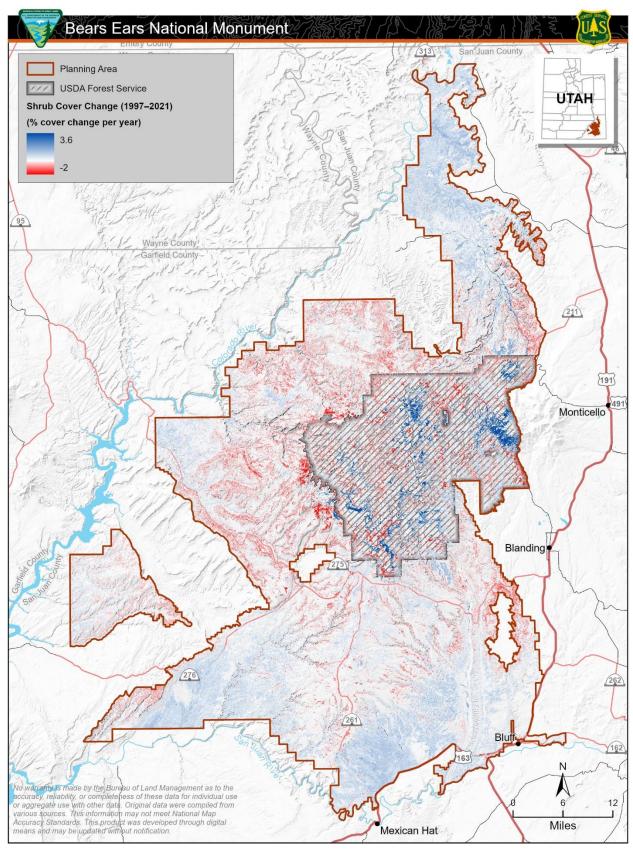


Figure 3-22. AIM data for shrub cover changes from 1997 to 2021.

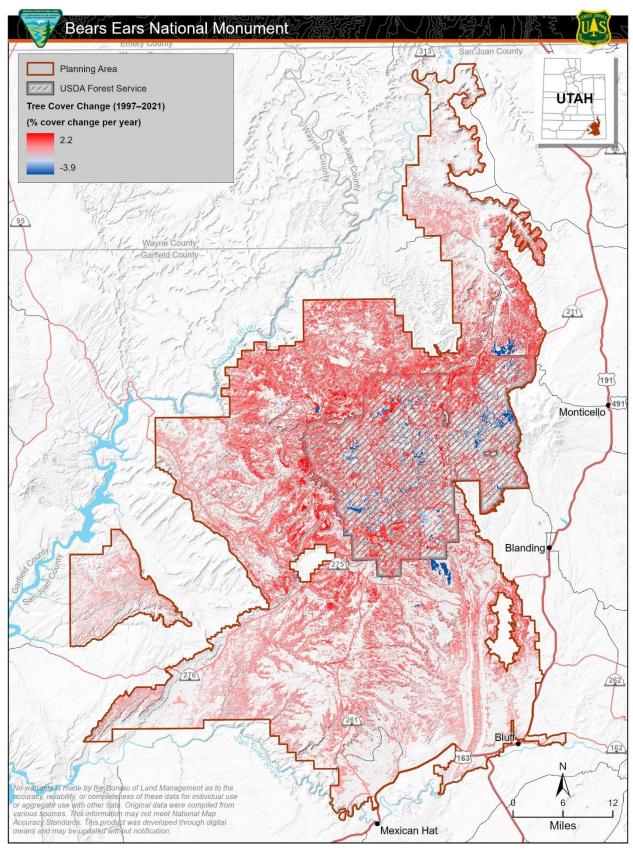


Figure 3-23. AIM data for tree cover changes from 1997 to 2021.

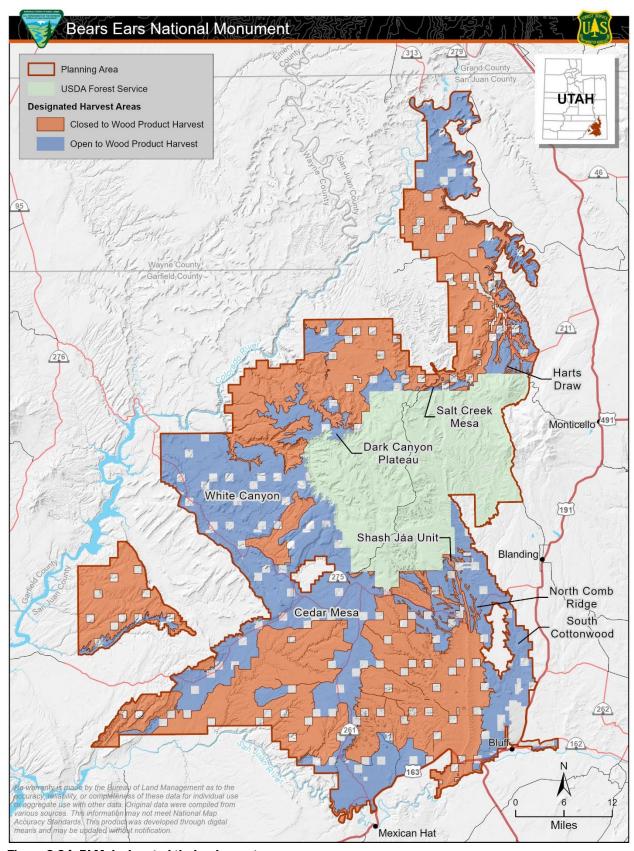


Figure 3-24. BLM-designated timber harvest areas.

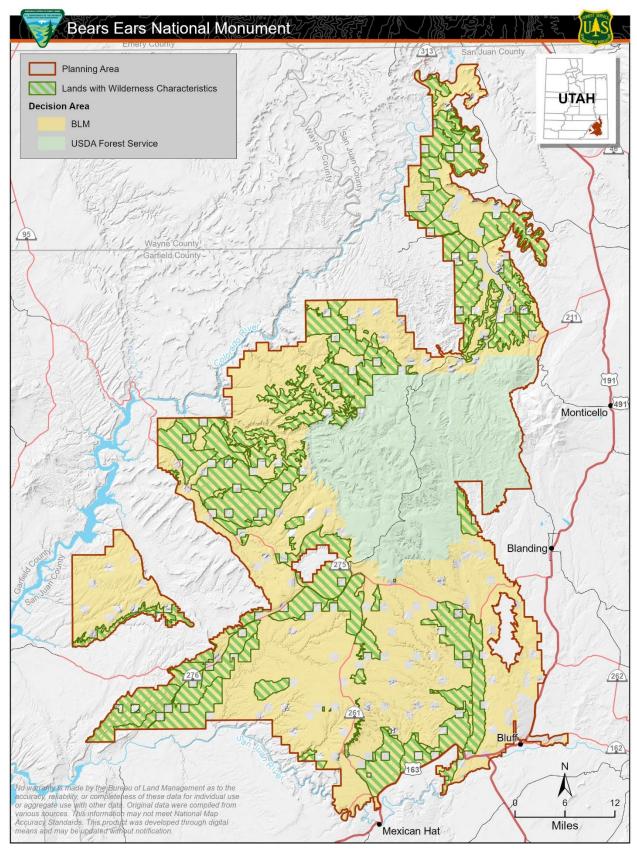


Figure 3-25. Lands with wilderness characteristics within BENM.

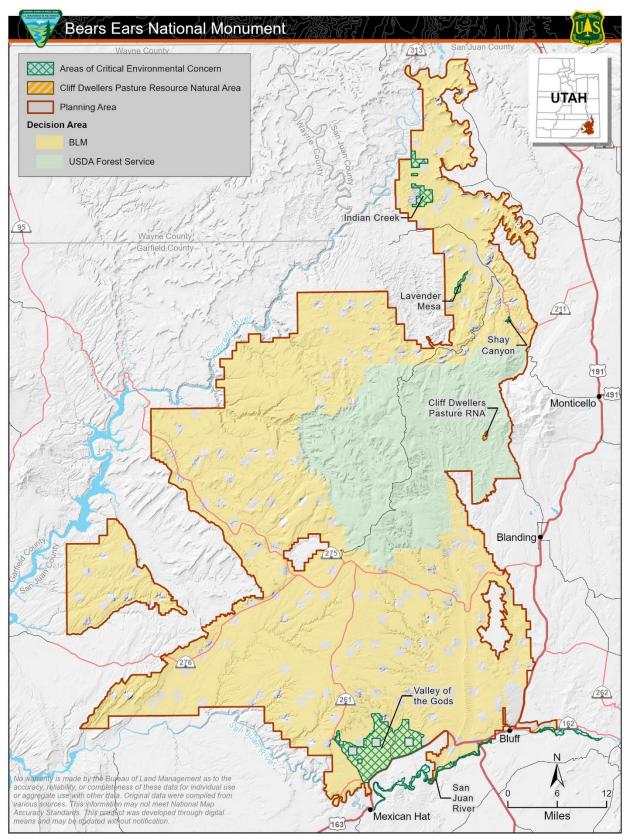


Figure 3-26. Existing Areas of Critical Environmental Concern and Research Natural Areas within the Planning Area.

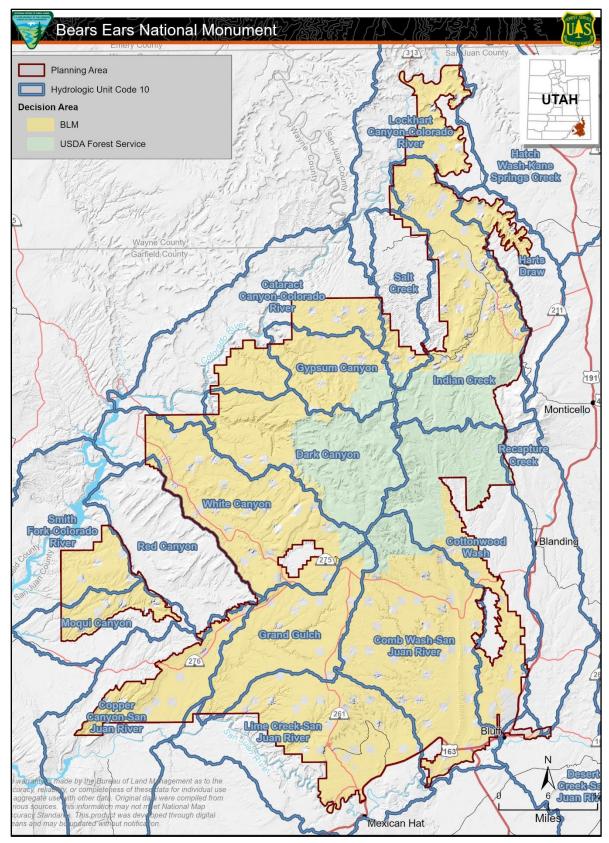


Figure 3-27. Hydrologic unit code 10 watersheds within the Planning Area.

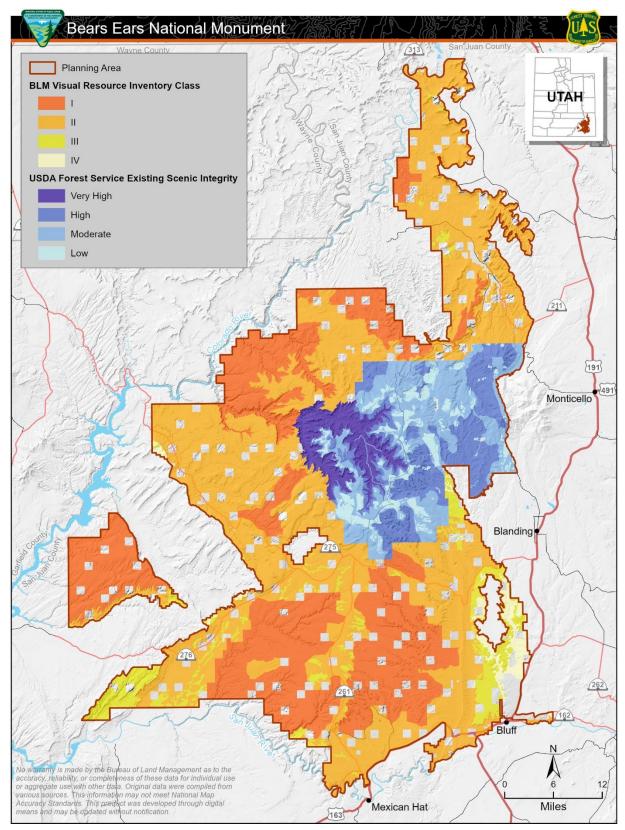


Figure 3-28. BLM VRI classes with VRI Class I and USDA Forest Service existing scenic integrity.

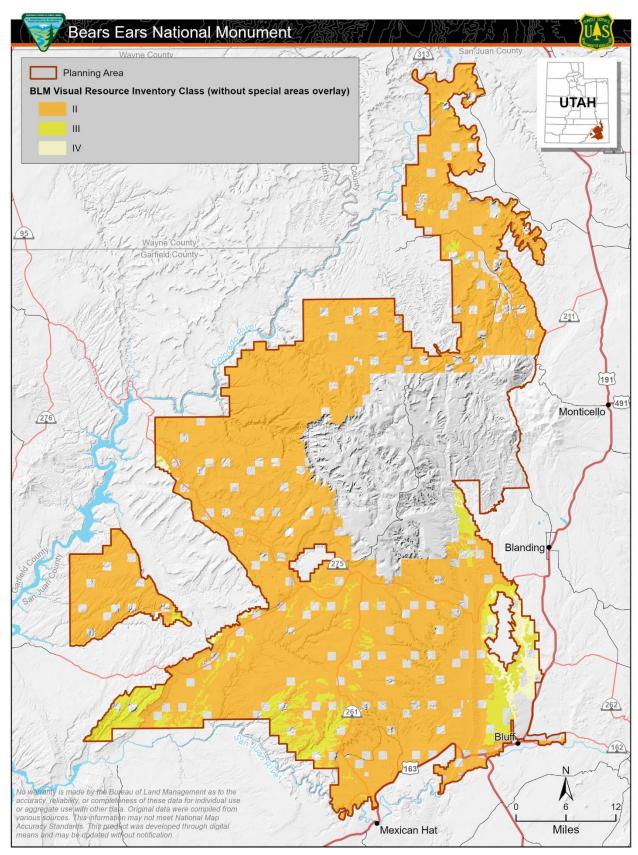


Figure 3-29. BLM VRI classes without VRI Class I.

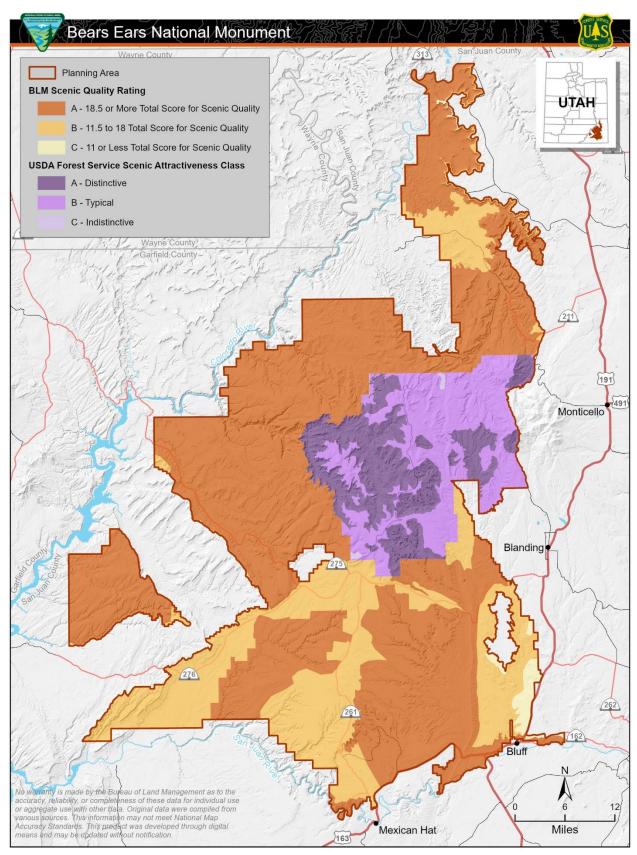


Figure 3-30. BLM VRI scenic quality and USDA Forest Service scenic attractiveness.

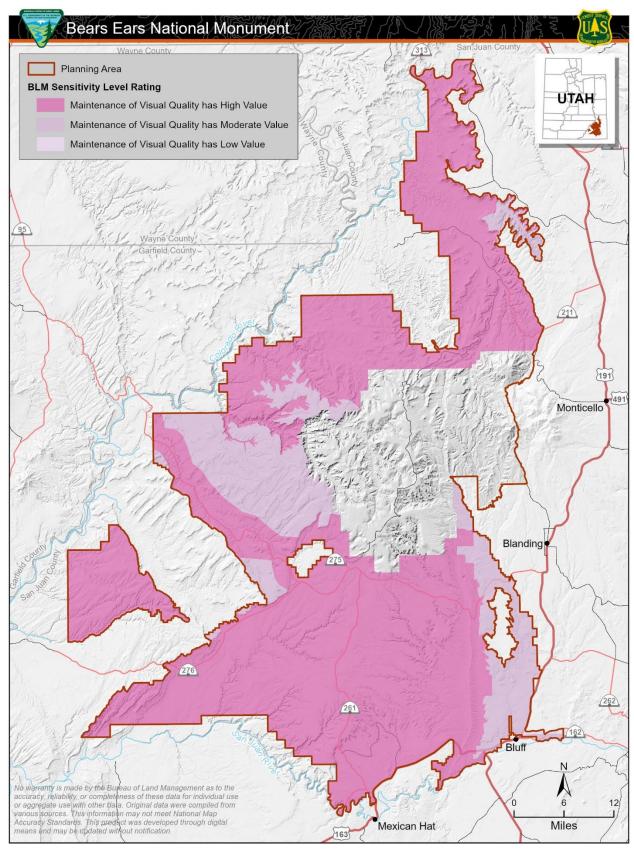


Figure 3-31. BLM VRI sensitivity levels.

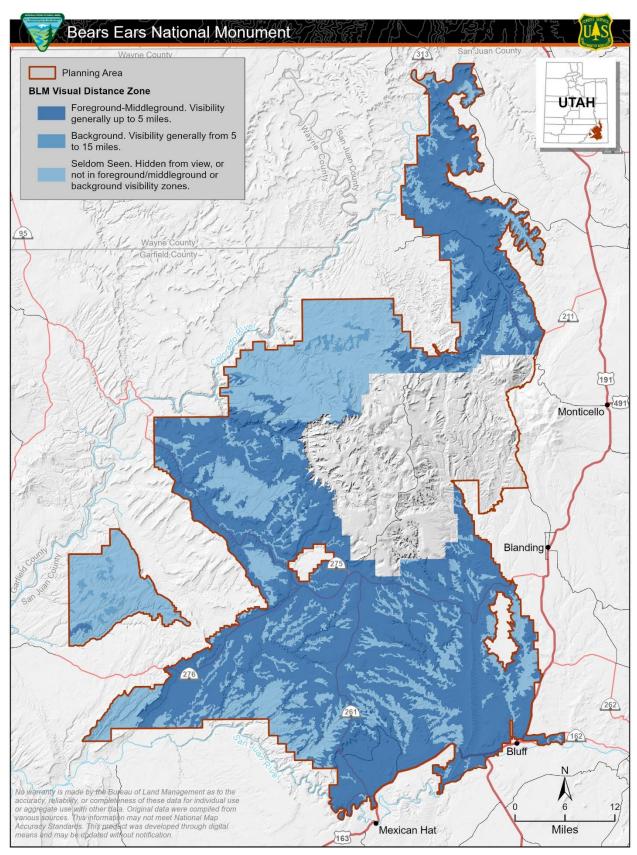


Figure 3-32. BLM VRI distance zones.

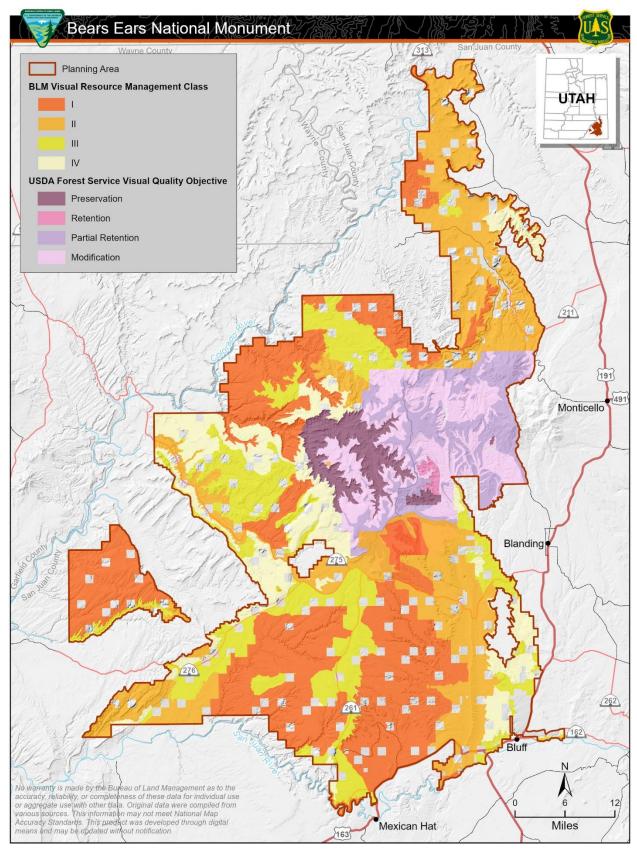


Figure 3-33. BLM VRM classes and USDA Forest Service Visual Quality Objectives.

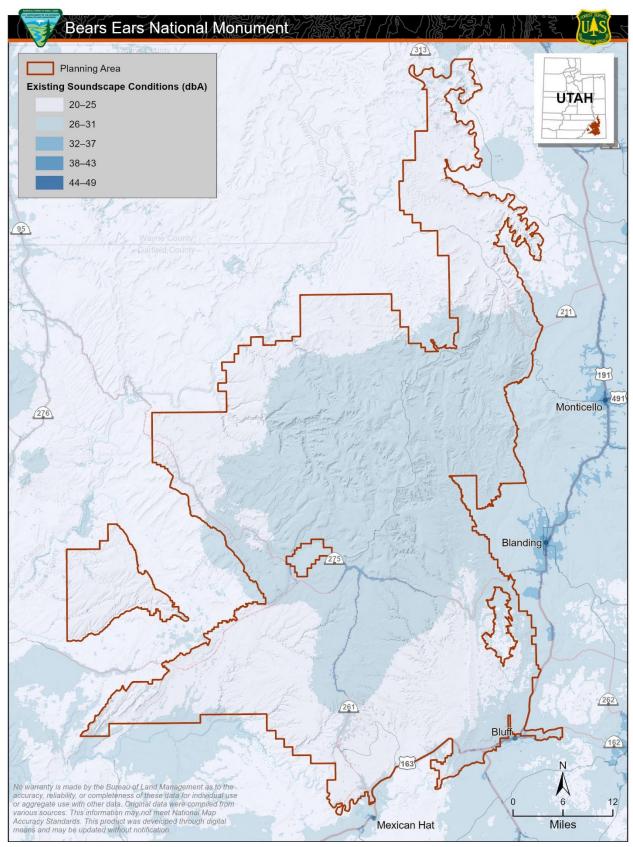


Figure 3-34. Existing soundscape conditions.

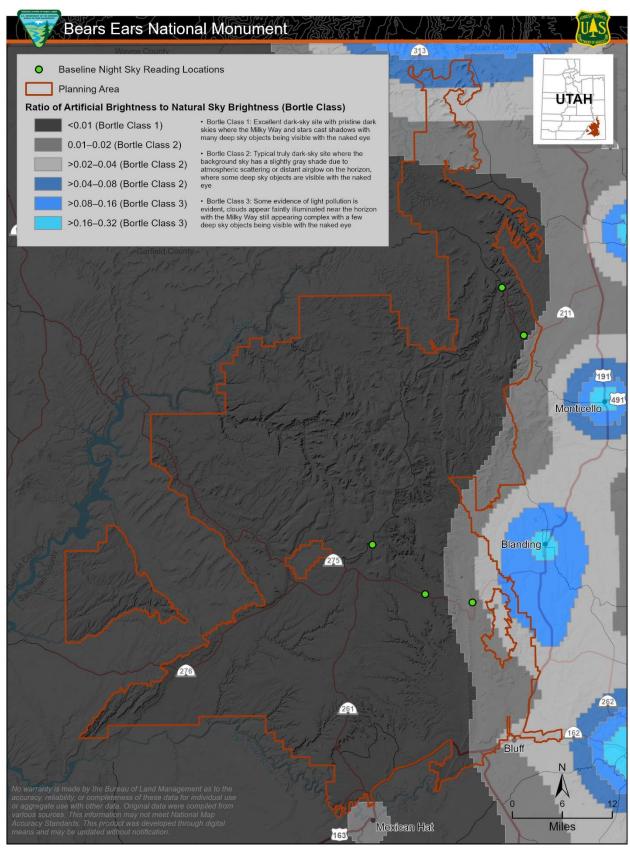


Figure 3-35. Dark skies: light pollution.

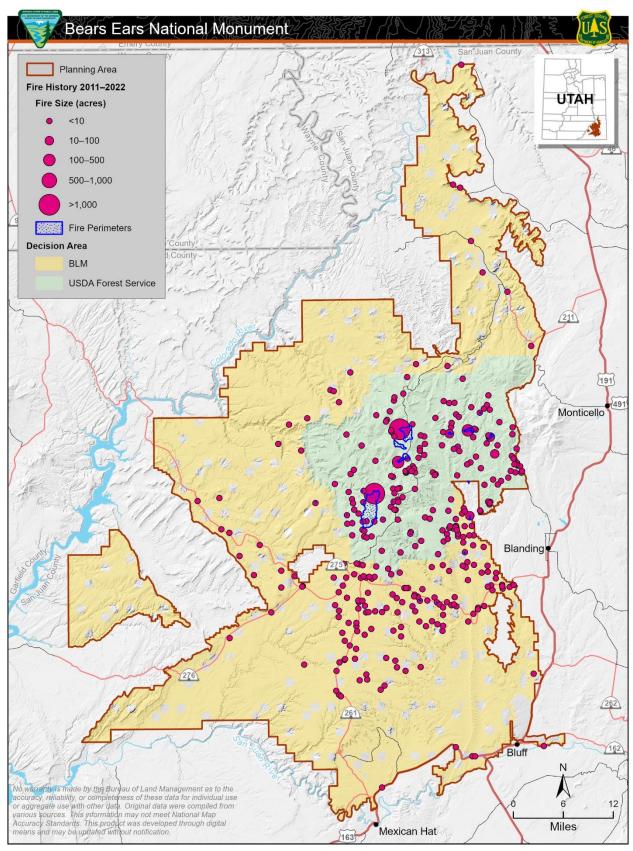


Figure 3-36. BENM spatial fire statistics, 2011–2022.

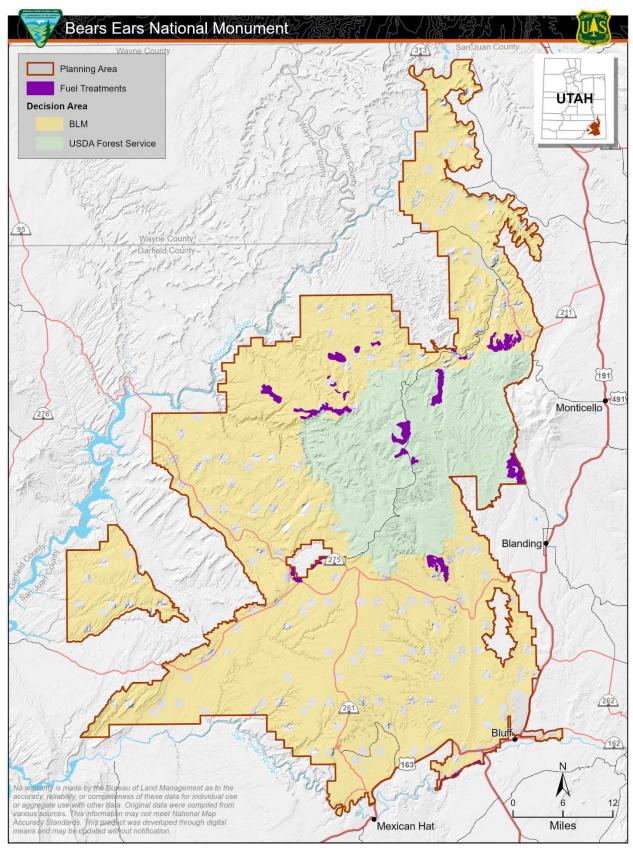


Figure 3-37. BENM fuels treatments, 2013-2021.

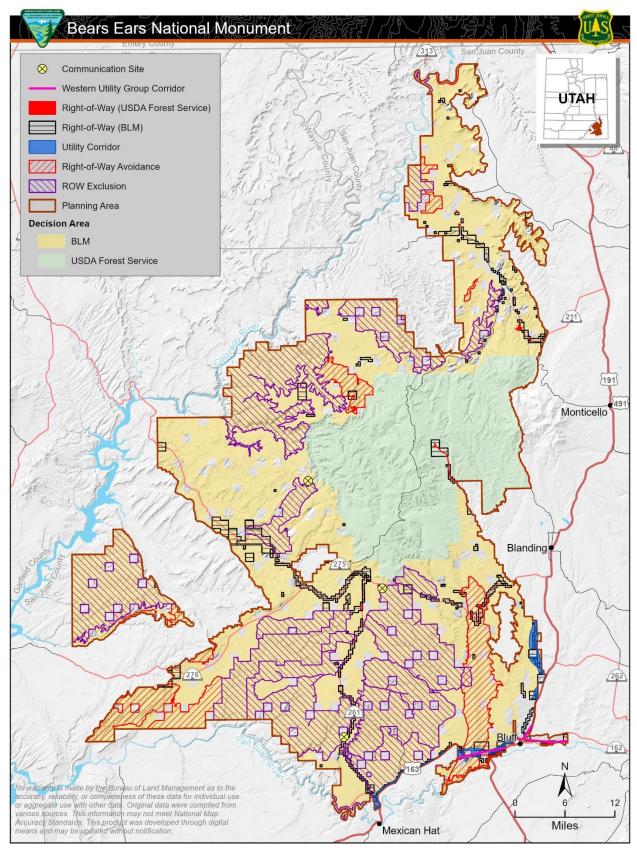


Figure 3-38. Rights-of-way and utility corridors within the Planning Area.

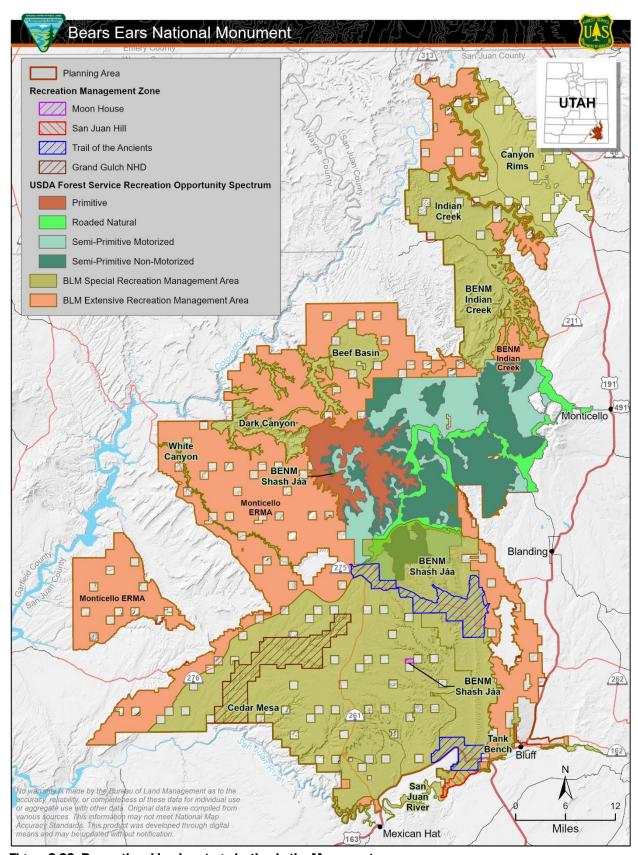


Figure 3-39. Recreational lands categorization in the Monument.

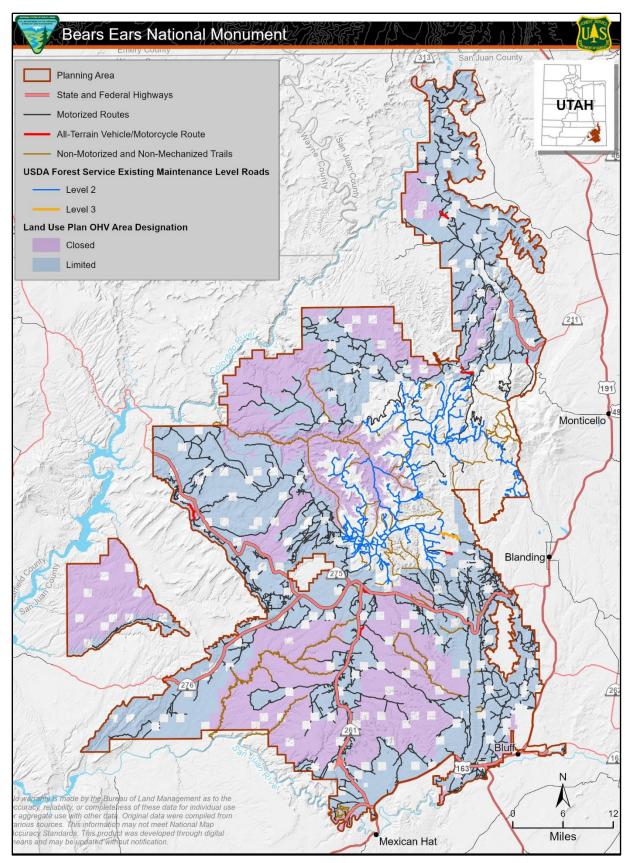


Figure 3-40. Current travel system.

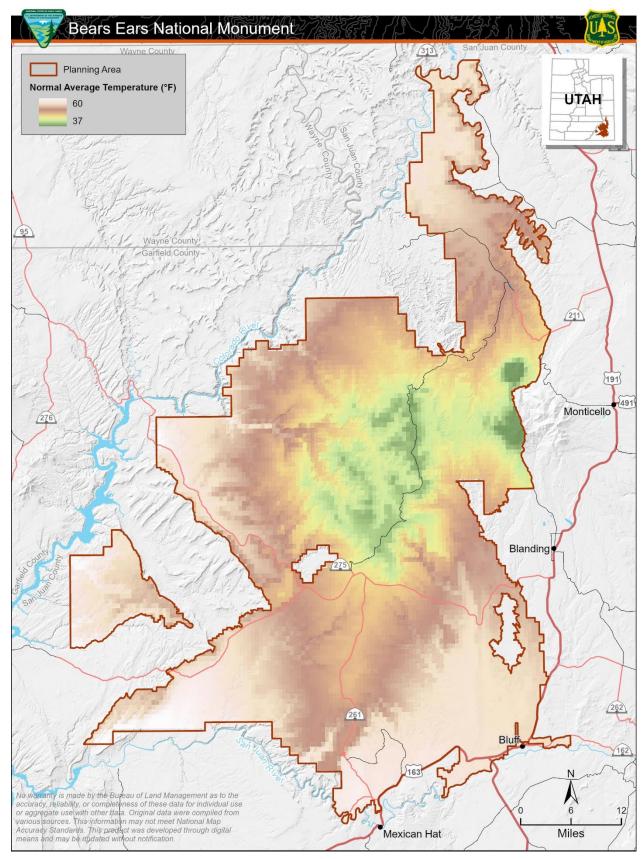


Figure 3-41. Average annual temperature based on 30-year climate normals.

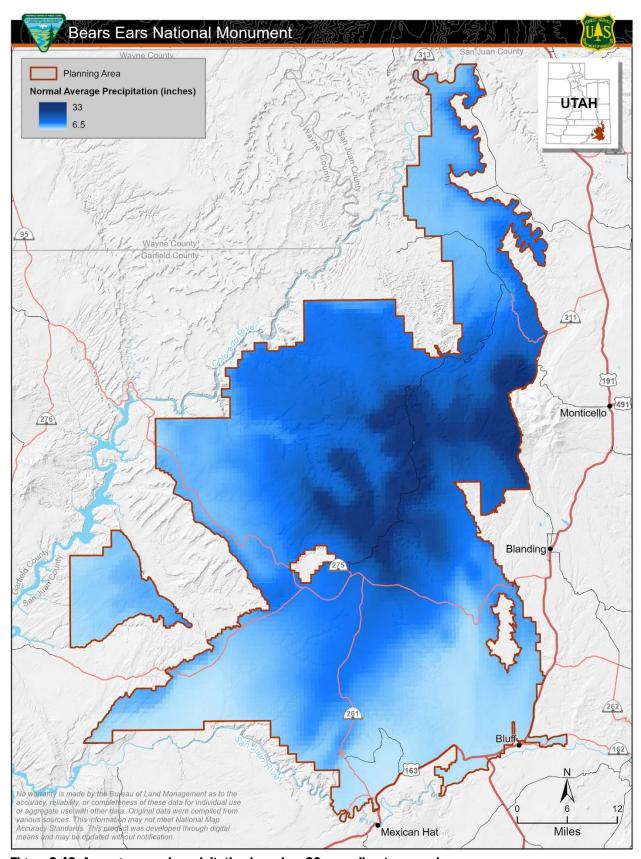


Figure 3-42. Average annual precipitation based on 30-year climate normals.

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APPENDIX B

Laws, Regulations, Policies, and Plans
Considered in the Development of the Resource Management Plan
and Environmental Impact Statement



1 INTRODUCTION

The Bureau of Land Management (BLM) and the U.S. Department of Agriculture Forest Service (USDA Forest Service) have considered and developed the Bears Ears National Monument Resource Management Plan and Environmental Impact Statement to be consistent with applicable laws, regulations, policies, and plans, including, but not limited to, those listed in this appendix.

2 FEDERAL LAWS

Administrative Procedure Act (Public Law [PL] 79-404)

Agriculture Improvement Act of 2018 (PL 115-334)

Agriculture Risk Protection Act of 2000 (Plant Protection Act) (PL 106-224)

American Indian Religious Freedom Act (42 United States Code [USC] 1996)

Antiquities Act of 1906 (16 USC 431-433)

Archaeological Resources Protection Act of 1979 (16 USC 470aa-470ee)

Bald and Golden Eagle Protection Act (16 USC 668-668d)

Carlson-Foley Act (43 USC 1241)

Clean Air Act of 1970, as amended (42 USC 7401)

Clean Water Act of 1972 (33 USC 1251 et seq.)

Endangered Species Act (16 USC 1531–1544), as amended

Energy Independence and Security Act of 2007

Federal Cave Resources Protection Act of 1988

Federal Land Assistance, Management and Enhancement Act of 2009 (3 USC 1748)

Federal Land Policy and Management Act of 1976 (43 USC 1701), as amended

Federal Lands Recreation Enhancement Act of 2005 (PL 108-447)

Federal Land Transaction Facilitation Act of 2018, as amended 2018 (43 USC 2301 et seq.)

Federal Noxious Weed Act of 1974 (7 USC 2801 and 7 USC 2814)

Fish and Wildlife Act of 1956 (16 USC 742a et seq.), as amended

Fish and Wildlife Conservation Act of 1980 (16 USC 2901–2911)

Fish and Wildlife Coordination Act of 1934 (16 USC 661–667)

Healthy Forests Restoration Act of 2003 (16 USC 6511 et seq.)

John D. Dingell, Jr. Conservation, Management, and Recreation Act of 2019 (PL 116-9)

Land and Water Conservation Fund Act (16 USC 4601 et seq.)

Materials Act of 1947 (30 USC 601-604)

Migratory Bird Treaty Act of 1918 (16 USC 703-712)

Multiple-Use Sustained-Yield Act of 1960 (16 USC 528-531)

National Environmental Policy Act (NEPA) of 1969, as amended (42 USC 4321–4347)

National Forest Management Act of 1976, as amended (16 USC 1600 et seq.)

National Historic Preservation Act of 1966, as amended (54 USC 300101-307108)

Native American Graves Protection and Repatriation Act (25 USC 3001–3002)

Noxious Weed Control and Eradication Act of 2004, as amended (PL 108-412)

Omnibus Public Land Management Act of 2009 (PL 111-11)

Paleontological Resources Preservation Act of 2009 (16 USC 470)

Petrified Wood Act of 1962 (30 USC 611)

Recreation and Public Purposes Act (43 Code of Federal Regulations [CFR] 2740)

Rescissions Act of 1995 (PL 104–19, Section 504)

Salinity Control Act of 1974 (PL 93-320)

Taylor Grazing Act of 1934 (PL 73-482)

Wild and Scenic Rivers Act, 1968 as amended (16 USC 1271 et seq.)

Wilderness Act of 1964 (PL 88-577)

3 FEDERAL REGULATIONS

BLM Leases, Permits, and Easements Regulations (43 CFR 2920)

BLM Off-Road Vehicle Regulations (43 CFR 8340)

BLM Planning Regulations (43 CFR 1600)

BLM Resource Regulations (generally 43 CFR Chapter II)

BLM Rights-of-Way Regulations (43 CFR 2800 and 2880)

Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500–1508)

USDA Forest Service NEPA and Resource Regulations (generally 36 CFR 220-297)

USDA Forest Service Planning Regulations (36 CFR 219)

USDA Forest Service Roadless Rule (36 CFR 294)

U.S. Department of the Interior (DOI) NEPA Regulations (43 CFR 46)

4 FEDERAL POLICIES

BLM Handbook H-1601-1 - Land Use Planning

BLM Handbook H-1740-2 - Integrated Vegetation Management

BLM Handbook H-1745 – Introduction, Transplant, Augmentation, and Reestablishment of Fish, Wildlife, and Plants

BLM Handbook H-1780-1 - Improving and Sustaining BLM-Tribal Relations

BLM Handbook H-2740-1 - Recreation and Public Purposes

BLM Handbook H-2930-1 - Recreation Permit and Fee Administration

BLM Handbook H-8270-1 – General Procedural Guidance for Paleontological Resource Management

BLM Handbook H-8320-1 – Planning for Recreation and Visitor Services

BLM Handbook H-8342 - Travel and Transportation Handbook

BLM Handbook H-9011-1 - Chemical Pest Control

BLM Handbook H-9014 - Use of Biological Control Agents of Pests on Public Lands

BLM Handbook H-9015 - Integrated Weed Management

BLM Instruction Memorandum (IM) 2009-112 – Updated Policy for Implementation of Federal Wildland Fire Management Policy

BLM IM 2016-013 – Managing for Pollinators on Public Lands

BLM IM-UT-2005-091 – Utah BLM Riparian Management Policy

BLM Manual 1601 - Land Use Planning

BLM Manual 1613 - Areas of Critical Environmental Concern

BLM Manual 1626 – Travel and Transportation Management Manual

BLM Manual 1730 - Management of Domestic Sheep and Goats to Sustain Wild Sheep

BLM Manual 1780 - Tribal Relations

BLM Manual 4100 - Grazing Administration

BLM Manual 5000 - Forest Management

BLM Manual 6100 - National Landscape Conservation System Management

BLM Manual 6220 - National Monuments, National Conservation Areas, and Similar Designations

BLM Manual 6310 - Conducting Wilderness Characteristics Inventory on BLM Lands

BLM Manual 6320 – Considering Lands with Wilderness Characteristics in BLM Land Use Planning Process

BLM Manual 6330 - Management of Wilderness Study Areas

BLM Manual 6340 - Management of Designated Wilderness Areas

BLM Manual 6400 - Wild and Scenic Rivers Policy and Program Direction for Identification,

Evaluation, Planning, and Management

BLM Manual 6500 - Wildlife and Fisheries Management

BLM Manual 6840 - Special Status Species Management

BLM Manual 7240 - Water Quality Manual

BLM Manual 7300 - Air Resource Management

BLM Manual 8100 - The Foundations for Managing Cultural Resources

BLM Manual 8110 - Identifying and Evaluating Cultural Resources

BLM Manual 8130 - Planning for Uses of Cultural Resources

BLM Manual 8140 - Protecting Cultural Resources

BLM Manual 8150 – Permitting Uses of Cultural Resources

BLM Manual 8400 - Visual Resource Management System

BLM Manual 8431 - Visual Resource Contrast Rating

BLM Manual 9011 - Chemical Pest Control

BLM Manual H-8410-1 – Visual Resource Inventory

BLM Manual and Handbook 8270 - Paleontological Resource Management

BLM NEPA Handbook (H-1790-1) - National Environmental Policy Act

BLM Supplement H-8100 - Utah - Cultural Resource Fieldwork Guidelines and Standards

DOI Departmental Manual 517 DM 1 – Environmental Quality Programs: Pesticides, Integrated Pest Management Policy

DOI Departmental Manual 609 DM 1 - Policy and Responsibilities: Weed Control Program

DOI Operational Procedures Memorandum (OPM)-11

Executive Order 11593 - Protection and Enhancement of the Cultural Environment

Executive Order 11988 - Floodplain Management

Executive Order 11990 - Protection of Wetlands

Executive Order 12898 – Federal Actions to Address Environmental Justice in Minority and Low Income Populations

Executive Order 13007 - Indian Sacred Sites

Executive Order 13084 - Consultation and Coordination with Indian Tribal Governments

Executive Order 13112 – Preventing the Introduction and Spread of Invasive Species, as amended by Executive Order 13751 – Safeguarding the Nation from the Impacts of Invasive Species

Executive Order 13186 - Responsibilities of Federal Agencies to Protect Migratory Birds

Federal Aviation Administration Civil Operations Part 107 – Small Unmanned Aircraft Systems (UAS) Regulations

Presidential Proclamation 9558 - Establishment of the Bears Ears National Monument (2016)

Presidential Proclamation 9681 – Modifying the Bears Ears National Monument (2017)

Presidential Proclamation 10285 – Bears Ears National Monument (2021)

Secretarial Order 3355 – Streamlining National Environmental Policy Act Reviews and Implementation of Executive Order 13807, "Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects"

Secretarial Order 3362 – Improving Habitat Quality in Western Big-Game Winter Range and Migration Corridors

Secretarial Order 3366 – Increasing Recreational Opportunities on Lands and Waters Managed by the U.S. Department of the Interior

Secretarial Order 3372 – Reducing Wildfire Risks on Department of the Interior Land Through Active Management

Secretarial Order 3373 – Evaluating Public Access in Bureau of Land Management Public Land Disposals and Exchanges

USDA Forest Service Handbook FSH 1909.12 – Land Management Planning

USDA Forest Service Handbook FSH 1909.15 - NEPA Handbook

USDA Forest Service Handbook FSH 2209.21 - Rangeland Ecosystem Analysis and Monitoring

USDA Forest Service Handbook FSH 2309.12 - Heritage Program Management Handbook

USDA Forest Service Handbook FSH 2509.22 - Soil and Water Conservation Practices Handbook

USDA Forest Service Handbook FSH 2809.15 - Minerals and Geology Handbook

USDA Forest Service Handbook FSH 5700 - Aviation Management

USDA Forest Service Manual FSM 1500 - External Relations

USDA Forest Service Manual FSM 1900 - Planning

USDA Forest Service Manual FSM 1920 - Land Management Planning

USDA Forest Service Manual FSM 2200 - Range Management

USDA Forest Service Manual FSM 2300 – Recreation, Wilderness, and Related Resource Management

USDA Forest Service Manual FSM 2400 - Timber Management

USDA Forest Service Manual FSM 2500 - Watershed and Air Management

USDA Forest Service Manual FSM 2600 - Wildlife, Fish, and Sensitive Plant Habitat Management

USDA Forest Service Manual FSM 2700 - Special Uses Management

USDA Forest Service Manual FSM 2800 - Minerals and Geology

USDA Forest Service Manual FSM 2900 - Invasive Species Management

5 FEDERAL PLANS

Bears Ears National Monument: Record of Decision and Approved Monument Management Plans Indian Creek and Shash Jáa Units (2020)

Bonytail (Gila elegans) Revised Recovery Goals (U.S. Fish and Wildlife Service [USFWS] 2002)

Bureau of Land Management Moab Field Office Record of Decision and Approved Resource Management Plan (BLM 2008)

Bureau of Land Management Monticello Field Office Record of Decision and Approved Resource Management Plan (BLM 2008)

California Condor (Gymnogyps californianus) Recovery Plan, Third Revision (USFWS 1996)

Canyonlands National Park and Orange Cliffs Unit of Glen Canyon National Recreation Area Backcountry Management Plan (National Park Service [NPS] 1995)

Canyonlands National Park General Management Plan (NPS 1978)

Canyonlands National Park General Management Plan (NPS 1979)

Canyonlands National Park Resource Management Plan (NPS 1996)

Canyonlands Wilderness Recommendation (NPS 1974)

Colorado Pikeminnow (Ptychocheilus lucius) Recovery Goals (USFWS 2002)

Conservation Agreement and Strategy for Colorado River Cutthroat Trout (*Oncorhynchus clarkii pleuriticus*) in the state of Utah (Lentsch and Converse 1997)

Conservation and Management Plan for Three Fish Species in Utah: Addressing Needs for Roundtail Chub (*Gila robusta*), Bluehead Sucker (*Catostomus discobolus*), and Flannelmouth Sucker (*Catostomus latipinnis*) (Utah Division of Wildlife Resources [UDWR] 2006)

Final Environmental Assessment Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin (USFWS 1987)

Final Programmatic Environmental Impact Statement for Vegetation Treatments Using Aminopyralid, Fluroxypyr, and Rimsulfuron on Bureau of Management Lands in 17 Western States (BLM 2016)

Final Programmatic Environmental Impact Statement on Wind Energy Development on BLM-Administered Lands in the Western United States (BLM 2005)

Final Programmatic Environmental Impact Statement (PEIS) for Solar Energy Development in Six Southwestern States (BLM and U.S. Department of Energy 2012)

Final Recovery Plan for Jones Cycladenia (Cycladenia humilis var. jonesii) (USFWS 2021)

Final Recovery Plan Southwestern Willow Flycatcher (Empidonax traillii extimus) (USFWS 2002)

Foundation Document Canyonlands National Park Utah (NPS 2013)

Foundation Document Glen Canyon National Recreation Area Rainbow Bridge National Monument Arizona and Utah (NPS 2014)

Foundation Document Natural Bridges National Monument Utah (NPS 2013)

Glen Canyon National Recreation Area Off-road Vehicle Management Plan/Final Environmental Impact Statement (NPS 2017)

Humpback Chub (Gila cypha) Revised Recovery Goals (USFWS 2002)

Land and Resource Management Plan: Manti-La Sal National Forest (USDA Forest Service 1986)

Mexican Spotted Owl Recovery Plan, First Revision (Strix occidentalis lucida) (USFWS 2012)

Navajo Sedge (Carex specuicola) Recovery Plan (USFWS 1987)

Old Spanish National Historic Trail Comprehensive Administrative Strategy (NPS 2017)

Pollinator-Friendly Best Management Practices for Federal Lands (USDA and DOI 2015)

Razorback Sucker (Xyrauchen texanus) Revised Recovery Goals (USFWS 2002)

Record of Decision Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement (BLM 2007)

Recovery Plan Amendments for 20 Southwestern Species (2019)

Recovery Plan Amendments for Eleven Southwest Species (2019)

Recovery Plan for Carex specuicola (Navajo sedge) (USFWS 2019)

Utah Greater Sage-Grouse Approved Resource Management Plan Amendment (BLM 2015, 2019)

Ute Ladies'-Tresses Draft Recovery Plan (USFWS 1995)

Water Resources Management Plan and Environmental Assessment Glen Canyon National Recreation Area, Utah/Arizona (Wood 1987)

6 STATE PLANS AND POLICIES

Elk Herd Unit Management Plan, Elk Herd Unit # 14, San Juan (2016)

Southern Utah Support Area Fire Management Plan Environmental Assessment (2005)

State of Utah Resource Management Plan (2018)

State of Utah Resource Management Plan (2023)

Utah Administrative Code, Title 63: Chapter 4, Part 4, Planning (2022)

Utah Administrative Code, Title 73: Chapter 3, Part 31, Water right for watering livestock on public land (2022)

Utah Administrative Code, Title 79: Chapter 3, Part 5, Paleontology (2009)

Utah Administrative Code, Title 23-13-3: Wildlife declared property of the state

Utah Bighorn Sheep Statewide Management Plan (2018)

Utah BLM Statewide Wilderness Environmental Impact Statement: Final (1990)

Utah Catastrophic Wildfire Reduction Strategy (n.d.)

Utah Division of Wildlife Resources/Utah Division of Oil, Gas and Mining Abandoned Mine Reclamation Program, Memorandum of Understanding for the Conservation and Management of Bats in Abandoned Mines in Utah (2015)

Utah Forest Action Plan (2016)

Utah Mule Deer Statewide Management Plan (2019)

Utah Noxious Weed Act (Rule R68-9)

Utah Pollutant Discharge Elimination System, Utah Administrative Code, R317-8 (2013)

Utah Pronghorn Statewide Management Plan (2017)

Utah Smoke Management Plan (2021)

Utah Statewide Elk Management Plan (2022)

Utah Statewide Nonpoint Source Pollution Management Plan (2013)

The Utah Strategic Plan for Managing Noxious and Invasive Weeds (2004)

Utah Wildlife Action Plan 2015–2025 (2015)

Utah's List of Impaired Waters (303d) (2010)

Utah Nonpoint Source Pollution Management Plan (2000)

Utah's Outdoor Recreation Strategic Plan (2023)

Utah State Comprehensive Outdoor Recreation Plan (2014)

Water Resources Plan (2021)

7 COUNTY PLANS

San Juan County Comprehensive Plan (2022)

San Juan County 2018 General Plan Update (2018)

San Juan County, 2017 Resource Management Plan (as amended in 2022)

8 TRIBAL PLANS

Bears Ears Inter-Tribal Coalition: A Collaborative Land Management Plan for the Bears Ears National Monument (2022)

APPENDIX C

Tribal Nations Collaboration Framework



1 IMPROVING AND SUSTAINING TRIBAL RELATIONSHIPS AT BEARS EARS NATIONAL MONUMENT

Presidential Proclamation 10285 recognizes the importance of Bears Ears National Monument (BENM, or Monument) to Tribal Nations and the importance of Tribal participation in the future management of the Monument, including the proper care and management of important cultural objects. This framework outlines the strategy that the Bureau of Land Management (BLM) and U.S. Department of Agriculture Forest Service (USDA Forest Service) will use for closely coordinating with Tribal Nations as envisioned in Presidential Proclamation 10285. The BLM and USDA Forest Service have developed this document with the intent of creating an ongoing two-way dialogue with Tribal Nations, specifically those named in Presidential Proclamation 10285. Changes will be made in response to Tribal Nation comments or feedback.

2 BUILDING AND MAINTAINING RELATIONSHIPS WITH TRIBAL NATIONS IDENTIFIED IN BEARS EARS NATIONAL MONUMENT PRESIDENTIAL PROCLAMATIONS

The BLM and USDA Forest Service recognize that beyond the formal and legal consultation responsibility the United States has with Tribal governments, the federal government is committed to pursuing a goal of shared stewardship of lands managed within BENM. BENM stands out from other monuments in that Presidential Proclamation 10285 recognizes the importance of Tribal participation in the development of a management plan and the subsequent management of the Monument to ensure the proper care and management of Monument objects.

Presidential Proclamation 10285 notes the establishment of a commission or comparable entity composed of a designated officer from the Hopi Tribe, the Navajo Nation, the Ute Mountain Ute Tribe, the Ute Indian Tribe of the Uintah and Ouray Reservation, and Zuni Tribe.

In striving to protect Tribal interests and further the nation-to-nation relationship with Tribal Nations, as directed in Proclamation 10285, the BLM and USDA Forest Service recognize the following:

- Presidential Proclamation 10285 envisions a new way of working together.
- There is value in traditional knowledge and maintaining respectful relationships in furthering shared stewardship of BENM natural and cultural resources. The agencies are committed to working collaboratively with the Bears Ears Commission (BEC) or comparable entity consistent with Presidential Proclamation 10285 and law and policy, including Executive Order 13175 "Consultation and Coordination with Indian Tribes" (2000) and BLM Manual (MS) 1780.
- It is important to work closely with all Tribal governments that attach religious or cultural significance to BENM or that are otherwise interested in actions occurring within BENM on a government-to-government consultation basis, consistent with consultation law and policy, including Executive Order 13175, the National Historic Preservation Act (NHPA) (54 United States Code [USC] 300101 et seq.), and the National Environmental Policy Act (NEPA) (42 USC 4321 et seq.). There is value in working together with all interested members of the Tribes, including local American Indian residents, for example, Navajo chapter houses, and the members of the Ute Mountain Ute Tribe living at White Mesa.
- Many governmental entities, organizations, and individuals have an important role in the shared stewardship of BENM, including federal, Tribal, state, and local governments; local

- American Indian residents; other Tribal members; other area residents; and public land users.
- Successful collaboration and integration of Tribal historical knowledge into future management of BENM is contingent on the federal government and the BEC or comparable entity being equally willing to take part in Monument organization and administration.

3 BEARS EARS COMMISSION

An agreement for the cooperative management of the federal lands and resources of the Monument was signed on June 18, 2022. The intergovernmental cooperative agreement is between the Tribal Nations whose representatives make up the BEC (the Hopi Tribe, Navajo Nation, Ute Mountain Ute Tribe, Ute Indian Tribe of the Uintah and Ouray Reservation, and the Pueblo of Zuni) and the U.S. Department of the Interior, BLM, and the USDA Forest Service (2022). It states that its purpose is to "facilitate coordination and cooperative management of the Federal lands within the Bears Ears, for purposes of implementing the Proclamation and to provide consistent, effective, and collaborative of the land and resources."

Further, the cooperative agreement states that it will seek to achieve this goal by "coordinating on land use planning and implementation, as well as the development of long-term resource management and programmatic goals. Through the cooperative agreement the parties will work collaboratively to address tribal issues, including developing robust outreach efforts to Tribal Nations and more effective mechanisms for Tribal government coordination. In doing so, the parties will ensure that tribal priorities inform the management of the Bears Ears" (2022).

The interagency cooperative agreement provides a framework for collaborative management of the Monument. It identifies actions to be taken by the agencies and the BEC to ensure that the proclamation purposes and goals are met. All parties agree to the following:

- 1. Cooperate in land use planning, including preparation of a Monument management plan and travel management plan for BENM, as well as subsequent, implementation-level decision-making.
- Cooperate in program development (including education and interpretation about species, Tribal uses, and other Monument objects), resource protection, and public land access concerning BENM.
- 3. Engage on an ongoing basis in joint dialogue, knowledge sharing, and learning programs for BLM and USDA Forest Service managers and professional staff, Tribal officials, and other appropriate parties to address critical resource management, Tribal and agency program priorities, and a shared awareness of the Tribal context of the landscape, including the need to protect both visible and sacred Tribal uses and activities, as well as Monument objects and other resources.
- 4. Coordinate, consult, and engage regularly on resource management priorities and joint management opportunities within the Monument as follows:
 - a. Meet annually to develop a joint annual work plan that will set priorities for the year based on available funding, including, but not limited to, critical research opportunities, a schedule of site visit(s), shared training, discussions about planning a visitor center, visitor management initiatives, volunteer opportunities, interpretive signage needs, and categories of activities and types of agency decisions for which the BEC may elect to provide input, such as, authorizations regarding range

- improvements, developed recreation sites and areas, and special recreation permits.
- b. Meet quarterly to coordinate and consult on Tribal Nations' land management priorities, public land resource issues, opportunities for joint Tribal-federal program development, BEC participation in planning- and implementation-level decision-making processes, landscape-level management issues, and to provide awareness of upcoming federal actions and authorizations.
- c. Engage regularly and frequently at the local level to coordinate federal decisionmaking processes and to ensure Tribal knowledge, priorities, and interests are incorporated into the management of the Monument.
- 5. Develop opportunities to engage Tribal youth in the culture and traditions of BENM, as well as the protection and management of the Monument to cultivate a shared understanding of the Monument's context and a shared stewardship for its resources.
- 6. Cooperatively seek additional partnerships, funds, and authorities to achieve shared Tribal and federal land management goals.
- 7. Maintain the confidentiality of documents and deliberations to the extent legally permissible prior to the contents of such documents and deliberations becoming publicly available through official releases, such as the public release of any planning or NEPA documents, including drafts.
- 8. Take all reasonable measures to protect information regarding sacred sites, traditional ceremonies and other rituals from disclosure in order to prevent damage or desecration.
- 9. Adhere to the agreed-upon schedule established for the Monument management plan and other critical planning and decision-making time frames as discussed below in Section 9.
- 10. Explore opportunities for repatriating cultural resources and related data excavated or removed from federal lands.
- 11. Work collaboratively to ensure Tribal Nations have access to sacred sites and other areas of Tribal importance in BENM for cultural purposes and for non-cultural purposes, such as gathering plants and firewood.
- 12. Work collaboratively to develop a strategy for inventorying and monitoring the objects within the Monument. Within this strategy, identify how to obtain the input from Tribal members, in particular Tribal Elders, who cannot travel to remote sites.

The BEC agrees to the following:

- 1. Coordinate, organize, and assure appropriate Tribal professional and executive involvement in programs within the scope of this collaboration framework.
- 2. Identify and provide appropriate staff to engage in the development of the Monument management plan and implementation-level planning, as well as implementation of initiatives developed pursuant to this cooperative agreement.
- 3. Provide specific information for identified Monument landscapes to inform the BLM's and USDA Forest Service's inventory of Monument objects.
- 4. Develop and execute organizational documents for the BEC to memorialize roles and responsibilities (such as identifying a chairperson) and operating procedures (including internal dispute resolution) governing the BEC's activities in order to facilitate engagement with the BLM and USDA Forest Service on decisions regarding the management of the Monument.

5. Notify the BLM and USDA Forest Service about issues identified by other Tribal Nations with interests in the Bears Ears region that are not part of the BEC.

In order to implement the direction in Proclamation 10285, the BLM and USDA Forest Service agree to the following:

- 1. Ensure that federal policies reflect the needs of Tribal Nations and that Tribal leaders have a meaningful seat at the table before decisions are made that impact their communities by centering indigenous voices, including increasing the recognition of the value of traditional indigenous knowledge and empowering Tribal Nations to make decisions for their cultural, natural, and spiritual values.
- 2. Honor applicable executive orders, secretarial orders, and memorandums of understanding, including, but not limited to, Executive Order 13175 of November 6, 2000, Consultation and Coordination With Indian Tribal Governments; Secretarial Order No. 3403: U.S. Department of the Interior and U.S. Department of Agriculture Joint Secretarial Order on Fulfilling the Trust Responsibility to Indian Tribes in the Stewardship of Federal Lands and Waters; and the November 16, 2021, Memorandum of Understanding Regarding Interagency Coordination and Collaboration for the Protection of Indigenous Sacred Sites.
- 3. Coordinate and consult with the BEC throughout land use planning and subsequent implementation-level decision-making processes concerning BENM, including preparation of a Monument management plan and a travel management plan.
- 4. Identify opportunities for development of initiatives to cooperatively conduct land management programs concerning BENM.
- 5. Seek specific opportunities to involve the BEC in public land management activities concerning BENM.
- 6. Coordinate, organize, and assure appropriate government professional and management involvement in programs within the scope of this collaboration framework.
- 7. Ensure that Tribal knowledge and local expertise is reflected in agency decision-making processes for BENM. Develop and share information and data with the BEC, to the extent possible, to facilitate understanding of issues and sites, such as providing pictures and other information to Tribal Elders who cannot travel, and to facilitate Tribal Nations' work and engagement on the management of the Monument.
- 8. Provide opportunities for input on implementation of interim guidance issued jointly or individually by the BLM and USDA Forest Service, including the BLM's interim Monument management guidance issued on December 16, 2021, which directs the BLM to a) inventory Monument objects, b) review existing discretionary uses and activities within the Monument to determine whether their impacts are consistent with the protection of the Monument objects, and c) update existing monitoring plans to ensure protection of Monument objects.
- 9. Provide opportunities for input to the USDA Forest Service review of existing discretionary uses and activities within the Monument to determine whether their impacts are consistent with the protection of the Monument objects.
- 10. Provide opportunities to review and provide input on BLM and USDA Forest Service policy guidance for BENM prior to issuance (2022).

The cooperative agreement is in effect until terminated or modified. The parties will review it within 5 years of signing, and every 5 years thereafter. It may be modified, amended, supplemented or terminated by mutual written consent of the parties. Its ultimate goal is to honor Tribal Nations,

and particularly Tribal Elders, who have important knowledge, local expertise, and an understanding of the spiritual significance of the Bears Ears region beyond the physical environment. That knowledge is critical to inform the BLM and USDA Forest Service planning processes and management of Monument objects.

4 PARTNERSHIPS

Federal land managers and BENM agency staff should seek out opportunities for partnerships with Tribal Nations and their designated representatives. All federal employees of BENM will work to ensure that the management of the Monument benefits from full engagement with the original stewards of BENM through such means as cooperative agreements, interagency agreements, contracts, hires, and volunteers.

5 COLLABORATIVE LAND MANAGEMENT

The BLM and USDA Forest Service, in collaboration with the BEC or comparable entity, should identify any programs, functions, services, and activities that self-governance Tribes can assume, as described in the Indian Self-Determination and Education Assistance Act of 1975 and later amendments, regulations, and agency policy associated with this act. Self-determination contracts, also known as "638 contracts," and negotiated funding agreements to assume programs, functions, services, or activities for the benefit of American Indians because of their status as American Indians are available to use under the discretion of the manager.

The BLM and USDA Forest Service should engage with the BEC and Tribal Nations to ensure access to and use of sacred sites, as defined in Executive Order 13007. The BLM and USDA Forest Service should seek to enter into agreements to share capability, expertise, and insight into fostering the collaborative stewardship of sacred sites and other properties of traditional religious and cultural importance.

The BLM and USDA Forest Service will collaborate with the BEC and Tribal Nations when developing site-specific protection and management plans that pertain to sacred sites or properties of traditional religious and cultural importance. Site-specific protection and management plans may include procedures for utilizing Tribal expertise and capabilities regarding stabilization, patrolling, interpretation, stewardship education, or ethnographic insights into site use and significance, including identification of traditional cultural properties, American Indian sacred sites, and cultural landscapes. Federal land managers and Tribal Nations may formalize site-specific protection and management plans with the completion of an agreement document.

5.1 Collaboration with the Bears Ears Commission or Comparable Entity

The BLM and the USDA Forest Service will work with the BEC or comparable entity on projects that will include, but are not limited to, the following:

 Execution of an annual or semi-annual BENM summit with the BEC or comparable entity to discuss management direction, proposed and ongoing projects, agency and Tribal priorities, research proposals and findings, and other items of importance or significance.

- Routine and ongoing communication (including, and as determined necessary, weekly, biweekly, or monthly meetings) with Tribal leaders or their delegated representatives to discuss regular and continuing administration and management activities.
- Administration of permits for traditional uses, including group events and firewood and seed collecting.
- Development of confidentiality agreements allowing the Tribes to share sensitive cultural resource information that can be used when considering or evaluating projects.
- Identification and listing of traditional cultural properties and other properties on the National Register of Historic Places.
- Identification of cultural landscapes to be considered when evaluating projects.
- Access to and protection and use of American Indian sacred sites in accordance with Executive Order 13007.
- Protection of cultural objects currently under the care of the BLM (including in the Cerberus Collection and other BLM-administered collections), and/or USDA Forest Service, and the development of interpretive and educational materials.
- Work with Tribal governments to establish a comprehensive agreement to assist with efficient repatriation of American Indian human remains and cultural items under the Native American Graves Protection and Repatriation Act (NAGPRA).
- Cooperative development of activity-level plans identified in the Resource Management
 Plan and Environmental Impact Statement, including, but not limited to, such items as the
 cultural resource management plan, camping plan, travel management plan, and sign and
 interpretation plan.
- Review of, prioritization of, and input on the selection of research projects funded by the federal government through various programs, including the National Conservation Lands program and federal agency cultural programs.
- Internal review of all project proposals and associated environmental analysis to ensure that Tribal Nations' concerns are adequately addressed and that Tribal historical knowledge is adequately taken into consideration.
- Participation in internal scoping efforts, including early issues identification and project design.
- Development and management of volunteer and cooperative agreements with third-party organizations to assist with the implementation of on-the-ground projects, monitoring, and other public education and outreach activities.
- Collaboration with Tribes and agencies to maximize efficiencies for wildfire and fuelsreduction programs. This may include a partnership for initial fire attack and protecting structures, facilities, natural resources, and cultural resources through fuels-reduction projects.
- Review, prioritization, and input on the management of cultural resources, including scientific, traditional, conservation, experimental, and public uses.
- Expansion and promotion of employment, volunteer, and internship opportunities for American Indians.
- Enhancement of on-the-ground experiential education and service opportunities for both Tribal and non-Tribal youth groups or organizations.
- Collaboration on issues of general administration, including items such as law enforcement, wildland fire, and the identification, location, and design of future facilities.

 Identification of shared office space, including the location of the BEC or comparable entity staff in BENM facilities so there is full integration into federal agency interdisciplinary teams.

6 PROCUREMENT

6.1 Small Disadvantaged Businesses

Federal officials should seek opportunities to utilize contracting opportunities for small business communities. Section 8(a) of the 1958 Small Business Investment Act (15 USC 14A) authorized the Small Business Administration to enter into prime contracts with federal agencies and to subcontract the performance of the contract to small business concerns. Executive Order 11458, Prescribing Arrangements for Developing and Coordinating a National Program for Minority Business Enterprise (34 Code of Federal Regulations [CFR] 4937), authorized the use of this provision to assist minority businesses and established the 8(a) Program, as it is commonly called. Federal officials should take advantage of Tribal businesses that are eligible as Small Disadvantaged Businesses, an 8(a) participant, or a Historically Underutilized Business Zone. The BLM and USDA Forest Service should encourage Tribal Nations firms to bid on upcoming agency contracts for which they qualify. The BLM and USDA Forest Service may also utilize their discretionary authority to purchase products of Indian Country as outlined in the 1910 Buy Indian Act (25 USC 47) and the regulations found at 48 CFR 1401, 1452, and 1480.

6.2 Contracting for Services, Expertise, or Products Needed for Decision-Making

The BLM and USDA Forest Service may require land use applicants (e.g., Special Recreation Permit holders) to obtain information from Tribes needed to comply with NEPA or the NHPA. Information may include knowledge about the management of natural resources or cultural resources, such as current or past land use practices, resource utilization, or distribution of natural resources. In addition, the BLM and USDA Forest Service may contract or pay for Tribes and American Indian individuals to produce reports. The BLM's and USDA Forest Service's ability to obtain this information may be impossible without the assistance of a Tribe or Tribal representative.

Tribes have occupied lands near or utilized portions of BENM for long periods of time. Their insights into past land conditions and the impacts of human use and occupation on this ecosystem extends back in time for hundreds of years. Thus, their knowledge of natural and human interactions on this landscape may be obtained by the BLM and USDA Forest Service working in collaboration with the BEC or comparable entity through the following methods:

- Studies on visitor use and the management of Monument objects
- Studies on utilizing traditional ecological knowledge for the management of Monument objects
- Studies on traditional, public, and scientific uses of Monument objects, including, but not limited to, pre-contact sites, rock writings, artifact scatters, American Indian sacred sites, cultural landscapes, and traditional cultural properties
- Studies on promoting access for religious and traditional uses
- Studies on sustainable firewood collection based on modern use and ethnographic accounts
- Studies on traditional building skills, technology, art, place names, and subsistence

- Ethnographic reports, National Register of Historic Places nominations, or other specific information regarding historic properties, trails, sacred sites, and culturally significant landscapes
- Studies on the location, habitat, condition, and trend of important plant and animal species, including ethnobotanical species

7 HUMAN RESOURCES

The BLM and USDA Forest Service will collaborate with the BEC or comparable entity on the development of American Indian recruitment programs. Although the BLM and USDA Forest Service do not utilize American Indian preference in hiring, the agencies do allow self-identification for employment statistics. Internship opportunities for Tribal youth and partnerships offer additional opportunities to bolster American Indian employment while facilitating mutually supported projects. Providing educational opportunities and employment to Tribal members is a powerful demonstration of a federal commitment to establishing positive, long-term working relationships with Tribes.

7.1 Education

The BLM and USDA Forest Service in collaboration with the BEC will negotiate cooperative agreements with Tribal Nations in the field of education and employment. The agencies will seek out partnerships with American Indian educational institutions to assist in the development of curricula or implementing cooperative education programs. Programs such as Project Archaeology would enable the agencies and Tribes to develop curricula and lesson plans that strengthen science competencies and interests that American Indian youth have in resource management careers. Agency officials may also seek out fully accredited Tribal colleges and universities to provide practical experiences and opportunities for their students. The BLM, USDA Forest Service, and Tribal colleges can partner to establish research projects and facilitate involvement with land management issues of BENM.

7.2 Training Opportunities

All federal employees working in BENM should complete the most recent training courses on Tribal relations. The BLM and USDA Forest Service should invite Tribes to attend and participate in agency training courses related to NEPA, lands, rights-of-way, cadastral surveys, wildfire and fuels management, and heritage resources. Holding periodic joint training courses may familiarize BENM staff members with Tribal cultural and governmental structure, and familiarize Tribal leaders and staff members with the USDA Forest Service's and BLM's legal authorities, missions, histories, and programs. Training courses should be tailored to address issues in BENM. Both federal employees and Tribes can benefit from a greater understanding of how federal programs can be coordinated with Tribal government programs. As funding allows, the BLM and USDA Forest Service may send Tribal staff to off-location trainings at locations such as the BLM's National Training Center. Access to BLM and USDA Forest Service online training courses should be made known to Tribes. The dialogue and multicultural perspectives that result from such exchanges enhance relationships in BENM.

Federal employees of the BLM and USDA Forest Service should take advantage of cultural awareness training sponsored by Tribes when and where they are available. Such classes strengthen the staff's understanding and appreciation of Tribal traditional, cultural, and religious

values, as well as treaties and other Tribally reserved rights on federal lands. Managers should encourage BENM staff to attend gatherings sponsored by Tribal entities, Tribal consortiums, or nonprofit organizations offering specialized knowledge and addressing issues important to Tribes. The BLM and USDA Forest Service may also co-host workshops with Tribes concerning Tribal relationships, traditional cultures, and consultation. Presentations may include traditional technologies and crafts, a mutual understanding of traditional use areas, cultural landscapes, and the full scope of Tribal interests.

Financial Support for Tribal Participation in Monument Land 7.3 **Management Decision-Making**

At the discretion of Authorized Officer (BLM)/Responsible Official (USDA Forest Service), funding may be provided to Tribes to facilitate their participation in the NEPA and NHPA processes under several circumstances (see BLM Manual MS-1780, Section 1.6.B, and H-1780-1, Appendix 2; see also Forest Service Manual 1563.15). It should be noted that this compensation policy allows for compensation but does not mandate it. Such compensation for consultation is not legally required; however, the BLM and USDA Forest Service have the authority to provide it directly under certain circumstances or require that the compensation needed to acquire information necessary for the agency to make decisions regarding land use applications or authorizations be provided by third parties. The agencies may utilize their own appropriated funds or cost-reimbursable accounts to reimburse Tribal members for travel expenses to attend meetings in connection with NEPA, the Federal Land Policy and Management Act, or NHPA Section 106 processes, or for time taken to discuss proposed projects, cultural resources site management, or traditional use areas (see the Advisory Council on Historic Preservation Memorandum, Guidance on Assistance to Consulting Parties in the Section 106 Review Process, dated November 28, 2018, available at: https://www.achp.gov/sites/default/files/ guidance/2018-

11/ACHP%20Guidance%20on%20Assistance%20to%20Consulting%20Parties.pdf).

7.4 **Employee Performance**

Federal employees working in BENM that are routinely engaged in collaborative management with the BEC or comparable entity will be evaluated regarding their efforts to build Tribal relationships and carry out effective consultation. BLM and USDA Forest Service managers and staff will do the following:

- Seek opportunities to develop ongoing partnerships with the Tribes to ensure that land use decisions reflect effective collaboration, including engagement of the BEC or comparable entity, early in the decision-making process. Decisions should include documentation on how Tribal issues and concerns were taken into account.
- Facilitate Tribal access for Tribal religious and traditional uses; maintain a professional staff that is capable of carrying out timely and effective collaboration and that seeks out and establishes educational, training, interpretive, contracting, fire, and cadastral programs of joint interest and benefit to Tribes and the agencies.
- Take steps to fully utilize information provided by Tribes regarding traditional uses, access concerns, and resource issues and will protect such sensitive information from public disclosure to the extent allowed by law.
- Personally participate in discussions with the BEC or comparable entity and establish professional relationships with Tribal governments, appointed delegates or representatives, and delegated Tribal staff in an effort to facilitate long-term, positive partnerships involving land management, resource protection, and economic development.

7.5 Tribal Consultation General Considerations

This section includes information on how the BLM and USDA Forest Service will consult with Tribal Nations not specifically identified in Presidential Proclamation 10285. The BLM and USDA Forest Service will also follow these general procedures when consulting with Tribes identified in Presidential Proclamation 9558, as re-established by Presidential Proclamation 10285, as required by federal laws requiring government-to-government consultation, such as the NHPA.

8 GENERAL ASPECTS OF CONSULTATION

8.1 Roles - Federal Official

Government-to-government consultation requires the participation of the BLM and/or USDA Forest Service manager and the Tribal chairperson or other representative official designated by the Tribal chair or council. The authority for consultation may be delegated through the BENM manager to the lowest practical level; however, the agency manager who delegates or re-delegates authority does not divest himself or herself of the power to exercise that authority, nor does the delegation or re-delegation relieve that official of the responsibility for actions taken pursuant to the delegation.

8.2 Roles - Staff

BLM and USDA Forest Service program specialists and staff members play an invaluable role in gathering information and briefing the agency manager on issues affecting Tribal relations. They provide professionally sound information, recommendations, and advice regarding the Tribes' traditional and ongoing uses of public lands, practices and beliefs, locations and uses of importance on public lands, and other information necessary for consultation. They interact frequently with their Tribal counterparts within Tribal governments to facilitate compliance with laws and regulations requiring Tribal consultation and input into federal decision-making. Staff members often arrange consultation meetings and meet with Tribal staff to discuss issues once the agency manager and Tribal officials decide it is time to consult on a matter. They obtain and share data needed for decision-making. They may identify opportunities for cooperative agreements or other proactive relationships in the fields of education, outreach, and research with Tribes. They play key roles in contracting and managing sensitive information. Agency staff members cannot, however, represent the BLM or USDA Forest Service in government-to-government interactions.

8.3 Roles - Third Parties

Contractors cannot negotiate, make commitments, or otherwise give the appearance of exercising the BLM's or USDA Forest Service's authority in consultations. Therefore, as a general rule, consulting firms working for land use applicants may be approved by the agency to carry out the following limited and restricted activities to facilitate consultation:

- Gathering and analyzing data
- Preparing reports
- Arranging meetings
- Facilitating field trip logistics
- Managing the compilation of data and records as part of the administrative record

Although these steps are helpful, the BLM and USDA Forest Service ultimately retain the responsibility to consult with Tribal Nations on a government-to-government basis. It cannot be transferred by the agencies to other entities.

8.4 Identifying Tribal Nations for Consultation

Specific consultation should focus on Tribal Nations known to have concerns about the BENM area under consideration and the Monument objects, natural resources, cultural resources, and/or land uses involved. In addition, nonresident Tribes with historical ties should be given the same opportunities as resident Tribes to identify their selected contact persons and their issues and concerns regarding public lands.

8.5 Points of Contact within Tribal Nations

For each Tribe, the BLM and USDA Forest Service should develop and maintain current lists of the following:

- Tribal officials (e.g., chairperson, president, council members, etc.)
- Appropriate staff contacts for specific programs and issues (e.g., energy development, natural resources, lands, cadastral surveys, economic development, Tribal Historic Preservation Offices, etc.)
- Traditional cultural or religious leaders
- Lineal descendants of deceased American Indian individuals whose remains are discovered on public lands or are in federal possession or control

8.6 Multitribal Organizations

Official Tribal consultation takes place as part of government-to-government relationships between the BLM and/or USDA Forest Service and individual federally recognized Tribes; however, Tribal relationships can also be enhanced through the development of positive working relationships with Tribal consortiums.

9 METHODS OF CONSULTATION

Agency managers should determine Tribal preferences for information sharing and consultation. Agency managers and staff should consider meeting with Tribes in their areas after each agency office's annual work plan has been prepared for the Monument. Regularly scheduled meetings can accomplish several important things:

- Agency managers and staff can identify and briefly explain actions planned for the coming year and can describe any additional land use proposals that are foreseeable on public lands or lands that may be affected by management decisions.
- A Tribe can identify proposed actions or geographical areas that it is concerned about and about which it would like to be consulted at a later date. The Tribe might also identify actions or geographical areas for which it feels no need to be consulted.
- For some proposed actions, agency managers and staff and the Tribe can agree to follow expedited or tailored consultation procedures to resolve scheduling conflicts, meet project time frames, or accommodate the special needs of the people involved.

 A Tribe can use the meeting as an opportunity to identify persons it recognizes as traditional leaders or religious practitioners. The Tribe can also identify specific proposed actions, kinds of actions, or geographical areas about which these individuals should be consulted.

Information coming out of these meetings may form the basis of consultation agreements or memoranda of understanding that can define the manner in which Tribes prefer that future consultation take place, areas or actions the Tribes wish to discuss in the future, or specific natural or heritage resources Tribes wish to be consulted about whenever proposed actions might affect them. Regular periodic meetings can be an effective means for maintaining a constructive ongoing intergovernmental relationship.

9.1 When and with Whom to Consult

Table C-1 indicates the types of Tribal Nation officials and/or individuals with whom the BLM and USDA Forest Service are obligated to consult.

Table C-1. Tribal Consultation Guidance

Officials or Individuals to Consult	NHPA	Archaeological Resources Protection Act	NAGPRA	Federal Land Policy and Management Act	NEPA	American Indian Religious Freedom Act	Executive Order 13007
Tribal representative whom the Tribal government has designated for this purpose	Х	X	Х*	Х	Х	X	Х
Lineal descendant of an identified American Indian individual			Χ [†]				
Traditional religious leader			X‡			X‡	
Appropriately authoritative representative of an American Indian religion							Χ‡

^{*} Tribal Nations also consulted

9.2 Coordinating Consultation across Administrative and Jurisdictional Boundaries

The BLM and USDA Forest Service managers responsible for the Monument should seek partnership opportunities to jointly meet with Tribes to discuss land management issues relevant to both agencies and multiple Tribes.

[†] Lineal descendants (who need not be Tribal members) have legal precedence for repatriation and custody.

[‡] A Tribal government may designate a "traditional religious leader" or an "authoritative representative" as the Tribe's representative for consultation under the American Indian Religious Freedom Act or Executive Order 13007. Under NAGPRA, a traditional religious leader is a person recognized by Tribal members as responsible for performing certain cultural or religious duties or a leader of the Tribe or organization's cultural, ceremonial, or religious practices, as defined in 43 CFR 10.2(d)(3).

9.3 Preparing and Initiating Tribal Consultation

When it becomes apparent that the nature and/or location of an activity could affect Tribal Nations' issues or concerns, the BENM manager should initiate appropriate consultation with the potentially affected Tribes as soon as possible once the proposed project-specific land use decision has been developed. Although land use planning is the best time to identify landscape-scale issues and other broad Tribal concerns, the BLM and USDA Forest Service must also address Tribal concerns when approving specific land use authorizations and making other decisions, such as revising significant policies, rules, and regulations.

10 CONSULTATION GUIDELINES FOR SELECTED AUTHORITIES

10.1 Consultation Guidelines for the National Historic Preservation Act

The BLM's and USDA Forest Service's responsibilities for compliance with Section 106 of the NHPA, including Tribal consultation, are triggered by a proposed undertaking. Tribal consultation as part of the Section 106 process is driven by and focused on a specific undertaking. Although the agencies must conduct Tribal consultation as part of the Section 106 process, this consultation is focused on historic properties only and does not satisfy the agencies' obligations to consult with Tribes on other issues potentially raised by a proposed action or program. Section 106 consultation will follow the requirements provided in 36 CFR 800.1 et seq.

10.2 Consultation Guidelines for the National Environmental Policy Act

For NEPA purposes, the agency manager consults with elected Tribal officials or Tribal representatives(s) whom the Tribal government has designated for this purpose. The purpose of consultation is to identify a proposed action's potential to conflict with Tribal members' uses of the environment for cultural, religious, and economic purposes and to seek alternatives that would resolve potential conflicts. Tribal consultation may begin before public notice, including when preapplication meetings occur. This early consultation may be initiated by providing Tribes the opportunity to add comments to the project-specific interdisciplinary team NEPA checklists. Tribal consultation should continue throughout the NEPA process.

For environmental assessments and environmental impact statements, consultation should occur at the formation of the proposed action, when alternatives are formulated, an assessment of impacts is projected, and analysis documents are published: before the final decision is rendered.

The NEPA document must fully disclose Tribal issues and provide a summary of Tribal consultation in order to demonstrate that Tribal concerns have been heard and their positions considered. As is fitting for the special, BENM federal-Tribal relationship, Tribal issues and recommendations should be fully discussed and addressed in relevant sections of the text within the NEPA document rather than as an appendix to the discussion of cultural and archaeological resources. The following is a list of relevant sections where these discussions could occur:

- Scoping and issues. Include a specific discussion of scoping issues raised by Tribes.
- Affected environment. Include a section that introduces those Tribes with interests in the project and identifies resources or issues of significance to them.

- Alternatives. Discuss how Tribal issues shaped the alternatives considered.
- Environmental impacts. Address impacts, including cumulative effects, to Tribal concerns and refer to more detailed discussions in other sections, such as impacts to water or biological or botanical resources of Tribal significance.

If a categorical exclusion is completed, the agency should take care to consider whether or not the proposed action covered by the categorical exclusion involves "extraordinary circumstances" relating to impacts to Tribal Nations' religious concerns or impacts to Tribal Nations' resources of concern to. If, for any reason, a NEPA document will not be prepared, an appropriate non-NEPA document should be used to substantiate identification and consideration of Tribal Nations concerns and places of importance. Such non-NEPA documentation may consist of federal-Tribal consultation logs, inventory reports, and data recovery reports, among others. These documents should be maintained and housed with the administrative record for the project.

A number of strategies should be discussed with Tribes during consultation associated with the NEPA process to protect resources and access issues of importance to the Tribes. Mitigation measures analyzed in the NEPA document may include, but are not limited to, the following:

- Attaching measures to use authorizations to protect resources of importance to Tribes and accommodate their use. For example, in certain situations, ceremonial places can be screened from view by planting vegetation or installing temporary visual barriers. Intrusive developments can be hidden or painted to blend with the environment.
- Moving competing uses. Conflicting activities and uses can be shifted to other areas or scheduled for other times.
- Removing incompatible facilities. Disturbed ground surfaces and vegetation can be
 restored. Vehicle use can be restricted. Livestock can be managed. Vandalism can be
 reduced by law enforcement patrols and site steward monitoring. Tribes can probably also
 suggest additional measures.
- Including Tribes in project planning and utilizing their input to design specifications for
 access, parking, trails, interpretive signs, and other visitor developments. Tribal consultation
 in several states has resulted in Tribal input into the text and artwork on interpretive signs
 at rock writing sites. Partnering on the interpretation of a site enhances the interpretive
 experience of all visitors and improves relationships with Tribes by reflecting their cultural
 traditions.
- Consulting with Tribal governments to collaboratively identify means of reducing or avoiding impacts.
- Issuing special use permits to address conflicts.
- Negotiating memoranda of understanding to facilitate access and use.
- Specifying the appropriate treatment of accidental finds such as archaeological sites or human remains resulting from project activities or natural erosion processes. This can include developing a comprehensive agreement or a plan of action related to NAGPRA.

Where Tribal concerns are appropriately addressed through the NHPA Section 106 process, as in the consideration of historic properties with traditional and religious significance, the NEPA document should reference the outcome of the Section 106 process.

10.3 Consultation Guidelines for the American Indian Religious Freedom Act

For the purpose of complying with the American Indian Religious Freedom Act, the BENM manager should consult with elected officials or Tribal representative(s) and/or Tribal Nations' traditional religious leaders whom the Tribal government has designated or identified for this purpose. The purpose of consultation is to identify the potential for land management procedures to conflict with Tribal Nations' religious observances and to seek alternatives that would resolve the potential conflicts.

Case law has established that the American Indian Religious Freedom Act has an ongoing implementation requirement, obligating agencies to consult with Tribal officials and Tribal religious leaders when agency actions would abridge the Tribe's religious freedom by 1) denying access to sacred sites required in their religion, 2) prohibiting the use and possession of sacred objects necessary to the exercise of religious rites and ceremonies, or 3) intruding upon or interfering with ceremonies. The American Indian Religious Freedom Act focuses not just on religious places but also on religious practices or religious activities, and it directs agencies to consider both places and practices before taking actions that could affect Tribes. The BENM manager must examine proposed actions and authorizations as well as routine management practices that could substantially restrict access or interfere with the free exercise of religion.

10.4 Consultation Guidelines for Executive Order **13007**, Indian Sacred Sites

For the purpose of complying with Executive Order 13007, the agency manager should consult with elected officials or Tribal representative(s) and/or the appropriately authoritative representative of a Tribal Nation whom the Tribal government has identified for this purpose. The purpose of consultation is to do the following:

- Determine whether proposed land management actions would
 - accommodate Tribal Nations' religious practitioners' access to and ceremonial use of traditional cultural properties, American Indian sacred sites, and cultural landscapes on federal lands, and/or
 - avoid adversely affecting the physical integrity of American Indian sacred sites on federal lands.
- Seek alternatives that would resolve potential conflicts.

Aside from a few exceptional cases where well-known physical markers are present, only Tribal representatives have the knowledge needed to identify a Tribe's sacred sites. A Tribe may name an appropriately authoritative representative of an American Indian religion to provide this information. Agency officials cannot know to accommodate access to and ceremonial use of traditional cultural properties, American Indian sacred sites, and cultural landscapes, and to avoid adversely affecting them unless the Tribe identifies them. Identification can only occur by consultation. In some cases, a Tribe may be reluctant to tell the BLM and USDA Forest Service where a site is located, because the agencies cannot protect that information or because the site may no longer be sacred if its location is revealed. In such cases, the agency manager should ask if there is a broader area that should be protected, within which there may be a sacred site.

10.5 Consultation Guidelines for the Native American Graves Protection and Repatriation Act

For the purposes of NAGPRA consultation, the agency manager consults with lineal descendants, a culturally affiliated Tribal Nation or Native Hawaiian organization, or a Tribal Nation that aboriginally occupied the area (as determined by the Indian Claims Commission). For the purposes of NAGPRA collections, the BLM state director conducts consultation. For the purposes of inadvertent discoveries or intentional excavation, the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) for the Monument conducts consultations.

For intentional excavations, the agency manager must take reasonable steps to determine whether a planned activity may result in the excavation of American Indian human remains and/or cultural items subject to NAGPRA from federal lands. When an intentional excavation is planned, the agency manager must follow the procedures found at 43 CFR 10.3 and any applicable requirements of applicable state laws, as specified in statewide protocol agreements between the BLM and the State Historic Preservation Office. In addition, a cultural resources use permit (see BLM Manual 8150) or equivalent documentation is required, which ensures that the recovery is conducted in accordance with the Archaeological Resources Protection Act, as required by 43 CFR 10.3(b)(1).

When the agency anticipates that an activity may result in the discovery of American Indian human remains and/or cultural items, the agency manager must notify and consult with Tribal Nations before issuing authorizations. Consultation informs the development of the BLM's plan of action for the identification, treatment, recording, and disposition of American Indian human remains and/or cultural items. Plans of action have a specific format, which is detailed in the regulations at 43 CFR 10.5(e). The agency manager signs the plan of action; consulting Tribes are provided a copy and may sign but do not have to sign.

Plans of action address specific projects. On a more programmatic level, a comprehensive agreement is encouraged, following 43 CFR 10.5(f). These agreements are developed in consultation with Tribal Nations, and the agency manager and Tribal officials sign.

An inadvertent discovery is a discovery of American Indian human remains and/or cultural items on public land when there is no plan of action. When American Indian human remains or other cultural items protected by NAGPRA are discovered on public land, BLM offices must handle this in the manner described in the inadvertent discovery procedures found at 43 CFR 10.4 and any applicable requirements of state laws, as specified in statewide protocol agreements between the BLM and the State Historic Preservation Office.

If a discovery occurs but no plan of action is in place, the agency manager must telephone, notify in writing, and initiate Tribal consultation within 3 working days. Work must cease at the location of the discovery, and the remains must be safeguarded for up to 30 days while the agency manager conducts Tribal consultation to determine next steps. If the human remains and/or cultural items must be removed, the BLM will develop a plan of action to address their treatment, recording, and disposition, in accordance with 43 CFR 10.5(e).

To minimize chances of a 30-day work stoppage, when there is a reasonable likelihood that a project will result in the discovery of American Indian human remains and/or cultural items, the agency manager should consult with Tribal Nations and develop plan(s) of action that will be implemented should discoveries occur.

APPENDIX D

Desired Wildland Fire Condition and Condition Class



Table D-1. Ecological Systems

Row Labels	Sum of Count (%)
Colorado Plateau Pinyon-Juniper Woodland	32.97
Colorado Plateau Blackbrush-Mormon-tea Shrubland	21.94
Colorado Plateau Mixed Bedrock Canyon and Tableland	14.58
Colorado Plateau Pinyon-Juniper Shrubland	12.68
Southern Rocky Mountain Ponderosa Pine Woodland	3.86
Inter-Mountain Basins Big Sagebrush Shrubland	2.35
Inter-Mountain Basins Mixed Salt Desert Scrub	1.60
Southern Rocky Mountain Dry-Mesic Montane Mixed Conifer Forest and Woodland	1.15
Rocky Mountain Gambel Oak-Mixed Montane Shrubland	1.09
Inter-Mountain Basins Semi-Desert Shrub-Steppe	0.98
Great Basin and Intermountain Ruderal Shrubland	0.87
Southern Colorado Plateau Sand Shrubland	0.85
Rocky Mountain Lower Montane-Foothill Shrubland	0.76
Rocky Mountain Cliff Canyon and Massive Bedrock	0.51
Rocky Mountain Aspen Forest and Woodland	0.44
Inter-Mountain Basins Shale Badland	0.40
Western Cool Temperate Pasture and Hayland	0.36
Developed-Roads	0.32
Rocky Mountain Lower Montane-Foothill Riparian Woodland	0.21
Inter-Mountain Basins Greasewood Flat	0.21
Inter-Mountain Basins Montane Sagebrush Steppe	0.20
Western Cool Temperate Urban Shrubland	0.17
Southern Rocky Mountain Mesic Montane Mixed Conifer Forest and Woodland	0.15
Inter-Mountain Basins Semi-Desert Grassland	0.13
Colorado Plateau Mixed Low Sagebrush Shrubland	0.12
Inter-Mountain Basins Active and Stabilized Dune	0.11
Inter-Mountain Basins Mat Saltbush Shrubland	0.11
Great Basin and Intermountain Introduced Annual Grassland	0.10
Great Basin and Intermountain Introduced Annual and Biennial Forbland	0.09
Western Cool Temperate Fallow/Idle Cropland	0.07
Great Basin and Intermountain Introduced Perennial Grassland and Forbland	0.07
Interior West Ruderal Riparian Scrub	0.07
Southern Rocky Mountain Montane-Subalpine Grassland	0.05
Rocky Mountain Subalpine Dry-Mesic Spruce-Fir Forest and Woodland	0.05
Interior Western North American Temperate Ruderal Grassland	0.05
Western Cool Temperate Urban Evergreen Forest	0.04
Open Water	0.04
Interior West Ruderal Riparian Forest	0.03

Row Labels	Sum of Count (%)
Rocky Mountain Subalpine-Montane Mesic Meadow	0.03
Interior Western North American Temperate Ruderal Shrubland	0.03
Western Cool Temperate Close Grown Crop	0.02
Western Cool Temperate Urban Herbaceous	0.02
Inter-Mountain Basins Aspen-Mixed Conifer Forest and Woodland	0.02
Rocky Mountain Lower Montane-Foothill Riparian Shrubland	0.02
Western Cool Temperate Developed Shrubland	0.02
North American Arid West Emergent Marsh	0.01
Western Cool Temperate Wheat	0.01
Rocky Mountain Alpine Bedrock and Scree	0.01
Western Cool Temperate Developed Evergreen Forest	0.01
Rocky Mountain Alpine-Montane Wet Meadow	0.00
Developed-Low Intensity	0.00
Rocky Mountain Subalpine-Montane Limber-Bristlecone Pine Woodland	0.00
Quarries-Strip Mines-Gravel Pits-Well and Wind Pads	0.00
Western Cool Temperate Urban Deciduous Forest	0.00
Western Cool Temperate Urban Mixed Forest	0.00
Rocky Mountain Subalpine-Montane Riparian Shrubland	0.00
Developed-Medium Intensity	0.00
Rocky Mountain Subalpine-Montane Riparian Woodland	0.00
Western North American Ruderal Wet Meadow and Marsh	0.00
Southern Rocky Mountain Ponderosa Pine Savanna	0.00
Western North American Ruderal Wet Shrubland	0.00
Developed-High Intensity	0.00
Western Cool Temperate Row Crop	0.00
Rocky Mountain Alpine Dwarf-Shrubland	0.00
Western Cool Temperate Row Crop - Close Grown Crop	0.00
Western Cool Temperate Developed Deciduous Forest	0.00
Western Cool Temperate Developed Mixed Forest	0.00
Western Cool Temperate Developed Herbaceous	0.00
Inter-Mountain Basins Curl-leaf Mountain Mahogany Woodland	0.00
Grand Total	100.00

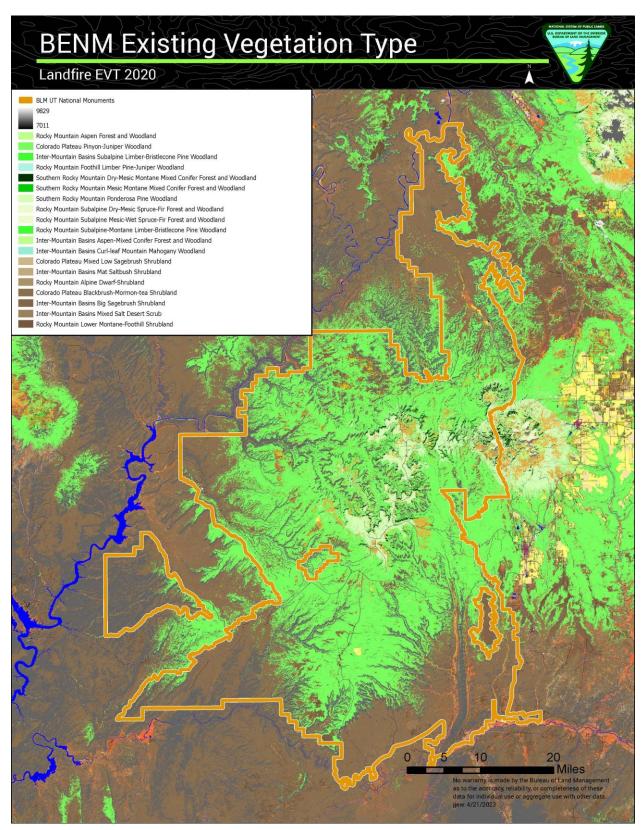


Figure D-1. BENM existing vegetation type.

Table D-2. Vegetation Group and Desired Wildland Fire Condition

Major Vegetation Group (Percentage in Planning Area)	Desired Wildland Fire Condition and Actions Needed to Meet Desired Wildland Fire Condition		
Salt Desert Scrub (29%)	The Desired Wildland Fire Condition (DWFC), both outside and inside the wildland-urban interface (WUI), is native, open salt desert scrub vegetation with little to no invasive species cover. Fire would be mostly excluded from these vegetation types. Due to the historical lack of surface fuels, the historical fire-return interval is extremely infrequent (Final EIS 2004).		
	Due to the historical lack of fire and current potential for cheatgrass (<i>Bromus tectorum</i>) invasion, do not allow wildland fire to burn into salt desert scrub vegetation types. Wildland fire is not desired due to high potential for cheatgrass invasion following wildfire and loss of native salt desert scrub communities.		
	Treat salt desert scrub types using a combination of mechanical, chemical, seeding and biological treatments to reduce cheatgrass cover and restore native communities. Prescribed fire may be used in conjunction with seeding when part of a cheatgrass control objective (Pellant 2002). Due to the high incidence of cheatgrass in this vegetation type, consider seeding following any surface-disturbing activity.		
	Following wildland fire, aggressively seed to reduce potential for cheatgrass and other noxious weed invasion.		
Pinyon and Juniper Woodland (26%)	Where pinyon and juniper occurred historically, the DWFC both outside and inside the WUI is open stands of pinyon and juniper with native grass and shrub understory (Miller and Wigand 1994; Final EIS 2004). Where pinyon and juniper did not occur historically, the DWFC is the native shrub, grass and forest communities that the pinyon and juniper have invaded. The historical role of fire (estimated 15–50 year fire-return interval) prevented encroachment of pinyon and juniper into other vegetation communities (Bradley et al. 1992; Heyerdahl et al. 2004; Miller and Tausch 2001; Romme et al. 2002). Most pinyon and juniper encroachment has occurred in the past 100 years (Miller and Wigand 1994). Follow treatments with seeding in stands that lack native understory vegetation (Final EIS 2004). Avoid treatments in old-growth (i.e., pre-settlement stands) pinyon and juniper. Historical occurrence of pinyon and juniper is difficult to map, but pre-settlement trees are generally located in shallow, rocky soils and tend to have a unique growth form characterized by rounded, spreading canopies; large basal branches; large irregular trunks; and furrowed fibrous bark (Miller and Rose 1999). Historical fire-return intervals in these protected sites are greater than 100 years (Romme et al. 2002).		
	When possible, allow wildland fire to play its natural role that mimics the historical fire- return interval and severity in stands that have some cover of native understory vegetation. Due to the high risk of losing key ecosystem components in stands with extremely depauperate native understory, avoid wildland fires in these areas. Prescribed fires should be applied to pinyon and juniper communities when native surface fuels will carry fire and when there is low risk of invasive species.		
	Prescribed fire should be used to approximate historical fire-return intervals and promote recovery of the pre-settlement vegetation cover types. Remove most young (<100 years old) pinyon and juniper trees through fire or mechanical treatments (Brockway et al. 2002). In the WUI, construct fuel breaks between Bureau of Land Management (BLM) and private land or other values at risk.		
	Following wildfire in areas lacking native understory, aggressively seed to reduce invasive species establishment and to restore native communities.		

Major Vegetation Group (Percentage in Planning Area)	Desired Wildland Fire Condition and Actions Needed to Meet Desired Wildland Fire Condition		
Sagebrush (18%)	The DWFC, both outside and inside the WUI, is healthy sagebrush defined as diverse age classes with an understory of native grasses and forbs (Paige and Ritter 1999). Research suggests that stand-replacement fires burned every 7 to 110 years depending on the particular sagebrush species and its associated habitat (Brown 2000; Miller 2002; Final Els 2004). Fire management actions in sagebrush must be carefully balanced between invasive species concerns, wildlife habitat, and the need to restore fire.		
	When possible, allow fire to play its natural role, which mimics the historical fire-return interval and severity in lands that have a low potential for cheatgrass invasion. Areas with low potential for cheatgrass invasion include higher elevation sites and/or sites that have very low incidence of cheatgrass pre-fire.		
	Treat dense sagebrush (>30%) (Winward 1991) with fire, mechanical, seeding, or chemical treatments to reduce sagebrush canopy cover and improve native grass and forb density and cover; an additional objective in treating sagebrush is to remove encroaching pinyon and juniper trees (Miller and Tausch 2001). In the WUI, construct fuel breaks between BLM and private land (or other values at risk) in dense stands of sagebrush.		
	Following wildfire in lands lacking native understory vegetation, aggressively seed to promote native understory grasses and forbs and reduce invasion of cheatgrass and noxious weeds. Consider including sagebrush in seeding mixes or planting sagebrush seedlings in high-value wildlife areas following large, high-severity wildfires when natural seed sources would be lacking.		
Grassland (12%)	Where native grasslands occurred historically, the DWFC outside and inside the WUI consists of native grass and forb communities. Native grasslands have been lost to pinyon and juniper encroachment, cheatgrass invasion, and nonnative plant seedings (e.g., crested wheatgrass, perennial ryegrass, etc.). Where nonnative grasslands occur, the DWFC is the restoration of the native grassland or shrub community. The historical role of fire in Utah's grasslands was similar to pinyon and juniper and sagebrush community types, with fires every 15 to 50 years (Paysen et al. 2000).		
	When possible, allow fire to play its natural role, which mimics the historical fire-return interval and severity.		
	Treat native grasslands with fire, mechanical, or chemical treatments to reduce encroaching trees (mainly juniper), shrubs, and invasive plants. Fire treatments alone should be avoided where there is potential for cheatgrass invasion (e.g., areas below 7,000 feet that have adjacent cheatgrass populations) (Pellant 2002). In the WUI, consider green stripping between BLM and private lands and other values at risk (Harrison et al. 2002).		
	Following wildfire in lands lacking native grasses, aggressively seed to reduce potential for cheatgrass and other invasive weeds.		
Blackbrush (6%)	The DWFC, both outside and inside the WUI, is composed of dense-to-scattered shrubs and dense-to-open native grasses. Evidence suggests Utah's blackbrush communities fail to reestablish following fire (Final EIS 2004).		
	Wildland fire should be avoided in blackbrush communities due to invasive species concerns, historical lack of fire, and poor regeneration of blackbrush following fire (Callison et al. 1985).		
	There is little research on non-fire treatments in blackbrush. Any treatments should be of relatively small size and closely monitored. In the WUI, consider fuel breaks between dense blackbrush stands on BLM-administered lands and private land.		
	Following wildfire, aggressively seed to reduce potential for invasion of cheatgrass and noxious weeds.		

Major Vegetation Group (Percentage in Planning Area)	Desired Wildland Fire Condition and Actions Needed to Meet Desired Wildland Fire Condition		
Mountain Shrub (2%)	The DWFC outside of the WUI is stands with patches of differing age classes. In the WUI, the DWFC is greatly reduced vegetation density or a conversion to less-flammable vegetation between BLM and private lands or other values at risk.		
	When possible, allow fire to play its natural role, which mimics the historical fire-return interval and severity.		
	Treat large expanses of even-aged, dense, homogenous stands to result in patches of diverse age classes (see Rondeau 2001 for patch size guidance). To achieve greater habitat diversity and decreased potential for large-scale, high-severity fire, reduce invasion of pinyon and juniper and reduce the average age of stands through fire, mechanical or biological (i.e., grazing goats) treatments. In the WUI, consider aggressive vegetation manipulation to create fire breaks in highly flammable shrub types (e.g., Gambel oak [Quercus gambelii]) when there are values at risk.		
	Because most of these species sprout following wildfire, consider seeding only to reduce potential for invasive weeds.		
Mixed Conifer (<1%)	The DWFC outside the WUI is landscapes with a mosaic of age classes (Arno 2000). In the WUI, the DWFC is reduced canopy density and reduced ladder fuels between BLM and private lands and other values at risk.		
	When possible, allow fire to play its natural role, which mimics the historical fire-return interval and severity in stands with low to moderate fuel loading. In dense stands with high fuel loading, consider mechanical treatments prior to reintroducing fire.		
	Treat areas to result in a landscape of diverse age classes while retaining patches of large old trees. In the WUI, remove ladder fuels and create shaded fuel breaks between BLM and private land when values are at risk.		
	Consider tree planting following wildland fire to restore or rehabilitate the forest resource to promote forest regeneration.		
Ponderosa Pine (<1%)	The DWFC, both outside and in the WUI, is open stands with a native grass and forb understory.		
	When possible, allow fire to play its natural role, which mimics the historical fire-return interval and severity. Restore fire (natural or prescribed) to stands with open to moderately dense canopies and with native understory.		
	Consider mechanical treatments in dense stands until they reach a lower Fire Regime Condition Class before restoring fire. Reduce juniper encroachment through fire (preferred when fuels conditions allow) or mechanical treatments. In the WUI, remove ladder fuels and create fuel breaks between BLM and private land and other values at risk.		
	Following wildfires, consider seeding to reduce invasive weeds and planting ponderosa pine seedlings for forest restoration and rehabilitation.		
Creosote Bursage (<1%)	The DWFC is for fire to be mostly excluded from these vegetation types.		
	Historically, fire seldom or rarely occurs due to the lack of surface fuels in these communities (Final EIS 2004).		
	Do not allow fire to burn into these vegetation types because fire rarely occurred historically, and the potential for cheatgrass invasion is high.		
	Treat creosote and bursage types using mechanical, chemical, or biological treatments to reduce annual grass cover.		
	Following wildfire, aggressively seed to reduce potential for annual grasses and other invasive weeds.		

Major Vegetation Group (Percentage In Planning Area)	Desired Wildland Fire Condition and Actions Needed to Meet Desired Wildland Fire Condition
Riparian Wetland (<1%)	The DWFC, both outside and inside the WUI, are riparian and wetland areas with the appropriate composition of native species (e.g., reduction of tamarisk [<i>Tamarix</i> sp.] and other invasive species).
	When possible, allow fire to play its natural role, mimicking the historical fire-return interval and intensity. Allow low to moderate severity fire to burn into riparian and wetland areas when natural ignitions are managed as wildland fire use.
	Restore native riparian and wetland species through fire and mechanical treatments. Reduce flammable invasive species along riparian corridors (e.g., tamarisk) through mechanical, chemical, biological, and fire treatments. For prescribed fire, allow low intensity fire to back into riparian and wetland areas through ignition outside of these areas. Mechanical treatment as the initial treatment would be emphasized where there is a moderate to high potential for riparian and wetland to be burned to a high severity.
	Consider active restoration options when native riparian and wetland communities are unlikely to recover with passive restoration (due to invasive species or stream bank erosion, for example).
Aspen (<1%)	The DWFC, both outside and inside the WUI, is healthy clones with diverse age classes represented and ample regeneration.
	When possible, allow fire to play its natural role that mimics the historical fire-return interval and severity because aspen (<i>Populous</i> sp.) readily sprout following fire.
	Treat aspen stands with fire or mechanical treatments to reduce encroaching junipers and conifers and to stimulate sprouting. If treated aspen stands are small, consider excluding big game and livestock until the regeneration can withstand grazing. In the WUI, consider increasing aspen cover if possible to create a shaded fuel break between private land (and other high value areas) and the more flammable conifer trees on BLM-administered lands.
	Following wildfire, most aspen stands would need little stabilization, except soil stabilization on steep slopes; however, burned areas may need to be fenced to exclude wildlife and livestock until the regeneration can withstand grazing.

Table D-3. Resource Protection Measures and Applicable Fire Management Practices

NATURAL, BIOLOGICAL, AND CULTURAL RESOURCES			
Air			
A-1	Evaluate weather conditions, including wind speed and atmospheric stability, to predict impacts from smoke from prescribed fires and wildland fire use.		
	Coordinate with Utah Department of Environmental Quality for prescribed fires and wildland fire use. (RX, WFU)		
A-2	When using chemical fuels reduction methods, follow all label requirements for herbicide application. (NF)		
Soil and Water			
SW-1	Avoid heavy equipment use on highly erosive soils (soils with low soil loss tolerance), wet or boggy soils, and slopes greater than 30%, unless otherwise analyzed and allowed under appropriate National Environmental Policy Act evaluation with implementation of additional erosion control and other soil protection mitigation measures. (SUP, WFU, RX, NF, ESR)		
SW-2	There may be situations in which high-intensity fire will occur on sensitive and erosive soil types during wildland fire, wildland fire use, or prescribed fire. If significant areas of soil show evidence of high severity fire, evaluate area for soil erosion potential and downstream values at risk and implement appropriate or necessary soil stabilization actions, such as mulching or seeding, to avoid excessive wind and water erosion. (SUP, WFU, RX)		
SW-3	Complete necessary rehabilitation on fire lines or other areas of direct soil disturbance, including but not limited to waterbarring fire lines, covering and mulching fire lines with slash, tilling and/or subsoiling compacted areas, scarification of vehicle tracks, off-highway vehicle (OHV) closures, and seeding and/or mulching for erosion protection. (SUP, WFU, RX)		
SW-4	When using mechanical fuels reduction treatments, limit tractor and heavy equipment use to periods of low soil moisture to reduce the risk of soil compaction. If this is not practical, evaluate sites post treatment and, if necessary, implement appropriate remediation, such as subsoiling, as part of the operation. (NF)		
SW-5	Treatments such as chaining, plowing, and roller chopping shall be conducted as much as practical on the contour to reduce soil erosion (BLM Record of Decision 13 Western States Vegetation Treatment Environmental Impact Statement 1991). (NF, ESR)		
SW-6	When using chemical fuels reduction treatments, follow all label directions, additional mitigations identified in project National Environmental Policy Act evaluation and the Approved Pesticide Use Proposal. At a minimum, provide a 100-foot-wide riparian buffer strip for aerial application, a 25-foot-wide buffer for vehicle application, and a 10-foot buffer for hand application. Any deviations must be in accordance with the label. Herbicides should be applied to individual plants within 10 feet of water where application is critical (BLM ROD 13 Western States Vegetation Treatment EIS 1991). (NF)		
SW-7	Avoid heavy equipment in riparian or wetland areas. During fire suppression or wildland fire use, consult a resource advisor before using heavy equipment in riparian or wetland areas. (SUP, WFU, RX, NF, ESR)		
SW-8	Limit ignition within native riparian or wetland areas. Allow low-intensity fire to burn into riparian areas. (RX)		
SW-9	Suppress wildfires consistently with compliance strategies for restoring or maintaining the restoration of water-quality-impaired (303(d)-listed) waterbodies. Do not use retardant within 300 feet of waterbodies. (SUP, WFU)		
SW-10	Plan and implement projects consistent with compliance strategies for restoring or maintaining the restoration of water-quality-impaired (303(d)-listed) waterbodies. Planned activities should take into account the potential impacts to water quality, including increased water yields that can threaten fisheries and aquatic habitat, improvements at channel crossings, channel stability, and downstream values. Of special concern are small headwaters of moderate to steep watersheds, erosive or saline soils, multiple channel crossings, at-risk fisheries, and downstream residents. (RX, NF, ESR)		

Vegetation					
V-1	When restoring or rehabilitating disturbed rangelands, non-intrusive, nonnative plant species are appropriate for use when native species I) are not available, 2) are not economically feasible, 3) cannot achieve ecological objectives as well as nonnative species, and/or 4) cannot compete with already established native species (Noxious Weeds Executive Order 13112 2/3/1999) (BLM Manual 9015; BLM ROD 13 Western States Vegetation Treatment EIS 1991). (RX, NF, ESR)				
V-2	In areas known to have weed infestations, aggressive action should be taken in rehabilitating fire lines, seeding, and follow-up monitoring and treatment to reduce the spread of noxious weeds. Monitor burned areas and treat as necessary. All seed used should be tested for purity and for noxious weeds. Seed with noxious weeds should be rejected (ROD 13 Western States Vegetation Treatment EIS 1991). (SUP, WFU. RX, NF. ESR)				
Special Status Species					
SSS-1	Initiate emergency Section 7 consultation with the U.S. Fish and Wildlife Service upon the determination that wildfire suppression may pose a potential threat to any listed threatened or endangered species or adverse modification of designated critical habitat. (SUP)				
SSS-2	Prior to planned fire management actions, survey for listed threatened and endangered and non-listed sensitive species. Initiate Section 7 consultation with the U.S. Fish and Wildlife Service as necessary if a proposed project may affect any listed species. Review appropriate management, conservation, and recovery plans and include recovery plan direction into project proposals. For non-listed special status plant and animal species, follow the direction contained in the BLM 6840 Manual. Ensure that any proposed project conserves non-listed sensitive species and their habitats and ensure that any action authorized, funded, or carried out by the BLM does not contribute to the need for any species to become listed. (RX, NF, ESR)				
SSS-3	See site-specific conservation measures that will be identified from the biological assessment (BLM 2005). (SUP, WFU, RX, NF, ESR)				
Fish and Wildlife					
FW-1	Avoid treatments during nesting, fawning, spawning, or other critical periods for wildlife or fish. (RX, NF, ESR)				
FW-2	Avoid (if possible) or limit the size of wildland fires in important wildlife habitats such as mule deer (Odocoileus hemionus) winter range and riparian and occupied Gunnison sage-grouse (Centrocercus minimus) habitat. Use resource advisors to help prioritize resources and develop wildland fire situation analyses and wildland fire implementation plans when important habitats may be impacted. (SUP, WFU)				
FW-3	Minimize wildfire size and frequency in sagebrush communities where sage-grouse habitat objectives will not be met if a fire occurs. Prioritize wildfire suppression in sagebrush habitat with an understory of invasive, annual species. Retain unburned islands and patches of sagebrush unless there are compelling safety, private property and resource protection, or control objectives at risk. Minimize burn-out operations (to minimize burned acres) in occupied sage-grouse habitats when there are no threats to human life and/or important resources. (SUP)				
FW-4	Establish fuels treatment projects at strategic locations to minimize size of wildfires and to limit further loss of sagebrush. Fuels treatments may include green stripping to help reduce the spread of wildfires into sagebrush communities. (RX, NF)				
FW-5	Use wildland fire to meet wildlife objectives. Evaluate impacts to sage-grouse habitat in areas where wildland fire use for resource benefit may be implemented. (WFU, RX)				
FW-6	Create small openings in continuous or dense sagebrush (>30% canopy cover) to create a mosaic of multiple-age classes and associated understory diversity across the landscape to benefit sagebrush-dependent species. (WFU, RX, NF)				
FW-7	On sites that are currently occupied by forests or woodlands, but that historically supported sagebrush communities, implement treatments (fire, cutting, chaining, seeding etc.) to re-establish sagebrush communities. (RX, NF)				
FW-8	Evaluate and monitor burned areas and continue management restrictions until the recovering and/or seeded plant community reflects the desired condition. (SUP, WFU, RX, ESR)				

FW-9	Utilize the emergency stabilization and rehabilitation program to apply appropriate post-fire treatments within crucial wildlife habitats, including sage-grouse habitats. Minimize seeding with nonnative species that may create a continuous perennial grass cover and restrict establishment of native vegetation. Seed mixtures should be designed to re-establish important seasonal habitat components for sage-grouse. Leks should not be re-seeded with plants that change the vegetation height previously found on the lek.
	Forbs should be stressed in early and late brood-rearing habitats. In situations of limited funds for ESR actions, prioritize rehabilitation of sage-grouse habitats. (ESR)
Wild Horses and Burros	
WHB-1	Avoid fencing that would restrict access to water. (RX, NF, ESR)
Cultural Resources	
CR-1	Cultural resources advisors should be contacted when fires occur in areas containing sensitive cultural resources. (SUP)
CR-2	Wildland fire use is discouraged in areas containing sensitive cultural resources. A programmatic agreement is being prepared to cover the finding of adverse effects on cultural resources associated with wildland fire use. (WFU)
CR-3	Potential impacts of proposed treatment should be evaluated for compliance with the National Historic Preservation Act and the Utah Statewide Protocol. This should be conducted prior to the proposed treatment. (RX, NF, ESR)
Paleontology	
P-1	Planned projects should be consistent with BLM Manual and Handbook H- 8270-1, Chapter III (A) and III (B) to avoid areas where significant fossils are known or predicted to occur or to provide for other mitigation of possible adverse effects. (RX, NF, ESR)
P-2	In the event that paleontological resources are discovered in the course of surface fire management activities, including fires suppression, efforts should be made to protect these resources. (SUP, WFU, RX, NF, ESR)
Forestry	
F-1	Planned projects should be consistent with Healthy Forests Restoration Act Section IO2(e) (2) to maintain or contribute to the restoration of old-growth stands to a pre-fire suppression condition and to retain large trees contributing to old-growth structure. (SUP, WFU, RX, NF)
F-2	During planning, evaluate opportunities to utilize forest and wood products prior to implementing prescribed fire activities. Include opportunities to use forest and wood product sales to accomplish non-fire fuels treatments. In forest and woodland stands, consider developing silvicultural prescriptions concurrently with fuels treatments prescriptions. (RX, NF)
Livestock Grazing	
LG-1	Coordinate with permittees regarding the requirements for non-use or rest of treated areas. (SUP, WFU, RX, NF, ESR)
LG-2	Rangelands that have been burned by wildfire, prescribed fire, or wildland fire use, should be made unavailable for grazing for a minimum of one complete growing season following the burn. (SUP, WFU, RX)
LG-3	Rangelands that have been re-seeded or otherwise treated to alter vegetative composition, chemically or mechanically, would be made unavailable for grazing for a minimum of two complete growing seasons. (RX, NF, ESR)
Recreation and Visitor Services	
Rec-1	Wildland fire suppression efforts would preferentially protect special recreation management areas and recreation site infrastructure in line with fire management goals and objectives. (SUP)
Rec-2	Vehicle tracks created off established routes would be obliterated after fire management actions in order to reduce unauthorized OHV travel. (SUP, WFU, RX, NF, ESR)
Lands and Realty	
LR-1	Fire management practices would be designed to avoid or otherwise ensure the protection of authorized rights-of-way and other facilities located on the public lands, including coordination with holders of major rights-of-way systems within rights-of-way corridors and communication sites. (WFU, RX, NF, ESR)

LR-2	Fire management actions must not destroy, deface, change, or remove to another place any monument or witness tree of the Public Land Survey System. (SUP, WFU, RX, NF, ESR)			
Hazardous Waste				
HW-1	Recognize hazardous wastes and move fire personnel to a safe distance from dumped chemicals, unexploded ordnance, drug labs, wire burn sites, or any other hazardous wastes. Immediately notify BLM field office hazmat coordinator or state hazmat coordinator upon discovery of any hazardous materials, following the BLM hazardous materials contingency plan. (SUP, WFU, RX, NF, ESR)			
Mineral Resources				
M-1	A safety buffer should be maintained between fire management activities and at-risk facilities. (SUP, WFU, RX)			
	SPECIAL DESIGNATIONS			
Wilderness and Wildern	ness Study Areas			
Wild-1	The use of earth-moving equipment must be authorized by the field office manager. (SUP, WFU, RX, ESR)			
Wild-2	Fire management actions would rely on the most effective methods of suppression that are least damaging to wilderness values, other resources and the environment, while requiring the least expenditure of public funds. (SUP, WFU)			

Note: ESR = emergency stabilization and rehabilitation; NF = non-fire fuel treatments; RX = prescribed fire; SUP = wildfire suppression; WFU = wildland fire use for resource benefit.

A resource advisor should be consulted when fire occurs in wilderness and wilderness study areas. (SUP, WFU)

Wild-3

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APPENDIX E Supporting Information for Recreation and Visitor Services Decisions



1 INTRODUCTION

This appendix provides supporting information for recreation and visitor services management actions included in the alternatives in the Draft Resource Management Plan (RMP)/Environmental Impact Statement (EIS) (Volume 1).

2 KEY RECREATION PLANNING TERMS AND DEFINITIONS

Special recreation management area (SRMA): The SRMAs are administrative units in which the existing or proposed recreation opportunities and recreation setting characteristics (RSCs) are recognized for their unique value, importance, and/or distinctiveness, especially as compared to other areas used for recreation. SRMAs are managed to protect and enhance a targeted set of activities, experiences, benefits, and desired RSCs.

Extensive recreation management area (ERMA): The ERMAs are administrative units that require specific management consideration to address recreation use, demand, or recreation and visitor services program investments. The ERMAs are managed to support and sustain the principal recreation activities and the associated qualities and conditions of the ERMA. Management of ERMAs is commensurate with the management of other resources and resource uses.

Management areas (MAs): The BEC does not recognize recreation as an appropriate use for public lands within BENM; however, the BEC acknowledges that recreation must be managed to ensure that activities occurring within the Monument are consistent with the protection of Monument objects. Management of MAs is similar to the management of ERMAs under H-8320-1, meaning that management of recreation in these areas is commensurate with management of other resources and resource uses.

Recreation management zone (RMZ)/Management zone (MZ): The SRMAs may be subdivided into RMZs to further delineate specific recreation opportunities or management needs. Although this is generally unnecessary, ERMAs and MAs may also be subdivided into RMZs or MZs to ensure recreation and visitor services are managed commensurate with other resources and resource uses.

SRMA/RMZ outcome objective: SRMAs and RMZs within SRMAs must have measurable, outcome-focused objectives. Supporting management actions and allowable use decisions are required to: 1) sustain or enhance recreation objectives, 2) protect the desired RSCs, and 3) constrain uses, including incompatible recreation activities that are detrimental to meeting recreation or other critical resource objectives (e.g., cultural resources or threatened and endangered species).

The outcome-focused objective is a clear, measurable, and agreed-upon guide for decision-making and evaluation of management effectiveness. SRMA/RMZ objectives must define the specific recreation opportunities (i.e., activities, experiences, and benefits derived from those experiences) that become the focus of recreation and visitor services management.

ERMA/RMZ (or MA/MZ) objective: The ERMAs and associated RMZs must have measurable objectives. Supporting management actions and allowable use decisions must facilitate visitors' ability to participate in outdoor recreation activities and protect the associated qualities and conditions. Incompatible uses, including some recreation activities, may be restricted or constrained to achieve interdisciplinary objectives. Because MAs and associated MZs are managed most similarly to ERMAs, they will have similar objectives. ERMA and MA objectives must define

the recreation activities and the associated qualities and conditions that become the focus for recreation and visitor services management.

Recreation outcomes: Recreation outcomes consist of experiences and benefits.

- Experiences: Recreation experiences are immediate states-of-mind resulting from participation in recreation opportunities that result in benefits.
- Benefits: Recreation benefits accrue from having a satisfying recreation experience that leads to an improved condition or to maintenance of a desired condition. These accrue from recreation participation and are both short and long term and are realized on- and off-site.
 Benefits are identified in one of four categories and are described as follows:
 - Personal/Household: Recreation and leisure contribute to personal wellbeing and better physical and mental health for all individuals.
 - Community: Recreation contributes to the quality of life within communities by encouraging positive lifestyle choices, building social skills, reducing crime, and fostering a sense of community pride.
 - Economic: Investments in recreation represent an investment in our economies through diversifying our economies, by attracting new businesses, and by generating employment opportunities.
 - Environmental: Participation in recreation and outdoor education programs can help protect the quality of the environment through improved understanding and stewardship of our natural, cultural, and historic resources.

In SRMAs and associated RMZs, where current Outcome Focused Management (OFM) and Government Performance and Results Act survey data were available, activities, experiences, and benefits are derived from those data. Where current survey data were not available, staff used monitoring data, OFM and GPRA results from similar locations and professional judgment to derive activity, experience, and benefit information.

RSCs: Proposed (or desired) RSCs are a description of the physical, social, and operational characteristics that define a recreation management area's (RMA's) function and condition in the future (Table E-1). The desired RSCs may currently exist and be maintained or may be a target toward which management of the RMA or RMZ is to be directed. The three recreation setting components are as follows:

- Physical: qualities of nature and the landscape defined by remoteness, naturalness, and facilities
- Social: qualities associated with use defined by group size, number of contacts, and evidence of use
- Operational: conditions to manage recreation use defined by type of access, visitor services, and management controls.

The Bureau of Land Management (BLM) establishes these criteria in the Land Use Planning Handbook to guide management action and allowable use decisions as well as "the identification of site-specific use levels for activities during plan implementation" (BLM 2005, Page 13). Monitoring and evaluation may cause recreation managers to adjust the RSCs over the life of the plan to meet recreation objectives.

 Table E-1. Recreation setting characteristics definitions for Bears Ears National Monument.

Physical	Remote	Back Country	Middle Country	Front Country
Remoteness (distance from routes)	More than 1/8 mile (or separated by significant cliff edge or canyon wall) from mechanized or motorized trails and roads.	More than 1/8 mile from County B roads or 150 feet from County D roads (four-wheel drive [4WD]/all-terrain vehicle [ATV]/motorcycle).	Within ½ mile of unpaved, regularly maintained County B roads or 150 feet of County D roads (4WD/ATV/motorcycle).	Within 0.5 mile of paved roads and highways (if not separated by significant cliff edge or canyon wall).
Naturalness (landscape texture, form, line color)	Undisturbed natural landscape.	Natural landscape with modifications in harmony with surroundings and not visually obvious (e.g., stock ponds).	Character of the natural landscape retained. A few modifications contrast (e.g., fences, ditches, kiosks).	Character of the natural landscape partially modified, but not overpowering (e.g., utility lines, small structures).
Visitor facilities	No structures. Improvements limited to unimproved foot or horse trails.	Developed trails made mostly of native materials. Structures are rare and isolated.	Maintained and marked trails, simple trailhead developments, and basic toilets.	Rustic facilities such as campgrounds, restrooms, trailheads, and interpretation.
Social	Remote	Back Country	Middle Country	Front Country
Contacts (average)	Six or fewer encounters per day on travel routes.	Seven to 15 encounters per day on travel routes.	15 to 29 encounters per day on travel routes.	30 or more encounters per day on travel routes.
Group size (average)	Three of fewer people per group.	Four to six people per group.	Seven to 12 people per group.	13 to 25 people per group.
Evidence of use	No alteration of the natural terrain except small Leave No Trace campsites and foot trails. Sounds of people rare.	Areas of alteration uncommon (primarily small, dispersed campsites). Sounds of people infrequent.	Small areas of alteration (primarily trailheads and dispersed campsites). Occasional sounds of people.	Small areas of alteration prevalent with some larger altered campgrounds. Sounds of people regularly heard.
Operational	Remote	Back Country	Middle Country	Front Country
Public access (types allowed)	Foot, horse, non-motorized float boat travel. Wilderness study areas and suitable wild segments of wild and scenic rivers.	Foot, horse, non-motorized float boat travel.	4WD vehicles, some two-wheel drive vehicles, and mountain bikes in addition to non-motorized vehicles.	Two-wheel drive vehicles predominant.
Visitor services and information	No maps or brochures available on- site. Staff rarely present on-site.	Basic maps provided. Staff infrequently present on-site.	Area brochures and maps provided. Staff frequently present on-site.	Informational and interpretive materials describe recreation areas and activities. Staff regularly present on-site.
Management controls (regulations)	Minimal on-site posts or signs with visitor regulations. Use may be regulated via permits to maintain setting.	Basic user regulations at key access points. Use may be regulated via permits to maintain setting.	Some regulatory and ethics signs. Use restrictions (e.g., camping designations) and permitting as needed.	Rules, regulations, and ethics clearly posted. Fewer use restrictions. Permits rare, except for Special Recreation Permits.

3 HOW TO USE THIS DOCUMENT

For action alternatives B, C, and D, summaries of the management framework for each RMA/MA and RMZ/MZ has been developed. Alternative E does not use the BLM Recreation Planning Framework as described in H-8230-1, and is not addressed in-depth in this Appendix. Instead, Alternative E creates four landscape-level zones in which standardized management would apply across the entire Monument. Alternative E also includes implementation-level decisions regarding a variety of recreational activities across the Monument, including boating, climbing, and hiking.

Each RMA or MA description contains the following:

- Overview maps for each RMA/MA by alternative, showing any associated RMZs or MZs as well as recreational developments such as campgrounds and trailheads.
- Summary page for RMAs/MAs and RMZs/MZs by alternative:
 - Acres
 - o Rationale for RMA or RMZ designation.
 - Table summarizing desired activities for all RMAs/MAs, as well as experiences and benefits for SRMAs and their associated RMZs. In cases where SRMAs and MAs or RMZs within SRMAs and MZs are displayed on the same page, the listed experiences and benefits only apply to the SRMA or RMZ.
 - Table summarizing existing and desired RSCs. For comparison purposes, the text from Table E-1 (above) is abbreviated into a simple graphic display (example below in Figure E-1). Existing RSCs have blue shading; desired RSCs are in bold orange borders.
 - o Narrative description of existing and desired RSCs for each RMA by alternative.
- A list of Management Actions, Best Management Practices, and Implementation Level Decisions (Alternative D only) which support the identified recreation opportunities, maintain the desired RSCs, limit incompatible uses, and/or identify consideration for other programs for each alternative.
 - Maps showing a graphic representation of the "composite" RSCs resulting from the management actions and implementation level decisions (Alternative D only) of each alternative. Because RSCs are always evaluated on the three components (physical, social, and operational), this map should be understood as a simplified graphic representation of the information in the summary table and is provided for comparison purposes only.

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/8 mile B roads	≤1⁄8 mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4-6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted info	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Figure E-1. Example of recreation setting characteristics summary table.

4 EXISTING MANAGEMENT AND SUMMARY OF ALTERNATIVES

The Planning Area currently contains eight SRMAs and eight RMZs, and partially overlaps two additional SRMAs (see Figure 2-27 in Appendix A). There is one ERMA within the Planning Area and one partially overlapped. Recreation setting characteristics for three components (physical, social, and operational) were mapped across the Planning area using the criteria shown in Table E-I. This information was used to quantify available recreation supply across the planning area (see Figures 2-23 through 2-25 in Appendix A). Information regarding demand for recreational activities, experiences, and benefits was derived from OFM surveys conducted by the University of Alaska Fairbanks in the 2020 - 22 seasons. Typically, any activity, experience, or benefit with a reported average desirability of 4.0 or more on the OFM survey (4.0 on a probability scale where: 1 = not atall desirable to 5 = highly desirable) was considered, unless that outcome conflicted with the overall management goals for the area. Where OFM data were not available, activities, experiences, and benefits were derived from Government Performance and Results Act survey data, recreational monitoring data, and professional judgement. These data sets, in conjunction with manageability considerations, were used to develop areas and objectives for RMAs and RMZs in Alternatives B and C, and for MAs and MZs in Alternative D (Tables E-2 - E-3/Maps E-1 through E-27). For overview maps of RMAs/RMZs under Alternatives B and C and MAs/MZs under Alternative D. please see Figures 2-28 and 2-29 in Appendix A.

For all alternatives, it was decided that most of the current Monticello ERMA more accurately fits under the current guidance for non-RMA lands, which allows for recreational activities, but does not require intensive management for those activities. The Tank Bench SRMA had originally been proposed as a Cultural Recreation Management Area under the 2008 Monticello RMP. While Tank Bench has significant cultural resources, it does not have recreational demand that requires special management, and so it was not brought forward under Alternatives B – E. USFS RMZs are not consistent with USFS policy and were not brought forward.

Among the action Alternatives, B and C include the highest number of RMAs (four SRMAs/four ERMAs) and RMZs (14), and consequently involve the most support for and specific management

of recreation activities, experiences, and benefits. Because the outcome objectives for each RMA/RMZ are similar between the two alternatives, these alternatives are distinguished by differences between their respective implementation-level decisions and best management practices. The four RMZs of Indian Creek Corridor, Trail of the Ancients, Sand Island, and the Bicentennial Highway would be managed identically between Alternatives B and C as places to interpret BENM, encourage an ethic of stewardship, and provide visitors with the education needed to properly visit culturally significant places. Under Alternative B, recreation areas outside of the above-mentioned RMZs would have an extra layer of direct management in the form of interpretive signage, site stabilization, trail construction, barricades, and other on-site measures to mitigate impacts to Monument objects. Under Alternative C, the same mitigation objective would be achieved through more intensive indirect management in the form of permitting systems, allocations, off-site interpretation such as brochures or websites, and education provided at Visitor Centers and Public Use sites.

Alternative D places more restrictions on recreational use in general, including decisions specific to LWC, Wildlife, VRI, and Travel which limit or even eliminate certain types of recreational use across the Monument. As a result, this Alternative has fewer areas containing unique recreational opportunities and/or requiring intensive recreation management, resulting in less areas managed specifically for recreation (seven MAs and eight MZs). The objectives for the MAs and MZs retained under this alternative are similar to Alternatives B and C, but to the greatest practical extent, this Alternative defers best management practices and implementation level actions to later implementation plans. This would allow for greater and more meaningful collaboration between the BLM and the BEC during implementation-level planning for these areas. Existing management for these areas, including permit systems, allocations, restrictions on dogs and camping are retained until those implementation-level decisions can be addressed.

Under Alternative E, recreation management would steward the cultural landscape of BENM by emphasizing teaching visitors to interact with the landscape in culturally appropriate ways. As discussed above, Alternative E does not use the BLM Recreation Planning Framework as described in H-8230-1 and is not addressed in depth in this Appendix. For an overview map of Alternative E zones in the Planning Area, see Figure 2-30 in Appendix A.

Table E-2. Recreation Management Area/Management Area Alternatives by Type and Acreage

RMA/MA	Alternative A (Existing)	Alternative B	Alternative C	Alternative D
Beef Basin	SRMA 17,191	ERMA 25,083	ERMA 25,083	-
Canyon Rims	SRMA	SRMA	SRMA	MA
	7,411	7,413	7,413	7,414
Cedar Mesa	SRMA	SRMA	SRMA	MA
	326,090	344,628	344,628	348,043
Dark Canyon	SRMA	ERMA	ERMA	MA
	30,810	40,829	40,829	18,802
Indian Creek	SRMA 41,226	_*	_*	_*
Indian Creek (Bears Ears National	SRMA	SRMA	SRMA	MA
Monument)	48,937	74,783	74,783	67,310
Indian Creek (Bears Ears National Monument)	ERMA 22,959	-	-	-

RMA/MA	Alternative A (Existing)	Alternative B	Alternative C	Alternative D
Monticello ERMA	ERMA 477,229	-	-	-
San Juan River	SRMA 2,815	SRMA 5,355	SRMA 5,355	MA 5,350
Shash Jáa	SRMA 97,472	- †	- †	- †
Tank Bench	SRMA 2,721	-	-	-
Valley of the Gods	-	ERMA 45,763	ERMA 45,763	MA 34,389
White Canyon	SRMA 2,825	ERMA 124,827	ERMA 124,827	MA 7,222

^{*} Area partially incorporated into Indian Creek (Bears Ears National Monument) SRMA.

Table E-3. Recreation Management Zones/Management Zones and Acreages in each Recreation Management Area by Alternative

RMZ	Alternative A (Existing)	Alternative B	Alternative C	Alternative D
Arch Canyon	Shash Jáa SRMA	Cedar Mesa SRMA	Cedar Mesa SRMA	-
	5,457	3,344	3,344	
Arch Canyon Back	No RMA*	-	-	-
Country*	13,322			
Bicentennial Highway	-	White Canyon ERMA	White Canyon ERMA	-
		4,178	4,178	
Cedar Mesa	-	Cedar Mesa SRMA	Cedar Mesa SRMA	Cedar Mesa MA
Backpacking		34,833	34,833	38,177
Comb Ridge	_	Cedar Mesa SRMA	Cedar Mesa SRMA	Cedar Mesa MA
		21,980	21,980	21,980
Dark Canyon	-	Dark Canyon ERMA	Dark Canyon ERMA	-
Backpacking		18,799	18,799	
Fable Valley	-	Beef Basin ERMA	Beef Basin ERMA	-
		7,870	7,870	
Goosenecks	-	Valley of Gods ERMA	Valley of Gods ERMA	-
		96	96	
Grand Gulch	Cedar Mesa SRMA	_†	_†	_†
	37,388			
Indian Creek Corridor	-	Indian Creek SRMA	Indian Creek SRMA	Indian Creek MA
		3,459	3,459	3,459
Moon House	Shash Jáa SRMA	Cedar Mesa SRMA	Cedar Mesa SRMA	Cedar Mesa MA
	318	318	318	318
Natural Bridges	-	White Canyon SRMA	White Canyon SRMA	Cedar Mesa MA
Overflow		1,458	1,458	1,458

 $^{^{\}dagger}$ Area partially incorporated into Cedar Mesa SRMA and San Juan River SRMA.

RMZ	Alternative A (Existing)	Alternative B	Alternative C	Alternative D
San Juan Hill	Shash Jáa SRMA 2,828	San Juan River SRMA 1,717	San Juan River SRMA 1,717	-
Sand Island	-	San Juan River SRMA 278	San Juan River SRMA 278	San Juan River MA 278
South Elks/ Bears Ears*	No RMA* 5,692	-	-	-
The Points*	No RMA* 13,432	-	-	-
Trail of the Ancients	Shash Jáa SRMA 30,612	Cedar Mesa SRMA 7,063	Cedar Mesa SRMA 7,063	Cedar Mesa MA 7,063
White Canyon Canyoneering	-	White Canyon ERMA 7,222	White Canyon ERMA 7,222	-

^{*} RMZs on National Forest System lands. The U.S. Department of Agriculture Forest Service does not use the RMA framework.

5 MANAGEMENT FRAMEWORK FOR ALTERNATIVES B, C, AND D

5.1 Area-Wide Best Management Practices (Alternatives B and C)

Recognize that various levels of restrictions and limits on recreational use are necessary.

Restrictions and limitations on public uses would be as minimal as possible without compromising the preservation, restoration, and protection of BENM objects. (Alternative B only)

Restrictions and limitations on public uses would be consistent with the protection of BENM objects. (Alternative C only)

Limit or control activities where damage by recreational uses is observed or anticipated through specialized management tools such as site hardening, construction of developed campsites, barricades/fences, signs, and designated campsites. If necessary, agencies will require permits, implement area closures, or place limitations on the number of users and duration of use. Revise RAMPs as necessary to maintain public land health and safety. (Alternative B only)

Limit or control activities where damage by recreational uses is observed or anticipated through specialized management tools such as permits, designated campsites, and limitations on the number of users and duration of use. If necessary, areas may be closed to recreational use. Revise RAMPs as necessary to maintain public land health and safety. (Alternative C only)

Coordinate with the BEC, Tribal Nations, federal and state agencies, and county and local governments in recreation planning and managing traffic, search and rescue operations, trash control and removal, and public safety.

Use management methods including construction of trailheads or facilities, and if necessary, limitation on visitor numbers, types, timing, and duration of use, to protect natural and cultural resources and maintain the quality of experience of various user groups. (Alternative B only)

[†] Part of area is incorporated into the Cedar Mesa Backpacking RMZ.

Use management methods including limitations on visitor numbers, types, timing, and duration of use, and if necessary, construction of trailheads or facilities, to protect natural and cultural resources and maintain the quality of experience of various user groups. (Alternative C only)

Emphasize Leave No Trace, Tread Lightly and Visit with Respect visitation, camping, and travel techniques throughout BENM.

Coordinate on the management of recreation use with the BEC, Tribal Nations, other agencies, and state and local governments to provide public benefits, help assure public safety, and make effective use of staff and budget resources.

OHV access for game retrieval would follow all area and route designations. There would be no cross-country OHV retrieval.

Dispersed camping may be closed seasonally or as impacts or environmental conditions warrant.

Collaborate with the BEC to develop interpretation plan, with an emphasis on on-site interpretation. Highlight Tribal Nation connections to distant areas visible in BENM, culturally important plants, culturally important vantage points, high interest or unique geological, paleontological, biological, archeological, or historical features for public information and, as appropriate, develop interpretive information for these sites.

On-site interpretation would mostly be confined to cultural sites allocated for Public Use (Developed) and- the Sand Island RMZ, Trail of the Ancients RMZ, Indian Creek Corridor RMZ, Bicentennial Highway RMZ, and Goosenecks RMZ. Interpretation in areas other areas without recreational development and/or motorized access would be off-site interpretation unless on-site guidance is required to address impacts to the preservation, restoration, and protection of BENM objects. (Alternative C only)

Place visitor use infrastructure near population centers, highway corridors, and high use areas. Provide restrooms and other facilities that would be adequate for anticipated uses at designated campgrounds, trailheads, and other areas where there is a concentration of recreational users.

Limit or control activities where damage by recreational uses is observed or anticipated through specialized management tools such as site hardening, construction of developed campsites, barricades/fences, signs, and designated campsites. If necessary, agencies will require permits, implement area closures, or place limitations on the number of users and duration of use. Revise RAMPs as necessary to maintain public land health and safety. (Alternative B only)

Limit or control activities where damage by recreational uses is observed or anticipated through specialized management tools such as permits, designated campsites, and limitations on the number of users and duration of use. If necessary, areas may be closed to recreational use. Revise RAMPs as necessary to maintain public land health and safety. (Alternative C only)

Use on-the-ground presence (agency staff, site stewards, volunteers) as a tool to protect public lands, with a priority on staffing visitor centers and developed sites. (Alternative B only)

Use on-the-ground presence (agency staff, site stewards, volunteers) as a tool to protect public lands with a priority on staffing visitor centers and permit compliance. (Alternative C only)

Existing developed recreation facilities would be maintained, and new recreation facilities would be developed to enhance the visitor experience, address visitor impacts, and to preserve, restore, and protect BENM objects. (Alternative B only)

Existing developed recreation facilities would be maintained. New recreation facilities would be developed only in cultural sites allocated for Public Use (Developed) and the Sand Island RMZ, Trail of the Ancients RMZ, Indian Creek Corridor RMZ, Bicentennial Highway RMZ, and Goosenecks RMZ. (Alternative C only)

Developed recreation facilities may be closed seasonally to allow for resource rest and/or traditional uses or ceremonies. These seasonal closures would be identified in collaboration with the BEC and Tribal Nations.

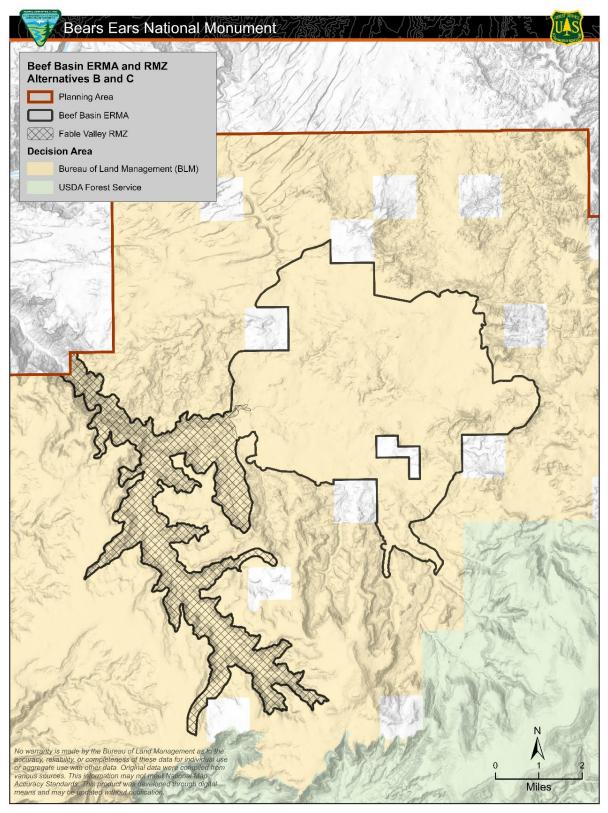
Where applicable, seasonal closures would be managed through permit systems. (Alternative C only)

5.2 Area-Wide Planning (Alternative D)

This alternative would generally prioritize the continuation of natural processes by limiting or discontinuing discretionary uses. This alternative would minimize human-created facilities and management would emphasize natural conditions. Existing facilities would be maintained at their current level until implementation-level or site-specific planning is completed. New facilities would only be developed if specifically necessary to preserve, restore, and protect BENM objects. Levels of maintenance or improvement for existing facilities would also be determined in implementation-level plans. Facilities that do not serve an administrative, resource protection, public education, or public safety purpose would be removed.

Agencies would collaborate with the BEC in the development of RAMPs for BENM MAs. These plans could include temporary closure of areas as necessary, including to preclude disturbance during traditional and/or ceremonial uses. The BLM and the BEC would coordinate to develop management plans for these areas. In the interim, existing implementation- level decision including but not limited to existing permit systems, allocations, group size limits, camping restrictions, fire pan requirements, fire restrictions, pet restrictions, SRP requirements, and human waste restrictions applied to the RMAs in Alternative A, including those captured in the 2008 Monticello RMP, the 2008 Moab RMP, the 2020 RMP/MMPs, the 2014 Monticello Campground Business Plan, 2017 San Juan River Business Plan, and the 2019 Cedar Mesa Business Plan, would stay in place.

5.3 Beef Basin Extensive Recreation Management Area



Map E-1. Beef Basin ERMA and RMZs, Alternatives B and C.

5.3.1 Beef Basin Extensive Recreation Management Area (Alternatives B and C)

Acres: 25,083

Rationale: Beef Basin is an ERMA due to its cultural site visitation, dispersed camping, backpacking, and rugged off-highway vehicle (OHV) opportunities. The area is extremely remote and often requires specialized vehicles to access, meaning the RMA receives significantly less recreational visitation than similar locations within the Monument. Many of the standing structural cultural sites within Beef Basin are located close to designated roads and are particularly vulnerable to damage from visitation, making Leave No Trace and Visit with Respect education essential for all visitors entering this area. The RMA also includes some of the most challenging OHV opportunities within the Monument, including roads leading to Bull Valley, Imperial Valley, and Bobby's Hole, and connects to popular Jeep routes within the Needles District of Canyonlands National Park. The canyon network of Fable Valley and Gypsum Canyon, located within the Dark Canyon Wilderness Study Area (WSA), offers a remote backpacking experience. Specific management for recreation activities is needed for the protection of Monument objects.

Beef Basin ERMA Objectives:

 Manage the Beef Basin ERMA to protect BENM objects while providing opportunities for cultural site visitation, scenic driving (OHV), and backpacking, with a focus on developing minimal visitor facilities and maintenance of predominantly remote and backcountry physical and social recreation settings.

Activities:

Cultural site visitation
Dispersed camping
Scenic driving
Backpacking

Recreation Setting Characteristics:

PHYSICAL	Primitive	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/8 mile B roads	≤⅓ mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Existing and Desired Physical RSCs

Remoteness: The RMA varies from within ½ mile of the designated Beef Basin B road to the extreme remoteness of Fable Valley and Gypsum Canyon in the Dark Canyon WSA. No change.

Naturalness: The RMZ has some recreation modifications, including a well-screened BLM cabin and several small informational kiosks and signs; however, most modifications are related to copious historic and modern range infrastructure, including the remains of an old cabin, several new and abandoned troughs, fences, corrals, and a very large modern guzzler. No change.

Visitor facilities: Visitor facilities consist of some simple signs at the intersection of major roads, the two Fable Valley Trailheads, and at some of the cultural sites. Under Alternative B, these would be improved and added to in order to educate visitors. Under Alternative C, educational materials at existing locations would be improved, but no additional recreational infrastructure would be added. No change.

Existing and Desired Social RSCs

Contacts (average): Due to remote and rugged access, Beef Basin receives less than 800 visitors a year, on average. Contacts are very rare, usually less than two per day. No change.

Group size (average): Group sizes can vary, because there is no group size limit; however, likely due to the need for specialized vehicles to access the area most of the year, observed group sizes tend to range from one to six individuals. Alternatives B and C might create a group size limit to retain these low group sizes under recreation area management planning.

Evidence of use: Evidence of use in the RMA includes some small, mostly well-screened parking and camping areas. Under Alternative B, campsites would be designated and marked.

Existing and Desired Operational RSCs

Access: Access to the area is by 4WD vehicle only. Fable Valley is in the Dark Canyon WSA, and can therefore only be accessed via non-motorized, non-mechanized means. *No change*.

Visitor services/information: Very little visitor information is provided. The BLM has one older brochure and some signage on-site. Interpretive signage and the brochure would be updated under Alternatives B and C.

Management controls: There are currently few management controls beyond those imposed on commercial Special Recreation Permits (SRPs). <u>Desired:</u> Under Alternative B, regulations would be clearly posted at the access points. Under Alternative C, a permit system would be created for back country camping.

5.3.1.1 BEST MANAGEMENT PRACTICES

Within the Beef Basin ERMA, recreation use rules, regulations, and ethics are clearly posted on-site at major access points and trailheads, and on-site facilities are the primary focus for managing visitation. (Alternative B only)

Within the Beef Basin ERMA, permits and other indirect, off-site methods are used as the primary means for communicating and enforcing recreation use rules, regulations, and ethics to manage visitation. (Alternative C only)

Dispersed campsites that impact archaeological sites would be closed.

5.3.1.2 IMPLEMENTATION-LEVEL DECISIONS

In collaboration with the BEC, develop a RAMP for the ERMA within 5 years of issuance of this RMP/EIS.

Dispersed camping areas would be designated, and once designated, camping would be limited to those areas. Until campsites are designated in this area, dispersed camping would be allowed as described under the No Action Alternative.

Camping would be by permit only. (Alternative C only)

Campfires are allowed and are restricted to fire rings where fire rings are available. In dispersed camping areas, where fire rings are not available, campfires are subject to Leave No Trace standards.

Group size limitations would be determined in the RAMP. Until the RAMP is written, group size would be managed as it is under Alternative A.

Solid human waste must be packed out and disposed of at appropriate facilities.

5.3.2 Fable Valley Recreation Management Zone (Alternatives B and C)

Acres: 7,870

Rationale: Fable Valley RMZ includes the canyon network of Fable Valley and Gypsum Canyon, located within the Dark Canyon WSA. There are two Fable Valley Trailheads, one accessed from the Beef Basin Road leading into Gypsum Canyon, and the other accessed from the North Long Point Road on the south side of Fable Valley. The canyon network offers a particularly remote backpacking experience with cultural site visitation opportunities.

Fable Valley RMZ Objective:

Manage the Fable Valley RMZ to preserve, restore, and protect BENM objects while
providing opportunities for cultural site visitation and backpacking in a remote physical and
social setting.

Activities:

Cultural site visitation Backpacking

Recreation Setting Characteristics:

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/8 mile B roads	≤⅓ mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
SOCIAL Contacts	Remote ≤6 contacts per day	Back Country 7-14 per day	Middle Country 15-29 per day	Front Country ≥30 per day
		•	•	•

OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Existing and Desired Physical RSCs

Remoteness: The RMZ is extremely remote due to being located within Fable Valley and Gypsum Canyon in the Dark Canyon WSA. No change.

Naturalness: The RMZ has very few modifications beyond the two trailheads on the perimeter. No change.

Visitor facilities: Visitor facilities consist of the two trailheads. No change.

Existing and Desired Social RSCs

Contacts (average): The Fable Valley Trailheads record less than 100 visitors a year, on average, and contacts are very rare. No change.

Group size (average): Group sizes can vary, because there is no group size limit; however, likely due to the need for specialized vehicles to access the area most of the year, observed group sizes tend to range from one to six individuals. Alternatives B and C might create a group size limit to retain these low group sizes.

Evidence of use: Evidence of use in the RMA includes some small trailheads. No change.

Existing and Desired Operational RSCs

Access: Access to the area is by 4WD vehicle only. Fable Valley is in the Dark Canyon WSA, and can therefore only be accessed via non-motorized, non-mechanized means. *No change*.

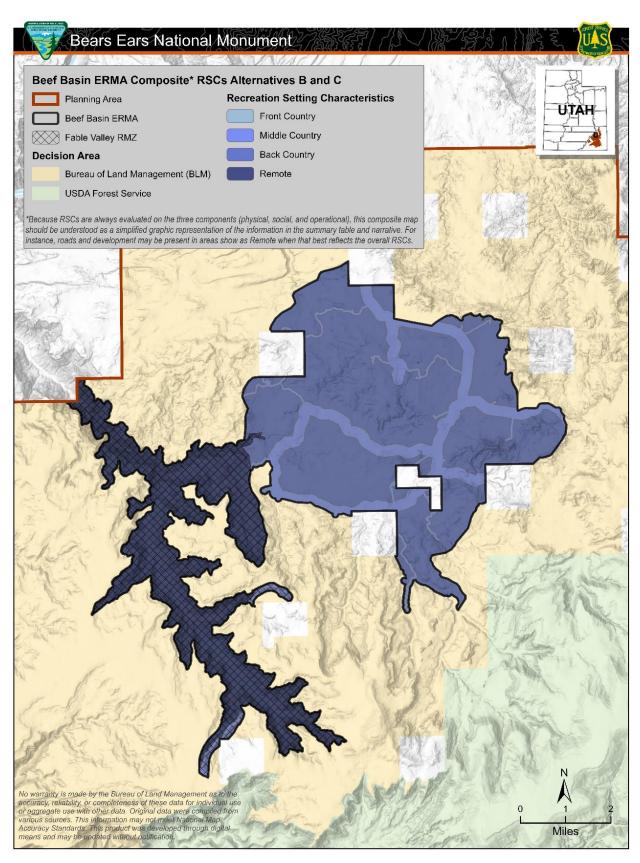
Visitor services/information: Very little visitor information is provided. No change.

Management controls: There are currently few management controls beyond those imposed on commercial SRPs. Under Alternative C, a permit system would be created for back country camping. No change.

5.3.2.1 IMPLEMENTATION-LEVEL DECISIONS

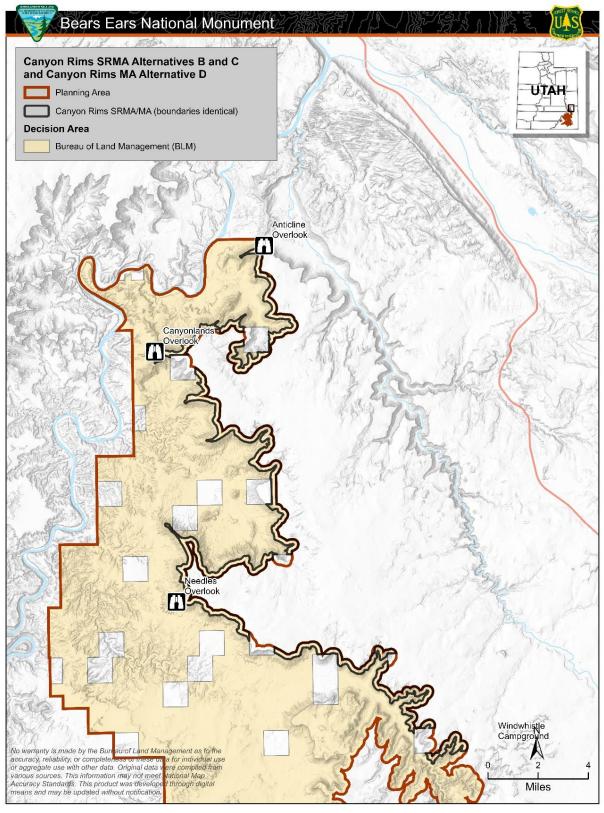
Facilities would only be allowed at the two Fable Valley trailheads.

Backpacking would require a permit. (Alternative C only)



Map E-2. Beef Basin ERMA and composite* RSCs, Alternatives B and C.

5.4 Canyon Rims Special Recreation Management Area



Map E-3. Canyon Rims SRMA, Alternatives B and C, and Canyon Rims MA, Alternative D.

5.4.1 Canyon Rims Special Recreation Management Area (Alternatives B and C)

5.4.2 Canyon Rims Management Area (Alternative D)

Acres: 7,413 (Alternatives B and C), 7414 (Alternative D)

Rationale: Canyon Rims is an SRMA due to exceptional scenic driving and photography opportunities. The SRMA includes three developed overlooks and provides exceptional views of the red rock of Indian Creek, Canyonlands National Park, and the Colorado River.

Canyon Rims SRMA Outcome Objectives:

- Manage the Canyon Rims SRMA within BENM to preserve, restore, and protect BENM objects while allowing for recreation activities such as driving and visiting scenic overlooks.
- In visitor assessments, 80% of respondents who participated in targeted activities report
 the ability to realize the targeted visitor experiences and benefits of the SRMA, and 80% of
 community residents report the ability to realize experiences and benefits targeted for
 community residents.

Activities:	Experiences:	Benefits:
Driving/sightseeing	Experiencing nature	Personal:
Photography	Enjoying the scenery	Rest from mental stress/tension
		Increased appreciation of the area's cultural history
		Household:
		Improved health
		Greater awareness and appreciation of natural landscapes

Recreation Setting Characteristics:

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>½ mile D roads	>1/8 mile B roads	≤1/8 mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4-6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Existing and Desired Physical RSCs

Remoteness: The SRMA generally follows the paved Needles Overlook Road and the gravel Anticline Overlook Road. *No change.*

Naturalness: The area has been modified by the introduction of roads and developed overlooks. No Change.

Visitor facilities: The Needles Overlook and Anticline Overlooks both have paved parking, fences, interpretive displays, and toilets. *No Change.*

Existing and Desired Social RSCs

Contacts (average): The Needles and Anticline Overlooks both attract many sightseers. No Change.

Group size (average): Group size can be very large, because there is no group size limit. No Change.

Evidence of Use: The area has two large developed overlooks. No Change.

Existing and Desired Operational RSCs

Access: The Needles Overlook Road is paved, whereas the Anticline Overlook Road is gravel. Both are accessible by passenger vehicle. *No Change.*

Visitor services/information: Both overlooks feature new interpretive displays. No Change.

Management controls: Rules and regulations for the area are clearly posted at the developed overlooks. No change.

5.4.2.1 MANAGEMENT ACTIONS

Closed to woodland harvest except where inconsistent with the Religious Freedom Restoration Act and other applicable laws. Woodland harvest would not be prohibited where such prohibition constitutes a substantial burden on Tribal Nations' religious practices.

5.4.2.2 BEST MANGEMENT PRACTICES

Manage the Needles and Anticline roads within BENM as a Scenic Driving Corridor Focus Area to manage for scenic driving enjoyment. The corridor is defined as 0.5 mile from the centerline of the road.

5.4.2.3 IMPLEMENTATION-LEVEL DECISIONS

The BLM would work with the BEC and the Moab FO to amend the existing Canyon Rims RAMP.

Existing and new developed recreation facilities would be developed and maintained in areas that receive heavy use. New sites/facilities/trails would be developed or improved outside of these areas if needed to preserve, restore, and protect BENM objects.

No motorized commercial, organized, or competitive events in the Canyon Rims SRMA (within BENM).

Camping: Camping would be restricted to designated sites or developed campgrounds. No camping would be allowed surrounding the Needles and Anticline Overlooks. New campgrounds would be developed in areas that receive heavy use and designated dispersed camping would be physically delineated in the rest of the SRMA (within BENM) in an implementation-level plan.

5.4.2.4 ALTERNATIVE D – CURRENT IMPLEMENTATION-LEVEL RECREATION MANAGEMENT CARRIED FORWARD IN THE INTERIM UNTIL SUPERSEDED BY SUBSEQUENT IMPLEMENTATION PLANNING (RAMPS, ETC.)

Camping Restrictions:

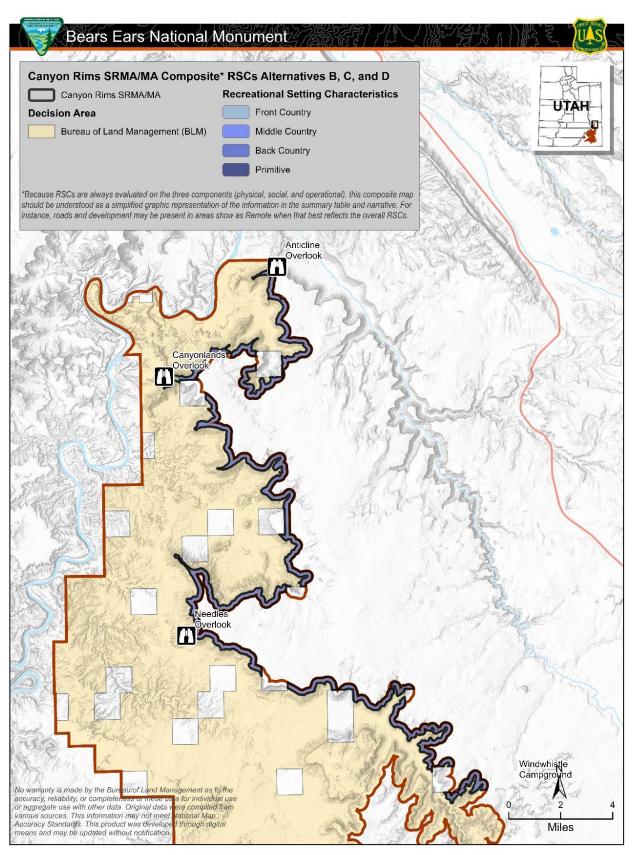
- Camping would be restricted to designated sites or developed campgrounds. No camping
 would be allowed surrounding the Needles and Anticline Overlooks. New campgrounds
 would be developed in areas that receive heavy use and designated dispersed camping
 would be physically delineated in the rest of the SRMA (within BENM) in an implementationlevel plan.
- Restrict camping near developed recreation sites.

Fire Restrictions:

No firewood gathering.

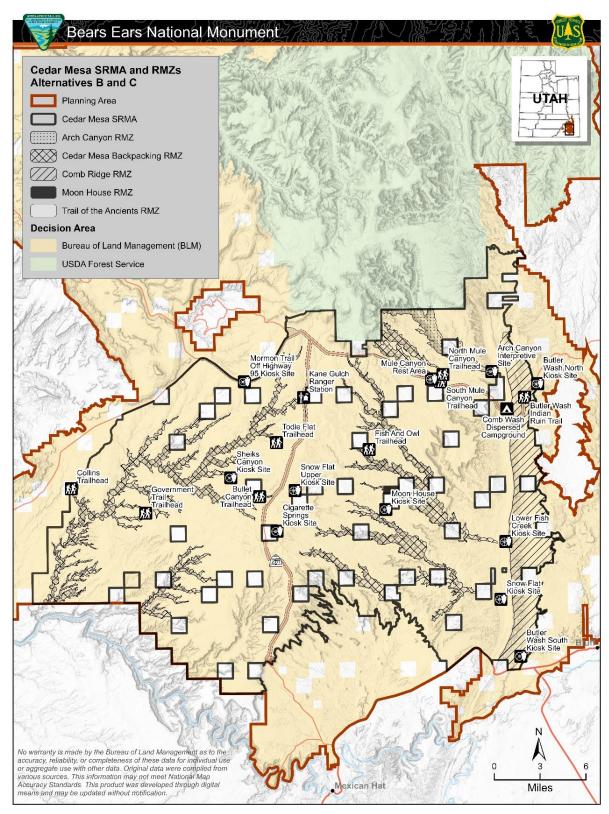
SRP Restrictions:

No backcountry motorized events.

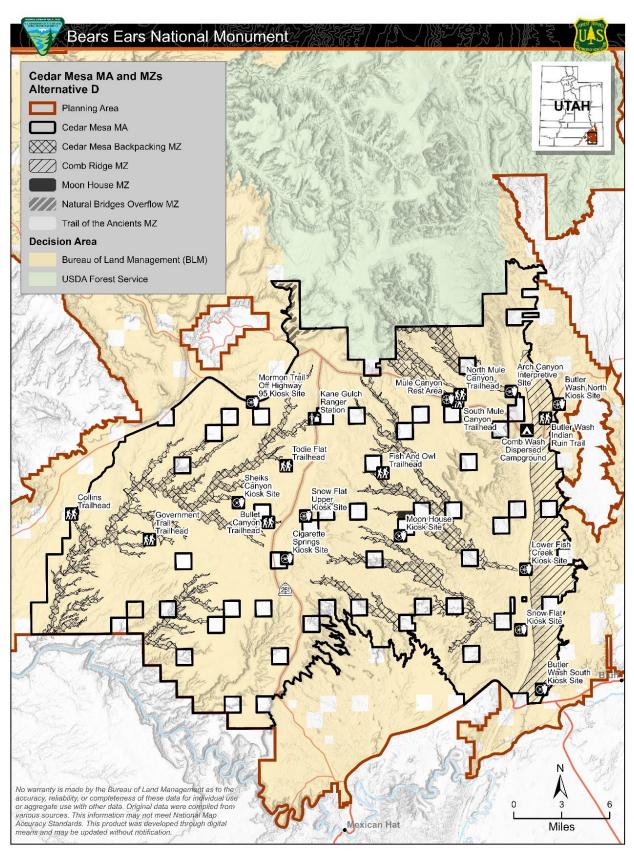


Map E-4. Canyon Rims SRMA/MA and composite* RSCs, Alternatives B, C, and D.

5.5 Cedar Mesa Special Recreation Management Area



Map E-5. Cedar Mesa SRMA and RMZs (Alternatives B and C).



Map E-6: Cedar Mesa MA and MZs (Alternative D).

5.5.1 Cedar Mesa Special Recreation Management Area (Alternatives B and C)

5.5.2 Cedar Mesa Management Area (Alternative D)

Acres: 344,628 (Alternatives B and C); 348,043 (Alternative D)

Rationale: Cedar Mesa is an SRMA due to extensive scenic driving, backpacking, hiking, camping, and cultural site visitation opportunities. Cultural site visitation ranges from developed roadside sites such as the Mule Canyon Village and Butler Wash Interpretive Site (both stabilized as off-site migration for the paving of Utah State Route (SR) 95 in the late 1970s/early 1980s), to popular day hikes such as House on Fire or those found along the Butler Wash Road, to multiday backpacking experiences in the remote canyons of the four WSAs within this SRMA. Specific management for the various recreation activities present in the SRMA is needed; therefore, this SRMA is further subdivided into RMZs in order to group recreational opportunities with corresponding physical infrastructure and management controls necessary to protect Monument objects.

Cedar Mesa SRMA Outcome Objectives:

- Manage the Cedar Mesa SRMA to preserve, restore, and protect BENM objects. Provide opportunities for cultural site visitation, hiking, backpacking, camping, and scenic driving that enhance the visitors' appreciation of the cultural landscape across BENM and foster an ethic of stewardship.
- In visitor assessments, 80% of respondents who participated in targeted activities report the ability to realize the targeted visitor experiences and benefits of the SRMA.

Activities:	Experiences:	Benefits:
Driving/sightseeing	Experiencing nature	Personal:
Camping	Enjoying the scenery	Improved/maintained health
Visiting cultural sites	Enjoying the area's wildlife	Rest from mental stress/tension
Hiking	Learning more about Cedar Mesa	Increased appreciation of the area's cultural history
		Household:
		Greater appreciation for our cultural heritage
		Greater awareness and appreciation of natural landscapes

Recreation Setting Characteristics:

The Cedar Mesa SRMA has a wide range of RSCs. The various RMZs within the SRMA each have distinct RSCs from the remainder of the SRMA. The RSCs in the following section describe the SRMA outside of the RMZs. The distinct RSCs for each RMZ are detailed further in the document.

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/8 mile B roads	≤1/8 mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structure	Rustic facilities

SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
OPERATIONAL Access	Remote Non-mechanized	Back Country Non-motorized	Middle Country 4WD vehicles	Front Country Passenger cars
				·

Existing and Desired Physical RSCs

Remoteness: The SRMA outside of the RMZs includes several large B roads (Fish and Owl, Government, Snow Flat), but the majority of the area is situated on the mesa tops of the four WSAs contained within the Cedar Mesa SRMA These areas lack the complete isolation provided by the canyons, but are remote. No change.

Naturalness: There is some camping adjacent to County B and D roads. Inside the WSAs, the area appears essentially undisturbed with few trails or campsites. *No change.*

Visitor facilities: There are virtually no visitor facilities outside of the RMAs. Those that do exist, such as the Snow Flat Road kiosk, provide information for areas within the RMZs. No change.

Existing and Desired Social RSCs

Contacts (average): The degree of solitude on the mesa tops of the WSAs is high. No change.

Group size (average): Group sizes vary across the area, but there is a camping limitation of 24 for the mesa tops. Under Alternatives B and C, group size limits might be reevaluated during the development of a recreation area management plan.

Evidence of use: The area has little evidence beyond small user-created campsites near the roads. No change.

Existing and Desired Operational RSCs

Access: County-maintained B roads, including the Fish and Owl Road, Bullet Canyon Road, Government Road, Snow Flat Road, and Cigarette Springs Road can sometimes accommodate passenger cars, but are often 4WD only in inclement weather or when not recently maintained. Access in the WSAs is by non-motorized/non-mechanized means only. No change.

Visitor services/information: Visitor services are provided at a staffed ranger station, multiple developed trailheads, and less-developed trailheads serving back country trails. *No change.*

Management controls: There are few management controls in the SRMA outside of the RMZs. No change.

5.5.2.1 MANAGEMENT ACTIONS

Recreational shooting would be prohibited within the Grand Gulch WSA, Fish Creek Canyon WSA, Mule Canyon WSA, Road Canyon WSA, and areas managed for LWC. (Alternative D only)

5.5.2.2 BEST MANAGEMENT PRACTICES

Developed Recreation Facilities:

- Developed recreation facilities would be concentrated in the Trail of the Ancients RMZ and allowed in the Comb Ridge RMZ. Existing developed recreation facilities would be maintained. Where consistent with preserving, restoring, and protecting BENM objects, new sites/facilities/trails would be developed or expanded as necessary in response to user demand. (Alternative B only)
- Existing and new developed recreation facilities would be developed and maintained in the Trail of the Ancients RMZ. New sites/facilities/trails would be developed or improved outside of the Trail of the Ancients RMZ only if needed to preserve, restore, and protect BENM objects. (Alternative C only)

5.5.2.3 IMPLEMENTATION-LEVEL DECISIONS

Within 3 years, the BLM would work with the BEC to develop a Cedar Mesa RAMP to provide management direction for the SRMA, including permit allocations, group size limits, and designation of campsites. Until the RAMP is developed, existing permit allocations and camping limitation would remain in place.

Interpretive Plan:

 The BLM would work with the BEC to develop an interpretive plan specific to the Cedar Mesa area. The plan would identify themes and stories that Tribal Nations want to convey to visitors but would heavily focus on information regarding cultural and natural resources protection. The plan would also identify methods (signs, printed materials, audio-visual methods) appropriate for each RMZ. (Alternatives B and C only)

Camping:

 Campsites would be designated where necessary to reduce user conflicts, provide for public safety, and preserve, restore, and protect BENM objects. Camping in designated sites may either be encouraged or required to meet SRMA goals and objectives, as identified in the RAMP. (Alternatives B and C)

Group Size:

- Maximum group size limits for each area would be applied to all private and commercial trips to preserve, restore, and protect BENM objects and achieve the desired recreation setting characteristics of the SRMA. (Alternatives B and C)
- Every 3 years, the BLM, in collaboration with the BEC, would review visitor impacts to cultural resources and adjust group size limits accordingly. (Alternative C only)
- The group size limit and allocations in Alternative A would remain in effect until superseded by the Cedar Mesa RAMP or other future implementation-level planning. (Alternatives B and C)

Camping:

- New campgrounds would be developed in the Trail of the Ancients RMZ. (Alternatives B and C)
- Designated dispersed camping would be physically delineated in the rest of the SRMA in an implementation-level plan and would be to designated campsites along designated routes. (Alternative B only)

 Camping would require ISRPs and group size limitations would be imposed for dispersed camping. (Alternative C only)

Campfires:

Campfires would be restricted to fire rings where metal fire rings are available. In dispersed
camping areas with no metal fire rings, campfires would be limited to fire pans, and
campfire ash should be hauled away; stone fire rings would not be allowed unless
consistent with the preservation, restoration, and protection of BENM objects as determined
during implementation-level planning. (Alternatives B and C)

Human and Other Waste:

- The requirement on visitors to remove solid waste would be made during implementation-level planning consistent with the preservation, restoration, and protection of BENM objects. (Alternative B only)
- Visitors would be required to use existing bathroom facilities or pack out solid human waste and dispose of it at appropriate facilities. All cans, trash, organic garbage, and burnable refuse, including toilet paper, must be carried out. Liquid garbage may be discarded 200 feet from any water source. Dishwater must be strained and discarded 200 feet from any camps, trails, and water sources. (Alternative C only)

5.5.2.4 ALTERNATIVE D – CURRENT IMPLEMENTATION-LEVEL RECREATION MANAGEMENT CARRIED FORWARD IN THE INTERIM UNTIL SUPERSEDED BY SUBSEQUENT IMPLEMENTATION PLANNING (RAMPS, ETC.)

Camping Restrictions:

- Open to dispersed camping except in areas where cultural resources are at risk.
- Group size is limited to 24 people for both private and commercial use.
- Closure of campsites impacting cultural sites.
- 14-day camping limit within any 28 consecutive days, with the options of reducing the number of days or closing campsites if impacts occur.
- In canyon camping could be limited to certain designated areas if resource or cultural damage occurs. Campsites would be designated where necessary to reduce user conflicts, provide for public safety, and preserve, restore, and protect BENM objects. Camping in designated sites may either be encouraged or required to meet MA goals and objectives, as identified in the RAMP.

Fire Restrictions:

 Campfires allowed on mesa tops only; fire pan required. Available for private and/or commercial use of woodland products including on-site collection of dead wood for campfires.

5.5.3 Arch Canyon Recreation Management Zone (Alternatives B and C)

Acres: 3,344

Rationale: The Arch Canyon RMZ is a distinct area within the Cedar Mesa SRMA due to the concentration of a variety of potentially conflicting recreation uses (OHV, hiking, and backpacking) in a narrow riparian system with a density of significant cultural sites and rock writing. Arch Canyon is unique because it is the only canyon in the Cedar Mesa SRMA that features a motorized road,

and it is one of a small handful of canyons in the area with a semi-perennial water source. The availability of year-round water makes Arch Canyon important for wildlife, specifically Mexican Spotted Owl and amphibious species. Specific objectives and management are needed for the protection of natural and cultural resources within the RMZ and to reduce the potential for conflicts among motorized and non-motorized recreational use.

Arch Canyon RMZ Outcome Objectives:

- Manage the Arch Canyon RMZ to preserve, protect, and restore BENM objects while providing opportunities for scenic OHV driving, cultural site visitation, and hiking experiences.
- In visitor assessments, 80% of respondents who participated in targeted activities report the ability to realize the targeted visitor experiences and benefits of the RMZ.

Activities:	Experiences:	Benefits:
Driving/sightseeing	Experiencing nature	Personal:
Visiting cultural sites	Enjoying the scenery	Improved/maintained health
Hiking	Enjoying the area's wildlife	Rest from mental stress/tension
	Learning more about Cedar Mesa	Increased appreciation of the area's cultural history
		Household:
		Improved health
		Greater appreciation for our cultural heritage
		Greater awareness and appreciation of natural landscapes

Recreation Setting Characteristics:

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/s mile D roads	>1/8 mile B roads	≤⅓ mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Existing and Desired Physical RSCs

Remoteness: Under Alternatives B and C, the Arch Canyon Road would remain open without changes for 7.5 miles, and use for the last 0.5 mile would be limited via a physical turnaround or permit system during Mexican spotted owl (*Strix occidentalis lucida*) breeding season. This would make the northernmost part of the RMZ slightly more remote during certain parts of the year, but overall the area would be within 0.5 mile of a designated D road. *No change*.

Naturalness: The RMZ has few modifications beyond the sign at the mouth of the canyon, the structures protecting the Arch Canyon Great House, and the campsite/turnaround at the end of the road. No change.

Visitor facilities: Visitor facilities consist of some simple structures near the mouth of the canyon, including the Arch Canyon Great House Interpretive Site. Under Alternatives B and C, the need for facilities to protect the great house would be reduced through more education in the Trail of the Ancients RMZ and/or permit restrictions. No change.

Existing and Desired Social RSCs

Contacts (average): <u>Desired:</u> Under Alternatives B and C, contacts would be reduced slightly through stricter permit requirements.

Group size (average): Group sizes might be imposed for the RMZ but would be similar to existing average group sizes of seven to 12 individuals This area is expected to remain a popular destination for motorized events such as Jeep Safari and Jeep Jamboree, which are limited to groups of 12. No change.

Evidence of use: Evidence of use in the RMZ is currently limited to the designated D road, the small trail at the great house, and the campsite near the U.S. Department of Agriculture Forest Service (USDA Forest Service) boundary. No change.

Existing and Desired Operational RSCs

Access: Access to the area is via the designated D road or hiking from the parking area at the mouth of the canyon. No change.

Visitor services/information: In addition to website information, an Arch Canyon brochure is available online and at local visitor centers. No change.

Management controls: There are currently few management controls beyond those imposed on commercial SRPs. <u>Desired</u>: Under Alternative B and C, group size limits and turnarounds would be imposed. Under Alternative C, a permit system would be put in place for all users.

5.5.3.1 MANAGEMENT ACTIONS

OHV limited.

5.5.3.2 BEST MANAGEMENT PRACTICES

Maintain or enhance backcountry recreation settings. Use visitor facilities at trailheads and major visitor access areas to communicate recreation use rules, regulations, and ethics to visitors.

5.5.3.3 IMPLEMENTATION-LEVEL DECISIONS

An ISRP would be required for all motorized travel in the Arch Canyon RMZ. Use may be allocated if needed to preserve, restore, and protect BENM objects. (Alternative C only)

MSO Habitat:

- To protect MSO habitat, the BLM would develop a turnaround point no closer than 0.5 mile before the national forest boundary. All OHVs would be required to turn around at this point between March 1 and August 31. Signage would also be utilized in this area at the turnaround. (Alternative B only)
- Motorized use would be prohibited seasonally from March 1 to August 31 for the last 0.5 mile before the national forest boundary. (Alternative C only)
- Designated dispersed camping would not be allowed in MSO PACs from March 1 to August 31. (Alternative C only)

Camping would be allowed only in designated camping areas.

SRPs:

- No more than six motorized commercial, organized, or competitive events would be permitted between March and May. The events could not be on consecutive weekends. (Alternative B only)
- The number of commercial, organized, or competitive events permitted from March through May would be determined on a case-by-case basis. (Alternative C only)

5.5.4 Comb Ridge Recreation Management Zone (Alternatives B and C)

Acres: 21,980

Rationale: Due to easy vehicular accessibility and the density of numerous cultural sites within easy hiking distance of the Butler Wash Road, the Comb Ridge RMZ is a highly visited and popular recreation destination within the Cedar Mesa SRMA, which requires distinct and specific management from the rest of the SRMA. Visitors are attracted to the numerous short (less than a mile) scenic day hikes to significant cultural site within the area, and as a result dispersed camping activities at trailheads and user-created campsites are prolific along the Butler Wash Road. A permit and fee system have been in place in the area since 2019 to manage day hiking and cultural site visitation use. Specific objectives and management are needed within the RMZ to protect cultural resources from recreational impacts and regulate dispersed camping activities for the protection of Monument objects.

Comb Ridge RMZ Outcome Objectives:

- Manage the Comb Ridge RMZ to preserve, restore, and protect BENM objects while
 providing opportunities for cultural site visitation, including selected trails and cultural sites
 which would be used to educate visitors about proper site visitation etiquette to mitigate
 impacts from visitation throughout the rest of the area.
- In visitor assessments, 80% of respondents who participated in targeted activities report the ability to realize the targeted visitor experiences and benefits of the RMZ.

Activities:	Experiences:	Benefits:
Day hiking Visiting cultural sites Camping Driving/sightseeing Photography	Experiencing the natural surroundings Enjoying the solitude Enjoying the scenery Getting physical exercise Learning more about the Cedar Mesa area	Personal/Household: Increased appreciation of the area's cultural history Greater awareness and appreciation of natural landscapes Greater appreciation for our cultural heritage Community, Economic, Environmental: Increased awareness and protection of natural landscapes Greater protection of fish, wildlife, and plant habitat from growth, development, and public use impacts Preservation of distinctive public land recreation character

Recreation Setting Characteristics:

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/8 mile B roads	≤1/8 mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Existing and Desired Physical RSCs

Remoteness: The Comb Ridge RMZ is accessed by the Butler Wash Road on the east side of Comb Ridge and the Comb Wash Road on the west side of Comb Ridge. The entire area is in proximity to these designated B roads. No change.

Naturalness: The RMZ has numerous dispersed campsites, small roads, and features related to old mining and range facilities, which are mostly located in the strip of land between the Butler Wash Road and Butler Wash. The character of naturalness is higher west of Butler Wash, where there is minimal change. Under Alternatives B and C, additional developments in the form of developed trailheads, toilets, and marking designated dispersed sites would result in increased modifications to naturalness east of Butler Wash.

Visitor facilities: Visitor facilities consist of a kiosk and fee station on the north and south ends of the Butler Wash Road, three sets of portable toilets, and lightly marked designated trails at Monarch Cave, Fish Mouth, Cold Springs, Procession Panel, Wolf Man Panel, and Ball Room Cave. Under Alternatives B and C, some of the trailheads would be developed with toilets and site etiquette information.

Existing and Desired Social RSCs

Contacts (average): Visitor contacts are typically along the Butler Wash Road, with some amount of contacts at trailheads. By developing trailheads at some of the designated trails under Alternatives B and C, it is likely that use may concentrate in those areas, meaning visitors would be likely to have more encounters per day.

Group size (average): Group sizes might be imposed for the RMZ, but would be similar to existing average group sizes of seven to 12 individuals.

Evidence of use: Evidence of use in the RMZ includes several small, user-created dispersed campsites and trailheads. Under Alternatives B and C, designated dispersed campsites would be marked and some trailheads would be developed with visitor education and site etiquette information.

Existing and Desired Operational RSCs

Access: Access to the area is currently via hiking from undeveloped trailheads and user-created dispersed campsites on the Butler Wash Road. Under Alternatives B and C, access off of designated roads would be via hiking from developed trailheads and camping would be limited to designated dispersed sites.

Visitor services/information: The BLM currently provides very little visitor information or services on the Butler Wash Road aside from the two kiosk/fee stations and the three sets of portable toilets. Under Alternatives B and C, trailheads with visitor information would be developed, and toilets would be installed to accommodate day hikers and dispersed camping. Better online information, including virtual tours and brochures, might also be developed. Under Alternative C, any additional facilities would be limited to trailheads and other already-developed areas.

Management controls: A permit and fee system has been in place in the RMZ since 2019. Under Alternatives B and C, additional locations would be added for posting regulatory information. Under Alternative C, such information would be limited to trailheads and other already-developed areas.

5.5.4.1 BEST MANAGEMENT PRACTICES

Maintain and enhance a predominantly backcountry physical and social recreation setting where minimal visitor facilities may be developed only when necessary for the preservation, restoration, and protection of BENM objects. Exceptions would be middle country physical settings at selected trails and cultural sites that would be used to educate visitors about proper site visitation etiquette to mitigate impacts from visitation throughout the rest of the area.

Recreation use rules, regulations, and ethics would be clearly posted on-site and at major access points.

If monitoring indicates damage to the preservation, restoration, and protection of BENM objects, the BLM would provide for visitor management infrastructure and education. If those actions are not effective, day use must be allocated. (Alternative B only)

5.5.4.2 IMPLEMENTATION-LEVEL DECISIONS

Dispersed campsites would be designated, and camping would be limited to designated campsites, with designated access routes and parking. In camp areas without toilets, solid human waste must

be packed out and disposed of at appropriate facilities. The camping limitations in Alternative A would remain in effect until superseded by the Cedar Mesa RAMP or other future implementation-level planning.

In collaboration with the BEC, appropriate sites along Butler Wash Road would be identified for development at public use cultural sites. Trails from parking areas to public use cultural sites would be designated and signed, and the sites would be hardened or otherwise made visitor-ready (Alternative B).

Sites along Butler Wash Road would not be developed unless necessary to preserve, restore and to preserve, restore, and protect BENM objects (Alternative C).

Parking for day use is limited to designated trailheads.

No new OHV or mechanized trails would be developed on the Comb Ridge formation west of Butler Wash.

Pets:

- All pets must be under voice control. (Alternative B)
- All pets much be leashed at all times. (Alternative C)

5.5.5 Comb Ridge Management Zone (Alternative D)

Acres: 21,980

Rationale: Due to easy vehicular accessibility and the density of numerous cultural sites within easy hiking distance of the Butler Wash Road, the Comb Ridge MZ is a highly visited and popular recreation destination within the Cedar Mesa MA, which requires distinct and specific management from the rest of the MA. Visitors are attracted to the numerous short (less than a mile) day scenic hikes to significant cultural site within the area, and as a result dispersed camping activities at trailheads and user-created campsites are prolific along the Butler Wash Road. A permit and fee system have been in place in the area since 2019 to manage day hiking and cultural site visitation use. Specific objectives and management are needed within the MZ to protect cultural resources from recreational impacts and regulate dispersed camping activities for the protection of Monument objects.

Comb Ridge MZ Outcome Objective:

 Manage the Comb Ridge MZ to maintain hiking, cultural site visitation, and dispersed camping recreation activities with a focus on protecting Monument objects. Maintain predominantly back country physical and social recreation settings by avoiding development of visitor services.

Activities:
Day hiking
Visiting cultural sites
Camping
Driving/sightseeing
Photography

Recreation Setting Characteristics:

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/8 mile B roads	≤⅓ mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Existing and Desired Physical RSCs

Remoteness: The Comb Ridge MZ is accessed by the Butler Wash Road on the east side of Comb Ridge and the Comb Wash Road on the west side of Comb Ridge. The entire area is in fairly close proximity to these designated B roads. *No change*.

Naturalness: The MZ has numerous dispersed campsites, small roads, and features related to old mining and range facilities, which are mostly located in the strip of land between the Butler Wash Road and Butler Wash. The character of naturalness is higher west of Butler Wash, where there is minimal change. No change.

Visitor facilities: Visitor facilities consist of a kiosk and fee station on the north and south ends of the Butler Wash Road, three sets of portable toilets, and lightly marked designated trails at Monarch Cave, Fish Mouth, Cold Springs, Procession Panel, Wolf Man Panel, and Ball Room Cave. No change.

Existing and Desired Social RSCs

Contacts (average): Visitor contacts are typically along the Butler Wash Road, with some amount of contacts at trailheads. *No change.*

Group size (average): Group sizes might be imposed for the MZ but would be similar to existing average group sizes of seven to 12 individuals.

Evidence of use: Evidence of use in the MZ included several small, user-created dispersed campsites and trailheads.

Existing and Desired Operational RSCs

Access: Access to the area is via hiking from undeveloped trailheads and user-created dispersed campsites on the Butler Wash Road. *No change.*

Visitor services/information: The BLM provides very little visitor information or services on the Butler Wash Road aside from the two kiosk/fee stations and the three sets of portable toilets. No change.

Management controls: A permit and fee system has been in place in the MZ since 2019. No change.

5.5.5.1 BEST MANAGEMENT PRACTICES

 Maintain predominantly back country physical and social recreation settings by avoiding development of visitor services.

5.5.5.2 ALTERNATIVE D – RECREATION MANAGEMENT DECISIONS CARRIED FORWARD IN THE INTERIM UNTIL SUPERSEDED BY SUBSEQUENT IMPLEMENTATION PLANNING (RAMPS, ETC.)

Camping would be managed the same as Alternative A until an implementation level camping plan is developed.

Permit Requirements:

- ISRPs would continue to be required for hiking in the Comb Ridge MZ.
- Private and commercial group size is limited to 12 individuals for hiking to cultural sites in Comb Ridge accessed from Butler Wash.

Fire Restrictions:

Campfires allowed on mesa tops only; fire pan required. Available for private and/or commercial use of woodland products including on-site collection of dead wood for campfires.

5.5.6 Cedar Mesa Backpacking Recreation Management Zone (Alternative B)

Acres: 34,833

Rationale: This area is an RMZ within the SRMA due to its high level of backpacking use and the potential for impacts to the high-density, world-renowned cultural resources in this area. Restrictions and management prescriptions are intended to minimize impacts to cultural resources, including culturally important riparian and wildlife resources.

Cedar Mesa Canyons RMZ Outcome Objectives:

- Manage the Cedar Mesa Canyons RMZ to preserve, restore, and protect BENM objects while providing opportunities for backpacking, hiking, and cultural site visitation experiences.
- In visitor assessments, 80% of respondents who participated in targeted activities report the ability to realize the targeted visitor experiences and benefits of the RMZ.

Activities:	Experiences:	Benefits:
Backpacking Day hiking Visiting cultural sites	Experiencing the natural surroundings Enjoying the scenery Enjoying the solitude Getting physical exercise	Personal: Increased appreciation of the area's cultural history Closer relationship with nature Household: Greater awareness and appreciation of natural landscapes Greater appreciation for our cultural heritage Community, Economic, Environmental: Preservation of distinctive public land recreation character Increased awareness and protection of natural landscapes

Recreation Setting Characteristics:

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/s mile B roads	≤1/8 mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13-25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Existing and Desired Physical RSCs

Remoteness: Aside from trailheads and access points, the Cedar Mesa Canyons RMZ is located entirely within WSAs (Grand Gulch, Fish Creek Canyon, Road Canyon, and Mule Canyon), meaning no motorized or mechanized access is allowed.

Naturalness: There are few impacts to the RMZ's naturalness other than trailheads and access points on the perimeter. Inside the WSAs, current impacts to naturalness include several small backpacking campsites and some removable stanchions to protect standing archaeological structures. Under Alternative B, additional signage and structures would be constructed to keep visitors on trails and out of sensitive portions of archaeological sites.

Visitor facilities: Visitor facilities consist of trailheads with toilets at Kane Gulch (co-located with the Kane Gulch Ranger Station in the Trail of the Ancients RMZ), Bullet Canyon, and Fish and Owl Canyons and trailheads without toilets at Road Canyon (Citadel), Collins Canyon, Government Canyon, South Fork Mule Canyon (House on Fire), North Fork Mule Canyon, Lime Canyon, Shieks Canyon, Slickhorn No. 1 Canyon, and Todie Canyon. Under Alternative B, these facilities would be enhanced, including development of high-use sites such as the House on Fire Trailhead.

Existing and Desired Social RSCs

Contacts (average): Due to the existing permit system and the isolation provided by the canyons, contacts are limited throughout most of the area; however, House on Fire and the Citadel have become more heavily visited due to the short length of the hikes and exposure on social media, and it is not uncommon to have up to 15 contacts at those locations on busy spring days.

Group size (average): Group sizes might be imposed for the RMZ, but would be similar to the existing average group size of seven to 12 individuals.

Evidence of use: Evidence of use in the RMZ includes several small backpacking campsites.

Existing and Desired Operational RSCs

Access: Because the RMZ is located almost entirely within WSAs, access is by foot and stock only.

Visitor services/information: The BLM provides visitor information online, including an educational video that visitors are required to view before overnight trips and a requirement to pick up overnight permits at the Kane Gulch Ranger Station during the busy season. The BLM also provides information with online day passes and at the trailheads.

Management controls: A permit and fee system has been in place in the RMZ for decades. This system would be retained. Regulations would be posted at trailheads and, if needed, might be posted at key locations to protect archaeological sites within the WSAs.

5.5.6.1 BEST MANAGEMENT PRACTICES

Use the existing Cedar Mesa permit system to convey important rules, regulations, and ethics to visitors.

Most visitor facilities would be restricted to trailheads and access points located outside of WSAs, on the boundaries of the RMZ. Minimal visitor facilities may be developed inside the RMZ only compatible with WSA policy and when necessary for the preservation, restoration, and protection of BENM objects.

Permits

- Overnight and day use in the following canyons requires an ISRP:
 - o Grand Gulch and its tributaries
 - Fish and Owl Canyons
 - Road Canyon
 - o Lime Creek
 - Mule Canyons
 - Slickhorn Canyon
- Overnight permits are allocated and would be issued to users through a permit reservation system. A maximum group size limit is applied to all private and commercial trips to preserve, restore, and protect BENM objects and achieve the desired recreation setting characteristics of the SRMA.
- The group size limit in Alternative A would remain in effect until superseded by the Cedar Mesa RAMP or other future implementation-level planning.

 If monitoring indicates damage to the preservation, restoration, and protection of BENM objects, the BLM would provide for visitor management infrastructure and education. If those actions are not effective, day use must be allocated.

In-Canyon Overnight Camping

- Campsites would be designated, and all overnight visitors would be encouraged to use these designated sites.
- All cans, trash, organic garbage, and burnable refuse, including toilet paper, must be carried out. Liquid garbage may be discarded 200 feet away from water sources. Dishwater must be strained and discarded 200 feet from camps, trails, and water sources.)
- No swimming or bathing is allowed in the pools.
- Solid human waste must be packed out and disposed of at appropriate facilities.
- No campfires in canyons.
- If drought conditions are negatively impacting wildlife, overnight trips would not be permitted.

Pets

No pets allowed within this RMZ.

Stock Use

- Stock users are required to take all feed (non-germinating, certified weed-free) necessary to sustain their animals while on the trip.
- Loose herding of pack and saddle stock is prohibited. All stock must be under physical control. When tethered, all stock must be at least 200 feet away from any water source and archaeological sites.

5.5.7 Cedar Mesa Backpacking Recreation Management Zone (Alternative C)

Acres: 34,833

Rationale: This area is an RMZ within the SRMA due to its high level of backpacking use and the potential for impacts to the high-density, world-renowned cultural resources in this area. Restrictions and management prescriptions are intended to minimize impacts to cultural resources, including culturally important riparian and wildlife resources.

Cedar Mesa Canyons RMZ Outcome Objective:

- Manage the Cedar Mesa Canyons RMZ to preserve, restore, and protect BENM objects while providing opportunities for backpacking, hiking, and cultural site visitation experiences.
- In visitor assessments, 80% of respondents who participated in targeted activities report the ability to realize the targeted visitor experiences and benefits of the RMZ.

Activities:	Experiences:	Benefits:
Backpacking Day hiking Visiting cultural sites	Experiencing the natural surroundings Enjoying the scenery Enjoying the solitude Getting physical exercise	Personal: Increased appreciation of the area's cultural history Closer relationship with nature Household: Greater awareness and appreciation of natural landscapes Greater appreciation for our cultural heritage Community, Economic, Environmental: Preservation of distinctive public land recreation character
		Increased awareness and protection of natural landscapes

Recreation Setting Characteristics:

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>⅓ mile D roads	>1/8 mile B roads	≤⅓ mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Existing and Desired Physical RSCs

Remoteness: Aside from trailheads and access points, the Cedar Mesa Canyons RMZ is located entirely within WSAs (Grand Gulch, Fish Creek Canyon, Road Canyon, and Mule Canyon), meaning no motorized or mechanized access is allowed.

Naturalness: There are few impacts to the RMZ's naturalness other than trailheads and access points on the perimeter. Inside the WSAs, current impacts to naturalness include several small backpacking campsites and some removable stanchions to protect standing archaeological structures.

Visitor facilities: Visitor facilities consist of trailheads with toilets at Kane Gulch (co-located with the Kane Gulch Ranger Station), Bullet Canyon, and Fish and Owl Canyons and trailheads without toilets at Road Canyon (Citadel), Collins, Government, South Fork Mule (House on Fire), North Fork Mule, Lime Canyon, Shieks, Slickhorn No. 1, and Todie. Under Alternative C, these facilities might be enhanced, including development of high-use sites such as the House on Fire Trailhead, but facilities and developments would be excluded from the WSAs.

Existing and Desired Social RSCs

Contacts (average): Due to the existing permit system and the isolation provided by the canyons, contacts are limited; however, House on Fire and the Citadel have become more heavily visited due to the short length of the hikes and exposure on social media, and it is not uncommon to have up to 15 contacts at those locations on busy spring days. Under Alternative C, allocations on day use permits may be used to bring the number of contacts down in these locations.

Group size (average): The group size limit in Alternative A would remain in effect until superseded by the Cedar Mesa RAMP or other future implementation-level planning.

Evidence of use: Evidence of use in the RMZ includes several small backpacking campsites.

Existing and Desired Operational RSCs

Access: Because the RMZ is located almost entirely within WSAs, access is by foot and stock only.

Visitor services/information: The BLM provides visitor information online, including an educational video that visitors are required to view before overnight trips and a requirement to pick up overnight permits at the Kane Gulch Ranger Station during the busy season. The BLM also provides information with online day passes and at the trailheads.

Management controls: A permit and fee system has been in place in the RMZ for decades. This system would be retained. Regulations would be posted at trailheads.

5.5.7.1 BEST MANAGEMENT PRACTICES

Use the existing Cedar Mesa permit system to convey important rules, regulations, and ethics to visitors.

Use off-site interpretive materials to instill a sense of stewardship.

Visitor facilities would be restricted to trailheads and access points located outside of WSAs, on the boundaries of the RMZ.

Permits

- Overnight and day use in the following canyons requires an ISRP:
 - Grand Gulch and its tributaries
 - Fish and Owl Canyons
 - Road Canyon
 - Lime Creek
 - Mule Canyons
 - Slickhorn Canyon
- Overnight permits are allocated and would be issued to users through a permit reservation system. A maximum group size limit is applied to all private and commercial trips to preserve, restore, and protect BENM objects and achieve the desired recreation setting characteristics of the SRMA.
- Every 3 years, the BLM, in collaboration with the BEC, would review visitor impacts to cultural resources and adjust group size limits accordingly.

- The group size limit in Alternative A would remain in effect until superseded by the Cedar Mesa RAMP or other future implementation-level planning.
- Day use may be allocated if monitoring indicates damage to the preservation, restoration, and protection of BENM objects. If this is implemented, commercial and private use allocations would be adaptive and determined based on the relative visitor demand for selfsupported (private) and guided (commercial) recreation opportunities, and preceding actual use trends. Allocations would sustain the viability of both types of visitor opportunities.

In-Canyon Overnight Camping

- In-canyon camping could be limited to certain designated areas if resource damage occurs.
- All cans, trash, organic garbage, and burnable refuse, including toilet paper, must be carried out. Liquid garbage may be discarded 200 feet away from water sources. Dishwater must be strained and discarded 200 feet from camps, trails, and water sources.
- No swimming or bathing is allowed in the pools.
- If solid human waste becomes a problem, a requirement to carry out waste and dispose of it at appropriate facilities may be required.
- No campfires in canyons.
- If drought conditions are negatively impacting wildlife, overnight users would be notified that they must pack all water for their trip (no pumping from water sources on BENM).

Pets

No pets allowed within this RMZ.

Stock Use

- Stock users are required to take all feed (non-germinating, certified weed-free) necessary to sustain their animals while on the trip.
- Loose herding of pack and saddle stock is prohibited. All stock must be under physical control. When tethered, all stock must be at least 200 feet away from any water source and archaeological sites.

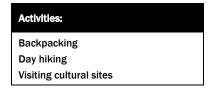
5.5.8 Cedar Mesa Backpacking Management Zone (Alternative D)

Acres: 38,177 (includes the Arch Canyon area)

Rationale: This area is an MZ within the MA due to its high level of backpacking use and the potential for impacts to the high-density, world-renowned cultural resources in this area. Restrictions and management prescriptions are intended to minimize impacts to cultural resources, including culturally important riparian and wildlife resources.

Cedar Mesa Canyons MZ Outcome Objective:

 Manage the Cedar Mesa Canyons MZ to preserve, restore, and protect BENM objects while providing opportunities for backpacking, hiking, and cultural site visitation experiences.



Recreation Setting Characteristics:

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/s mile D roads	>1/8 mile B roads	≤⅓ mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Existing and Desired Physical RSCs

Remoteness: Aside from trailheads and access points, the Cedar Mesa Canyons MZ is located mostly within WSAs (Grand Gulch, Fish Creek Canyon, Road Canyon, and Mule Canyon), meaning no motorized or mechanized access is allowed. However, the Arch Canyon portion of the MZ is within 0.5 mile of the designated Arch Canyon Road. <u>Desired:</u> Under Alternative D the Arch Canyon Road would be closed to OHVs, increasing the remoteness of the that portion of the MZ.

Naturalness: There are few impacts to the MZ's naturalness other than trailheads and access points on the perimeter. Inside the WSAs, current impacts to naturalness include several small backpacking campsites and some removable stanchions to protect standing archaeological structures. The Arch Canyon portion of the MZ has few modifications beyond the sign at the mouth of the canyon, the structures protecting the Arch Canyon Great House, and the campsite/turnaround at the end of the road, but due to the road this area is generally less natural than the remainder of the MZ. <a href="Desired: Removal of the Arch Canyon road would eventually allow some of these modifications to partially naturalize, resulting in an overall more natural character in that portion of the MZ.

Visitor facilities: Visitor facilities consist of trailheads with toilets at Kane Gulch (co-located with the Kane Gulch Ranger Station), Bullet Canyon, and Fish and Owl Canyons and trailheads without toilets at Road Canyon (Citadel), Collins, Government, South Fork Mule (House on Fire), North Fork Mule, Lime Canyon, Shieks, Slickhorn No. 1, Todie, and Arch Canyon.

Existing and Desired Social RSCs

Contacts (average): Due to the existing permit system and the isolation provided by the canyons, contacts are limited; however, House on Fire and the Citadel have become more heavily visited due to the short length of the hikes and exposure on social media, and it is not uncommon to have up to 15 contacts at those locations on busy spring days. Arch Canyon is not managed under a permit system, so contacts are more frequent, especially in the busy spring and fall seasons. Desired: Under Alternative D, Arch Canyon would be added to the permit system, and allocations on day use permits may be used to bring the number of contacts down in these locations.

Group size (average): Group sizes might be imposed for the MZ but would be similar to existing average group sizes of seven to 12 individuals.

Evidence of use: Evidence of use in the MZ includes several small backpacking campsites.

Existing and Desired Operational RSCs

Access: Because the RMZ is located almost entirely within WSAs, access is by foot and stock only, with the exception of Arch Canyon. <u>Desired:</u> The MZ would be OHV closed, with the exception of access points and trailheads.

Visitor services/information: The BLM provides visitor information online, including an educational video that visitors are required to view before overnight trips and a requirement to pick up overnight permits at the Kane Gulch Ranger Station during the busy season. The BLM also provides information with online day passes and at the trailheads. No Change.

Management controls: Except for Arch Canyon, a permit and fee system has been in place in the RMZ for decades. <u>Desired</u>: This system would be retained and expanded to include Arch Canyon. Regulations would be posted at trailheads.

5.5.8.1 MANAGEMENT ACTIONS

Arch Canyon (portion of the RMZ) OHV Closed.

5.5.8.2 ALTERNATIVE D – RECREATION MANAGEMENT DECISIONS CARRIED FORWARD IN THE INTERIM UNTIL SUPERSEDED BY SUBSEQUENT IMPLEMENTATION PLANNING (RAMPS, ETC.)

Permit Requirements:

 ISRPs would continue to be required for hiking and backpacking in the Cedar Mesa Canyons MZ.

Group Size Limits:

- Day use: Private and commercial group size is limited to 12 people.
- Backpacking: Private and commercial group size is limited to 12 people.

Overnight Camping (backpacking) - Cedar Mesa Canyons MZ

- One commercial group per trailhead per day.
- Commercial allocation is 30% of the Cedar Mesa permitted use.

Total overnight visitors per day:

•	Kane	20
•	Bullet	20
•	Government	20
•	Collins	20
•	Fish/Owl	20
•	Road Canyon	20
•	Lime Creek	20
•	Mule Canyons	20
•	Slickhorn Canyons	20

In canyon camping could be limited to certain designated areas if resource or cultural damage occurs.

No fires within canyons of Cedar Mesa.

Pets are not permitted in Grand Gulch, Slickhorn Canyon, nor their tributaries.

Stock Use Restrictions:

- All commercial and private stock use requires a permit.
- No more than one overnight stock party at a time in any canyon on Cedar Mesa. However, Grand Gulch is limited to only one stock trip at any time, day or overnight. Stock day use would be limited to one party per day per trailhead in all canyons requiring permits (except Grand Gulch and McLoyd).
- Overnight and day use in the Cedar Mesa Canyons MZ is restricted to 12 individuals and eight animals (pack and/or saddle).
- Areas for Day Stock Use Only: Bullet Canyon from Grand Gulch to Jailhouse Ruin. Two miles upstream Fish Canyon from the confluence with Owl Canyon, McLoyd Canyon to impassable pour-off, and Owl Canyon to Nevill's Arch.
- Overnight Stock Use Areas: Kane Gulch, Collins Canyon, Government Trail, Grand Gulch from Kane Gulch to Collins Canyon, Fish Creek Canyon from Comb Wash to confluence with Owl Canyon, Mule Canyon South of U-95, Road Canyon, Lime Creek Canyon, Johns Canyon, and Arch Canyon.
- Areas Closed to Stock Use: Grand Gulch below Collins Canyon, all the Slickhorn Canyons, Mule Canyons north of U-95, Bullet Canyon above Jailhouse Ruin, Fish Creek Canyon from 2 miles upstream from Fish Creek and Owl Creek confluence, and Owl Canyon above Nevill's Arch.

5.5.9 Moon House Recreation Management Zone (Alternatives B and C)

5.5.10 Moon House Management Zone (Alternative D)

Acres: 318

Rationale: Moon House RMZ is a highly popular visitor destination within the Cedar Mesa SRMA for hiking and cultural site visitation due to its easy accessibility and the unique architecture of the Moon House site. From a scientific perspective, Moon House is world renowned—unique to the

region—and is a significant cultural treasure. An allocated permit system was established for Moon House in 2009 to limit and manage visitation for protection of the site. Specific objectives and management are needed within the RMZ for the protection of the Moon House site itself and other Monument objects and to prevent impairment of the suitability of the Fish Creek Canyon WSA.

Moon House RMZ Outcome Objectives:

- Manage the Moon House RMZ to protect Moon House and other cultural sites located within the RMZ. Use permits and trailhead materials to promote an ethic of stewardship while allowing hiking and cultural site visitation recreation activities.
- In visitor assessments, 80% of respondents who participated in targeted activities report the ability to realize the targeted visitor experiences and benefits of the RMZ.

Activities:	Experiences:	Benefits:
Day hiking Visiting cultural sites Photography	Experiencing the natural surroundings Enjoying the scenery Enjoying the solitude Getting physical exercise	Personal: Increased appreciation of the area's cultural history Closer relationship with nature Household: Greater awareness and appreciation of natural landscapes Greater appreciation for our cultural heritage Community, Economic, Environmental: Increased awareness and protection of natural landscapes

Recreation Setting Characteristics:

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/8 mile B roads	≤1/8 mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13-25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Remoteness: The RMZ is located entirely within Fish Creek Canyon WSA, meaning no motorized or mechanized access is allowed. No change.

Naturalness: There are few existing impacts to the RMZ's naturalness other than a small trail. No change.

Visitor facilities: Visitor facilities consist of the Moon House Trailhead, which is located on Utah School and Institutional Trust Lands Administration land outside of the RMZ, and two informational kiosks at either end of the Snow Flat Road (outside of the RMZ). Under Alternatives B and C, the Moon House Trailhead might be enhanced to provide better visitor education. Under Alternative D, the trailhead facilities would be retained until a RAMP is developed, whereupon a decision would be made to retain, enhance, or remove facilities.

Existing and Desired Social RSCs

Contacts (average): Due to the existing allocated permit system, contacts are limited to a maximum of 20 per day. Under Alternatives B, C, and D, this might be reduced or increased in a recreation area management plan.

Group size (average): Group sizes might be imposed for the RMZ, but would be similar to existing average group sizes of four to six individuals.

Evidence of use: Evidence of use in the RMZ is limited to a small trail. No change.

Existing and Desired Operational RSCs

Access: Because the RMZ is located entirely within WSAs, access is by foot and stock only. No change.

Visitor services/information: The BLM provides visitor information online, including an educational video that visitors are required to watch before trips and a requirement to pick up permits at the Kane Gulch Ranger Station during the busy season. No change.

Management controls: An allocated permit and fee system has been in place in the RMZ since 2009. This system would be retained. Regulations would be posted at trailheads. No change.

5.5.10.1 BEST MANAGEMENT PRACTICES

The Moon House RMZ occurs within the Fish Creek Canyon WSA and is managed under current WSA policy.

Maintain predominantly remote physical and social recreation settings.

Visitation would be by ISRPs only. All permit restrictions under Alternative A would be kept in place until development of the RAMP. (Alternatives B and C)

Visitors would not be allowed to enter the interior corridor of Moon House. (Alternative B)

Access to the interior corridor of Moon House would be limited to four visitors at a time. (Alternative C only)

Solid human waste must be packed out and disposed of at appropriate facilities. (Alternative B and C)

Hiking to the Moon House site would be limited to the designated trail. Hiking to other sites in the RMZ may also be limited to designated trails if determined necessary. (Alternatives B and C)

Guided trips (led by the BLM, BLM volunteers, or permitted outfitters and guides) would be encouraged to reduce potential for resource damage. (Alternative C only)

The RMZ would be closed to pack animals and pets. (Alternatives B and C)

Campfires would not be allowed. (Alternatives B and C)

No overnight use would be allowed. (Alternatives B and C)

Camping would be prohibited. (Alternative D)

5.5.10.2 ALTERNATIVE D – RECREATION MANAGEMENT DECISIONS CARRIED FORWARD IN THE INTERIM UNTIL SUPERSEDED BY SUBSEQUENT IMPLEMENTATION PLANNING (RAMPS, ETC.)

Permit Requirements:

• ISRPs would continue to be required for the Moon House RMZ.

Group Size Limits (canyons of Cedar Mesa):

- Day use: Private and commercial group size is limited to 12 people.
- Access to the interior corridor of Moon House is limited to four people at any one time.

Trailhead Allocations:

20 people per day allowed for private use and 16 additional people allowed on commercial guided trips or tours led by BLM-trained docents.

Moon House RMZ

- No overnight use is allowed.
- Closed to pack animals and pets

Fire Restrictions:

No fires within Moon House RMZ.

5.5.11 Natural Bridges Overflow Management Zone (Alternative D only)

Acres: 1,458

Rationale: Dispersed camping activities in user-created campsites proliferate along the Deer Flat Road (County B Road 254) and Bears Ears Road (County B Road 228) immediately east of Natural Bridges National Monument. Specific management is needed to regulate dispersed camping activities along the roads in this area, prevent the spread of additional user-created campsites, and protect Monument objects.

Natural Bridges Overflow MZ Outcome Objective:

 Manage the MZ to limit and control dispersed camping activities and the proliferation and expansion of user-created campsites in the area.



Recreation Setting Characteristics:

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/s mile B roads	≤⅓ mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Existing and Desired Physical RSCs

Remoteness: The RMZ is accessed via the Bears Ears Road (B252) and the Deer Flat Road (B254). The entire area is within half a mile or less of these designated B roads.

Naturalness: The RMZ has numerous dispersed campsites and small roads accessing those campsites. Under Alternative D, additional developments in the form of developed trailheads, toilets, and marked designated dispersed sites would result in increased modifications to naturalness.

Visitor facilities: There are currently few to no visitor facilities in the RMZ.

Existing and Desired Social RSCs

Contacts (average): Visitor contacts are typically along the B Roads. No change.

Group size (average): Group size tends to be medium to large due to the presence of the paved Natural Bridges Road. *No change.*

Evidence of use: Evidence of use in the RMZ includes several user-created dispersed campsites, some with alteration to vegetation and soils to accommodate RVs. Under Alternative D, designated dispersed campsites would be marked.

Existing and Desired Operational RSCs

Access: Access to the area is primarily through the two B roads, which are accessible to passenger cars when the roads have been recently maintained and are in dry condition. In wet weather, the roads become impassable, even to 4WD vehicles. *No change.*

Visitor services/information: The BLM currently provides very little visitor information or services in the RMZ. Under Alternative D, more information would be provided about camping locations.

Management controls: Additional locations would be added for posting regulatory information.

5.5.12 Trail of the Ancients Recreation Management Zone (Alternatives B and C)

5.5.13 Trail of the Ancients Management Zone (Alternative D)

Acres: 7,063

Rationale: Due its location along SR-95 and SR-276 highway corridors, the Trail of the Ancients RMZ is the most easily accessible and traveled area within the Cedar Mesa SRMA. It contains several developed Public Use Sites, trailheads, and the Kane Gulch Ranger Station. The area is distinct within the SRMA for having a more front country recreation setting than the remainder of the SRMA. An RMZ along this highway corridor presents an opportunity for the BLM to manage the area within existing front country recreation settings; develop and enhance facilities to direct and channel visitation away from less-developed areas within BENM; and communicate recreation use rules, regulations, and ethics to visitors for the protection of Monument objects. For these reasons, specific and distinct objectives and management are needed within the RMZ.

Trail of the Ancients RMZ Outcome Objectives:

- Manage the Trail of the Ancients RMZ for a frontcountry physical and social recreation setting, which uses existing and new developed visitor facilities and interpreted Public Use (Developed) sites to communicate the cultural importance of the Cedar Mesa area to a broad audience. Use accessible visitor facilities at trailheads and major visitor access areas to instill an ethic of stewardship by communicating recreation use rules, regulations, and ethics to visitors.
- In visitor assessments, 80% of respondents who participated in targeted activities report the ability to realize the targeted visitor experiences and benefits of the RMZ.

Activities:	Experiences:	Benefits:
Driving/sightseeing Day hiking Visiting cultural sites Photography	Enjoying the scenery Learning about the connection of the Tribes of the BEC to BENM Learning to visit cultural sites responsibly	Personal: Increased appreciation of the area's cultural history Closer relationship with nature Greater aesthetic appreciation Household: Greater awareness and appreciation of natural landscapes Greater appreciation for our cultural heritage Greater recreation opportunities for my family Community, Economic, Environmental: Increased awareness and protection of natural landscapes Greater community stewardship of recreation and natural resources

Recreation Setting Characteristics:

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/8 mile B roads	≤1/8 mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4-6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Remoteness: The RMZ is situated within 0.5 mile of SR-95 and SR-261. No change.

Naturalness: The RMZ has several rustic facilities that are in harmony with the natural environment, as well as one communications tower located along SR-261. Under Alternatives B and C, visitor facilities would be updated and upgraded, which might reduce their visibility on the landscape and increase naturalness. Under Alternative D, facilities would be retained until a RAMP is developed, whereupon a decision would be made to retain, enhance, or remove facilities.

Visitor facilities: The RMZ includes a range of facilities. The Kane Gulch Ranger Station has a staffed visitor desk, interpretive displays, a small store, toilets, and staff housing. The Butler Developed Interpretive Site and Mule Canyon Interpretive Site were developed in the 1980s and include interpretive displays, toilets, and sidewalks. The RMZ also has several facilities with fewer amenities, including the Butler Wash Dinosaur Tracksite, the Cigarette Springs Road kiosk, Government Road kiosk, the Hole in the Rock interpretive panels at Natural Bridges, the Salvation Knoll Trail, the Snow Flat upper kiosk and the Texas Flat/South Mule kiosk. Under Alternatives B and C, facilities within the RMZ would be enhanced, including updating interpretive materials and improving accessibility. Under Alternative D, facilities would be retained until a RAMP is developed, whereupon a decision would be made to retain, enhance, or remove facilities.

Existing and Desired Social RSCs

Contacts (average): Visitor contacts are common in the RMZ due to the presence of the highways. No change.

Group size (average): Group size may be large in the RMZ because many of the facilities can accommodate large groups. No change.

Evidence of use: Evidence of use in the RMZ includes trailheads and rustic campgrounds. No change.

Existing and Desired Operational RSCs

Access: Access to the area is via passenger car on the highways. No change.

Visitor services/information: The BLM currently provides visitor information at the staffed desk at Kane Gulch Ranger Station and the many interpretive displays throughout the area. Under Alternative C, better online information, including virtual tours and brochures, would be developed.

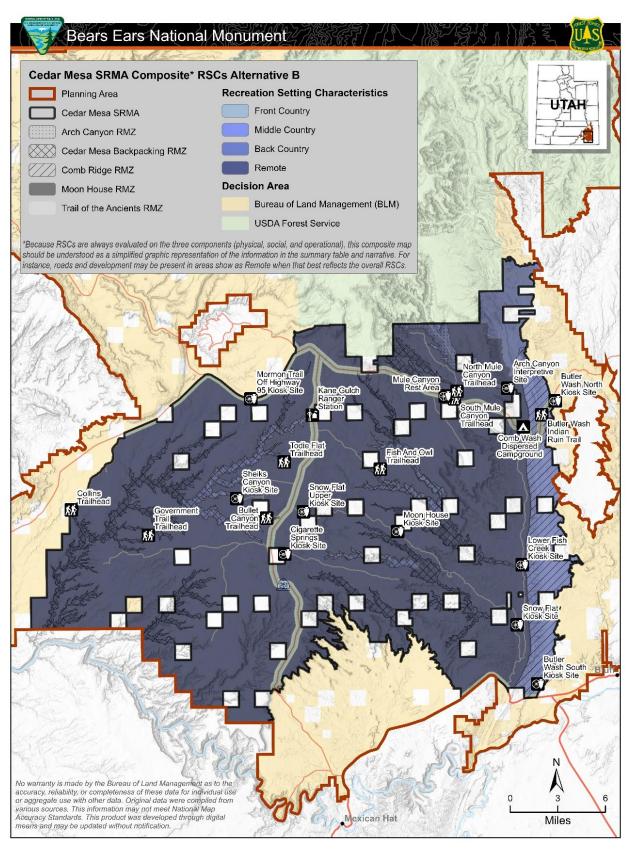
Management controls: Regulations are clearly posted at interpretive sites. No permits are required for access to any of the sites within the RMZ. *No change.*

5.5.13.1 BEST MANAGEMENT PRACTICES

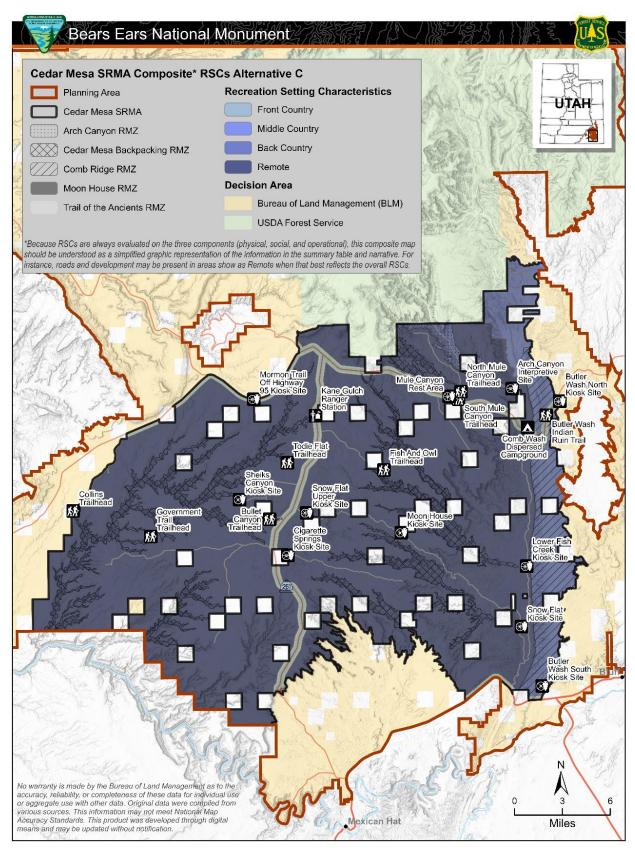
RMZ would be managed primarily as a place to educate visitors about appropriate etiquette at cultural sites. (Alternatives B and C)

Campgrounds would be developed in the RMZ. (Alternatives B and C)

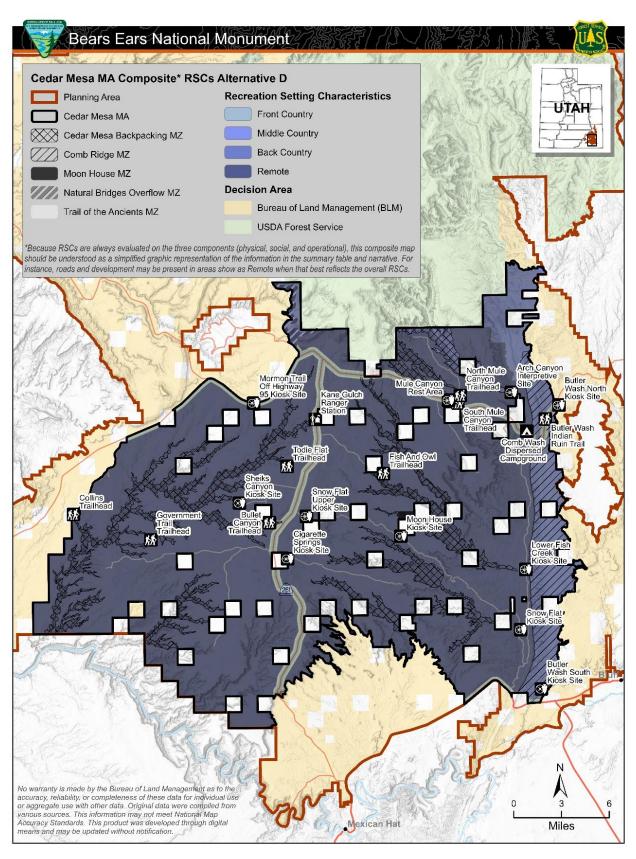
New developed recreation facilities would be allowed. Existing recreation facilities would be maintained to preserve, restore, and protect BENM objects; educate the public; and minimize impacts to the existing landscape from the Trail of the Ancients Scenic Byway. (Alternatives B and C)



Map E-7. Cedar Mesa SRMA, RMZs, and composite* RSCs, Alternative B.

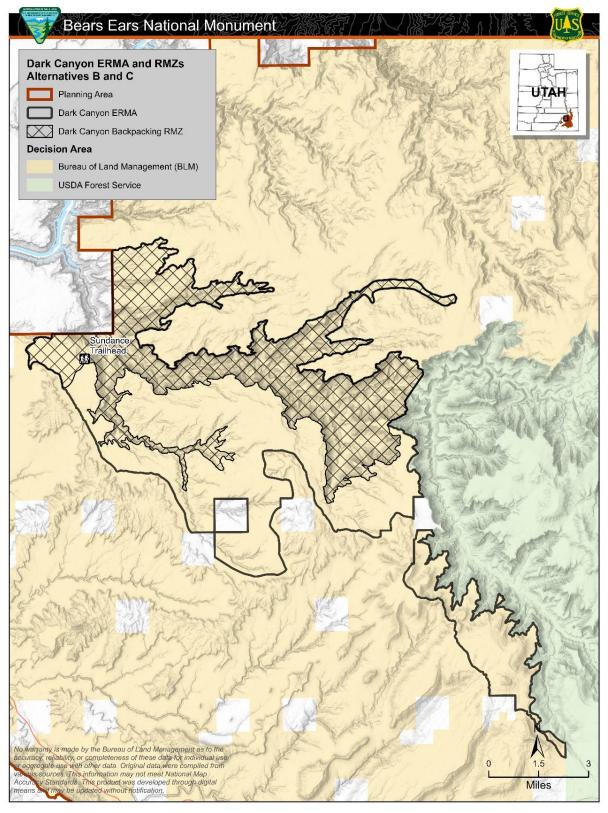


Map E-8. Cedar Mesa SRMA, RMZs, and composite* RSCs, Alternative C.

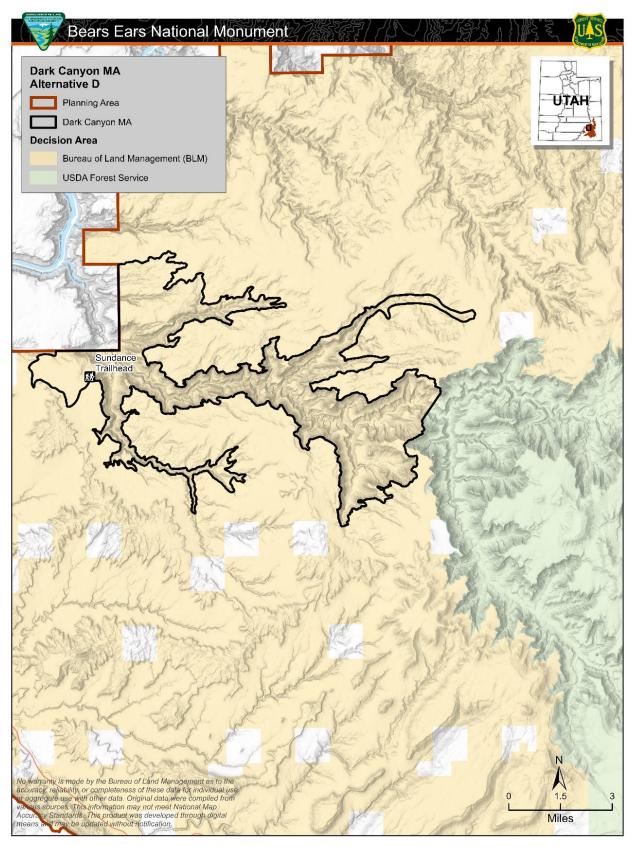


Map E-9. Cedar Mesa MA, MZs, and composite* RSCs, Alternative D.

5.6 Dark Canyon Extensive Recreation Management Area



Map E-10. Dark Canyon ERMA and RMZ, Alternatives B and C.



Map E-11. Dark Canyon MA, Alternative D.

5.6.1 Dark Canyon Extensive Recreation Management Area (Alternatives B and C)

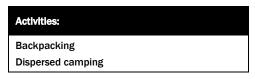
Acres: 40,829

Rationale: Dark Canyon is an ERMA to maintain a scenic back country experience of expansive views from within one of the deepest canyon systems in the region. Visitors can experience multiday backpacking trips in a remote, roadless, and essentially unmodified natural environment. This area is popular with outdoor education organizations, who may travel with groups of up to 18 in the canyons for up to 2 weeks multiple times in the spring and fall.

Dark Canyon ERMA Objectives:

Alternative B:

Manage the Dark Canyon ERMA to preserve, restore, and protect BENM objects while
providing opportunities for backpacking and dispersed camping, with a focus on developing
and enhancing visitor facilities in limited areas at trailheads, while maintaining remote and
backcountry recreation settings throughout the majority of the area.



Recreation Setting Characteristics:

The Dark Canyon Backpacking RMZ within the Dark Canyon ERMA has distinct RSCs from the remainder of the ERMA. The RSCs in the following section do not include the Dark Canyon Backpacking RMZ. The specific RSCs for the Dark Canyon Backpacking RMZ are detailed further in the document.

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/8 mile B roads	≤1/8 mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Remoteness: The Dark Canyon ERMA above the rim of Dark Canyon contains the Woodenshoe Road (San Juan County Road 256), which is a maintained County B Road, and multiple County D Roads; however, the ERMA encompasses a large area, most of which is more than ½ mile from any roads or trails. No change.

Naturalness: There are few impacts to the naturalness of the Dark Canyon ERMA. Modifications from existing resource uses are rare and are generally not visually obvious; however, there are several small stock ponds and an old airstrip related to uranium mining near the Woodenshoe Road. No change.

Visitor facilities: The only visitor facility in the ERMA is the Sundance Trailhead, which is located in the Dark Canyon Backpacking RMZ. No change.

Existing and Desired Social RSCs

Contacts (average): Contacts are typically focused on the area along the Woodenshoe Road and there are fewer in other areas within the ERMA. No change.

Group size (average): Group size for private groups is typically small; however, group sizes are not limited and larger SRP groups and multi-family groups camp and travel through the area. No change.

Evidence of use: On the mesa top areas of the ERMA, evidence of use is limited to small, dispersed campsites. No change.

Existing and Desired Operational RSCs

Access: Access on the Woodenshoe Road is by 4WD or passenger cars. No change.

Visitor services/information: Basic area maps are provided off-site. Staff are infrequently present on-site. <u>Desired:</u> Under both Alternatives B and C, informational and interpretive materials would be updated and improved.

Management controls: There are minimal on-site posts and signs and permits are not required. Desired: Under Alternatives B and C, regulatory and ethics signs would be added and improved. Under Alternative C, signs would be limited to trailheads and other already-developed areas.

5.6.1.1 MANAGEMENT ACTIONS

Consistent with the Religious Freedom Restoration Act and other applicable laws, prohibit private and/or commercial collection of woodland product use, except for the on-site collection of dead wood for campfires on mesa tops. Private collection of woodland products would not be prohibited where such prohibition constitutes a substantial burden on Tribal Nations' religious practices.

5.6.1.2 BEST MANAGEMENT PRACTICES

Within the Dark Canyon ERMA, recreation use rules, regulations, and ethics are clearly posted onsite at major access points and trailheads, and on-site facilities are the primary means for managing visitation. (Alternative B only) Within the Dark Canyon ERMA, permits and other off-site methods are used as the primary means for communicating and enforcing recreation use rules, regulations, and ethics to manage visitation. (Alternative C only)

Complete an interagency implementation-level RAMP in coordination with the BEC and the contiguous NPS unit within 5 years of the issuance of this RMP/EIS. (Alternatives B and C)

If needed to reduce resource damage or enhance the visitor experience, create a permit and fee system for these canyons as necessary to preserve, restore, and protect BENM objects and reduce user conflict. (Alternative B)

Create and allocate an interagency permit and fee system for these canyons to preserve resources and encourage visitor stewardship. (Alternative C)

Group size limits for the ERMA would be established in the RAMP. (Alternatives B and C)

Campfires are allowed on mesa tops. (Alternatives B and C)

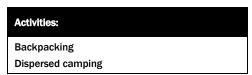
5.6.2 Dark Canyon Management Area (Alternative D)

Acres: 18,802

Rationale: Dark Canyon is an MA to maintain a scenic back country experience of expansive views from within one of the deepest canyon systems in the region. Visitors can experience multiday backpacking trips in a remote, roadless, and essentially unmodified natural environment. This area is popular with outdoor education organizations, who may travel with groups of up to 18 in the canyons for up to 2 weeks multiple times in the spring and fall.

Dark Canyon MA Outcome Objectives:

Manage Dark Canyon to provide a remote and undeveloped recreational experience in an
essentially unmodified natural environment within the canyon system. Continue to provide
a scenic back country experience of expansive views from within one of the deepest canyon
systems in the region.



Recreation Setting Characteristics:

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/8 mile B roads	≤⅓ mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
SOCIAL Contacts	Remote ≤6 contacts per day	Back Country 7-14 per day	Middle Country 15-29 per day	Front Country ≥30 per day
			•	•

OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Remoteness: The Dark Canyon MA below the rim of Dark Canyon is entirely within the Dark Canyon WSA. The Sundance Trailhead is accessed from a County D Road. No change.

Naturalness: There are very few modifications to naturalness within the MA other than the Sundance Trailhead. *No change.*

Visitor facilities: The only visitor facility in the MA is the Sundance Trailhead, which has a small parking area and one kiosk for educational information. No change.

Existing and Desired Social RSCs

Contacts (average): Contacts are typically rare due to the highly screened nature of the canyon walls. No change.

Group size (average): Group size for private groups is typically small; however, education SRPs are permitted to travel in groups of up to 18. <u>Desired:</u> Group sizes may be further limited under Alternative D through implementation-level planning.

Evidence of use: Under the rim, evidence of use is limited to small campsites. No change.

Existing and Desired Operational RSCs

Access: Other than the Sundance Trailhead, access is limited to non-mechanized means. No change.

Visitor services/information: Currently, visitor information is limited to one bulletin board at the trailhead and one brochure available online. <u>Desired:</u> Under Alternative D, this information would be updated and improved online and at the Sundance Trailhead.

Management controls: There is a maximum group size of 18 people and some basic user regulations are posted at the Sundance Trail. <u>Desired:</u> Under Alternative D, rules and regulations would be clearly posted, campsites would be designated, and a permit system may be implemented.

5.6.2.1 MANAGEMENT ACTIONS

Consistent with the Religious Freedom Restoration Act and other applicable laws, prohibit private and/or commercial collection of woodland product use, except for the on-site collection of dead wood for campfires on mesa tops. Private collection of woodland products would not be prohibited where such prohibition constitutes a substantial burden on Tribal Nations' religious practices.

Campsites would be designated where necessary to reduce user conflicts, to provide for public safety, and to preserve, restore, and protect BENM objects. Camping in designated sites may either be encouraged or required to meet area goals and objectives, as identified in the RAMP.

5.6.2.2 ALTERNATIVE D – RECREATION MANAGEMENT DECISIONS CARRIED FORWARD IN THE INTERIM UNTIL SUPERSEDED BY SUBSEQUENT IMPLEMENTATION PLANNING (RAMPS, ETC.)

Group size is limited to 18 people for private and commercial.

Use Limits/Allocations:

- Three commercial trips are allowed per week.
- Up to 20 total private users allowed per day. This number may be altered depending upon future visitor impacts.
- If and where necessary, camping would be restricted to designated sites only.

Fire Restrictions:

- Cook stoves only in canyons.
- Campfires are allowed on mesa tops. Woodland product use limited to the on-site collection of dead wood for campfires on mesa tops.

Pets are allowed on leash and under physical control.

5.6.3 Dark Canyon Backpacking Recreation Management Zone (Alternatives B and C)

Acres: 18,799

Rationale: The Dark Canyon Backpacking RMZ is almost entirely within the Dark Canyon WSA and access is predominantly limited to foot travel (besides the Sundance Trailhead). As a result, backpacking is the primary activity occurring in the area, and the area features distinctly more remote recreation settings than the remainder of the ERMA on the mesa top. For these reasons, specific management is needed to maintain backpacking activities and recreation settings while protecting Monument objects.

Dark Canyon Backpacking RMZ Outcome Objectives:

 Manage the Dark Canyon Backpacking RMZ to preserve, restore, and protect BENM objects while providing opportunities for backpacking and preventing impairment to the suitability of Dark Canyon WSA and Dark Canyon Suitable-Wild WSR segment.



Recreation Setting Characteristics:

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/8 mile B roads	≤⅓ mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities

SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13-25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
OPERATIONAL Access	Remote Non-mechanized	Back Country Non-motorized	Middle Country 4WD vehicles	Front Country Passenger cars
	[·		·

Remoteness: The Dark Canyon Backpacking RMZ below the rim of Dark Canyon is entirely within the Dark Canyon WSA. The Sundance Trailhead is accessed from a County D Road. *No change.*

Naturalness: There are very few modifications to naturalness other than the Sundance Trailhead. No change.

Visitor facilities: The only visitor facility in the RMZ is the Sundance Trailhead, which has a small parking area and one kiosk for educational information. No change.

Existing and Desired Social RSCs

Contacts (average): Contacts are typically rare due to the highly screened nature of the canyon walls. No change.

Group size (average): Group size for private groups is typically small; however, education SRPs are permitted to travel in groups of up to 18. <u>Desired:</u> Group sizes may be further limited under Alternatives B and C through implementation-level planning.

Evidence of use: Under the rim, evidence of use is limited to small campsites. No change.

Existing and Desired Operational RSCs

Access: Other than the Sundance Trailhead, access is limited to non-mechanized means. *No change.*

Visitor services/information: Currently, visitor information is limited to one bulletin board at the trailhead and one brochure available online. Desired: Under Alternatives B and C, this information would be updated and improved online and at the Sundance Trailhead.

Management controls: There is a maximum group size of 18 people. Basic user regulations are posted at the Sundance Trail. <u>Desired:</u> Under Alternatives B and C, rules and regulations would be clearly posted, campsites would be designated, and a permit system may be implemented. Under Alternative C, signage would be limited to trailheads and other already-developed areas.

5.6.3.1 BEST MANAGEMENT PRACTICES

Manage the RMZ to maintain predominantly remote physical and social recreation settings.

Until the RAMP is developed, group size limits within the RMZ would continue as it is under the No Action Alternative.

Limits on the amount of commercial use would be determined through the RAMP. Until the RAMP is developed, commercial entries would continue as it is under Alternative A.

Limits on the amount of private use would be determined through the RAMP, and a limited allocated permit system for private use would be implemented. (Alternative C only)

A limited allocated permit system for private use would be implemented. (Alternative C only)

Camping limits:

- Campsites within the canyon would be designated.
- Once designated, camping would be restricted to designated sites only. (Alternative B only)
- Once designated, camping would be encouraged in designated sites. (Alternative C only)

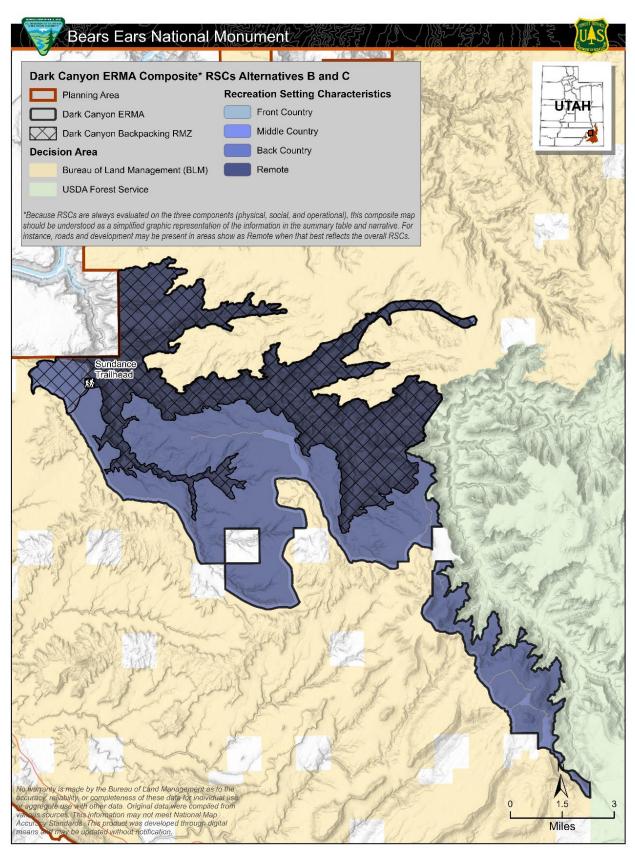
Campfires are not allowed. Only cook stoves are allowed.

Human Waste:

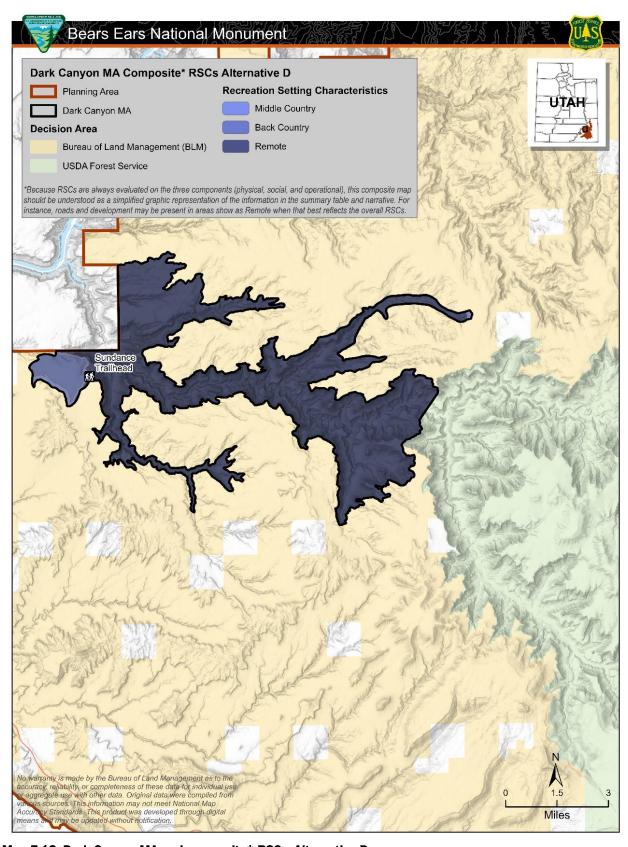
- Solid human waste must be packed out and disposed of at appropriate facilities.
 (Alternative B only)
- If solid human waste becomes a problem, the requirement for carrying out waste and disposing of it at appropriate facilities may be implemented in the canyon. (Alternative C only)

Pets:

- Pets are not allowed within the canyons. (Alternative B only)
- Pets are allowed on leash and under physical control. (Alternative C only)

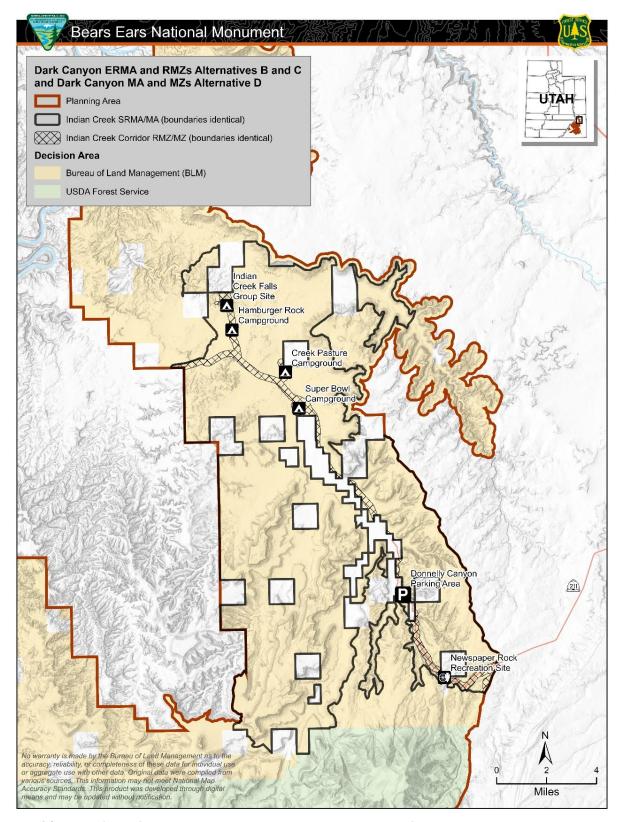


Map E-12. Dark Canyon ERMA, RMZ, and composite* RSCs, Alternatives B and C.



Map E-13. Dark Canyon MA and composite* RSCs, Alternative D.

5.7 Indian Creek Special Recreation Management Area



Map E-14. Indian Creek SRMA and RMZs/MAs and MZs, Alternatives B, C and D.

5.7.1 Indian Creek Special Recreation Management Area (Alternatives B and C)

5.7.2 Indian Creek Management Area (Alternative D)

Acres: 74,783 (B and C), 67,310 (D)

Rationale: This area is an SRMA due to the world-class crack climbing opportunities as well as cultural site visitation, camping, and scenic driving in a scenic red rock and riparian setting. SR-211 in the Indian Creek Corridor is the gateway to the Needles District of Canyonlands National Park, and upward of 200,000 visitors per year stop at the developed Newspaper Rock site, which has parking, paved sidewalks, and toilets in addition to the rock writing site. There are currently four developed campgrounds and three reservable group sites in the Indian Creek SRMA, but the demand for camping continues to grow, with several documented dispersed campsites throughout the area. The primary draw outside of the main Indian Creek Corridor, situated close to the paved highway, is crack climbing in the Wingate Sandstone cliffs, which sometimes also contain rock writing and other cultural sites. Interest in this sport has been increasing, and Indian Creek has long been an international crack climbing destination. The northern part of the SRMA is popular for OHV riding and camping. Recreational pressures, including climbing, camping, and OHV riding must be managed in order to protect the fragile cultural landscape and the unique recreation experience that Indian Creek offers.

Indian Creek SRMA Outcome Objectives:

- Manage the Indian Creek SRMA to preserve, restore, and protect BENM objects. Provide
 opportunities for climbing, camping, and cultural site visitation in a scenic red rock setting
 that supports appreciation of the cultural landscape and fosters an ethic of stewardship
 among visitors.
- In visitor assessments, 80% of respondents who participated in targeted activities report the ability to realize the targeted visitor experiences and benefits of the SRMA.

Activities:	Experiences:	Benefits:
Rock climbing	Experiencing the natural surroundings	Personal:
Camping	Enjoying the scenery	Improved physical fitness
	Experiencing adventure and excitement	Improved/maintained health
	Being with others who enjoy the same things I do	Rest from mental stress/tension/anxiety
		Enhanced sense of personal freedom
		Community, Economic, Environmental:
		Increased awareness and protection of natural landscapes
		Greater protection of fish, wildlife, and plant habitat from growth, development, and public use impacts
		Preservation of distinctive public land recreation character
		Greater community stewardship of recreational and natural resources

Recreation Setting Characteristics:

The Indian Creek SRMA has a wide range of RSCs. The Indian Creek Corridor RMZ within the SRMA has distinct RSCs from the remainder of the SRMA. The RSCs in the following section describe the SRMA outside of the RMZ. The distinct RSCs for the RMZ are detailed further in the document.

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/8 mile B roads	≤⅓ mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Remoteness: The quality of remoteness varies widely throughout the RMA. Many of the designated climbing access trails are located entirely within ½ mile of paved roads, whereas the tops of Bridger Jack and Lavender Mesa are rarely accessed at all due to steep cliffs on all sides. No change.

Naturalness: Outside of the Indian Creek Corridor RMZ, there are several small user-created dispersed campsites near roads, and parking areas for climbing access trails. Under all alternatives, appropriate campsites will be designated and marked, whereas those that impact other resources will be rehabilitated.

Visitor facilities: Small, undeveloped parking areas have formed at several designated climbing access trails. Under Alternatives B and C, unobtrusive facilities may be improved to provide better visitor education about protecting Monument objects.

Existing and Desired Social RSCs

Contacts (average): Visitor contacts are common in much of the area due to the presence of the highways and Indian Creek's popularity for climbing. Areas like the Donnelly Canyon parking area is often full all day in the spring and fall. No change.

Group size (average): Group sizes can vary, because the climbing groups often merge and split multiple times throughout the day. Large groups are common at the group sites, but typical group size throughout the area is four to 12 individuals. *No change*.

Evidence of use: Evidence of use includes rustic campgrounds, climbing access points, and many dispersed campsites. Under all alternatives, appropriate campsites will be designated and marked, whereas those that impact other resources will be rehabilitated.

Existing and Desired Operational RSCs

Access: Access to the area is via passenger car on the highways and 4WD vehicles in some of the more remote spots. *No change.*

Visitor services/information: The BLM provides visitor information online and at several interpretive signs, mostly clustered in the Indian Creek Corridor RMZ. Under Alternative B, unobtrusive facilities might be developed to provide information. Under Alternative C, visitor education would more likely be accomplished through a permit system.

Management controls: Regulations are clearly posted at interpretive sites. Permits are currently only required for camping in developed sites, but may be required for designated dispersed camping in the future, especially under Alternative C.

5.7.2.1 MANAGEMENT ACTIONS

Recreational shooting: Recreational shooting would be prohibited. (Alternatives B and D)

Recreational shooting: Recreational shooting would generally be allowed but would be prohibited at campgrounds/developed recreation facilities, climbing areas, designated trails, parking areas, trailheads, rock writing sites, and structural cultural sites, and across roadways. Where problem areas occur regarding recreational shooting, the BLM would post signs notifying visitors of restrictions and would consider additional recreational shooting closures. (Alternative C only)

5.7.2.2 BEST MANAGEMENT PRACTICES

Developed recreation facilities would be concentrated in the Indian Creek Corridor RMZ and allowed throughout the SRMA. Existing developed recreation facilities would be maintained. New sites/facilities/trails would be developed or expanded as necessary in response to user demand consistent with preserving, restoring, and protecting BENM objects. (Alternative B)

Developed recreation facilities would be limited to the Indian Creek Corridor RMZ. Existing developed recreation facilities that receive heavy use would be maintained in the Indian Creek Corridor RMZ. New sites/facilities/trails would be developed or improved if needed to preserve, restore, and protect BENM objects. (Alternative C)

Within 3 years, the BLM would develop, in collaboration with the BEC, an Indian Creek RAMP to provide management direction for the SRMA, including group size limits, facilities development, and designation of campsites. Until the RAMP is developed, existing group size camping limitation would remain in place.

Camping:

- Camping would be restricted to designated areas/sites or developed campgrounds. New campgrounds would be developed in the Indian Creek Corridor RMZ and designated dispersed camping would be physically delineated in the SRMA in an implementation-level plan. (Alternative B only)
- Camping would require ISRPs, and group size limitations would be imposed for dispersed camping. New campgrounds would be developed in the Indian Creek Corridor RMZ and designated dispersed camping would be identified in the SRMA in an implementation-level plan. (Alternative C only).

 Campsites would be designated where necessary to reduce user conflicts, to provide for public safety, and to preserve, restore, and protect BENM objects. Camping in designated sites may either be encouraged or required to meet SRMA goals and objectives, as identified in the RAMP. (Alternative D)

Campfires

Campfires would be restricted to fire rings where metal fire rings are available. In dispersed camping areas with no metal fire rings, campfires would be limited to fire pans, and campfire ash should be hauled away; stone fire rings would not be allowed unless consistent with the preservation, restoration, and protection of BENM objects as determined during implementation-level planning. No campfires would be allowed in the Lavender Mesa ACEC. The area would be unavailable for private and/or commercial use of woodland products, including on-site collection of dead wood for campfires. Campers must bring in their own wood for campfires.

Pets

Pets must be leashed at all times.

Human and other waste

 Visitors would be required to use existing bathroom facilities or pack out solid human waste and dispose of it at appropriate facilities. All cans, trash, organic garbage, and burnable refuse, including toilet paper, must be carried out. Liquid garbage may be discarded 200 feet from any water source. Dishwater must be strained and discarded 200 feet from any camps, trails, and water sources.

Climbing:

ISRPs would be required for all climbing activities and group size limits would be imposed.
 (Alternative C only)

Access points, trails, and climbing routes that are consistent with the preservation, restoration, and protection of BENM objects would continue to be allowed.

The BLM could do any of the following:

- Use physical infrastructure to educate climbers at climbing access points on potential climbing impacts and how to recreate responsibly and/or self-regulate to avoid impacting these resources. (Alternative B only)
- Use permits to educate climbers on potential climbing impacts and how to recreate responsibly and/or self-regulate to avoid impacting these resources. (Alternative C only)
- Work with climbing organizations and SRP holders to increase volunteer monitoring and to educate climbers.
- If site-specific impacts exist, climbing routes can be closed and access trails and staging areas may be rerouted. Any closures would be identified in collaboration with the BEC and Tribal Nations. Climbing closures would be identified via physical infrastructure and/or kiosks/signs.
- All new bolts, anchors, or fixed gear for new routes would require prior approval by the BLM.
 Bolts, anchors, and fixed gear on existing open routes could be replaced as needed without
 prior authorization. All bolts, anchors, and fixed gear would be painted to limit visual
 contrast.

Seasonal Climbing Closures: Climbing routes would be closed seasonally as appropriate to
protect nesting raptors, to provide for natural resource rest, and/or to support traditional
uses. Closures would be identified in collaboration with the BEC and Tribal Nations.

5.7.2.3 ALTERNATIVE D – RECREATION MANAGEMENT DECISIONS CARRIED FORWARD IN THE INTERIM UNTIL SUPERSEDED BY SUBSEQUENT IMPLEMENTATION PLANNING (RAMPS, ETC.)

Camping Restrictions:

 Dispersed camping would be allowed following current management rules and encouraged in designated sites.

Fire Restrictions:

Campfires are restricted to fire rings where fire rings are available. In dispersed camping
areas, where fire rings would not be available, campfires are subject to Leave-No- Trace
standards. No campfires are allowed in the Lavender Mesa ACEC. On-site collection of dead
wood for campfires is prohibited. Campers must bring in their own wood for campfires.

5.7.3 Indian Creek Corridor Recreation Management Zone (Alternatives B and C)

5.7.4 Indian Creek Corridor Management Zone (Alternative D)

Acres: 3,459

Rationale: This area is an RMZ due to exceptional camping, sightseeing, and cultural resource visitation opportunities, including Newspaper Rock Recreation Area and SR-211, the gateway to the Needles District of Canyonlands National Park. Existing infrastructure in Indian Creek is clustered in this RMZ.

Indian Creek Corridor RMZ Outcome Objective:

- Manage the Indian Creek Corridor RMZ for a frontcountry physical and social recreation setting. Use existing and new visitor facilities and Public Use (Developed) sites to interpret the cultural importance of the Indian Creek area to a broad audience and support protection of the overall cultural landscape through an ethic of stewardship.
- In visitor assessments, 80% of respondents who participated in targeted activities report the ability to realize the targeted visitor experiences and benefits of the RMZ.

Activities:	Experiences:	Benefits:
Camping Driving/sightseeing Visiting cultural sites Photography	Enjoying the scenery Experiencing the natural surroundings Learning about the connection of the Tribes of the BEC to BENM Learning to visit cultural sites responsibly	Personal: Rest from mental stress/tension/anxiety Enhanced sense of personal freedom Household: Greater awareness and appreciation of natural landscapes Strengthened family relationships Community, Economic, Environmental: Increased awareness and protection of natural landscapes Greater community stewardship of recreational and natural resources

Recreation Setting Characteristics:

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/8 mile B roads	≤1/8 mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Existing and Desired Physical RSCs

Remoteness: The RMZ is situated within ½ mile of SR-211, the paved road leading to the Needles District of Canyonlands National Park, and the Lockhart Basin Road (B112), which is an improved gravel road.

Naturalness: The RMZ has several rustic facilities and campgrounds that are in harmony with the natural environment. Due to excellent natural screening provided by the canyon environment, these facilities are often virtually unnoticeable from common observation points such as the Indian Creek Scenic Backway.

Visitor facilities: Facilities within the RMZ include Newspaper Rock Interpretive Site, the Creek Pasture Campground and Group Site, the Superbowl Campground and Group Site, the Hamburger Rock Campground, the Indian Creek Falls Group Site, the Bridger Jack designated dispersed campsites, the Donnelly Canyon Day Use Area, the Lockhart Basin kiosk, and a set of kiosks and toilets at the North Cottonwood Road turnoff.

Existing and Desired Social RSCs

Contacts (average): Visitor contacts are common in the RMZ due to the presence of the highways. Newspaper Rock is the most heavily visited site in BENM, although trips tend to be 15 minutes or less.

Group size (average): Group size may be large in the RMZ, because many of the facilities can accommodate large groups.

Evidence of use: Evidence of use in the RMZ includes rustic campgrounds and climbing access points.

Existing and Desired Operational RSCs

Access: Access to the area is via passenger car on the highways.

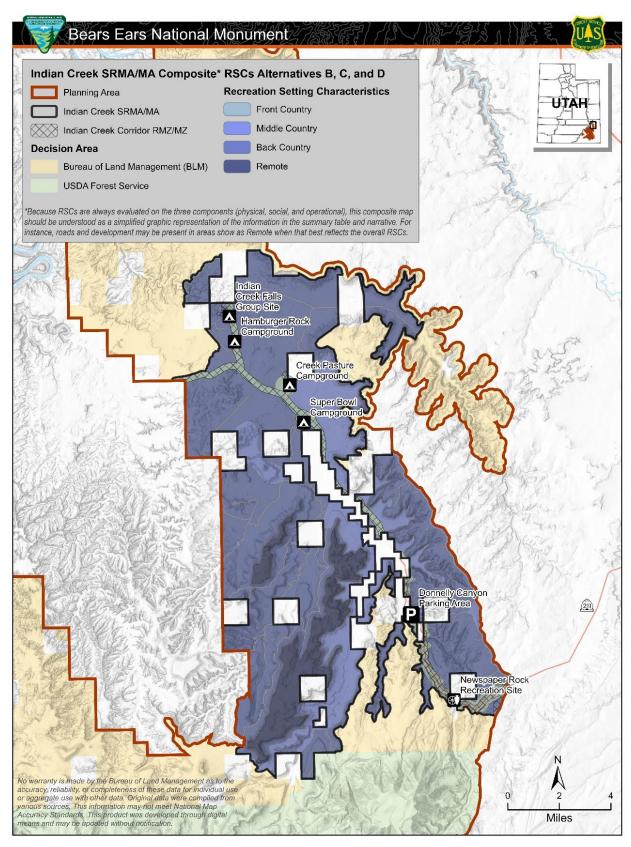
Visitor services/information: The BLM provides visitor information online and at several interpretive signs throughout the RMZ.

Management controls: Regulations are clearly posted at interpretive sites. No permits are currently required for access to any of the sites within the RMZ, with the exception of developed campgrounds and group sites.

5.7.4.1 BEST MANAGEMENT PRACTICES

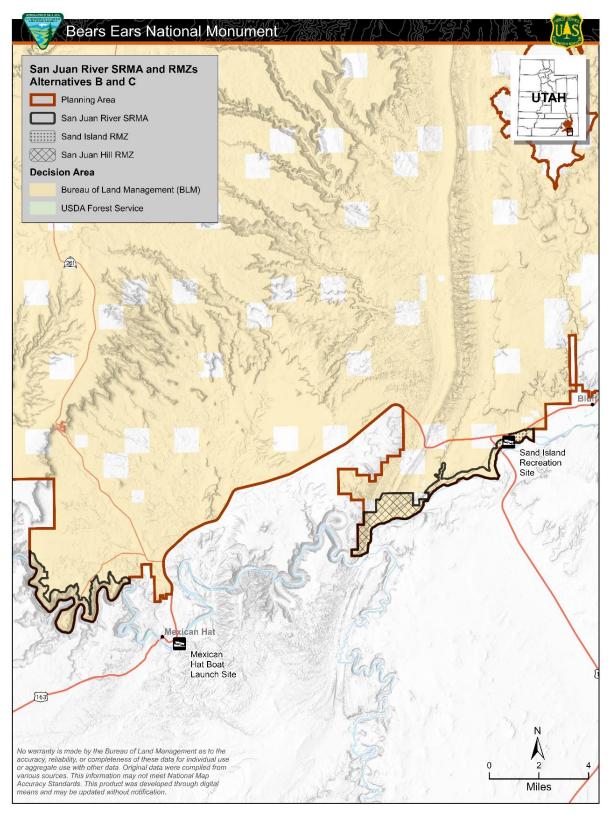
Use accessible visitor facilities at trailheads and major visitor access areas to communicate recreation use rules, regulations, and ethics to visitors.

- RMZ would be managed primarily as a place to educate visitors about appropriate etiquette at cultural sites.
- Campgrounds would be developed in the RMZ.
- New developed recreation facilities would be allowed. Existing recreation facilities would be maintained to preserve, restore, and protect BENM objects; educate the public; and minimize impacts to the existing landscape from the Indian Creek Corridor Scenic Byway.

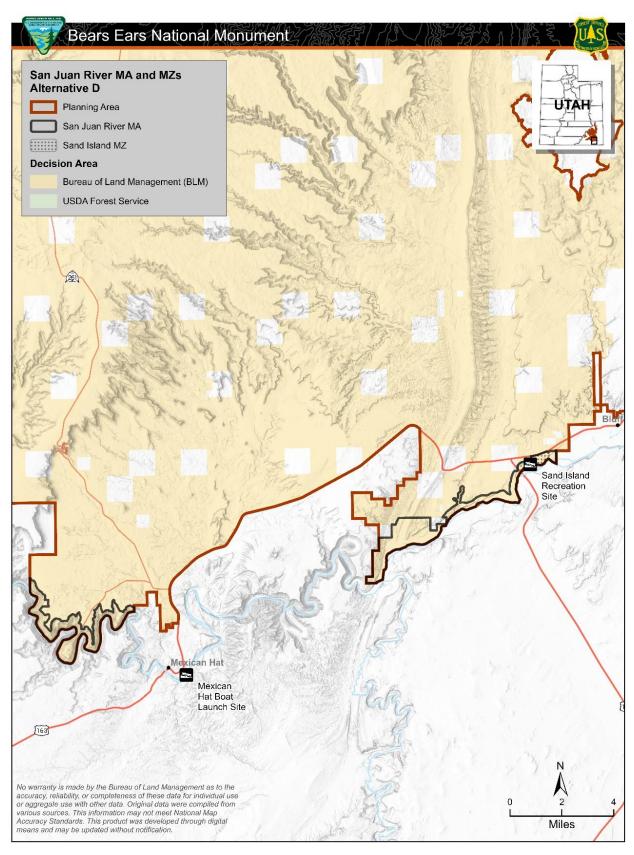


Map E-15. Indian Creek SRMA, RMZs, and composite* RSCs, Alternatives B and C, and MA, MZs and composite* RSCs, Alternative D.

5.8 San Juan River Special Recreation Management Area



Map E-16. San Juan River SRMA and RMZs, Alternatives B and C.



Map E-17. San Juan River MA and MZs, Alternative D.

5.8.1 San Juan River Special Recreation Management Area (Alternatives B and C)

5.8.2 San Juan River Management Area (Alternative D)

Acres: 5,355 Alternatives B and C) or 5,350 (Alternative D)

Rationale: The San Juan River provides a unique recreation opportunity in the American southwest to float through a remote and scenic river canyon system containing world-renowned geological formations and cultural and historic sites. River boating is the predominant recreation activity and mode of access. Approximately 11,000 visitors float the river annually. A permit and limited allocation system have been in place to float the river since 1974, and the area was identified as a BLM Special Area in 1981 to permit and allocate recreation use for the protection of natural and cultural resources and protection of the recreation experience itself. Increasing demand subsequently required the establishment of a permit lottery to distribute permits. Demand for this unique recreation experience and whitewater boating on other permitted rivers in the region has steadily grown since the initial establishment of the permit system in the 1980s. An intensive level of recreation management and operational controls are needed to continue managing this area for the protection of resources and the unique recreation experience that attracts so many visitors.

Additionally, the river corridor contains multiple jurisdictions, which adds to the complexity of recreation management of the area and requires careful interagency coordination and planning with the Navajo Nation and National Park Service. The RMA designation of the San Juan River should remain consistent for BLM-administered lands both within and outside the Monument to manage for a continuous and consistent San Juan River user experience.

San Juan River SMRA Outcome Objectives:

Manage the San Juan River SRMA to preserve, restore, and protect BENM objects while
providing opportunities for river boating, camping, and cultural site visitation, with
integrated management between the BLM, NPS, and Navajo Nation.

In visitor assessments, 80% of respondents who participated in targeted activities report the ability to realize the targeted visitor experiences and benefits of the SRMA.

Activities:	Experiences:	Benefits:
River boating/ paddling (i.e., rafting, canoeing, kayaking, paddleboarding, packrafting) Camping Cultural site visitation Heritage tourism	Enjoying the scenery Experiencing the natural surroundings Enjoying the area's wildlife Getting physical exercise Being with others who enjoy the same things I do Enjoying the solitude Being with friends	Personal: Increased appreciation of the area's cultural history Greater aesthetic appreciation Household: Greater awareness and appreciation of natural landscapes Community: Maintenance/preservation of distinctive public land recreation character Greater protection of fish, wildlife, and plant habitat from growth, development, and public use impacts Increased awareness and protection of natural landscapes

Recreation Setting Characteristics:

The San Juan River SRMA has a wide range of RSCs. The Sand Island and San Juan Hill RMZs within the SRMA each have distinct RSCs from the remainder of the SRMA. The RSCs in the

following section describe the SRMA outside of the RMZs. The distinct RSCs for each RMZ are detailed further in the document.

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/s mile D roads	>1/8 mile B roads	≤1/8 mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Existing and Desired Physical RSCs

Remoteness: There are very few roads within the SRMA that provide access to the river. Most roads are separated from the SRMA by deep canyon walls. There are no roads within the suitable-wild wild and scenic river (WSR) segment. No change.

Naturalness: The suitable-wild WSR segment features a predominantly undisturbed natural landscape. Segments upstream have some modifications, but they are rare and not visually obvious. *No change*.

Visitor facilities: Facilities are limited to rare trails constructed with native materials. There are no structures. No change.

Existing and Desired Social RSCs

Contacts (average): The number of contacts can vary based on how close together and the pace at which groups are travelling through the linear corridor, but generally a group can expect less than six contacts because of permit launch limits. No change.

Group size (average): The permitting system limits groups to a maximum group size of 25. The average group size is approximately nine people. *No change.*

Evidence of use: Areas of alteration are mostly limited to dispersed campsites and foot trails. Sounds of people are infrequent except in a few popular camping areas where camps are in close proximity. No change.

Existing and Desired Operational RSCs

Access: Access predominantly limited to river boating and foot access. No change.

Visitor services/information: Maps, brochures, and trip planning information are provided online and there is a dedicated phone line and email address for river inquiries. Rangers frequently conduct river monitoring patrols and are present on-site. No change.

Management controls: Use has been regulated and allocated through a permit system for approximately 40 years to maintain the recreation setting and protect resources. A lottery is used to distribute limited allocation for the high-demand recreation opportunity. Minimal on-site posts and signs are present within the river corridor. No change.

5.8.2.1 MANAGEMENT ACTIONS

Firearm Use: Recreational shooting would be prohibited.

Grazing: Grazing in the riparian area would only be allowed from October 1 to May 31 and must meet or exceed PFC and incorporate rest-rotation and/or deferment systems. This includes Perkins Brothers (outside Slickhorn Canyon), East League, and McCracken Wash Allotments.

VRM

VRM Class II to allow for minimal recreation infrastructure (e.g., signs, fences, trail improvements) for the preservation, restoration, and protection of BENM objects, except the Sand Island RMZ managed as VRM Class III and San Juan WSR Suitable Segment 5 managed as VRM Class I.

Camping

Campsites would be designated along the river corridor where necessary to reduce user conflicts; provide for public safety; and preserve, restore, and protect BENM objects. Camping in designated sites may either be encouraged or required to meet SRMA goals and objectives, as identified in the RAMP.

Designated campsites are available for permitted river users only.

5.8.2.2 BEST MANAGEMENT PRACTICES

The BLM would establish and maintain, throughout the life of this RMP/EIS, MOUs with the NPS and Navajo Nation for collaborative management of the river corridor between Montezuma Creek and Clay Hills. (Alternatives B and C)

Within 2 years of issuance of this RMP/EIS, the BLM would develop a San Juan River RAMP in collaboration with the BEC, NPS, and Navajo Nation for integrated and collaborative management of the entire river segment between Montezuma Creek and Clay Hills. (Alternatives B and C)

Vegetation:

Developed facilities, designated campsites, designated trails, and public use cultural sites would be prioritized for invasive vegetation treatment projects in the river corridor. (Alternative B only)

No priority for invasive vegetation treatment at developed recreation facilities and high use areas. (Alternative C only)

Permits

River trips on the San Juan River downstream of Sand Island require an ISRP. Permits would be issued to private users through a permit lottery and reservation system. (Alternative B only)

River trips on the San Juan River downstream of Montezuma Creek require an ISRP. Permits would be issued to private users through a permit lottery and reservation system. (Alternative C only)

Campfires

Campfires are allowed only in a fire pan, and campfire ash should be hauled away (except for BLM-constructed fire rings at Sand Island Campground). (Alternative B and C)

Woodland product use is limited to the on-site collection of driftwood for campfires.

Motorized Boating

No private or commercial motorized use is allowed (official and emergency use allowed). (Alternatives B and D)

Downstream motorized travel is allowed at low, wakeless speed. Upstream travel is prohibited, except for authorized use or emergency purposes. (Alternative C only)

Launch Limits

Launch limits and permit allocations would be maintained year-round to preserve, restore, and protect BENM objects, provide targeted recreation experiences and benefits, achieve the desired recreation setting characteristics of the SRMA, and maintain a level of use that is commensurate with campsite and boat ramp capacity. (Alternative B and C)

Commercial/Private Allocations

Commercial and private use allocations would be adaptive and determined based on the relative visitor demand for self-supported (private) and guided (commercial) recreation opportunities, and preceding actual use trends. Allocations would sustain the viability of both types of visitor opportunities. The specific commercial/private allocation in Alternative A would remain in effect until superseded by the San Juan River RAMP or other future implementation-level planning. (Alternative B and C)

Group Size

A maximum group size limit would be applied to all private and commercial river trips to preserve, restore, and protect BENM objects, achieve the desired recreation setting characteristics of the SRMA, and maintain a level of use that is commensurate with campsite and boat ramp capacity. The group size limit in Alternative A would remain in effect until superseded by the San Juan River RAMP or other future implementation-level planning. (Alternative B and C)

Human Waste

All solid human waste must be packed out and disposed of at appropriate facilities. (Alternative B and C)

SRPs

No competitive events. Vending permits would be limited to vehicle/visitor shuttle operations. A cap on commercial SRPs for river guiding would be established in a RAMP or other implementation-level planning. (Alternatives B and C)

Pets

No pets would be allowed for river boating activities downstream of Sand Island or at the Honaker Trail. (Alternatives B and C)

5.8.2.3 ALTERNATIVE D – RECREATION MANAGEMENT DECISIONS CARRIED FORWARD IN THE INTERIM UNTIL SUPERSEDED BY SUBSEQUENT IMPLEMENTATION PLANNING (RAMPS, ETC.)

Permit Requirements:

- River trips on the San Juan River require an ISRP.
- Permits are issued to commercial companies on a 5-year designated basis. They are issued to private users through an annual lottery and reservation system.

Group Size Limits:

- Private/Non-commercial: 25 people
- Commercial: 33 people (25 passengers plus 8 guides/crew)

Use Limits/Allocations:

- Launch limits allow approximately 40,000 user/days per year.
- Commercial use is allowed up to 40% of total use. Two commercial day trips per day (one launch of 25 passengers and one launch of 10 passengers) are allowed and are not included in the launch limits.

Camping Restrictions:

- The bench above Sand Island Campground (256 acres) is closed to camping.
- Upstream of Comb Wash, dispersed camping is allowed in previously disturbed areas within 150 feet of designated routes.

Fire Restrictions:

 Campfires allowed only with a fire pan. Woodland use within the floodplain is limited to collection of driftwood for campfires.

Human Waste Requirements:

 All campers (including backpackers) must have carry-out toilets and pack out all human waste.

Pet Restrictions:

Under San Juan River ISRP stipulations, pets are not allowed downstream of Sand Island.

5.8.3 Sand Island Recreation Management Zone (Alternatives B and C)

5.8.4 Sand Island Management Zone (Alternative D)

Acres: 278

Rationale: Sand Island is the primary hub for river access on the San Juan River and has a distinctly higher level of infrastructure development and visitation than the remainder of the river corridor within the San Juan River SRMA. Its proximity to Highway 191 and 163 make it easily accessible and a popular destination for a variety of recreation users in the area. Current infrastructure at Sand Island includes a developed campground, boat ramp, picnic area, ranger station and staff housing, parking area, and the Bluff River Trail. Visitors come to the area to launch boats on the San Juan River, camp, visit the Upper and Lower Sand Island Panels, picnic, and enjoy the non-motorized Bluff River Trail.

These conditions result in primarily front country recreation settings. In contrast, the remainder of the SRMA is not easily accessible, features minimal infrastructure, river boating is the primary recreation use, and recreation settings are predominantly back country and remote. The RMZ provides an opportunity to provide visitors with an easily accessible and more developed recreation experience within the San Juan River SRMA and BENM. It provides the BLM with a focus area to provide interpretation and communicate recreation use rules, regulations, and ethics to visitors in a relatively high-use area before they travel to lesser-developed areas of the Monument.

San Island RMZ Outcome Objectives:

- Manage the Sand Island RMZ for river boating, developed camping, and cultural site visitation recreation opportunities.
- Manage the Sand Island RMZ for a predominantly front country recreation setting and as a
 focus area for developing and enhancing visitor facilities and communicating recreation use
 rules, regulations, and ethics to San Juan River and BENM visitors.
- Manage the Bluff River Trail System in coordination with Bluff community partners and private landowners to provide non-motorized, land-based opportunities for visitors and community members to access the river.
- In visitor assessments, 80% of respondents who participated in targeted activities report the ability to realize the targeted visitor experiences and benefits of the RMZ.

Activities:	Experiences:	Benefits:
River boating/ paddling (i.e., rafting, canoeing, kayaking, paddleboarding, packrafting) Developed camping Cultural site visitation Non-motorized river access	Visitor: Enjoying the scenery Experiencing the natural surroundings Learning about the connection of the Tribes of the BEC to BENM Learning to visit cultural sites responsibly	Personal: Increased appreciation of the area's cultural history Greater aesthetic appreciation Household: Greater awareness and appreciation of natural landscapes Community: Maintenance/preservation of distinctive public land recreation character Greater protection of fish, wildlife, and plant habitat from growth, development, and public use impacts Increased awareness and protection of natural landscapes

Recreation Setting Characteristics:

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/8 mile B roads	≤1/8 mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Existing and Desired Physical RSCs

Remoteness: The RMZ is within 0.125 mile of the U.S. Highway (US)163 and 191 corridors. A paved B road provides access to Sand Island and a maintained County B road provides access to the Swinging Bridge area. No change.

Naturalness: The character of the natural landscape is partially modified by existing visitor facilities, utility lines, fences, corrals, and highway corridor infrastructure. *No change.*

Visitor facilities: The RMZ features rustic facilities, including a developed campground, boat ramp, picnic area, ranger station and staff housing, parking area, and the Bluff River Trail. No change.

Existing and Desired Social RSCs

Contacts (average): Sand Island is easily accessible and a popular destination for a variety of recreation users due to its campground, river access, day use areas, and trail access. Contacts with other groups are common most times of the year. No change.

Group size (average): Although most groups who visit the area are small (two to four people), occasional larger groups sizes, mostly associated with river use (maximum group size is 25) and the group campsites, increase the average group size to approximately seven to 12 people per group. No change.

Evidence of use: Evidence of use in the RMZ includes the developed campground and other facilities described above. Sounds of people can be regularly heard most times of the year. No change.

Existing and Desired Operational RSCs

Access: Sand Island is primarily accessed by passenger cars from US-163 via a less-than-0.5-mile paved County B Road. A maintained concrete boat ramp provides river access. The Swinging Bridge area is accessed primarily by passenger cars via a maintained County B road, and there is an unmaintained boat launching area for river access. *No change.*

Visitor services/information: The area features a ranger station, and staff and volunteers are regularly present on-site to make contact with river and campground visitors. Informational and interpretive kiosks are present on the boat ramp and at the Lower Sand Island Panel. No change.

Management controls: Rules, regulations, and ethics are clearly posted on-site, particularly for campground and day use facilities. Basic user regulations are provided for river use (which is more heavily managed and regulated through permits) at the boat ramp. No change.

5.8.4.1 MANAGEMENT ACTIONS

Within the Sand Island RMZ, camping is only allowed in the developed campground.

Manage as VRM Class III.

5.8.5 San Juan Hill Recreation Management Zone (Alternatives B and C)

Acres: 1,717

Rationale: San Juan Hill RMZ is a distinct area within the San Juan River SRMA due to the concentration of Public Use cultural sites (e.g., River House, Lower Butler Wash Panel) and historical, heritage tourism sites (e.g., San Juan Hill, Barton Trading Post), which attract both river users and land-based, motorized recreation users. The RMZ is the only area within the SRMA where river recreation use and land-based, motorized recreation use and access significantly converge. The concentration of popular sites and the presence of motorized access result in much higher visitation within the RMZ compared to other areas within the SRMA. Specific objectives and management are needed for the protection of the cultural and heritage tourism sites within the RMZ and to reduce the potential for recreation use conflicts.

San Juan Hill RMZ Outcome Objectives:

- Manage the San Juan Hill RMZ for both land-based and river-based cultural site visitation and heritage tourism activities while minimizing conflict between multiple recreation uses and protecting Monument objects.
- Manage the San Juan Hill RMZ to maintain and enhance a predominantly middle country recreation setting where minimal visitor facilities may be developed only when necessary for the protection of Monument objects. Recreation use rules, regulations, and ethics would be clearly posted on-site and at major access points.
- In visitor assessments, 80% of respondents who participated in targeted activities report the ability to realize the targeted visitor experiences and benefits of the RMZ.

Activities:	Experiences:	Benefits:
River boating/ paddling (i.e., rafting, canoeing, kayaking, paddleboarding, packrafting) Camping Cultural site visitation Heritage tourism	Enjoying the scenery Experiencing the natural surroundings Enjoying the area's wildlife Getting physical exercise Being with others who enjoy the same things I do Enjoying the solitude Being with friends	Personal: Increased appreciation of the area's cultural history Greater aesthetic appreciation Household: Greater awareness and appreciation of natural landscapes Community: Maintenance/preservation of distinctive public land recreation character Greater protection of fish, wildlife, and plant habitat from growth, development, and public use impacts Increased awareness and protection of natural landscapes

Recreation Setting Characteristics:

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/8 mile B roads	≤1⁄8 mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Existing and Desired Physical RSCs

Remoteness: Most of the RMZ is more than 150 feet from County D roads but the most commonly visited sites and trail parking areas within the RMZ (i.e., River House, San Juan Hill, Barton Trading Post, Lower Butler Wash Panel) are located within 150 feet of County D roads. No change.

Naturalness: The area contains fences, remnants of historical structures, kiosks, signs, and natural surface parking areas. *No change.*

Visitor facilities: Short trails in the area are user-created social trails or are made of mostly native materials. There are several small informational kiosks at Public Use Sites. <u>Desired:</u> Under Alternative B, informational and interpretive kiosks would be enhanced, and recreation use rules, regulations, and ethics would be clearly posted on-site and at major access points. No change.

Existing and Desired Social RSCs

Contacts (average): Although sites within the RMZ have more visitation than most of the river corridor, contacts with other groups are limited because users tend to spend a short duration of time at Lower Butler Wash, River House, and other sites before leaving the area or returning to camp. No change.

Group size (average): Although the average group size is seven to 12 (San Juan River average group size is nine) larger groups frequently visit the area, including large river groups (maximum group size is 25) and heritage tourism and OHV SRP groups. No change.

Evidence of use: Small areas of alteration include parking areas at Public Use Sites, social trails, and dispersed campsites along the river. The sounds of people can occasionally be heard in the area. No change.

Existing and Desired Operational RSCs

Access: The area is limited to access by boat from the San Juan River or 4WD vehicles from a single County D road. *No change.*

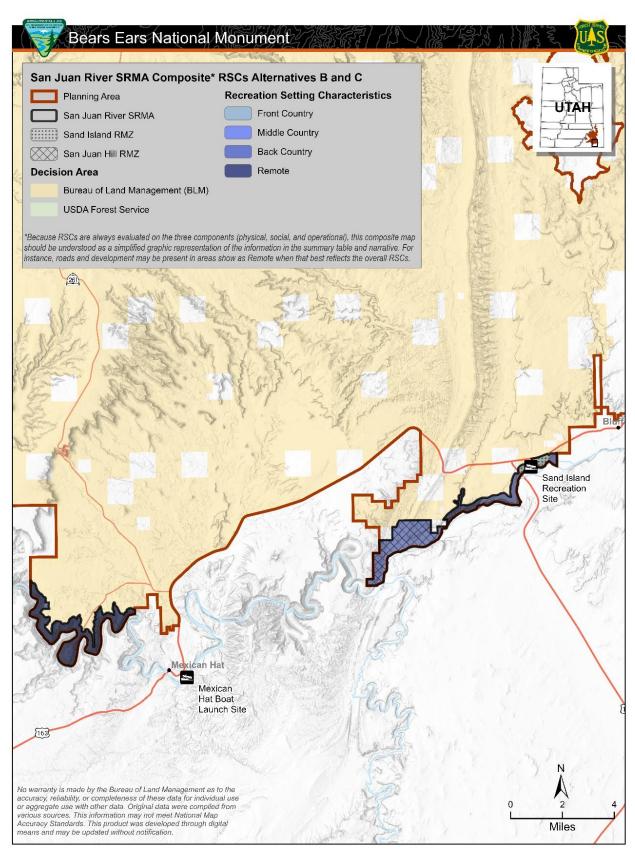
Visitor services/information: There are small informational kiosks at River House, Lower Butler Wash Panel and San Juan Hill. A brochure is available for River House. Rangers are infrequently on-site. <u>Desired:</u> Under Alternatives B and C, more informational and interpretive information would be provided. Under Alternative C, informational infrastructure would be limited to trailheads and other already-developed areas.

Management controls: There are some basic use regulations and ethics signs posted. Land-based access is not permitted or limited. River access is limited and regulated by river permit system. Desired: Under Alternative B, rules regulations, and ethics signs would be clearly posted in the area and permits would continue not to be required for land-based use. Under Alternative C, permits would be required for land-based use and some regulatory and ethics signs would be posted. Under both B and C, camping would be designated and limited to river users.

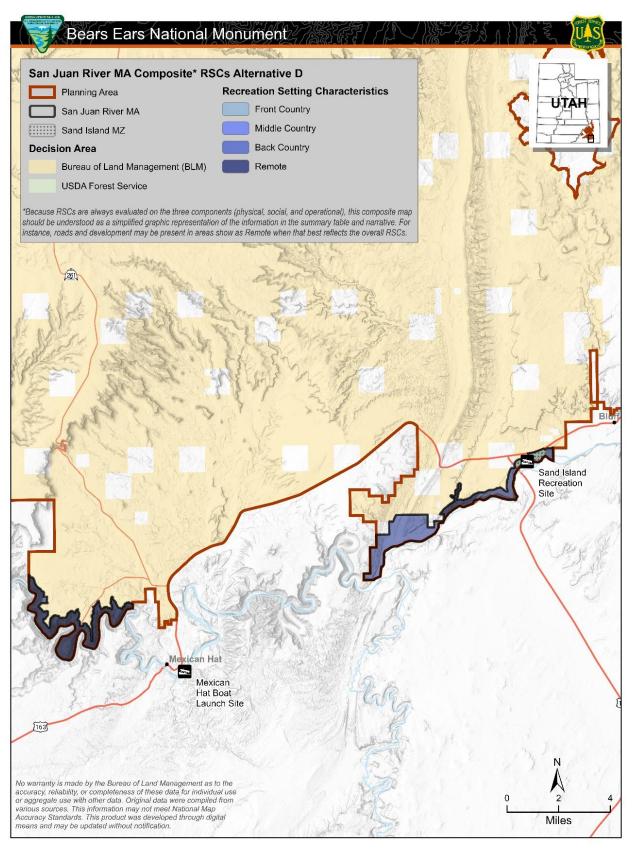
5.8.5.1 MANAGEMENT ACTIONS

Camping: Area is day use only except for camping in designated campsites under a river permit.

A permit would be required for OHV use in the RMZ, and permits may be allocated if necessary to preserve, restore, and protect BENM objects. (Alternative C)

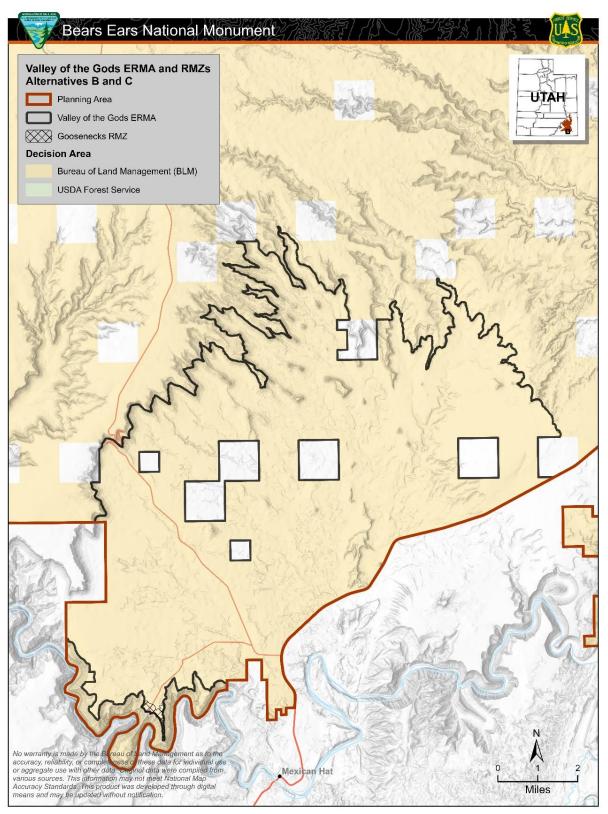


Map E-18. San Juan River SRMA, RMZs, and composite* RSCs, Alternatives B and C.

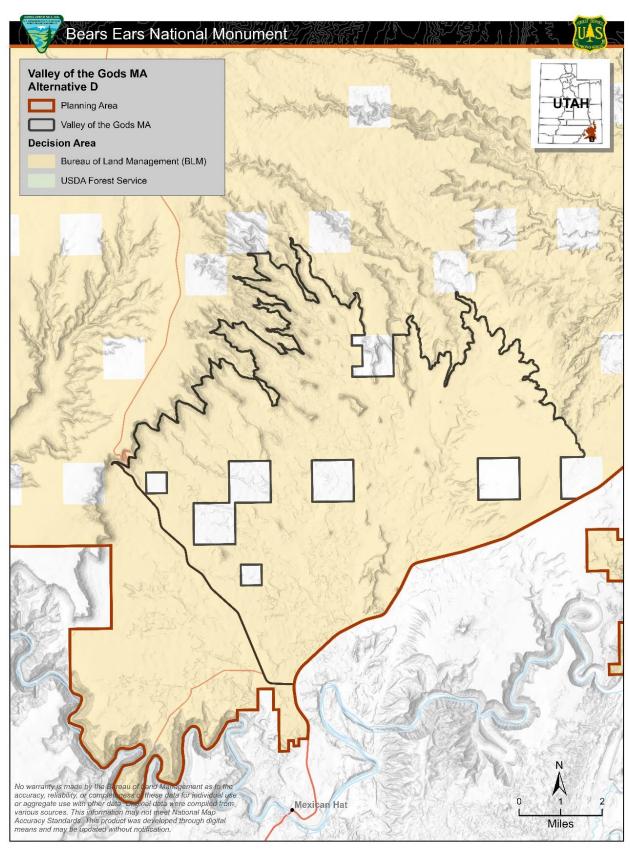


Map E-19. San Juan River MA, MZ, and composite* RSCs, Alternative D.

5.9 Valley of the Gods Extensive Recreation Management Area



Map E-20. Valley of the Gods ERMA and RMZ, Alternatives B and C.



Map E-21. Valley of the Gods MA, Alternative D.

5.9.1 Valley of the Gods Extensive Recreation Management Area (Alternatives B and C)

5.9.2 Valley of the Gods Management Area (Alternative D)

Acres: 45,763 (Alternatives B and C); 34,389 (Alternative D)

Rationale: Due to the area's high scenic quality, naturalness, and easy accessibility, Valley of the Gods is a popular recreation destination for scenic driving and dispersed camping. The area is easily accessible via an unpaved and improved passenger car road adjacent to US-163 and SR-261. Approximately 60,000 people visit Valley of the Gods annually. User-created dispersed camping sites are prolific along the primary improved road. Due to the high-level of visitation, recreation uses need specific management for the protection of Monument objects in Valley of the Gods.

Alternatives B and C: The ERMA boundary extends west to the San Juan River SRMA boundary to encompass the area below Cedar Mesa and surrounding Goosenecks State Park, a highly visited and easily accessible scenic overlook, where dispersed camping on adjacent BLM-administered lands requires specific management, similar to Valley of the Gods, for the protection of Monument objects.

Valley of the Gods ERMA Objectives:

Alternatives B and D:

Manage the Valley of the Gods ERMA to preserve, restore, and protect BENM objects while
providing opportunities for scenic driving and dispersed camping with a focus on developing
and enhancing visitor facilities in limited areas, and maintenance of predominantly middle
country recreation setting.

Alternative C:

Manage the Valley of the Gods ERMA/MA to preserve, restore, and protect BENM objects
while providing opportunities for scenic driving and dispersed camping, with a focus on offsite education (e.g., internet education and interactive interpretation, off-site interpretation)
methods for the preservation, restoration, and protection of BENM objects and
maintenance of a predominantly middle country recreation setting.

Activities:
Dispersed camping
Scenic driving
Sightseeing

Recreation Setting Characteristics:

The Goosenecks RMZ (Alternatives B and C) within the Valley of the Gods ERMA has distinct RSCs from the remainder of the ERMA. The RSCs in the following section do not include the Goosenecks RMZ. The specific RSCs for the Goosenecks RMZ are detailed further in the document.

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/8 mile B roads	≤1/8 mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities

SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
OPERATIONAL Access	Remote Non-mechanized	Back Country Non-motorized	Middle Country 4WD vehicles	Front Country Passenger cars
			·	,

Existing and Desired Physical RSCs

Remoteness: The vast majority of recreational users experience Valley of the Gods within 0.125 mile of the Valley of the Gods Road (B242), which is a large, graveled County B road; however, the area also includes portions of the remote Road Canyon WSA and the seldom accessed and mostly un-roaded valley in which the monuments sit. No change.

Naturalness: Areas of modification are concentrated along the Valley of the Gods Road and primarily dispersed vehicle campsites. Under Alternatives B and C, campsites would be designated and delineated to limit and prevent further modification but would still be concentrated along the Valley of the Gods Road in order to leave large natural areas.

Visitor facilities: There are few visitor facilities, aside from the entrance kiosks at either end of the Valley of the Gods Road. Under Alternative B, the kiosks would be improved. No change.

Existing and Desired Social RSCs

Contacts (average): Contacts are common on the paved highway and the gravel road but are uncommon outside of these areas. *No change*.

Group size (average): Large groups are common due to the improved road. No change.

Evidence of use: Evidence of use within the RMA is limited to vehicle-supported campsites, which may be fairly large. No change.

Existing and Desired Operational RSCs

Access: Although the majority of the area is not roaded, the two large roads are accessible via passenger car. No change.

Visitor services/information: Visitor services and information are minimal and are currently limited to two kiosks at either end of the Valley of the Gods Road and a small trifold brochure available in print or online. <u>Desired:</u> Under Alternatives B and C, the kiosks would be improved.

Management controls: Very few management controls are in place, with some regulations posted at the two kiosks. <u>Desired:</u> Under Alternatives B and C, camping would be limited to designated sites. Under Alternative C, permits may be required for camping in designated sites.

5.9.2.1 MANAGEMENT ACTIONS

Managed as VRM Class I with the exception of highway access portals (57 acres), which would be managed as VRM Class II and 61 acres of the Goosenecks RMZ, which would be managed as VRM Class III.

Dispersed camping areas would be designated, and once designated, camping would be limited to those areas. Campfires only allowed in agency-provided fire rings in designated campsites. (Alternative B only)

Dispersed camping areas would be designated, and once designated, camping would be limited to those areas and permits would be required for dispersed camping. (Alternative C only)

ROW exclusion area (within ACEC).

Unavailable for private and/or commercial use of wood products.

Solid human waste must be carried out and disposed of at appropriate facilities.

Launching and landing of balloons requires an SRP.

Recreational activities may be limited as necessary to maintain scenic and cultural landscape and meet VRM requirements.

UAS use taking off and landing within the ERMA by permit only.

5.9.2.2 BEST MANAGEMENT PRACTICES

Within the Valley of the Gods ERMA, recreation use rules, regulations, and ethics are clearly posted on-site at major access points and on-site facilities are the primary means for managing visitation. (Alternative B)

Within the Valley of the Gods ERMA, permits and other off-site methods are used as the primary means for communicating and enforcing recreation use rules, regulations, and ethics to manage visitation. (Alternative C)

Recreational activities may be limited as necessary to maintain scenic and cultural landscape and meet VRM requirements.

Solid human waste must be carried out and disposed of at appropriate facilities. (Alternatives B and C)

Launching and landing of balloons requires an SRP. (Alternatives B and C)

UAS use taking off and landing within the ERMA by permit only.

5.9.3 Goosenecks Recreation Management Zone (Alternatives B and C only)

Acres: 96

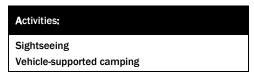
Rationale: Goosenecks State Park is a highly visited and easily accessible scenic overlook that is surrounded by BLM-administered lands. The 10-acre park, managed by the State of Utah, currently

offers limited developed camping opportunities in association with the scenic overlook, but much of the dispersed car camping in the immediate area of the park occurs on BLM-administered lands. Dispersed camping along the San Juan River canyon rim in the Goosenecks area can impact the viewshed of the San Juan River suitable-wild WSR segment and the viewshed from the Goosenecks overlook itself. Specific recreation objectives and management are needed to protect the San Juan River and Goosenecks overlook viewshed and manage camping in this highly visited area, cooperatively with the State of Utah.

Because of the high level of visitation in the Goosenecks area and its designation as a State Park, this area is distinct in having a more front country physical and social recreation setting than the rest of the Valley of the Gods ERMA. Within these existing settings, the RMZ provides an opportunity for BLM to offer an easily accessible and more developed recreation experience within the Valley of the Gods ERMA and BENM. It also provides the BLM with a focus area to provide interpretation and communicate recreation use rules, regulations, and ethics to visitors in a relatively high-use area before they travel to lesser-developed areas of the Monument.

Goosenecks RMZ Objectives:

- Manage the Goosenecks RMZ in coordination with Utah State Parks to manage dispersed and developed camping recreation activities in the immediate area of Goosenecks State Park and protect the San Juan River viewshed.
- Manage the Goosenecks RMZ for front country recreation settings and allow for recreation development that is consistent with the protection of Monument objects.



Recreation Setting Characteristics:

The RMZ consists of BLM-administered lands immediately adjacent to Goosenecks State Park that are interconnected to and directly affected by recreation infrastructure and visitation within the state park. For this reason, recreation infrastructure and visitation within the park is considered when describing the physical and social RSCs for the Goosenecks RMZ.

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/8 mile B roads	≤1/8 mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
SOCIAL Contacts	Remote ≤6 contacts per day	Back Country 7-14 per day	Middle Country 15-29 per day	Front Country ≥30 per day
		•	·	

OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Existing and Desired Physical RSCs

Remoteness: The RMZ is accessed by SR-316 (leading to Goosenecks State Park) and is located within 0.5 mile of the same road. No change.

Naturalness: The character of the natural landscape is partially modified by recreation infrastructure within the park, including toilet facilities, an entrance station, shade structures, picnic table, delineated parking, and railings. *No change*.

Visitor facilities: The park includes the rustic facilities described above. No change.

Existing and Desired Social RSCs

Contacts (average): Contacts are common at the overlook and dispersed campsites and social trails along the rim. No change.

Group size (average): Most groups are smaller (two to four people), but large groups and tour groups are fairly common. *No change.*

Evidence of use: Small areas of alteration are prevalent, and the sounds of people can be heard regularly. No change.

Existing and Desired Operational RSCs

Access: The state park and surrounding RMZ are predominantly accessed by passenger cars on SR-361. No change.

Visitor services/information: The state park is regularly staffed at the entrance station; however, BLM staff are infrequently present on-site and little BLM-related information is provided. <u>Desired:</u> Under Alternatives B and C, BLM staff would be frequently present on-site and more informational and interpretive materials would be provided.

Management controls: The state park requires an entrance permit; however, there are few BLM-specific regulatory or ethics signs, and dispersed camping on BLM-administered lands is not restricted. <u>Desired:</u> Under Alternatives B and C, dispersed camping would be designated or developed and restricted to developed sites. Rules, regulations, and ethics would be clearly posted. Under Alternative C, signage would be limited to trailheads and other already-developed areas.

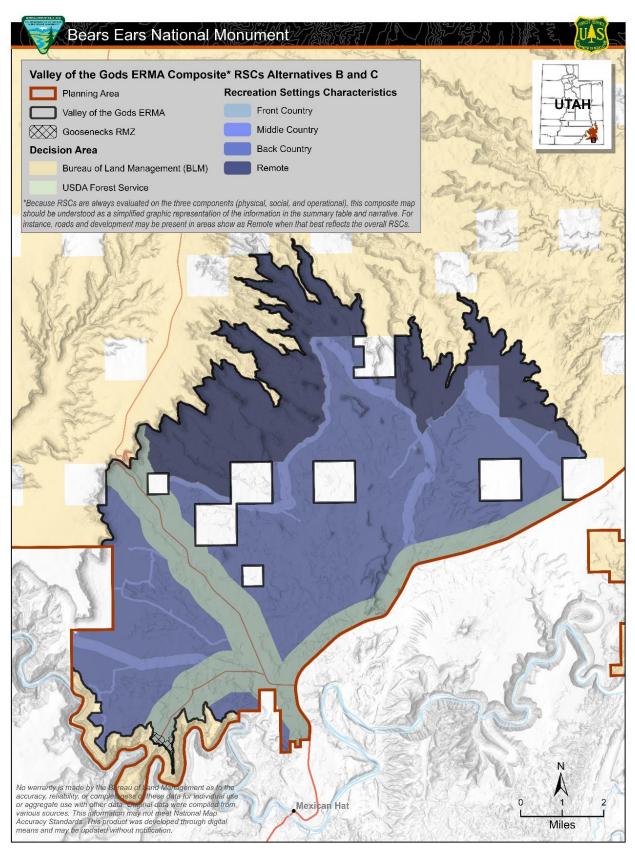
5.9.3.1 MANAGEMENT ACTIONS

61 acres managed as VRM Class III.

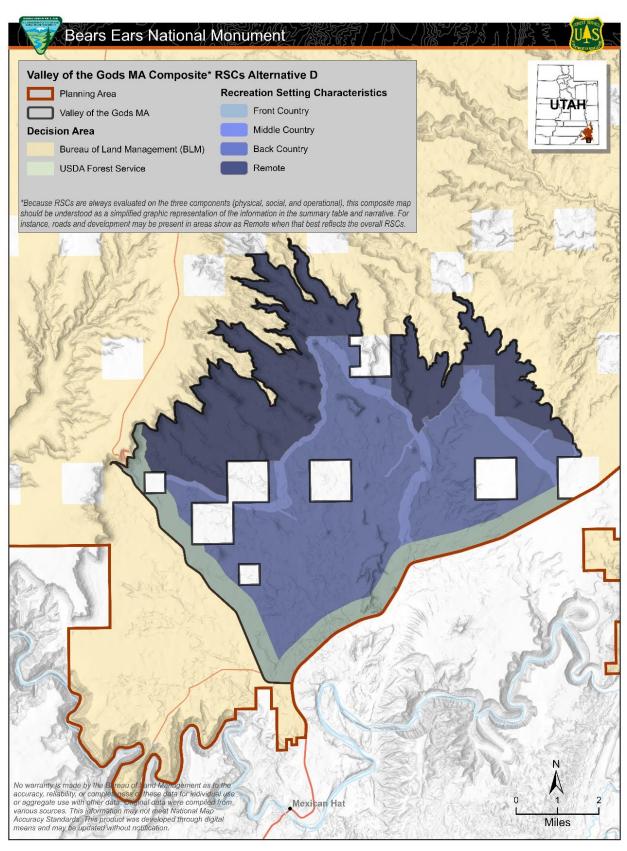
35 acres along canyon rims managed as VRM Class II.

Dispersed camping closed in VRM Class II areas.

Develop campground or designate dispersed campsites in VRM Class III area.

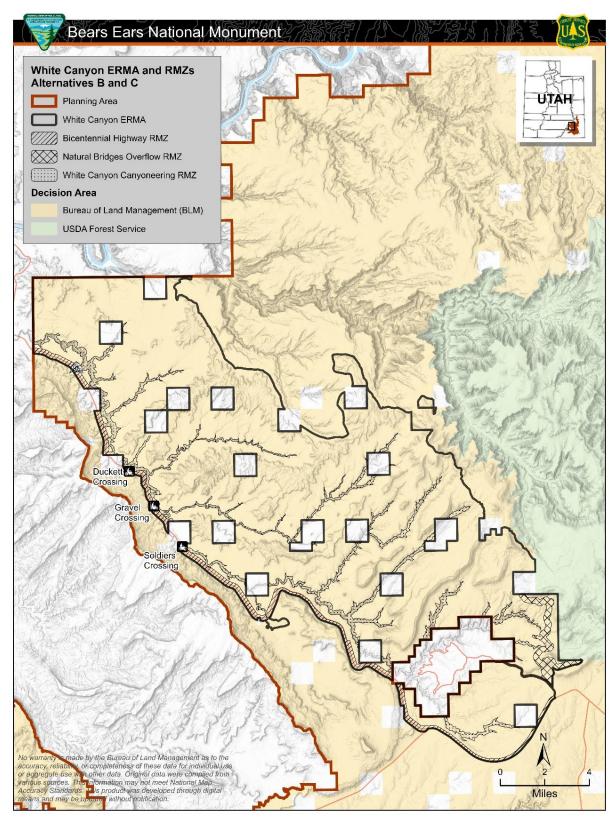


Map E-22. Valley of the Gods ERMA, RMZ, and composite* RSCs, Alternatives B and C.

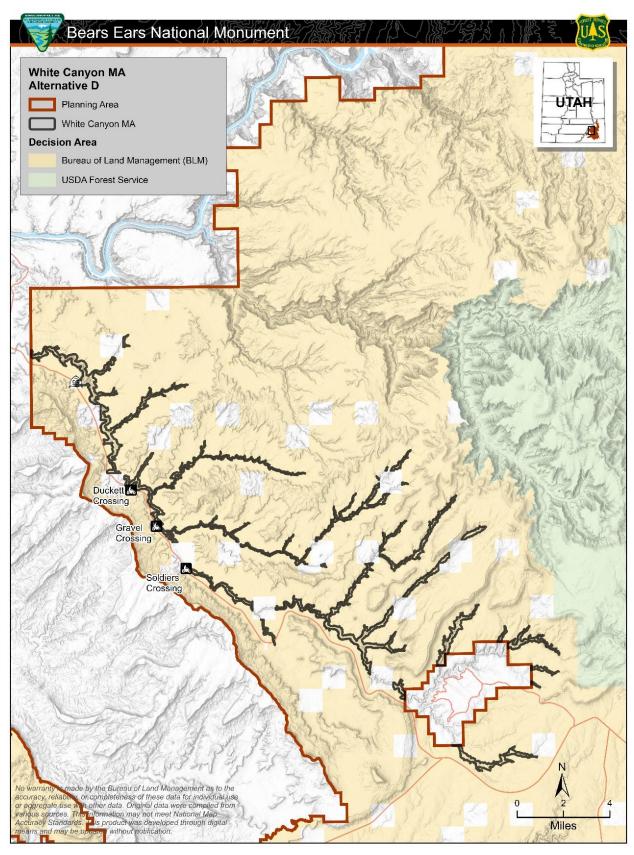


Map E-23. Valley of the Gods MA and composite* RSCs, Alternative D.

5.10 White Canyon Extensive Recreation Management Area



Map E-24. White Canyon ERMA and RMZs, Alternatives B and C.



Map E-25. White Canyon MA, Alternative D.

5.10.1 White Canyon Extensive Recreation Management Area (Alternatives B and C)

Acres: 124,827

Rationale: Within White Canyon and the tributary canyons of the White Canyon basin, non-technical and technical canyoneering and backpacking are popular recreation activities. Outside of the canyons, scenic driving on designated roads and OHV trails are common activities, along with dispersed camping. Dispersed camping is particularly common and dense in the area surrounding Natural Bridges National Monument. Specific management for recreation activities occurring within the canyon system and the areas outside of the canyons is needed for the protection of Monument objects.

White Canyon ERMA Objectives:

 Manage the White Canyon ERMA to maintain canyoneering, backpacking, scenic driving (OHV), and dispersed camping recreation activities, with a focus on developing and enhancing visitor facilities in limited areas for the protection of Monument objects and maintenance of a predominantly back country physical and social recreation setting.

Activities:
Canyoneering
Backpacking
Scenic driving
Dispersed camping

Recreation Setting Characteristics:

The White Canyon ERMA has a wide range of RSCs. The White Canyon Canyoneering, Bicentennial Highway, and Natural Bridges Overflow RMZs within the ERMA each have distinct RSCs from the remainder of the ERMA. The RSCs in the following section describe the ERMA outside of the RMZs. The distinct RSCs for each RMZ are detailed further in the document.

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/8 mile B roads	≤1/8 mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Existing and Desired Physical RSCs

Remoteness: The White Canyon ERMA includes a network of County B and D roads, including the popular Woodenshoe Road (San Juan County Road 256); however, the ERMA encompasses a large area, most of which is more than ½ mile from any roads or trails. No change.

Naturalness: There are few impacts to the ERMA's naturalness. Modifications from existing resource uses are rare and are generally not visually obvious. *No change.*

Visitor facilities: There are no visitor facilities within the ERMA. No change.

Existing and Desired Social RSCs

Contacts (average): Activities in the ERMA (outside of the RMZs) are mostly focused on and along the County B and D roads. In these areas, visitors can expect seven to 15 contacts per day. No change.

Group size (average): Most groups are small (two to four people), but large SRP and multi-family groups camp or drive in the area. No change.

Evidence of use: Evidence of use in the ERMA includes small, dispersed campsites along the roads and the sounds of other people is infrequent. No change.

Existing and Desired Operational RSCs

Access: The ERMA is primarily accessed by 4WD vehicles.

Visitor services/information: There are no visitor services or information in the ERMA. <u>Desired:</u> Under Alternatives B and C, basic maps and additional information would be provided. Visitor information at the trailheads that serve the ERMA (within the Bicentennial Highway RMZ) would be improved.

Management controls: There are minimal on-site posts and signs, and permits are not required. <u>Desired:</u> Under Alternative C, a permit system would be developed for the ERMA. Under Alternatives B and C, posted rules and regulations at trailheads that serve the ERMA (within the Bicentennial Highway RMZ) would be improved.

5.10.1.1 BEST MANAGEMENT PRACTICES

Within the White Canyon ERMA, recreation use rules, regulations, and ethics are clearly posted onsite at major White Canyon access points and trailheads, and on-site facilities are the primary means for managing visitation. (Alternative B only)

Within the White Canyon ERMA, permits and other off-site methods are used as the primary means for communicating and enforcing recreation use rules, regulations, and ethics to manage visitation. (Alternative C only)

A permit system would be established for the entire ERMA. (Alternative C)

In collaboration with the BEC, develop a RAMP for the ERMA within 5 years of issuance of this RMP/EIS. (Alternatives B and C)

5.10.2 White Canyon Extensive Recreation Management Area (Alternative D)

Acres: 7,222

Rationale: Within White Canyon and the tributary canyons of the White Canyon basin, non-technical and technical canyoneering and backpacking are popular recreation activities. Specific management for recreation activities occurring within the canyon is needed for the protection of Monument objects.

White Canyon ERMA Objectives:

Manage the White Canyon ERMA to preserve, restore, and protect BENM objects while
providing opportunities for canyoneering, backpacking, scenic driving (OHV), and dispersed
camping. Developing and enhancing visitor facilities in limited areas to support visitor
ethics and stewardship while and maintaining of a predominantly backcountry recreation
setting outside of RMZs.

Activities:	
Canyoneering Backpacking	

Recreation Setting Characteristics:

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/8 mile B roads	≤⅓ mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Existing and Desired Physical RSCs

Remoteness: Aside from trailheads and access points, the White Canyon ERMA is located entirely under the rims of canyons (e.g., White Canyon, Gravel Canyon, Long Canyon). Although some of these canyons are within proximity of roads, the sheer canyon walls screen and enhance the quality of remoteness. No change.

Naturalness: There are few impacts to the ERMA's naturalness other than trailheads and access points on the perimeter. Impacts to naturalness include several small backpacking campsites. No change.

Visitor facilities: There are no visitor facilities within the ERMA. No change.

Existing and Desired Social RSCs

Contacts (average): Due to the isolation provided by the canyons, contacts are limited.

Group size (average): Current group size is often up to 18 people due to use by extensive-education SRPs such as the National Outdoor Leadership School and Colorado Outward Bound. <u>Desired:</u> Under Alternative D, a permit system may further limit group size.

Evidence of use: Evidence of use in the ERMA includes several small backpacking campsites. No change.

Existing and Desired Operational RSCs

Access: There are no roads within the ERMA. Access is by foot and technical canyoneering only. *No change.*

Visitor services/information: There are no visitor services or information in the ERMA. <u>Desired:</u> Under Alternative D, basic maps and visitor information would be provided online or off-site.

Management controls: There are minimal on-site posts and signs, and permits are not required.

<u>Desired:</u> Under Alternative D, an allocated permit system would be developed for canyoneering in the ERMA.

Campsites would be designated where necessary to reduce user conflicts, to provide for public safety, and to preserve, restore, and protect BENM objects. Camping in designated sites may either be encouraged or required to meet area goals objectives, as identified in the RAMP.

5.10.2.1 ALTERNATIVE D – RECREATION MANAGEMENT DECISIONS CARRIED FORWARD IN THE INTERIM UNTIL SUPERSEDED BY SUBSEQUENT IMPLEMENTATION PLANNING (RAMPS, ETC.)

Camping Restrictions:

If and where necessary, camping would be restricted to designated sites only.

Fire Restrictions:

• Campfires are not allowed in the canyons. Cook stoves only in canyons.

5.10.3 Bicentennial Highway Recreation Management Zone (Alternatives B and C only)

Acres: 4,178

Rationale: The physical recreation setting characteristics of the White Canyon ERMA are generally remote and back country with the exception of the SR-95 Bicentennial Highway corridor. An RMZ along this major highway corridor presents an opportunity for the BLM to manage visitors within a more front country recreation setting and develop trailheads or visitor access portals to communicate recreation use rules, regulations, and ethics to White Canyon and Dark Canyon ERMA recreation users before they recreate in the predominantly less-developed remote and back country areas of the ERMAs.

Bicentennial Highway RMZ Objective:

Manage the Bicentennial Highway RMZ as a front country physical recreation setting and as
the focus area for developing and enhancing visitor facilities at trailheads and major visitor
access areas to communicate recreation use rules, regulations, and ethics to visitors.



Recreation Setting Characteristics:

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/8 mile B roads	≤1/8 mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Existing and Desired Physical RSCs

Remoteness: The RMZ is within 1/8 mile of SR-95. No change.

Naturalness: The RMZ has several visible modifications, including four recreational trailheads, old mining operations, modern gravel pits, range facilities, and a designated air strip. No change.

Visitor facilities: There are five OHV/canyoneering trailheads located within this RMZ: Soldier's Crossing, Duckett Crossing, Paiute Pass, Gravel Crossing, and the parking area for the Black Hole. These typically have a natural surface and a sign or two. The trailheads would be developed and improved to provide better visitor orientation and etiquette information. No change.

Existing and Desired Social RSCs

Contacts (average): Contacts within the RMZ are common due to vehicles on SR-95. No change.

Group size (average): Group sizes can vary, because there is no group size limit. No change.

Evidence of use: Evidence of use in the RMZ consists of areas of alteration at the five OHV/canyoneering trailheads, including small, dispersed campsites at these locations and other small, dispersed campsites along the highway corridor. No change.

Existing and Desired Operational RSCs

Access: Access to the area is by passenger car. No change.

Visitor services/information: Very little visitor information is provided. The BLM has some signs at the trailheads, but they have not been updated recently. <u>Desired:</u> Under Alternatives B and C, visitor information and interpretive materials would be developed for the trailhead signs and online, and signs at trailheads would be maintained and updated. Trailheads would provide information to help visitors recreate responsibly in more remote back country areas.

Management controls: There are few management controls beyond those imposed on commercial SRPs. <u>Desired</u>: Under Alternatives B and C, regulatory and ethics signs would be clearly posted at key access points.

5.10.3.1 MANAGEMENT ACTIONS

Manage as VRM Class III.

Maintain and enhance OHV and canyoneering trailheads at Soldier's Crossing, Duckett Crossing, Gravel Crossing, and Black Hole.

5.10.4 White Canyon Canyoneering Recreation Management Zone (Alternatives B and C only)

Acres: 7,222

Rationale: Within White Canyon and the tributary canyons of the White Canyon basin, non-technical and technical canyoneering and backpacking are the predominant recreation activities. Specific management of these activities within the canyons is needed for the protection of Monument objects and the maintenance of predominantly remote physical and social recreation settings.

White Canyon Canyoneering RMZ Objectives:

 Manage the White Canyon Canyoneering RMZ to preserve, restore, and protect BENM objects while providing opportunities for canyoneering and backpacking and preventing impairment to the suitability of the Cheese Box Canyon WSA.



Recreation Setting Characteristics:

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/8 mile B roads	≤⅓ mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13–25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Existing and Desired Physical RSCs

Remoteness: Aside from trailheads and access points, the White Canyon Canyoneering RMZ is located entirely under the rims of the canyons (e.g., White Canyon, Gravel Canyon, Long Canyon). Although some of these canyons are within proximity of roads, the sheer canyon walls screen and enhance the quality of remoteness. No change.

Naturalness: There are few impacts to the RMZ's naturalness other than trailheads and access points on the perimeter. Impacts to naturalness include several small backpacking campsites. No change.

Visitor facilities: There are no visitor facilities within the RMZ, but it is served by four OHV/canyoneering trailheads in the Bicentennial Highway RMZ. No change.

Existing and Desired Social RSCs

Contacts (average): Due to the isolation provided by the canyons, contacts are limited. No change.

Group size (average): Current group size is often up to 18 people due to use by extensive-education SRPs such as the National Outdoor Leadership School and Colorado Outward Bound. Desired: Under Alternative C, a permit system may further limit group size.

Evidence of use: Evidence of use in the RMZ includes several small backpacking campsites. No change.

Existing and Desired Operational RSCs

Access: There are no roads within the RMZ. Access is by foot and technical canyoneering only. No change.

Visitor services/information: There are no visitor services or information in the RMZ. <u>Desired:</u> Under Alternatives B and C, basic maps and additional information would be provided. Visitor information at the trailheads that serve the RMZ (within the Bicentennial Highway RMZ) would be improved.

Management controls: There are minimal on-site posts and signs, and permits are not required. <u>Desired:</u> Under Alternative C, an allocated permit system would be developed for canyoneering in the RMZ. Under Alternatives B and C, posted rules and regulations at the trailheads that serve the RMZ (within the Bicentennial Highway RMZ) would be improved.

5.10.4.1 BEST MANAGEMENT PRACTICES

Manage the RMZ to maintain predominantly remote physical and social recreation settings.

Limits on the amount of commercial use would be determined through the RAMP.

Solid human waste must be packed out and disposed of at appropriate facilities.

Campfires are not allowed. Only cook stoves are allowed.

An allocated permit system would be developed for canyoneering in the White Canyon Canyoneering RMZ. (Alternative C)

5.10.5 Natural Bridges Overflow Recreation Management Zone (Alternatives B and C only)

Acres: 1,458

Rationale: Dispersed camping activities in user-created campsites are prolific along the Deer Flat Road (County B Road 254) and Bears Ears Road (County B Road 228) immediately east of Natural Bridges National Monument. Specific management is needed to regulate dispersed camping activities along the roads in this area, prevent the spread of additional user-created campsites, and protect Monument objects.

Natural Bridges Overflow RMZ Objective:

 Manage the RMZ to limit and control dispersed camping activities and the proliferation and expansion of user-created campsites in the area.



Recreation Setting Characteristics:

PHYSICAL	Remote	Back Country	Middle Country	Front Country
Remoteness	>1/8 mile D roads	>1/s mile B roads	≤1⁄8 mile B roads	≤0.5 of highways
Naturalness	Undisturbed	Minimal change	Few modifications	Partially modified
Facilities	No structures	Rare and isolated	Simple structures	Rustic facilities
SOCIAL	Remote	Back Country	Middle Country	Front Country
Contacts	≤6 contacts per day	7-14 per day	15-29 per day	≥30 per day
Group size	≤3 per group	4–6 per group	7–12 per group	13-25 per group
Evidence of use	No alteration	Small campsites	Trailheads	Campgrounds
OPERATIONAL	Remote	Back Country	Middle Country	Front Country
Access	Non-mechanized	Non-motorized	4WD vehicles	Passenger cars
Services	Minimal to none	Basic maps	Posted information	Staff on-site
Regulation	Minimal with permit	Basic with permit	Posted regulations	Clearly posted

Existing and Desired Physical RSCs

Remoteness: Portions of the RMZs are within 0.5 mile of SR-275. The RMZ follows the Deer Flat Road and Bears Ears Road, which are both maintained County B roads. No change.

Naturalness: There are few impacts to the RMZ's naturalness other than user-created vehicle campsites along the roads. *No change.*

Visitor facilities: There are no visitor facilities within the RMZ. <u>Desired:</u> Under Alternatives B and C, regulatory and ethics signs or kiosks would be added at major access points.

Existing and Desired Social RSCs

Contacts (average): Because dispersed campsites are along popular County B roads and in close proximity to Natural Bridges National Monument and the Bears Ears Buttes, contacts are frequent. No change.

Group size (average): Most groups are small (two to four people), but large SRP and multi-family groups camp in the area. *No change.*

Evidence of use: Evidence of use in the RMZ includes a large number of user-created dispersed campsites. Under Alternatives B and C, campsites would be designated and delineated to limit and prevent further modification but would still be concentrated along the roads. No change.

Existing and Desired Operational RSCs

Access: The area is accessed by both passenger cars and 4WD vehicles. No change.

Visitor services/information: Basic area maps are provided off-site. Staff are infrequently present on-site. <u>Desired:</u> Under Alternatives B and C, informational and interpretive materials would be provided. Staff would be frequently on-site.

Management controls: There are no on-site posts or signs with visitor regulations or other management controls. <u>Desired:</u> Under Alternatives B and C, dispersed camping would be designated or developed and restricted to developed sites. Rules, regulations, and ethics would be clearly posted. Under Alternative C, signage would be limited to trailheads and other already-developed areas. Under Alternative C, permits would be required for camping in designated sites.

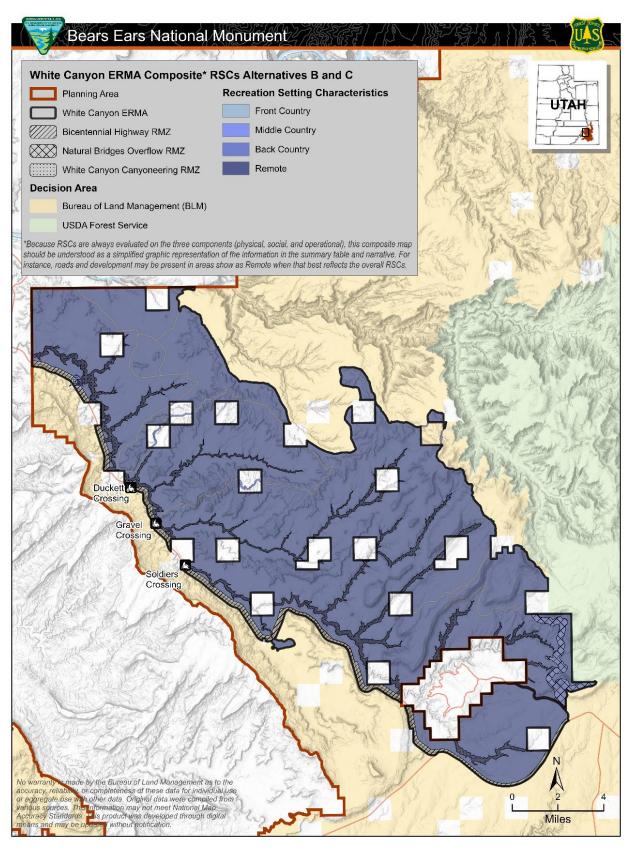
Campsites would be designated. Once designated, camping would be restricted to designated sites only.

Camping would require a permit (Alternative C only).

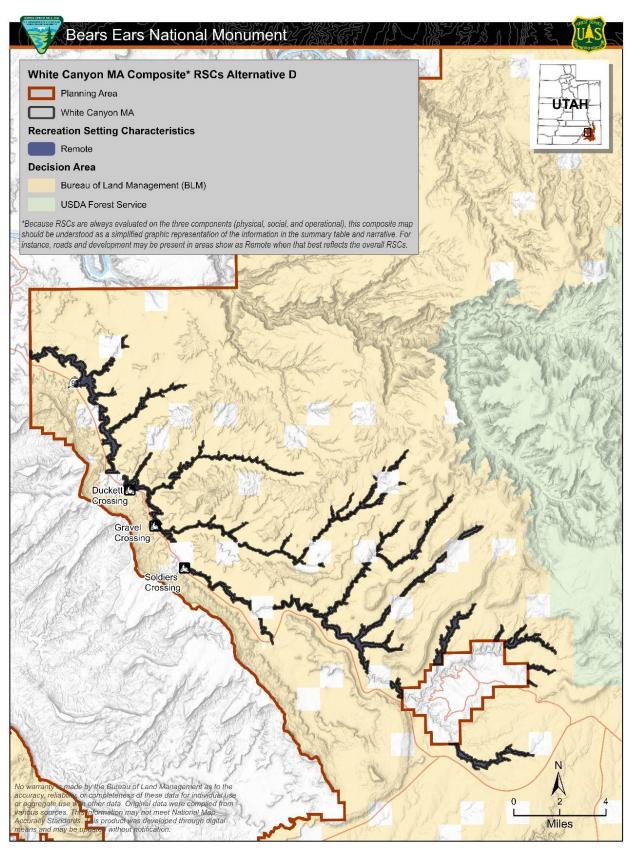
Solid human waste must be packed out and disposed of at appropriate facilities.

Campfires are not allowed. Only cook stoves are allowed.

Limits on the amount of commercial use would be determined through the RAMP.



Map E-26. White Canyon ERMA, RMZs, and composite* RSCs, Alternatives B and C.



Map E-27. White Canyon MA and composite* RSCs, Alternative D.

6 U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE RECREATION MANAGEMENT ZONES DESIRED FUTURE CONDITIONS

6.1 Recreation Opportunity Spectrum Description and Values

The Recreation Opportunity Spectrum (ROS), offers a framework for understanding the relationships and interactions between the different types of recreation on the Manti-La Sal National Forest ("the Forest"). The ROS consists of six major classes for USDA Forest Service use: urban, rural, roaded natural, semi-primitive non-motorized, semi-primitive motorized, and primitive. Maintaining a broad spectrum of these classes is very important to provide people with recreational activity choices.

Motorized use varies between seasons. When areas are not covered by sufficient snow levels for over snow travel, motorized use is limited to roads and trails shown on USDA Forest Service Motor Vehicle Use Maps. When sufficient snow cover exists, portions of the Forest become open to overthe-snow travel by vehicles with tracks or skis. To manage recreation use in these varying conditions, both a summer and winter version of the ROS are included in the Bears Ears National Monument RMP/EIS plan.

6.1.1 Roaded Natural Class Desired Conditions

This class is located along the main roads on the USDA Forest Service potion of BENM, including FR3088 Elk Ridge Road, FR0092 South Elks Road, FR106 South Cottonwood, and FR095 The Causeway. Opportunities for vehicle-based sightseeing, including interpretive sites that highlight the cultural and scenic resources of the Forest. Dispersed camping is popular in the areas along the primary roads. All of these provide extraordinary panoramas of mountains and canyons, red rock spires, fall colors, and distant views of surrounding lands. This class contains the highest level of development and most on-site interpretation will be focused in this class. The class will be dominated by natural-appearing environments with moderate elements of the sights and sounds of human development. Such developments usually harmonize with the natural environment. Interactions with other users will be low to moderate, but evidence of other users will be prevalent. Resource modification and extraction may evident but will harmonize with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities. Motorized use is permitted on designated roads and trails.

6.1.2 Semi-primitive Motorized Class Desired Conditions

This class is often found adjacent to and accessed from roaded natural road corridors. Activities in this class are often family-based dispersed camping and motorized use. Although motorized use is emphasized in this class, there are inclusions of non-motorized areas. Vehicle-based sightseeing, dispersed camping, and hunting are popular activities within areas classified as semi-primitive motorized. Key areas include side roads on Elk Ridge, Dry Mesa and other roaded areas. These areas are characterized by natural or natural-appearing environments of moderate to large size. Concentration of users is low but there is often evidence of other users. The areas are managed in such a way that minimum on-site controls and restrictions may be present but are subtle. Motorized use is permitted on designated roads and trails.

6.1.3 Semi-primitive Non-motorized Class Desired Conditions

This class accounts for the largest amount of non-motorized recreation opportunities, such as hiking, horseback riding, hunting, backpacking and climbing. This setting emphasizes non-motorized use. Opportunities for solitude and challenge are emphasized in these classes. Primitive dispersed camping is common, and the scenery generally appears intact and unaltered by human activity. Ecological processes such as fire, insects, and disease are the primary factors affecting landscape patterns. Sounds of motorized use are generally not heard in the core of these areas. Onsite interpretation generally does not occur in these areas. These classes include Hammond and Arch Canyons and other large roadless areas. These areas are characterized by natural or natural-appearing environments of moderate to large size. Concentration of users is low but there is often evidence of other users. The areas are managed in such a way that minimum on-site controls and restrictions may be present but are subtle. Motorized use is not allowed in this class.

6.1.4 Primitive Class Desired Conditions

The area is characterized by an essentially unmodified natural environment of fairly large size. Interactions with other users are very low and evidence of other users is minimal. On-site interpretation is not allowed in this class except if needed to reduce impacts to resources. Motorized and mechanized use is not permitted. This class includes the Dark Canyon Wilderness and any recommended wilderness units designated by the Manti-La Sal National Forest Land and Resource Management Plan.

7 LITERATURE CITED

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APPENDIX F Stipulations Applicable to Surface-Disturbing Activities



1 STIPULATIONS APPLICABLE TO SURFACE-DISTURBING ACTIVITIES

This appendix identifies stipulations for all surface-disturbing activities for the Bears Ears National Monument (BENM) Resource Management Plan (RMP)/Environmental Impact Statement (EIS). The stipulation language (e.g., no surface occupancy [NSO]) used in this appendix typically describes limitations on oil and gas development; however, Proclamation 10285 withdrew all federal lands within BENM from location and entry under the Mining Law of 1872 and from the disposition of leasable and salable minerals under the Mineral Leasing Act of 1920 and all other applicable laws. The agencies adopted the stipulation language as a clear way to express specific expectations as to how Monument objects and other resources would be protected from future surface-disturbing activities. Stipulations are generally applied to applicant-driven land use authorizations and permits issued on Bureau of Land Management (BLM)-administered lands and National Forest System lands; however, the agencies would take these stipulations into consideration and apply them when authorizing internally driven projects that would require surface disturbance. As appropriate, this appendix also identifies exceptions, modifications, and waivers for these stipulations.

Surface-disturbing activities are actions that mechanically alter the vegetation, surface/near-surface soil resources, and/or surface geological features, beyond natural site conditions and on a scale that affects other public land values. Surface-disturbing activities may include operation of heavy equipment to construct power lines, roads, and campgrounds. Surface-disturbing activities would typically not include such activities as livestock grazing, cross-country hiking, driving on designated routes, and minimum-impact filming.

Although some activities would not require use or occupation of the surface, stipulations may still be applied if the activity requires BLM or U.S. Department of Agriculture Forest Service (USDA Forest Service) authorization and it is determined that the activity may result in more than negligible resource impacts. One example would be applying a timing limitation (TL) to activities that require the use of low-flying aircraft in crucial wildlife areas. Identification of appropriate measures to reduce potential impacts resulting from new range improvements would be handled at the implementation level and through the application of appropriate best management practices.

2 DESCRIPTION OF STIPULATIONS

Table F-1 shows resources of concern and stipulations, including exceptions, modifications, and waivers. Three types of stipulations could be applied to land use authorizations: 1) NSO, 2) TL, and 3) controlled surface use (CSU).

Areas identified as NSO are closed to surface-disturbing activities with the exception of vegetation and fuels treatments. NSO areas would be avoidance areas for rights-of-way (ROWs); no ROWs would be granted in NSO areas unless there were no feasible alternatives. Areas identified as TL would be closed to surface-disturbing activities during identified time frames. This stipulation would not apply to operation and maintenance activities, including associated vehicle travel, unless otherwise specified. Areas identified as CSU would require that proposals for surface-disturbing activities be authorized according to the controls and constraints specified.

3 EXCEPTIONS, MODIFICATION, AND WAIVERS

Stipulations could be excepted, modified, or waived by the Authorized Officer (BLM)/Responsible Official (USDA Forest Service). An exception exempts the holder of the land use authorization document from the stipulation on a one-time basis. A modification changes the language or provisions of a surface stipulation, either temporarily or permanently. A waiver permanently exempts the surface stipulation. The documented environmental analysis for site-specific proposals would need to address proposals to exempt, modify, or waive a surface stipulation. Exceptions, waivers, and modifications would be considered when the agency conducts site-specific analysis. The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may require surveys, mitigation, environmental analysis, or consultation with other government agencies when making this determination. Table F-1 specifies the circumstances under which the general exceptions, modifications, and waivers would apply. The general exceptions, modifications, and waivers that commonly apply to many stipulations are as follows:

- Exception The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may
 grant an exception to a stipulation if it is determined that the factors leading to its inclusion
 as stipulation have changed sufficiently such that the protection provided by the stipulation
 is no longer necessary to meet resource objectives established in the RMP/EIS.
- Modification The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may modify a stipulation as a result of new information if: 1) the protection provided by the stipulation is no longer necessary to meet resource objectives established in the approved RMP/EIS, or 2) the protection provided by the stipulation is no longer sufficient to meet resource objectives established in the approved RMP/EIS. The modification may be subject to public review for at least a 30-day period.
- Waiver The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may
 waive a stipulation if it is determined that the factors leading to its inclusion as a stipulation
 no longer exist. The waiver may be subject to public review for at least a 30-day period.

Specific exceptions, modifications, and waivers have been developed for some surface-disturbing activities and are provided in Table F-1. When no exceptions, modifications, or waivers can be granted under a specific resource or resource use (e.g., the general exceptions, modifications, and waivers do not apply for the resource), then the table will state "none."

Table F-1. Stipulations including Exceptions, Modifications, and Waivers by Alternative

Resource	Stipulation	Applicable Area/Resource	Stipulation Description
Cultural resources	CSU	Historic properties	Cultural properties eligible for or listed in the National Register of Historic Places would be surrounded by an avoidance area, identified at the time of consultation, sufficient to avoid impacts.
			Purpose: Protect and preserve cultural resources and/or sites of religious significance to Native Americans.
			Exception: An exception could be granted if the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) determines that avoidance of direct and indirect impacts to historic properties is not feasible (e.g., avoidance may cause unacceptable damage to other public land resources or affect valid existing rights).
			Modification: General modification applies.
			Waiver: General waiver applies.
Cultural resources	CSU	Cultural resources	Surveys and monitoring (where appropriate) are required for all surface-disturbing activities. Where monitoring encounters cultural resources, all operations must cease until the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) determines whether the site can be avoided, protected, or fully excavated.
			Purpose: Protect and preserve cultural resources and/or sites of religious significance to Native Americans.
			Exception: General exception applies.
			Modification: General modification applies.
			Waiver: General waiver applies.
Lands and realty	NSO	ROW avoidance areas	ROWs within ROW avoidance area would not be authorized.
		(Monument objects)	Purpose: To minimize impacts to Monument objects.
			Exception: An exception may be granted if the applicant can demonstrate that there is no practicable route outside of the unit, and the proposed ROW would be consistent with the objects of BENM. Additionally, ROWs may be issued for maintenance and improvement of existing roads and, where necessary, to access non-federal inholdings so long as impacts to Monument objects can be avoided or mitigated.
			Modification: None.
			Waiver: None.
Paleontological resources	CSU	Within Potential Fossil Yield Classification Class 4 and 5 areas	Conduct on-site surveys for paleontological resources prior to implementing any surface-disturbing activities in all Potential Fossil Yield Classification Class 4 and 5 areas. Surface-disturbing activities would avoid or minimize impacts to paleontological resources to the degree practicable. Where avoidance is not practicable, appropriate mitigation to reduce impacts would be developed based on site-specific survey information.
			Purpose: To protect paleontological resources.
			Exception: General exception applies.
			Modification: General modification applies.
			Waiver: General waiver applies.

Resource	Stipulation	Applicable Area/Resource	Stipulation Description
Water, riparian and wetland resources	NSO	Riparian areas along perennial and intermittent streams	With the exception of vegetation or in-stream treatments designed to improve habitat condition, no new surface-disturbing activities would be allowed within active floodplains or within 100 meters (approximately 330 feet) of riparian areas along perennial and intermittent springs and streams.
		and springs	Purpose: Protect and conserve riparian areas, springs, streams, and floodplains and associated vegetation.
			Exception: An exception could be authorized: a) to allow development of recreational and range infrastructure, b) if impacts could be mitigated to a level that allows for the proper care and management of Monument objects or, c) if the action is designed to enhance the riparian resource values, or d) it can be shown that there are no practical alternatives.
			Modification: None.
			Waiver: None.
Soil and water resources	CSU	Steep slopes 21 to 40%	New surface disturbance/construction on slopes between 21 and 40% would require an erosion control strategy and reclamation and site plan with a design approved by the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) prior to construction and maintenance.
			Purpose: Protect soils and avoid erosion on sloped embankments.
			Exception: General exception applies.
			Modification: General modification applies.
			Waiver: General waiver applies.
Soil and water	NS0	Steep slopes 40%	New surface-disturbing activities are not allowed on slopes greater than 40%.
resources			Purpose: Protect soils, avoid erosion, and maintain public health and safety in sloped embankments.
			Exception: If, after an analysis, the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) determines that it would not cause undue or unnecessary degradation and that other placement alternatives are not practicable, surface occupancy in the NSO may be authorized. An erosion control plan would be required for review and approval by the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) prior to construction and maintenance.
			Modification: None.
			Waiver: None.
Water	CSU	Seeps and springs	Requirements for a hydrologic study would be determined at the implementation level based on groundwater levels and geological conditions. Land uses for water withdrawals that could negatively and adversely affect groundwater for seeps and springs would be authorized.
			Purpose: To protect seep and spring areas.
			Exception: General exception applies.
			Modification: General modification applies.
			Waiver: General waiver applies.
Special	NS0	Cultural and	No surface-disturbing activities allowed.
designations:		paleontological	Purpose: Maintain the relevant and important cultural, historic, and paleontological resource values.
Shay Canyon Area of Critical Environmental		resources	Exceptions: An exception could be granted if, after an analysis, the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) determines that the project would not impair or could benefit the ACEC's relevant and important values.
Concern (ACEC)			Modification: None.
			Waiver: None.

Resource	Stipulation	Applicable Area/Resource	Stipulation Description
Special	NS0	Relict vegetation	Surface-disturbing activities are not allowed on the mesa top.
designations:			Purpose: Protect relevant and important vegetation and visual values.
Lavender Mesa ACEC			Exceptions: An exception could be granted for test plots and facilities necessary to study the plant communities, restoration, and reclamation activities if, after an analysis, the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) determines that the project would not impair or could benefit the ACEC's relevant and important values.
			Modification: None.
			Waiver: None.
Special	NSO	Visual resources	Surface-disturbing activities are not allowed.
designations:			Purpose: Protect relevant and important scenic values.
Indian Creek ACEC			Exceptions: An exception could be granted if activities are short term or if, after an analysis, the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) determines that the project could meet Visual Resource Management I Objectives. Small signs, kiosks, route designators, low contrast range improvements, etc. used to manage activities or resources could also be allowed.
			Modification: None.
			Waiver: None.
Special	Closed	Visual resources	Closed to surface-disturbing activities.
designations;			Purpose: Protect relevant and important scenic values.
Valley of the Gods ACEC			Exception: Allow for addition of utilities in existing utility corridors that may overlap the ACEC. Other projects may be allowed if activities are short term or if, after an analysis, the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) determines that the project could meet Visual Resource Management I objectives. Small signs, kiosks, route designators, low contrast range improvements, etc. used to manage activities and resources could also be allowed.
			Modification: None.
			Waiver: None.
Special	NSO	Relict vegetation and visual resources	No surface-disturbing activities are allowed.
designations: San			Purpose: Protect relevant and important scenic, cultural, and wildlife values
Juan River ACEC			Exception: An exception could be granted if activities are short term or, after an analysis, the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) determines that the project would benefit the ACEC's relevant and important values. Small signs, kiosks, route designators, etc. used to manage activities or resources could also be allowed.
			Modification: None.
			Waiver: None.
Special	NS0	Wilderness study	No surface-disturbing activities.
designations:		areas	Purpose: Protect wilderness values.
wilderness study areas			Exception: An exception could be granted if the activity meets the non-impairment standard and/or enhances wilderness values.
			Modification: None.
			Waiver: None.

Resource	Stipulation	Applicable Area/Resource	Stipulation Description
Special designations: Colorado River No. 2 Wild and Scenic River (WSR)	NSO	Scenic, fish, recreation, wildlife, cultural, and ecological outstandingly remarkable values (ORVs)	Surface-disturbing activities are not allowed. Purpose: Protect ORVs. Exception: An exception may be granted if, after an analysis, the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) determines that the disturbance would be short term or could benefit the ORVs. Small signs, kiosks, route designators, etc. used to manage activities or resources could also be allowed. Modification: None. Waiver: None.
Special designations: Colorado River No. 3 WSR	Closed	Scenic, fish, recreation, wildlife, cultural, and ecological ORVs	Closed to surface-disturbing activities. Purpose: Protect ORVs. Exception: None. Modification: None. Waiver: None.
Special designations: Dark Canyon WSR	Closed	Scenic, recreation, and wildlife ORVs	Closed to surface-disturbing activities. Purpose: Protect ORVs. Exception: None. Modification: None. Waiver: None.
Special designations: San Juan River No. 5 WSR	Closed	Scenic, fish, recreation, wildlife, and ecological ORVs	Closed to surface-disturbing activities. Purpose: Protect ORVs. Exception: None. Modification: None. Waiver: None.
Recreation	NSO	Developed recreation sites in Planning Area	No surface-disturbing activities allowed within 0.25 mile of campgrounds and within 200 meters of other developed recreation sites. Purpose: Preserve and protect the federal investment in recreation sites and enhance visitor experiences. Exception: An exception could be granted if the disturbance is related to recreational infrastructure support or if, after an assessment, it is determined that the visual intrusions and noise can be mitigated so as to not adversely affect the visitor experience. Modification: None. Waiver: None.

Resource	Stipulation	Applicable Area/Resource	Stipulation Description
Recreation	NSO	San Juan River Special	No surface-disturbing activities are allowed.
		Recreation Management Area	Purpose: Preserve and protect the federal investment in developed and potential recreation sites, recreational opportunities, and visitors' San Juan River experience.
		(excluding segment No. 5 WSR)	Exceptions: An exception may be granted if, after an analysis, the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) determines that the disturbance is related to or can be shown to benefit recreational experiences.
			Modification: None.
			Waiver: None.
Special status	TL	Northern goshawk	Prohibit forest vegetation manipulation within active nest areas during the active nesting period (March 1 to September 30).
species: northern		habitat	Purpose: To minimize disturbance to nesting northern goshawk.
goshawk (Accipiter			Exception: None.
gentilis)			Modification: None.
			Waiver: None.
Special status	NSO	Kit fox habitat	No surface disturbances would be allowed within 660 feet (200 meters) of an occupied natal kit fox den.
species: kit fox			Purpose: To avoid disturbance to active natal kit fox dens.
(Vulpes macrotis)			Exception: An exception could be granted if protocol surveys determine that kit fox dens are not present.
			Modification: The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may modify the stipulation area if portions of the area do not contain habitat.
			Waiver: A waiver may be granted if it is determined that the habitat no longer exists.
Special status species: Mexican spotted owl (<i>Strix</i> occidentalis lucida) (MSO)	CSU/TL	MSO designated critical habitat and suitable habitat	To protect MSO habitat and avoid negative impacts to the species, actions would be avoided or restricted that may cause stress and disturbance during nesting and rearing of young. Appropriate measures would depend on whether the action is temporary or permanent and whether it occurs within or outside the MSO nesting season: a) a temporary action is completed prior to the following breeding season, leaving no permanent structures and resulting in no permanent habitat loss; b) a permanent action continues for more than one breeding season and/or causes a loss of MSO habitat or displaces MSO through disturbances (i.e., creation of a permanent structure). Current avoidance and minimization measures consist of the following:
			 Within potential MSO habitat, surveys would be required prior to implementation of the proposed action. All surveys must be conducted by qualified individual(s) acceptable to the agencies. Assess habitat suitability for both nesting and foraging using accepted habitat models in conjunction with field reviews. Apply the conservation measures below if project activities occur within suitable MSO habitat. Determine potential effects of actions on MSO and its habitat.
			 Document the type of activity, acreage, and location of direct habitat impacts and type and extent of indirect impacts relative to location of suitable MSO habitat. Document whether the action is temporary or permanent. Activities may require monitoring throughout the duration of the project. To ensure desired results are being achieved, minimization measures would be evaluated and, if necessary, Endangered Species Act (ESA) Section 7 consultation reinitiated. Any activity that includes water production should be managed to ensure that enhancement of riparian habitat is maintained.
			For all temporary actions that may impact MSO or its suitable habitat:
			 If the action occurs entirely outside of the MSO breeding season from March 1 through August 31 and leaves no permanent structure or permanent habitat disturbance, the action can proceed without an occupancy survey.

Resource	Stipulation	Applicable Area/Resource	Stipulation Description
			 If the action would occur during a breeding season, a survey for MSO is required prior to commencing the activity. If MSOs are found, the activity should be delayed until outside of the breeding season.
			 Rehabilitate access routes created by the project through such means as raking out scars, revegetation, and gating access points.
			For all permanent actions that may impact owls or suitable habitat:
			 Conduct surveys for MSO for 2 consecutive years, according to accepted protocol, prior to commencing activities.
			 If MSOs are found, no disturbing actions would occur within 0.5 mile of an identified site. If nest site is unknown, no activity would occur within the designated current and historic Protected Activity Center.
			 Avoid building permanent structures within suitable habitat unless it is surveyed and not occupied.
			 Reduce noise emissions (e.g., use hospital-grade mufflers) to 45 dBA at 0.5 mile from suitable habitat, including canyon rims. Placement of permanent noise-generating facilities should be contingent upon a noise analysis to ensure noise does not encroach upon a 0.5-mile buffer for suitable habitat, including canyon rims.
			 Limit disturbances to and within suitable habitat by staying on designated and/or approved routes.
			Limit new access routes created by the project.
			Additional measures to avoid or minimize effects on the species may be developed and implemented in consultation with the U.S. Fish and Wildlife Service (USFWS) to ensure continued compliance with the ESA.
			Purpose: To minimize effects on MSO.
			Exception: An exception may be granted by the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) if authorization is obtained from USFWS (through applicable provisions of the ESA). The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may also grant an exception if an analysis indicates that the nature or the conduct of the actions would not impair the primary constituent element determined necessary for the survival and recovery of MSO, and the USFWS, through consultation, concurs with this determination.
			Modification: The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may modify the boundaries of the stipulation area if an analysis indicates and the USFWS (through applicable provisions of the ESA) determines a portion of the area is not being used as critical habitat.
			Waiver: A waiver may be granted if MSO is delisted and the critical habitat is determined by the USFWS as not necessary for the survival and recovery of MSO.
Special status species: southwestern willow flycatcher (Empidonax traillii extimus) (SWFL)	CSU/TL	SWFL habitat (riparian areas)	To protect SWFL habitat and avoid negative impacts to the species, actions would be avoided or restricted that may cause stress and disturbance during nesting and rearing of young. Appropriate measures would depend on whether the action is temporary or permanent and whether it occurs within or outside the nesting season: a) a temporary action is completed prior to the following breeding season, leaving no permanent structures and resulting in no permanent habitat loss; b) a permanent action continues for more than one breeding season and/or causes a loss of habitat or displaces SWFL through disturbances, i.e., creation of a permanent structure.
(SWIL)			Current avoidance and minimization measures consist of the following:
			 Surveys would be required prior to operations unless species occupancy and distribution information is complete and available. All surveys must be conducted by qualified individual(s) and be conducted according to protocol.
			 Activities would require monitoring throughout the duration of the project. To ensure that desired results are being achieved, minimization measures would be evaluated and, if necessary, ESA Section 7 consultation reinitiated.
			Water production would be managed to ensure maintenance or enhancement of riparian habitat.

Resource	Stipulation	Applicable Area/Resource	Stipulation Description
			Activities would maintain a 330-foot buffer from suitable riparian habitat year long.
			 Activities within 0.25 mile of occupied breeding habitat would not occur during the breeding season of April 15 to August 15.
			 Noise emissions within 0.25 mile of suitable habitat for SWFL will not exceed baseline conditions during the breeding season of April 15 to August 15.
			 Water extraction or disposal practices must not result in change of hydrologic regime that would result in loss or degradation of riparian habitat.
			 All areas of surface disturbance within riparian areas and/or adjacent land must be revegetated with native species.
			Loss or disturbance of riparian habitats must be avoided.
			Additional measures to avoid or minimize effects on the species may be developed and implemented in consultation with the USFWS to ensure continued compliance with the ESA.
			Purpose: To minimize effects on the SWFL.
			Exception: An exception may be granted by the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) if concurrence is obtained from USFWS (through applicable provisions of the ESA). The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may also grant an exception if an environmental analysis indicates that the nature of the conduct of the actions, as proposed or conditioned, would not impair the primary constituent element determined necessary for the survival and recovery of the SWFL, and USFWS concurs with this determination.
			Modification: The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may modify the boundaries of the stipulation area if an environmental analysis indicates and USFWS (through applicable provisions of the ESA) determines that a portion of the area is not being used as SWFL habitat.
			Waiver: May be granted if the SWFL is delisted and the critical habitat is determined by the USFWS as not necessary for the survival and recovery of the SWFL.
Special status species: western yellow-billed cuckoo (Coccyzus americanus) (YBCU)	CSU/TL	YBCU habitat (riparian areas)	Avoidance or use restrictions may be placed on any proposed project. Application of appropriate measures will depend whether the action is temporary or permanent and whether it occurs within or outside the breeding and nesting season: a) a temporary action is completed prior to the following breeding season, leaving no permanent structures and resulting in no permanent habitat loss; b) a permanent action could continue for more than one breeding season and/or cause a loss of habitat or displace YBCU through disturbances. The following avoidance and minimization measures have been designed to ensure that activities carried out are in compliance with the ESA. Integration of and adherence to these measures will facilitate review and analysis of any submitted project proposal. Following these measures could reduce the scope of ESA Section 7 consultation at the permit stage. Avoidance and minimization measures consist of the following:
			 Habitat suitability within the parcel and/or within a 0.5-mile buffer of the parcel will be identified prior to project authorization to identify potential survey needs. Habitat suitability should be determined in accordance with Guidelines for the Identification of Suitable Habitat for WYBCU in Utah (USFWS 2017).
			 Protocol breeding season surveys will be required in suitable habitats prior to operations unless species occupancy and distribution information is complete and available. All surveys must be conducted by permitted individual(s) and be conducted according to protocol.
			For all temporary actions that may impact YBCU or suitable habitat:
			 If the action occurs entirely outside of the YBCU breeding season (June 1 to August 31) and leaves no structure or habitat disturbance, the action can proceed without a presence/absence survey.

Resource	Stipulation	Applicable Area/Resource	Stipulation Description
			 If the action is proposed between June 1 to August 31, a presence/absence surveys for YBCU will be conducted prior to commencing activity. If YBCUs are detected, activity should be delayed until September 1.
			 Access roads created by the project will be eliminated through such means as raking out scars, revegetation, gating access points, etc.
			 For all permanent actions that may impact YBCU or suitable habitat:
			 Protocol level surveys by permitted individuals will be conducted prior to commencing activities. If YBCUs are detected, no activity will occur within 0.25 mile of occupied habitat.
			 Noise levels at 0.25 mile from suitable habitat must not exceed baseline conditions. Placement of permanent noise- generating facilities should be determined by a noise analysis to ensure that noise does not encroach upon the 0.25-mile buffer for suitable habitat.
			 Temporary or permanent actions will require monitoring throughout the duration of the project to ensure that YBCU or its habitat is not affected in a manner or to an extent not previously considered. Avoidance and minimization measures will be evaluated throughout the duration of the project.
			 Water extraction or disposal practices must not result in a change of hydrologic regime that would result in loss or degradation of riparian habitat
			 All areas of surface disturbance must be revegetated with native species within riparian areas and/or adjacent uplands.
			Additional measures to avoid or minimize effects on the species may be developed and implemented in consultation with the USFWS to ensure continued compliance with the ESA.
			Purpose: To minimize effects on the YBCU.
			Exception: An exception may be granted by the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) if authorization concurrence is obtained from USFWS (through applicable provisions of the ESA). The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may also grant an exception if an environmental analysis indicates that the nature of the conduct of the actions, as proposed or conditioned, would not impair the primary constituent element determined necessary for the survival and recovery of the YBCU, and the USFWS concurs with this determination.
			Modification: The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may modify the boundaries of the stipulation area if an environmental analysis indicates and the USFWS (through applicable provisions of the ESA) determines that a portion of the area is not being used as YBCU habitat.
			Waiver: May be granted if the YBCU is delisted and if the USFWS determines that the critical habitat is not necessary for the survival and recovery of the YBCU.
Special status species: California condor (Gymnogyps californianus)	CSU/TL	California condor potential habitat	Avoidance or use restrictions may be placed on portions of areas known or suspected to be used by California condors. Application of appropriate measures would depend on whether the action is temporary or permanent, and whether it occurs within or outside potential habitat: a) a temporary action is completed prior to the following important season of use, leaving for habitat functionality; b) a permanent action continues for more than one season of habitat use and/or causes a loss of California condor habitat function or displaces California condors through continued disturbance (i.e., creation of a permanent structure requiring repetitious maintenance or emits disruptive levels of noise).
			Purpose: To minimize effects on the California condor.
			Exception: An exception may be granted by the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) if authorization is obtained from the USFWS (through applicable provisions of the ESA). The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may also grant an exception if an analysis indicates that the nature of the

Resource	Stipulation	Applicable Area/Resource	Stipulation Description
			conduct of the actions, as proposed or conditioned, would not impair the primary constituent element determined necessary for the survival and recovery of the California condor, and the USFWS concurs with this determination.
			Modification: The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may modify the boundaries of the stipulation area if an analysis indicates and the USFWS (through applicable provisions of the ESA) determines that a portion of the area is not being used as California condor nesting or roosting territory.
			Waiver: May be granted (through applicable provisions of the ESA) if there is no reasonable likelihood of site occupancy over a minimum 10-year period.
Special status Species: fish	Moderate (CSU)	Special status fish species habitat	With the exception of habitat improvement projects (e.g., vegetation treatments, side channel restoration), avoid surface-disturbing and disruptive activities within 330 feet of current special status fish species habitat.
			Purpose: To protect special status fish habitat.
			Exception: Any activities or exceptions would require site-specific analysis and consultation with the USFWS.
			Modification: General modification applies.
			Waiver: General waiver applies.
Special status species:	NSO	San Juan River and all associated backwaters	Surface-disturbing activities within the 100-year floodplain of the San Juan River would not be allowed. Other avoidance and minimization measures include the following:
endangered Colorado River fishes			 Surveys will be required prior to operations unless species occupancy and distribution information is complete and available. All surveys must be conducted by qualified individuals.
listics			 Surface-disturbing activities will require monitoring throughout the duration of the project. To ensure that desired results are being achieved, minimization measures will be evaluated and, if necessary, Section 7 consultation reinitiated.
			Water production will be managed to ensure maintenance or enhancement of riparian habitat.
			Loss or disturbance of riparian habitats will be avoided.
			 Watershed analysis will be conducted for surface-disturbing activities in designated critical habitat and overlapping major tributaries to determine toxicity risk from permanent facilities.
			Purpose: To protect critical habitat of the endangered Colorado River fishes.
			Exception: An exception may be granted by the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) if there are no practical alternatives, and the development would enhance riparian/aquatic values. This exception would require consultation with the USFWS. The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may also grant an exception if an environmental analysis indicates that the nature or the conduct of the actions, as proposed or conditioned, would not impair the primary constituent element determined necessary for the survival and recovery of the endangered Colorado River fishes.
			Modification: The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may modify the boundaries of the stipulation area if an environmental analysis indicates and the USFWS (through applicable provisions of the ESA) determines that a portion of the area is not being used as critical habitat.
			Waiver: A waiver may be granted if the endangered Colorado River fishes are delisted and the critical habitat is determined by the USFWS as not necessary for the survival and recovery of the endangered Colorado River fishes.

Resource	Stipulation	Applicable Area/Resource	Stipulation Description
Special status species: Colorado	CSU	Within special status fish species habitat	With the exception of habitat improvement projects (e.g., vegetation treatments, side channel restoration), avoid surface-disturbing and disruptive activities within 330 feet of current special status fish species habitat.
cutthroat trout			Purpose: To protect special status fish habitat.
(Oncorhynchus clarkii pleuriticus)			Exception: Any activities or exceptions would require site-specific analysis and consultation with USFWS.
. ,			Modification: General modification applies.
			Waiver: General waiver applies.
Special status species: Navajo sedge (<i>Carex</i>	CSU	Potential, suitable, and occupied habitats	To minimize effects on the federally threatened Navajo sedge, all surface disturbance within potential Navajo sedge habitat will be surveyed according to U.S Fish and Wildlife Service (USFWS) Utah Field Office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants (USFWS 2011).
specuicola)			Purpose: To minimize effects on the federally threatened Navajo sedge.
			Exception: An exception may be granted by the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) if authorization is obtained from the USFWS (through applicable provisions of the ESA). The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may also grant an exception if an environmental analysis indicates that the nature of the conduct of the actions, as proposed or conditioned, would not impair the survival and recovery of the Navajo sedge, and the USFWS concurs with this determination.
			Modification: The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may modify the boundaries of the stipulation area if an environmental analysis indicates and the USFWS (through applicable provisions of the ESA) determines that a portion of the area is no longer suitable habitat for Navajo sedge.
			Waiver: May be granted if the Navajo sedge is delisted and the USFWS determines the critical habitat is not necessary for the survival and recovery of the Navajo sedge.
Special status species: Jones cycladenia	CSU	Potential, suitable, and occupied habitats	To minimize effects on the federally threatened Jones cycladenia, all surface disturbance within potential Jones cycladenia habitat will be surveyed according to U.S. Fish and Wildlife Service (USFWS) Utah Field Office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants (USFWS 2011).
(Cycladenia			Purpose: To minimize effects on the federally threatened Jones cycladenia.
humilis var. jonesii)			Exception: An exception may be granted by the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) if authorization is obtained from the USFWS (through applicable provisions of the ESA). The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may also grant an exception if an environmental analysis indicates that the nature of the conduct of the actions, as proposed or conditioned, would not impair the survival and recovery of the Jones cycladenia, and the USFWS concurs with this determination.
			Modification: The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may modify the boundaries of the stipulation area if an environmental analysis indicates and the USFWS (through applicable provisions of the ESA) determines that a portion of the area is no longer suitable habitat for Jones cycladenia.
			Waiver: May be granted if the Jones cycladenia is delisted and the USFWS determines the critical habitat is not necessary for the survival and recovery of the Jones cycladenia.

Resource	Stipulation	Applicable Area/Resource	Stipulation Description
Special status species: plants	CSU	Special status species plant habitat	Allow surface-disturbing activities within 330 feet or habitat-fragmenting activities within 660 feet of potential, suitable, and occupied special status plant habitat.
			Purpose: To protect special status species plants.
			Exception: An exception could be authorized if 1) the activity is consistent and compatible with protection, maintenance, or enhancement of the habitat and populations as outlined in recovery and conservation plans and when such actions would not lead to the need to list the plant, or 2) the activity is relocated or redesigned to eliminate or reduce detrimental impacts to acceptable limits.
			Modification: None.
			Waiver: None.
Special status species: plants	CSU/TL	Within federally listed plant species occupied	For suitable habitat for federally listed plant species under the ESA, the following avoidance and minimization measures have been developed to facilitate review and analysis of any submitted applications for surface-disturbing activities:
		and suitable habitats	Site inventories
			 must be conducted to determine habitat suitability;
			 are required in known or potential habitat for all areas proposed for surface disturbance before initiating project activities, at a time when the plant can be detected, and during appropriate flowering periods;
			o should include documentation on individual plant locations and suitable habitat distributions; and
			o must be conducted by qualified individuals.
			 Surface-disturbing activities will require monitoring throughout the duration of the project. To ensure that desired results are being achieved, minimization measures will be evaluated and, if necessary, Section 7 consultation reinitiated.
			 Project activities must be designed to avoid direct disturbance to populations and to individual plants. Designs will avoid concentrating water flows or sediments into plant-occupied habitat.
			 Construction will occur downslope of plants and populations where feasible; if well pads and roads must be sited upslope, buffers of 100 feet (minimum) between surface disturbances and plants and populations will be incorporated.
			 A buffer or fence will be established between the individuals or groups of individuals and the well pads during construction and postconstruction where populations occur within 200 feet of well pads.
			 Areas for avoidance will be visually identifiable in the field (e.g., flagging, temporary fencing, rebar). For surface pipelines, a 10-foot buffer will be used from any plant locations.
			 If on a slope, stabilizing construction techniques will be used to ensure that the pipelines do not move toward the population(s).
			 For riparian/wetland-associated species (e.g., Ute ladies'-tresses [Spiranthes diluvialis]), avoid loss or disturbance of riparian habitats; ensure that water extraction or disposal practices will not result in change of hydrologic regime.
			 Disturbances to and within suitable habitat will be limited by staying on designated routes.
			 New access routes created by the project will be limited.
			 Signing will be placed appropriately to limit off-highway vehicle travel in sensitive areas.

Resource	Stipulation	Applicable Area/Resource	Stipulation Description
			Dust abatement practices will be implemented near occupied plant habitat.
			 All disturbed areas will be revegetated with native species composed of species indigenous to the area.
			 Postconstruction monitoring for invasive species will be required.
			 Surface-disturbing activities will require monitoring throughout the duration of the project. To ensure that desired results are being achieved, minimization measures will be evaluated and, if necessary, Section 7 consultation reinitiated.
			Additional measures to avoid or minimize effects on the species may be developed and implemented in consultation with the USFWS prior to surface-disturbing activity to ensure continued compliance with the ESA.
			Purpose: To avoid and minimize disturbances within federally listed plant species' occupied and suitable habitat.
			Exception: None.
			Modification: None.
			Waiver: None.
Wildlife and fisheries: bald eagle (Haliaeetus leucocephalus)	CSU/TL	Nest sites and winter roost areas within bald eagle habitat	To protect bald eagle habitat and avoid negative impacts to the species, actions would be avoided or restricted that may cause stress and disturbance during nesting and rearing of young. Appropriate measures would depend on whether the action is temporary or permanent and whether it occurs within or outside the bald eagle breeding or roosting season: a) a temporary action is completed prior to breeding or roosting season, leaving no permanent structures, and resulting in no permanent habitat loss; b) a permanent action continues for more than one breeding or roosting season and/or causes a loss of eagle habitat or displaces eagles through disturbances (i.e., creation of a permanent structure). Current avoidance and minimization measures consist of the following:
			 Surveys would be required prior to operations, unless species occupancy and distribution information is complete and available. All surveys must be conducted by qualified individual(s) and be conducted according to protocol.
			 Surface-disturbing activities would require monitoring throughout the duration of the project.
			 Minimization measures would be evaluated to ensure that desired results are being achieved.
			 Water production would be managed to ensure maintenance or enhancement of riparian habitat.
			 Temporary activities within 1 mile of nest sites would not occur during the breeding season, which lasts from January 1 to August 31, unless the area has been surveyed according to protocol and determined to be unoccupied.
			 Temporary activities within 0.5 mile of winter roost areas, (e.g., cottonwood galleries) would not occur during the winter roost season of November 1 to March 31, unless the area has been surveyed according to protocol and determined to be unoccupied.
			No permanent infrastructure would be placed within 1 mile of nest sites.
			 No permanent infrastructure would be placed within 0.5 mile of winter roost areas.
			Big game carrion would be removed to 100 feet from roadways occurring within bald eagle foraging range.
			Loss of or disturbance to large cottonwood gallery riparian habitats would be avoided.
			 All areas of surface disturbance within riparian areas and/or adjacent uplands should be revegetated with native species.
			Purpose: To protect bald eagle habitat and avoid negative impacts to the species.

Resource	Stipulation	Applicable Area/Resource	Stipulation Description
			Exception: An exception may be granted by the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) if authorization is obtained from the USFWS/Utah Division of Wildlife Resources (UDWR). The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may also grant an exception if an analysis indicates that the nature of the conduct of the actions, as proposed or conditioned, would not impair the habitat and physical requirements determined necessary for the survival of the bald eagles.
			Modification: The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may modify the boundaries of the stipulation area if an analysis indicates, and the USFWS/UDWR determines, that a portion of the area is not being used as bald eagle nesting or roosting territories or if additional nesting or roosting territories are identified.
			Waiver: May be granted if there is no reasonable likelihood of site occupancy over a minimum 10-year period.
Wildlife and fisheries: golden eagle (Aquila chrysaetos)	CSU/TL	Golden eagle nest sites and territories	To protect the golden eagle habitat, nest sites, and nesting territories, actions would be avoided or restricted that may cause stress and disturbance during nesting and rearing of young. Appropriate measures would depend on whether the action is temporary or permanent and whether it occurs within or outside the golden eagle breeding season: a) temporary action is completed prior to the breeding or roosting season, leaving no permanent structures and resulting in no permanent habitat loss; b) a permanent action continues for more than one breeding or roosting season and/or causes a loss of eagle habitat or displaces eagles through disturbances (i.e., creation of a permanent structure). Current avoidance and minimization measures consist of the following:
			 Surveys would be required prior to operations unless species occupancy and distribution information is complete and available. All surveys must be conducted by qualified individual(s) and be conducted according to protocol.
			 Surface-disturbing activities would require monitoring throughout the duration of the project.
			 Minimization measures would be evaluated to ensure desired results are being achieved.
			 Temporary activities within 0.5 mile of nest sites would not occur during the breeding season from January 1 to August 31, unless the area has been surveyed according to protocol and determined to be unoccupied.
			 No permanent infrastructure would be placed within 0.5 mile of nest sites.
			Purpose: To protect golden eagle habitat, nest sites, and nesting territories.
			Exception: An exception may be granted by the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) if authorization is obtained from USFWS and UDWR. The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may also grant an exception if an environmental analysis indicates that the nature or the conduct of the actions, as proposed or conditioned, would not impair the primary constituent element determined necessary for the survival and recovery of the golden eagle.
			Modification: The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may modify the boundaries of the stipulation area if an environmental analysis indicates, and USFWS and UDWR determine, that a portion of the area is not being used as golden eagle nesting territory.
			Waiver: A waiver may be granted if an individual golden eagle nest has been inactive (unoccupied) for at least a period of 3 years. Nest- monitoring data for a 3-year period would be required before the waiver could be granted.
Wildlife and fisheries: raptors	CSU/TL	Raptors	Appropriate seasonal and spatial buffers shall be placed on all known raptor nests in accordance with the <i>Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances</i> (Romin and Muck 2002) and <i>Best Management Practices for Raptors and their Associated Habitats in Utah</i> (BLM 2020). All construction-related activities will not occur within these buffers if preconstruction monitoring indicates the nests are active, unless a site-specific evaluation (survey) for active nests is completed prior to construction, and if an agency wildlife biologist, in consultation with the USFWS and UDWR, recommends that activities may be permitted within the buffer. The agencies will coordinate with the USFWS and UDWR and have a recommendation within 3 to 5 days of notification. Any construction activities authorized within a protective (spatial and seasonal) buffer for raptors will require an on-site monitor. If there is any indication that activities are

Resource	Stipulation	Applicable Area/Resource	Stipulation Description
			adversely affecting a raptor and/or its young, the on-site monitor will suspend activities and contact the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) immediately. Construction may occur within the buffers of inactive nests. Construction activities may commence once monitoring of the active nest site determines that fledglings have left the nest and are no longer dependent on the nest site.
			Purpose: To minimize stress and disturbance to raptors during nesting season.
			Exception: None.
			Modification: None.
			Waiver: None.
Wildlife and fisheries: migratory birds	CSU/TL	Migratory bird habitat	Surveys for nesting migratory birds may be required during migratory bird breeding season (April 1 to July 31) whenever surface disturbances and/or occupancy is proposed in association with any surface-disturbing activity or occupancy within priority habitats. Surveys should focus on identified priority bird species in Utah. Field surveys will be conducted as determined by the Authorized Officer (BLM)/Responsible Official (USDA Forest Service). Based on the result of the field survey, the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) will determine appropriate buffers and TLs.
Wildlife and fisheries:	TL	Migratory bird nesting habitats	During nesting season for migratory birds (April 1–July 31), avoid or minimize surface-disturbing activities and vegetative-altering projects and broad-scale use of pesticides in identified occupied priority migratory bird habitat.
migratory birds			Purpose: To minimize stress and disturbance to migratory birds during nesting season.
			Exception: An exception would be granted if clearance surveys determine that there are no migratory bird nesting sites in the project area.
			Modification: The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may modify the boundaries of the stipulation area if a portion of the area is not being used for migratory bird nesting.
			Waiver: A waiver may be granted by the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) if migratory bird nesting clearance surveys are carried out a minimum of 2 weeks prior to surface disturbance. If nests are found, buffers appropriate to the species will be applied to protect the nest sites.
Wildlife and fisheries: burrowing owl (Athene cunicularia) and ferruginous hawk (Buteo regalis)	TL	Burrowing owl and ferruginous hawk habitats	No surface disturbances would be conducted during the breeding and nesting season (March 1 to August 31 for burrowing owl and March 1 to August 1 for ferruginous hawk) within spatial buffers (0.25 mile for burrowing owl and 0.5 mile for ferruginous hawk) of known nesting sites.
			Purpose: To minimize stress and disturbance to burrowing owls and ferruginous hawks during breeding and nesting season.
			Exception: No surface disturbances or occupancy will be conducted during the breeding and nesting season (March 1 to August 31 for burrowing owl and March 1 to August 1 for ferruginous hawk) within spatial buffers (0.25 mile for burrowing owl and 0.5 mile for ferruginous hawk) of known nesting sites.
			Exception: An exception would be granted if protocol surveys determine that nesting sites, breeding territories, and winter roosting areas are not occupied.
			Modification: The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may modify the boundaries of the stipulation area if portions of the area do not include habitat or are outside the current defined area, as determined by the agencies.
			Waiver: May be granted if it is determined the habitat no longer exists or has been destroyed.

Resource	Stipulation	Applicable Area/Resource	Stipulation Description
Wildlife and fisheries: Gunnison prairie dog (Cynomys gunnisoni)	NSO	Gunnison prairie dog habitat	No surface-disturbing activities within 660 feet (200 meters) of active prairie dog colonies identified within prairie dog habitat would be allowed. No permanent aboveground facilities are allowed within the 660-foot buffer.
			Purpose: To minimize stress and disturbance to active prairie dog colonies.
			Exception: An exception may be granted by the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) if the applicant submits a plan that indicates that impacts of the proposed action can be adequately mitigated; or, if due to the size of the town, there is no reasonable location for the surface-disturbing activity and colonies cannot be avoided, the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) will allow for loss of prairie dog colonies and/or habitat.
			Modification: The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may modify the boundaries of the stipulation area if portions of the area do not include prairie dog habitat or active colonies are found outside the current defined area, as determined by the agencies.
			Waiver: May be granted if it is determined that the habitat no longer exists.
Wildlife and	TL	Deer winter range	No surface-disturbing activities from November 15 to April 15.
fisheries: deer			Purpose: To minimize stress and disturbance to deer during crucial winter months.
			Exception: The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may grant an exception if, after an analysis, the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) determines that the animals are not present in the project area or the activity can be completed so as to not adversely affect the animals. Routine operation and maintenance are allowed.
			Modification: The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may modify the boundaries of the stipulation area if a portion of the area is not being used as deer winter range.
			Waiver: May be granted by the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) if the deer winter range is determined to be unsuitable, unoccupied, or if the winter conditions are mild.
Wildlife and	TL	Elk winter range	No surface-disturbing activities from November 15 to April 15.
fisheries: elk			Purpose: To minimize stress and disturbance to elk during crucial winter months.
			Exception: The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may grant an exception if, after an analysis, the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) determines that the animals are not present in the project area or the activity can be completed so as to not adversely affect the animals. Routine operation and maintenance is allowed.
			Modification: The Authorized Officer (BLM)/Responsible Official (USDA Forest Service) may modify the boundaries of the stipulation area if a portion of the area is not being used as elk winter range.
			Waiver: May be granted by the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) if the elk winter range is determined to be unsuitable, unoccupied, or if the winter conditions are mild.

4 LITERATURE CITED

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APPENDIX G

Best Management Practices



1 BEST MANAGEMENT PRACTICES

Best management practices (BMPs) are land and resource management techniques determined to be the most effective and practical means of maximizing beneficial results and minimizing conflicts and negative environmental impacts from management actions. BMPs can include structural and nonstructural controls, specific operations, and maintenance procedures. To reduce or eliminate negative environmental impacts, BMPs can be applied before, during, and after activities. BMPs are not one-size-fits-all solutions; they should be selected and adapted through interdisciplinary analysis to determine which management practices are necessary to meet the goals and objectives of a resource management plan. The best practices and mitigation measures for a particular site are evaluated by considering site-specific conditions, local resource conditions, and a suite of techniques that guide or may be applied to management actions to aid in achieving desired outcomes. BMPs are often developed in conjunction with land use plans, but they are not considered a land use plan decision unless the land use plan specifies that they are mandatory. They may be updated or modified without a plan amendment if they are not mandatory.

This appendix does not provide an exhaustive list of BMPs; additional BMPs may be identified during an interdisciplinary process when evaluating site-specific management actions. BMPs may also be updated as new technology emerges. The implementation and effectiveness of BMPs must be monitored to determine whether the practices are achieving a resource management plan's goals and objectives. Adjustments could be made, as necessary, to ensure that goals and objectives are met and to conform to changes in Bureau of Land Management (BLM) and/or U.S. Department of Agriculture Forest Service (USDA Forest Service) regulations, policy, direction, or new scientific information.

1.1 Air Resources

- 1. All site-specific proposals would be reviewed for compliance with existing laws and policies regarding air quality and would be designed not to degrade existing quality. Specific procedures would include the following:
 - a. Coordinate with the Utah Department of Environmental Quality if an emission permit is required.
 - b. Prescribed fires would comply with State of Utah regulations on smoke management (Rule 307-204), the *Utah Smoke Management Plan* (Utah Division of Air Quality 2021), and future updates to the plan and regulation to minimize air quality impacts from resulting particulates.

2. Fugitive dust

- a. Water or alternative dust suppressants (i.e., surfactants or other erosion-control materials) would be used to minimize fugitive dust during construction and applied on material (sand, gravel, soil, minerals, or other matter that may create fugitive dust) piles.
- b. Vehicles are not to exceed a speed of 20 miles per hour on any unpaved road to discourage the generation of fugitive dust.
- c. Enclose, cover, water, or otherwise treat loaded haul trucks to minimize loss of material to wind and spillage.
- d. Cover, enclose, or stabilize excavated or inactive material piles after activity ceases.
- e. Use chip-seal or asphalt surface for long-term access.

f. Train workers to handle construction materials and debris to reduce fugitive emissions.

3. Surface disturbance

- a. Minimize the period of time between initial disturbance of the soil and revegetation or other surface stabilization. Use interim reclamation procedures.
- b. Minimize the area of disturbed land.
- c. Prompt revegetation of disturbed lands.
- d. Revegetate, mulch, or otherwise stabilize the surface of all disturbed areas adjoining roads.

4. Engine exhaust

- a. All vehicles and construction equipment would be properly maintained to minimize exhaust emissions.
- b. Use carpooling to and from sites to minimize vehicle-related emissions.
- c. Reduce unnecessary idling.
- d. Reduce elemental carbon, particularly from diesel-fueled engines, by utilizing controls such as diesel particulate filters on diesel engines or by using lower-emitting engines (e.g., Tier 2 or better).
- e. Opportunities to reduce nitrogen oxides (NOX), particularly from internal combustion engines, should be pursued to control impacts related to deposition and visibility in nearby Class I areas. This may include the use of lower-emitting engines (e.g., Tier 2 or better for mobile and non-road diesel engines) and/or add-on controls (e.g., selective catalytic reduction) where appropriate.
- f. Use of ultra-low sulfur diesel in engines when available.
- g. Stationary internal combustion engine standard of 2 grams NOX/brake horsepower-hour (bhp-hr) for 300-horsepower engines and 1 gram NOX/bhp-hr for engines with more than 300 horsepower.

1.2 Cultural Resources

- 1. Evaluation of all BLM activities and BLM-authorized activities shall be made in compliance with BLM Manual 8100, *The Foundations for Managing Cultural Resources* (BLM 2004), and subsequent 8100 series manuals as well as the *Handbook of Guidelines and Procedures for Inventory, Evaluation, and Mitigation of Cultural Resources* (BLM 2021).
- 2. When possible, locate projects in areas that are previously disturbed. To comply with the National Historic Preservation Act, the BLM and USDA Forest Service must identify eligible cultural resources. Under the current regulations and guidelines, the BLM and USDA Forest Service may decide that no inventory needs to be conducted because the proposed action is located in an environment where ground disturbance has modified the surface so extensively that the likelihood of finding intact cultural resources is negligible.
- 3. When a National Environmental Policy Act (NEPA) document specifically stipulates the need for an archaeological monitor during construction or a project is located in areas that require an archaeological monitor to be present, it is the applicant's responsibility to contract an archaeological consultant that holds a current Utah BLM or USDA Forest Service permit (as applicable) and that is authorized to work in BENM. Fieldwork authorizations are required prior to any construction monitoring.

- 4. Where proposed projects or development will adversely affect a cultural resource, testing, data recovery, or full excavation to recover scientific information may be required as mitigation. The applicant or operator bears the full cost of mitigation and is encouraged to consider avoiding adverse effects through project relocation or redesign rather than mitigating adverse effects. The applicant or operators will also be responsible for the costs of consultation with Tribal cultural advisors in addition to contract archaeologists. The agencies will consult with Tribes prior to cultural resources testing or data recovery consistent with existing agency policy.
- 5. A cultural resource must be allocated by appropriate analysis prior to a) authorizing or implementing any heritage tourism project, b) issuing special recreation permits that will use a cultural resource, or c) proposing a BLM recreation project that involves the use or interpretation of a cultural resource.
- 6. The National Historic Preservation Act, as amended, requires that if newly discovered historic or archaeological materials or other cultural resources are identified during project implementation, work in that area must stop and the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) must be notified immediately. Within 5 working days the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) will inform the proponent as to
 - a. whether the materials appear eligible for the National Register of Historic Places;
 - the mitigation measures that will likely have to be undertaken before the site can be used (assuming in situ preservation is not practicable) (36 Code of Federal Regulations [CFR] 800.13); and
 - c. a time frame for the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Office (SHPO), that the Authorized Officer's (BLM)/Responsible Official's (USDA Forest Service) findings were correct and mitigation was appropriate.
- 7. A standard education/discovery stipulation for cultural resource protection shall be attached to the land use authorization. The operator or its contractor is responsible for informing all persons who are associated with the project operations that federal laws protect archaeological resources and they will be subject to prosecution for disturbing or destroying any historic or archaeological sites, or collecting any cultural objects, pre-contact or historic, from federal lands.
- 8. Any companies, individuals, or their subcontractors to which the BLM or USDA Forest Service issues a land use authorization will strictly adhere to the confidentiality of information provided by the BLM or USDA Forest Service that pertains to the nature and location of archaeological resources (Archaeological Resource Protection Act, 16 United States Code 470hh).
- 9. If any previously unidentified cultural resources or human remains are discovered, all activity in the vicinity of the discovery will cease and will be immediately reported to the relevant BLM field office or USDA Forest Service district office. Work may not resume at that location until it is approved by the Authorized Officer (BLM)/Responsible Official (USDA Forest Service).
- 10. Visual resource BMPs will be used to avoid, minimize, or mitigate potential adverse effects on historic properties.
- 11. The Canyon Country Fuels Program uses design features during vegetation projects to protect cultural resources. These design features are developed through the Section 106

process in consultation with the SHPO and generally include, but are not limited to, the following:

- a. Buffering the sites (by a distance of approximately 15 meters).
- b. Including cultural sites within the feathered edges of treatments.
- c. Leaving faux islands for wildlife habitat purposes.
- d. Treating the sites.
- e. Leaving the sites untreated.
- f. Method of treatment (hand, mechanized, rubber tire or tracked, etc.).
- g. Time of year (frozen/dry preferred).
- h. Evaluating, protecting, and monitoring all National Register of Historic Placeseligible sites. These sites will be avoided during mechanized treatments or managed as agreed through SHPO consultation.

1.3 Construction

- 1. When necessary to promote soil permeability and infiltration rates, construction may not be conducted during wet conditions when soils are saturated.
- 2. Drainage from disturbed areas will be confined or directed so as not to cause erosion in undisturbed areas.
- 3. Construction of access roads on steep hillsides and near watercourses will be avoided where alternate routes provide adequate access.
- 4. Activities on slopes over 21% will be avoided to the extent possible.
- 5. Access roads requiring construction with cut and fill will be designed to minimize surface disturbance and will take into account the character of the landform, natural contours, cut material, depth of cut, where the fill material will be deposited, resource concerns, and visual contrast. Roads will follow the contour of the land where practical.
- 6. Fill material will not be cast over hilltops or into drainages. Cut slope ratios should normally be no steeper than 3:1 and fill slopes no steeper than 2:1.
- 7. Placement of facilities on hilltops and ridgelines will be avoided. Facility layout should take into account the character of the topography and landform.
- 8. Burning of trash will not be allowed on the site.
- 9. Construction sites shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste-disposal site. "Waste" means all discarded matter, including human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.
- 10. Trash will be retained in portable trash containers and hauled to an authorized disposal site.
- 11. Cattle guards will be installed and maintained whenever access roads go through pasture gates or fences as practicable. Maintenance includes cleaning out under cattle guard bases when needed.
- 12. Only the minimum amount of vegetation necessary for the construction of structures and facilities shall be removed. Topsoil shall be conserved during excavation and reused as cover on disturbed areas to facilitate regrowth of vegetation.

- 13. All brush, limbs, crushed stumps, and other woody material will be stockpiled separately from topsoil, and the stripped vegetation will be used for reclamation.
- 14. During reclamation, certified weed-free mulch or other suitable materials will be applied and crimped or tackified to remain in place to reclaim areas for seed retention.
- 15. In areas where grading is necessary, the disturbed area shall be recontoured and all earthwork obliterated by removing embankments, backfilling excavation, and grading to reestablish the approximate original contours of the land on the right-of-way.
- 16. After site restoration, right-of-way holders shall construct waterbars along graded areas of the right-of-way as required by the Authorized Officer (BLM)/Responsible Official (USDA Forest Service).

1.4 Fire Management

- 1. Maintain organic groundcover, where possible, to minimize the formation of pedestals, rills, and/or surface runoff.
- 2. Do not build fire lines in or around wetlands unless they are needed to protect life, property, and/or wetland resources. Use natural features as preferred fire breaks over constructed fire lines. When possible, use hand crews to construct fire lines within, or adjacent to, wetlands and/or riparian areas.
- 3. Retain organic groundcover in filter strips during prescribed fires. As a fire break, build fire lines outside of filter strips, unless they are tied into a stream and/or wetlands.
- 4. Build fire lines with rolling grades and minimum downhill convergence, where practicable. Out-slope or back-blade, permanently drain, and revegetate fire lines shortly after the burn. Use certified local native plants, where practicable, to revegetate burned areas.
- 5. Conduct prescribed fires in a manner that minimizes the residence time on the soil, while at the same time conducting them in a manner that meets the burn objectives (such as when soils are moist).
- 6. Use broadcast burning, where appropriate, during prescribed fire operations to prevent excessive heat transfer to the soil.
- 7. Resource coordinators on incident overhead teams and fire rehabilitation teams will consider weed-risk factors and weed-prevention measures when developing resource protection recommendations.
- 8. Locate temporary labor, spike, logging, and/or fire camps in a manner that protects surface and subsurface water resources. Consideration should be given to the disposal of human waste, wastewater, garbage, and/or other solid wastes.
- 9. Fuels treatment projects would avoid old growth pinyon-juniper using visual characteristics criteria.
- 10. Apply a 300-foot buffer from a streambank for the application of fire retardant.

1.5 Livestock Grazing

- 1. Grazing management practices will be implemented that do the following:
 - a. Maintain sufficient residual vegetation and litter on both upland and riparian sites to protect the soil from wind and water erosion and support ecological functions.

- b. Promote attainment or maintenance of proper functioning condition riparian/wetlands areas, appropriate stream channel morphology, desired soil permeability and infiltration, and appropriate soil conditions and kinds and amounts of plants and animals to support the hydrologic cycle, nutrient cycle, and energy flow.
- c. Meet the physiological requirements of desired plants and facilitate reproduction and maintenance of desired plants to the extent natural conditions allow.
- d. Maintain viable and diverse populations of plants and animals appropriate for the site.
- e. Provide or improve, within the limits of site potentials, habitat for threatened or endangered species.
- f. Avoid grazing management conflicts with other species that have the potential of becoming protected or special status species.
- g. Encourage innovation, experimentation, and the ultimate development of alternatives to improve rangeland management practices.
- h. Give priority to rangeland improvement projects and land treatments that offer the best opportunity for achieving the Standards for Rangeland Health and Guidelines for Grazing Management for BLM Lands in Utah (BLM 1997) or USDA Forest Service Rangeland Ecosystem Analysis and Monitoring Handbook (USDA Forest Service 2005a).
- 2. Any spring and seep developments will be designed and constructed to protect ecological processes and functions and improve livestock and wildlife distribution.
- 3. New rangeland projects for grazing will be constructed in a manner consistent with the Standards for Rangeland Health and Guidelines for Grazing Management for BLM Lands in Utah (BLM 1997) or USDA Forest Service Rangeland Ecosystem Analysis and Monitoring Handbook (USDA Forest Service 2005a). Considering economic circumstances and site limitations, existing rangeland projects and facilities that conflict with the achievement or maintenance of the standards will be relocated and/or modified.
- 4. Livestock salt blocks and other nutritional supplements will be located away from riparian/wetland areas or other natural water sources. It is recommended that the locations of these supplements be moved, as needed, to reduce resource impacts.
- 5. The use and perpetuation of native species will be emphasized; however, when restoring or rehabilitating disturbed or degraded rangelands, nonintrusive, nonnative plant species are appropriate for use where native species a) are not available, b) are not economically feasible, c) cannot achieve ecological objectives as well as nonnative species, and/or d) cannot compete with already established nonnative species.
- When rangeland manipulations are necessary, the BMPs, including biological processes, fire, and intensive grazing, will be used prior to the use of chemical or mechanical manipulations.
- 7. When establishing grazing practices and rangeland improvements, the quality of the outdoor recreation experience is to be considered. Aesthetic and scenic values, water, campsites, and opportunities for solitude are among those considerations.
- 8. Feeding of hay and other harvested forage (which does not refer to miscellaneous salt, protein, and other supplements), for the purpose of substituting for inadequate natural forage will not be conducted on BLM lands other than in a) emergency situations where no other resource exists and animal survival is in jeopardy, or b) situations where the

- Authorized Officer (BLM)/Responsible Official (USDA Forest Service) determines such a practice will assist in meeting a standard or attaining a management objective.
- 9. To eliminate, minimize, or limit the spread of noxious weeds, a) only hay cubes, hay pellets, or certified, weed-free hay will be fed on BLM lands; and b) reasonable adjustments in grazing methods, methods of transport, and animal husbandry practices will be applied.
- 10. On rangelands where a standard is not being met, and conditions are moving toward meeting the standard, grazing may be allowed to continue. On lands where a standard is not being met, conditions are not improving toward meeting the standard or other management objectives, and livestock grazing is deemed responsible, administrative action with regard to livestock will be taken by the Authorized Officer (BLM)/Responsible Official (USDA Forest Service) pursuant to CFR 4180.2(c).
- 11. Where it can be determined that more than one kind of grazing animal is responsible for failure to achieve a standard and adjustments in management are required, those adjustments will be made to each kind of animal, based on interagency cooperation as needed, in proportion to their degree of responsibility.
- 12. Rangelands that have been burned, reseeded or otherwise treated to alter vegetative composition will be closed to livestock grazing as follows:
 - a. Burned rangelands, whether by wildfire or prescribed burning, will be left ungrazed for a minimum of one complete growing season following the burn.
 - b. Rangelands that have been reseeded or otherwise chemically or mechanically treated will be left ungrazed for a minimum of two complete plant growing seasons following treatment.
- 13. Livestock use and resulting levels of utilization on forage will be monitored to help determine the proper carrying capacity of allotments.
- 14. Specific archaeological sites that have the potential for adverse impacts from livestock will be mitigated as necessary and practicable. Site-specific clearances on range improvements will continue to be performed.

1.6 Soil, Water, and Riparian Resources

- 1. For projects involving surface disturbance, to aid in the reclamation of discretionary actions in areas of identified biological soil crusts, the top 2 to 5 inches of topsoil, inclusive of the biological soil crusts, shall be carefully stripped and stockpiled separately from all other soil materials where practicable. Organic matter and debris may be retained in the piles to help sustain biological activity and increase the effectiveness of respreading the crust material. Storage piles should be shallow to preserve microorganisms and seeds. Respread the soil crust during interim and final reclamation. During reclamation, re-establish mounds on the surface prior to reapplying the biological soil crusts. Stabilize topsoil stockpiles by 1) spraying with water to establish crust, and 2) covering with biodegradable product.
- 2. Regular monitoring of revegetated and reclaimed areas will be conducted with regular maintenance or reseeding as needed until the agency determines that the revegetation is successful. Follow up invasive species control will be done when needed.
- 3. Topsoil will be segregated and stored separately from subsurface materials to avoid mixing during construction, storage, and interim and final reclamation. Subsurface materials will never be placed on top of topsoil material at any point in the operation. Stockpiles will be located and protected so that wind and water erosion are minimized and reclamation potential is maximized. Ensure that the topsoil is spread evenly over the reclaimed area.

- 4. No new surface-disturbing activities are allowed within active floodplains or within 100 meters of riparian areas, springs, or water sources unless it can be shown that a) there is no practical alternative, b) all long-term impacts can be fully mitigated, or c) the activity will benefit and enhance the riparian area or water resources.
- All structures crossing intermittent and perennial streams and 100 year floodplains will be located and constructed such that they do not decrease channel stability or increase water velocity.
- 6. Any activity that includes water production should be managed to ensure maintenance or enhancement of riparian habitat.
- 7. Loss or degradation of large cottonwood gallery riparian habitats will be avoided.
- 8. All areas of surface disturbance within riparian areas and/or adjacent uplands should be revegetated with native species.
- 9. To avoid contamination of water sources and inadvertent damage to non-target species, aerial application of pesticides would not be applied within 100 feet of a riparian wetland area or water source unless the product is registered for such use by the U.S. Environmental Protection Agency.
- 10. On National Forest System (NFS) lands, guidelines in Forest Service Handbook 2509.22 Soil and Water Conservation Practices (USDA Forest Service 2005b) will be followed.
- 11. Loss or degradation of side channel, backwater, or other off-channel habitats will be avoided, as well as increasing surface roughness in these locations. The effects of seeding or planting on surface roughness and side channel resilience and persistence will be considered.
- 12. When conducting vegetation treatments to remove nonnative invasive species in southwestern willow flycatcher (*Empidonax traillii extimus*) and yellow-billed cuckoo (*Coccyzus americanus*) nesting habitat, reducing patch size beyond that which is sufficient for nesting (>0.25 acre) will be avoided.

1.7 Recreation Activities

1.7.1 Camping

- Cans, rubbish, and other trash shall not be discarded, buried, or dumped on public lands or related waters. Wet garbage such as egg shells, orange peels, leftover solid food, bones, melon rinds, etc., must be carried out. Trash cleanup at campsites and day use areas will include collecting all litter or discarded items, including small items such as bottle caps and cigarette butts.
- 2. Camping would not be allowed within historic and pre-contact structures.
- 3. No camping is permitted within 200 feet of a water source other than perennial streams unless within a developed campground or with prior authorization from the Authorized Officer (BLM)/Responsible Official (USDA Forest Service).
- 4. Where human waste pack out is not required and toilet facilities are not present, disposal of human waste is not permitted within 200 feet of a water source, trail, or campsite. In places where carry-out is not required, solid human waste will be deposited in a cat hole (6 inches deep) and covered with soil, following Leave No Trace guidelines.
- 5. Washing or bathing with soap is not permitted in streams, springs, or other natural water sources. Dishwater must be strained prior to dispersal. Dishwater and bathwater may not

- be dumped within 100 feet of streams, springs, or other natural water sources. Only biodegradable soap may be used.
- 6. No climbing or rappelling is allowed over petroglyphs, pictographs, or historic inscriptions.
- 7. Dispersed campsites will be closed in areas with known cultural sites, wildlife conflicts, and livestock conflicts, including corrals, ponds, and guzzlers used and maintained by grazing permittees.

1.7.2 Outfitting and Recreation Pack and Saddle Stock Use

- 1. Allow only certified weed-free hay/feed on BLM-administered and NFS lands.
- 2. Inspect, brush, and clean animals (especially hooves and legs) before entering public land.
- 3. Inspect and clean tack and equipment.
- 4. Regularly inspect trailheads and other staging areas for backcountry travel.
- 5. Alternate locations where livestock is tied or contained to minimize impacts to vegetation.
- 6. Educate and encourage outfitters to look for and report new weed infestations.
- 7. Riding and pack animals may not be tied to live trees under 6 inches diameter breast height in size. Using hobbles, picket lines, and highlines is preferable to hard tying to individual trees.
- 8. Livestock shall not be tied or picketed for more than 1 hour within 300 feet of a natural water source other than perennial streams. All animals will be under control en route and in camp to protect wildlife, other livestock, and range forage.
- Corrals located on public lands are not available for public or recreational permittee use, with the exception of corrals built in developed recreation sites for recreational use. Prior authorization is required for the use of such corrals.

1.7.3 Permitted Activities

1. Permittees may not leave unattended personal property on public lands administered by the BLM for a period of more than 48 hours without written permission of the Authorized Officer (BLM)/Responsible Official (USDA Forest Service), with the exception that vehicles may be parked in designated parking areas for up to 14 consecutive days. Unattended personal property is subject to disposition under the Federal Property and Administrative Services Act of 1949, as amended.

1.7.4 Visiting Cultural and Historic Sites

- 1. No surface collection or digging for artifacts.
- 2. No standing, sitting, or leaning on walls or other architectural features.
- 3. Do not touch petroglyphs and pictographs. Taking rubbings of petroglyphs or historic inscriptions is not allowed.

1.8 Vegetation and Weeds

- 1. Avoid or minimize the loss of sagebrush/steppe and blackbrush habitat.
- 2. During operations conducted in sagebrush/steppe habitat, focus on maintaining large blocks of sagebrush habitat.

- 3. Reseed or plant disturbed areas with desirable vegetation when the native plant community cannot recover and occupy the site sufficiently.
- 4. Seeding application performed as part of reclamation operations will occur during the appropriate season for best seed establishment or during the fall from mid-October until mid-December when the ground surface is not frozen.
- 5. Prior to commencing operations, clean all equipment and vehicles to remove seeds and soil that may contain seeds to avoid the spread of noxious weeds and invasive species.
- 6. Develop a weed management plan, which would include using portable washing stations to periodically wash down equipment entering and leaving areas with surface disturbance, especially during muddy conditions because seeds and propagules of noxious plants are commonly transported on equipment and mud clinging to equipment.
- 7. Design treatments to prevent the introduction or spread of invasive and noxious plants that conform to the guidelines in the RMP/EIS and follow BLM protocol.
- 8. Control noxious and invasive plants that become established along roads or adjacent to facilities.
- 9. Clean and sanitize all equipment brought in from other regions.
- 10. Maintain trailheads, campgrounds, visitor centers, picnic areas, roads leading to trailheads, and other areas of concentrated public use in a weed-free condition. Consider high-use recreation areas as high-priority sites for weed and invasive plant eradication.
- 11. Sign trailheads and access points to educate visitors on noxious and invasive weeds and the consequences of their activities.
- 12. Inspect and document travel corridors for weeds and treat as necessary.
- 13. Encourage backcountry horsemen and hunters to use pelletized feed. Pelletized feed is unlikely to contain weed seed. Inspect and clean mechanized trail vehicles of weeds and weed seeds.
- 14. Wash boots and socks before hiking into a new area. Inspect and clean packs, equipment, and bike tires. Install boot brushes at trailheads to facilitate boot cleaning
- 15. Avoid hiking through weed infestations whenever possible.
- 16. Keep dogs and other pets free of weed seeds.
- 17. Avoid picking unidentified "wildflowers" and discarding them along trails or roadways.
- 18. Frequently and systematically inspect and document riparian areas and wetlands for noxious weed establishment and spread. Eradicate new infestations immediately because effective tools for riparian-area weed management are limited.
- 19. Promote dense growth of desirable vegetation in riparian areas (where appropriate) to minimize the availability of germination sites for weed seeds or propagules transported from upstream or upslope areas.

1.9 Visual Resources, Noise, Night Skies, and Soundscape

1. Use natural or artificial features, such as topography, vegetation, or an artificial berm to help screen facilities. Design roads and other linear facilities to follow the contour of the landform or mimic lines in the vegetation. Avoid a straight road that will draw the viewer's eye and attention straight toward the facility at the end of the road.

- 2. If electricity is used to power a facility, bury electric lines and place solar panels out of view of the casual observer.
- 3. Use semi-gloss paints rather than flat paints; the selected paint color should be one or two shades darker than the background.
- 4. During reclamation, replace soil, brush, rocks, shrub/tree debris, etc., over disturbed earth surfaces, which allows for natural regeneration rather than introducing an unnatural-looking grass cover.
- 5. Place infrastructure within or near previously disturbed locations.
- 6. Post nighttime quiet hours at developed campgrounds.
- 7. Limit the use of artificial lighting during nighttime operations to only those lights that are determined necessary for the safety of operations and personnel.
- 8. Use shielding and aiming techniques and limit the height of light poles to reduce glare and avoid light shining above horizon(s).
- 9. Use lights only where needed, use light only when needed, and direct all lighting on-site.
- 10. Use motion sensors, timers, or manual switching for areas that require illumination but are seldom occupied.
- 11. Reduce lamp brightness and select lights that are not broad spectrum or bluish in color.
- 12. Require a lightscape management plan where an extensive amount of long-term lighting is proposed.

1.10 Wildlife and Fisheries

- 1. Identify important, sensitive, and unique habitats of fish and wildlife in the area. Incorporate mitigation practices that minimize impacts to these habitats.
- 2. If migration corridors and unique habitats are identified, implement mitigation practices to minimize impacts.
- 3. Place infrastructure within or near previously disturbed locations to avoid new impacts to fish and wildlife habitat.
- 4. Evaluate seasonal restrictions on public vehicular access where there are fish and wildlife conflicts or road damage and maintenance issues.
- 5. To the extent possible, avoid activities and facilities that create barriers to the seasonal big game crucial habitats, including any identified transitional and stopover routes.
- 6. Advise project personnel regarding appropriate speed limits to minimize wildlife mortality due to vehicle collisions. Reclaim temporary and closed roads as soon as possible after they are no longer required.
- 7. Promptly report observations of potential wildlife problems to the regional office of the Utah Division of Wildlife Resources (UDWR) and, as applicable, to the U.S. Fish and Wildlife Service (USFWS).
- 8. Monitor and survey abandoned mine lands prior to reclamation. If bats are present, install bat gates unless human safety is at risk.
- 9. Where practicable, follow *Pollinator-Friendly Best Management Practices for Federal Lands* (USFWS 2015).

2 BEST MANAGEMENT PRACTICES FOR RAPTORS AND THEIR ASSOCIATED HABITATS IN UTAH

2.1 Introduction

Raptors, or birds of prey, are found on public lands throughout Utah. Approximately 31 species of raptors use public lands for at least a portion of their life cycle. These include 20 diurnal raptors, including eagles, hawks, falcons, osprey (*Pandion haliaetus*), turkey vulture (*Cathartes aura*), and California condor (*Gymnogyps californianus*), and 11 mostly nocturnal owl species. At least 16 of the diurnal raptors are known to nest, roost, and forage on public lands, whereas two others are probable nesters within the southern part of the state. The California condor is known to use public lands for roosting and foraging but is not currently known to nest within the state. The rough-legged hawk (*Buteo lagopus*) is a winter resident that uses public lands for foraging. All of the owl species nest, roost, and forage on public lands in Utah.

Some of Utah's raptors are considered to be special status species by the BLM or USDA Forest Service and currently receive enhanced protection in addition to the regulatory authority provided by the Migratory Bird Treaty Act (MBTA), which covers all raptor species. The Mexican spotted owl (Strix occidentalis lucida) is federally listed as a threatened species and is afforded the protection and Section 7 consultation requirements of the Endangered Species Act (ESA). Both the bald eagle (Haliaeetus leucocephalus) and golden eagle (Aquila chrysaetos) are protected by the provisions of the Bald and Golden Eagle Protection Act (BGEPA). The California condor is federally listed as an endangered species; however, the birds found in southern Utah are part of a non-essential experimental population reintroduced to northern Arizona under Section 10(j) of the ESA. The BLM and USDA Forest Service are required to treat the California condor as a species proposed for listing for Section 7 purposes of the ESA. The northern goshawk (Accipiter gentilis) is managed by a multiagency conservation agreement and is also a USDA Forest Service sensitive species. The bald eagle, burrowing owl (Athene cunicularia), ferruginous hawk (Buteo regalis), flammulated owl (Psiloscops flammeolus), golden eagle, short-eared owl (Asio flammeus), and peregrine falcon (Falco peregrinus) are listed as Species of Greatest Conservation Need by UDWR (2021), and they are therefore recognized as BLM sensitive species under the BLM's 6840 Manual. The BLM's 6840 Manual states that the "BLM shall . . . ensure that actions authorized, funded, or carried out . . . do not contribute to the need for the species to become listed" (BLM 2008). USDA Forest Service Manual 2600, chapter 2670 directs the USDA Forest Service to "develop and implement management practices to ensure that species do not become threatened or endangered because of Forest Service actions" (USDA Forest Service 2011).

Future raptor management on BLM and USDA Forest Service lands in BENM will be guided by the use of these BMPs, which are BLM-specific recommendations for implementation of the USFWS Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances (Guidelines) (Romin and Muck 2002). The Guidelines were originally developed by the USFWS in 1999 and were updated in 2002 to reflect changes brought about by court and policy decisions and to incorporate Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds. The Guidelines were provided to the BLM and other land management agencies in an attempt to provide raptor management consistency while ensuring project compatibility with the biological requirements of raptors and encouraging an ecosystem approach to habitat management.

These BMPs, or specific elements of the BMPs that pertain to a proposal, should be attached as conditions of approval (COA) to all BLM and USDA Forest Service use authorizations that have the

potential to adversely affect nesting raptors or would cause occupied nest sites to become unsuitable for nesting in subsequent years.

Raptor management is a dynamic and evolving science and, consequently, as the science evolves these BMPs will undergo subsequent revision. As more information becomes available through implementation of these raptor BMPs and as our knowledge of raptor life cycle requirements increases, findings will be incorporated into future revisions of the BMP document. Additionally, the BLM and the U.S. Department of Energy are initiating a 3-year raptor radii study that will test traditional spatial and seasonal nest buffers during actual oil and gas development activities for a select suite of species. Study results would be incorporated into new BMP revisions as well.

To adequately manage raptors and their habitats, and to reduce the likelihood of a raptor species being listed under the ESA, BLM- and USDA Forest Service-authorized or proposed management activities and/or land-disturbing actions would be subject to the criteria and processes specified within these BMPs. The implementation of raptor spatial and seasonal buffers under the BMPs would be consistent with Table 2 of the Guidelines, included here as Attachment 2. As specified in the Guidelines, modifications of spatial and seasonal buffers for BLM- and USDA Forest Service-authorized actions would be permitted, so long as protection of nesting raptors was ensured. State and/or federally listed, proposed, and candidate raptor species, as well as BLM sensitive raptor species, should be afforded the highest level of protection through this BMP process; however, all raptor species would continue to receive protection under the MBTA. Modification of the buffers for threatened or endangered species would be considered pending results of Section 7 consultation with the USFWS.

As stated in the Guidelines, spatial and seasonal buffers should be considered as the best available recommendations for protecting nesting raptors under a wide range of activities statewide; however, they are not necessarily site-specific to proposed projects. Land managers should evaluate the type and duration of the proposed activity, the position of topographic and vegetative features, the sensitivity of the affected species, the habituation of breeding pairs to existing activities in the proposed project area, and the local raptor nesting density when determining site-specific buffers. The BLM and USDA Forest Service would be encouraged to informally coordinate with UDWR and the USFWS any time a site-specific analysis shows that an action may have an adverse impact to nesting raptors. The coordination would determine if the impact could be avoided or must be mitigated, and if so, to determine appropriate and effective mitigation strategies.

Potential modifications of the spatial and seasonal buffers identified in the Guidelines may provide a viable management option. Modifications would ensure that nest protection would occur while allowing various management options that may deviate from the suggested buffers within the Guidelines, which, if adequately monitored, could provide valuable information for incorporation into future management actions.

Seasonal raptor buffers from Attachment 2 should be reviewed by local raptor nesting authorities who are knowledgeable of raptor nesting chronologies within their local area. For those nesting raptors for which local nesting chronologies remain uncertain, the seasonal buffers provided in Attachment 2 should serve as the default; however, for those raptor species whose known nesting chronologies differ from the seasonal buffers provided in Attachment 2, the local seasonal buffers may be used as a modification of the Guidelines.

Criteria that would need to be met prior to implementing modifications to the spatial and seasonal buffers in the Guidelines would include the following:

Completion of a site-specific assessment by a wildlife biologist or other qualified individual.
 See example in Attachment 1.

- 2. Written documentation by the BLM field office or USDA Forest Service ranger district wildlife biologist, identifying the proposed modification and affirming that implementation of the proposed modification(s) would not affect nest success or the suitability of the site for future nesting. Modification of the Guidelines would not be recommended if it is determined that adverse impacts to nesting raptors would occur or that the suitability of the site for future nesting would be compromised.
- 3. Development of a monitoring and mitigation strategy by a BLM or USDA Forest Service biologist or other raptor biologist. Impacts of authorized activities would be documented to determine if the modifications were implemented, as described in the environmental documentation or COAs, and whether they were adequate to protect the nest site. Should adverse impacts be identified during monitoring of an activity, the BLM would follow an appropriate course of action, which may include cessation or modification of activities that would avoid, minimize, or mitigate the impact or, with the approval of UDWR and the USFWS, the BLM could allow the activity to continue while requiring monitoring to determine the full impact of the activity to the affected raptor nest. A monitoring report would be completed and forwarded to UDWR for incorporation into the Natural Heritage Program (NHP) raptor database.

In a further effort to provide additional support and expertise to local BLM and USDA Forest Service field biologists, a network of biologists from various agencies with specific expertise in raptor management has been identified and included as Attachment 3. The personnel identified have extensive backgrounds in raptor management issues and are available, upon request, to assist BLM and USDA Forest Service field biologists on a case-by-case basis. Field biologists are encouraged to use this network, via informal conference, with one or more of the individuals identified. This coordination should be clearly distinguished from the consultation process required under Section 7 of the ESA. Individuals on the expert panel should not be expected to provide formal advice but should serve as a sounding board for discussing potential effects of a proposal, as well as potential mitigation measures on specific projects that may be useful to BLM and USDA Forest Service biologists.

2.2 Habitat Enhancement

As recommended in the Guidelines, raptor habitat management and enhancement, both within and outside of buffers, would be an integral part of these BMPs, with the understanding that in order for raptors to maintain high densities and maximum diversity, it is necessary that the habitat upon which they and their prey species depend be managed to promote healthy and productive ecosystems. Habitat loss or fragmentation would be minimized and/or mitigated to the extent practical and may include such measures as drilling multiple wellheads per pad, limiting access roads and avoiding loop roads to well pads, effective rehabilitation or restoration of plugged and abandoned well locations and access roads that are no longer required, rehabilitation or restoration of wildland fires to prevent domination by nonnative invasive annual species, and vegetation treatments and riparian restoration projects to achieve rangeland health standards.

In some cases, artificial nesting structures, located in areas where preferred nesting substrates are limited but where prey base populations are adequate and human disturbances are limited, may enhance some raptor populations or may serve as mitigation for impacts occurring in other areas.

2.3 Protection of Nest Sites and Buffer Zones

As stated in the Guidelines, protection of both occupied and unoccupied nests is important because not all raptor pairs breed every year, nor do they always use the same nest within a nesting territory.

Individual raptor nests left unused for a number of years are frequently reoccupied, if all the nesting attributes which originally attracted a nesting pair to a location are still present. Nest sites are selected by breeding pairs for the preferred habitat attributes provided by that location.

Raptor nest buffer zones are established for planning purposes because the nest serves as the focal point for a nesting pair of raptors. The buffer should serve as a threshold of potential adverse effect on nest initiation and productivity. Actions proposed within these buffer zones are considered potentially impacting and therefore trigger the need for consideration of site-specific recommendations.

Seasonal (temporal) buffer zones are conservation measures intended to schedule potentially impacting activities to periods outside of the nesting season for a particular raptor species. These seasonal limitations are particularly applicable to actions proposed within the spatial buffer zone of a nest for short-duration activities such as pipeline or power line construction, seismic exploration activity, vegetative treatments, fence or reservoir construction, or permitted recreational events where subsequent human activity would not be expected to occur.

Spatial buffer zones are those physical areas around raptor nest sites where seasonal conservation measures or surface occupancy restrictions may be applied, depending on the type and duration of activity, distance and visibility of the activity from the nest site, and adaptability of the raptor species to disturbance. Surface occupancy restrictions should be used for actions that would involve human activities within the buffer zone for a long duration (more than one nesting season) and that would cause an occupied nest site to become unsuitable for nesting in subsequent years.

2.3.1 Unoccupied Nests

All activities: Surface-disturbing activities occurring outside of the breeding season (seasonal buffer) but within the spatial buffer would be allowed during a minimum 3-year nest monitoring period, as long as the activity would not cause the nest site to become unsuitable for future nesting, as determined by a wildlife biologist. Facilities and other permanent structures would be allowed, if they meet the above criteria. Occupied and unoccupied eagle nests are protected under the BGEPA. Occupied and unoccupied eagle nests cannot be legally removed unless a permit is issued by the USFWS.

Some examples of typical surface-disturbing actions occurring outside of the seasonal buffer, which may not be expected to affect nest production or future nesting suitability, would include pipelines, power lines, communication sites, recreation events, fence or reservoir construction, vegetative treatments, and other actions with discrete starting and ending times and for which subsequent human activity or heavy equipment operation within the spatial buffer would not be expected to occur, or could be scheduled outside of the seasonal buffer in subsequent years.

Surface-disturbing activities that would be expected to potentially affect nest production or nest site suitability include oil and gas facilities requiring regular maintenance; sand and gravel operations; road systems; wind energy projects; other actions requiring continual, random human activity; or heavy equipment operation during subsequent nesting seasons.

A nest site that does not exhibit evidence of use, such as greenery in the nest, fresh whitewash, obvious nest maintenance, or the observed presence of adults or young at the nest, for a period of 3 consecutive years (verified through monitoring), would be deemed abandoned, and all seasonal and spatial restrictions would cease to apply to that nest. All subsequent authorizations for permanent activities within the spatial buffer of the nest could be permitted. If the nest becomes

reoccupied after authorized activities are completed, conservation measures would be considered to reduce potential adverse effects and to comply with the MBTA and the BGEPA.

The 3-year nonuse standard varies from the Guidelines' suggested 7-year nonuse standard before declaring nest abandonment. This variation is based upon a similar standard that has been applied for over 20 years in two administrative areas within Utah. Empirical evidence would suggest that the 3-year nonuse standard has been effective in conserving raptor species. The 3-year standard has been applied without legal challenge or violation of "take" under the MBTA or the BGEPA.

Because prey base populations are known to be cyclic, and because raptor nest initiation or nesting success can be affected by drought and other random natural events, care should be taken when applying the 3-year nonuse standard. The 3-year nest occupancy monitoring requirement should be viewed as a minimum time period during those years of optimal raptor nesting conditions. During suboptimal raptor nesting years, when nesting habitat may be affected by drought, low prey base populations, fire, or other events, the monitoring standard should be increased to allow raptors the opportunity to reoccupy nesting sites when nesting conditions become more favorable.

2.3.2 Occupied Nests

All activities: Land use activities that would have an adverse impact to an occupied raptor nest would not be allowed within the spatial or seasonal buffer.

2.4 Consideration of Alternatives and Mitigation Measures

Alternatives, including denial of the proposal, should be identified, considered, and analyzed in a NEPA document any time an action is proposed within the spatial buffer zone of a raptor nest. Selection of a viable alternative that avoids an impact to nesting raptors should be selected over attempting to mitigate those impacts. If unavoidable impacts are identified, mitigation measures should be applied as necessary to mitigate adverse impacts of resource uses and development to nesting raptors. Monitoring of the effectiveness of the mitigation measures should be mandatory and should be included as a COA.

2.5 Specific Strategies to Be Implemented Regarding Other Resource Uses

The following are management strategies designed to reduce or eliminate potential conflicts between raptors and other resource uses. This is a list of examples and is not intended to be all-inclusive. In all cases, when an activity on BLM-administered or NFS lands is proposed and a NEPA document developed, the site-specific analysis process identified in Attachment 1 may be implemented to identify and either avoid or mitigate impacts to raptors from the proposal. These strategies apply to proposals generated by the BLM, USDA Forest Service, and other applicants.

2.5.1 Cultural Resources

Excavation and studies of cultural resources in caves and around cliff areas should be delayed until a qualified biologist surveys the area to be disturbed or impacted by the activity for the presence of raptors or nest sites. If nesting raptors are present, the project should be rescheduled to occur outside of the seasonal buffer recommended by the Guidelines.

2.5.2 Forestry and Harvest of Wood Products

Timber harvest would be subject to NEPA analysis and would be conducted in a manner that would avoid impacts to raptor nests. This could also apply to areas identified for wood gathering and firewood sales.

2.5.3 Hazardous Fuels Reduction and Habitat Restoration Projects

Hazardous fuels reduction projects and shrub-steppe restoration projects should be reviewed for possible impacts to nesting raptors. Removal of trees containing either stick nests or nesting cavities, through prescribed fire or mechanical or manual treatments, should be avoided.

It is important to note that certain raptor species are tied to specific habitat types. Consideration must be made on a site-specific basis when vegetation manipulation projects are proposed to determine which raptor species may benefit and which may be negatively affected by the vegetation composition post- treatment.

2.5.4 Livestock Grazing

Rangelands and riparian areas should be managed in a manner that promotes healthy, productive rangelands and functional riparian systems. Rangeland health assessments should be conducted on each grazing allotment, and rangeland guidelines should be implemented where rangeland health standards are not being met, to promote healthy rangelands.

Locations of camps and other temporary intrusions would be located in areas away from raptor nest sites during the nesting season. Placement of salt and mineral blocks would also be located away from nesting areas.

Season of use, kind of livestock, and target utilization levels of key species affect vegetative community attributes (percent cover, composition, etc.) and influence small mammal and avian species diversity and density. Although not all raptor species would be affected in the same way, livestock management practices that maintain or enhance vegetative attributes will preserve prey species density and diversity, which will benefit the raptor resource.

2.5.5 Off-Highway Vehicle Use

Special recreation management areas (SRMA) that are developed for off-highway vehicle (OHV) use would not be located in areas that have important nesting, roosting, or foraging habitat for raptors.

OHV use would be limited to designated roads and trails. Lands categorized as "open" for OHV use should not be in areas important to raptors for nesting, roosting, and foraging.

When proposals for OHV events are received, the area to be impacted would be surveyed by a qualified wildlife biologist to determine if the area is used by raptors. Potential conflicts would be identified and either avoided or mitigated prior to the issuance of any permit.

2.5.6 Realty

Lands proposed for disposal that include raptor nesting, roosting, or important foraging areas would be analyzed and evaluated for the relative significance of these resources before a decision is made for disposal or retention.

A priority list of important raptor habitat areas, especially for federally listed or state sensitive raptor species, on state and private lands should be developed and used as lands to be acquired by the BLM or USDA Forest Service when opportunities arise to exchange or otherwise acquire lands.

Lands and realty authorizations would include appropriate conservation measures to avoid and/or mitigate impacts to raptors.

2.5.7 Recreation

Development of biking trails near raptor nesting areas would be avoided.

Rock climbing activities would be authorized only in areas where there are no conflicts with cliffnesting raptors.

In high recreation use areas where raptor nest sites have been made unsuitable by existing disturbance or habitat alteration, mitigation should be considered to replace nest sites with artificial nest structures in nearby suitable habitat, if it exists, and consider seasonal protection of nest sites through fencing or other restrictions.

Dispersed recreation would be monitored to identify where this use may be impacting nesting success of raptors.

2.6 Bureau of Land Management Inventory and Monitoring

The BLM should cooperatively manage a raptor database with UDWR and the USFWS as part of the BLM corporate database. Raptor data should be collected and compiled utilizing the Utah Raptor Data Collection Standards developed by the BLM Utah State Office, so that personnel from other agencies can access the data. Appropriate protocols for survey and monitoring should be followed, when available. This database should be updated as new inventory and monitoring data become available. The data should also be forwarded to UDWR and the NHP, which has been identified as the central repository for raptor data storage for the State of Utah.

Use of seasonal employees and volunteers, as well as challenge cost share projects, should be used to augment the inventory and monitoring of raptor nests within a planning area, with the data entered into the abovementioned databases at the close of each nesting season. Project proponents, such as energy development interests, would be encouraged to participate and help support an annual raptor nest monitoring effort within their areas of interest.

Active nest sites should be monitored during all authorized activities that may impact the behavior or survival of the raptors at the nest site. A qualified biologist would conduct the monitoring and document the impacts of the activity to the species. A final report of the impacts of the project should be placed in the environmental assessment file, with a copy submitted to the NHP. The report would be made available for review and should identify what activities may affect raptor nesting success and should be used to recommend appropriate buffer zones for various raptor species.

As data are gathered and impact analyses are more accurately documented, adaptive management principles should be implemented. Authorization of future activities should take new information into account, better protecting raptors while potentially allowing more development and fewer restrictions, if data indicate that current restrictions are beyond those necessary to protect nesting raptors, or conversely indicate that current guidance is inadequate for protection of nesting raptors.

3 LITERATURE CITED

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APPENDIX H

Travel Management Plan Criteria



1 BUREAU OF LAND MANAGEMENT TRAVEL MANAGEMENT PLAN CRITERIA FOR AREA DESIGNATIONS

All decisions made in the travel planning process would apply only to public lands managed by the Bureau of Land Management (BLM) in Bears Ears National Monument (BENM) and would recognize current valid existing rights. Decisions regarding off-highway vehicle (OHV) travel would be consistent with the BLM's national OHV strategy.

In general, policy guidance in 43 Code of Federal Regulations 8343.1 lists the following OHV designation criteria that the BLM must meet in the travel planning process:

- 1. Cultural and natural resources: Designations must minimize damage to all cultural and natural resources; examples include historic and archaeological sites and soil, water, air, vegetation, and scenic values.
- 2. Wildlife: Designations must minimize harassment of wildlife and significant disruption of wildlife habitat with special attention given to protect endangered or threatened species and their habitats.
- 3. Conflict resolution: Designations must minimize conflicts between OHV use and other existing or proposed recreational uses to ensure the compatibility of such uses, taking into account noise and other factors.
- 4. Wilderness: Designations must not be located in officially designated wilderness areas or primitive areas, nor may they impair the wilderness suitability of lands under consideration for inclusion in the wilderness system (i.e., wilderness study areas).

In addition to the standard criteria listed in 8343.1, the designation of roads, trails, and areas within BENM must take into account the protection of BENM objects as described in Proclamation 10285.

2 BUREAU OF LAND MANAGEMENT PRELIMINARY TRAVEL MANAGEMENT PLAN CRITERIA FOR ROAD AND TRAIL DESIGNATIONS

Proclamation 9558, incorporated by reference into Proclamation 10285, requires that designation of *new* roads or trails for public motorized vehicle use must be limited to routes necessary for public safety or protection of BENM objects. Designation criteria for roads and trails will include all standard and Bears Ears Commission–specific criteria listed above, with additional designation criteria chosen in coordination with the Bears Ears Commission. Additional criteria may include, but is not limited to the following:

- Access: Designations must consider requirements to access culturally significant resources (such as American Indian sacred sites, traditional cultural properties, cultural landscapes, plant communities and gathering areas, wood gathering locations, and springs), recreational uses, facilities maintenance for both agency and permitted users, and rights-ofway.
- 2. State and private lands: Designations must consider the access and use needs for roads and trails within state and privately held inholdings and edge holdings, including legal access requirements based on valid and existing rights.

3.	Hazards: Designations must eliminate, mitigate, or minimize travel in areas of extreme natural or human-made hazards and separate uses in situations where safety factors present unacceptable risks (e.g., rifle ranges, open mines, and proposed campgrounds).

APPENDIX I

Supporting Data for Water Resources



Table I-1. Hydrologic Units

Hydrologic Unit Code 12	Name	Watershed Acres	Acres in Planning Area	Percentage of Watershed in Planning Area
140300050704	140300050704-Harts Draw	12,944	7,108	55%
140802010401	Allen Canyon	24,486	21,110	86%
140802010701	Arch Canyon	26,193	26,193	100%
140700010601	Armstrong Canyon	16,517	13,318	81%
140802010410	Black Rock Canyon-Cottonwood Wash	20,950	16,166	77%
140700010207	Black Steer Canyon-Dark Canyon	30,365	30,365	100%
140700010705	Blue Notch Canyon	13,377	1,137	9%
140300050703	Bobbys Hole Canyon-Harts Draw	14,790	4,871	33%
140700010407	Bowdie Canyon	18,711	17,613	94%
140802010405	Brushy Basin Wash	13,143	1,488	11%
140300051007	Buck Canyon-Colorado River	30,438	4,277	14%
140802010710	Buck Creek-San Juan River	17,151	8,487	49%
140300051002	Bull Canyon-Colorado River	32,151	1,106	3%
140802050202	Bullet Canyon-Grand Gulch	29,444	29,444	100%
140700010602	Burch Canyon-White Canyon Creek	26,643	22,188	83%
140700010401	Butler Wash	36,144	16,580	46%
140802010708	Butler Wash	35,731	34,299	96%
140700010406	Calf Canyon-Colorado River	20,797	1,281	6%
140802050408	Cedar Mesa-San Juan River	26,211	1,478	6%
140802050405	Cedar Point-San Juan River	16,266	7,616	47%
140700010604	Cheesebox Canyon-White Canyon	32,980	32,578	99%
140802010307	Chimney Rock Draw-Recapture Creek	17,714	802	5%
140802050601	Clay Hills Divide	16,656	14,930	90%
140802050204	Collins Canyon-Grand Gulch	21,776	21,776	100%
140700010608	Copper Point-White Canyon	39,483	16,342	41%
140300050809	Corral Pocket-Indian Creek	24,490	24,240	99%

Hydrologic Unit Code 12	Name	Watershed Acres	Acres in Planning Area	Percentage of Watershed in Planning Area
140802010402	Cottonwood Creek	30,277	28,781	95%
140802010510	Cow Canyon-San Juan River	29,442	2,961	10%
140700010402	Cross Canyon	11,599	9,409	81%
140300050807	Davis Canyon	15,260	8,030	53%
140802010704	Dog Tanks Draw-Comb Wash	19,364	19,364	100%
140300051004	Dripping Spring-Colorado River	22,469	10,662	47%
140802010403	Dry Wash	15,068	12,862	85%
140700010103	Fable Valley	14,673	14,673	100%
140700011007	Forgotten Canyon	12,069	5,851	48%
140700010607	Fortknocker Canyon-White Canyon	26,612	26,612	100%
140700010603	Fry Canyon	18,939	18,939	100%
140802050410	Government Bird Rock-San Juan River	31,523	8,735	28%
140700010605	Gravel Canyon	22,906	22,906	100%
140802010404	Hammond Canyon	17,884	17,884	100%
140802010705	Headwaters Fish Creek	32,639	32,639	100%
140300050701	Headwaters Harts Draw	22,532	222	1%
140300050803	Headwaters Indian Creek	23,371	10,385	44%
140700010901	Headwaters Moqui Canyon	18,174	12,538	69%
140700010202	Horse Pasture Canyon-Dark Canyon	13,199	13,199	100%
140802010408	Jekes Hole-Cottonwood Wash	16,591	6,151	37%
140700011003	Johnny Coldwater Spring-Cedar Canyon	16,122	16,119	100%
140802050407	Johns Canyon	21,351	20,098	94%
140802010301	Johnson Creek	15,542	1,233	8%
140802050201	Kane Gulch-Grand Gulch	18,789	18,789	100%
140300050806	Lavender Creek	20,981	15,285	73%
140700010208	Lean-To Canyon-Dark Canyon	12,871	9,978	78%
140802010509	Little Water Spring-San Juan River	19,617	335	2%

Hydrologic Unit Code 12	Name	Watershed Acres	Acres in Planning Area	Percentage of Watershed in Planning Area
140300051006	Lockhart Canyon	33,987	21,447	63%
140700010606	Long Canyon	13,564	13,564	100%
140700010206	Lost Canyon	18,934	18,934	100%
140700010704	Low Canyon-Red Canyon	15,761	1,114	7%
140700010102	Lower Beef Basin Wash	18,973	18,973	100%
140802050612	Lower Castle Creek	29,408	42	0%
140700010105	Lower Gypsum Canyon	12,252	8,098	66%
140802050404	Lower Lime Creek	26,016	22,366	86%
140300050804	Lower North Cottonwood Creek	17,393	17,393	100%
140300050903	Lower Salt Creek	21,908	2,952	13%
140700010904	Middle Moqui Canyon	17,892	5,764	32%
140700010409	Middle Point-Colorado River	16,565	8,216	50%
140300050902	Middle Salt Creek	23,807	465	2%
140802050607	Mikes Canyon	20,764	16,155	78%
140802050613	Monitor Mesa-San Juan River	15,680	0	0%
140802010702	Mule Canyon	14,517	14,517	100%
140300051005	Musselman Canyon-Colorado River	13,794	2,805	20%
140700010701	North Fork Red Canyon	29,089	924	3%
140700010903	North Gulch	13,225	9,581	72%
140802010706	Outlet Fish Creek	16,249	16,249	100%
140802050205	Outlet Grand Gulch	15,547	14,306	92%
140300050705	Outlet Harts Draw	9,910	6,703	68%
140700010203	Peavine Canyon	18,704	18,704	100%
140802010703	Picket Fork-Dry Wash	19,436	19,436	100%
140700010201	Poison Canyon	12,064	12,063	100%
140700010706	Rainbow Canyon-Red Canyon	22,759	246	1%
140700010404	Range Canyon-Colorado River	27,493	5,360	20%

Hydrologic Unit Code 12	Name	Watershed Acres	Acres in Planning Area	Percentage of Watershed in Planning Area
140802010409	Right Hand Fork Cottonwood Wash-Cottonwood Wash	25,950	9,752	38%
140802010707	Road Canyon	33,141	33,141	100%
140300050810	Rustler Canyon-Indian Creek	27,947	26,438	95%
140700011005	Sevenmile Creek-Colorado River	26,385	267	1%
140700010411	Sheep Canyon-Colorado River	31,443	5,083	16%
140802050409	Slickhorn Canyon	24,466	22,740	93%
140802050411	Slickhorn Pasture-San Juan River	29,491	8,360	28%
140700010702	South Fork Red Canyon	11,934	651	5%
140802010411	Spring Canyon-Cottonwood Wash	15,892	12,937	81%
140802050602	Steer Gulch	26,358	24,549	93%
140802050203	Step Canyon-Grand Gulch	29,833	29,815	100%
140300050801	Stevens Canyon	24,886	24,886	100%
140802010709	Sweet Springs-Comb Wash	21,977	18,887	86%
140802050406	The Goose Necks-San Juan River	17,236	3,890	23%
140300050808	The Island-Indian Creek	11,639	11,547	99%
140802050401	The Narrows-San Juan River	16,161	1,328	8%
140300050805	Titus Canyon-Indian Creek	17,742	17,742	100%
140700011004	Trail Canyon-Cedar Canyon	17,716	11,238	63%
140700010205	Trail Canyon-Dark Canyon	22,510	22,510	100%
140300050609	Trough Springs Canyon-Kane Springs Creek	32,258	38	0%
140300050702	Turner Water Canyon-Harts Draw	19,186	910	5%
140700010101	Upper Beef Basin Wash	15,494	15,494	100%
140700010104	Upper Gypsum Canyon	14,983	14,983	100%
140802050403	Upper Lime Creek	23,073	21,125	92%
140700010902	Upper Moqui Canyon	15,064	1,888	13%
140300050802	Upper North Cottonwood Creek	31,656	31,624	100%
140300050901	Upper Salt Creek	28,657	15,020	52%

Hydrologic Unit Code 12	Name	Watershed Acres	Acres in Planning Area	Percentage of Watershed in Planning Area
140700011008	Warm Springs Creek-Colorado River	11,188	1,434	13%
140802050402	West Fork Lime Creek	17,518	17,518	100%
140802010407	West Water Creek	18,892	92	0%
140802050603	Whirlwind Draw-San Juan River	26,563	11,544	43%
140802010406	Whiskers Draw-Cottonwood Wash	25,949	21,034	81%
140300051008	White Rim-Colorado River	19,859	1,852	9%
140700010204	Woodenshoe Canyon	32,415	32,415	100%
140700010403	Y Canyon-Colorado River	26,255	77	0%

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Table I-2. Hydrologic Unit Code 12 Watersheds and Area Available or Unavailable for Grazing

Watershed	Total Acreage	Percentage of Watershed						Acr	es within Bear	s Ears National M	onument Bounda	ary					
		in Planning Area		A			В			С			D			E	
			Available	Trailing Only	Unavailable	Available	Trailing Only	Unavailable	Available	Trailing Only	Unavailable	Available	Trailing Only	Unavailable	Available	Trailing Only	Unavailable
140300050704-Harts Draw	12,944	55%	5,459	1,019	0	5,459	1,019	0	5,459	1,019	0	3,491	0	2,987	4,765	0	1,714
Allen Canyon	24,486	86%	20,865	0	0	20,865	0	0	20,461	0	403	20,459	0	406	20,767	0	97
Arch Canyon	26,193	100%	19,370	0	6,165	19,050	0	6,485	16,512	0	9,022	16,512	0	9,022	19,370	0	6,165
Armstrong Canyon	16,517	81%	12,234	0	0	11,818	0	416	11,818	0	416	1,814	10,420	0	12,234	0	0
Black Rock Canyon-Cottonwood Wash	20,950	77%	13,712	0	0	13,712	0	0	13,712	0	0	13,712	0	0	13,712	0	0
Black Steer Canyon-Dark Canyon	30,365	100%	18,929	0	10,974	18,929	0	10,974	18,929	0	10,974	18,929	0	10,974	18,678	0	11,225
Blue Notch Canyon	13,377	8%	1,134	0	2	1,134	0	2	1,134	0	2	1,057	0	80	1,134	0	2
Bobbys Hole Canyon-Harts Draw	14,790	33%	2,857	1,692	0	2,857	1,692	0	2,857	1,692	0	2,859	63	1,629	1,717	0	2,833
Bowdie Canyon	18,711	94%	1,4418	0	3,191	14,418	0	3,191	14,418	0	3,191	14,418	0	3,191	14,417	0	3,192
Brashy Basin Wash	13,143	11%	1,488	0	0	1,488	0	0	1,488	0	0	1,488	0	0	1,488	0	0
Buck Canyon-Colorado River	30,438	14%	3,638	0	0	3,638	0	0	3,638	0	0	3,638	0	0	3,638	0	0
Buck Creek-San Juan River	17,151	49%	7,335	0	0	7,335	0	0	7,335	0	0	7,315	0	20	6,518	0	818
Bull Canyon-Colorado River	32,151	3%	1,105	0	0	1,105	0	0	1,105	0	0	1,105	0	0	1,105	0	0
Bullet Canyon-Grand Gulch	29,444	100%	22,987	0	4,985	22,987	0	4,985	22,987	0	4,985	20,847	2,199	4,925	22,987	0	4,985
Burch Canyon-White Canyon Creek	26,643	83%	21,056	0	0	21,056	0	0	21,056	0	0	16,493	4,562	0	21,056	0	0
Butler Wash	36,144	46%	45,116	0	240	41,751	0	3,605	41,751	0	3,605	25,252	0	20,104	28,372	0	16,984
Calf Canyon-Colorado River	20,797	6%	1,274	0	0	1,274	0	0	1,274	0	0	1,274	0	0	1,274	0	0
Cedar Mesa-San Juan River	26,211	6%	1,470	0	0	972	0	498	972	0	498	456	0	1,015	1,470	0	0
Cedar Point-San Juan River	16,266	47%	7,610	0	0	7,610	0	0	7,610	0	0	1,524	0	6,086	7,610	0	0
Cheesebox Canyon-White Canyon	32,980	99%	2,7685	0	1,804	27,685	0	1,804	27,685	0	1,804	27,685	0	1,804	27,685	0	1,804
Chimney Rock Draw-Recapture Creek	17,714	5%	373	0	0	373	0	0	373	0	0	373	0	0	357	0	16
Clay Hills Divide	16,656	90%	13,526	0	0	13,526	0	0	13,526	0	0	13,526	0	0	13,526	0	0
Collins Canyon-Grand Gulch	21,776	100%	18,366	0	3,233	18,366	0	3,233	18,366	0	3,233	16,762	0	4,837	18,366	0	3,233
Copper Point-White Canyon	39,483	41%	15,611	0	0	15,611	0	0	15,611	0	0	275	0	15,337	15,611	0	0
Corral Pocket-Indian Creek	24,490	99%	20,852	0	0	20,540	0	312	20,540	0	312	2,568	0	18,284	20,540	0	312
Cottonwood Creek	30,277	95%	28,261	0	0	28,163	0	99	28,163	0	99	28,163	0	99	28,258	0	3
Cow Canyon-San Juan River	29,442	10%	565	0	0	565	0	0	565	0	0	565	0	0	410	0	155
Cross Canyon	11,599	81%	7,481	0	623	7,481	0	623	7,481	0	623	7,481	0	623	7,453	0	650
Davis Canyon	15,260	53%	7,170	0	140	6,666	0	644	6,666	0	644	0	0	7,310	6,666	0	644
Dog Tanks Draw-Comb Wash	19,364	100%	17,338	0	38	17,338	0	38	17,026	0	350	14,340	0	3,036	17,266	0	110
Dripping Spring-Colorado River	22,469	47%	9,664	0	0	9,571	0	93	9,571	0	93	9,571	0	93	9,664	0	0
Dry Wash	15,068	85%	12,824	0	0	12,824	0	0	12,824	0	0	12,824	0	0	12,824	0	0
Fable Valley	14,673	100%	8,657	0	4,097	8,657	0	4,097	8,657	0	4,097	8,657	0	4,097	8,631	0	4,124

Watershed	Total Acreage	Percentage of Watershed						Acr	es within Bear	s Ears National M	onument Bounda	ary					
		in Planning Area		A			В			С			D			E	
			Available	Trailing Only	Unavailable	Available	Trailing Only	Unavailable	Available	Trailing Only	Unavailable	Available	Trailing Only	Unavailable	Available	Trailing Only	Unavailable
Forgotten Canyon	12,069	48%	5,273	0	0	5,273	0	0	5,273	0	0	5,273	0	0	5,052	0	222
Fortknocker Canyon-White Canyon	26,612	100%	20,118	0	2,768	20,118	0	2,768	20,118	0	2,768	5,268	0	17,618	20,118	0	2,768
Fry Canyon	18,939	100%	16,158	0	1,031	16,158	0	1,031	16,158	0	1,031	16,158	0	1,031	16,158	0	1,031
Government Bird Rock-San Juan River	31,523	28%	8,090	0	0	8,090	0	0	8,090	0	0	0	0	8,090	5,122	0	2,968
Gravel Canyon	22,906	100%	15,988	0	4,326	15,988	0	4,326	15,988	0	4,326	6,875	0	13,439	15,988	0	4,326
Hammond Canyon	17,884	100%	17,790	0	0	12,697	0	5,093	12,697	0	5,093	12,697	0	5,093	17,790	0	0
Headwaters Fish Creek	32,639	100%	23,988	0	5,441	23,988	0	5,441	23,988	0	5,441	23,965	0	5,464	23,988	0	5,441
Headwaters Harts Draw	22,532	1%	222	0	0	222	0	0	222	0	0	222	0	0	215	0	7
Headwaters Indian Creek	23,371	44%	9,658	249	0	9,658	249	0	9,658	249	0	9,658	249	0	7,538	34	2,336
Headwaters Moqui Canyon	18,174	69%	10,712	0	0	10,712	0	0	10,712	0	0	10,712	0	0	1,798	0	8,913
Horse Pasture Canyon-Dark Canyon	13,199	100%	13,199	0	0	12,752	0	446	12,752	0	446	7,961	0	5,238	2,762	0	10,436
Jekes Hole-Cottonwood Wash	16,591	37%	5,324	0	0	5,324	0	0	5,324	0	0	5,300	0	25	5,300	0	25
Johnny Coldwater Spring-Cedar Canyon	16,122	100%	14,334	0	0	14,334	0	0	14,334	0	0	14,334	0	0	5,940	0	8,394
Johns Canyon	21,351	94%	18,091	0	0	14,055	0	4,036	14,055	0	4,036	7,923	0	10,169	8,858	0	9,233
Johnson Creek	15,542	8%	1,233	0	0	1,233	0	0	1,233	0	0	1,233	0	0	1,233	0	0
Kane Gulch-Grand Gulch	18,789	100%	16,987	0	1,176	16,987	0	1,176	16,987	0	1,176	12,538	4,755	870	16,987	0	1,176
Lavender Creek	20,981	73%	11,128	0	2,393	11,128	0	2,393	11,128	0	2,393	0	2,665	10,856	11,128	0	2,393
Lean-To Canyon-Dark Canyon	12,871	78%	5,686	0	4,283	5,686	0	4,283	5,686	0	4,283	5,347	0	4,623	5,685	0	4,284
Little Water Spring-San Juan River	19,617	2%	320	0	0	320	0	0	320	0	0	320	0	0	178	0	143
Lockhart Canyon	33,989	63%	18,451	0	0	18,313	0	138	18,313	0	138	18,313	0	138	18,451	0	0
Long Canyon	13,564	100%	8,112	0	4,199	8,112	0	4,199	8,112	0	4,199	0	0	12,311	8,112	0	4,199
Lost Canyon	18,934	100%	14,123	0	3,208	14,123	0	3,208	14,123	0	3,208	13,029	0	4,303	14,123	0	3,208
Low Canyon-Red Canyon	15,761	7%	1,113	0	0	1,113	0	0	1,113	0	0	1,113	0	0	1,093	0	21
Lower Beef Basin Wash	18,973	100%	17,864	0	0	17,864	0	0	17,864	0	0	17,864	0	0	6,043	0	11,821
Lower Castle Creek	29,408	<1%	42	0	0	42	0	0	42	0	0	42	0	0	42	0	0
Lower Gypsum Canyon	12,252	66%	1,675	0	6,414	1,675	0	6,414	1,675	0	6,414	1,675	0	6,414	1,674	0	6,415
Lower Lime Creek	26,016	86%	19,589	0	0	19,589	0	0	19,589	0	0	17,307	0	2,282	19,589	0	0
Lower North Cottonwood Creek	17,393	100%	11,138	0	3,741	11,138	0	3,741	11,138	0	3,741	4,785	10,095	0	5,198	0	9,681
Lower Salt Creek	21,908	13%	2,301	0	0	2,301	0	0	2,301	0	0	2,235	0	66	2,301	0	0
Middle Moqui Canyon	17,892	32%	5,040	0	0	3,776	1,265	0	3,776	1,265	0	3,776	0	1,265	1,992	0	3,048
Middle Point-Colorado River	16,565	50%	6,440	0	1,758	6,440	0	1,758	6,440	0	1,758	6,440	0	1,758	6,426	0	1,772
Middle Salt Creek	23,807	2%	461	0	0	406	0	56	406	0	56	0	0	461	461	0	0
Mikes Canyon	20,764	78%	15,038	0	0	14,910	0	127	14,910	0	127	14,910	0	127	2,905	0	12,133

Watershed	Total Acreage	Percentage of Watershed						Acr	es within Bear	s Ears National M	onument Bounda	ary					
		in Planning Area		A			В			С			D			E	
			Available	Trailing Only	Unavailable	Available	Trailing Only	Unavailable	Available	Trailing Only	Unavailable	Available	Trailing Only	Unavallable	Available	Trailing Only	Unavailable
Monitor Mesa-San Juan River	15,680	<1%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mule Canyon	14,517	100%	11,093	0	1,943	11,093	0	1,943	11,093	0	1,943	11,093	0	1,943	11,093	0	1,943
Musselman Canyon-Colorado River	13,794	20%	2,776	0	0	2,052	0	725	2,052	0	725	2,052	0	725	2,776	0	0
North Fork Red Canyon	29,089	3%	917	0	0	917	0	0	917	0	0	917	0	0	917	0	0
North Gulch	13,225	72%	8,417	0	0	8,417	0	0	8,417	0	0	8,417	0	0	5,041	0	3,376
Outlet Fish Creek	16,249	100%	11,552	0	1,819	11,552	0	1,819	11,552	0	1,819	3,730	0	9,642	11,552	0	1,819
Outlet Grand Gulch	15,547	92%	11,238	0	2,977	11,238	0	2,977	11,238	0	2,977	2,760	0	11,456	11,238	0	2,977
Outlet Harts Draw	9,910	68%	5,381	0	0	5,381	0	0	5,381	0	0	1,145	0	4,236	5,381	0	0
Peavine Canyon	18,704	100%	18,704	0	0	18,704	0	0	18,704	0	0	13,899	0	4,805	6,091	0	12,613
Picket Fork-Dry Wash	19,436	100%	17,131	0	0	17,131	0	0	17,131	0	0	10,067	0	7,064	17,131	0	0
Poison Canyon	12,064	100%	12,064	0	0	12,064	0	0	12,064	0	0	12,064	0	0	2,923	0	9,141
Rainbow Canyon-Red Canyon	22,759	1%	246	0	0	246	0	0	246	0	0	246	0	0	54	0	192
Range Canyon-Colorado River	27,493	19%	3,844	0	1,395	3,844	0	1,395	3,844	0	1,395	3,844	0	1,395	3,800	0	1,439
Right Hand Fork Cottonwood Wash-Cottonwood Wash	25,950	38%	8,850	0	0	8,850	0	0	8,850	0	0	8,850	0	0	8,850	0	0
Road Canyon	33,141	100%	24,743	0	4,853	24,743	0	4,853	24,743	0	4,853	21,060	0	8,536	24,743	0	4,853
Rustler Canyon-Indian Creek	27,947	95%	22,806	0	0	20,277	0	2,530	20,277	0	2,530	19,495	0	3,311	20,277	0	2,529
Sevenmile Creek-Colorado River	26,385	1%	267	0	0	267	0	0	267	0	0	267	0	0	0	0	267
Sheep Canyon-Colorado River	31,443	16%	4,442	0	0	4,442	0	0	4,442	0	0	28	0	4,414	4,442	0	0
Slickhorn Canyon	24,466	93%	17,330	0	2,273	17,330	0	2,273	17,330	0	2,273	10,488	0	9,115	17,330	0	2,273
Slickhorn Pasture-San Juan River	29,491	28%	7,145	0	0	7,145	0	0	7,145	0	0	3,088	0	4,057	7,145	0	0
South Fork Red Canyon	11,934	5%	651	0	0	651	0	0	651	0	0	651	0	0	651	0	0
Spring Canyon-Cottonwood Wash	15,892	81%	6,489	0	0	6,489	0	0	6,489	0	0	6,489	0	0	6,489	0	0
Steer Gulch	26,358	93%	21,719	0	0	21,719	0	0	21,719	0	0	21,719	0	0	21,719	0	0
Step Canyon-Grand Gulch	29,833	100%	23,448	0	3,310	23,448	0	3,310	23,448	0	3,310	4,879	18,889	2,990	23,448	0	3,310
Stevens Canyon	24,886	100%	22,947	0	147	22,709	0	385	22,709	0	385	21,340	1,518	236	22,935	0	158
Sweet Springs-Comb Wash	21,977	86%	17,806	0	0	17,806	0	0	17,806	0	0	11,131	0	6,675	17,627	0	179
The Goose Necks-San Juan River	17,236	23%	3,879	0	0	2,344	0	1,535	2,344	0	1,535	0	0	3,879	3,879	0	0
The Island-Indian Creek	11,639	99%	8,306	0	516	8,306	0	516	8,306	0	516	7,859	516	447	8,306	0	516
The Narrows-San Juan River	16,161	8%	883	0	0	883	0	0	883	0	0	883	0	0	870	0	13
Titus Canyon-Indian Creek	17,742	100%	15,375	71	0	15,375	71	0	15,375	71	0	15,353	93	0	15,374	71	1
Trail Canyon-Cedar Canyon	17,716	63%	10,597	0	0	10,597	0	0	10,597	0	0	10,597	0	0	6,111	0	4,486
Trail Canyon-Dark Canyon	22,510	100%	22,227	0	0	22,227	0	0	22,227	0	0	19,835	0	2,393	5,809	0	16,419
Trough Springs Canyon-Kane Springs Creek	32,258	<1%	38	0	0	38	0	0	38	0	0	38	0	0	38	0	0
Turner Water Canyon-Harts Draw	19,186	5%	782	31	0	782	31	0	782	31	0	781	0	31	767	0	45

Watershed	Total Acreage	Percentage of Watershed						Ac	res within Bear	s Ears National M	onument Bounda	ary					
		in Planning Area		A			В			С			D			E	
			Available	Trailing Only	Unavailable	Available	Trailing Only	Unavailable	Available	Trailing Only	Unavailable	Available	Trailing Only	Unavailable	Available	Trailing Only	Unavailable
Upper Beef Basin Wash	15,494	100%	14,291	0	0	14,291	0	0	14,291	0	0	14,291	0	0	10,901	0	3,390
Upper Gypsum Canyon	14,983	100%	12,179	0	2,326	12,179	0	2,327	12,179	0	2,327	12,179	0	2,327	10,841	0	3,665
Upper Lime Creek	23,073	92%	19,450	0	0	19,450	0	0	19,450	0	0	16,193	0	3,257	19,450	0	0
Upper Moqui Canyon	15,064	13%	1,730	0	0	1,730	0	0	1,730	0	0	1,730	0	0	81	0	1,649
Upper North Cottonwood Creek	31,656	100%	31,559	0	0	31,559	0	0	31,559	0	0	29,941	191	1,427	13,580	0	17,979
Upper Salt Creek	28,657	52%	13,017	0	0	7,191	0	5,825	7,191	0	5,825	6,842	676	5,499	13,017	0	0
Warm Springs Creek-Colorado River	11,188	13%	1,433	0	0	1,433	0	0	1,433	0	0	1,433	0	0	911	0	522
West Fork Lime Creek	17,518	100%	15,569	0	0	15,569	0	0	15,569	0	0	15,502	0	67	15,569	0	0
West Water Creek	18,892	<1%	88	0	0	88	0	0	88	0	0	88	0	0	88	0	0
Whirlwind Draw-San Juan River	26,563	43%	10,266	0	0	10,266	0	0	10,266	0	0	10,266	0	0	9,884	0	382
Whiskers Draw-Cottonwood Wash	25,949	81%	18,816	0	0	18,816	0	0	12,739	0	6,076	12,739	0	6,076	18,816	0	0
White Rim-Colorado River	19,859	9%	1,527	0	0	255	0	1,272	255	0	1,272	255	0	1,272	256	0	1,272
Woodenshoe Canyon	32,415	100%	32,023	0	2	32,023	0	2	32,023	0	2	32,023	0	2	12,841	0	19,185
Y Canyon-Colorado River	26,251	<1%	0	0	77	0	0	77	0	0	77	0	0	77	0	0	77
Total Acreage	2,427,090	-	1,262,160	3,063	97,873	1,233,268	4,328	125,497	1,223,939	4,328	134,829	971,253	56,891	334,952	1,070,862	105	292,129

Table I-3. Hydrologic Unit Code 12 Watersheds and Associated Acreage of Recreation Management Zones

HUC 12 Watershed	Total Watershed Acreage	% of Total Watershed within							Acres w	ithin BENM	Boundary						
	Acreage	the Planning Area		Alternative A			Alternative	В		Alternative	С		Alternative I)		Alternative E	
			ERMA	RMZ	SRMA	ERMA	RMZ	SRMA	ERMA	RMZ	SRMA	ERMA	RMZ	SRMA	ERMA	RMZ	SRMA
140300050704-Harts Draw	12,944	55%	3,802.23	0	2,749.14	0	0	2,854.44	0	0	2,854.44	0	0	2,750.68	1,553.25	0	0
Allen Canyon	24,486	86%	4.56	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arch Canyon	26,193	100%	0	22,737.53	7,679.26	0	0	7,679.19	0	0	7,679.19	0	0	7,679.19	7,679.19	7,679.19	0
Armstrong Canyon	16,517	81%	11,398.45	325.95	855.63	10,899.22	0	712.45	10,899.22	0	712.45	429.03	0	1,114.86	925.05	3,122.31	0
Black Rock Canyon-Cottonwood Wash	20,950	77%	13,308.62	0	404.89	0	0	402.68	0	0	402.68	0	0	402.68	14,116.29	0	0
Black Steer Canyon-Dark Canyon	30,365	100%	18,378.83	0	11,427.86	18,420.37	0	0	18,420.37	0	0	11,406.23	0	0	29,806.81	0	0
Blue Notch Canyon	13,377	8%	1,136.55	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bobbys Hole Canyon-Harts Draw	14,790	33%	4,188.15	0	396.27	0	0	531.36	0	0	531.36	0	0	396.32	134.94	0	0
Bowdie Canyon	18,711	94%	14,420.91	0	3,192.22	0	0	0	0	0	0	0	0	0	17,613.12	0	0
Brushy Basin Wash	13,143	11%	137.22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Buck Canyon-Colorado River	30,438	14%	3,639.69	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Buck Creek-San Juan River	17,151	49%	3,108.16	2,383.92	4,178.16	0	0	2,201.43	0	0	2,201.43	0	0	2,196.32	5,953.00	92.01	0
Bull Canyon-Colorado River	32,151	3%	1,089.23	0	15.95	0	0	15.89	0	0	15.89	0	0	15.89	0	0	0
Bullet Canyon-Grand Gulch	29,444	100%	0	9,787.89	27,982.84	0	0	27,982.84	0	0	27,982.84	0	0	27,982.84	27,982.73	27,982.73	0
Burch Canyon-White Canyon Creek	26,643	83%	14,246.37	2,747.62	42.48	14,289.23	0	0.16	14,289.23	0	0.16	839.87	0	1,877.67	14,090.44	164.43	0
Butler Wash	36,144	46%	21,954.91	8,205.14	23,397.56	7.36	0	21,746.99	7.36	0	21,746.99	0	0	21,745.95	45,991.04	18,511.96	0
Calf Canyon-Colorado River	20,797	6%	1,279.82	0	0	0	0	0	0	0	0	0	0	0	1,279.82	0	0
Cedar Mesa-San Juan River	26,211	6%	132.05	0	1,331.79	419.33	0	1,052.24	419.33	0	1,052.24	0	0	1,052.23	1,052.23	511.57	0
Cedar Point-San Juan River	16,266	47%	1,266.51	0	5,656.62	7,008.74	0	607.17	7,008.74	0	607.17	415.00	0	607.17	607.17	1,979.88	0
Cheesebox Canyon-White Canyon	32,980	99%	28,695.35	0	793.30	28,209.23	0	0	28,209.23	0	0	2,167.81	0	0	27,211.45	2,281.28	0
Chimney Rock Draw-Recapture Creek	17,714	5%	367.21	0	7.17	0	0	17.87	0	0	17.87	0	0	17.87	207.73	0	0
Clay Hills Divide	16,656	90%	6,236.00	0	7,290.40	0	0	0	0	0	0	0	0	0	0	13,522.46	0
Collins Canyon-Grand Gulch	21,776	100%	0	8,416.76	21,598.26	0	0	21,105.92	0	0	21,105.92	0	0	21,105.89	21,105.85	21,598.71	0
Copper Point-White Canyon	39,483	41%	14,891.18	0	722.42	13,613.48	0	0	13,613.48	0	0	864.79	0	0	12,862.35	977.77	0
Corral Pocket-Indian Creek	24,490	99%	1,695.96	0	19,295.86	0	0	18,507.44	0	0	18,507.44	0	0	18,507.34	18,508.14	0	0
Cottonwood Creek	30,277	95%	1,895.74	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cow Canyon-San Juan River	29,442	10%	378.32	0	182.86	0	0	227.69	0	0	227.69	0	0	227.69	227.69	0	0
Cross Canyon	11,599	81%	5,172.62	0	2,930.92	2,936.33	0	0	2,936.33	0	0	0	0	0	8,103.47	0	0
Davis Canyon	15,260	53%	0	0	7,311.26	0	0	7,311.24	0	0	7,311.24	0	0	7,311.12	7,311.07	0	0
Dog Tanks Draw-Comb Wash	19,364	100%	0	6,448.07	17,061.02	0	0	17,061.31	0	0	17,061.31	0	0	17,700.97	17,700.55	17,698.27	0
Dripping Spring-Colorado River	22,469	47%	8,017.88	0	1,643.07	0	0	1,645.26	0	0	1,645.26	0	0	1,645.16	0	0	0
Fable Valley	14,673	100%	8,676.94	0	5,040.49	4,943.89	0	0	4,943.89	0	0	0	0	0	13,714.53	0	0
Forgotten Canyon	12,069	48%	5,274.01	0	0	0	0	0	0	0	0	0	0	0	5,274.01	0	0
Fortknocker Canyon-White Canyon	26,612	100%	21,589.18	0	1,277.79	16,003.08	0	0	16,003.08	0	0	1,577.93	0	0	13,675.15	3,084.75	0
Fry Canyon	18,939	100%	17,191.30	0	0	1,134.02	0	0	1,134.02	0	0	55.09	0	0	0.00	875.45	0
Government Bird Rock-San Juan River	31,523	28%	0	0	8,089.80	0	0	8,091.03	0	0	8,091.03	0	0	8,091.03	8,091.03	8,091.03	0

HUC 12 Watershed	Total Watershed	% of Total Watershed within							Acres w	ithin BENM	Boundary						
	Acreage	the Planning Area		Alternative A			Alternative E	3		Alternative	С		Alternative D)		Alternative E	
			ERMA	RMZ	SRMA	ERMA	RMZ	SRMA	ERMA	RMZ	SRMA	ERMA	RMZ	SRMA	ERMA	RMZ	SRMA
Gravel Canyon	22,906	100%	20,599.70	0	13.94	20,313.55	0	0	20,313.55	0	0	891.77	0	0	20,608.82	4.82	0
Hammond Canyon	17,884	100%	1,129.31	168.21	0	0	0	0	0	0	0	0	0	0	0	0	0
Headwaters Fish Creek	32,639	100%	0	1,265.44	29,475.17	0	0	29,074.23	0	0	29,074.23	0	0	29,074.22	29,073.75	28,221.80	0
Headwaters Harts Draw	22,532	1%	121.51	0	66.77	0	0	67.23	0	0	67.23	0	0	66.75	67.22	0	0
Headwaters Indian Creek	23,371	44%	2,417.84	0	1,218.17	0	0	1,771.91	0	0	1,771.91	0	0	1,211.99	1,772.06	0	0
Headwaters Moqui Canyon	18,174	69%	10,711.95	0	0	0	0	0	0	0	0	0	0	0	10,711.95	0	0
Jekes Hole-Cottonwood Wash	16,591	37%	5,320.84	0	0	0	0	0	0	0	0	0	0	0	1,898.08	1,168.58	0
Johnny Coldwater Spring-Cedar Canyon	16,122	100%	14,334.69	0	0	0	0	0	0	0	0	0	0	0	14,334.69	0	0
Johns Canyon	21,351	94%	0	0	18,090.24	0	0	18,090.50	0	0	18,090.50	0	0	18,090.50	18,090.82	18,090.82	0
Kane Gulch-Grand Gulch	18,789	100%	1.45	8,061.42	14,489.43	23.02	0	14,463.87	23.02	0	14,463.87	0	0	14,485.91	14,463.43	10,780.64	0
Lavender Creek	20,981	73%	785.20	0	12,737.39	0	0	12,765.74	0	0	12,765.74	0	0	12,765.74	12,765.74	0	0
Lean-To Canyon-Dark Canyon	12,871	78%	5,305.92	0	4,672.30	4,696.39	0	0	4,696.39	0	0	4,672.30	0	0	9,977.74	0	0
Little Water Spring-San Juan River	19,617	2%	166.20	0	146.37	0	0	154.62	0	0	154.62	0	0	154.62	154.62	0	0
Lockhart Canyon	33,987	63%	15,785.54	0	2,802.89	0	0	2,804.41	0	0	2,804.41	0	0	2,805.04	0	0	0
Long Canyon	13,564	100%	12,293.46	0	17.92	12,311.37	0	0	12,311.37	0	0	395.79	0	0	12,310.69	0.68	0
Lost Canyon	18,934	100%	15,405.19	0	1,925.04	17,330.24	0	0	17,330.24	0	0	1,925.04	0	0	17,330.23	0	0
Low Canyon-Red Canyon	15,761	7%	1,113.41	0	0	0	0	0	0	0	0	0	0	0	1,113.41	0	0
Lower Beef Basin Wash	18,973	100%	7,280.10	0	2,706.36	2,706.33	0	0	2,706.33	0	0	0	0	0	9,986.45	0	0
Lower Castle Creek	29,408	0%	42.42	0	0	0	0	0	0	0	0	0	0	0	0	42.42	0
Lower Gypsum Canyon	12,252	66%	7,055.58	0	1,042.80	1,042.80	0	0	1,042.80	0	0	0	0	0	8,098.39	0	0
Lower Lime Creek	26,016	86%	0.00	0	19,590.19	16,951.80	0	2,639.05	16,951.80	0	2,639.05	14,845.95	0	2,639.05	2,639.05	18,346.51	0
Lower North Cottonwood Creek	17,393	100%	1,253.19	0	9,872.11	0	0	9,963.39	0	0	9,963.39	0	0	9,963.88	9,965.86	0	0
Lower Salt Creek	21,908	13%	0	0	2,302.19	0	0	111.89	0	0	111.89	0	0	111.89	111.89	0	0
Middle Moqui Canyon	17,892	32%	5,041.42	0	0	0	0	0	0	0	0	0	0	0	5,041.42	0	0
Middle Point-Colorado River	16,565	50%	7,356.18	0	860.07	0	0	0	0	0	0	0	0	0	8,216.25	0	0
Middle Salt Creek	23,807	2%	58.21	0	406.44	0	0	406.44	0	0	406.44	0	0	406.43	464.64	0	0
Mikes Canyon	20,764	78%	14,878.93	0	0	0	0	0	0	0	0	0	0	0	0	14,878.93	0
Monitor Mesa-San Juan River	15,680	0%	0.26	0	0	0	0	0	0	0	0	0	0	0	0	0.26	0
Mule Canyon	14,517	100%	0.00	4,323.05	12,240.17	0	0	12,240.17	0	0	12,240.17	0	0	12,239.83	12,239.83	12,238.70	0
Musselman Canyon-Colorado River	13,794	20%	2,742.31	0	32.71	0	0	32.70	0	0	32.70	0	0	32.70	0	0	0
North Fork Red Canyon	29,089	3%	916.96	0	0	0	0	0	0	0	0	0	0	0	0	536.14	0
North Gulch	13,225	72%	8,419.77	0	0	0	0	0	0	0	0	0	0	0	8,419.77	0	0
Outlet Fish Creek	16,249	100%	0	313.77	13,366.65	0	0	13,366.62	0	0	13,366.62	0	0	13,366.61	13,366.61	13,366.61	0
Outlet Grand Gulch	15,547	92%	0	10,958.33	14,215.92	0	0	14,169.26	0	0	14,169.26	0	0	14,169.26	14,169.26	14,215.92	0
Outlet Harts Draw	9,910	68%	728.42	0	4,740.31	0	0	4,747.77	0	0	4,747.77	0	0	4,747.76	4,261.28	0	0
Peavine Canyon	18,704	100%	0	144.86	0	0	0	0	0	0	0	0	0	0	0	0	0
Picket Fork-Dry Wash	19,436	100%	0	2,507.80	17,377.72	0	0	17,128.96	0	0	17,128.96	0	0	17,128.96	17,128.96	17,128.86	0

HUC 12 Watershed	Total Watershed Acreage	% of Total Watershed within							Acres v	within BENM	Boundary						
	Acreage	the Planning Area				Alternative	В		Alternative	С		Alternative [)		Alternative E		
			ERMA	RMZ	SRMA	ERMA	RMZ	SRMA	ERMA	RMZ	SRMA	ERMA	RMZ	SRMA	ERMA	RMZ	SRMA
Rainbow Canyon-Red Canyon	22,759	1%	245.72	0	0	0	0	0	0	0	0	0	0	0	245.72	0	0
Range Canyon-Colorado River	27,493	19%	5,246.58	0	0	0	0	0	0	0	0	0	0	0	5,246.58	0	0
Right Hand Fork Cottonwood Wash- Cottonwood Wash	25,950	38%	9,490.25	0	0	0	0	0	0	0	0	0	0	0	9,490.25	0	0
Road Canyon	33,141	100%	0	40.97	29,602.57	0	0	29,602.57	0	0	29,602.57	0	0	29,602.48	29,602.46	29,602.45	0
Rustler Canyon-Indian Creek	27,947	95%	2,122.80	0	21,150.98	0	0	2,458.84	0	0	2,458.84	0	0	2,458.84	1,692.70	0	0
Sevenmile Creek-Colorado River	26,385	1%	267.14	0	0	0	0	0	0	0	0	0	0	0	267.14	0	0
Sheep Canyon-Colorado River	31,443	16%	3,647.38	0	797.56	4,445.02	0	0	4,445.02	0	0	795.58	0	0	4,444.89	0	0
Slickhorn Canyon	24,466	93%	0	0	19,605.40	0	0	19,602.79	0	0	19,602.79	0	0	19,602.57	19,603.32	20,187.34	0
Slickhorn Pasture-San Juan River	29,491	28%	0	572.94	7,143.20	0	0	6,195.83	0	0	6,195.83	0	0	6,195.59	6,194.94	7,196.24	0
South Fork Red Canyon	11,934	5%	650.51	0	0	0	0	0	0	0	0	0	0	0	0	1.10	0
Spring Canyon-Cottonwood Wash	15,892	81%	5,049.94	0	1,406.51	0	0	3.86	0	0	3.86	0	0	3.86	6,486.93	0	0
Steer Gulch	26,358	93%	4,748.99	842.38	16,971.54	0	0	949.82	0	0	949.82	0	0	949.82	949.82	19,950.46	0
Step Canyon-Grand Gulch	29,833	100%	2,161.77	6,180.56	24,597.70	14.82	0	24,589.56	14.82	0	24,589.56	0	0	24,429.90	24,426.29	25,225.70	0
Stevens Canyon	24,886	100%	3,392.36	0	213.76	0	0	391.78	0	0	391.78	0	0	391.79	391.79	0	0
Sweet Springs-Comb Wash	21,977	86%	0	5,347.66	17,802.15	10.62	0	15,344.39	10.62	0	15,344.39	10.62	0	15,343.86	15,343.86	15,219.62	0
The Goose Necks-San Juan River	17,236	23%	414.72	0	3,442.36	2,255.56	0	1,624.26	2,255.56	0	1,624.26	0	0	1,624.26	1,624.26	506.45	0
The Island-Indian Creek	11,639	99%	3,271.88	0	5,549.64	0	0	8,820.22	0	0	8,820.22	0	0	5,550.07	8,820.20	0	0
The Narrows-San Juan River	16,161	8%	0	102.86	871.28	786.90	0	95.88	786.90	0	95.88	786.89	0	95.88	95.88	789.25	0
Titus Canyon-Indian Creek	17,742	100%	9,652.47	0	3,520.29	0	0	6,222.41	0	0	6,222.41	0	0	3,520.29	6,222.41	0	0
Trail Canyon-Cedar Canyon	17,716	63%	10,599.60	0	0	0	0	0	0	0	0	0	0	0	10,599.60	0	0
Trail Canyon-Dark Canyon	22,510	100%	1,920.16	0	0.44	0.49	0	0	0.49	0	0	0.44	0	0	1,920.60	0	0
Trough Springs Canyon-Kane Springs Creek	32,258	0%	0.95	0	19.82	0	0	19.82	0	0	19.82	0	0	19.82	0	0	0
Turner Water Canyon-Harts Draw	19,186	5%	908.95	0	0	0	0	745.69	0	0	745.69	0	0	0	745.72	0	0
Upper Beef Basin Wash	15,494	100%	5,145.49	0	2,901.74	2,901.79	0	0	2,901.79	0	0	0	0	0	8,047.28	0	0
Upper Gypsum Canyon	14,983	100%	4,007.76	0	10,496.13	10,523.19	0	0	10,523.19	0	0	0	0	0	14,503.88	0	0
Upper Lime Creek	23,073	92%	0	43.39	19,447.62	9,181.35	0	10,268.27	9,181.35	0	10,268.27	9,181.35	0	10,268.27	10,268.21	19,449.57	0
Upper Moqui Canyon	15,064	13%	1,729.91	0	0	0	0	0	0	0	0	0	0	0	1,729.91	0	0
Upper North Cottonwood Creek	31,656	100%	373.17	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Upper Salt Creek	28,657	52%	10,937.99	0	0	0	0	0	0	0	0	0	0	0	10,090.81	0	0
Warm Springs Creek-Colorado River	11,188	13%	1,433.58	0	0	0	0	0	0	0	0	0	0	0	1,433.58	0	0
West Fork Lime Creek	17,518	100%	0	0	15,568.27	9,148.88	0	6,419.41	9,148.88	0	6,419.41	9,148.88	0	7,056.31	7,056.25	16,205.17	0
West Water Creek	18,892	0%	88.14	0	0	0	0	0	0	0	0	0	0	0	88.14	0	0
Whirlwind Draw-San Juan River	26,563	43%	6,312.28	0	3,954.50	0	0	0	0	0	0	0	0	0	0	10,266.62	0
Whiskers Draw-Cottonwood Wash	25,949	81%	7,288.38	7,118.84	3,938.07	0	0	5,070.23	0	0	5,070.23	0	0	5,067.26	5,067.42	5,067.42	0
White Rim-Colorado River	19,859	9%	0	0	1,528.48	0	0	0	0	0	0	0	0	0	0	0	0
Woodenshoe Canyon	32,415	100%	4,161.88	0	2.13	3,974.69	0	0	3,974.69	0	0	2.13	0	0	4,164.12	0	0
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HUC 12 Watershed	Total Watershed Acreage	% of Total Watershed within	Acres within BENM Boundary														
	Notougo	the Planning Area	Alternative A			Alternative B		Alternative C		Alternative D		Alternative E					
		•	ERMA	RMZ	SRMA	ERMA	RMZ	SRMA	ERMA	RMZ	SRMA	ERMA	RMZ	SRMA	ERMA	RMZ	SRMA
Y Canyon-Colorado River	26,255	0%	77.18	0	0	0	0	0	0	0	0	0	0	0	77.18	0	0

APPENDIX J

Cumulative Actions



Table J-1. BLM Reasonably Foreseeable Future Actions for Cumulative Impacts Analysis

Action or Project	Description	Disturbance or Description of Impacts
House on Fire Trailhead (DOI-BLM-UT-Y020-2020-0023-EA)	Improving a parking area; mostly on slickrock. The area is used for hiking and backpacking only.	Approximately 2.0 acres on existing disturbance.
Indian Creek Allotment Range Improvements (DOI-BLM-UT-Y020-2018-0054-EA)	Construction of 13 earthen reservoirs and five rangeland fences on the Indian Creek allotment to hold surface water runoff to provide reliable water, facilitate livestock distribution, and improve control of grazing patterns and forage use levels.	Approximately 2.5 acres of disturbance.
Reauthorize existing Special Recreation Permits (SRPs)	Several motorized, backpacking, bicycling, hunting, and shuttle SRPs.	Negligible. All SRPs require holders to "tread lightly, including practices such as pack everything out and stay on designated routes."
Bureau of Land Management (BLM) Monticello Field Office resource management plan	Continued land management under the 2008 Bureau of Land Management Monticello Field Office Record of Decision and Approved Resource Management Plan.	Monticello Field Office planning area management and reasonably foreseeable development as disclosed in the Monticello Proposed RMP and Final EIS.
U.S. Department of Agriculture Forest Service Manti-La Sal land and resource management plan.	Continued land management under the 1986 Land and Resource Management Plan: Manti-LaSal National Forest	Manti-La Sal National Forest planning area management and reasonably foreseeable development.
Bluff River Trail right-of-way (ROW)	Issuing BLM a ROW for the land where the trail will go.	No disturbance associated with the ROW.
Bluff River Trail (DOI-BLM-UT-Y020-2017-0001-EA)	Construct, maintain, and designate 6.7 miles of trails on BLM-administered lands as part of a greater 10.6-mile Bluff River Trail system.	Creation of 6.7 miles of trail on BLM-administered lands.
Kane Gulch Ranger Station battery storage upgrade (DOI-BLM-UT-Y020-2023-0011-CX)	Upgrade battery storage area with walls, staircase, and new door.	0.01 acre of disturbance.
TY Cattle Company (UTU-96221)	Temporary access to Utah Trust Lands to drill two water wells for cattle in Red Canyon. Troughs would be added.	Outside of Planning Area; approximately 0.73 acre of disturbance.
Utah Department of Transportation (UDOT) Bluff material site environmental assessment	Land transfer to UDOT for a gravel pit.	Outside of Planning Area; 119.58 acres o disturbance.
Temporary access road to state land (UTU-96194)	Temporary access road to state land to drill a livestock water well at Fry Canyon, Utah.	Approximately 0.15 acre of temporary disturbance.
2023 ROW renewals (DOI-BLM-UT-Y020-2023-0015-CX)	Renew or reissue ROW grants that are due to expire in 2023.	Outside of Planning Area; no new disturbance.
Emergency repair: UDOT San Juan Bridge repair	Build cofferdam around two bridge piers to allow improvements to structures. Temporary use of disturbed areas between campground and bridge for staging.	3.64 acres of disturbance.
Citizens Upper Horse Flat communication site lease renewal (UTU-66107) (DOI-BLM-UT-Y020-2024-0001-CX)	Renewal of lease with no new disturbance.	Outside of Planning Area; no new disturbance.
Exploratorium film permit	5 days of use leading up to filming the solar eclipse.	No new disturbance; using a previously disturbed area.
University of Massachusetts Reburial (DOI-BLM-UT-Y020-2023-0009-CX)	Reburial of ancestral remains in a previously disturbed area.	Using a previously disturbed area; less than 1 acre of disturbance.

Action or Project	Description	Disturbance or Description of Impacts			
Aneth D-212X oil and gas well application for permit to drill (DOI-BLM_UT-Y020-2023-0010-EA)	Elk Petroleum would drill a new well on an existing well pad. Additional disturbance of 1.5 acres, reclaimed back to 0.5 acre.	Outside of Planning Area; approximately 1.5 acres of disturbance.			
ROW UTU-96101 for geotechnical test boreholes	Proposal to drill two geotechnical test boreholes to evaluate suitability for a culinary water storage tank at Fry Canyon.	0.25 acre of disturbance.			
Water tank and associated pipeline for culinary water use	Proposal to construct a 300,000-gallon water storage tank on a hill with 1,426 feet of 10-inch-diameter polyethylene pipe.	1.9 acres of disturbance.			
Cottonwood Wash bridge replacement	UDOT would like to replace a bridge structure after it was damaged in a storm.	Working on designs to limit the amount of disturbance.			
Colorado Mountain College SRP amendment	Amendment of SRP to include guided backpacking along designated routes.	No new disturbance.			
Renewal of ROW UTU-65892 for water pipeline (DOI-BLM-UT-Y020-2022-0037-CX)	Renewal of ROW for existing water pipeline.	No new disturbance.			
Owens Dugout permit renewal	Renewal of grazing permit.	Outside of Planning Area; no new disturbance.			
East League Livestock water wells (DOI-BLM-UT-Y020-2020-0037-CX)	Drilling of two livestock water wells.	2 acres in a previously disturbed area for the wells.			
Utah State University research ROW categorical exclusion	Research project on Criollo cattle and drought tolerance for 3 years.	Less than 0.001 acre would be disturbed during soil sampling and areas with exclosures would be reclaimed.			
Flats water wells and Kane Gulch fence	Construction of three water wells with troughs and one with a pipeline, and fence to keep cows out of Kane Gulch.	Approximately 1.25 acres of disturbance.			
Cave Canyon water wells (DOI-BLM-UT-Y020-2022-0039-EA)	Drill two wells on allotment. Site 1 is an old, previously disturbed well pad. Site 2 is in the corner of the allotment where cattle have concentrated and where water has been hauled in the past.	Outside of Planning Area; approximately 2 acres of disturbance.			
Red Canyon water wells	Drilling 5 water wells and one rangeland fence on the Lake Canyon allotment in the Red Canyon Pasture to improve livestock control and distribution.	Outside of Planning Area; 3.8 acres of new disturbance.			
Beef Basin and Dark Canyon Plateau range improvements	Drilling four water wells and constructing one livestock reservoir on the Dark Canyon Plateau pasture of the Indian Creek allotment. Also includes constructing two livestock fences in the Beef Basin pasture. The Ruin Canyon fence would be approximately 650 feet long, and the Calf Canyon fence would be approximately 1,704 feet long.	Approximately 1.85 acres of disturbance.			
North Cottonwood toilet construction and installation (DOI-BLM-UT-Y020-2022-0009-DNA)	Install two toilets, one in the Bridger Jack dispersed camping area, and one at the intersection of State Route 211 and the North Cottonwood Road.	Approximately 0.03 acre of disturbance.			
Salt Creek Trail reconstruction	Reconstruct approximately 1,000 feet of the Salt Creek Trail.	Negligible disturbance. Repairs would be made on an existing trail and may include short reroutes and the addition of stabilization features.			

Action or Project	Description	Disturbance or Description of Impacts				
Shay Mesa retreatment and maintenance environmental assessment (DOI-BLM-UT-Y020-2022-0006-EA)	Fuels reduction retreatment and maintenance of 2,500 acres within previously treated lands in the Shay Mesa vicinity. Fuels treatments would consist of hand treating via lop and scatter of pinyon and juniper saplings that are attempting to reestablish within the area.	No new disturbance; 2,500 acres of previously treated land.				
Summit Operating, LLC (Summit), pipeline ROW	Summit submitted ROW application proposing the construction, operation, maintenance, and termination of a new natural gas pipeline. The pipeline would generally run through Montezuma Canyon, parallel to County Road B146, through federal, state, and private lands. The pipeline would connect Summit's existing well at Cactus Park 8-23-36-24, on private land, to their existing surface pipeline located on state land at SLM Section 2, Township 37 South, Range 24 East.	Outside of Planning Area; approximately 7.52 acres of disturbance.				
Mancos Mesa ROW access	Authorize access across BLM- administered lands on Mancos Mesa for gaining entry to six Utah Trust Lands sections in order to perform maintenance on existing stock ponds as well as drilling and development of new water wells.	Approximately 8 acres of disturbance.				
Cactus Park project	Seed, machine masticate, lop, and pull back pinyon and juniper for hazardous fuels and habitat restoration purposes.	Outside of Planning Area; approximately 3,098 acres of treatment.				
Utah Backcountry Pilots Association Dark Canyon Airstrip UTU-94768 (DOI-BLM-UT-Y020-2021-0034-EA)	Utah Backcountry Pilots Association proposes to rehabilitate the "Dark Canyon South Landing Strip."	Reconstruction of the landing strip that would be 40 feet wide and 2,000 feet long.				
Motorized event SRPs in the Arch Canyon Recreation Management Zone (DOI-BLM-UT-Y020-2021-0016-EA)	Renew existing SRPs for Red Rock Four Wheelers and Jeep Jamboree USA to provide guided commercial four-wheel drive (4WD) vehicle events on BLM-designated routes within Bears Ears National Monument (BENM) at Arch Canyon and Hotel Rock.	No expected surface disturbance.				
Slickhorn allotment water wells (DOI-BLM-UT-Y020-2021-0008-EA)	Drilling three water wells for livestock on the Slickhorn allotment.	Approximately 0.75 acre of redisturbance.				
Red House Cliffs water wells (DOI-BLM-UT-Y020-2020-0029-EA)	Drilling six water wells on the Lake Canyon allotment in the vicinity of Red House Cliffs.	Approximately 1.5 acres of re-disturbance.				
Lockhart allotment range improvements	Drilling one water well, developing one spring, and constructing three fences in Lockhart Basin.	Outside of Planning Area; approximately 0.25 acre of re-disturbance.				
Hamburger Rock Campground improvements and expansion (DOI-BLM-UT-Y020-2021-0017-EA)	Renovate and expand the Hamburger Rock Campground to respond to the growth of camping and a shift in user demand for larger campsites to accommodate multiple recreational vehicles (RVs) and larger vehicles.	Approximately 2 acres of new disturbance.				
Goosenecks campgrounds and trails	Utah Division of Parks and Recreation proposal to expand Goosenecks Campground onto BLM-administered lands and develop mountain bike and hiking trails.	Approximately 12 acres of new disturbance.				
Alkali Point	Common garden with U.S. Geological Survey.	Early planning stages.				

Action or Project	Description	Disturbance or Description of Impacts			
Guzzler maintenance proposal	Replacement of three defunct systems. May include a slightly larger footprint to update systems to larger capacity.	Less than 1 acre of disturbance.			
Bighorn sheep habitat project	Vegetation treatments of top of the mesas around Red Canyon, Jacobs Chair, Tables of the Sun, and White Canyon. Goal would be to increase forage vegetation for bighorn sheep utilizing prescribed burn, lop and scatter, and mulching.	Early planning stages.			
Indian Creek water BDA and erosion mitigation	Construction of stream control structures within water channels to slow water down as it goes through the watershed, reduce the amount of erosion, and increase the amount of riparian vegetation. Partnership with the Nature Conservancy.	Early planning stages.			
Horse Canyon reservoir and water tank	Water development for livestock use.	Outside of Planning Area; early planning stages.			
Black Steer reservoir	Water development for livestock use.	Outside of Planning Area; early planning stages.			
Recapture Reservoir boat ramp	Paving the boat ramp and parking area on the south side.	Outside of Planning Area; early planning stages.			
Daneros Mine expansion (DOI-BLM-UT-Y020-2016-0001-EA)	Expansion of facilities at the Daneros Mine.	Outside of Planning Area; 46 acres of surface disturbance.			
San Juan River side channel restoration	Removal of Russian olive on active San Juan River floodplain.	Outside Planning Area; 27 acres of seeding and mastication of Russian olive that are previously frill cut.			
Utah Trust Lands Administration land exchange	The proposed swap would see 130,000 acres in BENM currently managed by the Utah Trust Lands Administration turned over to federal agencies.	No new disturbance.			
Red Canyon material collection (DOI-BLM-UT-Y020-2023-0013-CX)	Southeastern Utah – Museum of the American West proposal to collect float (loose stones not connected to outcropping) to be used as decorative stone for a museum in Blanding, Utah.	Outside of Planning Area; no new disturbance.			
Cold Snap SRP amendment	Amendment of current permit for commercial photography company to include two new areas.	Outside of Planning Area; No new disturbance.			
Creek Pasture Campground fencing project	Construction of range fence on BLM and Utah Trust Lands.	Less than 1 acre.			
Lockhart and Hurrah Pass grazing permit renewal	Renewal of existing grazing permit for 10 years.	No new disturbance.			
Rim Tours SRP transfer of ownership	Transfer of ownership for the Rim Tours SRP.	No new disturbance.			

Table J-2. USDA Forest Service Reasonably Foreseeable Future Actions for Cumulative Impacts Analysis

Action or Project	Description	Disturbance or Description of Impacts				
North Elk Ridge forest health project	Prescribed fire treatment in ponderosa pine and aspen/mixed conifer forests.	Prescribed understory fire within 7,500 acres of ponderosa pine, 5,200 acres of aspen/mixed conifer; moderate to high intensity prescribed fire on 40 to 80% of acreage.				

Action or Project	Description	Disturbance or Description of Impacts
Mormon Pasture Mountain wildlife habitat improvement project	Use prescribed fire in ponderosa pine/oak type forest to increase diversity in vegetation and age class structure and reduce continuity of existing vegetative fuels.	Hand/mechanical pre-treatment and prescribed fire within 1,915 acres.
Maverick Point project	Commercial timber, ponderosa pine thinning and stand improvement, prescribed fire.	Early planning stages.
Abajo-BENM watershed restoration project	Spring and riparian restoration using exclosure fencing, seeding/planting, PALS, and other site-specific techniques.	10 sites within BENM over next 3 years.
South Elk Ridge aspen restoration project	Thinning and prescribed fire treatments in mixed ponderosa pine/aspen.	Early planning stages.
Dark Canyon Wilderness/Peavine Corridor	Manage motorized route in Dark Canyon Wilderness; may include realignment or closure.	Early planning stages. Approximately 3 miles of road associated with the Peavine Corridor in Dark Canyon.
Special use permit: paleontology	Survey and excavate paleontological resources.	Less than 1 acre of ground disturbance.
Moab-Monticello U.S. Department of Energy Defense-Related Uranium Mines and abandoned mine lands project	Abate hazards and rehabilitate abandoned mine lands.	Rehabilitation activity to take place on approximately 20 sites (e.g., fencing, adit closure, water capture).
Special use permits: recreation events/outfitter-guides	Permits for recreation events and outfitter- guides (hunting, hiking and backpacking, motorized and non-motorized).	Use on designated roads and trails and at specific sites.
Range: maintenance of existing improvements	Maintain fences, stock ponds.	Existing facilities.
Ongoing road maintenance	Regular road maintenance.	Existing roads.
Kigalia Guard Station	Modernize facilities and design an education center and conference area for Tribal parties and youth with supporting amenities (i.e., bunkhouses, water/sewer, storage, camping and picnic area).	Approximately 50–160 acres (pending final design)

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APPENDIX K

Assessment, Inventory, and Monitoring Data



1 SUMMARY

The Assessment, Inventory, and Monitoring Strategy: For Integrated Renewable Resources Management (AIM strategy) was developed in 2011 (Toevs et al. 2011) to provide a standardized approach for measuring natural resource condition and trend on BLM-administered lands. Quantitative data collected with the standardized AIM methods are used to identify the status and trend of terrestrial and lotic (aquatic) indicators. These indicators inform the condition and trend of aquatic and upland resources and can support management decisions at multiple spatial scales (Grant-Hoffman et al. 2021).

The BLM analyzed data from AIM observations collected between 2013 and 2022 across terrestrial and lotic indicators. As a tenant of the AIM strategy, these observations were integrated and assessed with multiple other data sources including remote sensing, range trend, and Utah Department of Environmental Quality (DEQ) water quality assessments. The initial analysis was at the HUC 10 scale but due to complex terrain and challenges of making management decisions at the HUC 10 scale, the analysis was shifted to focus on the pasture or allotment scale.

AIM data consisted of 139 terrestrial plots and 30 lotic AIM reaches. After analyzing both terrestrial and lotic indicators as further described below, the BLM identified areas with a high departure from reference conditions. Areas were identified by evaluating lotic and terrestrial AIM data collected, the number of indicators that were departed, the degree of departure from expected conditions, and departure across both terrestrial and lotic measures. Areas were prioritized and recommended for closure or trailing only in Alternative D when multiple lines of evidence showed similar trends (e.g., terrestrial AIM or remote sensing showing high departure and range trend in a downward trend). Areas were also selected if lotic AIM data and/or DEQ water quality assessments showed high levels of departure even if terrestrial data did not show high levels of departure. Areas were not included where recent changes in management that are expected to improve conditions had occurred or been authorized after data had been collected to allow time for these expected improvements to occur. While identifying areas and indicators that are departed from expected conditions for any single indicator is based on the statistical analysis described below, identifying allotments or pastures for closure or trailing only was ultimately based on professional expertise when considering all available information.

2 TERRESTRIAL ASSESSMENT, INVENTORY, AND MONITORING ANALYSIS

Prior to assessing the overall land health at each terrestrial AIM plot, benchmarks were needed for each of the 10 parameters related to land health standard 1. Benchmark values were established at either the 25th (parameters where a lower value is worse [e.g., perennial grass cover]) or 75th percentile (parameters where a higher value is worse [e.g., bare soil cover]) of all terrestrial AIM data points of the Semiarid Benchlands/Canyonlands and Arid Canyonlands Ecoregion (L4 20c and 20d, respectively) sampled within the respective LANDFIRE biophysical setting (BPS) group of the AIM plot in question. For example, an AIM plot sampled in Colorado Plateau Pinyon-Juniper Shrubland would be compared against all L4 20c/20d terrestrial AIM plots in that BPS group. Indicator values that were below the 25th or above the 75th percentile threshold (depending on the parameter) were deemed to be not meeting expected ecological condition of its respective BPS group.

The AIM plots were subsequently aggregated by HUC 10 watershed, and watershed indicators were considered not meeting expected BPS soil conditions if more than 25% of AIM observations per

parameter in each watershed were outside the expected range (Tables K-2 and K-3). Further detail can be found in BLM Technical Note 455 and Appendix A. To assist identifying areas of concern within the Monument that transcended HUC10 watershed boundaries, each AIM plot was given an indicator score of 1 if that indicator met the expected ecological condition for the plots respective BPS and a score of 0 if the indicator did not meet expected condition. These scores were then summed to provide a score with a rating of 0 (no indicators meet expected condition) to 10 (all indicators meet expected condition) (see Appendix A: Figures).

Understanding long-term trends in soil and vegetative quality/quantity is critical for understanding ecological condition. To assist with understanding temporal trends not captured by terrestrial AIM data within BENM, trend analyses were performed on functional group cover values (i.e., perennial forbs/grasses, annual forbs/grasses, shrub, tree, litter, and bare soil) provided from the rangeland analysis platform (RAP). The Mann-Kendall test for monotonic trends was used to identify statistically significant changes ($\alpha = 0.05$) in cover values over the last 25 years (1997–2021) at each 30m x 30m pixel. These tests assisted in identifying areas that may be trending toward poor condition where data are missing from in-situ monitoring data and are presented in Appendix A, Figure 3-5, Change in BENM bare ground cover from the Rangeland Analysis Platform from 1997 to 2021; Figure 3-6, Change in BENM litter cover from the Rangeland Analysis Platform from 1997 to 2021; Figure 3-18, AIM data for annual forb/grass cover changes from 1997 to 2021; Figure 3-21, AIM data for perennial forb/grass biomass changes from 1997 to 2021; Figure 3-21, AIM data for perennial forb/grass cover changes from 1997 to 2021; Figure 3-22, AIM data for shrub cover changes from 1997 to 2021; and Figure 3-23, AIM data for tree cover changes from 1997 to 2021.

3 LOTIC ASSESSMENT, INVENTORY, AND MONITORING ANALYSIS

Lotic AIM monitoring began in the Monticello Field Office including what is now BENM in 2014. From 2014 through 2022, 36 lotic AIM sampling events have taken place at 30 unique reaches in and adjacent to BENM with some sites being sampled multiple times. Sample points are a combination of random sites from stratified designs and targeted sites.

All data was collected using the Lotic AIM protocol, currently TR 1735-2 (BLM 2021). The lotic AIM protocol standardizes the collection of indicators to evaluate the chemical, physical, and biological properties of wadeable streams. Random sites are based off NHD perennial stream designations and stream order. Targeted sites were selected in areas of management interest that based on local knowledge, likely had perennial water. Boatable sites are sites that are not safely wadeable (e.g., San Juan River). Data collection protocols were modified at these sites for safety and logistics following the draft boatable protocol (AIM NAMF 2021). Boatable reaches within the San Juan assessment area were not given the same weight as other wadeable reaches due to protocol variation, watershed influence, and location on the perimeter of the planning area.

Eleven indicators were selected for the assessment to describe the physical habitat of the stream and water quality (Table K-1). Indicators were chosen based on appropriate model and benchmark applicability for the variation of streams and rivers within the analysis area. This group of indicators was used to determine the overall degree of departure from desired condition.

Indicators were evaluated against established benchmarks (see Table K-3), which vary based on ecoregion, stream size, and regulatory decision (e.g., state water quality standards). Degree of departure from benchmark values are reported as major, moderate, or minimal. These departure classes were converted to values (major = 1, moderate = 0.5, minimal = 0) across all indicators for each reach, and then averaged to create a reach departure score ranging from 0 to 1.

To identify areas of concern, reaches were aggregated by modified HUC12 watersheds (Lotic AIM Assessment Areas) (Appendix A, Figure 3-10, Assessment units, lotic assessment areas, and lotic AIM point locations) due to greater variation in perennial water availability and subsequent flow regimes at the HUC10 scale. To validate water chemistry parameters, assessment areas were evaluated in conjunction with UT DWQ assessments and previously sampled lotic AIM reaches were applicable. The proportion of reaches within each assessment area and respective degree of departure across indicators are shown in Table K-3.

Table K-1. Summary of Lotic Assessment, Inventory, and Monitoring Indicators Used in the Analysis and their Respective Predicted Stress Response

Indicator	Indicator Description	Predicted Response to Stress
% Bank Overhead Cover (BOC)	Average percent overhead cover provided by stream banks (left and right), vegetation or other objects measured at the scour line of the left and right banks across 11 transects (units: %, min: 0, max: 100, n= 22).	Decrease with stress
% Fine Sediment (FS)	Average percent fine sediment (≤ 2mm) on the pool tail (units %, min: 0, max: 100, n= 3 per pool).	Increases with stress
% Banks Covered (BC)	Percent of 42 erosional or depositional banks with greater than 50% foliar cover provided by perennial vegetation, wood or mineral substrate > 15 cm (units: %, min: 0, max: 100, n= 42).	Decrease with stress
% Banks Stable (BS)	Percent of 42 banks lacking visible signs of active erosion (e.g., slump, slough, fracture) (units: %, min: 0, max: 100, n= 42).	Decrease with stress
Floodplain Connectivity (FC)	The ratio of average bench height to average bankfull height taken from the thalweg = (bench height + thalweg depth) / (bankfull height + thalweg depth). This is also known as Rosgen's Bank Height Ratio (units: none, n= 11).	Increase with stress
Macroinvertebrates Observed / Expected (O/E)	Biological condition was assessed using an observed/expected (O/E) index. O/E models compare the macroinvertebrate taxa observed at sites of unknown biological condition (i.e., 'test sites') to the assemblages expected to be found in the absence of anthropogenic stressors (see Hawkins et al. 2000 for details) (Units: none, min: 0, max: 1.5).	Decrease with stress
Invasive Invertebrate Species (II)	List of invasive macroinvertebrate species if present.	Increase with stress
pH	Measured pH value using a Sonde (units: SU, min: 0, max: 14, n=1).	Increase or decrease
Total Nitrogen (TN)	Measured total nitrogen value (units: μg/L, n=1).	Increase with stress
Total Phosphorous (TP)	Measured total phosphorous value (units: μg/L, n=1).	Increase with stress
Temperature	Site specific prediction of 19 year average August stream temperature for the period of 1993 – 2011 as derived from NorWest models (Isaak et al. 2016 https://doi.org/10.2737/RDS-2016-0033) (units: degrees C, n=1)	Increase with stress

Indicators were evaluated against established benchmarks (Table K-2), which vary based on ecoregion, stream size and regulatory decision (e.g., state water quality standards). Degree of departure from benchmark values are reported as major, moderate, or minimal. These departure classes were converted to values (major = 1, moderate = 0.5, minimal = 0) across all indicators for each reach, and then averaged to create a reach departure score ranging from 0 to 1.

Table K-2. Overview of Benchmarks Used for the Lotic Assessment, Inventory, and Monitoring Analysis

Indicator	Benchmark Description	Departure	Eastern Xeric Basin		
			Small	Boatable	
% Bank Overhead Cover	30th (moderate) and 10th (major)	Moderate	70.9	14.89	
	percentiles of regional reference conditions defined by 23 groups of EPA hybrid level III ecoregions and a combination of stream size (> or < 10 m bankfull width) and sampling protocol (wadeable vs. boatable). (Kaufmann et al. 1999; Stoddard et al. 2005)	Major	39.8	4.25	
% Fine Sediment	70th (moderate) and 90th (major)	Moderate	44.38	40	
	percentiles of regional reference conditions defined by 23 groups of EPA hybrid level III ecoregions and a combination of stream size (> or < 10 m bankfull width) and sampling protocol (wadeable vs. boatable). (Kaufmann et al. 1999; Stoddard et al. 2005)	Major	73.43	96.6	
% Banks Covered	Best professional judgment sets numeric criteria for conditions based on published	Moderate	70		
	studies. Plains, southern xeric and eastern	Major	50		
% Banks Stable	xeric ecoregions have naturally lower bank stability so thresholds were 70% of banks	Moderate	70		
	stable and/or covered (moderate) and 50% of banks stable and/or covered (major).	Major	50		
Floodplain Connectivity	Mean floodplain height 1.3 (moderate) and	Moderate	1.30		
	 1.5 (major) times mean bankfull height. Rosgen 1996. 	Major	1.50		
O/E Macroinvertebrates	Utah Department of Environmental Quality	Moderate	0.76		
	Standards. (DEQ_2015)	Major		0.69	
Invasive Invertebrate Species	Assumed all sites with invasive species present had major departure from reference and if no invasive species present, had minimal departure.	Major	Invasiv	es present	
рН	Acidic (7, 6.5) and alkaline (8.5, 9) for	Moderate	6.5-7.0	or 8.5-9.0	
	moderate and major departure from reference respectively. (Kaufmann et al. 1999)	Major	< 6.5 or > 9.0		
Total Nitrogen (TN)	Utah Department of Environmental Quality standards (only two condition classes used; major = not meeting, minimal = meeting).	Major	40	0 μg/L	
Total Phosphorous (TP)	Utah Department of Environmental Quality standards (only two condition classes used; major = not meeting, minimal = meeting).	Major	3!	5 µg/L	

Indicator	Benchmark Description	Departure	Eastern Xeric Basin		
			Small	Boatable	
Temperature	State of Utah water quality standard for designated beneficial uses of <u>warm water</u> fisheries.	Major	27°C		
	State of Utah water quality standard for designated beneficial uses of <u>cold water</u> fisheries.	Major	2	20°C	

Note: All reaches Are Located in the Eastern Xeric Basin Hybrid Level III Ecoregion, where regional reference values were drawn.

To identify areas of concern reaches were aggregated by modified HUC 12 watersheds (Lotic AIM Assessment Areas) (see Appendix A) due to greater variation in perennial water availability and subsequent flow regimes at the HUC 10 scale. To validate water chemistry parameters, assessment areas were evaluated in conjunction with Utah Division of Water Quality assessments and previously sampled lotic AIM reaches where applicable. The proportion of reaches within each assessment area and respective degree of departure across indicators are summarized in Table K-3.

Table K-3. Summary of the Proportion of Reaches within Each Lotic Assessment, Inventory, and Monitoring Assessment Area and their Respective Degree of Departure per Indicator

Lotic Assessment Area	Lotic AIM Sampling Events (n)	Lotic AIM Reaches (n)				Propor	tion of Read	ches in Eac	h Degree of	Departure	(%)			
			Reacties (II)	Departure	вос	FS	ВС	BS	FC	II	O/E	рН	TN	TP
Harts Draw	6	4	Major	25.00		50.00		50.00		25.00		25.00	50.00	
			Moderate	75.00	75.00	50.00				25.00				
			Minimal		25.00		100.00	50.00	100.00	50.00	100.00	75.00	50.00	100.00
Lower North	6	4	Major	25.00	25.00	100.00	25.00				25.00	75.00	50.00	
Cottonwood Creek			Moderate	50.00	50.00			25.00		50.00				
			Minimal	25.00	25.00		75.00	50.00	100.00		75.00	25.00	50.00	100.00
Arch Canyon	5	4	Major	50.00				75.00					25.00	
			Moderate	25.00	50.00	50.00		25.00			25.00			
			Minimal	25.00	50.00	50.00	100.00		100.00	50.00	75.00	100.00	75.00	100.00
South Cottonwood Creek	3	2	Major		50.00	100.00							50.00	
			Moderate	50.00	50.00			50.00		50.00	50.00			
			Minimal	50.00			100.00	50.00	100.00		50.00	100.00	50.00	100.00
Dark Canyon	3	3	Major		33.33			33.33						
			Moderate	33.33	66.67	66.67	33.33				33.33			
			Minimal	66.67		33.33	66.67	66.67	100.00	100.00	66.67	100.00	100.00	100.00
Outlet Fish Creek	2	2	Major		50.00	50.00		50.00		50.00	50.00	50.00	100.00	
			Moderate	50.00	50.00						50.00			
			Minimal	50.00		50.00	100.00		100.00			50.00		100.00
Headwaters Fish	2	2	Major	50.00				50.00		50.00		50.00		
Creek			Moderate	50.00		50.00	50.00							
			Minimal		100.00	50.00	50.00	50.00	100.00	50.00	100.00	50.00	100.00	100.00
Indian Creek	2	2	Major			100.00	50.00	50.00		100.00				
			Moderate											
			Minimal	100.00	100.00		50.00	50.00	100.00		50.00	100.00	100.00	100.00

Lotic Assessment Area	Lotic AIM Sampling Events (n)	Lotic AIM Reaches (n)				Propor	tion of Rea	ches in Eac	h Degree of	f Departure	(%)									
			Reacties (II)	Departure	вос	FS	ВС	BS	FC	II	O/E	рН	TN	TP	Temp					
Mule Canyon	1	1	Major			100.00		100.00				100.00	100.00							
			Moderate	100.00						='										
			Minimal		100.00		100.00		100.00	='	100.00			100.00						
Middle Moqui Canyon	1	1	Major			100.00						N/A	N/A							
			Moderate	100.00	100.00		100.00					-								
			Minimal					100.00	100.00	100.00	100.00	_		100.00						
Upper Gypsum Canyon	1	1	Major									100.00								
			Moderate	100.00	100.00			100.00												
			Minimal			100.00	100.00		100.00	100.00	100.00		100.00	100.00						
Lower San Juan	4	4	Major			50.00		50.00	25.00			50.00	75.00							
River			Moderate		100.00	50.00	75.00	25.00			25.00	25.00								
			Minimal	100.00			25.00	25.00	75.00	50.00	75.00			100.00						

Note: Proportions totaling < 100 and N/A indicate missing data and/or model errors and were not included in the analysis.

APPENDIX L Bears Ears Inter-Tribal Coalition: A Collaborative Land Management Plan for the Bears Ears National Monument



Bears Ears Inter-Tribal Coalition: A Collaborative Land Management Plan for the Bears Ears National Monument



Bears Ears Inter-Tribal Coalition: A Collaborative Land Management Plan for the Bears Ears National Monument

Prepared by:

Jason Chuipka, M.A., RPA Woods Canyon Archaeological Consultants, Inc. 140 North Linden Street Cortez, CO 81321

On Behalf of:

The Bears Ears Inter-Tribal Coalition

And

Resources Legacy Fund Resources Legacy Fund Contract No. 15288

Executive Summary

The five Tribes of the Bears Ears Inter-Tribal Coalition (BEITC) – Hopi, Navajo (Diné), Ute Indian Tribe, Ute Mountain Ute, and Zuni -- have deep traditional cultural beliefs that tie them to the land. The physical world is much more than just a natural realm to sustain the material needs of life. The origin of the canyons, cliffs, and landforms of the greater Bear's Ears region have a place in traditional history. There are narratives that provide a continuity that link people, landscapes, and supernatural beings through time.

The purpose of the BEITC Land Management Plan is intended to provide a synthesis of Tribal perspectives on managing the landscape of the Bears Ears National Monument (BENM). The BEITC Land Management Plan emphasizes a holistic approach to all resources that gives primacy to indigenous knowledge and perspectives on the stewardship of the Bear's Ears landscape. Although prepared for BENM, this plan can also be applied beyond the boundaries of the Monument, as it is intended to provide the foundation for proactive collaborative management of ancestral lands that extend well beyond current reservation boundaries.

The Bear's Ears region has significance that is greater than any single Native group. It is a sacred landscape that transcends individual Tribal concerns. The goals of having collaborative management in BENM can be summarized as follows:

- Establish a proactive process for the Tribal Nations of the BEITC to collaboratively manage BENM with Federal land managers.
- Have indigenous knowledge and Native ways of knowing given equal consideration with knowledge from processes framed by a Western scientific paradigm.
- Create by-laws for equity between Tribes and Federal land managers that will also ensure continuity of collaborative management.
- Create a full-time Tribal Management staff to participate in collaborative management with Federal land managers.
- Secure Federal funding for full-time Tribal Management Staff.
- Establish and fund a Traditional Knowledge Institute that has programs that would have a Native benefit.
- Establish a reciprocal relationship between Tribes and Federal land managers regarding sharing of indigenous knowledge with information collected within a Western scientific paradigm.
- Enhanced data sharing and acquisition for Tribes.
- Tribal input regarding adapting the collaborative land management plan over time.

Collaboration between Tribal Nations and Federal land managers is proposed as the foundation of true co-management of these important lands. Collaboration includes on-going, meaningful Native engagement but is not intended to supplant or replace Section 106 consultation. Instead, the BEITC proposes to increase the involvement of Tribes early and often so as to be proactive in the land management planning process instead of perpetuating the reactive relationship between Tribes and land management agencies. Collaboration between Tribal Nations and Federal agencies is seen as the



foundation for both planning and implementation of day-to-day management decisions with the common goal of long-term, sustainable management of the Bears Ears landscape.

The plan presented here summarizes the main points of the BEITC position on how they view and interact with this landscape and how the approach to land management at Bears Ears should be different. It is understood that this is not to be the final document for the management of BENM but is instead the beginning of implementing a new chapter in collaboration and co-management of ancestral lands. This plan is intended to be a living document that will be added to and evolve as different needs on the landscape arise



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LIST OF ACRONYMS

AIRFA American Indian Religious Freedom Act
ACHP Advisory Council on Historic Preservation
ARPA Archaeological Resource Protection Act

ATV All-Terrain Vehicles

BEITC Bears Ears Inter-Tribal Coalition
BENM Bears Ears National Monument
BLM Bureau of Land Management
CFR Code of Federal Regulations
CRAT Cultural Resource Advisory Team
EIS Environmental Impact Statement

FLPMA Federal Land Policy and Management Act IPCC Intergovernmental Panel on Climate Change

MMP Monument Management Plan

NAGPRA Native American Graves Protection and Repatriation Act

NCAI National Congress of American Indians NEPA National Environmental Policy Act

NFS National Forest System

NGO Non-Governmental Organization
NHPA National Historic Preservation Act

OHV Off-Highway Vehicle ROD Record of Decision

SHPO State Historic Preservation Office TCP Traditional Cultural Property

THPO Tribal Historic Preservation Office

UIT Ute Indian Tribe

UMUT Ute Mountain Ute Tribe
USFS United States Forest Service



LIST OF PREPARERS

HOPI TRIBE

Mr. Craig Andrews, Vice Chairman of the Hopi Tribe (2022)

Mr. Daryn Melvin, Hopi Tribe

Hopi Cultural Resources Advisory Task Team

Hopi Cultural Preservation Office

Hopi Department of Natural Resources

Maren Hopkins, Michael Spears, and Dr. T.J. Ferguson, Anthropological Research, LLC

NAVAJO NATION

Richard Begay and Tamara Billie, Navajo Nation Heritage and Historic Preservation Department Rena Martin, Helen Cheromiah, Tonia Clark, and Clarina Clark, Dinétahdóó Cultural Resources Management, LLC

PUEBLO OF ZUNI

Zuni Cultural Resource Advisory Team Kurt Dongoske, Zuni Heritage and Historic Preservation Office and Zuni Cultural Resource Enterprise

UTE INDIAN TRIBE

Betsy Chapoose, Cultural Rights and Protection Director Jason Chuipka, Woods Canyon Archaeological Consultants, Inc.

UTE MOUNTAIN UTE

Terry Knight and Nichol Shurack, Ute Mountain Ute Tribal Historic Preservation Office Malcolm Lehi, Ute Mountain Ute Tribe
Jason Chuipka, Woods Canyon Archaeological Consultants, Inc.

BEITC STAFF

Keala Carter, Charissa Wahwasuck-Jessepe, Brandy Hurt, Tyesha Ignacio, Cassaundra Pino



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PART A: INTRODUCTION

COLLECTIVE VISION STATEMENT

Culture, traditions, language, values, and worldviews are born from Tribal homelands. The Bears Ears region has been home to Native peoples for millennia. The Bears Ears National Monument (BENM) is significant and important to the Tribal Nations of the Bears Ears Inter-Tribal Coalition (BEITC) and to other Native peoples, many of whom share stories of trauma and forced removal from this place and continue to return to Bears Ears for healing, renewal, and communion with ancestors whose spirits remain a part of this multidimensional landscape.

To the Tribal Nations of the BEITC, the landscape is much more than just a natural realm to sustain the material needs of life. It is imbued with spiritual powers, and everything in the natural world – rocks, trees, animals, water, air, light, sound -- has meaning and character. Cultural resources and natural resources are not two different categories in Native life. An individual depends on other living plants, animals, and surrounding land to survive; thus, the natural resources gathered, hunted, and walked on for survival become a cultural resource.

The resources and places of BENM cannot be considered separately from the landscape as a whole. The Tribal Nations of the BEITC view all elements of the Bears Ears landscape as cultural resources that they share responsibility to protect and maintain. When evaluating management practices of the landscape of BENM, it is not only the tangible aspects of these elements but also the less tangible aspects that should be regarded. The management of resources within BENM should emphasize protection and conservation of the resources through stewardship, a fundamental aspect of traditional Native knowledge.

In the Native worldview, time and space, and the sacred and secular, are not rigidly partitioned; the spiritual and physical are mutually co-implicated, and the environments, spaces, and landscapes composing places are organic and cannot be divided or segmented along clearly delineated borders and boundaries—all of nature exists in sacred interrelation and unity. Humans are part of nature, and should respect and live in a balanced, reciprocal, and harmonious relationship with all of the environment and all of life, any disruption in balance is the fault of human action, inaction, and error. Important to any discussion of land management is that historical truths are inseparable from ancestral knowledge, traditional oral history, and geographical stories. This knowledge, along with associated ceremonial and ritualistic activities, are the bases for understanding the relationships and origins of environmental ties and their perseverance, preservation, balance, and integrity over, through, and as part of space and time.

The establishment of BENM in 2016 was premised on collaborative management between the Tribes and the Federal government. Tribal governments are sovereign and have inherent powers of self-government. Both President Obama and President Biden under the authority of the Antiquities Act explicitly stated the need for collaborative Tribal-Federal management in Presidential Proclamations 9558 and 10285 that established and restored BENM.



The Tribal Nations of the BEITC are *knowledge-sovereign*, or that their way of knowledge is in equal standing with mainstream Western scientific methodologies. Knowledge sovereignty is inextricably tied to cultural, social, and political sovereignty and associated relationships of ecological health and well-being and should be understood from a traditional knowledge perspective. Tribal Nations must be involved early and often with management, including being provided with the same information at the same point in the planning process as the Federal land managers. In this way, collaborative management can preserve and maintain all values of BENM. Only then will Native people have real influence on how this sacred land is managed.

The purpose of this plan is to present the context in which Tribal Nations seek to be regularly and fully engaged with Federal land managers. To be fully engaged, the Tribes must not be considered merely as another stakeholder that can offer comments to plans that are already designed and mostly completed. It is not enough that tribes have "a bigger say" in policy and practice of monument management. Instead, the Tribal Nations and Federal managers must collaborate to create an effective management planning process to preserve and maintain all values of the BENM. Tribal Nations must be involved early and often with management, including being provided with the same information at the same point in the planning process as the Federal land managers. In this way, collaborative management can preserve and maintain all values of BENM. Only then will Tribes have real influence on how this sacred land is managed.

BACKGROUND TO BEITC LAND MANAGEMENT PLAN

2015 BEITC Proposal for the Creation of BENM

In 2015, the Bears Ears Inter-Tribal Coalition (BEITC) submitted a Tribal proposal for a Presidential proclamation under the Antiquities Act of 1906 to protect historical and scientific objects in an area of 1.9 million acres of ancestral land on the Colorado Plateau and the creation of Bears Ears National Monument (BENM). The coalition proposed that the most appropriate and effective management regime is collaborative management by the Tribes and Federal agencies (BEITC 2015).

This initial proposal was six years in the making and involved grassroots people and Tribal leaders working intensively to get a proposal in place. The true origins, however, go back much farther. As stated in the proposal (BEITC 2015:1), the need for protecting the Bears Ears landscape has been broad and heartfelt for well over a century. The rampant looting and destruction of the villages, structures, rock markings, and gravesites within the Bears Ears landscape saddened and sickened our ancestors, and that sense of loss and outrage continues today. The depth of our spiritual connection to these places is not widely understood, but it is true that these desecrations to our homeland, structures, implements, and gravesites -- insults to the dignity of our societies and Traditional Knowledge as well -- wound us physically. By visiting Bears Ears, giving our prayers, and conducting our ceremonies, we heal our bodies and help heal the land itself.



2016 Presidential Proclamation

The Bears Ears National Monument (BENM, or Monument) was established by Presidential Proclamation 9558 on December 28, 2016. Rather than 1.9 million acres, BENM encompassed 1.3 million acres of land. The first paragraph of this proclamation acknowledged that "...the land is profoundly sacred to many Native American tribes, including the Ute Mountain Ute Tribe, Navajo Nation, Ute Indian Tribe of the Uintah Ouray, Hopi Nation, and Zuni Tribe." The proclamation also highlighted the importance of the Bears Ears landscape to descendant communities:

The area's cultural importance to Native American tribes continues to this day. As they have for generations, these tribes and their members come here for ceremonies and to visit sacred sites. Throughout the region, many landscape features, such as Comb Ridge, the San Juan River, and Cedar Mesa, are closely tied to native stories of creation, danger, protection, and healing. The towering spires in the Valley of the Gods are sacred to the Navajo, representing ancient Navajo warriors frozen in stone. Traditions of hunting, fishing, gathering, and wood cutting are still practiced by tribal members, as is collection of medicinal and ceremonial plants, edible herbs, and materials for crafting items like baskets and footwear. The traditional ecological knowledge amassed by the Native Americans whose ancestors inhabited this region, passed down from generation to generation, offers critical insight into the historic and scientific significance of the area. Such knowledge is, itself, a resource to be protected and used in understanding and managing this landscape sustainably for generations to come (Presidential Proclamation 9558).

In recognition of the importance of tribal participation to the care and management of the landscape, and to ensure that management decisions affecting the monument reflect tribal expertise and traditional and historical knowledge, the proclamation mandated that a commission be established that included representatives from the Hopi Nation, Navajo Nation, Ute Mountain Ute Tribe, Ute Indian Tribe of the Uintah Ouray, and Zuni Pueblo. The establishment of the Bears Ears Commission was intended to create a means to effectively partner with the Federal agencies by making continuing contributions to inform decisions regarding the management of the monument. Furthermore, the proclamation stated that:

The Secretaries shall meaningfully engage the Commission or, should the Commission no longer exist, the tribal governments through some other entity composed of elected tribal government officers (comparable entity), in the development of the management plan and to inform subsequent management of the monument. To that end, in developing or revising the management plan, the Secretaries shall carefully and fully consider integrating the traditional and historical knowledge and special expertise of the Commission or comparable entity. If the Secretaries decide not to incorporate specific recommendations submitted to them in writing by the Commission or comparable entity, they will provide the Commission or comparable entity with a written explanation of their reasoning. The management plan shall also set forth parameters for



continued meaningful engagement with the Commission or comparable entity in implementation of the management plan (Presidential Proclamation 9558).

2017 Monument Reduction

On December 4, 2017, Presidential Proclamation 9681 purported to modify the boundaries of the BENM. The monument was reduced by approximately 85%. The revised BENM boundary included two separate units, known as the Indian Creek and Shash Jáa Units, which totaled 201,876 acres. Presidential Proclamation 9558 directed the Bureau of Land Management (BLM) and U.S. Forest Service (USFS) to jointly prepare a management plan for the Monument. All the Federal lands contained within the Indian Creek Unit are administered by the BLM; therefore, the BLM prepared a Monument Management Plan (MMP) for the Indian Creek Unit. The Federal lands contained within the Shash Jáa Unit are administered by the BLM and USFS; therefore, the BLM and USFS jointly prepared a MMP for the Shash Jáa Unit.

This Record of Decision (ROD)/Approved MMPs document was prepared under the BLM planning regulations (43 Code of Federal Regulations [CFR] Part 1600) implementing the Federal Land Policy and Management Act (FLPMA) (43 United States Code [USC] 1701 et seq.) and other applicable laws. An Environmental Impact Statement (EIS) was prepared to support the BLM's development and selection of the Approved MMPs in compliance with the National Environmental Policy Act (NEPA) (42 USC 4321–4347), as amended.

The BLM and USFS issued a Notice of Intent to prepare the MMPs and associated EIS for the BENM on January 16, 2018. The BLM and USFS released the Draft MMPs/EIS for a 90-day public review and comment period on August 15, 2018. After reviewing and responding to public comments and making corresponding edits to the MMPs and EIS, the BLM and USFS released the Proposed MMPs/Final EIS (BLM and USFS 2019a) for a 30-day protest period, a 60-day Governor's consistency review, and a 60-day public comment period regarding the proposed closure of recreational target shooting at campgrounds, developed recreation sites, rock writing sites, and structural cultural sites within the BENM on July 26, 2019.

2021 Monument Restoration

Several lawsuits in federal court were filed in federal court challenging the legality of President Trump's Proclamation. On January 20, 2021, President Joe Biden signed an Executive Order calling for an onsite review of BENM. In April of 2021, Secretary of the Department of the Interior, Deb Haaland, visited the monument along with several tribal leaders and other BENM stakeholders as part of this onsite review process. On October 8, 2021, in Presidential Proclamation 10285, President Biden reinstated protections for the 1,351,849 acres (2,112.264 mi²; 5,470.74 km²) described in Presidential Proclamation 9558 and maintained protections for the 11,200 acres of federal land added to the northeastern portion of the Indian Creek Unit under Presidential Proclamation 9681. As a result of



President Biden's actions, BENM now encompasses approximately 1.36 million acres of Federal land

Figure 1.). Proclamation 10285 states:

Restoring the Bears Ears National Monument honors the special relationship between the Federal Government and Tribal Nations, correcting the exclusion of lands and resources profoundly sacred to Tribal Nations, and ensuring the long-term protection of, and respect for, this remarkable and revered region (Presidential Proclamation 10285).

Proclamation 10285 states that the entire monument shall be jointly managed as a single unit by the USFS and BLM, with active involvement by federally recognized tribes and state and local governments. The USFS shall manage the portions of the monument within the National Forest System, and the BLM shall manage the remainder of the monument. These two federal agencies, in collaboration with other relevant federal agencies and stakeholders, shall develop a management plan for the entire monument.

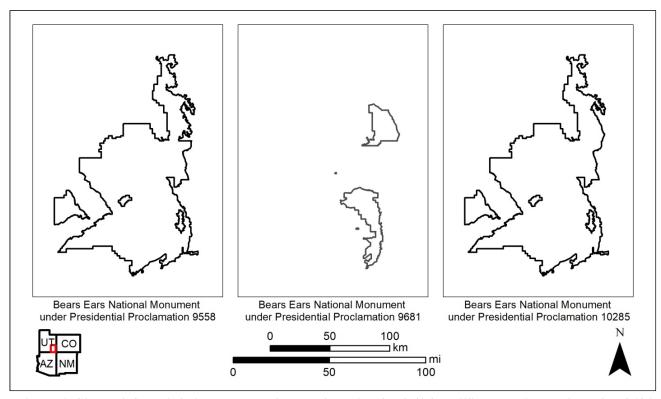


Figure 1. Shown left-to-right is BENM under Proclamation 9558 (1.35 million acres), Proclamation 9681 (201,876 acres), and Proclamation 10285 (1.36 million acres).

Importantly, Proclamation 10285 recognizes the value of tribal involvement in the development of a management plan. It states:

In recognition of the importance of knowledge of Tribal Nations about these lands and objects and participation in the care and management of the objects identified above, and to ensure that management decisions affecting the monument reflect expertise and traditional and historical knowledge of Tribal Nations, a Bears Ears Commission (Commission) is reestablished in accordance with the terms, conditions, and obligations set forth in Proclamation 9558 to provide guidance and recommendations on the development and implementation of management plans and on management of the entire monument.

To further the protective purposes of the monument, the Secretary of the Interior shall explore entering into a memorandum of understanding with the State of Utah that would set forth terms, pursuant to applicable laws and regulations, for an exchange of land owned by the State of Utah and administered by the Utah School and Institutional Trust Lands Administration within the boundary of the monument for land of approximately equal value managed by the BLM outside the boundary of the monument. Consolidation of lands within the monument boundary through exchange in this manner provides for the orderly management of public lands and is in the public interest (Presidential Proclamation 10285).

Presidential Proclamation 10285 further states that the Secretary of the Interior shall explore entering into a memorandum of understanding with the State of Utah that will set forth terms for acquiring additional lands within the monument boundary through exchange if it furthers the protective purposes of the monument. Finally, the BLM and USFS must continue to manage livestock grazing as authorized under existing permits or leases. Should grazing permits or leases be voluntarily relinquished by existing holders, lands covered by such permits shall be retired and forage shall not be reallocated for livestock grazing purposes unless such reallocation will advance the purposes of Proclamation 10285 and Proclamation 9558. Similarly, existing rights related to mining will remain in place; however no new leases or patents within the monument will be permitted.

BLM and USFS Monument Management Plans and Environmental Impact Statement

Pursuant to Presidential Proclamation 9681, in July of 2019 the BLM and USFS, in coordination with cooperating agencies and non-Coalition American Indian Tribes, published the Proposed Monument Management Plans (MMPs) and a Final Environmental Impact Statement (EIS) for the 201,876 acres encompassed by the Shash Jáa and Indian Creek Units (US DOI and DOA 2019). As a result of the MMPs, the BLM and USFS outlined five alternatives for management (A–E), with Alternative E being the BLM's and USFS's preferred alternative. Major planning issues addressed in Alternative E include cultural resources, American Indian tribal concerns, and recreation management.

Under all alternatives, the BLM and USFS presented a set of management goals, objectives, and decisions for American Indian traditional uses of the Monument and outlined a Tribal Collaboration Plan and Cultural Resources Monitoring Framework. Records of Decision were issued by the BLM and USFS in February of 2020.

Presidential Proclamation 10285 will result in revisiting the existing MMPs. They are referenced in this document, but it is understood that they will likely be changed or replaced to incorporate the



perspectives presented in this tribally-informed land management plan. As of May 2, 2022, there is only BENM interim guidance with a revised BENM MP is to be completed by March 1, 2024.

Purpose of the BEITC Land Management Plan

While collaborative management was mandated by the BENM Proclamations, there was no specified management framework or path forward. The Bureau of Land Management (BLM) had a Monument Management Plan drafted for the reduced Monument, but there is currently no federal land management plan for the restored BENM. As a result of this restoration, a revised land management plan will need be devised in the coming months and completed by March 1, 2024.

The purpose of the Bears Ears Inter-Tribal Coalition Land Management Plan (BEITC LMP) is to provide Federal land managers with a synthesis of Tribal perspectives on managing the landscape of the Bears Ears National Monument (BENM). The BEITC does not intend to replace the Federal land managers or the resources that can be provided by the Department of the Interior. Instead, the purpose of the BEITC LMP is to provide a framework for how the Tribal Nations named in the Monument proclamation -- Ute Indian Tribe, Ute Mountain Ute, Hopi, Zuni, and Navajo -- will be regularly and fully engaged with Federal land managers.

The Tribal Nations of the BEITC must take a proactive stance. Tribal Nations must be involved early and often with management, including being provided with the same information at the same point in the planning process as the Federal land managers. In this way, collaborative management can preserve and maintain all values of BENM. Only then will Native people have real influence on how this sacred land is managed.

In order to have an effective collaborative process the Tribal Nations must first identify the goals we are trying to achieve. The Tribal Nations of the BEITC must identify how we are to maintain and enhance this landscape to insure its continuance. How we do this is to make decisions based on those goals in collaboration with the federal managers of BENM. We must let this goal guide us to the end result we want. If a project is proposed, then we must ask how it will help us to achieve our shared goals.



PART B: CONNECTION TO PLACE

Each of the five tribes of the BEITC prepared documents that detailed their individual Tribal perspectives on the management of lands of the Bears Ears region. The connection to the Bears Ears region presented below is derived from each of those individual documents. They are presented to summarize individual Tribal connections to this region in their own words. Although they are presented individually, together they show how the Tribes of the BEITC share cultural connections to the sacred landscapes of the Bears Ears National Monument.

HOPI TRIBE

Bears Ears National Monument (BENM), although approximately 200 miles from the modern Hopi Indian Reservation, is within the ancestral homeland of the Hopi people and remains important in Hopi cultural beliefs and practices today. Hopi people refer to their ancestral homeland as *Hopitutskwa*, meaning Hopi land, and they recognize it as the vast area in which Hopi clans settled as they migrated to their present-day home on the Hopi mesas in northeastern Arizona.

Hopi clan migration traditions account for ancestral land use and the formation of *Hopitutskwa*. Upon emerging into the Fourth World (the present world), Hopi ancestors entered into a pact with the earth guardian, their creator, who allowed the Hopi people to use the land as long as they would act as environmental stewards, caring for the land and respecting their spiritual and religious connections with the earth. The Earth Guardian instructed Hopi ancestors to migrate as clans across the land until they reached their final destination at *Tuuwanasavi* at the Hopi Mesas. As Hopi ancestors set out on their migrations, each clan established specialized knowledge and ties to certain features and resource areas (Ferguson 1998:40; Kuwanwisiwma and Ferguson 2009:90; Stephen 1929:55–56).

Clan migration histories are complex, with groups moving together, splitting, and re-converging many times over the course of their journeys. It was common for clans to retrace their steps and revisit or reestablish previous settlements as they migrated. Hopi history is thus a collection of multiple clan histories rather than a single tribal narrative. Ancestral sites and landforms across *Hopitutskwa* anchor migrations in a cultural landscape that helps Hopi people understand earlier periods in their history (Ferguson and others 2013:110).

After settling on the Hopi Mesas, the Hopi people continued to claim and use many shrines, springs, and natural resources in areas they formerly occupied (Ellis 1961:221; Hough 1897). It is common for Hopi people to travel to distant places to collect resources needed to perform ceremonies and rituals, essentially transporting the power of significant places back to the Hopi Mesas (Ellis 1974:143; Euler 1988:40; Hopkins and others 2015:151). The continued collection and use of resources from ancestral areas enables Hopi people to remain connected to the traditions and lands used by their ancestors (Ferguson and others 2007:17).

Many Hopi clans trace their migrations through the area of BENM. Based on previous ethnographic research conducted by the Hopi Cultural Preservation Office in Glen Canyon National Recreation Area, there are at least 26 Hopi clans with ties to the Colorado River and San Juan River corridors and the



surrounding landscape in the vicinity of BENM. Hopi people remember and commemorate the BENM landscape today through songs, prayers, and the recollection of clan migration traditions by numerous Hopi clans that settled in the area in the distant past.

In addition to clan migration traditions associated with BENM, Hopi place name further memorialize and preserve Hopi connections to the BENM and surrounding landscape. For example, the names *Hoon'naqvut* and *Honnaqvu* (Bears Ears buttes), *Honn'muru* (Bear Mound), and *Honn'tsomo* (Bear Hill) describe the twin buttes for which the Monument was named. Hopi cultural advisors explained that in Hopi tradition this area is associated with the Bear Clan, and the image of the bear resembled by the two buttes was likely a significant factor in this clan's settlement there in the past (Dawahongnewa, Preston, and Wadsworth 2021).

Pisisvayu (Colorado River) and Yotse'vayu (San Juan River) also comprise aspects of Hopi history and geography in this region. Pisisvayu is important in the history and traditions of many Hopi clans. Some clans use water collected from the Colorado River in their kiva ceremonies. (Ferguson 1998). The Hopi Tribe considers Pisisvayu to be a traditional cultural property eligible for the National Register of Historic Properties under criteria A, B, C, and D. The Colorado River is significant for its association with important Hopi creation traditions, clan histories, and ongoing religious activities (Hopi Tribe 2001; 2010).

Yotse 'vayu is also significant in the migration histories of numerous Hopi clans, including the Bear Clan, and the Hopi people consider this river to be an important aspect of *Hopitutskwa*. In Hopi belief, water from the San Juan River was used to create ceremonial springs close to the Hopi Mesas, and the Hopi people smoke and offer prayers to the San Juan River so that rain will fall at Hopi (Saufkie in Albert and Colwell-Chanthaphonh 2007:2–35). *Yotse 'vayu* is also remembered as a meeting point and trade route for the Hopi, Utes, and Paiutes in the past (Hopkins and others 2013).

Petroglyphs, artifacts, landmarks, and landforms help Hopi people verify their clan histories, so visitation to the BENM is essential for Hopi people to preserve their ties to this area. Although many clans have ties to the BENM area because of their migration histories, this landscape is significant to all Hopi people.

NAVAJO NATION

The significance of Bears Ears (*Shashjaa'*) to the Navajo people is manifested by its importance in Navajo ceremonies that keep individuals and the community heathy; tribal members visit the area for prayers, offerings, and gathering and renewing of resources; and the landscape encompasses places where ancestors left their markings.

"The Bears Ears is a part of a larger landscape and plays a significant role in Navajo ceremonial history. For example, the origin of the Mountain Top Way Ceremony began in Bears Ears and the Blessing Way Ceremony, particularly the Sleeping Among Bears Version.



The Sleeping with the Bear's Version of the Blessing Way tells of a neighboring tribe stealing a young Navajo boy and taking him north of the San Juan River. The boy was brought to the people living near Bears Ears, and there he was tortured and starved because he possessed sacred knowledge of medicines. He was held captive inside a Teepee for several months. He tried to plead for his freedom to return home. Instead, he became a slave. His captors mistreated and tortured him by starving him and depriving him of sleep. One early morning he heard Talking God and Harvesting God in the distance. The sounds happened on four instances; each time, the calls came closer and closer. Finally, Talking God and Harvesting God entered the Teepee. Eventually, he was rescued and made the journey back home with Talking God, who uses the rainbow to travel by way of the mountain tops to Chuska Peak. The captors sent their pet, the Bear, to retrieve the boy.

The boy was welcomed home by his people, but he suffered from the trauma inflicted on him. So, the Holy People performed a ceremony to bring him back into balance; this version became Sleeping with the Bears. Unfortunately, while searching for the boy, the Bear began taking other people. The People got tired of their kin being stolen, so Harvesting God placed a boundary using his cane in the landscape, which became Comb Ridge to protect the people from the Bear. Finally, the Bear tired, and it turned into Bears Ears and Elk Ridge. Behind Comb Ridge are the scars marking the claw marks of the Bear (Tim Begay, 09/10/2021)."

Diné (Navajo) oral traditions and archaeological and historical records document their occupation in and around Bears Ears National Monument (BENM). Traditional histories of Diné ceremonies mention places in the region, including Bears Ears buttes (*Shashjaa'*), Elk Ridge, Comb Ridge, the Abajo Mountains (*Dzil Dootl'izh*), Navajo Mountain (*Naatsis'áán*), Rainbow Bridge (*Tsé na'ni'áhi*), and the ancient crossings of the San Juan River (*Tooh*) near Cottonwood Wash, Comb Wash, and Mexican Hat. At least five ceremonies are associated with these named places. Most of the Bears Ears National Monument is within the Navajo Land Claim before the Indian Claims Commission. The Commission recognized most of that claim (Kelley 2017:5).

Today, the descendants of the families who once lived in the *Shashjaa* 'area continue to act as stewards for their ancestors' homelands. Oral histories of their ancestors have been passed down to them. For generations, the Navajo families of Aneth, Montezuma Creek, Mexican Water, Oljeto, Navajo Mountain, and Red Mesa have maintained connections to the *Shashjaa*' area and have voiced their concerns about the management of the lands within the region. *Shashjaa*' and surrounding areas are a part of their cultural universe; they hold family stories and undoubtedly remains of ancestors. Thus, there is a deep connection to the landscape. In Navajo tradition, the connection with the place where one's umbilical cord is buried is unbreakable.

Being forced to leave a sacred place, knowing your place of offerings, prayers, and songs are no longer available, is hurtful. Ceremonies of prayer and song are initiated prior to traveling away from important places. The sight of Bears Ears alone reminds people of historical connection and ceremonies. The people who live within sight of the Bears Ears are reminded daily of the historical significance of the

place and how it still plays a vital part of their lives today. Several of the Navajo people who were interviewed for the Navajo Nation portion of this project stated, "that is where we began and in there remain places of refuge."

Navajo people retold stories of their ancestors who traveled throughout what is now the western U.S. The stories gathered for this land management plan included how the Navajo ancestors traveled long distances for survival, ceremony, trade, hunting, gathering, and to collect materials; thus, the whole region of present-day Bears Ears National Monument and beyond was (and is) used by Navajos.

The Navajo people value their clan histories. For generations they have recounted how clans originated on the landscape; thus, mentally, the landscapes have become a part of their kin and tribal histories. In some cases, these places then become significant. *Shashjaa'* is especially dear to the people who continue to live near *Shashjaa'*.

Hataali and traditional herbalists continue to travel to the area for plants to be used in ceremonies and for personal well-being. Plant gathering is still common and fruitful today according to the herbalists interviewed by Navajo ethnographers in preparation of this land management plan. The concerns for gathering herbs centered around the loss of plants and of their potency because of the climate changing and the effects of industrial, commercial, and recreational development.

Historically, food scarcity also led the early Navajos to travel north. The pinyon nuts in the La Sal Mountains (*Dził di tłóh*) were well known to the Navajos. Whenever the corn crops failed to provide adequate harvests in the south, the Navajos would move north to gather pinyon. Many Navajos who had always lived there regarded the northern regions as home. The Navajos used the extreme northern and western reaches of their homeland for other essential needs. When enemies pressed them too hard, the Navajos could retreat into what they called *Nahonidzo*, the Escaping Place (Benally et al. 1982:20).

The Navajo people cannot see themselves separated from the Bears Ears. A traditional practitioner told us that *Shashjaa*' was a more recent name, but the name still connects with ceremonial stories of the bear. He stated that the area known as *Shashjaa*' centers around the low mountains. The region known as *Dzil Na'has'ti'* covers a larger area that encompasses *Shashjaa'* itself and a broader area which is connected to the Navajo ceremonial landscape.

"Dził Na'has'ti' is encircled by the two rivers, Tooh (San Juan) and Bits'iis Ninéézi (Colorado River) on the southern and western edges. Tó Na'nili' made these rivers. Dził Dootl'izh and Dził Di Tłooh are located on the northern and eastern edges of Dził Na'has'ti'. Where you refer to as Shashjaa' are the homes of Tl'ish and Shash; the larger mountain peaks are connected to Shash. The stories intertwined with the landmarks extend into the rest of our homelands" (Ronald Largo, April 22, 2021)."

11



PUEBLO OF ZUNI

For the Zuni people, place is much more than a geographical location or the physical and biological features that distinguish it. This is especially true when it is indelibly tied to Zuni attachments and practices of identity, purpose, connection, and grounding. Accordingly, place is as much a part of what makes one human as humans are a part of that place. The embodied psychological and emotional attachment to place is no more strikingly evident than in the Bears Ears National Monument (BENM). Uniquely, the BENM provides a dramatic sense of place because of its magnificence, vastness, complexity, and pristine condition.

In general, the BENM area is a place the Zuni ancestors resided in and traveled through on their way to find the Middle Place. Specifically, the Zuni medicine societies recount migration histories of traveling through and residing in the BENM on their respective journeys to the Middle Place. These societies also maintain cultural and historical associations to Blue Mountain located in the Abajo Mountain range northeast of BENM. An important point worthy of emphasizing here is the ongoing associations Zunis share with their ancestral landscape, expressed through songs, prayers, and storytelling, that inform and guide the ever-present through the grounding and belonging to specific geographies like BENM.

Zunis maintain their knowledge through storytelling, a lot of the history, the place-names, and the landmarks, significant dates, the locations have already beentold through the oral storytelling—but also in terms of stories affiliated with landmarks and names, locations, plants. They call all the landmarks with a particular event or incident happening, and that is where the name occurs, and that is the storytelling portion around that. The gist of the information is retained inthe storytelling method ... they pick a select landmark, and a story is built around that ... to highlight the actual location, but also the significant events surrounding the location. In that sense, people know that the story belongs to a certain place or location [unnamed Zuni elder, quoted in Isaac 2007:39].

As Zuni cultural truths may be recounted and the time of the past reactivated through encounters with material landmarks embedded throughout the Zuni ancestral landscape, these encounters and their experiences present a destabilizing linkage that couples any supposeddistinctions between oral tradition and cultural stories and history. The two become enfolded through acts of information recovery and reactivation contained in and expressed through, for example, ancestral rock marking locations found throughout the Zuni ancestral landscape.

Octavius Seowtewa (interviewed, June 16, 2016) noted during the Zuni traditional cultural property assessment for the Navajo Gallup Water Supply Project that Zuni history "is written on stone, our information is there for all of us to make connection back, because we know our history, we know what we can identify." Historical information expressed in and recounted by rock markings include identification of clans, origin and migration narratives, affirmations of political positions or offices, political statuses, boundary disputes and negotiations, land allotment decisions, year counts, insights into people, society, and culture, personal signatures (e.g., handprints, footprints, and animal tracks), irrigation tallies, seasonally important deities, and ancestral communication to future generations



(Olsen 1989:421, 425; Young 1988:28-29, 179; Curti and others 2017). Iconographic symbols materially scribed by Zuni ancestors are understood as indelible parts of the ancestral landscape, with mnemonic functions that allow the retrieval of information associated with collective, long-term cultural memory (Olsen 1989:418). Zuni retrieval of information, the reactivation and recounting of traditional history by those capable of understanding and deciphering their meanings and messages (see Dongoske and Hays-Gilpin 2016; Isaac 2007; Young 1988), often fold together places and spaces of rock markings with historical time. As a result, the past and present merge together as a dimension of space and place. The enfolding space-time encounters of Zuni people with locations that contain "signs from the ancestors" (Young 1988:119) function as intensive sacred zones where there is "an intensification of experience" (Young 1988:153) because the "the past and present [are] joined by means of [communication]" (Olsen 1989:418).

When accounting for how intangible aspects of Zuni culture connect to tangible zones of the ancestral landscape, it is important to recognize that intensive communicative encounter enfold the past and present, necessarily spiraling forward to enfold and envelope future time. Zuni elder and artist Alex Seowtewa explains:

The earliest art that you can probably still witness or view are the petroglyphs: pictographs from the earth's pigment. Our ancestors were pretty sophisticated people.... They had all this wisdom because it has been handed down fromgeneration to generation of who we are, where we came from.... At times [my father] took me to the nearest drawings where his customary lands were in the northeastern corner of the reservation—which is in the Nutria area. He took me in those hills and explained certain symbols. I shared, passed on, what my father taught me, how to remember these symbols, to recognize them [Alex Seowtewa, quoted in Isaac 2007:39].

As Alex Seowtewa's recounting of personal experience highlights, the endurance of Zuni traditional religious and cultural practices, beliefs, and identities for future generations require the uncompromised integrity of scribed landmarks and the information they materially impart to reengage the history of ancestral creation and reactivate and recover certain cultural truths vitalto Zuni tradition and identity. This enfolding of space and time extends to the entire Zuni ancestral landscape, as it "provides stories and teaches new generations about the lives andevents that have molded the Zuni people. In the same way that all objects and tasks are embodied with a spiritual life, so too is the landscape. As one member of the Zuni community expressed this notion, 'the landscape is our church, a cathedral. It is a sacred building to us" (Isaac 2007:37). Isaac explains that the landscape also functions, in a sense, not only as a sacred structure, but a sacred text, as "[t]eaching younger [Zuni] generations about their history is not just about explaining the events and their meaning; it is also about transmitting the significance of these events within the landscape" (Isaac 2007:38-39). Thus, while rock markings function as textual metonyms of narratives and meanings, this can only be activated when there are opportunities for direct experiential contact and interactive encounters with rock markings and their specific expressions of and material contributions to the Zuni cultural landscape (Young 1988:122, 175-176).

Young explains that during her research with Zunis investigating rock iconography that one Zuni man could decipher the meanings of several rock markings and describe their surrounding environments when viewing the images as part of a projected slideshow. At certain times, however, this man could



not decipher select iconographic figures. He explained, "I don't know what it means because I've never been out there.' Thus, for him meaning was tied to specific location and he couldn't be expected to identify an image on a slide that he hadn't seen in reality, situated in its appropriate [geographical and environmental] context" (Young 1988:175-176). This Zuni relationship to rock markings and their material representations and recordings of history that enfold space and time in and through direct encounters and material acts of communication and information retrieval is but one example of how space-time enfolds as part of different ancestral landscape zones of intensity for Zuni people.

In the BENM, archaeological site 42SA24318, commonly referred to as the Procession Panel site, contains Zuni sacred text because it conveys Zuni migration history, a significant historical event, depicted on the vertical sandstone face by the Zuni ancestors to communicate important information to their descendants. Specifically, the Procession Panel is located near the summit of Comb Ridge and represents an impressive petroglyph panel in the northern Southwest depicting a procession. Archaeologists believe the Procession Panel was probably created ca. A.D. 650-800 (Throgmorton 2017:138-9). The panel stretches for approximately seven meters and depicts four lines of anthropomorphic figures converging on a large, double circle. When ZCRAT members, Presley Haskie and Octavius Seowtewa, visited the Procession Panel, Mr. Seowtewa stated that he thought the petroglyph panel was misnamed and should be more appropriately referred to as the "Migration Panel," because, in his reading, it was depicting the movement of Zuni ancestors through the BENM area (O. Seowtewa personal communication, April 2021).

Zuni traditions about their tribal origins have been documented for over a century (Bunzel 1932; Cushing 1896; Ferguson and Hart 1985; Parsons 1923; Stevenson 1904). Zuni origin narratives are central to understanding and appreciating the deep time connection the Zuni people have to the BENM. According to these accounts, Zuni people trace their origins to the Fourth Underworld, where they had not yet formed fully into human beings. These primordial ancestors developed as they passed through a series of worlds, led by a number of deities and religious leaders, before emerging as the Zuni People onto the earth's surface. Many traditional accounts trace the place of emergence to *Chimikyana'kya deya:a* ("Place of Beginning") at Ribbon Falls in the Grand Canyon.

Upon emergence, the Zuni ancestors began a journey to find *Halona:Idiwanna*, the "Middle Place," which is in the location of today's Zuni Pueblo (Ferguson and Hart 1985:21). Zuni ancestors traveled first to the southeast, reaching *Sunha:kwin K'yabachu Yallanee* (San Francisco Peaks), continuing along *K'yawa: n: Ahonna* (the Little Colorado River). Whiletraveling along the Little Colorado River, the Zuni ancestors were given a choice of two eggs as gifts. One egg was plain and the other was bright blue and spotted. One group chose the plain egg, from which a Macaw hatched. This group migrated south to the Land of EverlastingSunshine. The other group of people chose the blue spotted egg, from which hatched a raven. This group of ancestors branched into three groups and continued their migrations toward the Middle Place (Benedict 1935; Bunzel 1932; Cushing 1896; Ferguson and Hart 1985; Parsons 1923).

The traditional Zuni cultural landscape covers the entire region of their ancestral migrations, including the area of the BENM, and they maintained sovereignty over significant portions of this region into the mid-nineteenth century (Hart 1995b:14). Today, the Pueblo of Zuni is a federally recognized tribe situated on a reservation to the south of the BENM area, in portions of western New Mexico and eastern Arizona. The Zuni language is a linguistic isolate, unrelated to any other languages spoken



today (Hale and Harris 1979:173). Some Zuni oral histories and traditions, however, refer to connections with Central and South American peoples and languages. The Zuni vocabulary includes many loan words from Hopi, O'odham, and Keresan languages, reflecting Zuni ancestors' wide-spread social interaction among groups in the American Southwest (Hill 2007).

UTE INDIAN TRIBE

Ancestral lands of the *Nūche* or *Núu-ci* (Ute people) extend well beyond current Reservation lands and encompass all of Colorado, Utah, the northern parts of Arizona and New Mexico, southern part of Wyoming, and a small portion of Kansas, Oklahoma, Nebraska, and Texas (Simmons 2000). Prior to the arrival of Europeans to North America, the Ute people inhabited this vast expanse of land. Although archaeologists generally place the migration of the Ute people to the Four Corners region by A.D. 1300, more recent evidence connects them to prehistoric Fremont people that lived in the Great Basin and Colorado Plateau by A.D. 800 (Madsen 1975; Simms 2008). In the past decade, it has been more widely accepted by the archaeology community that the Ute share with the Fremont similarities in architecture, artifacts, and lifeways. It is Ute ethnography that currently informs interpretation of botanical remains recovered from Fremont sites (Pearce 2017). It is likely that the cultural connection extends even farther into the past, possibly to the Desert Archaic Period that begins around 9,000 B.C. (Callaway et al. 1986).

The first ethnographic data we have for the Ute in the Bear's Ears region is from the 1776 Dominguez and Escalante Expedition from Santa Fe to California. That record notes cultural and dialect differences among the Utes across what is now Colorado and Utah. However, the Utes were connected by the Southern Numic language, a division of the Uto-Aztecan language family (Rockwell 1965). The Numic branch spread with the dispersal of the Utes from the southern Great Basin, with three linguistic divisions eventually emerging west of the Rockies: Western Numic, which includes Monos, Northern Paiutes, Snakes, and Bannocks; Central Numic, spoken by Comanches, Gosiutes, and Shoshones; and Southern Numic, which includes the Southern Paiutes, Kawaiisus, Chemehuevis, and Utes. While there were regional differences in Ute speech, all dialects were mutually intelligible. This mutual intelligibility implies a single speech community and many overlapping social networks across the considerable expanse that the Ute inhabited. This includes homelands of bands that are now part of the Ute Indian Tribe of the Uintah and Ouray Reservation including the San Pitch, Uintah, Timpanogos, Seuvarits, Yampa, Parianuche, and Tabeguache. Other Ute bands that with neighboring traditional homelands include the Moaununt, Sabuagan, Pahvant, Moache, Capote, and Weeminuche (Uintah-Ouray Ute Tribe 1977; Callaway et al. 1986; Conetah 1982).

For thousands of years, the Utes lived and traveled through the Bear's Ears region as part of seasonal activities and moving through a circuit from high to low elevations as animal and plant resources became available. Each of these locations – from above tree line in the mountains to the bottom of canyons in the desert – have different resources. For millennia, traditions were developed that included narratives that tied the cosmological world to the physical world. Narratives told of where to find water and food, as well as proper processing of the different types of plants and animals. Traditions also dictated what restrictions of food resources were in place regardless of need. These narratives provide a continuity that link people, landscapes, and natural beings through time. The interrelationship of

culture with all natural resources is a significant aspect of the Ute worldview (Smith 1974; Conetah 1982).

The Ute Indian Tribe is committed to sustaining the heritage, culture, and identity that is contained in the landscapes that surround *Kwee yah gut Nah Kav*, or the Bear's Ears. The distinct landscape and natural resources found withing what is now Bears Ears National Monument form a part of the Ute's bond to their ancestral lands. The many landscapes surrounding the Bear's Ears are integral to preservation of the beliefs, customs, and traditions of the Ute people which will continue to be passed forward today and in the future to generations to come.

The landscape of the Bear's Ears region has tremendous significance to the Ute people for a variety of reasons. The area surrounding the Bear's Ears is home to bears and is one place that that they come out of hibernation in the spring. This is significant to the Bear Dance that is practiced by the Ute people. Bear is recognized by the Utes as their Older Brother. This dance was given to the Ute People by the Bear for a prospers hunting season which has evolved to signify the coming of spring or a "new year".

The origin of the canyons, cliffs, and landforms of the greater Bear's Ears region have a place in Ute traditional history. Within the boundaries of ancestral Ute lands are special sites, or "power points", where sacred forces reside. *Poowagudt*, spiritual leaders, understand how to use *poowa--* natural powers -- associated with these spaces. These places have been in use for generations and continue to be used by the Ute people today. The location of specific power sites, which are not general knowledge, should be discussed only with those who have a need to know as this power has both the possibility to harm and to heal.

Traditionally, Ute pilgrimages were unique ceremonial and ritual activities occurring outside the daily habitual cultural activity. Pilgrimage places and the offerings left behind contain the prayers forever and they continue to send their *poowa* across the landscape long after the pilgrim has finished his or her pilgrimage (Van Vlack 2018). This forever links, people, places, and ceremonial objects together in Ute history and cultural memory. The Ute continue to pass on cultural knowledge through programs such as language classes, cultural camps, and other interactive education programs that serve as an important means to help the young people reconnect to, and learn about, ceremonial places throughout their traditional homeland.

UTE MOUNTAIN UTE

The *Nūche* (Ute people) have always lived in the area that is now the Bears Ears National Monument (BENM). Ancestral lands of Ute people extend beyond current Reservation lands and include all of Colorado, major portions of Utah, the northern parts of Arizona and New Mexico, and portions of Wyoming, Kansas, Oklahoma, Nebraska, and Texas (Callaway et al. 1986; Simmons 2000). The Bears Ears National Monument – regardless of how the boundaries are drawn by non-Tribal governments – are but a small portion of the larger whole of these ancestral lands.

The Ute people have ancestral connections to the Bears Ears that extend back millennia, to prehistoric peoples that are known and have yet to be fully understood by scientists. The Ute people are a sovereign



Tribe that has been in the Bears Ears region since time immemorial, but more importantly, are people that are in the Bears Ears region now and will be for generations to come.

Prior to the arrival of Europeans to North America, the Ute people inhabited this vast expanse of land. Many archaeologists believe that the ancestors of the Utes migrated to the Four Corners region by A.D. 1300 (Madsen 1975). More recent data has questioned this interpretation of the historic record, and it is likely that the Ute people have ancestral connections that tie them to the region centuries earlier. Studies in recent years now seek to examine the cultural link between the Utes and the prehistoric Fremont people who were farmers and hunters that occupied the region by A.D. 800 (Callaway et al. 1986; Simms 2008).

The Utes were connected across this vast region by the Southern Numic language, a division of the Uto-Aztecan language family. The Numic branch spread with the dispersal of the Utes from the southern Great Basin, with three linguistic divisions eventually emerging west of the Rockies. This mutual intelligibility implies a single speech community and many overlapping social networks across the considerable expanse that the Ute inhabited (Rockwell 1965).

The Bears Ears National Monument lands are one part of the much larger ancestral lands of the Ute people. The Ute Mountain Ute Tribe is committed to preserving its distinct culture and identity and to passing this heritage on to future generations. Ute ancestral lands contain many sites that preserve a memory of the beliefs, customs, and traditions of the Ute people. There are numerous named places across this landscape. The most prominent terrain features include Blue Mountain (Abajos), also known as Water Soaked or Spring Mountain; Shay Mountain, also known as Sheep Back; The Bear's Ears; Comb Ridge; and the San Juan River, also known as Water Canyon, Big River, or River Flowing from the Sunrise (Aton et al. 2000).

The Bear's Ears -- Kwiyagatu Nukavachi -- is said to be the first place that bears come out of hibernation in the spring. This is significant to the Bear Dance that is practiced by the Ute people. Traditionally, all the Ute bands would come and set up camp and prepare for the dance. Many of the singers were ready to sing their songs which they had practiced or dreamed about during the winter months. The songs show respect for the spirit of the bear and the respect to the bear spirit makes one strong (McPherson 2011).

Ute Mountain Ute ancestral lands contain many sites that preserve a memory of the beliefs, customs, and traditions of the Ute people. As such, the Ute Mountain Ute Tribe has a vested interest in consulting on affiliated cultural resources and human remains associated with aboriginal (ancestral) lands. Bears Ears National Monument is *entirely* within these ancestral lands and contains numerous historic and prehistoric cultural sites. Many of these sites are known but not mapped, while for other sites their general location is known, as well as their importance, but specific and exact information of their locations is undocumented.

The Ute Mountain Ute people are aware of places in the greater Bear's Ears regions that are now in ruin, referring to the people who built them as *Mokwiĉ* or *Muukwitsi*, meaning "the dead". Archaeologists refer to many of these ruin sites as those of the Anasazi. There was never conflict between the Ute people and the *Mokwiĉ*, but some traditional knowledge connects the migration of the *Mokwiĉ* southward with the movement of the Utes into the region. Other narratives describe conflict,

and how the Utes drove the *Mokwiĉ* out of the region to the areas south of the Colorado River. Regardless of the narrative, the Utes respect and preserve the ruin sites so as not to disturb the spirits of the dead. These spirits persist in the ruins, and in the natural elements of the landscape itself (Rockwell 1965; Ute Mountain Ute Tribe 2015).

Archaeological sites – physical remains of where people lived -- of the Utes are found throughout the Bear's Ears region. These sites include traces of the Utes in the form of tipi rings, wickiups, artifacts, and rock art. Many other places where the Utes lived are not readily discernable to archaeologists, primarily because the Utes lived very lightly on the land. They lived in dwellings that were made of natural materials, and often in portable structures such as tents and tipis. Rock art is a more durable remnant of the Ute people's occupation. Newspaper Rock, a well-known rock art panel in the Bear's Ears region, is primarily covered in Ute rock art elements. Other rock art sites are found throughout the canyons and mesas of the Bear's Ears region.

The Utes were drawn to the Bear's Ears region by the rich resources of the mountains and rivers that flow in this portion of the Colorado Plateau. Water formed the many washes and drainage systems of the region, all of which have traditional Ute names. These drainages define a Ute homeland that offered many campsites near springs, seeps, and permanent water sources. It is in these favored places that the Bear Dance and Worship Dance were held. Traditional leaders such as Mancos George (n.d.) have stated this importance to the Ute people as follows:

There is something here that you people should never forget that I am going to tell you. You remember this as long as you live – that Dry Wash, Allen Canyon, Cottonwood, Hammond Canyon, and Comb Wash – whenever a white man says something about them, tell them it's yours, that all canyons with running water are yours (McPherson 2011).

The San Juan River, as well as other rivers including the Colorado and Green, have served to define the territories of different bands of Utes. They have also served to separate them from other people, including the Navajo, during times of conflict. Historic networks of trail systems used drainages as travel corridors. Place names of drainages and springs connect these travel routes to past lifeways and stories. For example, just north of Bear's Ears is a spring called *Na-gwitti-paaĉi* (Looking for Girl Friend, or Flirting Around) because while some Ute men hunted in its vicinity on Elk Ridge, other would-be hunters would return to flirt with the women remaining in camp. While this place name portrays an entertaining picture of camp life, it also describes how the Utes would come together seasonally for wild game and re-establishing social ties.

The Bear's Ears area has been a homeland for the Ute people. All aspects of Ute life took place on these lands including hunting, farming, raising livestock, gathering wild plants for food and medicine, firewood gathering, and burial of the dead. It is through these activities that many landforms, canyons, and places on the landscape were named and became part of the Ute history.

Prior to disruption by non-Native settlement, the Utes followed a seasonal cycle in the area surrounding what is now the Bears Ears National Monument. The monument lands are one small part of a larger network of places that were utilized by the Utes. This movement tied the Utes to the natural world and allowed them to utilize the resources at various elevations and at different times of the year. The



seasonal round included summer and winter camps in this area. Most notably, winter camps were in locations such as Beef Basin and Cottonwood Canyon, as well as Allen Canyon and Butler Wash. The area of what is now Bluff was a favored winter camp as it is sheltered and has good exposure to the low winter sun.

For a time, the Ute Mountain Ute enjoyed relative isolation, as the white settlers generally ignored this part of the Four Corners region. In the 1880s, however, Mormon settlers moved into the area, followed by cattle companies in search of free grazing lands. Conflict between settlers and local Indians frequently ensued. The Utes also found themselves in conflict with the Navajos, whose population expanded into the area in the 1890s. The Utes living in southeastern Utah repeatedly resisted attempts by the Federal government to remove them to Ute Mountain Ute Agency at Towaoc, Colorado. Tensions between the Utes and white settlers culminated in the 1923 "Posey War". In reality the "war" was a few shots meant to delay a posse chasing local Utes and Paiutes, who were fleeing for a traditional sanctuary. However, the Posey incident became an excuse for the Federal government to send many of the Ute children to the boarding school at the Ute Mountain Ute Agency and force the remaining Utes onto small land allotments near Allen Canyon and Montezuma Creek (Lacy and Baker 2012; McPherson 2011).

Non-native settlement began to put serious pressure on Ute lands, and in 1868 the Utes begrudgingly signed a treaty in Washington D.C. that consigned them to the western Colorado Territory. They were expected to farm, but this proved disastrous due to cultural resistance and competition from better-equipped and more-experienced non-Native neighbors. Accordingly, the Utes turned raising sheep, cattle and horses, which also proved challenging because of limited grazing lands. Starting in the 1950s, the Utes began to build houses on Ute-owned land eleven miles south of Blanding, Utah. Now known as White Mesa, the new settlement fostered a sense of community among local Ute Mountain Utes.

The ability to have access to various landscapes and resources is fundamental to the Ute Mountain Ute traditions. The Bear's Ears region is part of these traditions and remains significant regardless of modern land boundaries.



PART C: THE BEARS EARS CULTURAL LANDSCAPE

Introduction

The cultural landscape comprises both the natural and built environments. Importantly, cultural resources and natural resources are not two different categories in traditional Native life. An individual depends on other living plants, animals, and surrounding land to survive; thus, the natural resources gathered, hunted and walked on for survival becomes a cultural resource. And resources and places on the landscape cannot be considered separately from the landscape as a whole. Those concepts are the foundation of the BEITC management plan, since Native peoples with ancestral ties to this region are eternally obligated by their beliefs to serve as stewards of the land.

From a Native perspective, the natural world is much more than just a physical realm to sustain the material needs of life. The natural resources of the Bears Ears cultural landscape – water, land, wind, sound – are imbued by powerful religious, artistic, and other cultural meanings significant to Native communities with ancestral ties to this region. There are meaningful names for places on the land and they are linked with significant deities, stories, and past events. These places can be topographic features, but also can include areas containing important natural resources -- hunting grounds, distant forests, lithic quarries, marshes, agricultural soils, etc. As described by a Hopi elder Bill Preston "We pray to all these things that we know that take care of us and this whole world. Because of them, this world is in balance."

For generations, Native people have recounted how their people originated on the landscape; thus, mentally, the landscapes are a part of their kin and tribal histories. In some cases, these places then become even more significant. For example, because the Navajo leader Manuelito and his brothers were born near the Bear's Ears, it is now a significant place to the Navajo people. Similarly, the Bear's Ears is said to be the first place that bears come out of hibernation in the spring. This is significant to the Bear Dance, one of the significant ceremonies that continues to be practiced by the Ute people.

Native people have constructed culturally meaningful features on the land, often in the vicinity of notable natural landmarks. Archaeological sites, the physical remains of where people once lived, are found throughout the Bear's Ears region. All Tribal Nations that are part of the BEITC have always had respect for places that were used by all ancestors, regardless of whether there is a direct cultural affiliation to individual sites. The sites have been left undisturbed by generations of Native people because they were homes of the early people. In some traditions, the young were taught to keep away from prehistoric sites and not to touch other people's property and homes. In other traditions, prehistoric sites are used to protect items associated with ceremonies or are places of religious significance.

NATURAL ENVIRONMENT

The 1.9 million acres of the 2015 BEITC proposal for BENM was mostly made up of BLM lands but included and intersected with National Park and National Forest lands. The region is bounded on the south and west by the Colorado and San Juan Rivers. On the east and north, the region is marked by low bluffs and high mesas and plateaus from White Mesa up to the Colorado River near Canyonlands National Park. This vast, mountain-mesa-and-canyon country offers carved, rugged, soaring beauty (Figures 2 and 3). The most exposed part of 800-foot-high Comb Ridge, with its many sweeping vistas and hidden side-canyons, runs south to north through the area for 40 miles. To the north are the Abajo Mountains, which climb above 11,000 feet.

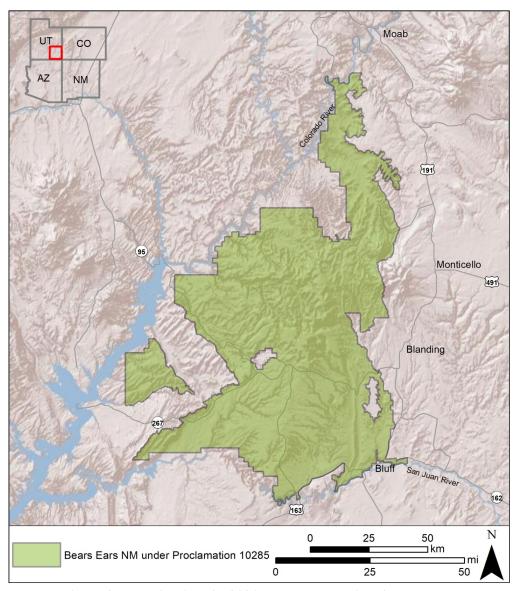


Figure 2. Map showing the 2021 Bears Ears National Monument.



21

The Bears Ears region abuts the east and south sides of Canyonlands National Park. The Colorado River cuts a gorge through a formation named the Anticline between Lockhart Basin and Shafer Basin, both once considered for inclusion in Canyonlands. Verdant Indian Creek, a perennial stream that is lined with cottonwood trees, with headwaters in the peaks of the Abajo Mountains, runs past Newspaper Rock, one of the largest and most varied rock art panels in the Southwest. The lofty mesas of Hatch Point and Harts Point are home to mountain lions and antelope. Cottonwood Creek flows past Bridger Jack Mesa, a place so inaccessible that it has never been grazed by livestock.

The western reaches of Bears Ears include some of the nation's most untouched places including White Canyon, Red Canyon, Red House Cliffs, and Nokai Dome. In the central part of the proposed monument, the stately, arresting natural formation named Bear's Ears rises high above the piñon-juniper forests of broad and long Cedar Mesa, a grand plateau that offers long vistas, most notably from storied Muley Point. Cedar Mesa also is the origin of no fewer than twelve canyons that drape off the sides of this mesa, including Arch, Slickhorn, Fish, Owl, and Grand Gulch.

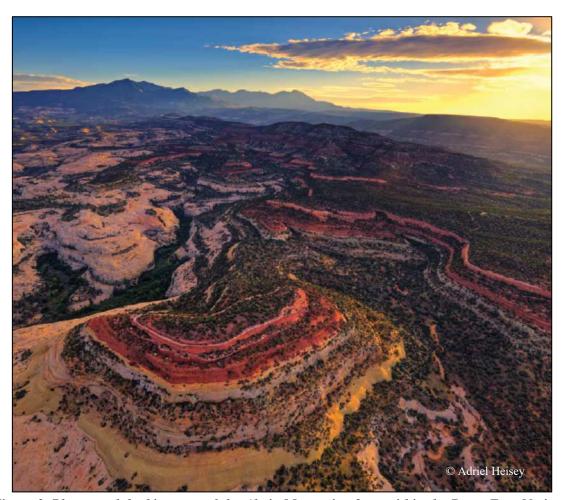


Figure 3. Photograph looking toward the Abajo Mountains from within the Bears Ears National Monument.



Viewsheds and Soundscapes

Emphasizing the importance of the BENM landscape, Octavius Seowtewa (2018:50) stated that "When I visit Bears Ears, I am visiting the ancestors. I leave an offering, and I reconnect back to my ancestors. It is very important to the people of Zuni, being a part of that landscape. We carry that legacy, that knowledge from our ancestors, forward. This whole area is sacred to us—from a petroglyph to a site, from a spring to a viewshed, from the smallest rock to the mountains, they talk, they speak with us."

Viewsheds are visible portion of the landscape seen from any particular vantage point. Everything in the natural world – rocks, plants, animals, water, and other natural elements -- have meaning and character. All these elements are interconnected and viewsheds are important beyond that of simply being "scenery" in the sense of a view from a road or overlook.

Any disruption to the natural world would negatively affect the viewshed, and by extension Native people whose spiritual power resides in that natural world. Any changes to that landscape that are done in a disrespectful manner negatively affect all people, the ecosystem, and all life forms. Such changes include mining, clear-cutting of timber, and creating roads in formerly roadless areas.

Tribes that comprise the BEITC value the auditory environment and believe that the sounds of nature should remain pristine. From a Hopi perspective, sounds and vibrations give life, and it is through vibrations that one can hear and connect with the spirits. In Hopi ceremonies, sacred tones are sung in order to connect with the spirits, and disruptive sounds break the spiritual connections (Preston 2021). In Hopi culture, the month of December is called *kyaamuya*, "the month of respect," and the wintertime is known as *tömö'qatsi*, "the quiet season" (Naseyowma in Hopkins and others 2017:74). There should be no noise during the quiet season. At Hopi during this time of the year, people even leave the villages to cut their wood to reduce the noise.

Tribal Nations of the BEITC consider BENM to be a spiritual place and thus value the need for peace and quiet. Hopi people believe that the spirits of their ancestors still reside at BENM, and any disruption of peace will disturb them. The BLM's 2020 Bears Ears National Monument Management Plan (BENM MP) states that protective measures will be established and implemented for sites, structures, objects, and traditional use areas that are important to Tribes with historical and cultural connections to the land to maintain the viewsheds and intrinsic values, as well as the auditory, visual, and aesthetic settings of the resources. Protection measures for undisturbed cultural resources and their natural settings will be developed in compliance with regulatory mandates and American Indian tribal consultation (BLM 2020).

Air Quality

Air quality is considered to be a key component of health by the BEITC. Clean air is important because it is part of an overarching earth stewardship that is part of all Native traditions. Air pollution from mining and milling, machinery, vehicles, and construction are considered to damage or corrupt the natural environment. From a Hopi perspective, humans are responsible for air quality, and if there is corruption in any way the earth will react to humans in a detrimental manner (Dawahongnewa 2021). This opinion is shared by all tribes of the BEITC.



Sky

Hopi people believe that since the beginning of time, the sky, stars, planets, and horizons have played an important role in their cultural traditions and ceremonies. There are names for many stars and constellations in the Hopi language, and many ancient villages were laid out according to their alignment with the sun, moon, and stars. This practice is still evident at Hopi today where the villages aligned with certain constellations. The skies and horizons also serve as Hopi calendars and sun dials. The alignment of light in association with natural landforms and the built environment is significant and conveys messages about planting season and ceremonies. Many Hopi *katsinam* (plural of *katsinam* have stars or the moon on their faces, which signifies their connection with the skies. These *katsinam* only appear at certain times, and they bring blessings of wellness and prosperity to the Hopi people (Wadsworth 2021).

For the Zuni, the annual ceremonial cycle is guided by lunar and solar cycles. Zunis believe that their ancestors perfected ceremonies as they migrated through places such as Chaco Canyon and Mesa Verde, and the Zuni people today carry on these practices (Hopkins 2014). In the Nineteenth century, Frank Hamilton Cushing noted that "[t]he Á-shi-wi, or Zuñis, suppose tesun, moon, and stars, the sky, earth, and sea, in all their phenomena and elements; and all inanimate objects, as well as plants, animals, and men, to belong to one great system of all-conscious and interrelated life" (Cushing 1883:9).

For generations, the Navajo have observed the night sky, from which they developed a sophisticated philosophy and complex astronomy. Traditional stories of the Night Sky were often spoken aloud with the enhancement of vocal performance, movement, and animal sounds. Most teaching traditionally took place during the winter months of late September to early March among family and clan members. Teachings associated with the Night Sky were shared within the traditional hogan, which itself was modeled and constructed in alignment with cosmic directions and principles. Navajo cosmology reflects the emphasis that Navajos place on the Night Sky and its holistic interconnection with the earth (Maryboy et al. 2017).

Navajo ways of knowing, including Navajo astronomy, are based on a sense of the power and significance of place. Navajo astronomy is based on the relationship of the four Sacred Mountains of Navajoland with the celestial bodies above. The movement of the Sun, the four cardinal directions, the colors of the directions (white, blue, yellow, and black), the phases of the moon, and the Navajo constellations, all these and more reflect the importance of the relationships of Mother Earth and Father Sky (Maryboy et al. 2017).

For the Utes, it is Father Sky that created the sun, moon, stars, and Earth. The Utes do not have an extensive pantheon of deities or a single unified explanation of life, but instead respect all elements of the natural world as it is in that world where power resides that influences all life (Simmons 2000). The origin of the earth and sky have a place in Ute traditional history. Differences in elevation divide the Ute Mountain Ute world into cosmological zones. Each cosmological zone has its animal spirits, and there are five different colors tied to these different kinds of places. The sky above the upper earth is associated with white and is the domain of the eagle; mountaintops of the upper earth are yellow and home to the Mountain Lion, while mountain slopes have a combination of blue/green/gray as their



colors and are represented by the Wolf; basins and lower elevations of the lower earth are colored red and occupied by the Weasel; and the underworld, a reflection of the earth above and the place where the planets and sun pass through during the day and night, is black and inhabited by the Rattlesnake. Importantly, all places in the natural world are interrelated and are not thought of as separate from one another.

There is consensus that the night sky in open spaces should be protected in order to preserve these ancestral connections. Light and dust pollution are factors that affect the quality of the night sky.

Water

Water is fundamental to all life. In the arid west, water is of central importance to Native religion and identity. Water is respected as a living entity that is essential to life, which must be protected in all of its forms for the benefit of all living creatures.

At its simplest, mainstream Western science defines and describes water as an inorganic compound—one composed of millions of molecules, wherein each molecule consists of two hydrogen atoms bonded to one oxygen atom—that can exist in three forms or states of matter: solid, liquid, and gas. Within this scheme, water is readily understood as indelibly connected to ecological systems, themselves functioning and connecting at different settings and scales, and as a "resource" upon which all life depends. Zuni perspectives are not necessarily in conflict with—but richly additive to—these Western understandings of water's significance. Zunis understand water as both a blessing that is indelibly connected to all aspects of the world as a complex, interrelated and dynamic system, and as a lifegiving force that—in and of itself—is living and alive.

Natural sources of water are viewed as interconnected and the home of deities or spiritual beings. Hopi people continue to pay homage to the water sources that were important to their ancestors (Singletary and others 2014:37). Many Hopi people believe that interference with the natural balance of water causes the water spirits to become so angry that they will reject spiritual petitions for good things to come to the Hopi people (Kuwanwisiwma in Humphrey 2014:2). The Hopi people have noted that many springs have declined in output in recent years and community members have made concerted efforts to restore many springs both on Hopi tribal lands elsewhere (Vasquez and Jenkins 1993; Hopi Tribe and Kaibab National Forest 2016).

Similarly, the Ute people believe that water sources are places where spiritual beings reside and that activity on or near water sources affect these entities. For Ute people the word for water is "Pah" which is the same as Hopi, and the word for blood is "Pa ph" they are both derived from the same meaning referring to life. There are traditions that describe the often-negative results of not recognizing or respecting this domain. In general, any adverse impact to water sources such as pollution has another effect of spiritual contamination, or negatively acting on this singularly important resource for the Ute people. The impact to water sources in the region affects the present people but it also has a larger effect on the spiritual realm as well that is less easily measured by Western scientific monitoring.

The Ute people were drawn to the Bear's Ears region by the rich resources of the mountains and rivers that flow in this portion of the Colorado Plateau. Water formed the many washes and drainage systems of the region, all of which have traditional Ute names. These drainages define a Ute homeland that



offered many campsites near springs, seeps, and permanent water sources. It is in these favored places that the Bear Dance and Worship Dance were held.

The Navajo cultural landscape holds stories of the value of water and connections with rivers, springs, creeks, and areas where water collects in stone basins. The rivers, springs, canyons, and rock formations are regarded as supernatural beings (*Diyin dine'e*) and places where supernatural events occurred. The Navajo similarly consider these rivers as sacred entities. Like their ancestors, the Navajo continue to make offerings and visit rivers for many traditions. The rivers of BENM connect living beings, like plants, animals, and other beings.

Two major rivers associated with BENM are the Colorado River and the San Juan River. Hundreds of small tributaries located within the boundaries of BENM feed these two rivers. Hopi people view watersheds as the veins of the earth that contribute to the health and productivity of the springs, and the well-being of all living things (Wadsworth 2021). From a Hopi perspective, the proper management of watersheds and riparian areas associated with BENM is significant because the water from this area ultimately feeds the Grand Canyon, which is where spirits reside in the afterlife and regenerate through the clouds and rain.

The Colorado River is known as *Pisisvayu* in the Hopi language, and the San Juan River is *Yotse'vayu*. Susan Secakuku (2011) described *Pisisvayu* as "a main water thoroughfare, or blood vein." She added that "the watershed that comes to it or off of it ... the mountain ranges ... is really how we here at Hopi ... [make our offerings] through the washes and things." Some Hopi tribal members consider the entire Colorado River Basin to be part of *Pisisvayu*, even though some of the smaller tributary streams may have specific names. In Hopi tradition, offerings are made to the Colorado River and its tributaries as part of the Hopi commitment to stewardship (Hopkins and others 2013).

Watersheds were historically used by the Ute people to navigate their ancestral lands. Historic networks of trail systems used drainages as travel corridors. Place names of drainages and springs connect these travel routes to past lifeways and stories. The San Juan River, as well as other rivers including the Colorado and Green, have served to define the territories of different bands of Utes. They have also served to separate them from other people, including the Navajo, during times of conflict.

Zuni traditional knowledge and knowledge derived through the practices of Western trained hydrologists align on the conclusion that all water is interconnected. From a Zuni perspective, these connections are formed and live through rhizomic underground waterways that link to surrounding oceans and find expression on the surface of Earth Mother in the forms of seeps, springs, lakes, rivers, washes, pools, and ponds (Bunzel 1992:487; Ford 1995:11; Young 1988:174). As Wilfred Eriacho Sr., (former) Chairperson of the Zuni Tribe Water Rights Negotiation Team explained:

All forms and sources of water are most important and sacred to our Zuni people because from the dawn of their traditions and culture, farming has been a major life and culture sustaining occupation. Using the moisture absorbed by Earth Mother during the winter snows and the spring and summer rains, ancient Zuni farmers cultivated every available land to grow their precious corn along with other crops such as squash and beans. Traditional oral stories tell of ancient farmers cultivating fields irrigated by spreader dikes that controlled flood flows....



Because of the importance and sacredness of all forms and sources of water, all prayers and songs of the three major components of the Zuni religion contain language asking for rain and snow to ensure that all crops have enough water to finish their life paths to provide sustenance for their Zuni children (Eriacho 2003:90).

Wildlife

The diverse vegetation and topography of BENM supports a variety of wildlife species. Wildlife resources are vital to the spiritual, cultural, and economic welfare of Native people. The unregulated use of wildlife threatens the political integrity, economic security, and health and welfare of future generations. Birds, mammals, reptiles, insects, and other animals are valued by Native people as brothers and sisters and many species are tied to clan histories, ceremonies, and identity. As described by Hopi elder Ronald Wadsworth, "Eagles and other animals are family; they are Hopi ancestors." Many wildlife species are used for food and in ritual activities. Hopi animal harvesting practices that were adapted to the environment and learned over millennia are still being practiced today at the Hopi Mesas (Duwala 2011). Harvesting animals involves religious elements in the preparation for the hunt and caring for harvested animals (Balenquah 2012:52-55). Sharold Nutuyma (in Spears and others 2021) explained that game animals "are human ... When you hunt them, they offer themselves to you. You have to cleanse yourself, pray, and make prayer feathers for them."

Hopi people consider all birds to have spiritual significance. Hopi people frequently collect bird feathers for use in prayer sticks and other ritual paraphernalia. The different colors of bird feathers are used in accordance with Hopi color and directional symbolism. Eagles are of paramount importance in Hopi lifeways, and are considered to be kin (Ainsworth 1988:77; Courlander 1971:36; Ferguson and Lomayestewa 2007). Eaglets are collected for religious purposes, and Hopi clans maintain specific eagle gathering areas, some located great distances from the Hopi villages. Young eaglets are collected and brought back to Hopi and are considered part of the family that raises them (Beaglehole 1936:18; Ferguson and others 2007:14; Hopkins and others 2015:151). Eagle feathers are an essential component of many Hopi rituals and prayer offerings (Ferguson 1998).

Zunis believe animals are the vessels of their ancestral spirits, and thus can commune with them. Occupying the world that links the Earth and sky, birds are an indicator species, telling the Zuni what our lives have become and sometimes, of destiny. Zuni religious practitioners use a wide array of animals in their cultural activities, such as deer, elk, antelope, bear, mountain lion, badger, turkey, blue jays, flicker, woodpecker, yellow oriole, eagle, duck, sparrow hawk, larks, nutcracker, night hawk, red tail hawk, and bobcat. Even common reptiles and insects have cultural importance for Zunis. Commonly, Zunis will leave offerings of corn meal at an anthill, because some Zuni medicine societies have cultural associations with ants, and that these insects figure prominently in their rituals. Another example is the *lechokyaba* (horned toad), a healer associated with the Ant Society, which heals sores through Zuni prayers.

Over the millennia, wildlife has become inextricably tied to all aspects of traditional Native beliefs and practices. Many wildlife species are used for food and in ritual activities. Animal harvesting practices that were adapted to the environment and learned over millennia are still being practiced today.



Harvesting animals involves religious elements in preparing for the hunt and then caring for the animals following the hunt.

Prior to disruption by non-Native settlement, the Ute people followed a seasonal cycle in the area surrounding what is now the BENM. This movement tied the Utes to the natural world and allowed them to utilize game resources at various elevations and at different times of the year. Similarly, local Navajo community members and traditionalists stated that the Bears Ears area was historically known as providing ceremonial hunts and, the hunting trips provided much needed meat for their families and community. Prayers centering on hunting were brought up in almost every conversation with the elders. The hunting travels into *Shashjaa* 'were completed reverently and respectfully as generations had done for decades.

Plants and Woodland Resources

Plants provide food, medicine, shelter, dyes, fibers, oils, resins, gums, soaps, waxes, latex, tannins, and even contribute to the air we breathe. The Tribes of the BEITC have extensive knowledge about wild plants growing in the Southwest, which is indicative of the long time they have resided in the region. For generations, Native people have used plants for food, medicine, tools, and ritual purposes. In some cases, people often travel long distances to collect plants and other substances for ceremonies, and the materials from certain places often embody the spiritual power of those places.

For all the Tribes of the BEITC, ethnobotany is a means of documenting the cultural significance of plants, including seasonality of use, harvesting practices, and traditional management. There are specific plants that are used in ceremonies as well, and often there are cultural practices surrounding their collection.

The Hopi Tribe believes that the harmony of trees, other vegetation, soil, water, and wildlife are necessary for the emotional and spiritual well-being of the Hopi people. The Utes have deep traditional cultural beliefs that tie them to the land. Everything in the natural world received qualities during the Creation, and the elements of the natural world – rocks, plants, animals, water, and other natural elements -- have meaning and character. The Ute names of the plants, as well as their traditional uses, tell a story about the cultural landscape of BENM.

Zuni clans are named for individual totems associated with plants, animals, and celestial bodies significant in Zuni history. For the Zuni the BENM's pristine environmental zones present an opportunity to have access to and use of traditionally important plants. These plants, once abundant on the Zuni reservation, are now less available. Over the decades, the effects of a warming climate have accelerated deleterious effects on the landscape.

All entities of nature have conscious ways of interacting with one another, and each is viewed as possessing a personhood, a sense of purpose, and inherent meaning expressed in a multitude of ways. For many Native Americans, sentience is recognized in plants which have a conscious essence that includes the realization of when they are being treated well or poorly. Cajete (2000:179) refers to this as a "spiritual ecology," expressed as embodied relationships that must be honored.



Nineteen plant species are documented as occurring in what are known as "hanging gardens" near Bluff, Bears Ears, Natural Bridges, and the Abajo Mountain regions. Recently, Navajo ethnobotanist Arnold Clifford has discovered several previously undescribed plant species that are awaiting documentation in the scientific literature. Many of these plants occur only in these specific environments and in the San Juan Mountains to the north and east, having been transported to these locations during the last glaciation. This region is unique; it is important to recognize and protect these rare botanical treasures.

Geologic Resources

Tutskwat toko'at, a Hopi phrase meaning the "essence or soul of the earth," comprises the many geological layers of sediment and minerals under the earth's crust. Historically and today, Native people travel long distances to collect materials for use in ceremonies and for other cultural reasons. Often, knowledge of these areas is passed on from generation to generation including rocks, clays, pigments, and other minerals. Stones, minerals, and pigments are used in Hopi ceremonies In Hopi belief, these resources should be collected and used sparingly. Hopi people believe that it is important to preserve and protect each layer of the earth because there are different formations containing different resources, and each layer carries the knowledge from times past (Wadsworth 2021).

Soil and minerals gathered by the Navajo from *Shashjaa*' are used for sand paintings and dyes. When these items are gathered, offerings are made in a traditional manner before the items are collected. The same minerals are used to dye the sumac for Navajo baskets which are used for ceremonies.

Landforms can be geologically and/or topographically prominent features on the landscape that are important in Native religion and culture. Landforms are natural landmarks that may display no signs of human interaction such as specific mountains or other geological formations, including waterfalls, caves, rock arches, hoodoos, etc. A landform may be part of an archaeological site, a shrine or an offering place, but it is a distinct geological or topographical feature that is imbued with cultural significance.

Paleontological Resources

There are many traditional stories about animals that are not around today, and it is understood that these beings existed before humans. These creatures, as evidenced today as fossils, should be acknowledged and respected. The Hopi people have stories about animals that are not around today. These stories are told during the wintertime, around winter solstice, and they describe creatures that existed "way back in time" (Wadsworth 2021). Hopi ceremonies acknowledge these ancient beings and there are Hopi *katsinam* that represent 'deep ocean life' and other life forms. These *katsinam* are considered disciplinarians, and they will appear to a person who is not living according to the covenant of Hopi values (Dawahongnewa 2021). Hopi people understand that these beings existed before humans (Preston 2021). They believe that these ancient beings from long ago were abundant and existed just like people and animals do today. These creatures should be acknowledged and respected. Other paleontological resources such as petrified wood are also important to Native people, and are uses in ceremonies and other activities.



BUILT ENVIRONMENT

Archaeological Sites

All Tribal Nations of the BEITC have ancestral ties to BENM. Moreover, they consider all ancestral places as integral in understanding the broader picture of Tribal history and religion. Archaeological sites – physical remains of where people lived -- are found throughout the Bear's Ears region. These archaeological sites include artifact scatters, rock markings (petroglyphs/pictographs), trails, shrines, wooden structures, pit house villages, and cliff dwellings with standing masonry architecture.

According to Utah State Department of History records, approximately 11.5% of San Juan county, Utah has been systematically surveyed for cultural resources as of January 2021. This has yielded approximately 34,500 documented sites, the majority of which are of prehistoric and historic Native American affiliation. Recent work has demonstrated that some portions of the region, such as lower Cottonwood Wash north of Bluff have archaeological site densities of up to 1 site per 5 acres (Chuipka 2018). Extrapolating this data to areas not yet inventoried for archaeological sites, there are likely upwards of 260,000 archaeological sites in the 1.3 million acres of BENM as it was established in 2016.

Importantly, these site count numbers only account for archaeological sites. Other cultural sites and traditional cultural properties likely exist within areas that have been inventoried without any ethnographic consultation. The true number of cultural sites with significance to descendant communities is currently unknown, but likely greater than the estimate provided above. What these numbers demonstrate is a deep and rich history of occupation and cultural significance to the Tribal Nations of the BEITC.

From the Zuni perspective, all of the archaeological sites in BENM are conceptually grouped together and identified as *enote hes'ahdowe* literally, "old homes." The ancient archaeological sites on BENM are essential pieces of the past that substantiate Zuni history. As the late Cornell Tsalate explained, "Even light artifact scatters are important because it's a sure sign our people passed through here. It shows they were roaming around here; it's like a trail connecting habitation areas. It's also a sign of hunting and gathering areas. The Zuni's histories aren't just made-up stories. These things—the artifacts—make the stories fact."

Hopi and Zuni consider all of these archaeological sites to be monuments that commemorate the lives of their ancestors. Hopi and Zuni cultural advisors have expressed that these sites are important sources of information, and more importantly, they are still occupied by the spirits of ancestors (Ferguson 1998:265–266). "They're still there, the spirits," exclaimed George Yawakie when visting archaeological sites associated with a project in southeastern Utah. Harry Chimoni, who also visited archaeological sites in the early 2000s, elaborated, "The bones of our ancestors are there. It puts a lot of sacredness on the land."



Both the Hopi and Zuni people view archaeological sites as sacred areas and they maintain strong associations with these places today (Carr 1992:32–33). They visit ancestral sites periodically to make offerings to their clan ancestors. Some sites are visited in connection with particular Hopi ceremonies to notify the deceased relatives buried there that the ceremony is in progress and the spirits should do their part (Eggan 1994:14). Zuni cultural advisor Octavius Seowtewa (2018:50) stated that "When I visit Bears Ears, I am visiting the ancestors. I leave an offering, and I reconnect back to my ancestors. It is very important to the people of Zuni, being a part of that landscape. We carry that legacy, that knowledge from our ancestors, forward."

The presence of Hopi clans in an area is recognized by their wu'ya, or totem, that represents their names and symbolic associations to plants, animals, or meteorological phenomena important in their migration histories (Lowie 1929:337–338; Eggan 1950:80–89). These symbols are often found in petroglyph or pictograph representations, and sometimes in painted pottery designs and other material remains. Ancestral Hopi settlements and petroglyphs are seen as "footprints," a historical metaphor for the physical evidence of occupation of the land that the Hopi people use to verify their historical traditions of clan migrations (Ferguson 1998).

Migration landscapes are celebrated at the Hopi Mesas today, and continued connections with these places are important in the preservation of cultural practices. Shrines or monuments have been built at the Hopi villages to commemorate places of historical significance so that prayers and other ceremonies performed at home will reach ancestral areas. The Hopi Tribe considers Hopi ancestral sites to be traditional cultural properties that are significant in the retention and transmission of Hopi culture.

Zuni people recognize their historical and cultural affinity to the archaeological sites contained in the BENM. In addition to their spiritual and sacred qualities, archaeological sites also embody a historical meaning to the Zunis, because they provide physical verification of Zuni traditional histories that recount their journey to find the Middle Place. This remembered traditional history is the lens through which Zunis interpret the distant past and give contemporary meaning to the places that make up their traditional land. Archaeological sites ranging from the Paleoindian and Archaeological through the Pueblo occupation of the Southwest are understood to be the tangible vestiges—the footprints and markers—of these Zuni ancestors (Dongoske and Nieto 2005:52-54). In the Zuni way, pottery, stone tools, architecture, middens, shrines, burials, rock art, and villages come to have a dual purpose in Zuni society in that they provide a source of historical knowledge and a sign of their unique spiritual charter (Ferguson 1984, 2007, 2008).

Navajo people have always had respect for the *Anaasazi* sites. The sites are referred to as *Anaasazi'* da'bighan intee' (ancestors' homes). They have been left undisturbed by generations of Navajo people because they were homes of the early people. Navajos do not return to places of death, whether recent or ancient. Traditionally the young were taught to keep away from prehistoric sites and not to touch other people's property and homes. The prehistoric sites are also used to protect items associated with ceremonies.

Navajo oral traditions and archaeological and historical records document their occupation in and around Bears Ears. Exploitation of prehistoric artifacts and sites are of great concern to Navajos. They have witnessed the destruction of places and the taking of cultural material. They have seen the destruction of prehistoric and Navajo sites. Cultural genocide continues through looting and by



destructive visitors. This continues to occur today through vandalism of petroglyphs and by looting of archaeological sites. This has resulted in historical trauma among the Navajos by others disrespecting their former ancestors' homes and cultural material, disregarding their stories and prayers. The destruction of former Navajo sites has been long discussed among the Utah Navajos who visit their ancestral homelands. Forcing families off the land they had occupied and loved for centuries has caused generational emotional trauma. These disrespectful actions were an attempt to erase the Navajo past in this region.

The Ute Mountain Ute are aware of places in the greater Bear's Ears region that are now in ruin, referring to the people who built them as *Mokwiĉ* or *Muukwitsi*, meaning "the dead". There was never conflict between the Ute people and the *Mokwiĉ*, but some traditional knowledge connects the migration of the *Mokwiĉ* southward with the movement of the Utes into the region. Other narratives describe conflict, and how the Utes drove the *Mokwiĉ* out of the region to the areas south of the Colorado River (Simmons 2000). Regardless of the narrative, the Utes respect and preserve the ruin sites so as not to disturb the spirits of the dead. These spirits persist in the ruins, and in the natural elements of the landscape itself. Any activity on or even near *Mokwiĉ* ruins is an ever-present concern for the Ute people. Special prayers prior to disturbance help to "quiet" ruin sites. Even with this respect and care, the dwellings, objects, and remains of past people are considered potentially dangerous. Illness may be a result of disturbing the places of the dead, who inhabit both the geographical and metaphysical places of the Bear Ears landscape.

Historic and prehistoric remains of the Ute people are evident in the form of tipi rings, wickiups, artifacts, and rock art. Many other places where the Utes lived are not readily discernable to archaeologists, primarily because the Utes lived very lightly on the land. They lived in dwellings that were made of perishable materials, and often in portable structures such as tents and tipis. Rock art is a more durable remnant of the Ute people's occupation.



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PART D: THREATS AND IMPACTS TO THE LANDSCAPE

The BENM was established, in part, because of the pristine condition of the environment and the value for preserving this landscape. The following section identifies the most threatening sources of potential damage and environmental degradation to the BENM. These sources are considered offensive actions by Tribal Nations of the BEITC and counterproductive to the traditional Native stewardship responsibility toward Earth Mother and all her non-human children.

Native people have an inherent concern about BENM resources that stems from their stewardship responsibilities. There are a number of perceived threats and potential impacts to BENM that must be considered in the management of this landscape. Presidential Proclamations 9558 and 10285 recognize the vast outdoor recreational opportunities that exist in the monument, including rock climbing, hunting, hiking, backpacking, canyoneering, whitewater rafting, mountain biking, and horseback riding. In addition to recreation, much of the BENM landscape is also used for grazing and forestry, and the Monument is subject to existing mining, grazing, and water rights. The BEITC is concerned about the impacts these activities may have on the cultural and natural environment of the Monument.

EXTRACTIVE INDUSTRIES

The BEITC is concerned that uranium mines, natural gas wells, and oil wells will scar the pristine lands of BENM and contribute to the release of methane and other noxious contaminants into the atmosphere and cause sickness to humans and wildlife. While energy development can provide benefits and economic opportunities when responsibly managed, this kind of development is not appropriate for the BENM.

Within the BENM uranium mining and oil and gas development would be detrimental to air and water quality, and the sound and vibrations caused by its extraction and transport would disturb plant life, wildlife, and other aspects of the cultural and natural environment. The production, use, and/or contamination of water as part of energy development in an arid environment such as Bear's Ears is a major contradiction to traditional beliefs regarding respect for the land and its resources.

There are over 100 active oil and gas wells on BENM, and over 180 wells that are inactive (Gunther et al. 2020). Tribal members are concerned that the continued use of wells will contribute to the release of methane into the atmosphere and cause sickness to humans, insects, plants, and animals. Tribal Nations of the BEITC believe that the continued extraction of oil and gas is detrimental to air quality, and that the sound and vibrations caused by oil and gas pumping or fracking will harm all life forms and diminish other aspects of the natural environment and ecosystems of BENM. The presence of oil and gas wells also detracts from the natural beauty of the environment in BENM and contaminates the audial environment. From the perspective of the Tribal Nations of the BEITC, oil and gas extraction creates voids in the earth that will cause unforeseen damage in BENM. Traffic from equipment may cause harm to environment, and the dust raised by trucks and heavy equipment may silt up water sources or adhere to petroglyph and pictograph panels. These adverse impacts would probably have had negative cumulative effects and will continue to have negative cumulative effects time to BENM over time.



There are concerns about development of additional industrial roads, as they will also allow the already high volume of recreational visitors on ATVs to access currently undisturbed areas of BENM. Roads also create erosion and cannot be fully rehabilitated, and also act as conduits for precious water and prevent it from being dispersed over the landscape.

Uranium is a major concern for the Tribal Nations of the BEITC. The region within and around BENM is rich in uranium, a mineral known to cause cancer in humans, and harm wildlife, plant life, soils, and water. Within BENM, there are 1787.56 sq. km. of low-yield uranium potential sites, and 765.77 sq. km of medium-yield potential sites. All Tribes of the BEITC are deeply concerned about radioactive contamination caused by uranium – past, present, and future. Hopi people are deeply concerned about radioactive contamination caused by uranium and they strongly and adamantly oppose uranium extraction on BENM. The Ute Mountain Ute Tribe's neighboring White Mesa community is especially concerned about its groundwater resources and the contamination of air quality with the transport and dusting of uranium ore using Monument roads.

Although there are no major coal deposits present within BENM, there are deposits on lands immediately adjacent to the Monument. Any extraction of coal in the vicinity of BENM will affect the water table, air quality, and overall health and well-being of humans and the environment. No reclamation program will ever be suitable to return the land and the order of the earth to its natural state following large-scale extraction of minerals such as coal. Large-scale mining and mineral extraction has caused harm to people of the Tribal Nations of the BEITC for generations.

Mining causes changes to the landscape in that large amounts of rock and dirt are displaced to get at the minerals, or to make room for infrastructure to get at subsurface resources. The White Mesa Uranium Mill outside of the White Mesa community of the Ute Mountain Ute Tribe processes materials mined from the Monument and elsewhere, with the air and water pollution directly affecting the local communities. This mill is outside of BENM but does affect the broader cultural landscape of the region.

There is a shared concern that toxic dust that falls on plants can become a source of carcinogens or toxins to traditional communities whose members who collect plants for medicine or consumption. This development causes a drastic change to the natural environment, but often it is only the start of the damage to the environment that may persist for generations. For example, uranium mines continue to cause radioactive contamination decades after they were abandoned. This contamination affects groundwater and all living things that rely on that water for life. These negative impacts extend to the well-being of the entire earth—the land, water, air, sunlight, wildlife, and more—as well as to human health.

There is a sentiment among some Native residents in the region that southeast Utah is viewed as a money-making place for non-Native Utah residents. Concerns have been expressed that the non-Native people are not thinking of the future. Any new development could bring in income for San Juan County and the State of Utah; however, it requires careful planning with everyone at the table.



LIVESTOCK GRAZING

Grazing of livestock has historically been a source of conflict within the Bears Ears region. In the 1880s, Mormon settlers moved into the area, followed by cattle companies in search of free grazing lands. Conflict between settlers and local Native groups, including the Ute and Navajo, frequently ensued. Allotment made the Native lifestyle of hunting and trading over long distances impossible. Accordingly, groups such as the Navajo and Ute turned to raising sheep, cattle, and horses, which also proved challenging because of the federal government's co-opting of their land and prescribed reservation boundaries, ultimately limiting opportunities for grazing.

Some Tribal members are worried about overgrazing in BENM, which can lead to soil erosion and affect plant resources. There is also concern about Native groups having access to important plants within grazing units that are leased to non-Natives. Erosion can harm springs and waterways and would likely threaten archaeological sites in BENM. Livestock may also pollute springs and waterways with their waste. Cattle and livestock may threaten medicinal and ceremonial plants (Preston 2021). The introduction of cattle has led to a reduction in the prey-base, such as prairie dogs, for eagles and diminished eagle populations in grazing environments. Prairie dogs consume the same plants as cattle, so they are in competition with each other, and prairie dogs are ultimately displaced (Wadsworth 2021). Some people believe that grazing management has led to division of land and misuse of springs. Springs should be fenced to keep cattle out of them.

If livestock is going to remain permitted within BENM, they need to be cared for with designated pastures and water. Livestock should be cared for properly so that they do not destroy the land. They should be cared for daily because any form of neglect will ultimately cause negative impacts to springs and other land resources. Springs and waterways should be protected from livestock by creating or designating specified watering areas for cattle. Cowboys should be present to keep cattle in their designated areas, and should not use motorized vehicles off established roads.

RECREATION AND TOURISM

Unmanaged and unregulated recreation and tourism is a major threat to the values held by the Tribal Nations of the BEITC. Visitation by Natives and non-Natives alike is one way to educate the public on the cultural heritage of the Tribes that have ancestral ties to the Bears Ears region. However, there should be consideration of sharing appropriate (or culturally sensitive) ways for thinking about and visiting BENM.

BENM currently hosts a number of climbing routes, trails, campgrounds, and other recreation sites. Some Tribal members believe that several negative impacts have already occurred as a result of uncontrolled recreation, including damage to ancestral sites, vandalism, and pollution to the environment by trash and human waste. People may harvest live wood for campfires, which harms the animals that still live within BENM.

In particular, off-road vehicles can churn up soil leading to the development of ruts, damaged root systems of natural trees and plants, compacted soil, increased erosion, increased frequency of dust



storms and increased sedimentation of waterways and springs. In addition to damaging plants by driving over them, off-road vehicles can spread seeds as they churn up the soil and vegetation aiding in the spread of non-native species that can damage native plant communities. As the natural habitat is disturbed, eroded and/or invaded by noxious non-natives, the natural habitat for wildlife is destroyed and their continued survival threatened. Engine noise can scare the natural wildlife driving them out of their established territories.

Recreationalists are creating new roads and trails, causing damage to the land, ancestral sites, plants, and to sensitive soils. Recreationalists sometimes overuse and misuse springs and other water sources. Erosion may occur as a result of trail use by ATVs, mountain bikes, and horses. Music, talking, yelling, driving, and human presence will have impacts on the soundscape and viewshed. Boats and rafts, especially motorized boats, if used in waterways in or near the BENM, will bring in noise pollution, gas pollution, and they may introduce non-native species to the environment.

Navajo ethnobotanist Arnold Clifford has conducted studies on the flora in the Bears Ears National Monument. In the past 30 years, the Bears Ears region has experienced greatly increased human visitation. Much impact and stress has been placed on the land, including the once near-pristine canyons. The results of increased human visitation include development of numerous new trails, and in the process has destroyed fragile, irreparable cryptobiotic, cryptogamic soils. Numerous hard-to-see forbs are also damaged by recreational pursuits. Off-road travel by all-terrain vehicles (ATVs) and motorbikes have done considerable damage, and the vegetation and desert terrain will exhibit scars for many generations to follow.

The Hopi are concerned that ancestral spirits will ask why people are disturbing them in BENM. Traditionally, Native people prepare themselves with prayers and offerings before they visit places like BENM. ATV use within BENM can inadvertently impact ancestral sites (archaeological sites) by driving over these sites and leaving tire marks and disturbed soils which can precipitate damaging erosion caused by channeling rain surface runoff. In addition, ATVs provide access to archaeological sites in remote locations where the potential for vandalism and pothunting is high because of the remoteness and sense of isolation.

It is recommended that recreation should be restricted to designated areas and signs should be posted to keep people within those designated areas. Signage upon entering BENM would be an important management tool. The "leave no trace" philosophy should be enforced. Campfires should only be made in designated campsites, and other fires should only be made for religious and spiritual purposes by Native Americans. Designated campgrounds should include restrooms, and possibly showers. Monitoring and policing should be enforced. Backcountry camping could be allowed through permits

CLIMATE CHANGE

It is important to the Tribal Nations of the BEITC that the climate is acknowledged as a physical and spiritual force in BENM. The climate is part of the physical world and affects all places and resources. Any changes in climate need to be recognized as impacting (positively or negatively) the cultural landscape the Bear's Ears region.



Climate change is a long-term change in the average weather patterns that have come to define Earth's local, regional, and global climates. The Intergovernmental Panel on Climate Change (IPCC) is the world's leading Western science body on climate change and its impacts. According to the IPCC, climate change refers to changes in certain prevailing environmental conditions (e.g., temperature, rainfall patterns) characterizing a place or period that can be identified and observed (IPCC 2012:557). Unusual conditions or extreme environmental events outside of the usual patterns (such as massive and extended periods of flooding or drought) related to weather patterns identified as irregular (for example, unusually intense rainfall or unusually dry conditions) may be due to processes of a changing climate, or they may simply be outlying occurrences (Curti et al 2020:10).

From a perspective of traditional knowledge, definitions of climate change immediately present, maintain, and are embedded within artificial dichotomies of humans distinct from nature. These ideas have permeated mainstream Western thought and practice for centuries, with dire consequences (Bateson 1987; Boehnert 2018:62). As ecological beings, we are embedded and mutually dependent on the rest of the natural world, but our understanding does not reflect these basic geophysical and biological circumstances. Consequently, management without consideration of traditional Native perspectives has resulted in deeply unsustainable ways of living that have the potential to negatively impact BENM.

Climate models predict that over the next 100 years, the Southwest will become warmer and more arid, with more extreme droughts than the region has experienced in the recent past. The seasonality and variability of precipitation is likely to shift, as well. Scientists have identified the American Southwest as a climate change hotspot. On the Colorado Plateau, the combination of high elevation and a semi-arid climate makes the area particularly vulnerable to climate change (www.nps.gov/subjects/swscience/climate-change.htm). Any land management plan for the BENM must integrate consideration and plans for adapting to the induced environmental change resulting from a warming climate. To do so requires adhering to a land management ethic that considers humans as a vital component of the environment with stewardship responsibilities to all non-human life forms that inhabit Earth Mother.

Climate changes have a broad range of observed effects that are readily observable in the Bear's Ears region. Long-term drought and dying vegetation (including Juniper trees) can be observed. This has resulted in increased erosion and desertification of the region. It is likely that the region will continue to receive less snow and rain for years to come, which will also have negative impacts to the plant community and wildlife. Wildfire no doubt will increase in the forest and undergrowth.

Climate change is a threat to the physical world as it is known today. Traditional perspectives tell of the earth having been destroyed in the past, and climate change has the potential to cause drastic changes like in the past foreshadowing that in the future "there will be wind, and no water or corn." The traditional Navajo perspective is that one does not talk about it [climate change], as giving it voice will make it take place. *Hataalii* are receptive to aiding ceremonies, they can complete ceremonies for rain. There is support for making offerings and prayers by placing offerings at the beginning of the rivers that flow through and near the Monument.

The BEITC is also concerned about invasive species in BENM, some of which have had changes in range due to climate change. Tamarisk and other non-native plants cause damage to the natural

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environment. Tamarisk draws the water table down, chokes out other species, and takes over natural riparian areas. These trees also alter natural water courses, thereby altering ecosystems. In addition to tamarisk, Tribal members are concerned about tumbleweeds, Russian olives, Chinese elm, and other invasive species. These plants consume a lot of moisture and they compete with native plants. There should be plans for replanting and revegetation of cottonwoods, and revival of water tables.

From a Hopi perspective it is crucial to discuss climate change and its effects on the environment. Hopi people believe that climate change is caused by the cumulative effect of human misuse and neglect of the environment, and land management practices, both within BENM and beyond, thus directly relate to climate. Extractive industries are a major contributor to the climate crisis because these industries disturb the balance of the earth and sky, clouds, rain, and the land. Hopi people believe that the human race is responsible for preventing climate change.



PART E: ENVIRONMENTAL PHILOSOPHY AND APPROACH TO CONSERVATION

Each of the five tribes of the BEITC prepared documents that detailed their individual Tribal perspectives, philosophies, and approaches to conservation for lands of the Bears Ears region. These perspectives are presented below in their own words. As with the traditional cultural connections to the landscape of the Bears Ears region, these perspectives share common threads that emphasize a holistic perspective regarding stewardship of resources in the Bears Ears National Monument.

In A Sand County Almanac, Aldo Leopold (1949:173) called for the development of a land ethic that affirms the right to the continued existence of the soil, waters, plants, and animals, and, in spots their continued existence in a natural state. He further argued that the land ethic changes the role of humans from conqueror of the land-community to plain member and citizen. This land ethic would involve humans having respect for this natural community. To Leopold, it was inconceivable ... that an ethical relation to land can exist without love, respect, andadmiration for land, and a high regard for its value."

It has been 72 years since Leopold called for the land ethic. Now, there is a critical [existential] need for the development of a sound American land ethic designed to protect the natural world, which has been nearly destroyed by the long-term effects of colonial and capitalistic practices and its associated unrelenting destruction of the natural environment. According to Echo-Hawk (2013:149), an effective land ethic cannot be developed, much less implemented, unless and until indigenous cosmologies, traditional ecological knowledge, and rights in the natural world are recognized and taken into account. Continued human existence is threatened by climate change including the mass extinction of animals and plants (humans'relatives that share Earth Mother) brought about by the activities of colonization.

HOPI TRIBE

Regardless of jurisdictional boundaries, the Hopi people are eternally obligated by their religion to serve as stewards of the land. The Hopi people consider *Hopitutskwa* to be an extension of themselves, and they offer the same care and concern to distant lands as they do to places close to home (Whiteley 1989:50; 53). Bill Preston described this connection to the land:

"Tutskwa i'qatsi," the land, the world is my life. That's what they told us, this is why we have to protect the world like we protect this human body. There are things out in the world that help us keep alive, just like what's inside this body that keeps us alive. There is a whole connection; there is no separation from land, water, air, the universe. It is all connected. We are all connected. This is what we are taught. This is what the songs are about, the sacred teachings are about, so that we can understand ourselves, and this whole world as a whole, the universe so we're connected, connected to the heavens and below us, and from all directions [Preston 2018]."



The ideals of stewardship are embedded within Hopi religious practices and social organization, which in turn supports Hopi peoples' connection to the land, their ancestry, efforts of ecological conservation, and the balancing of environmental resources (Bradfield 1973:295; Lomaomvaya and others 2001:11-12; Whiteley 1989:52–60). As a form of respect for the natural world, offerings are made when any resource is harvested from Mother Earth. The offerings enact the reciprocal relationship Hopi people have with the land, which is fundamentally tied to the commitment they made with the Earth Guardian to act as stewards of the land. Properly caring for the earth through traditional practices helps continue the cycle of the earth providing for Hopi and all of humanity. As described by Bill Preston, "We pray to all these things that we know that take care of us and this whole world. Because of them, this world is in balance." Hopi people today harvest plants, minerals, water, and wildlife using knowledge and practices that have been passed down through generations. Some resources are harvested according to a seasonal calendar for use in specific contexts, while other resources are harvested based on availability (Ainsworth 1988). Some resources are collected wherever they are found, while other resources are collected from specific places that imbue the resources with significant properties.

The Hopi people are deeply concerned about the preservation of the BENM in perpetuity. The land in its entirety is important to the Hopi people because it is a repository of Hopi history and lifeways for past, present, and future generations. From a Hopi perspective, the establishment and continued preservation of BENM is important because the Monument encourages Hopi values of Earth stewardship, and provides a means for offsetting past over-consumption of the land and its resources. Hopi Tribal Council Resolution No. H-035-2016 supports the proposal for a presidential proclamation designating Bears Ears National Monument, and recognizes the inherent value of BENM for the preservation of Hopi history, identity, and ongoing cultural practices. The Hopi Tribe views comanagement of BENM by the Bears Ears Commission of Tribes and federal agencies as a way to elevate tribal interests in the protection of cultural resources, and allow for flexibility in management of traditional Native American uses, including use of wood, plants, medicine, ancestral sites, shrines, and hunting (Hopi Tribe 2016).

Hopit Pötskwaniat (Hopi Tribal Consolidated Strategic Plan) (2011) is identified in Hopi Tribal Council Resolution No. H-035-2016 as guidance for ascertaining Hopi goals for the preservation and protection of cultural resources, and proper land management incorporating principles of Hopi stewardship, culture, and visions for the future. Hopit Pötskwaniat enables and encourages the involvement of the Hopi people, and it considers both traditional and contemporary values. While this strategic plan was created for the Hopi Reservation, it espouses principles that apply to all land management, including BENM. These principles are:

- Preservation, practice, and protection of the religion, ceremonies, cultural customs and practices, language, and arts and crafts of the Hopi people.
- Respect and care for the infant, youth, and elderly members of society.
- Independence and self-sufficiency of communities and people.
- Respect, conservation, and protection of the natural environment (land, water, air, plant life, and all living creatures).
- Sumi'nangwa [working together] and all the other characteristic traits of Hopi, including faith, trust, pride, cooperation, and consensus.



The Hopi visions for the future that are drawn from these principles are:

- To ensure happy, healthy, and prosperous life experiences for all Hopi people by incorporating Hopi values (culture and traditions) as the foundation for all aspects of governance functions and community/economic planning.
- To support and strengthen the Hopi way of life, to secure and ensure a happy, heathy, and fruitful life for all.
- To create a continuous, strong, and sustainable Hopi society through a clear understanding of Hopi traditions, culture, and future trends with full involvement, understanding, and acceptance.
- To seek balance between traditional and contemporary values to ensure a secure and healthy future for all Hopi people.

As identified in Presidential Proclamations 9558, 9681, and 10285, BENM encompasses diverse resources that merit recognition and protection. Hopi philosophy does not rank the value or significance of different resource types, but Hopi people have unique relationships with different aspects of the environment, and this positions them to make decisions about resource management. The Hopi Tribe's approach to land management of BENM is both pragmatic and philosophical.

NAVAJO NATION

Importantly, and traditionally, cultural resources and natural resources are not two different categories in Navajo life. An individual depends on other living plants, animals, and surrounding land to survive; thus, the natural resources gathered, hunted and walked on for survival becomes a cultural resource. And resources and places on the landscape cannot be considered separately from the landscape as a whole.

The following summary is taken from Navajo Philosophy of Learning and Pedagogy by Herbert John Benally (1994).

Our elders have always believed that we are the literal sons and daughters of Sa'ah Naagáí Bik'eh Hózhóón (SNBH), the gods who created this world. We spiritually call ourselves the Holy People on the face of earth. This notion is celebrated and reaffirmed through prayers and ceremonies. . . . The SNBH teachings include four principles (1) the proper development of the mind, (2) learning the skills of survival, (3) understanding and appreciating positive relationships, and (4) understanding and relating to one's home and environment.

The last item is incorporating the fourth principle, haa'áyíín dóó hodilzín (Rest and Reverence for all Creation). . . . Establishing an intimate relationship with nature begins with the acceptance that all creation is intelligent and beneficial in and of itself. Subsequently, when due respect is known for nature, that respect is returned with favors. . . . When we begin to understand this reciprocal relationship, we begin to participate in the great universal consciousness. We become related to all creatures, and our views and language toward this vibrating life changes. For we are no longer strangers, but family.



In our failure to understand this interconnectedness, we become alien to this world. We see the world as hostile and wild and something that must be shaped into our image and onto an order that is foreign to the natural order of things. The Navajo believe that the environment that we create and impose mirrors our own ignorance.

Father Sky and Mother Earth were blessed with untold wisdom and wealth to be used by man. For instance, the mountains were endowed with strength, wealth, teachings, and processes by which man can access their strength and resources. *Nitsáhakees* (thinking), *nahat'á* (planning), *iiná* (life) and *siihasin* (fulfillment and contentment) are stages of process that were placed in all creations.

It is believed that a person's heart becomes hard when he or she loses respect and reverence for nature. How one treats animals and nature directly relates to how one treats other people. It was and remains crucial that youth be taught to live close to nature's softening influence. By observing how animals and birds care for and bring up their young, or seeing how plants grow just like a child, one learns to care and nourish. Teachings about relationship to Mother Earth and Father Sky must continue to be passed on to the next generations if we intend to remain long.

Diné have voiced concerns about disturbance to traditional cultural resources in present Bears Ears National Monument since before the Monument was established. For example, in 2000, Diné chapters of Oljato and Navajo Mountain reportedly passed resolutions protesting a U.S. Forest Service proposal to cut timber around Bears Ears, which would destroy plant medicines that draw special power from growing at Bears Ears buttes. Diné have also repeatedly expressed concerns about the looting and destruction of traditional and ancestral places in general, concerns that would extend to sites within the present Bears Ears National Monument (Kelley 2017:9).

The Navajo people value input from all members of the Tribe, and the sacredness of the landscape. A number of Navajo individuals were interviewed for this document. They included community members from Aneth to Navajo Mountain; historians and traditionally knowledgeable people from Red Valley and Kayenta, Arizona, and Shiprock and Continental Divide, New Mexico, were also included. Eleven community members stressed the seriousness of not allowing any additional development in or near the monument. These recommendations were based on the traditional teachings of going into the *Shashjaa* area only for traditional purposes. Four individuals stressed the importance of protecting *Shashjaa* for the sacredness of the landscape and for the continuing practice of cultural traditions.

I want to voice my concerns for all the insects, birds, animals, and plants who have lived on this landscape for thousands of years. We did not ask them if we could come in here and invade their home. . . . Even the smallest of the creatures complete their work here in keeping this land whole. . . . We have yet to get their permission to be here (Arnold Clifford, July 9, 2021).



PUEBLO OF ZUNI

A land management plan for the BENM must involve the establishment of a land ethic with an underpinning that equitably integrates the unique ontology and epistemology of the Zuni people. The United Nations Declaration on the Rights of Indigenous Peoples (*Declaration*) adopted at the 107th plenary meeting on 13 September 2007, provides direction forthis land ethic through affirming that indigenous peoples are equal to all other peoples, while recognizing the rights of all peoples to be different, to consider themselves different and to be respected as such.

The *Declaration* recognizes that respect for indigenous knowledge, cultures and traditional practices contribute to sustainable and equitable development and proper management of the environment. That task can only be done by managing public lands in accordance with principles described in the Declaration, which urges agencies to recognize, respect, and incorporate indigenous values when managing places important to indigenous peoples. Through the incorporation of indigenous wisdom in the management of public land, important ingredients for a land ethic emerge (Echo-Hawk 2013:216).

While it is recognized that the *Declaration* is a statement of support and not a legally binding document for federal agencies in actively managing with the Pueblo of Zuni the BENM, it is a valuable for initiating a dialogue directed toward equitable collaboration in managing the BENM. Of particular interest to this conversation is a recognition in the *Declaration* "...that respect for indigenous knowledge, cultures and traditional practices contributes to sustainableand equitable development and proper management of the environment."

Respect for Zuni traditional knowledge includes a recognition of the Zuni stewardship philosophy and personal responsibility toward Earth Mother and all her living beings. The continued reliance on Western science as the basis for a land management plan for BENM which excludes the Zuni stewardship philosophy ignores Zuni wisdom, because it perceives science as the only path to understanding the natural world. As demonstrated throughout this Zuni land management plan for BENM, a sole reliance on science prevents one from finding that which is "sacred" on the land and in the natural world.

Approximately 50 years ago, Gregory Bateson (1972) stated that "the major problems in the world are the result of the difference between how nature works and the way people think." When humans separate themselves from nature, humans create what Bateson referred to as an occidental schism, a term that describes humanity's deep, traumatic separation from nature's creativity (Bateson 1972; Morely 2019:17).

For many Native Americans, including the Zuni people, sentience is recognized in plants, animals, rivers, and mountains, who all have a conscious essence, that includes the realization of when they are being treated well or poorly. All entities of nature have conscious ways of interacting with one another, and each is viewed as possessing a personhood, a sense of purpose, and inherent meaning expressed in a multitude of ways. Cajete (2000:179) refers to this as a "spiritual ecology," expressed as embodied relationships that must be honored.



Bateson (1972) developed a similar concept that encompasses an understanding that all the systems of the living world as being conscious or mental in kind. According to Bateson, each living system is a mind. Such systems vary from the very small, perhaps bacterial, genetic, or cellular to the very large: a coral reef and its inhabitants, a forest ecosystem, or the whole processof biological evolution. All these systems are interrelated and nested within larger mental systems so that there is an ultimate interconnected whole, which is the "sacred."

Bateson recognized that, as Western science and technology understand the world at present, our whole epistemology and ontology in which humanity is seen as separate from nature, in which "things" are separable and can be possessed, is wrong. Analogous to Leopold, Bateson implores us to see the world as a network of relating, as a vast interrelated process of which humans are dependent members. Bateson's monism, his understanding that all is one; in seeing the whole of the living world as a systemic nesting of minds within minds within minds. Bateson believed this perspective could restore to humans the awareness of unity that three hundred years of reductionist science has concealed.

Even with this brief consideration of sentience or consciousness, it is apparent that any insular adherence to Western science as the primary guiding management paradigm unintentionally disenfranchises indigenous people by continually diminishing the effectivenessof tribal voices and contributions by not affording non-Western perspectives and indeliblyconnected values commensurate levels of validity or consideration.

The land management reality defined by and through Western science is not objective and it is not unbiased; the reality that Western science typically studies is in fact a cultural, legal, and political construct. These cultural, legal, and political constructs shape and direct scientists and land managers to decide not only what does or does not count as life, but which life forms are permitted to exist and which life forms are undesirable. What are the moral and ethical responsibilities of scientists and federal land managers to Native American traditional communities in the management of an environment that is significant, equally sacred, and fundamental to a traditional community's collective identity and material capacities to persevere as a people?

UTE INDIAN TRIBE

The landscape is more than just a natural realm to sustain the material needs of life. It was a gift from *Senawahv*, and it was imbued with principals. As such, everything in the natural world received qualities during the creation, and the physical world is viewed as place filled with natural power (Clifford 1974; McPherson 2011; Smith 1974).

Tribal sovereignty was not granted to tribes by the United States government. Sovereignty is how Tribes have always governed themselves; it has always existed. And the land is the foundation of that sovereignty. The Ute people have a holistic perspective on resources. The most productive approach is one that considers archaeological sites, traditional Native histories and perspectives, non-Native scientific knowledge, and natural resources together.



The Ute people have deep traditional cultural beliefs that tie them to the land and environment that inform their perspective on land management practices both within and outside of the Bears Ears National Monument. Father Sky created the sun, moon, stars, and Earth. Mother Earth provides what is needed by those who show reverence and respect.

Within the boundaries of ancestral Ute lands are special sites, or "power points", where sacred forces reside. *Poowagudt*, spiritual leaders, understand how to use *poowa*-- natural powers -- associated with these spaces. These places have been in use for generations and continue to be used by the Ute people today. The location of specific power sites, which are not general knowledge, should be discussed only with those who have a need to know as this power has both the possibility to harm and to heal. These places are not disclosed but need to be considered when land use practices are considered, and these uses could irreparably damage these important but confidential places. Traditionally, Ute pilgrimages were unique ceremonial and ritual activities occurring outside the daily habitual cultural activity. Pilgrimage places and the offerings left behind contain the prayers forever and they continue to send their *poowa* across the landscape long after the pilgrim has finished his or her pilgrimage. This forever links, people, places, and ceremonial objects together in Ute history and cultural memory.

The Ute continue to pass on cultural knowledge through programs such as language classes, cultural camps, and other interactive education programs that serve as an important means to help the young people reconnect to, and learn about ceremonial places throughout their traditional homeland. As such, preservation of these places and the natural environment is central to preservation of Ute culture.

UTE MOUNTAIN UTE

The natural world was a gift from *Sináwav*, the Creator of All Life, and it was imbued with spiritual powers. As such, everything in the natural world received qualities during the creation, and the elements of the natural world – rocks, trees, animals, water, and other natural elements -- have meaning and character to the Ute Mountain Ute (McPherson 2011). The Bear's Ears area has been a homeland for the Ute people. All aspects of Ute life took place on these lands including hunting, farming, raising livestock, gathering wild plants for food and medicine, firewood gathering, and burial of the dead. It is through these activities that many landforms, canyons, and places on the landscape were named and became part of the Ute history.

The origin of the canyons, cliffs, and landforms of the greater Bear's Ears region have a place in Ute traditional history. There are narratives that tie the creation period to the present day and include events that involved supernatural beings, animals, and the Creator. These beings continue to impact daily life today and the narratives provide a continuity that link people, landscapes, and supernatural beings through time. As such, the natural and cultural worlds are not thought of as separate from one another. They are instead intertwined and linked through time.

Prior to disruption by non-Native settlement, the Utes followed a seasonal cycle in the area surrounding what is now the Bears Ears National Monument. The Monument lands are one small part of a larger network of places that were utilized by the Utes. This movement tied the Utes to the natural world and allowed them to use resources at various elevations and at different times of the year. The ability to



have access to various landscapes and resources is fundamental to Ute traditions. It is also part of Ute cosmology that recognizes upper, middle, and lower realms in both the physical world (sky, mountains, canyons) and the metaphysical realm.

Preservation of the natural world is important to the Ute Mountain Ute. Any disruption to the natural world would negatively impact the Ute people whose spiritual power resides in that natural world. Any changes to that landscape that are done in a disrespectful manner negatively affects the Ute people. Such changes include mining, clear-cutting of timber, and creating roads.



PART F: KNOWLEDGE GAPS

CULTURAL RESOURCE DATA

Archaeological Sites

As noted earlier, only a small fraction (approximately 11.5%) of San Juan County, Utah has been systematically surveyed for cultural resources as of January 2021. This has yielded the documentation of around 34,500 sites. The quality of the dataset is variable with scattered survey coverage, and this extant documentation on cultural resources is not easily accessed by the Tribal Nations of the BEITC at the current time.

In addition to very limited and scattered documentation, the majority of the existing site-level documentation entirely lacks any Native American input. A number of tribal members have professional education and experience in cultural resource management. Knowledgeable tribal members must be included in all archaeological identification and recording. Ethnography is not done as a regular part of cultural resource inventories on BLM lands at the current time. It is recommended that ethnographic work be included with archaeological inventories to enhance the understanding of the site. The reason for this is that historic places of the BEITC tribes remain important to people living today, and this work helps to maintain that traditional connection between people and places.

For example, the Cradleboard site (42SA34477) consists of the remnants of an early 1900s-era Ute camp approximately 1 mile north of the town of Bluff, Utah. Known but unrecorded until 2020, the site documentation included visits and interviews with White Mesa Ute representatives and discussion with the Ute Mountain Ute Elders Committee Meetings. Ethnographic interviews were conducted and more detailed information regarding the cultural history of the site was derived. This not only supplemented the history of this camp but included cultural information that would not have otherwise been evident to an archaeologist studying the material remains of the site.

In order to effectively manage BENM according to Hopi values, the Hopi Tribe has identified several knowledge gaps and recommends additional studies or acquisition of data in the following areas:

- 1. Acquisition of archaeological data
 - a. Data sharing between agencies and state, federal, and tribal governments
 - b. Complete an archaeological inventory survey of BENM pursuant to Section 110 of the National Historic Preservation Act
 - c. Acquisition of complete LiDAR coverage of BENM for use in historic preservation
- 2. Ethnographic research and identification of traditional cultural properties
 - a. Undertake a comprehensive Hopi ethnography of the monument, including an ethnographic overview and assessment and a resource use study
 - b. Bears Ears Commission of Tribes involvement in all NRHP evaluations and recommendations



- 3. Need for ethnobotanical research
 - a. Acquisition of existing plant inventories of BENM
 - b. Ethnobotanical fieldwork is needed to identify Native American cultural-use plants and potential collection areas in BENM
- 4. Acquisition of data from water monitoring stations
- 5. Need for raptor studies & nest mapping
 - a. Survey of eagles, hawks, and nesting areas
 - b. Inventory of prey base
- 6. Data sharing among federal agencies and the BEITC and Bears Ears Commission of Tribes (i.e., information about existing grazing permits; existing mining leases)
- 7. Active involvement by tribes in the development and review of all land management documents and categories.

Traditional Cultural Properties

A traditional cultural property (TCP) is defined as being associated with the cultural practices, traditions, beliefs, lifeways, arts, crafts, or social institutions of a living community. The significance of a TCP is rooted in a traditional community's history and are important in maintaining the continuing cultural identity of the community (NPS 2011; King 2003).

To date, there have not been comprehensive ethnographic studies of BENM for any of the Tribal Nations of the BEITC. While there are known and documented traditional cultural properties (TCPs) within Bears Ears, they are outnumbered by known but undocumented TCPs. TCPs may include ceremonial locations, gathering areas, trails, shrines, trail markers and cairns, springs, rivers, and sacred landforms.

It is highly likely that there are places within Bears Ears that are currently not considered as TCPs that would merit consideration as such. An example would be prehistoric rock art that contains images that are consistent with known cultural traditions of descendant communities. These types of TCPs would only be identified if they could be assessed by knowledgeable individuals and cultural specialists. Given the scale of the BENM, this will require a long-term, ongoing commitment rather than a single project.

There are many named places across the cultural landscape that are interconnected by a series of trails. These trails often follow uplands where visibility of the surrounding landscape is enhanced. Trails are very important to the Tribal Nations of the BEITC because they connect many different resource procurement and use areas, but also because they function as pilgrimage routes. However, very few have been archaeologically defined and as such, are not protected.

Trails and trail markers, such as cairns, are very important to the Tribal Nations of the BEITC because they connect many different resource procurement and use areas, but also because they function as pilgrimage routes. However, very few have been archaeologically or ethnographically defined and as such, are thus not protected.



Trails are considered important to many Native groups because they act as spiritual umbilical cords that function as connective tissues that maintain strong and continuous geographical links between current settlements and many culturally important distant places of the broader BENM cultural landscape. Trails often lead to shrines and offering places, and they are often marked with cairns along the route. Trails are blessed before their use, and once blessed, they remain blessed in perpetuity. Traditionally, prayers and offerings are required prior to and during travel. These prayers provide the individuals going to BENM with guidance on what route is to be followed, and on the religious actions that are necessary along the way. Prayers and offerings are regularly made at springs and shrines along a given travel route. Therefore, trails, trail markers, springs, and shrines all constitute a sacred geographical complex associated with travel.

For example, when travel was by foot (and later by burro), Zunis took a traditional trail to BENM and along the trail were Zuni shrines. The Zunis planted feathers at streams and shrines. These streams, shrines, and the trails themselves are sacred. *Heshodawe* ("house," i.e., archaeological sites) located along the trail are also sacred, because they are considered the eternal homes of Zuni ancestors. The *Zuni Atlas* identifies a major trail that extends from the Pueblo of Zuni toward Blue Mountain in the Abajo Mountains of Utah. In pre-contact times, Zuni traders utilized a vast network of trails to exchange goods with various peoples throughout the Southwest. Additionally, the Zuni used collections of water from the streams, springs, and rivers of BENM for religious purposes.

Data sharing agreements should be put into place to preserve sensitive cultural information regarding sacred sites. This necessarily requires identification of those sacred sites by Native people familiar with traditional land use, and would be part of the ongoing Native engagement with Federal land managers. Specific traditional information may not need to be shared beyond the Tribes but could inform planning decisions. Ongoing engagement would allow Tribal Nations to understand development and land use of the Bear's Ears region and they could identify any conflicts with traditional cultural properties while protecting culturally sensitive information.

NATURAL RESOURCE DATA

As with the cultural resource data, data on natural resources is not easily accessed by the Tribal Nations of the BEITC at the current time. It is important to the BEITC to protect surface water and groundwater quality on BENM for protection of human health and the environment. Although there is data on water sources and uses, it is unclear if the data is sufficient to meet the needs of the BEITC. There is a need to assess the knowledge of water resources and to commission both scientific and Tribal studies to fill in gaps in that knowledge. This may also entail creation of a protection, monitoring, and restoration plan for springs.

Ethnobotany is the study of how people of a particular culture and region make use plants. Partial lists and some studies have been undertaken, but there is no single comprehensive study of traditional plant knowledge within BENM. Plants provide food, medicine, shelter, dyes, fibers, oils, resins, and other useful materials from daily life and ritual use. Ethnobotany is another means to understand the link between Native people and the environment. It can help archaeologists understand the plants that may have been traditionally used, and to identify areas of traditional plant gathering. The Native names of



the plants, as well as their traditional uses, tell a story about the cultural landscape of the Bear's Ears. Traditional practitioners and herbalists need to be consulted regarding the plants they gather and monitor in the Monument. This traditional knowledge will be passed on to tribal members, and some of the knowledge can be shared with non-Natives to inform recommendations for management. This understanding is currently lacking in the region and is a major knowledge gap that will only widen as elders pass away without this information being recorded.

Navajo ethnobotanist Arnold Clifford has conducted studies on the flora in the BENM. Plants are often overlooked and forgotten, other than their showy flowers. This region of Utah has a very interesting history in terms of botany; numerous rare and endemic plant species occupy a broad range of diversified plant community cover types and specialized microhabitats within or adjacent to the Bear Ears National Monument. In the past decades, Mr. Clifford has personally discovered several previously undescribed plant species that are awaiting documentation in the scientific literature. Further research is warranted. The discoveries of new and diverse species can be attributed to the highly diversified exposures of sedimentary bedrock throughout the monument. Sedimentary rock units range from the Pennsylvanian to the Cretaceous. Each unit has unique cementing agents and microscopic rock types that host numerous rare and endemic plants only found on those particular rock units. Geobotanical endemism is being exhibited in the high desert country that comprises the Bears Ears National Monument; one just needs to decipher the rocks' secrets. This region is unique; it is important to recognize and protect these rare botanical treasures and to prevent their destruction.

As with cultural information, data sharing agreements would be put into place to preserve culturally sensitive natural resource information. Ongoing engagement would allow traditionalists that are part of the BEITC Tribal Nations to identify any conflicts with natural resources without necessarily needing to share specific culturally sensitive information with land management agencies.

NATIVE STEWARDSHIP EDUCATION

Traditional knowledge of Tribal Nations is fundamental to the long-term preservation of the BENM cultural landscape. Native stewardship needs to happen not in a vacuum but as an approach fundamental to the creation of a collaborative management plan. This would also facilitate greater understanding of the dynamics of Tribal perspectives.

Appendix H of the 2020 BENM MP states that Federal employees working in the BENM should complete the most recent training courses on Tribal relations. Currently, the BENM MP emphasizes that Tribal Nations should be invited to attend and participate in agency training courses related to NEPA, lands, rights-of-way, cadastral surveys, wildfire and fuels management, and heritage resources. The BEITC see that the Federal agencies have this backwards – at the current time, it is the Federal managers that need to understand traditional Native perspectives. They lack such training and background as it is generally something that is encouraged rather than mandated. This change in the culture of Federal land management is needed to actualize collaborative management and meaningful tribal engagement.

Rather than Federal employees of the BLM and USFS taking advantage of cultural awareness training sponsored by Tribes, this should be a mandatory part of collaborative management training for Federal employees. This would strengthen Federal staff's understanding and appreciation of Tribal traditional, cultural, and religious values, as well as treaties and other Tribally reserved rights on Federal lands.

For example, teachings such as the SNBH philosophy used by Diné College (and summarized above in Part E) could be integrated into the education of youth and the general public on caring for the plants, animals, birds, and insect communities of Bears Ears. The Hopi Tribe also currently has various plans and protocols already in place on their tribal lands that could be adapted for use at BENM. The Hopi Tribe envisions that traditional teachings from all tribes could be integrated into cultural sensitivity programs, tribal monitor programs, hunting awareness, springs restoration programs, and ethnobotanical training.



PART G: NATIVE ENGAGEMENT AND COLLABORATIVE MANAGEMENT

CONTEXT FOR COLLABORATIVE MANAGEMENT

If Tribal Nations are to be fully engaged with Federal land managers, Tribal Nations and Native perspectives must be incorporated early and often with management decisions and Native perspectives should be considered when framing any and all decisions that affect BENM. The key concepts presented here provide a context for Federal collaboration with Tribal Nations for the management of BENM.

In order to develop a meaningful BENM land management plan, it is important to understand that there is a contrast between Native understanding of the environment and the mainstream Anglo-American ontology that forms the foundation for the Western scientific system of belief. This non-Native paradigm is based on and informed through the following perceptions (Curti et al 2017; Dongoske et al 2019; Curti et al 2020):

- (i) time is conceived as a linear, unidirectional measure along a progressive continuum of past, present, and future;
- (ii) place and landscape are often defined through measurable, gridded, atomistic, and ordered dimensions of Euclidean and Cartesian space;
- (iii) culture and nature, humans and the broader environment, are two separate and qualitatively distinguishable realms, the natural environment is something to be dominated, controlled, and/or manipulated to serve human desires of economic growth and associated consumption;
- (iv) knowledge production involves understanding the world through supposed universal scientific models and modes of encounter, including models and projections of data into the future.

A Native understanding of the environment differs in many ways from that noted above. Fundamental concepts that inform on land management include:

- (i) time is understood and experienced as an organic circular or cyclical dimension rather than a linear measure; it is characterized by repetition and alternation, and past, present, and future may enfold and be co-existent in the ever-present;
- (ii) the temporal and spatial and the sacred and secular are not rigidly separated or partitioned; in this worldview, the cosmos is a singular entity, the spiritual and physical are mutually co-implicated, and the environments, spaces, and landscapes composing places are organic and cannot be divided or segmented along clearly delineated borders and boundaries—all of nature exists in sacred interrelation and unity;
- (iii) humans are part of nature, and should respect and live in a balanced, reciprocal, and harmonious relationship with all of the environment and all of life, any disruption in balance is the fault of human action, inaction, and error;



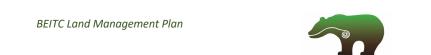
(iv) knowledge and historical truths are inseparable from ancestral knowledge, traditional oral history, and geographical stories, which, along with associated ceremonial and ritualistic activities, are the bases for understanding the relationships and origins of environmental ties and their perseverance, preservation, balance, and integrity over, through, and as part of space and time.

Legal Basis: Presidential Proclamations 9558 and 10285

Presidential Proclamation 9558 signed by President Obama in 2017 recognized the importance of the Bears Ears National Monument to American Indians and the importance of Tribal participation in the future management of the Monument, including the proper care and management of important cultural objects. The stated strategy is that the Bureau of Land Management (BLM) and U.S. Forest Service (USFS) will closely partner with American Indian Tribes as envisioned in Presidential Proclamation 9558. Specifically, Presidential Proclamation 9558 states that:

[t]he Secretary of Agriculture and the Secretary of the Interior (Secretaries) shall manage the monument through the U.S. Forest Service (USFS) and the Bureau of Land Management (BLM), pursuant to their respective applicable legal authorities, to implement the purposes of this proclamation. The USFS shall manage that portion of the monument within the boundaries of the National Forest System (NFS), and the BLM shall manage the remainder of the monument. The lands administered by the USFS shall be managed as part of the Manti-La Sal National Forest. The lands administered by the BLM shall be managed as a unit of the National Landscape Conservation System, pursuant to applicable legal authorities. In recognition of the importance of tribal participation to the care and management of the objects identified above, and to ensure that management decisions affecting the monument reflect tribal expertise and traditional and historical knowledge, a Bears Ears Commission (Commission) is hereby established to provide guidance and recommendations [emphasis added] on the development and implementation of management plans and on management of the monument. The Commission shall consist of one elected officer each from the Hopi Nation, Navajo Nation, Ute Mountain Ute Tribe, Ute Indian Tribeof the Uintah Ouray, and Zuni Tribe, designated by the officers' respective tribes. The Commission may adopt such procedures as it deems necessary to govern its activities, so that it may effectively partner [emphasis added] with the Federal agencies by making continuing contributions to inform decisions regarding the management of the monument.

The Secretaries shall meaningfully engage the Commission or, should the Commission no longer exist, the tribal governments through some other entity composed of elected tribal government officers (comparable entity), in the development of the management plan and to inform subsequent management of the monument. Tothat end, in developing or revising the management plan, the Secretaries shall carefully and fully consider integrating the traditional and historical knowledge and special expertise of the Commission or comparable entity. If the Secretaries decide not to incorporate specific recommendations submitted to them in writing by the Commission or comparable entity, they will provide the Commission or comparable entity with a written explanation of their reasoning. The



management plan shall also set forth parameters for continued meaningful engagement with the Commission or comparable entity in implementation of the management plan (Presidential Proclamation 9558).

Presidential Proclamation 10285 signed by President Biden in 2021 recognizes the value of tribal involvement in the development of a management plan reiterated the need for a Bears Ears Commission to be reestablished in accordance with the terms, conditions, and obligations set forth in Proclamation 9558 to provide guidance and recommendations on the development and implementation of management plans and on management of the entire monument. In order for the management vision for the BENM articulated in Presidential Proclamations 9558 and 10285 to be successfully realized, the Secretaries should engage the Commission in a manner that is more meaningful and inclusive than standard Federal-Tribal consultation. In other words, the development of an effective collaborative partnership between the Secretaries and the Commission must include adherence to and working toward achieving all applicable principles and articles of the *Declaration* described above if it has any standing or worth.

Ethical Basis: Indigenous Rights

Indigenous knowledge has validity that needs to be considered for management of the landscape of BENM. The Tribal Nations of the BEITC are considered here as *knowledge-sovereign*, or that their way of knowledge is in equal standing with mainstream Western scientific methodologies. Knowledge sovereignty is inextricably tied to cultural, social, and political sovereignty and associated relationships of ecological health and well-being and should be understood from a traditional knowledge perspective.

The United Nations Declaration on the Rights of Indigenous Peoples (*Declaration*) adopted at the 107th plenary meeting on September 13, 2007 affirms that indigenous peoples are equal to all other peoples, while recognizing the rights of all peoples to be different, to consider themselves different and to be respected as such. Five Articles (11, 12, 13, 15 & 19) in the *Declaration* are worthy of closer consideration as they directly inform the development of a collaborative BENM land management plan:

- Article 11 includes the statement, "indigenous people have the right to maintain, protect, and develop the past, present, and future manifestations of their cultures, such as archaeological and historical sites, artefacts, designs, ceremonies, technologies, and visual and performing arts and literature."
- Article 12 states, in part, "indigenous people have the right to manifest, practice, develop and teach their spiritual and religious traditions, customs and ceremonies; the right to maintain, protect and have access in privacy to their religious and cultural sites; the right to the use and control of their ceremonial objects; and the right to repatriation of their human remains."
- Article 13 states "Indigenous peoples have the right to revitalize, use, develop and transmit to future generations their histories, languages, oral traditions, philosophies, writing systems and literatures, and to designate and retain their own names for communities, places and persons."



- Article 15 states "Indigenous peoples have the right to the dignity and diversity of their cultures, traditions, histories and aspirations which shall be appropriately reflected in education and public information."
- Article 19 is directed toward agencies by declaring that "States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing legislative or administrative measures that may affect them."

All these articles speak to the importance of recognizing, respecting, and giving appropriate consideration to indigenous ways of knowing and relating to Earth Mother. Concisely, any collaborative management of the BENM must include information and data that informs Federal agency consideration that is gathered, analyzed, and deliberated by and through Native values and uses, lived perspectives, meanings, and practices (i.e., ontologies and epistemologies).

Traditional Knowledge

The National Congress of American Indians (NCAI), an inter-tribal organization, addressed traditional knowledge in Resolution REN-13-035, "Request for Federal Government to Develop Guidance on Recognizing Tribal Sovereign Jurisdiction over Traditional Knowledge." The resolution explains that traditional knowledge is a core part of tribal identities and ways of life, is highly spiritual, and carries responsibilities for its appropriate uses. NCAI goes on to explain that traditional knowledge includes, but is not limited to, the use of medicinal plants, knowledge of traditional habitats, and that some traditional knowledge is so sacred that it cannot be shared outside of tribal societies and traditional holders. Finally, NCAI also explains that there is increasing acknowledgement that tribal traditional knowledge is equivalent to scientific knowledge in solving environmental problems (ACHP 2021:13).

Although the term "traditional knowledge" is not defined in the National Historic Preservation Act (NHPA) or its implementing regulations, its role in the Section 106 process is obviated by the requirement, at 36 CFR Section 800.4, that agency officials "acknowledge that Indian tribes and Native Hawaiian organizations (NHOs) possess special expertise in assessing the eligibility of historic properties that may possess religious and cultural significance to them." Traditional knowledge is an integral part of that special expertise. The Advisory Council on Historic Preservation (ACHP) applies the term "traditional knowledge," for purposes of Section 106, to the information or knowledge held by Indian tribes and NHOs and used for identifying, evaluating, assessing, and resolving adverse effects to historic properties of religious and cultural significance to them (ACHP 2021:1).

The National Park Service (NPS) has a webpage devoted to traditional ecological knowledge (Indigenous Knowledge or Native Science) and describes it as the on-going accumulation of knowledge, practice, and belief about relationships between living beings in a specific ecosystem that is acquired by indigenous people over hundreds or thousands of years through direct contact with the environment, handed down through generations, and used for life-sustaining ways. This knowledge includes the relationships between people, plants, animals, natural phenomena, landscapes, and timing of events such as hunting, fishing, trapping, agriculture, and forestry. It encompasses a world view which includes ecology, spirituality, human and animal relationships, and more (ACHP 2021:15).



Consultation and Tribal Engagement

Consultation and collaboration are two separate, but not mutually exclusive, processes involved with land management. At present, only the consultation process is well-defined for Federal lands. The BEITC seeks to better define the collaboration process for management of lands in BENM, which will guide and inform consultation.

Consultation with Tribal Nations of the BEITC and other Tribes with ancestral ties to the region is mandated by Executive Order No. 13175, Consultation and Coordination with Indian Tribal Governments (E.O. No. 13175), laws, regulations, court cases, and federal agency policies and procedures. Consultation stems from the government-to-government relationship between the United States and Tribal Nations and reflects treaty and trust responsibilities of the United States. The Federal government is responsible for engaging Tribal Nations in consultation regarding all aspects of management of the BENM.

Consultation for the BENM should be based on concepts Free, Prior, and Informed Consent (FPIC) to reflect the importance of the landscape and resources to Tribal Nations. FPIC was included in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). In 2010, President Obama announced that the United States endorsed and supported UNDRIP. UNDRIP is a comprehensive statement addressing the rights of indigenous people. UNDRIP contains minimum standards for the survival, dignity, and well-being of indigenous people. UNDRIP acknowledges various methods necessary to respect and remedy the rights of indigenous people.

FPIC is a necessary policy and legal tool to ensure that the rights, views, and legal obligations of Tribal Nations are incorporated into federal agency decisions, policies, and actions. FPIC is designed to replace colonial processes that historically excluded tribes from decision-making related to activities that affected their lands, rights, interests, or resources, including removal and displacement from homelands without consent. Implementing FPIC within the BENM would help to set the standard for including tribal traditional knowledge and expertise in land and resources management.

Section 106 of the National Historic Preservation Act (NHPA) provides specific source of consultation for the BENM. Section 106 consultation is the interface where cultural resource staff, agency officials, tribal representative, archaeologists, the public, and others can come together to participate in a decision-making process. It is during consultation that a Tribe's interests, concerns, and expectations can be expressed to Federal land managers. Generally, this occurs during or after plans have been drafted by Federal land managers and in the past Tribes have often been in a reactive position.

Collaboration is proactive, and involves regular, early, and ongoing engagement between Tribes and Federal agencies to develop approaches to planning and preservation. It is an open and free exchange of information and opinion among parties which leads to a mutual understanding of issues. Collaboration brings traditional Native knowledge to discussions that are presently dominated by Western scientific perspectives. Unlike consultation, the Tribal Nations of the BEITC would be involved in the planning process and not solely reviewers of already prepared draft materials created



without any meaningful input from the Tribe. Proactive collaboration contributes to facilitating the Section 106 consultation process.

Consultation as part of the Section 106 process should remain as a means for Federal land managers to solicit a Tribe's feedback (via a Tribal Historic Preservation Office, or Cultural Resource Advisory Team) about a particular project or issue. However, it is ongoing Tribal engagement that will form a collaborative partnership with Federal agencies that will fulfill the spirit of Presidential Proclamation 9558 that established the BENM and reiterated in Presidential Proclamation 10285 that restored BENM in 2021. This will provide Native input on both tangible and intangible aspects of the Bear's Ears landscape and acknowledges the validity of Native knowledge that comes from a non-Western (Euroamerican) paradigm.

Existing Federal Framework for Tribal Collaboration

Appendix H of the 2020 Bears Ears National Monument Management Plan (BENM MP) is titled *American Indian Tribal Collaboration Framework*. The BLM and USFS recognize that beyond the formal and legal consultation responsibility the United States has with Tribal governments, the Federal government is committed to pursuing a goal of shared stewardship of lands managed within BENM. The BENM stands out from other monuments in that Presidential Proclamations 9558 and 10285 recognize the importance of Tribal participation in the development of a management plan and the subsequent management of the Monument to ensure the proper care and management of Monument objects.

As outlined in Appendix H of the 2020 BENM MP, this collaboration with the Federal land managers would include but is not limited to:

- Execution of an annual or semi-annual BENM summit with the commission or comparable entity to discuss management direction, proposed and ongoing projects, agency and Tribal priorities, research proposals and findings, and other items of importance or significance.
- Routine and ongoing communication (including and as determined necessary weekly, bi-weekly, or monthly meetings) with Tribal leaders or their delegated representatives to discuss regular and continuing administration and management activities.
- Development of confidentiality agreements allowing the Tribes to share sensitive cultural resource information that can be used when considering or evaluating projects.
- Identification and listing of traditional cultural properties and other properties on the National Register of Historic Places.
- Identification of culturally significant landscapes to be considered when evaluating projects.
- Access to and protection and use of American Indian sacred sites in accordance with Executive Order 13007.
- Protection of cultural objects currently under the care of the BLM (including in the Cerberus Collection and other BLM-administered collections), and/or USFS, and the development of interpretive and educational materials.



- Work with Tribal governments to establish a comprehensive agreement to assist with efficient repatriation of American Indian human remains and cultural items under the Native American Graves Protection and Repatriation Act (NAGPRA).
- Cooperative development of activity-level plans identified in the Monument Management Plans and Environmental Impact Statement including, but not limited to, such items as the cultural resource management plan, camping plan, travel management plan, and sign and interpretation plan.
- Review, prioritization, and input on the selection of research projects funded by the Federal government through various programs including the National Conservation Lands program and Federal agency cultural programs.
- Internal review of all project proposals and associated environmental analysis to ensure that American Indian concerns are adequately addressed and that Tribal historical knowledge is adequately taken into consideration.
- Participation in internal scoping efforts, including early issues identification and project design.
- Development and management of volunteer and cooperative agreements with third-party organizations to assist with the implementation of on-the-ground projects, monitoring, and other public education and outreach activities.
- Collaboration with Tribes and agencies to maximize efficiencies for wildfire and fuels-reduction programs. This may include a partnership for initial fire attack and protecting structures, facilities, natural resources, and cultural resources through fuels-reduction projects.
- Review, prioritization, and input on the management of cultural resources including scientific, traditional, conservation, experimental, and public uses.
- Expansion and promotion of employment, volunteer, and internship opportunities for American Indians.
- Enhancement of on-the-ground experiential education and service opportunities for both Tribal and non-Tribal youth groups or organizations.
- Collaboration on issues of general administration, including items such as law enforcement, wildland fire, and the identification, location, and design of future facilities.
- Identification of shared office space, including the location of the commission or comparable entity staff in BENM facilities so there is full integration into Federal agency interdisciplinary teams.

Many of the goals outlined in the previous federal framework for collaboration are worth retaining in the development of a new plan; however they should be reviewed and executed with the involvement of the Bears Ears Coalition of Tribes.



GOALS AND MANAGEMENT OBJECTIVES FOR COLLABORATIVE MONUMENT PLANNING AND MANAGEMENT

BEITC Management Goals

The Bear's Ears region has significance that is greater than any single Native group. It is a sacred landscape that transcends individual Tribal concerns. The goals of having collaborative management in BENM can be summarized as follows:

- Establish a proactive process for the Tribal Nations of the BEITC to collaboratively manage BENM with Federal land managers.
- Have indigenous knowledge and Native ways of knowing given equal consideration with knowledge from processes framed by a Western scientific paradigm.
- Establish principles for equity between Tribes and Federal land managers that will also ensure continuity of collaborative management.
- Create a full-time Tribal Management staff to participate in collaborative management with Federal land managers.
- Secure Federal funding for full-time Tribal Management Staff.
- Establish and fund a Traditional Knowledge Institute that has programs that would have a Native benefit.
- Establish a reciprocal relationship between Tribes and Federal land managers regarding sharing of indigenous knowledge with information collected within a Western scientific paradigm.
- Enhanced data sharing and acquisition for Tribes.
- Tribal input regarding adapting the collaborative land management plan over time.
- Work with federal agencies to integrate natural elements of the environment into cultural resource management.
- Create a management category for Auditory Environment.

BEITC Management Actions to Reduce Threats

In developing management actions for BENM, the Tribal Nations of the BEITC integrated traditional perspectives with pragmatic management recommendations based on proposed uses and perceived threats to monument resources. This was done by reviewing existing federal MMPs and adding or adapting the management goals and actions. The current federal MMPs outline several management categories, including:

- Traditional Indigenous Knowledge
- Management Common to All Resources
- Cultural Resources
- Fire Management
- Lands and Realty



- Lands with Wilderness Characteristics
- Livestock Grazing
- Paleontological Resources
- Recreation and Visitor Services
- Riparian and Wetland Resources
- Soil and Water Resources
- Special Designations
- Special Status Species
- Travel and Transportation Management
- Vegetation
- Visual Resource Management
- Wildlife and Fisheries Resources
- Woodlands and Forestry

Tribal Nations of the BEITC land managers added "Auditory Environment" as another category that they believe merits explicit management actions in BENM.

Tribal Nations of the BEITC believe that many of the goals, objectives, and management actions outlined in the 2019 federal MMPs and 2020 Record of Decision should remain in place; however some modifications are needed, and additional goals, objectives, and management actions deriving from tribal epistemologies should be added. The recommendations provided in Appendix C thus integrate the goals, objectives, and management actions from the BLM and USFS MMPs with edits and additions made by Tribal Nations of the BEITC. Finally, as expressed in Presidential Proclamation 10285, the Tribal Nations of the BEITC will continue to take an active role in the development of a new BENM management plan that represents tribal perspectives and reflects a co-management relationship between the BLM, USFS, Tribal Nations, and other stakeholders.

A TRIBAL-FEDERAL COLLABORATION FRAMEWORK

Figure 4 graphically depicts the current framework proposed by Appendix H of the BENM MP. Figure 5 depicts a proposed framework that is more collaborative and offers a means to operationalize Appendix H of the BENM MP. Further explanation of duties and responsibilities proposed in this adaptation to the tribal collaboration framework are further discussed below. The primary adaptations to the existing collaborative framework (Appendix H of the BENM MP) are as follows:



- Expansion of the BENM Commission to include full-time Tribal Management staff
- Funding for full-time Tribal Management Staff
- Establishing and funding a Traditional Knowledge Institute that has programs that would have a Native benefit
- Enhanced data sharing and acquisition
- Adapting the collaborative management plan if required

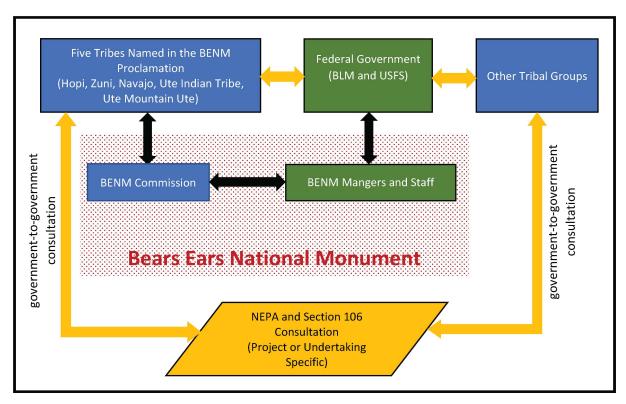


Figure 4. Graphic depiction of the Federal-Tribal collaborative management framework proposed for BENM in Appendix H of the 2020 BENM MP.



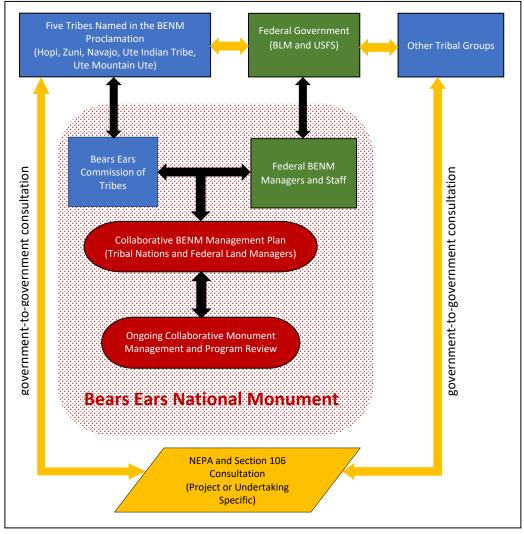


Figure 5. Graphic depiction of the Federal-Tribal collaborative management framework proposed by the BEITC for BENM.

An Expanded Bears Ears Commission: BENM Tribal Management Staff

Ongoing engagement between the Federal agencies and Tribal Nations cannot occur without funding. Both the BLM and USFS management plans for lands of BENM repeatedly prioritize ongoing engagement with descendant communities. However, neither the BLM nor USFS provide any specifics regarding the source of funding to allow this engagement to happen as outlined. Fundamental to meaningful, early, ongoing engagement with Tribal Nations is support for not only travel but the time required to effectively collaborate with Federal agencies for informed decisions regarding the management of lands within BENM. The Tribes of the BEITC prefer conducting management face-to-face rather than relying on letters, phone calls, and emails. It is also crucial to have Tribal staff dedicated to a schedule for regular on-going meetings, and that the meetings are part of a regular schedule to facilitate planning.

As mandated by the 2016 Presidential Proclamation for the Establishment of Bears Ears National Monument, a Bears Ears Commission (Commission) was established to provide guidance and recommendations on the development and implementation of management plans and on management of the monument. The Commission is to consist of one elected officer each from the Hopi Nation, Navajo Nation, Ute Mountain Ute Tribe, Ute Indian Tribe of the Uintah Ouray, and Zuni Tribe, designated by the officers' respective tribes. The Commission may adopt such procedures as it deems necessary to govern its activities, so that it may effectively partner with the Federal agencies by making continuing contributions to inform decisions regarding the management of the monument. The Commission will set policy within the bounds of the proclamation, the management plan, and MOUs or MOAs adopted in connection with the proclamation. The Commission will set performance standards and conduct annual performance reviews.

The BEITC recommends adding additional personnel selected by each of the five Tribes to be involved as BENM Tribal Management Staff. This would allow for Tribes that are already understaffed to devote the time required to the collaborative management of BENM as outlined in this plan. Unlike the elected officers that are part of the Commission, the BENM Tribal Management Staff members would be selected by each Tribe. The selection of the BENM Tribal Management Staff members would be based on employment regulations of each Tribe and suitability for the position.

The BENM Tribal Management Staff would be the primary means of regular collaboration with Federal land managers, and Tribal land managers. They would be provided with office space near or inside of BENM but may not need to be permanently stationed at BENM if some tasks could be completed remotely (i.e., planning and review tasks).

National Environmental Policy Act (NEPA) and Section 106 consultation would continue with Tribal Governments as is currently done on Federal lands. However, the ongoing collaborative management with the BENM Tribal Management Staff would streamline this process since there will already be involvement in planning and review of proposed undertakings. Since the Tribal Nations of the BEITC will be involved early and often with management issues, they will have already been in discussions with their Tribal leadership, community members, THPOs, and Natural Resource specialists ahead of the Section 106 and NEPA processes.

Funding Tribal Engagement: Federal and NGO Sources

The 2020 BENM MP states that at the discretion of Authorized Officer (BLM)/Responsible Official (USFS), funding may be provided to Tribes to facilitate their participation in the NEPA and NHPA processes under several circumstances (see BLM Manual MS-1780, Section 1.6.B, and H-1780-1, Appendix 2; see also Forest Service Manual 1563.15). It should be noted that this compensation policy allows for compensation but does not mandate it. Such compensation for consultation is not legally required; however, the BLM and USFS have the authority to provide it directly under certain circumstances or require that the compensation needed to acquire information necessary for the agency to make decisions regarding land use applications or authorizations be provided by third parties. The Federal agencies may utilize their own appropriated funds or cost-reimbursable accounts to reimburse Tribal members for travel expenses to attend meetings in connection with NEPA, the Federal Land



Policy and Management Act, or NHPA Section 106 processes, or for time taken to discuss proposed projects, cultural resource site management, or traditional use areas. (See the Advisory Council on Historic Preservation Memorandum, Guidance on Assistance to Consulting Parties in the Section 106 Review Process).

Appendix H of the 2020 BENM MP states that, in collaboration with the Commission or comparable entity, the BLM and USFS should identify any programs, functions, services, and activities that Tribes can assume, as described in the Indian Self-Determination and Education Assistance Act of 1975 and later amendments, regulations, and agency policy associated with this act. Self-determination contracts, also known as "638 contracts," and negotiated funding agreements to assume programs, functions, services, or activities for the benefit of American Indians because of their status as American Indians are available to use under the discretion of the manager.

Although 638 contracts or other sources of funding such as grants administered through non-governmental organizations (NGOs) may be used to fund programs, there is a need for the BLM and USFS to fund a Bears Ears Commission or comparable entity that will allow for ongoing engagement with Tribal Nations for collaborative management of BENM. In this way, there will be true collaborative management that goes beyond Section 106 consultation efforts.

The BEITC recommends that the BENM Tribal Management Staff be fully Federally funded, but not be part of a Federal agency. This would require an annual budget for each of the five Tribes of the BEITC for salaries and travel that would adjust annually to account for inflation. The Traditional Knowledge Institute (discussed below) would be staffed by the Federally funded BENM Tribal Management personnel and programs could be funded by individual tribes, the Federal government or non-governmental organizations (NGOs) at the direction of the Commission. A benefit of this structure would be that it would help to consolidate and focus efforts on projects in BENM. This would in turn create an efficiency that would ensure that more funds go to programs than to redundant management.

Traditional Knowledge Programs

Traditional knowledge of Tribal Nations with ancestral ties to the region is fundamental to collaborative management of BENM and long-term preservation of the cultural landscape. The Federal land managers will benefit from Native American insights and input. Juxtaposing traditional Native and mainstream Western understandings of time, space, and valid modes of knowledge would be of benefit to Natives and non-Natives alike.

A key question of a Native land management plan is: what is the benefit of collaboration to the people that comprise these Tribal Nations with cultural ties to the Bear's Ears region that live beyond the boundaries of the Bears Ears National Monument? The BEITC recommends establishment of an interdisciplinary Traditional Knowledge Institute within BENM. This would be under the collaborative management by Tribal Nations and Federal agencies. There are three interrelated programs that would form the basis of the Traditional Knowledge Institute:



- Natural Resources Program -- The creation of a natural history program that would include indigenous perspectives on plants, animals, geology, astronomical, and water resources. One portion of this program would be establishing a Bear's Ears catalog that includes Native names, traditional uses, and narratives surrounding natural resources in the area. This traditional knowledge would augment the management-driven (i.e., Western scientific paradigm) studies that are mandated for Federal lands. It would help preserve this knowledge for Tribal Nations, but also be a component of other education programs for Natives and non-Natives alike.
- <u>Cultural Ranger Program</u> -- Establishing a cultural ranger program that emphasizes an indigenous knowledge approach to the cultural landscape that comprises archaeological sites, Native histories, and the natural resources of BENM. The program would amplify and bolster the visit with respect/leave no trace messaging of the BLM and USFS, with an emphasis on Native perspectives regarding the landscape. This program would be open to tribal members and help to train current and future land managers working within and beyond BENM. They could also monitor sites and train non-Native site stewards working in the region on indigenous perspectives.
- <u>Curriculum Development Program</u> The emphasis would be on indigenous knowledge as well as taking scientific data that is generated in BENM and turning it into meaningful information to create curricula for Native people. This is a way for Tribal Nations with ancestral ties to the landscape of the Bears Ear's region to take information back to their people who now live out of the area. The program would also provide indigenous knowledge to non-Natives and Federal land managers to understand all perspectives on the landscape of BENM. This program would develop curricula regarding traditional knowledge that has been reviewed by individual Tribes in order to be shared outside of their communities so that culturally-sensitive information is not made public if it is to remain confidential.

Data Sharing and Acquisition

Data sharing between Tribal Nations and Federal land managers is fundamental to management of the Bear's Ears landscape. This information can increase the public's appreciation of history and the environment, and how to appropriately use the land and resources of the region. This applies to making both Native and non-Native people aware of environmental damage and how it affects their quality of life beyond the Bear's Ears landscape. Those who care about preserving America's natural and cultural landscape must share their views with others.

In addition to sharing extant data, there is a need for access to data on BENM resources including:

- archaeological data, including a complete inventory of BENM
- ethnographic research and TCP identification
- natural resources data on quality and conditions of water, plants, animals, birds, air
- land use and recreation data



Data sharing agreements would be put into place to preserve sensitive information regarding BENM resources. Specific traditional information may not need to be shared beyond the Tribes. Ongoing engagement would allow Tribal Nations to understand development and land use of the Bear's Ears region and they could identify any conflicts with traditional cultural properties without necessarily needing to share specific culturally-sensitive information with land management agencies.

The 2020 BENM MP states that the BLM and USFS should engage with Tribal partners to ensure access to and use of sacred sites, as defined in Executive Order 13007. The BLM and USFS should seek to enter into agreements to share capability, expertise, and insight into fostering the collaborative stewardship of sacred sites and other properties of traditional religious and cultural importance. The BLM and USFS will collaborate with Tribes when developing site-specific protection and management plans that pertain to sacred sites or properties of traditional religious and cultural importance. Site-specific protection and management plans may include procedures for utilizing Tribal expertise and capabilities regarding stabilization, patrolling, interpretation, stewardship education, or ethnographic insights into site use and significance including identification of traditional cultural properties and culturally significant landscapes. Federal land managers and Tribal Nations may formalize site-specific protection and management plans with the completion of an agreement document.

A Living Document: Adapting the Plan

The BLM and USFS developed the 2020 BENM MP with the intent of creating an ongoing two-way dialogue with American Indian Tribes, specifically those named in Presidential Proclamations 9558 and 10285. This document states that changes will be made in response to American Indian comments or feedback. Future changes to the plan should be made as necessary in order to adapt to future feedback from Tribal Nations.

This feedback and evaluation of the management plan would be made bi-yearly. Of interest will be the success of collaborative management by a Commission or similar entity and the Federal agencies including BLM and USFS. Collaborative management and ongoing tribal engagement will be adjusted as necessary to so as to best fulfill the mandates of the BENM MP.

Native Stewardship Training for Federal Managers

Appendix H of the 2020 BENM MP states that Federal employees working in the BENM should complete the most recent training courses on Tribal relations. Currently, the BENM MP emphasizes that Tribal Nations should be invited to attend and participate in agency training courses related to NEPA, lands, rights-of-way, cadastral surveys, wildfire and fuels management, and heritage resources. The Ute propose that the Federal agencies have this backwards – at the current time, it is the Federal managers that need to understand Native perspectives and lack such training as it is generally something that is encouraged rather than mandated. This change in the culture of Federal land management is needed to actualize collaborative management and meaningful tribal engagement.

Rather than Federal employees of the BLM and USFS taking advantage of cultural awareness training sponsored by Tribes, the BEITC recommends that this be a mandatory part of collaborative management training for Federal employees. This would strengthen Federal staff's understanding and



appreciation of Tribal traditional, cultural, and religious values, as well as treaties and other Tribal reserved rights on Federal lands.

Federal managers should encourage BENM staff to attend gatherings sponsored by Tribal entities, Tribal consortiums, or nonprofit organizations offering specialized knowledge and addressing issues important to Tribes. The BLM and USFS may also co-host workshops with Tribes concerning Tribal relationships, traditional cultures, and consultation. Presentations may include traditional technologies and crafts, a mutual understanding of traditional use areas, cultural landscapes, and the full scope of Tribal interests.

Change to the Utah Archaeological Site Form for BENM

The Utah Archaeological Site Form currently has shortcomings when it comes to ethnography and identification of Traditional Cultural Properties (TCPs). It is recommended that a confidential ethnographic attachment be created and appended to all site forms. This attachment would remain internal to BENM and be used to document: a) known TCPs in the study area, and b) any ethnographic information that would be pertinent to the archaeological site. In this way, archaeological inventories would be required to consider the non-material aspects of cultural sites in BENM.

It is recommended that ethnographic work be mandated for cultural resource inventories within BENM. Currently, the BLM and USFS do not require that ethnographic work be completed in conjunction with archaeological inventories. Tribes are consulted on the findings of archaeological inventories, which are most often completed by non-Native archaeologists. Having ethnographic work completed as part of cultural resource inventories would provide much more complete information to be used for land planning activities in relation to cultural resource sites. The five tribes of the BEITC should be involved with these ethnographic overviews on inventory projects within BENM. In this way, the Tribal Nations of the BEITC would be engaged prior to and during the data-gathering phases of land planning rather than consulted afterward on data that may be incomplete from a tribal perspective.

PROPOSED TIMELINE FOR ADAPTATIONS TO THE COLLABORATION FRAMEWORK

Year 1

- revise the existing 2020 BENM MP to incorporate collaborative management as outlined in this document, and/or create an MOU regarding collaborative management
- select members for the Commission to function in a full-time capacity for collaborative management
- hold a meeting of the Commission
- identify and secure on-going Federal funding for the Commission/Coalition
- request and receive all BENM geospatial data (GIS shapefiles) from USFS and BLM



Year 2

- establish Tribal protocols for collaborative management of BENM
- establish the Traditional Knowledge Institute in concert with the Federal land managers
- identify and secure funding sources for development of the Traditional Knowledge programs, including grants administered by non-profit organizations
- create an attachment to the Utah State Archaeological Form that would be for Bears Ears National Monument that is oriented toward ethnographic research needs and the cultural landscape

Year 3

 Identify and establish partners to assist with development of the Traditional Knowledge programs

Year 4

• Launch the Traditional Knowledge Institute programs

Annual Activities

- meet quarterly or more frequently with all members of the Commission to provide Tribe-to-Tribe updates
- meet yearly with all members of the Commission and Federal land managers, as well as other stakeholders
- develop contracts and grants to fund the programs of the Traditional Knowledge Institute

Bi-Annual Activities

- select Commission members for a 2-year term
- evaluate the workability of the Bears Ears collaborative management plan and adjust as needed



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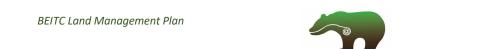
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Bears Ears Inter-Tribal Coalition: A Collaborative Land Management Plan for the Bears Ears National Monument

Appendix A: Tribal Resolutions (Hopi, Navajo, Zuni, Ute Indian Tribe, Ute Mountain Ute)



Bears Ears Inter-Tribal Coalition: A Collaborative Land Management Plan for the Bears Ears National Monument

Appendix B: Bears Ears National Monument Proclamations 9558 and 10285



Bears Ears Inter-Tribal Coalition: A Collaborative Land Management Plan for the Bears Ears National Monument

Appendix C: Tribal Review and Contributions to the LMP Categories (based on 2019 BLM and USFS MMPS and 2020 ROD).



Management Actions to Reduce Threats

Management Goals and Objectives Common to All Resources

- 1. Consult and collaborate with Tribal Nations of the BEITC and the Bears Ears Commission on all management decisions within the Monument.
- 2. Involve Tribal Nations of the BEITC in undertakings within the Monument.
- 3. Highlight history and ongoing connections of the Tribal Nations of the BEITC to Monument resources.
- 4. Quantify impacts of land use plan decisions on Monument objects and values over the life of the plans.
- 5. Create a permitting system for BENM land users.
- 6. Create a tribal monitoring program.

Cultural Resources

- 1. Define "cultural resources" according to perspectives of the Tribal Nations of the BEITC, which include ancestral sites, plants, animals, birds, and minerals.
- 2. Identify and evaluate cultural resources, especially within areas of increased visitation and visibility.
- 3. In collaboration with the Cultural Preservation Offices, identify and evaluate potential traditional cultural properties (TCPs), Hopi sacred sites, cultural landscapes, and traditionally significant vegetation and forest products, culturally significant minerals.
- 4. Identify an appropriate location for a Tribal learning center and ceremony grounds to facilitate educational opportunities within Tribal communities with youth groups, elders, or other similar groups.
- 5. Facilitate Native use of sacred sites or other sites within the Monument for ceremonies and gatherings as identified by the Tribal Nations of the BEITC.
- 6. Manage cultural resources in collaboration with the Tribal Nations of the BEITC for present and future generations in ways consistent with traditional knowledge.
- 7. Manage natural resources important to the Tribal Nations of the BEITC for cultural uses.
- 8. Engage with the Tribal Nations of the BEITC about collection of any archaeological objects and appropriateness of their use in museum exhibits.
- 9. Educate recreational users on methods to avoid and reduce impacts to sensitive cultural resources.

Management Actions to Reduce Threats

- 10. Provide for use by members of the Tribal Nations of the BEITC for any traditional cultural properties, sacred sites, cultural landscapes, and traditionally significant vegetation, forest products, and minerals.
- 11. Collaborate with the Tribal Nations of the BEITC to educate Special Recreation Permit holders and participants about the cultural history of the Monument, backcountry site visitor etiquette, and monument users about stewardship, interpretation, and education about cultural resources important to the objects and values of the Monument.
- 12. Create rules and regulations for land access and use for all users. All users should be subject to signing in at Visitor's Center and permitting protocols.
- 13. Collaborate with the Tribal Nations of the BEITC on the administration of the BENM, including coordinating law enforcement efforts to protect cultural sites and historic properties.
- 14. Meaningfully engage the Bears Ears Commission or comparable entity in the management of the Monument.

Management Actions for Cultural Resources

- 1. Agencies will collaborate with the Tribal Nations of the BEITC to allocate cultural resources according to specified uses.
- 2. Agencies will collaborate with the Tribal Nations of the BEITC to determine when it is appropriate to change the allocation status of sites.
- 3. An activity-level cultural resources management plan will be developed in coordination with the Tribal Nations of the BEITC. Tribal site visits should be planned as part of the development of a cultural resource management plan. The cultural resource management plan will include the following:
 - Tribal protocols for identifying and evaluating cultural resources, including TCPs, sacred sites, cultural landscapes, traditionally significant vegetation and forest products, and traditionally significant minerals.
 - A detailed monitoring and mitigation plan for cultural resource sites.
 - Coordination with the Tribal Nations of the BEITC to assist with monitoring, education, and interpretation
 - An interpretation plan that identifies types of sites meeting education goals, including suitability of sites allocated for specified uses.
 - Site-specific criteria for addressing Special Recreation Permit applications requesting visitation to cultural resource sites.

Management Actions to Reduce Threats

- Identification of criteria for sites and areas in need of stabilization and protective measures (e.g., fences and/or surveillance equipment).
- 4. Protective measures will be established and implemented for sites, structures, objects, and traditional use areas that are important to the Tribal Nations of the BEITC for historical and cultural reasons to maintain viewsheds, as well as the auditory, visual, and aesthetic settings of the resources. Protection measures for undisturbed cultural resources and their natural settings will be developed in consultation with the Tribal Nations of the BEITC.
- 5. The agencies will proactively implement a wildland fuels (wood, brush, etc.) management plan based on potential hazards around archaeological and cultural sites that are susceptible to destruction by fire from prescribed or wildfire. If areas are cleared, the Tribal Nations of the BEITC should be informed about plant species at sites that are available for traditional collection, and if wood is cut then it should be offered to the Tribal Nations of the BEITC.
- 6. Domestic pets and pack animals will not be allowed in cultural resource locations identified by tribes.
- 7. Camping will not be allowed within cultural resources (including archaeological resources). Camping will only be allowed in designated areas and in the backcountry through a permit system.
- 8. Campfires will not be allowed in archaeological sites. Exceptions may be made for Native American traditional and ceremonial purposes.
- 9. Ropes and climbing aids will not be allowed to access cultural sites (including archaeological resources) unless used for tribally-approved research purposes with a permit, for Tribal access, administrative access, or for emergencies.
- 10. Cultural sites may be closed to visitation when they are determined to be at risk or pose visitor safety hazards, or for maintenance, or when in use by tribal members for traditional purposes.
- 11. A schedule should be made in collaboration with the Tribal Nations of the BEITC to allow sites to "rest." Resting periods usually occur in the winter months, and visitation should be restricted during these times.
- 12. The BLM and USFS will develop the funding to conduct cultural resource inventories.
- 13. The BLM and USFS will conduct Class III cultural resource inventories in a manner that complies with Section 110 of the National Historic Preservation Act and Section 14 of the Archaeological Resources Protection Act. Priorities for inventory include the following (in this order):
 - Group 1: Areas that receive heavy public use and/or those that lack intensive inventory in relation to current standards
 - Group 2: Areas that need records clarification or updating

Management Actions to Reduce Threats

• Group 3: Areas with little or no previous inventory

These inventory priorities may change in response to changing conditions; uses and input from tribes, researchers, and educators; or other changed circumstances such as changes in travel management implementation guidelines. Inventory and site documentation will adapt existing tribal protocols and should involve/employ members of the Tribal Nations of the BEITC.

- 14. The BLM and USFS should meaningfully engage the Tribal Nations of the BEITC in the management of the Monument and should consider integrating the traditional and historical knowledge and special expertise of members of the Tribal Nations of the BEITC. If the BLM and USFS decide not to incorporate specific recommendations submitted to them in writing by the Tribal Nations of the BEITC, they will provide the Tribal Nations of the BEITC with a written explanation of their reasoning.
- 15. The BLM and USFS will monitor all access points, trails, and climbing routes and will develop protocols to educate visitors on potential impacts to cultural resources and how to "tread lightly" and/or self-regulate to avoid impacting these resources; work with visitors, organizations, and permit holders to increase volunteer monitoring and to educate users; and, as needed, will close or reroute access points, trails, and climbing routes to avoid or reduce impacts to cultural resources.
- 16. In coordination with the Tribal Nations of the BEITC, implement actions to minimize potential conflicts with traditional activities. Sensitive cultural information will be kept confidential and safeguarded from release to the extent allowed by law.
- 17. All research, inventories, and monitoring of archaeological resources will be conducted in accordance with applicable laws, regulations, and policy, and will incorporate tribal policies and protocols.

Fire Management

- 1. Maintain a healthy environment.
- 2. Fire management may be used as necessary to maintain a healthy environment.

Management Actions for Fire Management

- 1. Wildland fire will be used to protect, maintain, and enhance resources, and, when possible, will be allowed to function in its natural ecological role.
- 2. Hazardous fuels reduction treatments will be used to restore ecosystems; protect human, natural, and cultural resources; and reduce the threat of wildfire to the monument.

Management Actions to Reduce Threats

- 3. All prescribed burns will require coordination with tribal agencies and agency biologists to ensure that no adverse impacts will occur among wildlife populations.
- 4. Chemical spraying or biological treatments using insects or goats, sheep, and cattle require consultation with the Tribal Nations of the BEITC.
- 5. A fire management plan should be developed in consultation with the Tribal Nations of the BEITC. Existing tribal fire management plans may be referenced and adapted.
- 6. Fire suppression in wilderness areas and lands managed for the protection of wilderness characteristics will be through "light-on-the-land" techniques or minimum impact suppression tactics.
- 7. Mechanical treatments will be allowed only in those areas where the agencies have determined that it will be consistent with the proper care and management of Monument objects and values. Consultation with the Tribal Nations of the BEITC is needed prior to any mechanical treatments.
- 8. In collaboration with the Tribal Nations of the BEITC, the BLM and USFS will explore traditional uses of fire.
- 9. Reseeding practices following prescribed or natural burns will be done using native plants, including tobacco,

Lands and Realty

1. Acquire and maintain access to public lands to improve management efficiency, facilitate tribal use, and promote education, preservation, and cultural traditions among the Tribal Nations of the BEITC and other tribes associated with BENM.

Management Actions for Lands and Realty

- 1. Hopi Tribe is not in favor of commercial and promotional filming. Any special exceptions on case-by case basis in collaboration with the Tribal Nations of the BEITC and the Bears Ears Commission.
- 2. If filming is conducted, it should be limited to high-traffic public areas.
- 3. If filming occurs in sensitive backcountry areas, permits should be required.
- 4. Personal-use filming is allowed on cellphones and personal video cameras.
- 5. No lands in the Monument will be available for disposal. Acquisition of lands within the Monument will be pursued with willing sellers or by donation where it will provide for uses for which the Monument was intended. Any acquired lands will be managed as a

Management Actions to Reduce Threats

portion of the BENM in the same manner as adjacent lands in the BENM unless they required specific management related to Monument objects and values.

- 6. Landing on and taking off from existing backcountry airstrips on BLM or USFS administered lands in the Monument will only be allowed in emergency situations. In non-emergency situations, the Tribal Nations of the BEITC must be contacted and consulted to ensure that soundscapes, air quality, eagle nests, and other sensitive resources will not be adversely affected.
- 7. Casual-use landing and take-off of drones or unmanned aerial vehicle (UAVs) should not be allowed in the Monument.
- 8. Use of drones and UAVs for administrative use or permitted use will be analyzed on a case-by-case basis.
- 9. Retain existing designated travel corridors. Do not designate new corridors.
- 10. Analyze existing corridors to evaluate whether they should be closed.

Lands with Wilderness Characteristics

More information is needed to complete this section. This would be completed in consultation with BLM and USFS.

Livestock Grazing

- 1. Allow for sustainable grazing that does not impede protection, preservation, and enhancement of the Monument objects and values.
- 2. Monitor rangeland conditions and adapt grazing practices as necessary to maintain or make progress toward long-term rangeland health.
- 3. Maintain and improve existing range improvements, and consider new range improvements (including fencing, access, corrals, cattle guards, troughs, springs, wells, storage tanks, pipelines, guzzlers, and vegetation treatments) to allow for effective range management.
- 4. Manage grazing to maintain a healthy and diverse vegetation community.
- 5. Educate the public about avoiding conflict with livestock and manage livestock grazing to avoid conflicts with recreational users to the extent practicable.
- 6. Create Range Management Plans for each of the 35 grazing allotments currently present within BENM.
- 7. Livestock grazing should be limited or restricted in the southern portion of BENM.

Management Actions to Reduce Threats

Management Actions for Livestock Grazing

- 1. Review existing Range Management Plans with the Tribal Nations of the BEITC and Bears Ears Commission, and identify areas for improvement.
- 2. Exclude livestock from springs and riparian areas.
- 3. Monitor livestock to ensure that they are not adversely impacting cultural sites and other Monument objects and values.
- 4. Develop water sources away from springs and riparian areas to encourage cattle to remain in pasture lands.
- 5. Develop a plan to keep livestock away from sensitive cultural sites.

Paleontological Resources

- 1. Ensure that areas that contain or are likely to contain vertebrate or noteworthy invertebrate or plant fossils and their traces are identified and evaluated prior to authorizing the use of any activities.
- 2. Consider perspectives of the Tribal Nations of the BEITC in the management and interpretation of paleontological resources.
- 3. Promote scientific, educational, and interpretive uses of fossils consistent with applicable laws, policies, and regulations.
- 4. Identify, evaluate, study, interpret, and protect paleontological resources in the Monument.

Management Actions for Paleontological Resources

- 1. The Monument will be managed to provide for the protection of paleontological resources consistent with Monument objects and values.
- 2. All research, inventories, and monitoring of paleontological resources will be conducted in accordance with applicable laws, regulations, and policy, and will integrate applicable tribal policies and protocols.
- 3. Casual collection of petrified wood will not be allowed in the Monument except for in small quantities for traditional and ceremonial uses by members of federally-recognized Native American tribes.
- 4. As funding is available, the agencies will conduct paleontological resources inventories.

Management Actions to Reduce Threats

- 5. Collection of paleontological objects will be by permit only. Tribal Nations of the BEITC have traditional uses for petrified wood. Special permits should be granted for collection by tribal members.
- 6. To protect paleontological resources no casual fossil collecting will be allowed within the Monument, except for in small quantities for traditional and ceremonial uses by members of federally-recognized Native American tribes.
- 7. Activities will avoid or minimize impacts to paleontological resources. Where avoidance is not practicable, appropriate mitigation to reduce impacts will be developed based on site-specific survey information.

Recreation and Visitor Services

- 1. Manage recreation resources while maintaining and preserving cultural and natural resources, wildlife habitats, vegetation.
- 2. Minimize user conflicts.
- 3. Manage recreation to protect human health and safety.
- 4. In collaboration with the Tribal Nations of the BEITC and other tribes, provide visitor services, including interpretation, information, and education.
- 5. Manage the Monument to provide for the proper care and management of natural quiet that enhances recreational experiences.
- 6. No rock climbing will be allowed outside of designated rock-climbing areas.

Management Actions for Recreation and Visitor Services

- 1. BLM and USFS will work collaboratively with Tribal Nations of the BEITC to develop recreation plans for BENM.
- 2. Develop a user-permit system, which involves user education about the rules and regulations of the Monument and where users are subject to penalties and fines for permit violations\.
- 3. Create an education center in collaboration with Tribal Nations of the BEITC.
- 4. Develop trails and facilities in Public-Use sites to encourage a focused visitor experience.
- 5. No camping within 1/2 mile of springs and water improvements to allow space for wildlife and livestock to access water.
- 6. Improve existing recreational campsites.
- 7. Improve trails and fences at Sand Island petroglyph panels.

Management Actions to Reduce Threats

- 8. Improve trails at existing Public-Use cultural sites.
- 9. Build fences around petroglyphs at Procession Panel to create a buffer between recreational visitors and the petroglyph panel.
- 10. Create signage and interpretive panels at roadways and Public-Use cultural sites for user education.
- 11. Create signs and placards to identify culturally significant plants in recreational areas.
- 12. Ropes and other climbing aids will not be allowed for access to cultural sites (including archaeological resources), except for emergencies or administrative needs, or at the request of tribal members.
- 13. If camping or other user-fees are established, tribal members will be excluded from paying fees.
- 14. Restrict vehicular access to the rims of Cedar Mesa. Encourage access by foot.
- 15. Use of firearms is prohibited in the Monument, except with special permit for hunting.
- 16. Improve Mule Canyon archaeological site for visitation. Add signs about culturally-significant plants, improve interpretation, and add user regulations.
- 17. Create interpretive material for the Butler Wash dinosaur track site that includes values and interpretations of the Tribal Nations of the BEITC about dinosaurs and deep history.
- 18. Improve the Comb Wash campground and add restrooms. Lay gravel on roads to control dust. Clear vegetation.
- 19. Consult with Tribal Nations of the BEITC about the proposed development of BENM campground in the vicinity of the Goosenecks State Park.
- 20. Improve roads, parking, and campsites in all areas of Butler Wash.

Riparian and Wetland Resources

- 1. Manage and protect riparian resources in coordination with the Bears Ears Coalition of Tribes to ensure ecological diversity, stability, and sustainability.
- 2. Avoid or minimize the destruction, loss, or degradation of riparian areas, wetlands and associated floodplains; preserve and enhance natural and beneficial values.
- 3. Revitalize springs.
- 4. Allow use of springs by Tribal Nations of the BEITC and other tribes for cultural and religious purposes.

Management Actions to Reduce Threats

Management Actions for Riparian and Wetland Resources

- 1. Limit recreational use where the riparian area is being damaged.
- 2. Prohibit grazing in riparian areas.
- 3. Prohibit use of All Terrain Vehicles (ATV) and Off Highway Vehicles (OHV) in and around riparian areas.
- 4. Reclaim disturbed soils where erosion could cause adverse impacts to Monument objects and values, including riparian areas and aquatic ecosystems.
- 5. Minimize surface-disturbing activities in riparian areas that alter vegetative cover, result in stream channel instability or loss of channel cross sectional area, or reduce water quality.
- 6. Reduce tamarisk, Russian olive, and other woody invasive species where appropriate using allowable vegetation. Reseed treatment areas with native plants, when appropriate, to avoid erosion damage or the reestablishment of invasive species. Additionally, reduce herbaceous invasive species where appropriate.
- 7. The harvest of cottonwood and willow, reed, cattails, and other riparian species will be allowed for ceremonial uses through a permit system that has been developed in coordination with Tribal Nations of the BEITC and other tribes. Restrictions on this harvest will be implemented as necessary to achieve or maintain properly functioning conditions.
- 8. No camping allowed within 1/2 mile (approximately 800 meters) of isolated springs or water sources to allow wildlife access to water.
- 9. Discourage dispersed camping in riparian areas if camping is determined to have a negative effect.
- 10. Avoid or limit surface disturbance in drinking source water protection zones.
- 11. Relocate livestock outside riparian areas to achieve riparian area goals.
- 12. Do not authorize land uses for water withdrawals.
- 13. Conduct vegetation treatments in riparian areas to remove nonnative vegetation, including tamarisk and Russian olive.
- 14. Vegetation treatment will require coordination with the Tribal Nations of the BEITC and agency biologist.
- 15. Treatment type will be determined on a case-by-case basis at the implementation level based on what is deemed consistent with maintaining Monument objects and values.
- 16. Review the current herbicide plan in coordination with the Tribal Nations of the BEITC.

Management Actions to Reduce Threats

17. The BLM and USFS will work with tribal conservation crews (such as the Ancestral Lands Crews) to remove invasive species and transplant native vegetation.

Soil and Water Resources

- 1. Encourage actions that protect highly sensitive soils and biological soil crusts.
- 2. Manage actions in the Monument to promote healthy watershed function.

Management Actions for Soil and Water Resources

- 1. Manage uses to minimize and mitigate adverse impacts to soil and water resources. Encourage uses with positive impacts that improve quality of soil and water resources.
- 2. Maintain and restore overall watershed health and water quality conditions by reducing erosion, stream sedimentation, and salinization of water.
- 3. Water quality and soil productivity will be maintained or improved.
- 4. Permit only those special uses that will not impair water quality or quantity.
- 5. Do not authorize land uses for water withdrawals that could negatively affect groundwater for seeps and springs.
- 6. No new surface-disturbing activity will be allowed within active floodplains or within 100 meters of riparian areas along perennial and intermittent springs and streams unless it does not impair riparian function or will benefit soil and water resources.
- 7. Create a spring-revitalization program in collaboration with the Tribal Nations of the BEITC.
- 8. No new wells will be drilled in the Monument.
- 9. Create a rainwater catchment program so that groundwater can be restored.
- 10. Create a special permit system for Tribal Nations of the BEITC other tribal members to collect minerals in small quantities for traditional or ceremonial use.
- 11. Create a special permit system for Tribal Nations of the BEITC and other tribal members to collect spring water for traditional or ceremonial use.

Special Designations

More information is needed to complete this section.

Management Actions to Reduce Threats

Special Status Species

More information is needed to complete this section.

Travel and Transportation Management

- 1. Manage the transportation system so it provides safe and reasonable access for public travel, recreation uses, traditional and cultural uses, and land management and resource protection activities.
- 2. Encourage a sense of stewardship and conservation of the landscape during travel.

Management Actions for Travel and Transportation Management

- 1. Identify the entire BENM as a travel management area for the purposes of current and future travel management.
- 2. Improve signage in Monument travel corridors so that uses understand land-use rules and regulations.
- 3. Do not create new roads in the Monument. Encourage foot-travel.
- 4. Bicycles will be restricted to existing highways and OHV roads.
- 5. Identify and maintain existing roads in Monument so it is clear where travel is allowed and additional areas are not disturbed.
- 6. Lay gravels down on dirt roads within parking areas and campgrounds to control dust.
- 7. Identify and evaluate historic roads and trails, and develop a plan to preserve the integrity of historic travel routes.
- 8. Add speed bumps on road to Bears Ears Buttes to slow traffic, manage dust and sound pollution, and preserve a peaceful environment.

Vegetation

- 1. Identify the desired composition and range of conditions for vegetation communities throughout the Monument.
- 2. Manage vegetation and native plant communities relative to their associated landforms to optimize plant community health and resilience to landscape-wide impacts.
- 3. Manage vegetation to support fish and wildlife habitat and healthy watersheds.

Management Actions to Reduce Threats

- 4. Manage vegetation to support medicinal plants and other vegetative resources deemed by the Tribal Nations of the BEITC as being culturally relevant where management is consistent with the proper care and management of Monument objects and values.
- 5. Incorporate traditional knowledge in the identification and management of culturally relevant plants.

Management Actions for Vegetation

- 1. Protocols will be developed to control invasive nonnative species, control insect pest species, and implement fuels vegetation treatments and wildland urban interface risk assessments and management.
- 2. Pack stock and riding stock users on agency-administered land will be required to use certified weed-seed-free feed.
- 3. Restoration and rehabilitation activities will be required to use certified weed-seed-free seed mixes, mulch, and fill.
- 4. The agencies will provide for the management, protection, and access to vegetation types important to the Tribal Nations of the BEITC.
- 5. The entire Monument or certain localities may be closed to seed gathering as necessary to provide for sustainable annual seed production of native plants. An exception to this will be made to allow for private seed gathering and plant collection for Tribal Nations of the BEITC and other Native Americans for traditional, medicinal, and ceremonial purposes.
- 6. Create a plan to remove tamarisk and Russian olive from the Sand Island area and transplant native willows.
- 7. The BLM and USFS will work with the Tribal Conservation Crews to remove invasive species and transplant native vegetation.

Visual Resource Management

- 1. Manage public lands in a manner that will protect the quality of the scenic (visual) values of these lands for present and future generations.
- 2. Establish a Visual Resource Management Plan in coordination with BEITC tribes.
- 3. Promote Best Management Practices for reclamation of landscapes, restoration of native habitats, and rehabilitation of waterways and riparian areas to enhance natural and historical scenic values that have been negatively altered.

Management Actions to Reduce Threats

Management Actions for Visual Resource Management

- 1. Limit the use of lights at Monument buildings and infrastructure in order to minimize impacts to night skies.
- 2. Build Monument buildings and infrastructure to blend into the landscape while retaining functionality.
- 3. Restrict camping and parking at important viewsheds and overlooks such as Muley Point and Arch Canyon Overlook.
 - Create parking and camping areas at least 1/4 mile away from Muley Point and restrict car entry so that this overlook must be approached by foot.
 - Improve parking pullouts and foot trails at Arch Canyon Overlook.
- 4. Coordinate with the Tribal Nations of the BEITC about the interpretive value of different vantage points and viewsheds in the Monument.
- 5. Identify important viewsheds in coordination with the Tribal Nations of the BEITC.
- 6. Create interpretive materials in coordination with the Tribal Nations of the BEITC that highlight tribal connections to distant areas visible from vantage points within BENM.

Wildlife and Fisheries Resources

- 1. Protect fish and wildlife.
- 2. Engage all BENM stakeholders to address management issues and minimize or avoid impacts to fish and wildlife species and their habitats across jurisdictional boundaries.
- 3. Protect and maintain wildlife habitat connectivity.
- 4. Promote and restore healthy riparian habitat throughout the Monument.
- 5. Maintain and preserve aquatic connectivity through land acquisition and maintenance of instream flows and by removal of barriers where practicable.
- 6. Protect eagle and other raptor habitats.
- 7. Maintain healthy vegetation to support raptor prey base.

Management Actions for Wildlife and Fisheries Resources

- 1. Wildlife habitat objectives will be considered in all reclamation activity to achieve desired conditions for rangelands.
- 2. Ground-disturbing actions that adversely impact fish and wildlife species and habitats will be avoided.

Management Actions to Reduce Threats

- 3. In areas lacking proper water distribution or natural water sources, allow for installation of precipitation catchments (guzzlers) or the revival and development of springs on rangelands.
- 4. Raptor management will include seasonal and spatial buffers and mitigation to maintain and enhance raptor nesting and foraging habitat while allowing other resource uses.
- 5. Maintain or provide habitat requirements for deer and elk, including forage areas, hiding cover, and migration routes when detected. Manage crucial deer and elk habitat to minimize disturbance.
- 6. Agencies will post or otherwise provide educational information to reduce climbing and canyoneering impacts on active raptor nests.
- 7. Maintain, restore, and/or improve critical habitat requirements for native fish and amphibian and aquatic species, including restoration and enhancement of backwater, side channel, and floodplain habitats. Manage habitat to minimize disturbance.
- 8. From April 1 to July 31 or if nesting birds are observed, avoid or minimize surface-disturbing activities and vegetation-altering projects and broad-scale use of pesticides in identified and occupied priority migratory bird habitat.
- 9. Close areas (amount of time depends on species) near active raptor nests to rock climbers or other activities, generally from January through May.
- 10. Conduct surveys and closely monitor raptor populations in Monument.

Woodlands and Forestry

- 1. Maintain or develop healthy resilient forest.
- 2. Allow for tribal members to harvest woodland species, especially in areas where dead wood occurs.
- 3. Maintain or increase woodland harvest to meet demand while maintaining forest health.
- 4. While managing woodlands and forest resources, design vegetation treatments to maintain old-growth.
- 5. Collaborate with the Tribal Nations of the BEITC to develop vegetative management treatments.

Management Actions for Woodlands and Forestry

- 1. Work closely with the Tribal Nations of the BEITC to assess conditions and guide management decisions for woodland resources.
- 2. Create a permit system for woodland harvest.

Management Actions to Reduce Threats

- 3. Cottonwood and willow harvest will be allowed for Tribal Nations of the BEITC and other tribal members for ceremonial uses by permit.
- 4. Utilize native plant species from locally adapted seed sources in management activities (restoration and reseeding).
- 5. No commercial woodland harvest should be permitted on BLM-administered lands in the Monument.
- 6. Provide for woodland harvest to support fuel treatment projects, as needed.
- 7. Exclude all wilderness areas from woodland product use except for limited on-site collection of dead wood for campfires.
- 8. Exclude woodland product harvest from all developed recreation sites, livestock and wildlife exclosures, and cultural sites, including on-site collection of dead wood for campfires.
- 9. Exclude floodplains and riparian and aquatic areas from woodland product use except for Native American ceremonial purposes as determined on a site-specific basis.
- 10. Prior to authorizing private woodland product harvest, tribes and agencies will ensure that the activity is consistent with the proper care and management of Monument objects and values.
- 11. If monitoring of vegetation cover and soil erosion indicates that woodland harvest is having potentially irretrievable or irreversible impacts on natural or cultural resources or is conflicting with Monument objects and values, the designated woodland harvest area or harvest season may be altered as necessary to allow for resource reclamation and/or to protect that resource or resource use.
- 12. Prohibit chaining as a method for clearing woodlands.
- 13. Employ tribal members to assist with forestry management.

Auditory Environment

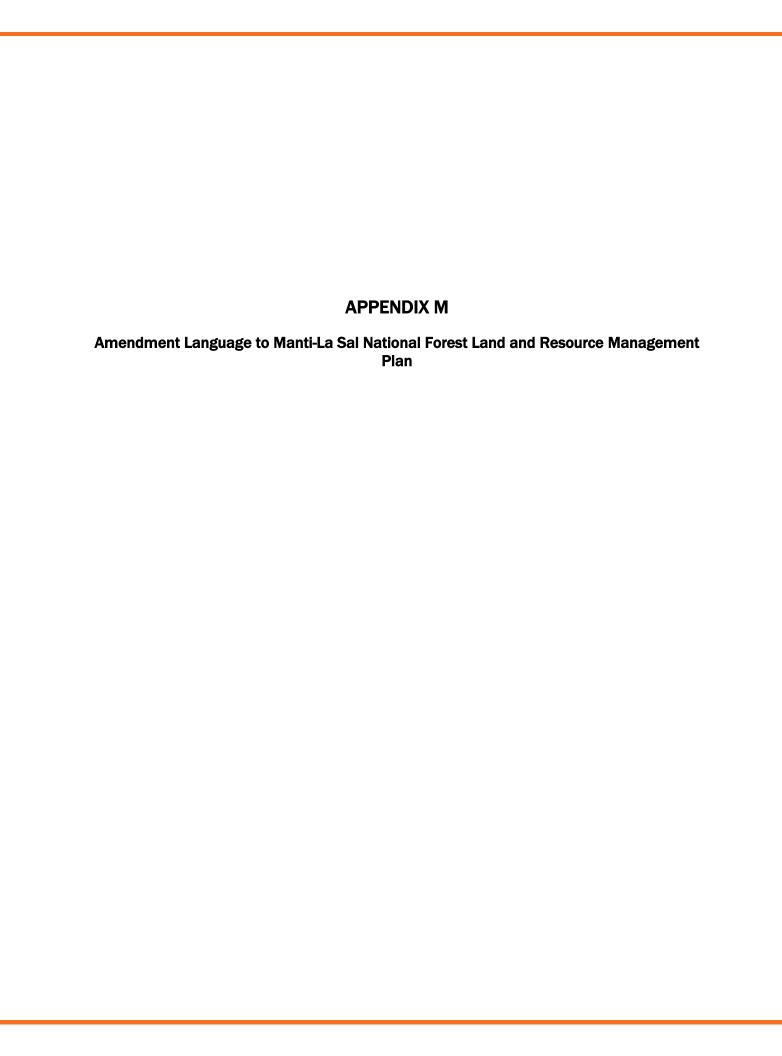
- 1. Maintain a sense of peace and quiet in the Monument.
- 2. Reduce artificial noise in the Monument.
- 3. Preserve animal and riparian habitats so that natural sounds prevail.

Management Actions for Auditory Environment

1. Post signage indicating the need for low-voices and low-volumes, especially in back-country areas.

Management Actions to Reduce Threats

- 2. Prohibit the use of drones.
- 3. Prohibit the use of music devices in back-country areas.
- 4. Add speed bumps or other speed barriers in areas of high-velocity OHV traffic to help preserve soundscapes.





1 AMENDMENT LANGUAGE TO MANTI-LA SAL NATIONAL FOREST LAND AND RESOURCE MANAGEMENT PLAN

In compliance with the National Forest Management Act of 1976 (NFMA), and associated implementing regulations (36 CFR 219), the U.S. Department of Agriculture Forest Service (USDA Forest Service) Manti-La Sal National Forest proposes to amend its 1986 Land and Resource Management Plan, as amended to incorporate the proposed Bears Ears National Monument resource management plan (RMP) and associated plan components.

The 1986 Manti-La Sal LRMP was amended by the Bears Ears National Monument: Record of Decision and Approved Monument Management Plan (MMP) for the Shash Jáa Unit (BLM 2020). The 2020 plan amendment added a BENM Designated Area for the National Forest Service lands within the Shash Jáa Unit, a map of the designated area, and associated plan components that included a desired condition, standard, and suitability determination per 219.7e(1)(i), (iii), and (v), respectively, and the MMP as an appendix.

The amendment proposed here will replace the 2020 amendment to the Manti-La Sal LRMP with the proposed BENM RMP, updated plan components as outlined below, and boundary for the BENM Designated Area as described in Presidential Proclamation 10285. Presidential Proclamation 10285 restored the boundaries and conditions established in Presidential Proclamation 9558, as well as retained the approximately 11,200 acres that added to the Monument by Presidential Proclamation 9681, although none of those acres are National Forest Service acres.

1.1 Purpose and Need

The USDA Forest Service purpose and need for this amendment is to incorporate the proposed Bears Ears National Monument resource management plan and boundary area into the 1986 Manti-La Sal LRMP as amended. Proclamation 10285 directs the BLM and USDA Forest Service to "prepare and maintain a new management plan for the entire monument" for the specific purposes of "protecting and restoring the objects identified [in Proclamation 10285] and in Proclamation 9558." Accordingly, the agencies' purpose and need is to provide for the proper care and management of the objects of antiquity and of historic and scientific interest, and the physical and natural setting in which they occur, consistent with Presidential Proclamation 10285 and other applicable laws, regulations, and policies on National Forest Lands within BENM.

The scope of the amendment is based on the objects, as described in the purpose of the amendment. The scale of the plan amendment applies to NFS lands within the BENM boundary area. The need for this programmatic forest plan amendment closely ties to the purpose and need for the project, which includes the need to prepare and maintain a new management plan for the entire monument for the specific purposes of protecting and restoring the objects as identified in the aforementioned Presidential Proclamations.

1.2 The Proposed Action

As discussed previously in the Executive Summary of this Environmental Impact Statement (see EIS, section 1-2), the BLM and the Forest Service have identified a need to amend the 1986 Manti-La Sal NF LRMP to incorporate the boundary area and proposed resource management plan of the Bears Ears National Monument (Figure 1-1). Based on the direction provided in 36 CFR 219, the Responsible Official must determine the appropriate scope and scale of forest plan amendments and which substantive provisions of 36 CFR 219.8 through 219.11 apply to the project.

1.3 Substantive Provisions

As per 36 CFR 219.13(b)(5), the responsible official shall, "determine which specific substantive requirement(s) within 219.8 through 219.11 are directly related to the plan direction being added, modified, or removed by the amendment and apply such requirement(s) within the scope and scale of the amendment." Based on the project purpose and need, the site-specific conditions for the project area, and the relevant forest-specific information and data, we hereby give notice that the substantive requirements that are likely to be directly related to the proposed amendment are as follows:

- 36 CFR § 219.8(b)(1), (5), and (6) Social and economic sustainability must consider: Social, cultural and economic conditions; cultural and historic resources and uses; and opportunities to connect people with nature.
- 36 CFR § 219.10(a)(1), (4), (5), (7), (8), and (10) Integrated resource management for multiple use shall consider: All multiple uses. Opportunities to coordinate with neighboring landowners. Habitat conditions, subject to the requirements of 36 CFR 219.9. Reasonably foreseeable risks to ecological, social, and economic sustainability. System drivers, including dominant ecological processes, disturbance regimes, and stressors and the ability of the terrestrial and aquatic ecosystems on the plan area to adapt to change (§ 219.8). Opportunities to connect people with nature.
- 36 CFR § 219.10(b)(1)(ii), (iii), and (vi) Cultural and historic resources, tribal importance, and other designated areas or recommended areas.

1.4 Amendment Language

1 Amendment of the Land and Resource Management Plan: Manti-La Sal National Forest

The following sections describe the language that would be in the USDA Forest Service (Forest Service) amendment to the Manti-La Sal LRMP, as amended.

1.1 Identify a Designated Area

The Bears Ears National Monument Designated Area is established for the Manti-La Sal LRMP (Figure 1-1).

1.2 Replace Plan Components Applicable to the Bears Ears National Monument Designated Area

Desired Condition

Existing Desired Condition:

BENMDA-DC-01: The objects of antiquity and the objects of historic or scientific interest, as identified by Presidential Proclamation 9558, as modified by Presidential Proclamation 9681, are protected.

Replace with following Desired Condition:

BENMDA-DC-01: The objects of antiquity and the objects of historic or scientific interest, as identified by Presidential Proclamation 9558, as modified by Presidential Proclamation 10285, or most current proclamation, are protected.

Standard

Existing Standard:

BENMDA-ST-01: The Bears Ears National Monument Designated Area shall be managed per the Shash Jáa Unit Monument Management Plan (see Appendix G). This direction shall take precedence over other conflicting forest plan direction that may also apply to the Bears Ears National Monument Designated Area.

Replace with following Standard:

BENMDA-ST-01: The Bears Ears National Monument Designated Area shall be managed per the Bears Ears National Monument Resource Management Plan (see Appendix G). This direction shall take precedence over other conflicting Forest Plan direction that may also apply to the Bears Ears National Monument Designated Area.

1.3 Replace Appendix Applicable to the Bears Ears National Monument Designated Area

Replace Appendix G: Bears Ears National Monument, Approved Monument Management Plan, Shash Jáa Unit with proposed Bears Ears National Monument Resource Management Plan.

1.4 Suitability Statement

Retain the following Suitability Statement:

Suitability of Lands: Lands within the Bears Ears National Monument Designated Area are not suited for timber production.

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