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Bureau of Land Management

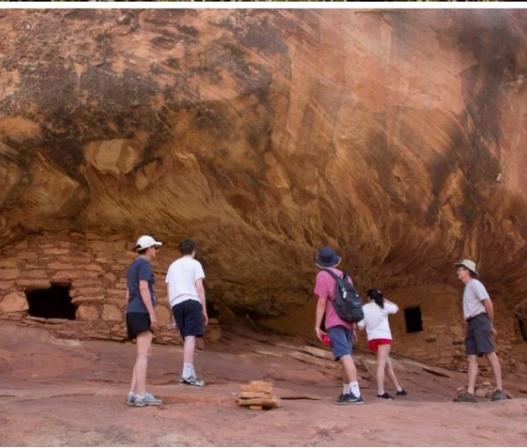


U.S. Department of Agriculture
U.S. Forest Service

Bears Ears National Monument: Monument Management Plans and Environmental Impact Statement Shash Jaá and Indian Creek Units

Scoping Report

August 2018



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1 INTRODUCTION

The Bureau of Land Management (BLM) Canyon Country District Office in Moab, Utah, intends to prepare a Monument Management Plan (MMP) for the Bears Ears National Monument (BENM or Monument) Indian Creek Unit, and intends to jointly prepare, with the U.S. Forest Service (USFS) Manti-La Sal National Forest in Price, Utah, an MMP for the BENM Shash Jaá Unit. The Planning Area for this effort is shown in Figure 1. The BLM will also act as the lead agency for preparation of a single Environmental Impact Statement (EIS) for both units to satisfy the National Environmental Policy Act of 1969, as amended (NEPA), requirements for this planning process. Preparation of the MMPs and EIS satisfies the requirements of NEPA; the Federal Land Policy and Management Act of 1976, as amended (FLPMA); the National Forest Management Act of 1976, as amended (NFMA); and Presidential Proclamation 9558, as modified by Presidential Proclamation 9681. The BLM will not repeat or duplicate direction from law, regulation, policy, or agency guidance (e.g., instructional memoranda, manuals, handbooks) in the MMPs.

The BLM began a scoping process on January 16, 2018, to solicit public comments and to identify issues to be addressed in the development of the MMPs and EIS. Comments were received by U.S. Postal Service mail, email, and website form, and verbal and written comments were submitted at two public meetings. The scoping period ended on April 11, 2018. This report summarizes the issues identified in the comments submitted.

2 SCOPING PROCESS

2.1 Purpose of Scoping

In accordance with Council on Environmental Quality (CEQ) NEPA regulations (40 Code of Federal Regulations [CFR] 1501.7), it is through the scoping process that the lead agency will 1) determine the scope and significant issues to be analyzed in depth in the EIS; 2) identify and eliminate from detailed study the issues that are not significant, narrowing the discussion of such issues to a brief presentation in the EIS regarding why they will not have a significant effect on the human environment; and 3) identify a range of reasonable alternatives that address issues identified during scoping. The scoping process will also help the BLM identify issues to be addressed in the MMPs/EIS.

2.2 Scoping Outreach

2.2.1 *Publication of the Notice of Intent*

The formal public scoping process began on January 16, 2018, with the publication of the Notice of Intent (NOI) in the *Federal Register* informing the public of the BLM's intent to prepare MMPs for the BENM Shash Jaá and Indian Creek Units and an associated EIS (*Federal Register* Vol. 83, No. 10, 2018; available on the BLM's ePlanning website at <https://goo.gl/uLrEae>). The NOI defined the end date of the scoping period as March 19, 2018, or 15 days after the last public meeting, whichever was later.

The last public meeting was held on March 27, 2018, and the public period closed on April 11, 2018, for a total scoping period of 105 days.

2.2.2 *Other Outreach Methods*

Other outreach methods included the following:

- A media release distributed on January 16, 2018, identifying the start of the public scoping period and methods by which interested parties can comment (distributed on January 16, 2018)
- A media release distributed on March 9, 2018, announcing meeting dates and locations
- Scoping notification letters sent to the BLM's interested party list

2.3 Opportunities for Public Comment

Members of the public and agencies had several methods for providing comments during the scoping period, as follows:

- Comments could be submitted via the BLM's ePlanning website at <https://goo.gl/uLrEae>.
- Comments could be handwritten on comment forms at the scoping meetings. Comment forms were provided to all meeting attendees and were also available throughout the meeting room, where attendees could write and submit comments during the meeting.
- Emailed comments could be sent to a dedicated email address: blm_ut_monticello_monuments@blm.gov

- Individual letters and comment forms could be mailed via U.S. Postal Service to the following:

BLM
 365 North Main
 P.O. Box 7
 Monticello, Utah 84535

Although the formal comment period has ended, the BLM will continue to consider all comments received to the best of the agency’s ability. However, any future scoping comments received may not be formally published in a scoping report or other document.

2.4 Public Scoping Meetings

The BLM hosted two public scoping meetings to provide the public an opportunity to become involved and offer comments on issues to be addressed in the MMPs/EIS (Table 1).

Table 1. Scoping Meetings

Date and Time	Location	Approximate No. Attendees
Monday, March 26, 2018, 4:30 p.m. to 8:00 p.m.	San Juan High School 311 North 100 East Blanding, Utah 84511	213
Tuesday, March 27, 2018, 4:30 p.m. to 8:00 p.m.	Bluff Community Center 3rd East and Mulberry Bluff Road Bluff, Utah 84512	171

2.5 Cooperating Agency Involvement

The CEQ’s regulations implementing NEPA allow Federal agencies (as lead agencies) to invite Tribal, State, and local governments, as well as other Federal agencies, to serve as cooperating agencies during the NEPA process. To serve as a cooperating agency, the potential agency or government must have either jurisdiction by law or special expertise relevant to the environmental analysis. For more information on cooperating agencies, please see the 2012 publication *A Desk Guide to Cooperating Agency Relationships and Coordination with Intergovernmental Partners*.¹

The following agencies have been invited to be cooperators:

- Blanding City
- Canyonlands National Park
- City of Monticello
- Grand County Council
- Manti-La Sal National Forest
- Natural Bridges National Monument
- Public Lands Policy Coordinating Office
- San Juan County Commission
- State of Utah School and Institutional Trust Lands Administration (SITLA)

¹ BLM. 2012. *A Desk Guide to Cooperating Agency Relationships and Coordination with Intergovernmental Partners*. Available at: <https://www.blm.gov/policy/im-2012-115>.

The following tribes have been invited to be cooperators:

- All Pueblo Council of Governors
- Confederated Tribes of the Goshute Indian Reservation
- Kaibab Band of Paiute Indians
- Navajo Nation
- Navajo Nation Council
- Navajo Utah Commission
- Northwest Band of Shoshone Nation
- Ohkay Owingeh
- Paiute Indian Tribe of Utah
- Pueblo of Acoma
- Pueblo of Cochiti
- Pueblo of Isleta
- Pueblo of Jemez
- Pueblo of Laguna
- Pueblo of Nambe
- Pueblo of Picuris
- Pueblo of Pojoaque
- Pueblo of San Felipe
- Pueblo of San Ildefonso
- Pueblo of Sandia
- Pueblo of Santa Ana
- Pueblo of Santa Clara
- Pueblo of Santo Domingo
- Pueblo of Taos
- Pueblo of Tesuque
- Pueblo of Zia
- Pueblo of Zuni
- Skull Valley Band of Goshute Indians
- Southern Ute Tribe
- The Hopi Tribe
- Uintah and Ouray Ute Tribe
- Ute Mountain Ute Tribe
- White Mesa Ute Tribe
- Ysleteta Del Sur

2.6 National Historic Preservation Act and Tribal Consultation

The requirements for consultation under the National Historic Preservation Act (NHPA) are in addition to and independent of the opportunity for qualified entities to *cooperate* under the provisions of NEPA. Entities who qualify to be considered a consulting party include the Utah State Historic Preservation Office and Tribal Historic Preservation Offices; the Advisory Council on Historic Preservation; Tribes; and others with legal, economic, or other demonstrated interest.

3 SUBMISSION PROCESSING AND COMMENT CODING

The following sections describe the methodology for reviewing and coding comments.

3.1 Submission-Level Processing

Each submission received was entered into an online database, numbered, and labeled with a commenter code indicating the entity from which it was received (i.e., individual, government agency, non-governmental organization or special interest, business, or Tribe). This system provides ease in referencing and cross-checking public letters received and the comments contained within them. Submissions were sorted into three groups: 1) unique, 2) form letter, and 3) form letter plus additional comments.

The BLM received 165,466 submissions from the public during and after the official public scoping period. Comments were received by U.S. Postal Service mail, email, and website form, as well as by verbal and written comments submitted at the scoping meetings. Duplicate submissions made through more than one submission method are excluded from this total. Verbal comments were transcribed and entered as written submissions into the comment database. All comments were given equal consideration, regardless of method of submittal. Table 2 details the submittal types.

Table 2. Summary of Submissions by Type

Type	No. of Submissions
Unique	2,846
Form letters	156,800
Form-plus letters	5,820
Total	165,466

Of the 165,466 submissions, 2,846 were unique and 162,620 were part of organized letter campaigns (Table 2). A letter campaign refers to identical copies of a letter or email (“form letters”) that are sent in by multiple individuals. One representative letter (i.e., “form master”) from each campaign was entered into the comment-tracking database, with all other exact duplicate letters identified as form copies. Letters that presented variations of the form master—unique comments added to, embedded in, or altered from the form master—were defined as “form-plus” letters, and any unique comments within a form-plus letter were added to and coded into the database. As shown in Table 2, there were 5,820 form-plus submissions.

3.2 Comment-Level Coding

Once the 165,466 submissions received during the public scoping process were entered into an online database, the letters were reviewed and parsed into individual comments to be coded according to issue categories. For example, if a letter brought up four different issues, the text was parsed into four separate comments. This parsing process resulted in approximately 9,000 individual comments, which were then coded according to planning issue categories. Table 3 shows the relative percentage of comment by issue category.

Table 3. Comments by Issue Category

Issue Category	Count	Percentage
Air and climate	18	0.2%
Soil and water	47	0.5%
Biological resources	134	1.5%
Cultural resources and Native American concerns	725	8.1%
Paleontology	115	1.3%
Aesthetic resources (visual resources and soundscapes)	63	0.7%
Wildland fire management	9	0.1%
Lands with wilderness characteristics	54	0.6%
Livestock grazing	80	0.9%
Recreation and visitor services	358	4.0%
Travel management	185	2.1%
Lands and realty	36	0.4%
Energy development (minerals and renewables)	197	2.2%
Special designations	40	0.4%
Social and economic conditions	73	0.8%
Process	2,058	22.9%
Out of scope	4,800	53.4%
Total	8,992	100.0%

As noted above, more than half of the individual comments were about issues that are outside of the decision space for this planning process. These comments are summarized Section 4. Section 5 presents summaries of public concerns and issues by resource topic. In some instances, comments contained multiple intertwined issues, and it was not possible to parse these comments into separate comments; therefore, some of the issues and topics discussed in Section 5 are not reflected in the comment coding above. However, all issues and topics are captured in the issue statements and comment summaries. Additional information on each resource topic can be found in Appendices A and B.

4 ISSUES RAISED THAT WILL NOT BE ADDRESSED AS PART OF THIS PLANNING PROCESS

Submissions included comments on the following issues that are out of the decision space for this planning process:

1. Modifying BENM boundaries or transferring BENM lands to the State of Utah
2. Abolishing Wilderness Areas and Wilderness Study Areas (WSAs)
3. Discontinuing BLM's mineral leasing program
4. Management suggestions for lands excluded from the BENM
5. Management suggestions for wild horses and burros

Issues regarding monument boundaries and ownership, wilderness, and the BLM's mineral leasing program are decisions guided by laws or presidential or congressional decisions that are beyond the scope of this planning effort. Management of lands excluded from the BENM is guided by the 2008 MFO Resource Management Plan and 1986 Manti-La Sal National Forest Land and Resource Management Plan. Wild horses or burros are not managed in the BENM.

5 SUMMARY OF PUBLIC CONCERNS AND ISSUES

The following key issues and concerns have been extrapolated from the public comments and summarized for future consideration in the MMPs/EIS process. The issues presented in the forthcoming Draft MMPs/EIS may include additional issues raised by cooperating agencies.

5.1 Air Resources and Climate Change

Issue: What BMPs are appropriate to incorporate into the MMPs/EIS to maintain air quality?

Comment Summary

Comments expressed concern about the impacts to air quality from fugitive dust associated with unpaved roads and motorized vehicle use; release of air pollutants as a result of oil and gas development; and smoke from prescribed burns. Comments recommended that the MMPs/EIS provide an evaluation of the current air quality conditions and trends in the Planning Area and disclose the potential environmental effects of land management actions such as prescribed burns and on- and off-road motorized vehicle use on air quality and evaluate whether there is a need to revise management actions or to develop stipulations to minimize the potential air quality impacts.

Issue: How should adaptive management be used to help the BLM and USFS plan for changes in climate, vegetation, and wildlife habitat?

Comment Summary

Submissions requested that the BLM address complex natural resource issues such as species adaptation and extreme variability in natural processes in the MMPs/EIS. Comments noted that drought conditions present a challenge for resource managers and stated that explicit consideration of drought and climate change in the planning process would benefit managers on the ground and noted that land use practices that may have been sustainable and effective in the past could become less successful in the future. Comments recommended that the BLM incorporate the actions contained in the U.S. Department of the Interior Manual 523 Department Manual 1, among other sources, and consider a “portfolio” management approach that establishes restoration, innovation, and observation zones. Comments also suggested establishing areas to conduct long-term ecological and agricultural research to provide more scientific data to support future land use planning and land management decisions.

5.2 Soils and Water

Issue: What restrictions or BMPs are necessary to protect biotic soils and minimize erosion; preserve water quality and quantity; and protect, maintain, and restore riparian areas?

Comments identified fragile soils, particularly living biological soil crusts (i.e., cryptobiotic soils), as important ecological and biological resources to be protected or enhanced during the planning process. Comments identified several degraded areas within the BENM and suggested use of active rehabilitation strategies with soils restoration to reverse these trends. Comments stated that some use has reduced protective plant or biological soil cover as well as soil fertility, which has in turn increased dust.

Comments identified freshwater systems such as perennial streams, including hanging gardens, high-quality riparian areas, and "relict" areas, as important resources for protection. Comments noted that riparian ecosystems support a number of special status species. Comments stated that authorized activities in the Planning Area have the potential to cause changes in hydrology from surface disturbance, compaction, and increased runoff, which may result in stream structure failure and additional sediment loading of wetlands and riparian areas. Comments specifically expressed concern about conditions of historically riparian areas in Comb Wash and Butler Wash and suggested a priority of the BENM should be to restore ecosystem functioning to all streams and riparian areas that are not at proper functioning condition. Comments noted that visitor demand may necessitate completion of new domestic water wells or septic systems and recommended location of facilities where development would not affect water surface or groundwater resources. Comments also recommended consideration of information in Rapid Ecoregional Assessments (REAs) in assessing drought and mitigation measures.

5.3 Biological Resources (Vegetation, Fisheries, and Wildlife, including special status species)

Issue: What Monument actions are appropriate to benefit wildlife species and improve or maintain special status species and other important wildlife habitat?

Comment Summary

Comments stated that the BENM is an invaluable ecosystem for wildlife and stated that it should be preserved for both wildlife and humans. However, comments also expressed concerns regarding impacts to threatened or endangered or other special status species and important wildlife habitat such as nesting and roosting sites for birds of prey and neotropical migrants, large areas that encompass wildlife habitat areas, and wildlife migration corridors.

Comments noted that the BENM also provides important habitat for a suite of game species including pronghorn, mule deer, elk, and bighorn sheep. Comments recommended maintaining corridors of undisturbed vegetation to maintain wildlife habitat connectivity and suggested the use of large-scale assessments, such as BLM REAs, to identify areas for resource protection and conservation. Comments recommended wildlife habitat restoration projects such as water guzzlers, spring development, and pinyon-juniper removal. Comments noted that human-caused noise can affect the physiology, behavior, and spatial distribution of wildlife in ways crucial to their survival and reproductive success. Submissions included statements of support and opposition to hunting, protection of large predators (such as mountain lion and bear), and predator control within the BENM. Comments also stated that the BLM should demonstrate that they have met their obligations to maintain or restore the ecological integrity of ecosystems and watersheds that contribute to the recovery of species listed under the Endangered Species Act (ESA).

Issue: What protections are necessary for special status plant species and other unique or rare vegetation communities?

Comment Summary

Comments expressed the value of the diverse and unique vegetation of the area, including agency-designated sensitive species and other rare and endemic plants known to occur in the BENM. Comments stated that a goal of the BENM's vegetation management should be to restore and

promote a natural range of native plant associations. Comments also suggested that the BLM prioritize the planting of native species over exotics; provide interpretive displays and handouts at project sites and visitor centers around the BENM to educate the public about protection of these species; and conserve and study medicinal plants. Comments stated that the BLM should consult with the U.S. Fish and Wildlife Service (USFWS) to ensure that actions authorized by the BLM do not jeopardize the continued existence of any special status plant species or result in the destruction or adverse modification of critical habitats. Comments expressed concern about impacts to vegetation from drought. Comments supported the use of large-scale assessments, such as REAs, in assessing drought and developing appropriate mitigation measures.

Comments expressed concern about impacts of invasive species on native vegetation and recommended that the BLM develop a Vegetation Management Plan to address the invasive tamarisk in Lower Butler Wash. Comments stated that many grasslands and sagebrush sites need active restoration and suggested a more holistic approach to ecological restoration that not only includes vegetation restoration but also restoration of soils. Submissions included comments both in favor of and expressing concern about the use of various types of vegetation manipulation and range improvement projects and suggested that the BLM review these past vegetation projects and assess improvements to watersheds and vegetation communities.

5.4 Cultural Resources and Native American Concerns

Issue: What conflicts exist between other land uses (such as recreation activities, off-highway vehicle [OHV] use, and livestock grazing) and protection and preservation of cultural resources?

Comment Summary

Commenters stated that the BENM contains one of the densest concentrations of indigenous and historic sites in the country. Commenters requested that the MMPs prioritize the protection of archaeological and sacred sites, as well as traditional cultural properties, from impacts including looting, shooting, vandalism, sound disturbances, development, cattle grazing, and off-road vehicle impacts. In addition, comments requested that other categories of management, such as travel, livestock grazing, fire management, and especially outdoor recreation, be considered in context with their impacts to cultural and historic resources. Comments included suggestions to limit, control, or eliminate grazing and OHV use in sensitive archeological areas and to revisit site visitation restrictions.

Issue: How should the BLM address increasing demand for recreational use centered on cultural heritage?

Comment Summary

Comments suggested that the BLM consider adding “hardened” or “visitor ready” cultural sites to help direct visitation away from other cultural sites. Comments recommended that the BLM conduct a visitor management analysis in conjunction with Tribal consultation and on-the-ground observation from stakeholders. Comments suggested that sites meeting the “visitor-ready” criteria should be moved through the NEPA process more quickly. Commenters also provided site-specific suggestions regarding visitation and permit restriction; fencing or other protection measures; or measures to improve access or guide recreation activities.

Issue: How will the BLM retain access to public lands by Native Americans for their traditional uses and practices, and how will the BLM incorporate Native Americans traditional knowledge into cultural resources management?

Comment Summary

Comments stated that the BENM preserves and protects some of the most sacred Tribal and scientifically important public lands in America. Comments recommended that the BLM identify and protect all Tribal, cultural, burial, and historic sites and provide for continued customary, traditional, ceremonial, and subsistence access and use, which include firewood gathering, collection of medicinal plants, use of ceremonial sites, collection of eagle feathers for traditional uses, gathering of pinyon nuts and wild berries, and gathering of willow brush for basketmaking. Comments recommended that the BLM consult with Native American tribes (including Tribal historians, Tribal elders, or other individuals knowledgeable) about cultural and sacred issues, all Tribal cultural and ceremonial uses, preservation of ancient structures and rock art, and management of the health of wildlife and medicinal plants. Comments also suggested that the BLM consider using Tribal members as guides or interpreters (or as patrols) to create local employment opportunities, provide authentic visitor experiences, and enhance protections for the archeological resources.

5.5 Paleontological Resources

Issue: How can the BLM minimize conflicts between other land uses (such as recreation, OHV use, and livestock grazing) and paleontological resources?

Comment Summary

Comments expressed concern about impacts to paleontological resources from vandalism, theft, neglect, OHV traffic, and mineral resource development. Comments recommended travel restrictions, increased staffing, additional site monitoring, and mineral development conditions for approvals that require pre-development surveys and site mitigation.

Issue: What opportunities exist for study and preservation of important paleontological resources?

Comment Summary

Comments stated that scientific research, particularly projects using paleontological resources, should remain as a priority and at the core of Monument unit activities. Comments provided a suite of BMPs and stipulations for collection and curation of paleontological resources and methods by which non-confidential information could be made public. Comments also recommended partnerships to secure funding to manage paleontological resources.

5.6 Aesthetic Resources (Visual Resource Management and Soundscapes)

Issue: Which visual resource management (VRM) class designations are appropriate for the BENM? How can dark sky values be retained?

Comment Summary

Comments stated that the BENM contains unique landscapes of the highest scenic quality and expressed their appreciation for intact and unique landscapes, scenic vistas, and unusually dark skies. Comments identified mineral extraction and vehicle use as two uses in which impacts to the viewshed or dark skies may not be adequately mitigated through usual management tools (e.g., color blending of structures, revegetation, and sensitive siting). Comments requested that the BLM establish a clear VRM direction describing areas inventoried and possessing high scenic importance, with clearly defined objectives that limit surface disturbance within important viewsheds. Comments included suggestions for management of BENM as VRM I or II. Comments also stated that VRM classifications are not restricted to land-based resources and suggested that the MMPs include analysis and management prescriptions that consider the value of a dark night sky consistent with the BLM's multiple-use mandate. Commenters recommended preservation of dark skies to achieve a Dark Sky Park nomination and designation from the International Dark Sky Association, which would preserve backcountry values of the cultural landscape and potential for economic growth. Comments also recommended development of a dark sky lighting plan that includes best management practices (BMPs) to minimize light emissions for authorized facilities identified in activity-level planning.

Issue: How should the BLM use soundscapes to guide recreation visitation and other resource use management?

Comment Summary

Comments identified "natural quiet" or the absence of human-made noise as a valuable resource of the BENM. Comments also noted that soundscapes are important for managing wildlife resources, because environmental noise can affect the physiology, behavior, and spatial distribution of wildlife. Activities of concern included drone use, industrial development, and traffic associated with visitation. Comments suggested development of a soundscape classification system similar to VRM classes as a way to inventory and manage sound resources in landscape-level planning. Comments also recommended that the BLM complete sound modeling to assess noise impacts of management alternatives on recreation and wildlife and recommended using a geographic information systems (GIS)-based model such as the System for the Prediction of Acoustic Detectability (SpreAD) to conduct that modeling.

5.7 Wildland Fire Management

Issue: How can fuels management minimize impacts to other resources?

Comment Summary

Comments express concern about impacts to cultural and visual resources from fuels reduction programs. Comments stated that current prescribed fire methods in Indian Creek may lead to significant soil loss in wind and water erosion. Comments included recommendations for

archaeological clearances prior to any on-the-ground disturbance; use of mechanical removal methods such as mastication instead of prescribed fire; use of small-scale, prescribed fires; and tamarisk removal near areas where campfires are allowed. Some comments suggested that all fuel-reduction projects may be in conflict with BENM management.

5.8 Land with Wilderness Characteristics

Issue: What areas within the BENM contain wilderness characteristics and how should those areas be managed?

Comment Summary

Comments expressed value for pristine, unspoiled lands within the BENM and articulated the value of hiking, climbing, and exploring in remote and protected areas without human-made noise. Comments also noted that lands with wilderness characteristics harbor important wildlife habitat, riparian areas, cultural resources, and other BENM values. Some comments expressed the belief that the MMPs should serve to protect and preserve the wilderness character of the land and stated that this designation would better protect lands than under other management schemes; other comments expressed concerns that lands managing to retain wilderness character would turn them into de facto wilderness areas. Commented stated that the BLM is required, as per Manual 6310, to inventory land for wilderness characteristics and should also consider citizen-based inventories that have been submitted. Comments stated that potential manageability for wilderness characteristics does not affect the BLM's obligation to maintain an accurate inventory; if the BLM finds areas that possess wilderness characteristics, then the BLM can decide whether or how to manage those characteristics. Commenters recommended that the MMPs/EIS evaluate a full range of alternatives for managing inventoried land with wilderness characteristics that identify management actions and allowable uses as outlined in Manual 6320. Comments also suggested a tiered system of management.

5.9 Forestry and Woodlands

Issue: How can the BLM maintain access to woodland products for subsistence, traditional uses, and forest harvest while minimizing impacts to other resources?

Comment Summary

Comments stated that woodland products have been important to communities surrounding the BENM for hundreds of years; many of the region's residents depend on areas within the BENM to procure wood to heat their homes and cook their food; juniper trees are commonly used for fence posts, aiding ranching and other agriculture activities; cottonwood and willow harvesting continues to be used for Native American ceremonial activities; and pinyon nuts are regularly used by local people to supplement their diets and incomes. Comments stated that permits for woodland harvest need to continue to be available to the public and requested that the BLM allow for easier permit acquisition. Other comments suggested that woodcutting has led to the creation of undesignated roads and suggested better signage regarding wood harvest restrictions. Comments also emphasized the value of pinyon nuts for native Tribes of the region as well as wildlife and expressed interest in a tree nursery program. Submissions also included comments both in favor of and against the use of chaining in in pinyon-juniper woodland. Commenters

expressed concern about potential impacts of pine beetle damage and suggested that the MMPs/EIS include a proactive approach to be resistant to extreme fire, insect outbreak, and timber harvesting.

5.10 Livestock Grazing

Issue: What areas should be available and unavailable for livestock grazing?

Comment Summary

Comments in support of grazing identified grazing as a sustainable use of the land and an important economic contributor to local economies. Comment in opposition to grazing generally expressed that livestock grazing was not compatible with a National Conservation Land management emphasis and could adversely affect water resources, vegetation, wildlife habitat, and cultural resources. Comments identified the Shash Jaá Unit and Butler and Comb Wash in particular as areas of concern. Comments included a variety of suggestions about areas that should be made available or unavailable for grazing (ranging from eliminating grazing within the BENM altogether to maintaining existing availability determinations).

Issue: What grazing management practices are appropriate for BENM allotments?

Comment Summary

Comments provided a range of suggestions regarding forage decisions, stocking rates and season of use to maintain rangeland health standards while managing the land to be as productive as possible for livestock grazing. Suggestions included making no change from existing management, recalculating animal unit months (AUMs), reinstating AUMs, reducing stocking rates, reassessing utilization, as well as developing an Adaptive Management Plan that contains specific decision thresholds and desired future conditions. Comment also included suggestions for monitoring requirements as well as appropriate vegetation management.

Issue: What measures should the MMPs/EIS incorporate to reduce conflicts between grazing and other resources?

Comment Summary

Comments included suggestions for BMPs or mitigation to minimize impacts to soils, riparian, and water resources; special status species; cultural resources; and other resources. These included suggestions regarding vegetation management techniques; restrictions in special status species habitat; buffer zones or other restrictions to protect riparian area and other important habitat, important cultural sites, or recreation areas; stocking strategies to minimize impacts to biological soils crusts; and maintenance of water flows.

5.11 Recreation and Travel

Issue: How can the BLM provide high-quality recreation opportunities while minimizing conflicts with other resource values and uses?

Comment Summary

The wide range of recreational opportunities available and the spectacular scenery—both within the BENM and in the nearby National Parks—draws many visitors to the area. Comments offered statements of support for a variety of recreational activities within the BENM, including wildlife viewing, hunting, fishing, recreational shooting, rock climbing, geocaching, historical tourism and reenactments, firewood gathering, camping, hiking, horseback riding, OHV use, aviation, biking, motorcycling, other recreational vehicles (RVs) use, and all other generally enjoyable uses. Some of the concerns highlighted that recreational use has led to environmental degradation, especially in the heavily used Indian Creek corridor. Comments expressed support for a delineation of management zones to set the overarching goals for visitor experiences as well as a basis for designating routes in a Travel Management Plan. Comments also recommended Extensive Recreational Management Area (ERMA) and Special Recreation Management Area (SRMA) designations. Comments indicated that the lack of designated public sites is one of the largest challenges in managing recreation and identified areas where strategic visitor management planning is needed. Comments requested additional campgrounds, visitor centers, and bathrooms and offered some specific locations where they might best benefit visitors. Some comments suggested that visitor centers should be in nearby communities to provide economic benefit and to allow the BENM to remain less developed.

Comments offered a variety of suggestions regarding topics of public education and interpretation, funding and stewardship opportunities, as well as areas that could benefit from additional signage or additional enforcement personnel.

Issue: What changes to the visitation and permit system are needed to promote the optimum recreation experience and resolve issues caused by growing recreation use?

Comment Summary

With the number of visitors to BENM continuing to grow, recreational activity is expanding deeper into the backcountry, and resource and user conflicts are becoming more common, intense, and difficult to manage. Commenters expressed concern about the ability of the BLM to manage visitation and protect natural and cultural resources. Some comments suggested that the BLM manage the number of visitors to the Planning Area to maintain quality recreational experiences with a permit system, with an annual pass, with a reservation system for camping and climbing, or by charging fees for hiking and backpacking. Comments also identified a range of casual and permitted use group sizes for various cultural/historic sites, such as Doll House, Moon House, River House, and Hole in the Rock. Comments suggested that geocaching should be limited within certain zones to protect cultural resources and also expressed concern about commercial events within the BENM. Some comments also requested that use of backcountry airstrips remain open.

Issue: How can the BLM minimize recreation-related human health and safety problems, including disposal of human waste, protection of water quality, and road safety?

Comment Summary

Comments expressed concern about the lack of infrastructure in the area and the ability to accommodate the influx of visitors. Commenters identified Indian Creek and San Juan River and River House as specific areas of concern for trash and human waste. Comments suggested that agencies should provide adequate law enforcement resources to protect against vandalism, looting, area misuse, inadvertent destruction of, or inappropriate conduct in and around, cultural sites. Comments stated that highways in the Planning Area are substandard, area roads need maintenance, and search-and-rescue efforts are not adequate. Comments also expressed concern that many visitors were not familiar with the harsh conditions of a desert climate and suggested that enforcement staff should be increased to better provide for public safety. Comments also expressed concern with potential public health issues from uranium mining and the use of Utah State Route 95 for uranium shipments.

Issue: Which OHV designations are appropriate to prevent conflicts among recreation users and to minimize adverse impacts to sensitive resources?

Comment Summary

Comments noted that Federal regulation requires the BLM to designate all public lands as either open, limited, or closed to OHVs. Comments suggested that a “limited” designation would provide the BLM with the opportunity to protect critical objects and would also allow a full range of alternatives to be analyzed when the Travel Management Plans are developed. Some comments expressed concern about resource impacts from illegal OHV uses and other motorized or mechanized activities and identified site-specific locations with recreation- or travel-related management issues that could be addressed by closing areas to OHV use. Other comments stated that the BENM should be available for a variety of motorized activities and requested that trails not be limited to vehicles that are 50 inches wide or less. Comments also noted the potential for travel management enforcement challenges because roads may originate or have access points outside the BENM.

5.12 Lands and Realty

Issue: What criteria are appropriate for land acquisition or exchange?

Comment Summary

Comments stated that the MMPs/EIS should address the potential for exchange of State of Utah lands within Monument boundaries for Federal lands outside these boundaries. Commenters acknowledged a potential benefit to resource protection from a land exchange that removes SITLA inholdings from within the BENM and but stated that the exchange must comply with NEPA and FLPMA requirements. Comments also suggested that any SITLA lands exchange include county involvement to ensure the exchange is not detrimental to the local economy. Comments also identified specific parcels of lands that could be acquired to provide for better land management.

Issue: How can the BLM maintain inholding access and minimize trespass issues?

Comment Summary

Comments stated that access to State sections and private land should be preserved. Comments suggested that the BLM either 1) consider less restrictive management to areas that provide access to these inholdings, so access issues can be analyzed during implementation-level planning or 2) define in the MMPs an official process by which access can be obtained by the State and private landowners as future needs may arise. Comments identified instances of trespass resulting from recreation use and recommended that the BLM consider proximity to private land when developing recreation sites. Comments also identified specific parcels of lands that could be acquired to resolve trespass issues.

Issue: What areas are appropriate for right-of-way avoidance and exclusion areas?

Comment Summary

Some comments stated that communication sites, utility rights-of-way, and road rights-of-way should not be permitted in the BENM or in known special status species populations. Other comments pointed out the value for enhanced communication as a public health and safety issue and stated that the MMPs should allow for the continued development and maintenance of power lines, pipelines, and other utility infrastructure and water rights necessary to the local community and State.

Issue: How can the BLM minimize conflicts between filming or unmanned aerial vehicle (UAV) use and protection of cultural resources, wildlife habitat, soundscapes, and other Monument values?

Comment Summary

Comments express concern that photography, videography, and drones in the BENM may have adverse impacts on cultural, natural, visual, and auditory resources. Comments suggested that to avoid damaging resources and compromising visitor experiences, use of UAVs (or drones) should be more tightly regulated. Suggestions included prohibition of UAV use in various areas of the BENM, tighter regulation of commercial filming, and public education.

5.13 Energy Development

Issue: What lands in the Planning Area will be made available for mineral and renewable development, and what would be the potential impacts of that development?

Comment Summary

Commenters expressed both support for and opposition to oil, gas, and mining development and renewable development in the Planning Area. Some comments expressed support for renewable energy over fossil fuel development; other comments generally opposed any type of development project within the BENM, citing surface disturbance, visual disturbance, and other impacts. Support

for increased oil, gas, and mining development generally cited the need for jobs in the region and the potential benefits to local economies. Commenters expressed opposition to the extraction of fossil fuels from the Planning Area because of the impacts to climate change.

5.14 Special Designations

Issue: What special designations are appropriate for the Planning Area?

Comment Summary

Comments stated that the planning process provides a valuable opportunity to protect existing resources through the creation of new Areas of Critical Environmental Concern (ACECs) and suggested that the BLM should immediately conduct a review of potential ACECs and engage the public in soliciting proposals for ACEC designations. Other submissions cautioned that any land areas proposed for ACEC designation must show unequivocally that the resource values under consideration are in imminent danger of irreparable damage and must show where existing management is failing to protect the resource value.

5.15 Social and Economic Conditions

Issue: How will Planning Area decisions impact local economies and environmental justice communities?

Comment Summary

Comments suggested that tourism is more beneficial to local economies than resource extraction and stated that southern Utah lands are a global destination for outdoor recreational activities. Comments expressed concern that oil and gas development would noticeably reduce tourism to the area and in Utah overall, having a greater negative economic effect than the revenues generated by potential oil development. Comments also suggested that night sky tourism could provide additional visitors during off-peak seasons. Comments suggested that management should aim for economic diversification and sustainability. Comments stated that the EIS must identify and disclose disproportionately high and adverse impacts to any minority, low-income, and Tribal communities.

Issue: How will the Monument management affect the character of the area?

Comment Summary

Commenters expressed concerns about potential impacts on quality of life for surrounding communities. Comments identified the value of Native American culture, spirituality, and history of the area and stated that this value is critical to understanding how the BENM should be managed. Comments also identified livestock grazing as a key driver of the rural/agrarian character of the area. It was suggested that increased infrastructure, extraction, and development in the Planning Area would result in pollution that would negatively impact the locals' quality of life. Comments identified the continuing need for early involvement of the local communities, including Tribal consultation and coordination, and the meaningful participation of community representatives in the NEPA process.

Issue: How can the BLM improve public health and safety within the Monument?

Comment Summary

Comments noted a potential health issue with human waste and suggested that additional restrooms would help alleviate the issue, identifying Indian Creek and San Juan River and River House as specific areas of concern. Comments expressed concern about area infrastructure and the ability to accommodate the influx of visitors. Comments also expressed concern that many visitors were not familiar with the harsh conditions of a desert climate and suggested that search-and-rescue capabilities are not adequate.

5.16 Other Planning Issues

The BENM planning process is of interest to a variety of stakeholders, and many commenters had questions about the MMPs planning process or related NEPA process, including the following:

- How should the Shash Jaá Commission, Monument Advisory Committee (MAC), or other management boards contribute to the planning process and ongoing management of the BENM?
- What avenues exist for Native American tribes to participate in the planning process?
- What opportunities exist for the BLM to collaborate with nearby management entities on BENM management?
- How should the BLM disseminate information to the public regarding the planning process and allow for meaningful public input?
- How will the BLM's and USFS' respective planning process requirements be reconciled and accommodated?
- What is a reasonable range of alternatives to analyze in the NEPA document? How will existing conditions be assessed? How will impacts be analyzed, and what criteria will guide selection of the preferred alternative?

6 FUTURE STEPS IN THE MONUMENT MANAGEMENT PLANS/ENVIRONMENTAL IMPACT STATEMENT PROCESS

Scoping is the first public involvement opportunity in the planning process. Several more steps are necessary in the NEPA process, including the formulating alternatives, analyzing the effects of alternatives, publishing a Draft MMPs/EIS; publishing a Proposed MMPs/Final EIS; and issuing the Final Record of Decision/Approved MMPs. Figure 2 shows where the BLM is at in the NEPA process currently as well as future major milestones and public involvement opportunities.

The BLM has revised the project mailing list to address scoping comments from individuals and organizations asking to be added or removed from the mailing list. The BLM's next step in the MMPs/EIS process is to consider comments and concerns as well as environmental and social constraints that were presented by the public during scoping and by cooperating agencies. This will enable the BLM to develop a range of alternatives to be included in the Draft MMPs/EIS. The impacts that could result from implementing the alternatives will be analyzed and documented in a Draft EIS. These alternatives will generally fall into two categories: 1) alternatives to be analyzed in detail in the Draft EIS, or 2) alternatives that are eliminated from detailed analysis. The Draft EIS (or an alternatives summary report) will provide rationale for any alternative eliminated from detailed analysis.

After alternatives are formulated, the BLM will prepare Draft MMPs and a Draft EIS. A Notice of Availability (NOA) will be published in the *Federal Register* when the Draft MMPs and Draft EIS are available for the public to review during a 90-day public comment period. The BLM will hold public meetings in key locations during this comment period to provide information on the Draft MMPs/EIS and to solicit public and agency comment on the draft documents. Once the 90-day comment period is completed, the BLM will respond to substantive comments and prepare the Proposed MMPs and a Final EIS. An NOA will be published in the *Federal Register* when the Proposed MMPs and Final EIS are available for the public to review.

Following publication of the Proposed MMPs and Final EIS, the BLM will provide a 30-day protest period and a 60-day governor's consistency review. Once any protests are resolved, the BLM will prepare and publish a Record of Decision and the Approved MMPs.

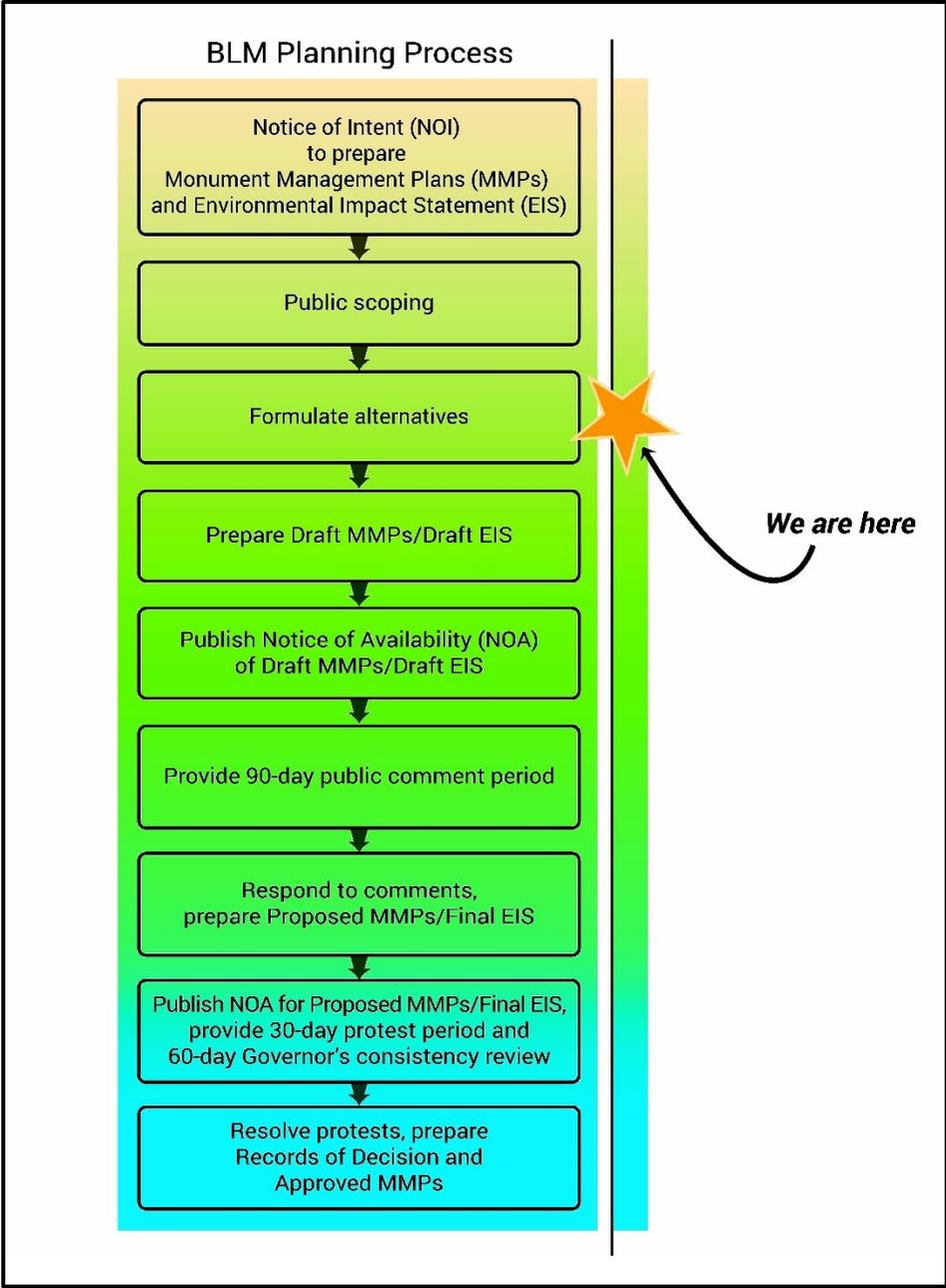


Figure 2. National Environmental Policy Act and land use planning process graphic.

7 CONTACT INFORMATION

BLM's ePlanning website: <https://goo.gl/uLrEae>

Email: blm_ut_monticello_monuments@blm.gov

Mail: BLM

Attention: BENM MMPs
365 North Main
P.O. Box 7
Monticello, Utah 84535

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U.S. Department of the Interior
Bureau of Land Management



U.S. Department of Agriculture
U.S. Forest Service

Bears Ears National Monument: Monument Management Plans and Environmental Impact Statement Shash Jaá and Indian Creek Units

Scoping Report Appendices

August 2018



APPENDIX A

Comment Summary by Resource Topic



INTRODUCTION

The following sections summarize the individual comments, by resource topic, received during the formal scoping period. Submissions are made part of the project record and can be viewed by contacting the BLM MFO.

Process

Development of Separate Monument Management Plans for the Shash Jaá and Indian Creek Units

Comments suggested that the development of the BENM MMPs rather than the development of a single MMP would not result in appropriate consideration of landscape-level impacts. Comments from stakeholders with recreation-oriented businesses felt that splitting the BENM into separate units could directly affect the appeal of the area to their client base.

BLM's Planning Process Timeline

Comments noted that bills have been introduced in Congress that may alter the final boundaries and management of the BENM. Comments stated that the ongoing litigation or pending legislation could alter the boundaries and management directives for this area and suggested that the agency delay planning efforts until these issues are resolved.

Comments recommended that the BLM fulfill its obligations under NEPA by ensuring that its analysis is thorough and complete. Comments expressed concern about the BLM's ability to allow adequate public comment or to fully integrate knowledge and information identified in the Tribal consultation process while developing the MMPs on an expedited timeline.

Consideration of the Planning Process for the Manti-La Sal National Forest

Comments requested clarification on how the BLM's planning process and the potential Forest Plan amendment associated with the BLM's planning process intersect with the USFS's plan revision process that is currently underway for the Manti-La Sal National Forest. Commenters stated that it may be necessary for the USFS to re-initiate scoping on the proposed land use plan amendment in order to meet USFS planning requirements contained in 36 CFR 219.

Comments stated that where species of conservation concern (SCC) have not been identified, the responsible official must determine whether that species is a potential SCC and, if so, must apply the requirements of 36 CFR 219.9(b) to that species as if it were an SCC (see also Fish and Wildlife section in this appendix).

Comments suggested that the joint management of Monument lands presents additional managerial challenges and stated that the EIS clearly identify any differences in management between BLM and USFS lands; clarify what that differences would mean for protection of resources; and identify which agency has responsibility for mitigation. Comments recommended separate Records of Decision for the BLM and the USFS to address their respective challenges with managing and protecting Monument resources.

Other Relevant Laws and Regulations

SECRETARIAL ORDER 3356

Comments recommended that the MMPs be developed in a manner consistent with the directives outlined in Secretarial Order (SO) 3356 (Hunting, Fishing, Recreational Shooting, and Wildlife Conservation Opportunities and Coordination with States, Tribes, and Territories), which require agencies to consider hunting, recreational shooting, and fishing opportunities and to collaborate with State, Tribal, and territorial fish and wildlife agencies to attain or sustain wildlife population goals during land use planning,

REVISED STATUTE 2477

Comments requested that transportation and access routes to and across Federal lands, vested under Revised Statute (RS) 2477, must be duly honored and protected for the movement of people, goods, and services within a county. RS 2477 rights-of-way may include horse paths, cattle trails, irrigation canals, waterways, ditches, wagon roads, jeep trails, logging roads, homestead roads, mine to market roads, and all other ways established and held consistent with Utah Code 72-5-104 and in use prior to October 22, 1976 (see Trails and Travel Management comments in this appendix).

AMERICAN INDIAN RELIGIOUS FREEDOM ACT

Comments stated that the American Indian Religious Freedom Act (AIRFA) of 1978 requires Federal agencies to evaluate their policies and procedures to assure that they protect the religious freedoms of Native Americans. Comments stated that this law would be violated by adoption of any management plan that fails to offer sufficient protections for the soundscape, dark skies, and viewshed.

Public Involvement

Comments noted that one of the core purposes of NEPA is to disclose to the public how an agency is making a decision when that decision may significantly impact the environment. Comments on specific elements of public outreach included the following:

- Submissions requested an extension of the public scoping period to 60, 90, 120, or 180 days after the last/final BLM or USFS public hearing to allow members of the public more time to analyze information that arises from that hearing and/or comment.
- Comment suggested meetings or public hearings in Salt Lake City, Utah; Flagstaff, Arizona; Denver, Colorado; Washington D.C.; Albuquerque, New Mexico; the Four Corners area; lands of the Hopi, Navajo, Zuni, Ute, and Ute Mountain Tribes; and the “gateway communities” of the Monument, which were defined as Bluff, Blanding, Monticello, Mexican Hat, and Moab.
- Comments requested placement of more detailed Planning Area maps on the project website. Some submissions indicated that the BLM’s ePlanning website was not accepting comments or was not accessible.
- Comments stated that the public meetings should have been better publicized and requested emailed planning updates and notifications of any upcoming meetings.
- Comments also requested that the BLM circulate the Analysis of Management Situation (AMS) and provide an additional scoping period after the AMS has been completed to facilitate more useful scoping comments and better alternatives.
- Comments requested that the BLM release alternatives for public review prior to publishing the draft MMPs.

Consultation and Coordination

Submissions offered a variety of suggestions about what entities should be involved in the planning process and how those entities should participate, as summarized in the subsections below.

COOPERATING AND CONSULTING AGENCIES

Capital Reef National Park stated that they have jurisdiction by law or special expertise and would like to become a cooperating agency with the BLM.

National Park Service stated that they have jurisdiction by law or special expertise and would like to become a cooperating agency with the BLM.

Comments requested that interagency consultation occur and to include the USFWS, along with the various BLM and USFS parties that represent places such as Canyonlands National Park; Glen Canyon National Recreation Area; Natural Bridges National Monument; Manti-La Sal National Forest; and Mexican Hat, Utah.

Comments stated that the All Pueblo Council of Governors (APCG) should not be a cooperating agency on the EIS.

Commenters suggested increased cooperation with State and local authorities in the management of the Planning Area. Comments stated that elected officials in local governments have a responsibility to their constituents to protect the “health, safety and welfare” of the community and indicated that County staff should have the opportunity to be active members of agency interdisciplinary teams.

GOVERNMENT-TO-GOVERNMENT AND SECTION 106 CONSULTATION

Comments requested that the BLM initiate formal government-to-government consultation with the Tribes, including the Pueblo of San Felipe and the APCG and all 20 of its member Pueblos.

Commenters also noted that the San Juan Southern Paiute, Kaibab Paiute, Paiute Tribe of Utah, and the Hualapai Tribe have connections to the BENM and should be involved in the management planning process.

The National Trust requested to participate as a consulting party in the Section 106 consultation to develop the MMPs, pursuant to 36 CFR 800.2(c)(5) and 800.3(f)(3).

Friends of Cedar Mesa stated that they have extensive knowledge of cultural resources to share in a Section 106 context and indicated that they would request Section 106 consulting party status under separate cover (i.e., not in public comments).

MONUMENT ADVISORY COMMITTEE

Comments noted that the BLM’s website states that the agency will develop alternatives for the land use plans with State, local, Tribal, and public participation. Suggestions about which entities should be included in a MAC or other management boards are summarized below.

- A new Federal Advisory Committee Act charter for the BENM should be formed during this scoping process. The committee should provide fair and balanced representation of all interested stakeholders. Meaningful input is needed from all stakeholders, including Native Americans, non-Native Americans, farmers, cattlemen, ranchers and conservation organizations, and not just limited input from certain parties favored by the current administration.

- The BLM should coordinate with all surrounding counties. Public lands in San Juan County should be managed by San Juan County (local) residents. The best way to take local citizens' input is through locally affected county and city official. Any advisory board that is created to manage the Monument should only include local taxpaying residents of San Juan County.
- The BLM should establish a Tribal Management Council empowered with capacity to make and set policies and decision-making power for both the Shash Jaá and Indian Creek Units. The council should include representatives from the Hopi Tribe, Navajo Nation (including the Oljato Chapter), Ute Indian Tribe of Uintah Ouray, Ute Mountain Ute Tribe, and Pueblo of Zuni.
- The Bears Ears Inter-Tribal Coalition's Land Management Planning Task Force should be involved in all aspects of the planning process and with the subsequent management of the Monument.
- Comments expressed concern that the Access Fund was removed from the MAC as a result of National Monument reductions, and specifically requested that they to be included in planning because of their extensive work as stewards of the climbing areas.
- Comments expressed concern about John Curtis's Bill House Rule (HR) 4532 (which would establish a Shash Jaá Tribal Management Council) and stated it would affect the way the BLM would operate if just the Native Americans, or just environmentalists, or just cattleman, or just one group sits on an advisory committee or management committee.

OTHER COLLABORATION

Suggestions regarding additional stakeholder engagement are summarized below:

- The BLM should collaborate with the recreational community, including but are not limited to: hikers; Access Fund; rock climbers; the Recreational Aviation Foundation; the Utah Back Country Pilots; the Off-Road Business Association, Inc.; the Salt Lake Climbers Alliance.
- The BLM should activity solicit participation from Native Tribes, environmental and cultural experts and business people who benefit from the tourism industry.
- The BLM should work with the Utah Rock Art Research Association with regards to the conservation, protection, and restoration of all natural and cultural resources.
- The BLM should work with the following groups to conserve, protect and restore the natural and cultural resources for current and future generations: The Wilderness Society (TWS), Southern Utah Wilderness Alliance, Grand Canyon Trust, Great Old Broads for Wilderness, National Parks Conservation Association, Western Watersheds Project, WildEarth Guardians, Western Resource Advocates, and Wild Utah Project.
- The BLM should verify all data and analyses be verified by professionals with the appropriate expertise in that area of concern to address potential interference of "special interest groups" in the consultation process.
- The BLM should define key public/private partnerships to fund plan management.
- The BLM should develop partnerships with external researchers, elected Tribal officials, and non-Federal public trust repositories for effective management, preservation of scientific and cultural resources (see Cultural Resources and Paleontology section in this appendix).
- The BLM should allow local employees to make more management decisions. Local opinions should carry the most weight in determining how the area should be managed.

Purpose and Need

Comments stated that the management mandate—to protect identified objects and values—must be recognized in the “purpose and need” section of the NEPA document. Comments also stated that the agency should not define the objectives of their actions in terms so unreasonably narrow that they can be accomplished by only one alternative.

Monument Vision

Comments requested that a vision statement for the BENM MMPs be created with the stated purpose for creating Bears Ears to protect prehistoric, historic, and scientific objects of national significance, and that the BLM thereby ensure that each alternative and management objective in the MMPs directly reflects and promotes this overall vision. Comments also requested that the MMPs should include a vision statement focused on this being the first successful Native American-led National Monument campaign, citing an addendum to the *Canyons of the Ancients National Monument Record of Decision and Resource Management Plan*, page 287, as an example.

Monument Values and Objects

Comments stated that the BLM should manage the Monument primarily for the protection and preservation of its natural, cultural, historic, and scientific values, and only allow uses other than those needed for protection of Monument objects when those uses do not conflict with the protection of those values and objects.

Many submissions included descriptions of or appreciation for the Monument values and objects and stated that any actions planned within the BENM boundary should have the purpose of protecting sensitive Monument resources. Comments emphasized the values that the Monument represented and stated that the Monument is a treasured space that not only provides habitat for flora and fauna, but also benefits our mental, physical, and spiritual health, as a “place to reconnect with nature and the earth.” Comments argued that these associated values should be acknowledged and discussed in the environmental analysis, and reflected in the decisions made in the MMPs. These sentiments are further discussed in each individual resource section. Comments suggested that the BLM consider using the approach used during the Sonoran Desert National Monument (SDNM) land use planning process, which specifically identifies the SDNM’s objects and values and a methodology for analyzing impacts to those objects and values and determining adequate protection of those objects and values.

Alternatives

Alternatives Development

Comments stated that NEPA requires the BLM to “rigorously explore and objectively evaluate” a range of alternatives to proposed Federal actions and stated that a “reasonable” range of alternatives includes alternatives that are practical or feasible and includes alternatives outside the jurisdiction of the lead agency if reasonable. This requirement prevents the EIS from becoming “a foreordained formality.” Comments stated that a reasonable range of alternatives must include options for protecting the all the stated values and objects of the Monument. Submissions also noted that a No Action alternative must be included. Submissions requested that the alternatives clearly stated how management on BLM and USFS lands will differ (if they do). Comments also stated that the alternatives should be consistent with applicable County plans to the extent allowed by law and should provide opportunities for job growth and economic development in the County.

Submissions suggested a variety of management emphases. These are summarized below. Comments also suggested a variety of management allocations or management actions by resource. These are summarized within each resource section in this appendix. Comment also requested that the BLM release draft alternatives for public review prior to publishing the draft MMPs.

NATIONAL CONSERVATION LANDS MANAGEMENT STANDARDS

Comments stated that National Monuments must be managed to “conserve protect, and restore nationally significant landscapes that have outstanding cultural, ecological, and scientific values for the benefit of current and future generations.” Comments identified the following conservation standards for National Conservation Lands (per SO 3308, the Omnibus Act of 2009; the 15-Year Strategic Plan; 2012 Policy Manuals, and BLM Policy Manual 6220):

- Prescriptive language that requires the area to be managed for the conservation, protection, and enhancement of resources over other uses
- A prohibition on discretionary uses that are not consistent with conservation and protection of these resources
- A mineral withdrawal
- Restrictions on off-road vehicles and a travel management plan with restrictions necessary to protect the area
- Incorporation of incorporate science into the decision-making process

Comments stated that the BLM’s National Monuments guidance, Manual 6220, includes obligations to 1) clearly identify and inventory Monument objects; 2) identify measurable goals and objectives for each object and value; 3) identify management actions, allowable uses, restrictions, and management actions regarding any valid existing rights; 4) conduct a thorough analysis of the effects of all plan alternatives on the objects and values; 5) identify mitigation measures to ensure that the objects and values are protected; and 6) include a monitoring strategy that identifies indicators of change, methodologies, protocols, and timeframes for determining whether desired outcomes are being achieved.

PRESERVATION EMPHASIS

Comments in support of preservation management generally supported management that would preserve or enhance sacred sites and traditional cultural properties; soundscape and quietude; dark skies, viewshed, and air quality; unique landscapes and ecologically fragile areas; and other values of the area now and into the future. Comments suggested that allowable uses need to be compatible with those values so that the aforementioned resources are not disturbed or damaged. Comments stated that BLM’s management objectives should do the following:

- Place paramount priority on the protection and preservation of objects of prehistoric, historic, and scientific significance, including historic landscapes.
- Not rely on multiple use as a principle to determine and designate permissible activities.
- Accurately inform the public of the agency’s management and stewardship responsibilities, and identify alternatives that are consistent with applicable legal requirements.
- Adopt a management approach which ensures that authorized activities, such as oil and gas development under existing valid leases, will not adversely affect the objects of prehistoric, historic, and scientific significance, including large scale resources, such as archaeological districts, traditional cultural properties, or cultural landscapes.

Submissions also included statements of opposition to grazing, mineral extraction, motorized recreation, and land disposal and identified areas needing additional protection or reduced access. Submissions were supportive of non-motorized recreation and education and interpretation and visitor limitations. These requests and suggestions are discussed under specific resource summaries in this appendix.

MULTIPLE-USE EMPHASIS

Commenters requested that the BLM focus its management of the Planning Area to emphasize multiple use. Comments stated that the area is over-managed, with too many restrictions on dispersed camping, road closures, and permits/quotas, and suggested it is possible for the BLM to protect and preserve and manage responsibly artifacts, antiquities, and natural resources without blocking access to millions of acres of public lands.

Submissions included statements of support for a variety of multiple uses, such as grazing, mineral extraction, tourism, OHV use and other access, wood and herb gathering, antler gathering, backpacking, rock climbing, aviation, camping, logging, hiking, hunting fishing, tourism, as well as other forms of economic development. Comments stated that Federal land management plans should have the objective to produce forage, food, fiber, minerals and energy necessary to meet current and future needs of the County and State.

Comments in support of multiple-use management stated that the MMPs would effectively convert Congressional designated multiple-use lands to de facto wilderness which circumvents Congressional law and the wilderness designation process. Other comments concluded that management is generally adhering to a multiple-use mandate because the only use prohibited within the BENM would be mineral development (subject to valid existing rights) and because the designation of motorized and non-motorized use areas is consistent with, and represents no change, from existing regulations.

LANDSCAPE-LEVEL MANAGEMENT

Comments noted that from a resource management and economic viewpoint, fragmented elements of land that are managed by multiple agencies or private interests are hard to facilitate effectively. Comments stated that maintaining and restoring ecosystems, flora, and fauna require management at a broader landscape scale and suggested that the BLM develop MMPs that provide for the protection of wildlife, watersheds, rare and unique habitats, and other public values at a landscape scale.

Comments suggested that management actions within the Indian Creek or Shash Jaá Unit might not harm the objects within that unit, but would impair the protection and restoration of objects in other parts of the Monument; for example, designating certain routes could facilitate access to other portions of the Monument, where access might increase opportunities for vandalism or disturb sensitive species.

Submissions stated that managing these public lands at the landscape level would be reasonable under NEPA because it would both meet the purpose and need for the current planning process and attend to other departmental and agency direction on planning and conserving resources at appropriate ecological scales.

NO ACTION ALTERNATIVE

Comments expressing support for existing management suggested that the BLM manage the area exactly as it was when designated a National Monument. Comments stated that existing management restrictions were not excessive and resulted in appropriate protection of sensitive areas and historical and cultural sites while still honoring existing mining, drilling, and ranching leases and allowing a broad range of public use within designated areas.

Comments stated that very little about area management actually changed as a result of National Monument designation and suggested that management of lands and resources within the Monument units should continue as prescribed in the BLM's 2008 *Monticello Field Office Record of Decision and Approved Resource Management Plan* and the USFS's Forest Plan for the Manti-La Sal National Forest as closely as possible (with the exception of new minerals claims and actions precluded by mineral withdrawal) and should avoid the development of any new management prescriptions designed to buffer or preclude the effects of management activities on lands adjacent to the Monument (i.e., no buffer zone management).

Comments stated that the plans should maintain the use of existing travel plans provide for the continued transport of goods and services to and through the Monument. See the Trails and Travel Management section of this appendix for more information. Comments also suggested that the BLM continue existing livestock grazing management. See Livestock Grazing section of this appendix for additional details. Comments stated that the plans should provide for continued customary, traditional, ceremonial, and subsistence uses of areas and resources of the Monument. See Section Native American Concerns section of this appendix for additional details.

General EIS Development Considerations

Baseline Conditions

Comments stated that NEPA requires agencies to describe the environment of the areas to be affected or created by the alternatives under consideration and stated that there is no way to determine what effect an action will have on the environment without that baseline. Comments stated that the BLM should provide an inventory and assessment of the Monument objects and values and their condition to enable the BLM and the public to evaluate whether the MMPs, as well as subsequent planning and management actions, adequately protect these resources.

Comments noted that the BLM is required to complete an AMS per 43 CFR 1610.4-4, and requested that it include landscape-level assessments of cultural, historical, and biological/ecological regions of the Four Corners or the Colorado Plateau. Comments also suggested that the BLM identify the current management practices in the Shash Jaá and Indian Creek Units and the success of those management practices to protect the water, cultural, flora, fauna, visual, soils and rocks, recreational, and other resources in those areas, so that the public can compare the past impacts and management practices with the ones that will be developed to protect Monument resources. Comments requested that the BLM and the USFS provide an additional scoping period after the AMS has been completed and circulated publicly to allow the public to use that information to identify issues and to develop alternatives.

Resource-specific suggestions regarding baseline information to be included in the AMS or EIS is contained in the baseline conditions subsection under each resource or resource use, below.

Impact Analysis

Submissions recommended a thorough NEPA evaluation to assess the impact of proposed management. Commenters stated that given the sizable land management challenges of the coming decades, it is imperative that the BLM employ effective and efficient science-based planning and analysis methods to support robust and legitimate decision-making processes. Comments noted that BENM planning information states that “BLM and USFS will use current scientific information, research, technologies, and results of inventory, monitoring, and coordination to determine appropriate management” and requested that scientists conduct necessary studies to guide management decisions. Comment stated that planning efforts should include recognized experts and scholars in geography, archaeology, paleontology, anthropology, botany, and behavioral ecology and identified three “essential ingredients” for the effective application of science to land management planning and decision-making:

- Well-defined, measurable standards (e.g., wildlife population or habitat condition targets), developed via robust public involvement processes
- The employment of science-based analytical tools to evaluate compliance with the standards (e.g., population viability analysis, or the spatially explicit Decision Support System recommended by the Western Governors’ Association)
- Consistent implementation of science-based analysis and decision-making (i.e., dedicated funding for monitoring and science-based adaptive management processes)

Comments stated that the BLM’s NEPA Handbook states that planners use the best available science to support NEPA analyses and consider peer-reviewed science and methodology over that which is not peer reviewed.

Comments also recommended that the MMPs/EIS analyze which management standards (e.g., that BLM or the USFS) for resource management and protection are the most protective while still affording the intended use of the BENM resources.

Comments recommended that the BLM employ the methodology used for the SDNM for the MMP/EIS analysis. Comments stated that NEPA regulations require that NEPA documents address not only the direct effects but also “reasonably foreseeable” indirect effects, which may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Comments provided the following reference: Rohlf, D.J. 2004. Science, Law, and Policy in Managing Natural Resources: Toward a Sound Mix Rather than a Sound Bite in *Forest Futures: Science, Politics, and Policy for the Next Century*, edited by K. Arabas and J. Bowersox, pp. 127–142. Lanham, Maryland: Rowman and Littlefield.

Cumulative Impacts

Comments stated that the BLM should thoroughly analyze cumulative impacts, as well as direct and indirect impacts, on all resources. Comment identified two steps necessary to satisfy NEPA’s hard-look requirement:

- The BLM should catalogue the past, present, and reasonably foreseeable projects in the area that might impact the environment.
- The BLM should analyze these impacts in light of the proposed action. If the BLM determines that certain actions are not relevant to the cumulative impacts analysis, it must demonstrate the scientific basis for this assertion.

Comments stated that the full footprint of cumulative impacts would necessarily extend beyond the Monument boundaries, and that failure to include a cumulative impact analysis of actions within a larger region would render the NEPA analysis insufficient.

Mitigation

Comments expressed concern about irretrievable and irreversible losses to natural and culture resources. Comments identified EISs as key planning tools for risk assessment and stated that the EIS should incorporate “lessons learned” from other areas, and as well as measures to offset any damage caused by stakeholder use.

Comments stated that the BLM should discuss the mitigation measures in sufficient detail to demonstrate how mitigation will reduce environmental impacts to an insignificant level. Comments stated that the “possibility of mitigation” should not be relied upon as a means to avoid further environmental analysis and also stated that general statements that the BLM will conduct monitoring are not an appropriate form of mitigation: simply monitoring for expected damage does not actually reduce or alleviate any impact. Comments also suggested that baseline ecosystem data be compared with annual assessments at chosen sites, and that mitigation of human use and development should be mandatory.

Natural, Biological, and Cultural Resources

Air Resources and Climate Change

GENERAL CONCERNS

Comments expressed concern about the impacts to air quality and climate change from extractive uses such as oil and gas development, prescribed burns, and on- and off-road vehicle use. Comments are summarized below.

Air Resources

Comments identified a visual “line of pollution” west of the Colorado–Utah border and expressed concern about additional air pollution from mineral development or road construction in the BENM.

Comments stated that fugitive dust can have significant effects on ecosystems and wildlife habitat: motorized vehicles create fugitive dust by travelling on unpaved roads and through cross-country travel, kicking fine dirt particles up into the air; these particles are then dispersed along roadsides or carried further afield with wind currents.

Comments stated that fossil fuel development contributed to haze and toxic air pollution through release of volatile organic compounds (VOCs) and methane, particulate matter (PM), nitrogen oxides (NO_x), and sulfur dioxide (SO₂), and ultimately increases global warming with catastrophic effects such as major storms, flooding, and wild fires.

Climate Change

Submissions stated that the BENM area will undoubtedly experience real effects of climate change and requested that the BLM address the complex natural resource issues such as species adaptation and extreme variability in natural processes in the MMP. Comments identified impacts catalogued in recent studies by Federal agencies (such as the National Climate Assessment), such

as shrinking water resources; extreme flooding events; invasion of more combustible nonnative plant species; soil erosion; loss of wildlife habitat; and larger, hotter wildfires. Comments stated that models predict increasing temperature, and increased drought frequency and severity across the southwest are likely to reduce snowpack and streamflows, threaten agricultural production, and increase the risk of wildfire. Comments presented a summary of information from the U.S. Geological Survey (and others) showing a connection between increased temperature, disturbance, invasive species, and dust. Comments stated that for major river basins such as the Colorado River Basin, models predict that drought will become more frequent, more intense, and longer lasting relative to droughts in the historical record. Drought conditions present a large challenge for resource managers, and explicit consideration of drought and climate change in the planning process would benefit managers on the ground.

Commenters stated that many management decisions in the MMPs may contribute to and exacerbate the impacts of human-induced global climate change, and BLM stewards many resources that must be managed to maximize their ability to adapt and endure in the face of climate change. Comments suggested that land use practices that may have been sustainable and effective in the past could become less successful or even irrelevant over the next century with climate change. Comments suggested that long-term records suggest that native plants are already responding to climate change, suggesting that planning considerations of future climate would be beneficial to successful management of the BENM.

Comments stated that SO 3289 mandates all U.S. Department of the Interior agencies to analyze potential climate change impacts when undertaking long-range planning exercises, setting priorities for scientific research and investigations, and developing multi-year management plans. Comments also stated that FLPMA gives the BLM authority to manage and plan for emerging issues and changing conditions that global climate change will affect in the Planning Area.

In contrast, other comments stated that climate change is being used as a reason to eliminate motorized access and recreation. Comments stated that motorized recreation is not a significant factor in climate change, and that if carbon dioxide (CO₂) is a significant factor, then forest fires are a significant impact, and this impact must be adequately addressed.

ALTERNATIVES/SUGGESTED MANAGEMENT

Comments stated that the range of alternatives should include strategies for mitigating climate change impacts. Suggestions are summarized below:

- Consider the actions contained in the U.S. Department of the Interior Manual for climate change adaptation (523 Department Manual 1):
 - Use the best available science of climate change risks, impacts and vulnerabilities;
 - Use the network of Landscape Conservation Cooperatives, Climate Science Centers and other partnerships to understand and respond to climate change;
 - Use well-defined and established approaches for managing through uncertainty including vulnerability assessments, scenario planning and other risk management approaches;
 - Promote landscape-scale, ecosystem-based management approaches to enhance the resilience and sustainability of linked human and natural systems; and
 - Manage linked human and natural systems that help mitigate climate change impacts, such as:
 - Protect diversity of habitat, communities and species,
 - Protect and restore core, unfragmented habitat areas and key habitat linkages,
 - Maintain key ecosystem services,

- Monitor, prevent and slow the spread of invasive species,
 - Focus development activities in ecologically disturbed areas and avoid ecologically sensitive landscapes, culturally sensitive areas, and crucial wildlife corridors.
- Consider the referenced TWS report, *Recommended Risk Assessment and Management Approach for Addressing Climate Change in BLM Land Use Planning*, as an approach for assessing risk in the Planning Area.
- Implement a design² known as a “portfolio approach” to land use planning to allow for diverse strategies and adaptive, dynamic planning as a climate change adaptation strategy. The approach involves establishing restoration, innovation, and observation zones in order to “learn while doing”:
 - Restoration Zones: areas that are devoted to forestalling change through the process of ecological restoration;
 - Innovation Zones: areas that are devoted to innovative management that anticipates climate change and guides ecological change to prepare for it; and
 - Observation Zones: areas that are left to change on their own time to serve as scientific “controls” and to hedge against the unintended consequences of active management elsewhere.
- Establish areas to conduct long-term ecological and agricultural research to provide the scientific data to support future land use planning and land management decisions. Comments stated the Indian Creek area has drawn the interest of researchers from many universities and agencies interested in understanding Canyon Country ecosystems and ways to sustainably manage them. The variety of land tenure (National Park Service, BLM, USFS, private) across a wide elevational range presents a unique opportunity to study how the interaction of different management approaches, climate, and a wide range of soil types influence ecosystem function.
- Do not prioritize resource extraction activities that add to the burden of climate change.

BASELINE CONDITIONS/AFFECTED ENVIRONMENT

Air Resources

Comments recommended that the Draft EIS provide an evaluation of the current air quality conditions and trends in the Planning Area.

Comments stated that the Planning Areas is near Clean Air Act (CAA) Class I Areas (e.g., Canyonlands, Arches, and Mesa Verde National Parks) that the CAA provides with special protection for air quality and (air quality–related values (AQRVs), including visibility, as well as sensitive Class II areas.

Climate Change

Comment stated that the BLM baseline data on climate change must be sufficient to permit analysis of impacts under NEPA. In cases where there is not enough information to determine a baseline, it is the BLM’s obligation to disclose the scientific uncertainty; to complete independent research and gather the information needed; and to evaluate the potential, reasonably foreseeable impacts in the absence of relevant information.

² Belote, T, G. Aplet, A. Carison, and P. McKinley. 2014. Wilderness and Conservation Strategy in the Anthropocene. *The Pinchot Letter*: Spring 2014.

IMPACT ANALYSIS

Air Resources

Comments recommended that the Draft EIS consider and disclose the potential environmental effects of land management actions such as prescribed burns and on- and off-road motorized vehicle use on air quality in the Planning Area and evaluate whether there is a need to revise management actions or develop stipulations to minimize the potential air quality impacts.

Climate Change

Comment stated that the BLM should take a hard look at climate change impacts from management decisions in the EIS for the MMPs. Comment stated that the BLM should fully analyze the direct, indirect, and cumulative impacts of the proposed decisions in the MMPs, such as off-road vehicle designations, oil and gas management stipulations, and renewable energy development that may significantly increase greenhouse gas emissions contributing to climate change. Comment also stated that the BLM should analyze impacts to climate change from fugitive dust emissions that would result from recreation activities authorized under this MMPs.

Comments stated that indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Comments stated that the BLM should evaluate reasonably foreseeable significant adverse impacts including impacts that have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence and is within the rule of reason. Comments stated that an analysis of such impacts are especially significant in the face of climate change.

MITIGATION

Comments stated that the Draft EIS should identify any mitigation measures that would apply at the project level in the event that potential adverse impacts to air quality or AQRVs on affected lands are predicted. These measures could include BMPs, dust-suppression measures for unpaved roads and construction areas, smoke management plans, as well as the mechanisms the BLM will use to ensure implementation of these measures.

Comments suggested a science-based monitoring system that established intervals and standards, as appropriate, for monitoring and evaluating the plan and stated that monitoring is necessary to create an effective adaptive management framework. Comments also noted that monitoring alone is not an appropriate form of mitigation, because monitoring for expected damage does not reduce or alleviate any impacts.

Soils and Water

GENERAL CONCERNS

Soils

Comments identified fragile soils, particularly living biological soil crusts (i.e., cryptobiotic soils), as important ecological and biological resources to be protected or enhanced during the planning process. Comments stated that biological soil crusts are an integral component of the desert

systems, protecting soil, retaining scarce moisture, reducing erosion, increasing nutrients, and preventing establishment of nonnative weeds. Comments stated that land use has reduced protective plant cover, biological soil crust cover, and soil fertility; this damage has also increased dust.

Comments stated that cryptobiotic soils can be irreplaceably damaged by livestock grazing and expressed concern about additional impacts from mining and other extraction methods. Comments stated there are several areas within the BENM that exist in a degraded state and suggested incorporation of active rehabilitation strategies to reverse these trends that also include restoration of soils, which includes native organisms within biological soil crusts communities.

Water and Riparian Areas

Comments stated that the most important ecological and biological resources to be protected or enhanced by Monument management include freshwater systems such as perennial streams, including both the quantity and quality of their waters, and rare or underrepresented ecological communities, such as hanging gardens, high-quality riparian areas, and "relict" areas.

Comments identified the following activities as having potential significant impacts to water quality and quantity: mining, oil and gas development, grazing, and irresponsible off-road vehicle use.

Water Quality

Comments stated that sediment loading has already caused impairment of waterbodies near the BENM and expressed concern that future activities (including livestock grazing; the use of bicycles, horses, and OHVs; and construction) could result in new surface disturbance that may result in changes in hydrology from surface disturbance, erosion, compaction, and increased runoff that may further degrade water quality.

Comments also noted that contaminants from surface events such as spills and leaks from maintenance equipment and transport vehicles, and nonpoint source runoff from surface disturbance have the potential to enter and impact surface water resources if these events occur near waterbodies.

Comments noted that lands in and surrounding the BENM include important areas of alluvial aquifer recharge. Comments expressed concern that shallow aquifers are more susceptible to contamination because a contaminant introduced at the surface may more rapidly enter the system, and there is little intervening soil to adsorb the contaminants before they reach the groundwater. Comments recommended protecting against potential impacts from activities authorized in the BENM that could impact recharge areas for sole source aquifers.

Comments stated that the Monument must embrace a wide, connected area to preserve watershed and land quality and suggested that land management agencies should work together during MMP development and implementation to devise and enforce standards and guidelines that protect public resources.

Water Quantity

Comments stated that water resources must be protected and preserved and provided anecdotal statements about areas where "perennial" streams and springs have been found to be dry. Comments also suggested that the area does not have enough water to support oil and gas development.

Comments stated that BLM Instruction Memorandum (IM) 2013-094 requires the BLM to modify uses and management to lessen impacts from drought, including activities such as grazing, recreation, lands actions, and minerals activities, and recommended consideration of information in REAs in assessing drought and mitigation measures.

Comments stated that water demand associated with new BENM uses such as visitor centers and visitor support facilities may necessitate completion of new domestic water wells. Given the scarcity of water resources in the Planning Area, commenters recommended that facilities should be located where development of water wells will not cause depletion of surface water or springs. Comments also recommended placement of facilities in areas that would not affect groundwater (for example, placing septic systems in appropriate soils, and away from water resources that could be impacted).

Riparian Areas and Wetlands

Comments noted that riparian ecosystems support a number of species, including the Kachina daisy, alcove columbine, and cave primrose, as well as the endangered southwestern willow flycatcher. Comments stated that authorized activities in the Planning Area such as grazing and construction have potential to cause changes in hydrology and increase runoff, which may result in stream structure failure and additional sediment loading of wetlands and riparian areas. Comments suggested that riparian and other wetland areas should be at proper functioning condition, including dominance by native wetland species, reduction in nonnatives, and a minimum of bare ground and erosion, as defined by appropriate reference conditions, and that the priority of the BENM should be to restore ecosystem functioning to all streams and riparian areas that are not at proper functioning condition.

Comments specifically expressed concern about livestock concentrating in riparian and historically riparian areas in Comb Wash and Butler Wash.

ALTERNATIVES/SUGGESTED MANAGEMENT

Soils

Comments identified the following soils resources management objectives:

- Manage uses to prevent damage to soil resources and to ensure that the health and distribution of fragile biological soil crusts are maintained or improved.
- Increase public education and appreciation of soils and biological soil crusts through interpretation.
- Facilitate appropriate research to improve understanding and management of soil resources and biological soil crusts.

Comments suggested a number of management strategies to protect soil resources, as follows:

- Maintain ground cover (including litter) at 80% of a relevant (e.g., similar soil, vegetation type, precipitation) ungrazed site to protect the soil surface. Protect biological soil crusts within at least 60% of their predicted available habitat. Indicators of excessive erosion such as rills, soil pedestals, mass wasting, and actively eroding gullies and headcuts should be within 80% of appropriate, identified reference sites.
- Avoid areas with high percentage cover of biological soil crust or high biodiversity conservation value (such as gypsiferous soils) when planning road and trail construction.

- Reduce grazing impacts though light to moderate stocking in early- to mid-wet season on biological soil crust. Use grazing strategies that minimize the frequency of surface disturbance during dry seasons and maximize periods between disturbances to reduce impacts to biological soil crusts.
- Relocate existing water development and nutrient block location to sites with low potential for biological soil crust development, such as rocky areas.
- Use brush barriers to divert trailing from sites with biological soil crust also helps prevent trampling damage.
- Consider a system of small fenced reserves to conserve habitat of the endemic biota.
- Do not conduct soil surface disturbing projects in habitats of rare biological soil crust species, where biological soil crust diversity is high, or where removal of biological soil crust should degrade soil, hydrology, or biology ecosystem functions.
- Develop trails to cultural sites to reduce impacts to cryptobiotic soils and flora/fauna.
- Concentrate recreational use by hikers and OHVs to reduce trampling and prevent disturbance.
- Limit access to foot traffic only in Arch Canyon to protect cryptobiotic soils from OHV use.
- Reduce unnaturally frequent and intense fires, such as those resulting from invasions by annual grasses.
- Limit soil- and plant-damaging land uses, invest in restoration of damaged lands where achievable, and in general mitigate dust consequences of management options in the future.
- Analyze the effects of activities such as grazing developments, mineral exploration or development, or water developments on biological soil crust and soil health through project specific NEPA documents. This process should include inventories for affected resources and the identification of mitigation measures.
- Conduct long-term research toward preservation and restoration of soils to support adaptive management techniques.
- Require biological soil crust data collection as part of all range management evaluations (e.g., trend studies, frequency transects, and any other assessments or data collection).
- Prioritize enforcement of OHV regulations in areas with of high biological soil crust value.

Water and Riparian Areas

Comments suggested a number of management strategies with respect to water and riparian resources, as follows.

Water Resource Management

Manage watersheds on Federal lands to achieve and maintain water resources at the highest reasonably sustainable levels (Utah Code 63J-8-104). Any proposed agency action must include an analysis of the effects on water quality, stream flow, water yield and timing of those yields. Any proposed action that results in a decrease in water quality, quantity or flow or negatively impacts flow timing should be opposed.

Prioritize protection and preservation of water sources. Determine potential impacts to water quality or quantity from Monument uses including grazing, off-road vehicle use, timber management, wildfire management, etc. to develop an appropriate plan for water usage and protection.

Identify sole source aquifers and aquifer systems (surface springs and wetlands that may supply and recharge the aquifers) in the Draft EIS and consider designating aquifers and aquifer systems (surface springs and wetlands that may supply and recharge the aquifers) that serve as a primary drinking source for communities as ACECs.

Ensure macroinvertebrate community diversity and composition meet standards and are within 80% of relevant reference stream reaches.

Identify surface activities setback buffers from surface water, wetlands, and designated source water protection zones, to provide an opportunity for accidental releases to be detected and remediated before impacts reach water resources

Develop a list of potential avoidance measures, mitigation requirements, and BMPs that may be applicable at the project level for grazing and construction, to prevent adverse impacts to aquatic resources. These measures could include silt fences, detention ponds, and other stormwater control measures.

Provide access and protection to existing water rights. Privately held water rights are separate from landownership and should be protected from coerced acquisition.

For livestock grazing:

- Discontinue grazing in the Shash Jaá Unit to protect livestock-related damage to water and riparian resources.
- Discontinue grazing in Comb Wash and Butler Wash.
- No water source should be completely diverted into tanks or troughs. At least 70% of the flow should remain in the system to maintain riparian ecological processes and functions.
- No new water developments should be constructed solely for livestock operations.

Riparian Areas

Manage Lavender and Davis Canyons for protection of riparian habitat including limiting OHV use.

Evaluate special status species habitat and ecological process in all future riparian assessments.

Keep trails out of riparian areas wherever possible. Where this is not possible, trails should be designed to minimize impacts by placing trails away from streams, using soil stabilization structures to prevent erosion, and planting native plants in areas where vegetation has been removed.

Establish monitoring should be established in all riparian areas to ensure that they are meeting or making progress toward meeting PFC and goals for native plant composition.

Manage for a maximum of 5% cover of nonnative, invasive riparian species such as tamarisk or Russian olive. Areas with more than this percent cover should be priorities for restoration.

BASELINE CONDITIONS/AFFECTED ENVIRONMENT

Soils

Comments requested the following baseline information for the Draft EIS:

- Distribution of biological soil crusts, particularly areas harboring rare species and where species diversity is concentrated
- Descriptions or maps of topography and soils, specifically steep slopes and fragile or erodible soils near surface waters and intermittent and ephemeral channels

Water

Comments stated that the BLM should identify all water resources within the Shash Jaá and Indian Creek Units and determine the condition of these water resources; threats to their long-term health and sustainability; historical, current, and anticipated impacts from grazing, mining, recreation, climate change, and other sources; and measures required to improve, maintain, and sustain those resources. Comments specifically requested the following baseline information for the Draft EIS:

- Inventories and maps of existing wetlands and waters of the U.S. within the Planning Area, including waters that are regulated under Section 404 of the CWA and wetlands and waters that are protected under Executive Order (EO) 11990 - Protection of Wetlands (May 24, 1977). This would include available information on acreages and channel lengths, habitat types, values, and functions of these waters.
- Current water quality conditions and current trends for surface waterbodies within the Planning Area and adjacent Federal lands, including intermittent, perennial, and ephemeral streams, rivers, lakes, reservoirs, and surface water drinking water resources.
- Delineation and marking of perennial seeps, springs and wetlands on maps and on the ground prior to project level development to ensure identification of these resources to facilitate their protection.
- Identification of reservoirs that are drinking water sources.
- A map delineating source water protection areas for public water supply wells and surface water intakes (streams, rivers, and reservoirs; contact the Utah Department of Environmental Quality [UDEQ] at (801) 536-4201 for access to the State data portal map of the Source Water Protection Zones for Public Water Supplies in the Planning Area).
- Description of all aquifers in the Planning Area, noting which aquifers are underground sources of drinking water as per 40 CFR 144.3.
- Water quality and water yield information from each aquifer, if available.
- Generalized maps depicting the location of sensitive groundwater resources such as municipal watersheds, source water protection zones (available from UDEQ), sensitive aquifers, and recharge areas.
- Descriptions and locations of groundwater use (e.g., public water supply wells, domestic wells, springs, and agricultural and stock wells).
- Designated uses of waterbodies and the specific pollutants of concern, where applicable. Comments identified several impaired waterbodies in the Planning Area: North Cottonwood Creek, Comb Wash, Cottonwood Wash, and parts of the San Juan River.

IMPACT ANALYSIS

Comment stated that the Draft EIS include an estimate of erosion rates and resulting impacts to water quality for each alternative using either the Water Erosion Prediction Project (WEPP) model (a web-based interface developed by the U.S. Department of Agriculture, Agricultural Research Service, that can be accessed at <http://www.ars.usda.gov/Research/docs.htm?docid=18084&pf=l>) or a similar model. Comments referenced the Wyoming BLM's *Bighorn Basin Resource Management Plan Revision Project Draft Resource Management Plan and Draft Environmental Impact Statement* as an example analysis that used the WEPP model.

Comments stated that the MMPs/EIS should describe potential impacts to wetlands and riparian areas that could occur due to management activity under the MMPs, including impacts associated with the following:

- Activities sited within waters
- Activities in areas adjacent to waters that could affect stream structure, instream habitats, and channel stability
- Activities in areas adjacent to waters that could alter sediment supply and result in deposition of fine sediments on the streambed, including in spawning habitats
- Activities in areas adjacent to waters that could affect riparian vegetation and habitat corridors
- Activities in areas adjacent to waters that could affect water quality and aquatic biota

Comments suggested that the MMPs/EIS should develop a range of estimated water demand per well developed in the BENM, and with regard to water use, should consider the following:

- Potential impacts of the water withdrawals (e.g., drawdown of aquifer water levels, reductions in stream flow, impacts on aquatic life, wetlands, and other aquatic resources).
- How water quality monitoring in the BENM Planning Areas will occur at the project level prior to, during, and after anticipated development to understand impacts to both surface water and groundwater resources, including private well monitoring.
- How the BLM and the USFS intend to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands.
- Impacts to surface waters related to erosion and sedimentation from roads and trails (routes), land disturbance, grazing, motorized or mechanized recreation and stream crossings.
- Potential impacts to impaired waterbodies within and downstream of the BENM, including waterbodies listed on the most recent U.S. Environmental Protection Agency (EPA)-approved CWA Section 303(d) list. Comments recommended that the Draft EIS seek opportunities to manage the BENM to move such water resources toward full functioning condition.

Comments recommended that the Draft EIS include a discussion of the following potential impacts associated with roads and trails:

- Road drainage and surface erosion
- Sediment delivery to streams
- Culvert sizing and potential for washout
- Effects on stream structure and seasonal spawning habitats
- Road density; number of road/stream crossings
- Road/trail encroachment on stream, riparian, and wetland habitats

Comments stated that the Draft EIS should include a discussion of past efforts to improve impaired waters in the BENM units (e.g., Cottonwood Wash total maximum daily load [TMDL] development) and any future steps that may be necessary to ensure continued progress, including impaired streams that would be priorities for renewed or enhanced protection and restoration. Comments stated that the BLM should coordinate with UDEQ if there are identified potential impacts to impaired waterbodies, to revise TMDL documents, and to develop new allocation scenarios that ensure attainment of water quality standards.

Comments stated that the analysis should include an analysis of the potential impacts to drinking water sources and identify measures available to protect such resources.

MITIGATION

Comments recommended that the Draft EIS include a list of BMPs that may be necessary at the project level to address the types of potential water and soil impacts associated with travel and transportation management decisions to protect sensitive soils, wetlands, riparian areas, meadows, stream crossings, and critical habitat. Possible mitigation measures to consider include the following:

- Minimize road construction and reduce road density to reduce potential adverse effects to watersheds.
- Locate roads and motorized, mechanized and horse trail routes away from streams and riparian areas, steep slopes, landslide-prone areas, and erosive soils.
- Minimize the number of stream crossings.
- Construct unavoidable road and route stream crossings during periods of low flow to avoid fish spawning and incubation periods, or dewater relevant stream segments prior to construction.
- Provide adequate road drainage and erosion control to avoid routing sediment to streams.
- Use bottomless or textured bottom culverts if possible.
- Design roads to allow for natural drainage patterns.
- Consider road decommissioning or rehabilitation at an equal or greater rate than new road construction to prevent increases in overall watershed impacts.
- Monitor revegetation efforts on closed roads for five years to ensure success.
- Require special protections, such as buffer zones or exclusion of motorized use, for areas with high quality riparian and wetland resources such as springs and wet meadows and other sensitive water resources including impaired waterbodies or high resource value waterbodies.

Comments recommended including a list of potential avoidance measures, mitigation requirements, and BMPs that may be applicable at the project level for grazing and construction, to prevent adverse impacts to aquatic resources. These measures could include silt fences, detention ponds, and other stormwater-control measures. Comments recommend that the Draft EIS include a requirement for delineation and marking of perennial seeps, springs, and wetlands on maps and on the ground prior to project-level development to ensure identification of these resources to facilitate their protection.

Vegetation

GENERAL CONCERNS

Comments expressed the value of the diverse and unique vegetation of the area. Comments noted that National Conservation Lands are to be managed as an integral part of the larger landscape, in collaboration with the neighboring landowners and surrounding communities, to maintain biodiversity, and promote ecological connectivity and resilience. Comments suggested that the MMPs must be integrated with BLM and USFS plans for the larger region, and that biological vitality within the BENM would be impossible to maintain if uses and activities in the surrounding area disrupt or degrade migration, pollination, water supplies or soil health. Comments also stated that large interconnected public lands benefit humans by maintaining biodiversity, providing clean air and water, facilitating pollination, moderating weather extremes, dispersing seeds, mitigating drought and flood.

Comments stated that the purpose of vegetation management in National Conservation Lands should be to restore and promote a natural range of native plant associations. Native plant communities need to be functional enough to support the range of native biota expected for the BENM region, including pollinators and soil macroinvertebrates as well as mammals and birds and fish, and that habitats should provide connectivity between populations and facilitate movement between populations. Comments stated that medicinal plants should be conserved and studied.

Comments expressed concern about impacts of drought on vegetation. Comments stated that grasses, both annual and perennial and native, are highly vulnerable to drought, whereas shrubs are fairly resilient. Some comments suggested that the BLM consider vulnerability of native grasses to climate change in land management planning.

Comments stated that although many ecosystems within the BENM are in a properly functioning condition, most grasslands and sagebrush sites need active restoration. Comments suggested a more holistic approach to ecological restoration that not only includes vegetation restoration but also restoration of soils. Comments suggested incorporation of active rehabilitation strategies into the MMPs and recommended that active restoration treatment sites be protected from significant human disturbance during the time period of recovery (which may take decades).

Comments expressed general concern about invasive species. Comments stated that because these species can contribute to increases in human-caused wildfires, they may require the use of herbicides for control.

Comments suggested that range improvement projects are necessary to enhance desirable vegetation while treating for encroaching and invasive species such as pinyon-juniper, cheatgrass, and noxious weeds. Comments stated that the vegetations treatments that have been implemented in these areas provide suitable and secondary range carrying capacity for not only cattle, but also wildlife, especially deer and elk.

Some comments stated concern about vegetation treatments, indicating mastication can result in cheatgrass proliferation and can damage artifacts, biological soil crust, and paleontological resources.

Comments suggested analyzing the need for restoration and stated that the MMPs/EIS should include a requirement to review these past vegetation projects and assess if they have actually improved watersheds and vegetation communities. Comments stated that the vegetation potential for each unit must be considered in deciding which areas to treat and requested that the MMPs identify all vegetation treatment projects.

Concerns about riparian areas are discussed in the Soils and Water section of this appendix.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters provided the following management suggestions:

- Prohibit all vegetation management except for removal of noxious weed species, which should be actively managed as part of the MMPs.
- Develop a specific vegetation management plan to address the invasive tamarisk in Lower Butler Wash.
- Prioritize seedings to restore native communities as defined by the Ecological Site Descriptions. Prioritize the use of Potential Natural Community native plants for all projects in the Monument. Use nonnative plants in limited, emergency situations.
- Clearly identify all proposed vegetation improvement projects in the MMPs.
- Prohibit vegetation restoration methods in rare vegetation types, unless needed for removal of noxious weed species.
- Prioritize the planting of native grasses in pinyon-juniper treatments over exotics.
- Consider chaining for grazing range improvements instead of vegetation removal projects. Soil-disturbing machinery should not be used to remove pinyon and juniper; mastication treatments may be allowed in limited circumstances.
- Allow light chaining (30 pounds or less) only to cover rehabilitation seed mixes with soil after wildfires only where
 - noxious weeds and invasive nonnative species are presenting a significant threat to Monument resources or watershed damage could occur if the burned area is not reseeded,
 - it can be demonstrated that resources should not be detrimentally affected (i.e., completion of full archaeological, paleontological, threatened and endangered species and other resource clearance and consultation),
 - it is determined that seed cover is necessary for the growth of the native species proposed for seeding, and
 - other less surface disturbing measures of covering seed are not available or cannot be applied in a timely manner.
- Use prescribed burns when fire has been documented to historically occur in an area, and where various factors have prevented natural fire cycles from occurring.
- Restrict chemical methods generally to the control of noxious weed species.
- Specify in the MMPs a requirement that all NEPA documents for vegetation treatments will include the budget for the project.
- Specify in the MMPs that all proposed developments or surface disturbing activities are required to include a site assessment for impacts to vegetation.
- Establish monitoring plots in any areas where nonnative plants are used in order to document changes in vegetation structure and composition as part of part of adaptive management.
- Manage the timber resources within the Monument to ensure protection of the ponderosa pine resource.

BASELINE CONDITIONS/AFFECTED ENVIRONMENT

Comments stated that the BLM's *The National Landscape Conservation System 15-Year Strategy 2010–2025* discusses using large-scale assessments, such as REAs, to identify how to connect and protect resources at the landscape level. Comments stated that IM 2013-082 specifically states that district and field office managers should use the REAs and other assessments, where appropriate, in developing new land use plans, plan amendments, and project-specific NEPA documents. Comments noted that the Colorado Plateau and Range REA was completed in 2012 and suggested that the agency should use these data to plan for the Monument in a broader landscape context.

Comments recommended that the Draft EIS provide information on the current state of invasive species in the Planning Area.

IMPACT ANALYSIS

Comments related to invasive species recommended that the Draft EIS analyze 1) how each alternative would positively or negatively impact baseline conditions; and 2) how management actions will assist ongoing efforts by the Utah Department of Agriculture and Food to identify and control noxious and invasive weeds throughout the State.

Special Status Species

GENERAL CONCERNS

Wildlife and Plant Values

Comments stated that the BENM designation appropriately recognized and protected a scientifically unique environment: a relatively intact and functional western landscape. Comments stated that the BENM protects and provides for conservation and management of important and rare landscape and ecosystem values. Comments identified the following threatened or endangered or other special status species: Mexican spotted owl, Cucina (or Kachina) daisy, southwestern willow flycatcher, Townsend's big-eared bat, spotted bat, peregrine falcon, Navajo sedge, Colorado pikeminnow, razorback sucker, and an additional 32 agency-designated "sensitive" species known to or may occur in the region (such as the alcove columbine and cave primrose), and other endemic plants known to occur in the Monument (many of which are identified as Monument objects and values for which the Monument was designated). Comments requested that area management focus on protection for these resources.

Comments also expressed the value of connectivity between habitats. Comments cited recent studies confirming the area's ecological intactness and connectivity. Connectivity is one of the most crucial factors in the conservation of fish and wildlife populations. The recognition and protection of wildlife connectivity corridors facilitate migration, dispersal, and gene flow between the BENM and surrounding protected areas. Comments stated that according to the BLM's REA for the Colorado Plateau, much of the BENM area is projected to experience low to moderate potential for impacts from climate change and other stressors. By contrast, large areas to the east and west of BENM are likely to face more severe impacts. Comments stated that the relative climate resilience of the BENM underscores the importance of protecting its habitats and species from other stressors at a landscape scale. Comments also noted that a large portion of southwestern willow flycatcher habitat has been lost and degraded across the species' range because of water diversion, livestock grazing, urban development, and other human-induced habitat changes. Comments stated that protection of habitat along the outer edges of the species' range is essential, because the effects of climate change are anticipated to alter species' ranges, and ranges of many bird species are expected to move north.

Comments argued that the BLM should continue to ensure that livestock grazing allotments authorized do not jeopardize the continued existence of any special status plant species or result in the destruction or adverse modification of critical habitats. In addition, disturbance, injury, or mortality of special status plants resulting from grazing by livestock should be minimized or eliminated. Where grazing by livestock is leading to adverse effects, conservation measures should be implemented to reduce or mitigate loss of the plant species. Measures can include fencing, seasonal restrictions, or relocation of livestock developments. No livestock waters or supplements should be placed on or near any populations.

Regulatory Requirements

Comments stated that the MMPs/EIS must comply with the ESA. Comments suggested that habitats of Federal threatened, endangered, proposed, candidate, or other special status species should be at, or making, significant progress toward, being restored or maintained for conservation (i.e., recovery) to ensure reproductive capability and recovery.

Comments stated that specific plan direction and components must be developed to protect wildlife species in accordance with existing Secretarial direction (e.g., SO 3308 [Management of the National Landscape Conservation System]; SO 3362 [Improving Habitat Quality in Western Big-Game Winter Range and Migration Corridors]).

Comments also noted that BLM's 6840 – Special Status Species Management manual stipulates that all information shall conform to the standards and guidelines established under the Information Quality Act, which stipulates the use of best available science and supporting studies conducted in accordance with sound and objective scientific practices, including peer-reviewed studies where available.

Comments stated that whether species are recognized as special status species or SCC, or are listed under the ESA, the BLM and the USFS should require that these species and their habitats be managed to ensure their presence and restoration within the Monument, and not assume that existing land use plan provisions pursuant to FLPMA or NFMA necessarily ensure that the presence of the wildlife or vegetation in question will be maintained and restored across the Monument lands in a way that reflects the overall values of the area.

Comments stated that in areas where SCC have not been identified and an amendment could have substantial adverse impacts to or substantially lessen protections for a specific species, the responsible official must determine whether that species is a potential SCC and, if so, must apply the requirements of 36 CFR 219.9(b) to that species as if it were an SCC (see also Consideration of the Planning Process for the Manti-La Sal National Forest section of this appendix).

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters provided the following management suggestions for wildlife resources.

Special Status Species Management

Educate the public about protection of these species as part of projects; provide interpretive displays and handouts at project sites and visitor centers around the BENM.

Key wildlife species and medicinal plants be studied and conserved.

Coordinate the USFS, the Utah Division of Wildlife Resources' (UDWR's) Natural Heritage Program, and the National Park Service where plant species cross jurisdictional lines.

Consult with USFWS to ensure that actions authorized by the BLM do not jeopardize the continued existence of any Federally listed plant species or result in the destruction or adverse modification of critical habitats. Incorporate the following measures to promote the recovery and conservation of all special status plant species within the BENM (in accordance with applicable ESA regulations and BLM Manual 6840:

- No exceptions for cross-country vehicular travel should be made in known habitat or locations of sensitive plant species.
- Surface-disturbing research activities should generally not be allowed in threatened or endangered plant species habitat. All scientific research projects in close proximity to listed species populations or habitat should be evaluated by Monument biologists, the USFWS, and appropriate experts prior to initiation to determine impacts to these populations or habitat. Any research project which may have an effect on populations of listed species should be coordinated with the USFWS.
- Areas with threatened or endangered plants should be targeted for noxious weed control activities as a first priority. BLM employees or contractors with appropriate certification should be responsible for use of chemicals in noxious weed removal efforts, and should take precautions to prevent possible effects to non-target species.
- Public education about protection of these species should be an integral part of projects and should be provided in interpretive displays and handouts at project sites and visitor centers around the Monument. Information should also be included on the Monument website.
- Communication sites, utility rights-of-way, and road rights-of-way should not be permitted in known special status species populations. As permits are granted for these sites and rights-of-way, surveys should be completed to determine the presence of special status species in the area. If they are found, these activities should be moved to another location.
- Reseeding or surface disturbing restoration after fires should not be allowed in areas with special status plant species. Natural diversity and vegetation structure should provide adequate regeneration. Management ignited fires should also not be allowed in these areas unless consultation with the USFWS indicates that fire is necessary for the protection and/or recovery of listed species.

Travel

Restrict OHVs in Mexican spotted owl and peregrine falcon nesting areas.

No new road development in the Monument.

Livestock Grazing

Minimize or eliminate disturbance, injury, or mortality of special status plants resulting from grazing by livestock through fencing, seasonal restrictions, or relocation of livestock developments. No livestock waters or supplements should be placed on or near any populations.

BASELINE CONDITIONS/AFFECTED ENVIRONMENT

Comments provided the following information related to special status species:

- **Southwestern willow flycatcher:** The northern extent of the southwestern willow flycatcher's range occurs in southern Utah and includes the BENM area. The species depends on riparian areas with dense vegetation, with a preference for areas with willow concentrations, though the bird has adapted to nonnative tamarisk encroachment into riparian habitat. A key threat to the species is the loss and degradation of riparian habitat.
- **Kachina daisy:** This species is unique to the Colorado Plateau in southwestern Colorado and southeastern Utah and is known to occur in just four counties, including San Juan County in Utah, and occurs in Bears Ears. Nineteen of 22 occurrences have been recorded in Utah since 1983. Mining, energy development, and water projects could threaten the species' water supply, and climate change is also a threat. The Kachina daisy is ranked S2 (imperiled) by NatureServe, is a USFS Sensitive Species, a BLM Sensitive Species, and on the Utah Native Plant Society Rare Plant List.
- **Navajo sedge:** This species' range is restricted to a small area of northeastern Arizona, a tiny sliver in northwestern New Mexico, and a small area in southeastern Utah. San Juan County in Utah contains the largest portion of the species' range, and Bears Ears contains a significant portion of the species' recognized distribution area. The northern extent of the species range, which overlaps the Monument, has suitable habitat where there may be species occurrences and/or connectivity and recovery areas. Though there is a USFWS recovery plan for the species, the plan does not include recovery criteria. Utah has no State laws that protect rare plants on private or State lands.
- **Five threatened and endangered fish species** (bonytail chub, Colorado pikeminnow, greenback cutthroat trout, humpback chub, and razorback sucker) have the potential to occur in the BENM, according to the USFWS. The modification of streamflows through damming and diversions has been a major threat to these species. The Monument contains designated critical habitat under the ESA for the Colorado pikeminnow and razorback sucker. The razorback sucker population experienced a rapid decline of 80% in the last few decades; the International Union for Conservation of Nature considers the species to be critically endangered.

IMPACT ANALYSIS

Comments stated that the BLM should demonstrate that they have met their baseline regulatory obligations to maintain or restore the ecological integrity of ecosystems and watersheds, contribute to the recovery of ESA-listed species, and maintain viable populations of SCC in this planning process. Comments stated that the NEPA analysis should support a determination that the MMPs/EIS contributes to the recovery of ESA-listed species.

Comments stated that the livestock grazing analysis in the EIS must address endangered species. Evaluations should incorporate the latest research and information in the protection of species. Section 7 consultation should be conducted for all allotments that may affect listed species during the individual allotment evaluations. This process should provide protection for listed and sensitive species as the evaluation should be site-specific for each of the allotments.

Comments stated that the EIS needs to evaluate noise pollution from motorized and non-motorized visitor use.

MITIGATION

Fish and Wildlife

GENERAL CONCERNS

Comments addressed the BENM as an invaluable public land for wildlife. Comments stated that public lands should be preserved for both wildlife and humans to enjoy and should be managed as a place of peace for wildlife and birds. Comments said the BENM is representative of a critical ecosystem that needs protection. Comment suggested that all wildlife and plants (particularly medicinal species) should be studied in situ and without environmental degradation. Comments expressed concerns regarding the disruption of wildlife habitat, particularly of migration corridors, and suggested that providing functioning habitat for wildlife and ensuring the long-term persistence of wildlife populations are part of the BLM's responsibilities to manage the public lands for multiple use and sustained yield.

Comments stated that the most important ecological and biological resources to be protected or enhanced by Monument management include habitat such as nesting and roosting sites for birds of prey and neotropical migrants, and wildlife migration corridors.

Comments stated that mesas and canyons support habitat for pronghorn, mule deer, elk, and once-secure but now at-risk populations of bighorn sheep. Comments stated that large predators, such as mountain lions and bears, should be protected to keep the food chain intact, and efforts should also be made to protect large species such as bighorn sheep.

Comments emphasized the importance of priority habitats as large areas that encompass wildlife habitat areas and wildlife movement corridors. Comments stated that the connection between these habitat patches is important to provide wildlife the ability to move along elevation gradients and between habitat areas. Comments stated that as climate conditions change, wildlife must be able to adapt by expanding or contracting according to the needs of their lifecycles. Comments raised concern that as a biological community of the desert southwest, the Shash Jaá Unit must be considered within a regional perspective as wildlife species live within, and migrate far beyond, an ecological setting much larger than the Monument's boundaries.

Comments noted that the BENM also provides important habitat and preserves wildlife corridors for a suite of game species sought by hunters. Comments noted that species such as mule deer, other ungulates, and other mammals avoid areas where energy infrastructure has been developed; therefore, removing land protection for oil and gas development may negatively affect these populations. Comments stated that key wildlife species should be studied and conserved and expressed concern for wildlife because of lands being opened to prospective oil and gas drilling. Comments stated that numerous vegetation treatments have been implemented in these areas that provide suitable and secondary range carrying capacity for cattle in the area, but that are also critical for wildlife, especially deer and elk.

Comments also stated the role of hunters and UDWR conservation efforts have been overlooked in public documents and education programs within the BENM. Comments claimed that the abundant wildlife resources and recreational opportunities in the BENM exist in large part because of the work of sportsmen, sportsmen organizations, and UDWR. Comments stated that in partnership with sportsmen, the State has been successful in bolstering wildlife populations through transplants, habitat improvements, watershed and fire restoration, and installation of guzzlers, among many other efforts. Comments stated that elimination of State access and management authority would threaten the progress the State has made in restoring and enhancing wildlife populations.

Comments noted that soundscapes are important for managing wildlife resources, because environmental noise can affect the physiology, behavior, and spatial distribution of wildlife. Comments stated that although the impacts vary by species and habitat, studies have shown that transportation-based and other human-caused noise can impact species in ways crucial to their survival and reproductive success.

Comments stated that there should be well-defined, measurable standards and well-articulated concepts and operational planning practices, associated with literature and practice of population viability assessments, to provide land managers with effective means of applying science-based conservation methods for wildlife planning decisions.

ALTERNATIVES/SUGGESTED MANAGEMENT

Comments offered the following suggestions related to BENM management of wildlife.

Fish and Wildlife

Manage for protection of wildlife as a priority.

Include special protections for the bighorn sheep populations in the area, against disease transmission from domestic sheep.

Allow for wildlife habitat restoration projects, including water guzzlers, spring development, pinyon and juniper removal.

Allow for translocations of wildlife species and populations into and out of these Monument areas, coordinated and conducted by the UDWR.

Consider volunteer monitoring of raptors at climbing areas due to seasonal climbing closures.

Do not allow Wildlife Services (Animal Damage Control) to remove native predators such as coyotes or mountain lions.

Do not allow the use of poisons due to safety concerns and potential conflicts with Monument resources, including rare species.

Wildlife Corridors

Maintain corridors of undisturbed vegetation that connect to other undisturbed habitat areas to allow wildlife to adapt to climate change expanding or contracting according to the needs of their lifecycles.

Monitor wildlife corridors and habitat as part of the MMPs, via connectivity and habitat fragmentation prevention.

Conduct studies to identify all wildlife travel corridors within the Monument as part of the planning process before any existing roads are re-opened for public travel.

Use the Lower Sonoran Field Office/SDNM example to establish priority habitats in the Planning Area within the BENM to ensure important corridors are protected.

Per SO 3361, consider direction for site-specific activities, including fencing modification, “avoiding development in the most crucial winter range or migration corridors,” and “minimizing development that would fragment winter range and primary migration corridors.” To improve habitat function and protection across the West, benefiting other species as well.

Hunting (see also Recreation and Visitor Services section of this appendix).

Prohibit hunting or trapping.

Allow for predator management to protect and enhance ungulate populations.

Allow for hunting ungulate populations, with seasons, limited and methods of take, as directed by UDWR and the Utah Wildlife Board.

Allow for guide permits for hunting, to be authorized by the Utah Guide and Outfitter licensing program.

Retain State wildlife management authority under multiple use principles, including hunting, fishing, trapping, management actions, predator management, and regulation of hunting, fishing, and trapping within the Monument.

BASELINE CONDITIONS/AFFECTED ENVIRONMENT

Comments requested that the BLM conduct surveys to determine what resources are present that need special management or protection in terms of predator control.

Comments requested that the BLM conduct bighorn sheep surveys. The desert bighorn sheep population in southeastern Utah experienced a dramatic population decline beginning ca. 1920, before which the population was believed to be abundant. Surveys put the total individual count at 135 sheep in 1966. UDWR conducted translocations of the animals into the region throughout the 1970s, and the population increased to 2,700 by 2003. The species is a USFS Sensitive Species, and NatureServe ranks it as S3 (vulnerable).

Comments recommended identifying wildlife movement corridors at the broader landscape level during the planning assessment to inform the designation of wildlife corridors through the planning process in accordance with Monument objects and values and BLM policies for the National Conservation Lands. Guidance from *The National Landscape Conservation System 15-Year Strategy 2010–2025* includes the following:

- Use large-scale assessments, such as BLM's REAs, to identify areas where National Landscape Conservation System units are important for resource protection and conservation within a broader landscape context; such as providing for large-scale wildlife corridors and water-dependent resources.
- Maintain or increase habitat connectivity with other important habitat areas to provide for sustainable populations of native species.
- Utilize existing large-scale assessments and maps, such as BLM's REAs, wildlife corridor mapping effort, wilderness inventories, and other Federal and State agency analyses to inform collaborative planning and land acquisition efforts.

IMPACT ANALYSIS

Comments stated that the EIS analysis should include credible scientific information and carefully consider impacts from climate change on wildlife and wildlife habitat. Comments also requested that the EIS to evaluate noise pollution from motorized and non-motorized visitor use.

Cultural Resources

GENERAL CONCERNS

Commenters stated that the BENM contains one of the densest concentrations of indigenous and historic sites in the country and suggested the value of historic preservation and historical education. Comments stated that sites found in the BENM include human burials, ancient structures, rock art (pictographs and petroglyphs), old cabins, and mining sites. Lands in the BENM are sacred to both Native and Euro-American peoples of San Juan County. Comments noted the presence of ancient Chacoan and traditional travel routes between cultural sites throughout the Four Corners region. Comments also noted Bears Ears and Cedar Mesa have significant archaeological sites. Comments noted that the Hopi see archaeological sites as “the footprints of our people” and that the spirits of their ancestors still inhabit the Bears Ears (see Native American Concerns section of this appendix).

Commenters requested that the MMPs prioritize the protection of archaeological and sacred sites, as well as traditional cultural properties, from impacts including looting, shooting, vandalism, sound disturbances, development, cattle grazing, and off-road vehicle impacts (see Trails and Travel Management comments in this appendix). In addition, comments requested other categories of management, such as travel, livestock grazing, fire management, and especially outdoor recreation, must be considered in context with their impacts to cultural and historic resources. Area-specific concern included the following:

- Development of a “new” climbing wall called Cave Wall with some 60 or so routes. The wall will be in the new guidebook being put out by Sharp End Publishing. At the top of this wall is an archaeological site with a U.S. Geological Survey surveying stake. This site will likely be damaged by visitors and possibly vandalized (see Recreation and Visitor Services comments in this appendix).
- Livestock grazing damage to archaeological resources, sacred sites, and traditional cultural properties at Comb Ridge and Butler Wash (see Livestock Grazing, and Native American Concerns and Issues comments in this appendix).
- Increases in visitation at the Moon House; Doll House site; Butler Wash areas sites such as House on Fire, Wolfman Panel, Target, and Ballroom site; and the Tower site.

Comments also requested permanent protection of the BENM’s ancient artifacts from extractive uses, such as mining and oil and gas development, and stated that earthquakes caused by hydraulic fracturing can damage fragile archaeological sites.

Comments also expressed concern about camping in alcoves. Comments stated that campfires can change the archaeological record of a site, potentially affecting its eligibility for the National Register of Historic Places (NRHP). Comments stated a “dead and down” campfire wood collection policy may direct impacts to cultural resources when historic hogans are torn down in the Comb Ridge and Butler Wash areas for use as firewood.

Comment suggested that the BLM consider adding “hardened” or “visitor ready” cultural sites to help direct visitation away from other cultural sites. Comments suggested that sites meeting the “visitor-ready” criteria could be moved through the NEPA process more quickly, and expressed hope that interim strategic decisions could make some sites public prior to completion of the planning process.

Comments requested that any travel management planning be postponed until the courts rule on the legality of Proclamation 9681 and requested that intensive-level cultural resource ground surveys be conducted in the BENM to ensure all areas have been appropriately documented (see Trails and Travel Management section of this appendix).

Comments also stated that the MMPs must identify and protect ancient and traditional travel routes (Chacoan road systems) between non-contiguous cultural sites across the Four Corners region.

ALTERNATIVES/SUGGESTED MANAGEMENT

Comments offered the following management suggestions. Note that some suggestions are restrictions to other uses in allocation to protect cultural resources.

Cultural Resources

Initiate and complete the Section 106 process prior to the designation of roads and routes located within the BENM during the planning process.

Develop use allocations that identify some cultural sites as locations to educate visitors in a more accessible setting and leaves other cultural areas preserved in their more natural state and setting. See the 2010 *Canyons of the Ancients National Monument Record of Decision and Resource Management Plan* for an example of use allocation. Zoning can allow for a blanket approach like allocating all backcountry sites to scientific, preservation, and/or traditional uses so those resources would be managed for those uses.

Work closely with the Tribes to identify certain areas within the Monument that should not be managed heavily, and instead be preserved in their natural state without signs, maps, and established trails (see Native American Concerns section of this appendix).

Conduct a visitor management analysis in conjunction with Tribal consultation and on-the-ground observation from stakeholders using the Friends of Cedar Mesa *Interim Visitor Management Strategy Memo, September 15, 2016* as an example. This analysis should be used to identify priority cultural sites for public visitation. Land managers should consider the following:

- Cultural sensitivity of the site
- Resource sensitivity of the site
- Carrying capacity of the site: is it visitor ready? Should it be?
- Current visitation trends
- Educational opportunities at the site
- Existence of previously disturbed parking areas
- Indirect impacts of opening the site on other nearby areas of interest
- Existing signage and signage needs
- Existing trails, trail needs, and any social user trail issues
- Methods of travel to sites: How can all types of travel (e.g., OHV, hiking, backpacking) be included in the proposed plan?
- Has a condition assessment be done in the last 3 years?
- Stabilization level of the site
- Other considerations pertaining to the long-term protection of the cultural site

Consider “hardening” a few more sites, basically designating them as “public” so they can be put on a map to direct visitation away from other cultural sites since cultural site locations can be found online and as a way for the BLM and the USFS to reclaim heritage tourism. Criteria for “visitor-ready” sites would include the following:

- Completed stabilization or social trail rerouting that mitigated some degree of archaeological sensitivity or fragility
- Signage or parking in place
- Identified through Tribal consultation as a location suitable for public visitation

Access

Ensure sacred lands of both Native and Euro-American peoples of San Juan County are available to those who hold them sacred. San Juan Hill is an example of a “sacred site” for early Euro-Americans.

Limit access restrictions within the Monuments to site-specific, small areas, such as archaeological sites that require only a 100 × 100-foot area rather than 1 acre of land, or 1 acre of land instead of 50 acres. These areas could be controlled by signage and fencing (see Recreation and Visitor Services section of this appendix).

Scientific Investigation

Excavation of archaeological resources should be performed in a manner that preserves the significant cultural information.

Ancient archeological record, art, and ancient remains of different species found in Monument area should be protected and preserved only for exhibition, not for study to enhance one’s prestige or profession.

Keep artifacts collected during professionally permitted archaeological activities in repositories in San Juan County and available for Monument visitors when appropriate.

Special Designations

Designate both BENM units as ACECs with cultural resources as the highest value.

Identify the most sensitive or threatened areas for additional ACEC designations.

Livestock Grazing

Prohibit or strictly limit grazing in the Shash Jaá Unit to protect archeological sites.

Limit or eliminate grazing in sensitive archeological areas such as Comb Ridge and Butler Wash, significant ancient Puebloan sites or areas with petroglyphs and pictographs.

Travel Management

Ban motorized vehicles road development in the BENM.

Maintain the current “unimproved” Butler and Comb Wash Roads for high-clearance, four-wheel-drive (4WD) vehicles to discourage increased traffic volume.

Close or reroute any roads near cultural sites.

Close Arch Canyon, Lavender Canyon, and Davis Canyon to motorized vehicle use to protect uniquely rich archeological values in those canyons as well as in the upper end of Salt Creek and adjacent areas.

Do not include the RS 2477 San Juan County Class D road located north of the Comb Ridge Long Fingers site climbing up into the Comb in any official BLM map. Negotiate with San Juan County to close and remove it. The road passes right through a surface archaeological site.

Recreation

Consider limiting visitation numbers at certain highly popular sites, similar to what was done at Moon House.

Restrict group size to six on over-visited sites on Comb Ridge.

Ban dogs near cultural sites within the BENM.

Require dogs to be on leash in Mule Canyon and Comb Ridge, or increase visible signage informing dog owners to restrict dogs from entering archeological sites.

Eliminate the unofficial campground in Comb Wash just south of Utah State Route 95 as it is negatively impacting cultural resources.

Increase the number of BLM staff on site in the most highly visited areas, i.e., Mule Canyon, Moon House, and South Butler Wash Road, to monitor use and educate visitors on how to visit sites with minimal impact.

Limit visitors to archeological sites on Comb Ridge by maintaining small parking areas at each trailhead.

Prohibit camping in all alcoves.

Reconsider “dead and down” campfire wood collection policy.

Consider whether some canyons should be removed from the online permitting process and only be available for in-person pickup so as to increase educational opportunities regarding cultural resource protection.

Make the Cedar Mesa backcountry visitor video available online.

For site-specific management:

- Keep the Moon House site limited to 20 people per day.
- Consider permitting for the Doll House site so visitors must go through Kane Gulch or Edge of the Cedars for orientation on the driving conditions and fragile nature of the site.
- Establish a well-marked road to the Doll House site to reduce potential resource damage from visitors trying to find the site (see Trails and Travel Management section of this appendix).
- Create a larger parking lot for the Lower Butler trail to Firehouse site hike. Consider advertising the hike officially as just the Firehouse site to limit visitation to the Wall site, Gazebo Kiva, and other sites upstream.

- Consider fencing off the granaries on the Comb to protect the sites and prevent visitors from falling off (see, Recreation and Visitor Services section of this appendix).
- Create an official parking area, trail, and improve signage at heavily visited sites such as the Butler Wash Indian site and the Tower site. The improved signage and trail could help direct visitors to those specific sites and take the visitation load off other sites in the area (see Recreation and Visitor Services section of this appendix).
- Exclude livestock from archaeological sites in Comb Ridge by blocking access at the trailhead or canyon entrance or at the site, using the least aesthetically intrusive materials possible (e.g., naturally weathered wood, split rail fencing).
- Improve fencing at Monarch Cave and other sites that are marked as non-grazing to prevent cattle from damaging the sites (see Livestock Grazing section of this appendix).
- Increase protection and informational signage for sites with increased traffic such as House on Fire, Wolfman Panel, Target and Ballroom sites, and the Tower site.

Volunteer Coordination/Site Stewardship

Work with volunteers to assist with preservation of cabins and mining sites. Grant money could be used for materials and possibly some labor to maintain archaeological sites with an architectural component.

Work with Access Fund and local climbers to continue stewarding climbing areas and approach trails, protect cultural resources, and maintain Indian Creek campgrounds and toilets (see Recreation and Visitor Services section of this appendix).

BASELINE CONDITIONS/AFFECTED ENVIRONMENT

Comments stated the BLM and the USFS need to inventory cultural resources and document baseline conditions so that proposed management actions can be evaluated rationally, noting that that Monument objects are required to be inventoried under the NHPA and BLM Manual 6220.

Comments stated the BLM should not rely on the maps showing the predicted probability of cultural resource presence within the Monument boundary, noting that the BLM's 2008 *Monticello Field Office Record of Decision and Approved Resource Management Plan* identified data gaps due to "large unsurveyed areas where there is no current knowledge about cultural resources, gaps in the database of particular site types, and research-related data limitations." Comments also stated that GIS data analysis cannot be relied on entirely because that analysis can miss sites; an inventory would capture the less-visible resources in the Monument and document baseline conditions.

Comments also requested that the BLM and the USFS identify and document landscape-scale historic resources during the inventory process. In addition, impacts to landscape-level resources should be identified and considered. These landscapes should be considered because sites found eligible for the NRHP only under Criterion D are also eligible under additional categories, such as cultural landscapes, as traditional cultural properties, or as part of a larger archaeological district. The 2010 *Canyons of the Ancients National Monument Record of Decision and Resource Management Plan* should be used as an example for identifying "settlement clusters," or places where numerous sites are close to each other. These areas are then managed in accordance with how people settled and used the land over time.

Sources recommended for consideration in the MMPs about cultural resources in the region include the following:

- Data from the Comb Ridge Heritage Initiative Project, including site forms. These forms contain a wealth of needed data, such as evidence of looting; impacts from grazing; impacts by recreational visitors such as artifact collection piles and vandalizing; impacts from commercial (and pirate) outfitters and their customers; and impacts from motorized travel, especially off-road all-terrain vehicles (ATVs). In addition to Ancestral Puebloan sites, many historic Navajo and Ute sites were also recorded.
- The BLM's 2008 *Monticello Field Office Record of Decision and Approved Resource Management Plan*.
- BLM Monticello Field Office Class I inventory report (which includes a predictive model and future inventory strategy): Cannon et al. 2017. *A Class I Cultural Resource Inventory of Lands Administered by the Bureau of Land Management, Monticello Field Office*. Final. Prepared by SWCA Environmental Consultants, Salt Lake City, Utah. Prepared for and copies available from the BLM MFO, Monticello, Utah.
- BLM Monticello Field Office Class II cultural resource inventory report [2017: This report is attached as Appendix C of the Monticello Field Office Class I report.].
- Relative population maps in the *Past Population "Intensity" within Bears Ears National Monument through Time* section of Bears Ears Archaeological Experts Gathering: Assessing and Looking Ahead (2017)]. Available at: https://www.archaeologysouthwest.org/pdf/Bears_Ears_Report.pdf.
- Friend of Cedar Mesa *Interim Visitor Management Strategy Memo, September 15, 2016*.
- *Blue Mountain Shadows*, a locally published journal that focuses on San Juan County history
- *Canyons of the Ancients National Monument Record of Decision and Resource Management Plan*, Section 1.3.1. [2010. Available at: https://eplanning.blm.gov/epl-front-office/projects/lup/65701/79872/92628/CANM_ARMP_ROD.pdf].
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- Bears Ears Inter-Tribal Coalition. Original Proposal to President Barack Obama for the Creation of the Bears Ears National Monument, dated October 15. 2015.

- The Comments of the Hopi Tribe, Navajo Nation, Ute Mountain Ute, Ute Indian Tribe and Zuni Pueblo on the National Monument Review submitted May 25, 2017.
- The Comments of the Navajo Nation on the National Monument Review submitted on May 24, 2017.
- The Comments of the Ute Mountain Ute Tribe on the National Monument Review submitted on May 25, 2017.
- The testimony of the five Tribes in opposition to HR 4532 as submitted to the House Committee on Natural Resources in January 2018.
- Archaeology Southwest, a nonprofit organization with experience in the Four Corners region and the Bears Ears landscape, can provide information.

Comments suggested that existing roads should be inventoried for cultural resources present within or adjacent to the right-of-way, with the goal to mitigate or reroute where possible.

Comments also requested a Class III survey of the BENM be conducted prior to the creation of a travel management plan.

MITIGATION

Comments stated that mitigation strategies intended to reduce the impacts of high visitation and other visitor impacts should be included in the Monument planning efforts. Creative mitigation strategies can provide necessary protection of sensitive areas while allowing access to, and use of, areas that are less at risk for harm.

Paleontology

GENERAL CONCERNS

Comments expressed the value of paleontological resources in the area and included anecdotes about vacations spent “gazing at the bones of dinosaurs dug from these lands.”³ Comments expressed concern about impacts to paleontological resources, particularly in light of the reduced boundary and potential for vandalism, theft, neglect, impacts from off-road vehicle traffic, and impacts from mineral resource development. Comments stated that the MMPs should be consistent with the Paleontological Resources Preservation Act (PRPA: Public Law 111-011 Omnibus Public Land Management Act of 2009) and all other applicable Federal laws and regulations. Comments recommended that the BLM consult with experts to ensure that internationally significant resources are protected.

Comments stated that the MMPs must regulate traffic within the new Monument units to avoid or minimize damage to paleontological resources and paleontologically sensitive sites and stated that enforcement of paleontological regulations should be high priority for law enforcement in the BENM.

Comments stated that scientific research, particularly projects using paleontological resources, should remain as a priority and at the core of Monument unit activities.

³ Some submissions reference to monument values and objects referenced both BENM and GSENM in their comments.

ALTERNATIVES/SUGGESTED MANAGEMENT

Comments provided the following suggestions related to management of paleontological resources for the Shash Jaá and Indian Creek Units:

Agency Staffing and Program Oversight

The number of paleontology Monument staff should be increased to at least one full-time (FT) paleontologist and one FT paleontological technician for each of the two new Monument units, as well as at least one FT senior paleontologist and one FT education and outreach coordinator for the combined Monument units plus excluded areas.

Paleontological resources also occur in the area on Federal lands that are not managed by BLM (e.g., USFS lands). If the non-BLM Federal agencies do not have paleontologists dedicated to the area, BLM's Monument paleontology staff should also be given jurisdiction to help advise managing, protecting, and preserving paleontological resources on those Federal lands.

Regular monitoring of paleontological sites should be part of an ongoing resource management plan. A Monument paleontologist from the relevant management unit should coordinate efforts to maximize preservation of the site's context.

Access and Travel Management

Access to areas in the BENM with paleontological resources for non-paleontological commercial purposes such as grazing, film production, and mineral extraction shall be conducted only where paleontological resources will not be adversely affected.

Access to all areas within the BENM with paleontological resources shall be restricted to existing roads.

The BLM should consider alternatives that permanently close Arch Canyon, Lavender Canyon, and Davis Canyon to motorized vehicle use to ensure protection geologic/topographic values in those canyons.

Public access to off-road areas with known paleontological resources within the Monument shall be restricted to dispersed foot-traffic only to minimize damage to the resources by vehicles and other modes of transportation, including horseback riding.

Access to areas identified for exploration or mineral extraction shall be permitted with conditions that minimize impact; and where impact is inevitable, with conditions that mitigate such impacts beginning with on-the-ground surveys, surface collection, and excavation. The BLM shall solicit professional advice for situations that require extensive deliberation or mitigation. Costs of mitigation shall be borne by the entity applying for a commercial-use permit.

Minerals

Any paleontological resource of potential scientific importance encountered during mineral exploration and extraction (including oil and gas) must be immediately reported to a Monument paleontologist.

Mineral extraction sites (including oil and gas) that have a high potential for yielding paleontological resources based on the preliminary paleontological resource survey must be inspected periodically by a Monument paleontologist.

Funding

Funding should be made available for paleontological research and curation under National Conservation Land science support grants for the Monument.

Funding for protecting and preserving paleontology resources at the new Monument units and excluded areas should support the paleontology staff and facilitate research on, surveying of, monitoring of, collection and curation of, protection and preservation of those resources, as well as paleontology education and outreach.

The BLM should provide financial support for partnerships with non-Federal public trust repositories to prepare, preserve, and curate specimens and make non-sensitive data on these specimens available to the public through the electronic dissemination of these data in online databases.

The BLM's partnerships with external researchers are crucial for effective management of paleontological resources and should be facilitated through flexible support of research methods, fostering collaborations, and a rapid processing of permit requests.

Stewardship

Establish site stewards, as well as site stewardship opportunities, for paleontological sites. Possibly combine this with a public outreach program that seeks to inform the public about these types of resources.

Collection

Excavation of paleontological resources should be performed in a manner that preserves significant information.

The BLM's partnerships with external researchers are crucial for effective management of paleontological resources and should be facilitated through flexible support of research methods, fostering collaborations, and a rapid processing of permit requests.

Researchers should be encouraged to communicate their research findings through public programs, exhibits, interpretative materials, and scientific publications and presentations targeting both local communities and regional, national, and international audiences.

Molding and casting as well as digitization of paleontological resources from the new Monument units as well as the excluded areas, and free availability of these resource representations, would greatly enhance their research and educational value.

Collecting paleontological resources for non-scientific purposes must be prohibited within the boundaries of the new Monument units. In addition, commercial collecting of paleontological resources must remain prohibited on all Federally administered lands.

Collection of vertebrate and non-vertebrate paleontological resources must be conducted in accordance with PRPA and existing BLM regulations. This includes appropriate educational qualification for researchers and proof of a repository agreement. Projects approved for permits should be compatible with federal policies and plans and compatible with the protection of other natural and cultural resources. Permits should indicate that all paleontological resources that are collected during a project remain the property of the United States and should be preserved for the public in a public trust repository along with associated data. Specific site data should remain confidential to researchers except as specified in the (pending) PRPA regulations.

Management plans should provide flexibility in appropriate tool use, handheld tools to small power tools, during collection of paleontological resources during approved collection activities. The Monument paleontologist should be consulted with regarding appropriate tool use prior to approved fieldwork.

Management plans should allow for appropriate use of wheeled and/or motorized vehicles and heavy equipment (including helicopter transport) on a case-by-case basis, as necessary to protect, preserve, and recover paleontological resources.

BASELINE CONDITIONS/AFFECTED ENVIRONMENT

Comments suggested that the presence of early vertebrate species fossils in nearby Valley of the Gods indicates similar resources may exist in Shash Jaá and Indian Creek. Comments noted the Chinle Formation contains a large number of paleontological specimens.

Comments stated that the BLM should identify and conduct a baseline inventory of paleontological resources such as Triassic fossils so that proposed management actions can be evaluated rationally.

Visual Resources

GENERAL CONCERNS

Viewsheds

Comments stated that the Bears Ears area contains unique landscapes of the highest scenic quality and provided anecdotal statements about visits to the area and their appreciation for intact and unique landscapes, scenic vistas, and unusually dark skies. Comments summarized enjoyment of the beauty and visual qualities area, including the open desert, afternoon shadows, brilliant crimson glow of the setting sun on the cliffs, and the dark skies and night time views. Comments identified mineral extraction and vehicle use as two of the uses that would adversely impact visual quality in the Shash Jaá Unit and suggested that impacts to the viewshed or dark skies may not be mitigated through the usual management tools (e.g., color blending of structures, revegetation, and sensitive siting).

Comments stated that the BLM ensure that scenic values are a public lands resource that are conserved, and that clear management direction must be established describing areas inventoried and possessing high scenic importance, with clearly defined objectives that limit surface disturbance within important viewsheds.

Comments in support of multiple use stated that some visible use of the land for the good of the public is reasonable.

Dark Skies

Comments defined dark night sky as a scenic and atmospheric value as defined in FLPMA. Commenters noted that the Colorado Plateau has a reputation for excellent night skies and emphasized the role of dark skies in visitor perceptions and experiences, in various ecological processes, and in the cultural landscape. Comments noted the designation of the Grand Canyon-Parashant National Monument as an International Night Sky Province by the Dark Sky Association, and recommended preservation of dark skies to achieve a Dark Sky Park nomination and designation from the International Dark Sky Association, which would not only preserve backcountry values of the cultural landscape but also increase potential for economic growth.

Comments stated that the BLM should actively manage BLM-administered lands for the value of the dark night sky resources they contain and requested consideration of potential light pollution in the development of MMPs. Comments stated that VRM classifications are not restricted to land-based resources; the MMPs should include analysis and management prescriptions that consider the value of a dark night sky, consistent with the BLM's multiple-use mandate. Comments also stated that the AIRFA requires protections for dark skies and the viewshed.

ALTERNATIVES/SUGGESTED MANAGEMENT

Visual Resources Management

Classify and manage all lands as Class I or Class II VRM categories.

- Primitive recreation areas and lands with wilderness characteristics should be managed as Class I to “preserve the existing character of the landscape.” BLM Manual 6320 affirms that VRM Class I may be appropriate to protect lands with wilderness characteristics. WSAs must be rated as VRM Class I per BLM policy guidance.
- Lands within popular and easily accessible vantage points should be managed for visual resources, such as VRM Class II to “retain the existing character of the landscape,” including clear provisions dealing with oil and gas development, renewable energy infrastructure, and other human disturbance.

Collaborate with adjacent land managers in the MMP process to consistently manage viewsheds across jurisdiction.

Use ACECs and other special management designations and prescriptions to protect scenic landscapes and lookout points within the resource area with stipulations specifically addressing and managing human development impacts.

Ensure that developed campgrounds do not negatively impact the viewshed.

Provide permanent protection of the BENM's scenery from extractive uses, such as mining and oil and gas development.

Harmonize transmission lines and other developments within the landscape.

Dark Skies

Prohibit permanent outdoor lighting in VRM Class I areas.

Protect dark sky and viewshed resources at the Monument unit boundaries to minimize light pollution from sources outside of the units.

Consider potential for astro-tourism opportunities for National Monument gateway communities in development of MMPs.

Incorporate dark sky education into signage and interpretive sites.

Develop a dark sky lighting plan. Plan components include the following:

- Base the plan on existing and new analysis of lighting conditions.
- Develop management prescriptions with the goal of maintaining light levels in order to preserve dark skies.

- Identify when, where, and under what circumstances the Monument management would permit the installation of permanent outdoor lighting).
- Use best technology available to minimize light emissions for authorized facilities identified in activity-level planning and NEPA review. These measures may include directing all light downward, using shielded lights, using only the minimum illumination necessary, using lamp types such as sodium lamps (less prone to atmospheric scattering), using circuit timers, and using motion sensors.

BASELINE CONDITIONS/AFFECTED ENVIRONMENT

Comments stated that the BLM and the USFS need to prepare an updated Visual Resources Inventory (VRI) assessment for the BENM. Comments stated that the BLM should re-inventory the Monument; re-classify in the context of its new designation statuses, which is more protective than its previous allocation; and then measure and protect dark sky and viewshed resources at the Monument unit boundaries.

As noted in Socioeconomics comments in this appendix, comments included a study from Missouri State University regarding the economic value provided by dark skies. Comments also provided the following references to consult for the MMPs:

- Listening to Bluff initiative of the Department of City & Metropolitan Planning, University of Utah
- Night sky readings of the Shash Jaá and Indian Creek Units by knowledgeable International Dark Sky Association members (led by Janet Muir) taken March 2017

IMPACT ANALYSIS

Comments stated that the BLM should create models representing viewsheds and make them available to the public.

Soundscapes

GENERAL CONCERNS

Comments identified silence or the absence of human-made noise as a valuable resource of the BENM. Comments noted that such silence is increasingly more difficult to find and stated that this value should be protected now and into the future. Comments also identified that for many people the primary reason for visiting primitive landscapes is to attain a sense of solitude and tranquility, and that non-natural noise affects the perceived naturalness of a landscape. Comments stated the soundscape must be preserved for the enjoyment of all Americans and to protect the religious freedoms Native American citizens who regard these sites as sacred.

Comments also noted that soundscapes are important for managing wildlife resources, because environmental noise can affect the physiology, behavior, and spatial distribution of wildlife, especially those that are especially sensitive to noise. Comments also expressed concern about the impacts to BENM soundscapes from activities occurring beyond the Monument boundaries. Comments requested that the BLM should curtail noise pollution and identified mineral extraction and vehicle use as two of the uses in surrounding lands that would affect the Monument soundscape. Commenters noted that the use of drones by the public around archeological sites can be invasive to the soundscape.

Comments identified the BLM's statutory obligation to manage the public lands and preserve and protect certain public lands in their natural condition and identified soundscapes, tranquility, and solitude as values that must be preserved by land management agencies and part of the "human environment" subject to the requirements of NEPA. Comments also stated that the AIRFA is violated by adoption of any management plan that fails to offer sufficient protections for the soundscape. Comments suggested that the following classes could provide a possible approach for inventorying and managing sound resources in landscape-level planning:

- **Class I Objective:** The objective of this class is to preserve the natural soundscape. This class would be appropriate for lands managed to preserve wilderness characteristics, promote primitive recreation experiences, and protect wildlife habitat and ecological systems. The level of change to the characteristic soundscape should be very low and must not attract attention.
- **Class II Objective:** The objective of this class is to retain the natural soundscape such that noticeable impacts are infrequent and isolated instances. The level of change to the natural soundscape should be low. Management activities may be heard on occasion, such as a passing motorized vehicle, but should not detract from the experience of the natural landscape.
- **Class III Objective:** The objective of this class is to partially retain the natural soundscape where practicable. Management activities may attract attention but should not dominate the auditory experience of the casual observer. This class would be appropriate for frontcountry recreation areas or other areas where natural soundscapes are not critical to the experience being sought out by visitors.
- **Class IV Objective:** The objective of this class is to provide for management activities which require significant impacts to the natural soundscape, including highly impactful events or impacts sustained over the long term. These management activities may dominate the sound of the landscape and may be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating basic elements.

Some comments felt that the BENM would eventually experience increased noise levels, just like Arches, Bryce Canyon, and Zion National Parks, because increasing numbers of visitors, and suggested that setting high entrance fees would help reduce visitation.

ALTERNATIVES/SUGGESTED MANAGEMENT

Comments offered the following general management suggestions related to soundscapes:

- Manage visitation and drone use to protect soundscapes.
- Manage industrial development and activities immediately outside the units to preserve quietude.
- Conduct develop a soundscape classification system similar to the VRM classification (see above) and identify areas of the public lands where protection of the natural soundscape is prioritized.
- Adopt management decisions based on sound modeling data or other information generated from soundscape analysis that minimize or mitigate noise impacts on recreation and wildlife.

BASELINE CONDITIONS/AFFECTED ENVIRONMENT

Comments suggested that the BLM should inventory and determine current soundscape conditions in the Shash Jaá and Indian Creek Units, particularly at the unit boundaries, to better understand how these affect the experience of traditional culture practitioners, recreationists, and wildlife.

IMPACT ANALYSIS

Comments stated that the EIS must include an assessment of noise pollution from visitors using the land in various ways. Comments recommended that the BLM complete sound modeling to the extent practicable to assess noise impacts of management alternatives on recreation and wildlife.

Commenters recommended that the BLM use a TWS-developed GIS-based model based on SpreAD to predict the propagation of noise for all directions throughout the area of interest and determine which planning decisions, such as route closures, could restore and enhance the natural soundscape. SpreAD was developed by the USFS and the EPA to predict the acoustic impacts of recreational activity in wildland settings; TWS adapted the SpreAD model to ArcGIS, automating the original hand calculation method to predict the propagation of noise for all directions throughout the area of interest. SpreAD-GIS can be used to 1) determine the areas within a planning unit where the natural soundscape is predominant and protect that setting through recreation planning; and 2) model sound propagation from uses such as motorized vehicles in a proposed quiet-use recreation area to determine what planning decisions, such as route closures, could restore and enhance the natural soundscape. Comments also noted there are other models and methodologies available, but highlighted SpreAD-GIS because it is available by request from TWS.

Wildland Fire Management

GENERAL CONCERNS

Comments expressed concern of the dangers of a fuel-reduction program and suggested that fuel-reduction projects are in conflict with managing for conservation and should be prohibited. Comments stated that fuel-reduction programs can cause serious adverse effects to cultural resources through direct and indirect damage to sites and visual impacts to users. Commenters also expressed concern about how the landscape would respond after prescribed burns.

Comments stated that research in vegetation and fire management in Indian Creek area suggests that current prescribed fire methods may lead to significant soil loss in wind and water erosion, whereas mechanical removal methods such as mastication that leave a residual mulch layer show very little change in erosional processes. There is some evidence, however, that mechanical mastication increases cheatgrass cover.

Comments stated that fire risk mitigation for private structures should be the responsibility of the private structure owner.

ALTERNATIVES/SUGGESTED MANAGEMENT

Comments provided the following suggestions related to management of wildland fire management:

- Prohibit fuel-reduction projects throughout the BENM.
- Avoid large-scale fires; use small-scale, prescribed fires to prevent larger wildfires.
- Consider tamarisk removal near popular campsites where campfires could inadvertently ignite the half-dead bushes.
- Require archaeological clearances prior to any on-the-ground disturbance.

Lands with Wilderness Characteristics

GENERAL CONCERNS

Comments expressed value for pristine, unspoiled lands within the BENM.⁴ Submissions included anecdotes about travel in the area and their appreciation of the area's beauty and wilderness qualities. Comments stated that there are extraordinary wilderness qualities in the Monument, including special qualities and solitude in the open desert, an incredible and consistent quiet stillness in Indian Creek, and nights filled with the sounds of coyotes. Comments articulated the value of hiking, climbing, and exploring in remote and protected areas without humanmade noise. Comments noted that in addition to providing backcountry recreation opportunities, lands with wilderness characteristics harbor important wildlife habitat, riparian areas, cultural resources, and other resources of the public lands that are better protected within lands managed to protect wilderness characteristics than under other management schemes.

Comments stated that all lands with wilderness characteristics within the BENM should be protected for their high value for wildlife habitat, biological diversity, riparian and wetland protection, natural quiet, opportunity for solitude, dark skies, air quality, archeological values, cultural values, and preservation of traditional knowledge. Comments stated that the area must be managed to preserve wilderness resources, to keep the lands open and untouched as much as possible, to preserve and encourage habitat for wildlife and plant species, and to protect and preserve all petroglyph sites.

Comments expressed concern about increase in visitation as a result of National Monument designation. Comments stated that not specifically managing for wilderness character would mean that remote experiences will be lost as human populations grow and place greater demands on these special open spaces.

Submissions also stated that the Monument should be managed in a broader context, taking ecological considerations into account beyond its boundaries because it could directly or indirectly impact other areas. Also, a more collaborative and holistic land management approach should be used that blends the needs for travel management, recreation, grazing, woodlands management, and cultural resource preservation equally and adaptively. Comments acknowledged that these efforts will require a significant amount of financial support for more personnel, development of educational outreach or interpretive programs for scientific monitoring, and tool implementation and for resource improvement.

Comments stated that the wilderness character inventory *process* should not be conflated with *management* of lands with wilderness characteristics as a priority, and if the BLM finds areas to possess wilderness characteristics, then the BLM can decide whether or how to manage those characteristics. Comments noted that the potential manageability for wilderness characteristics does not affect the BLM's obligation to maintain an accurate inventory of wilderness resources on the public lands.

Comments stated that converting lands designated for multiple-use by Congress would turn them into de facto wilderness areas.

⁴ Several submissions with comments about wilderness characteristics referenced both BENM and GSENM in their comments..

WILDERNESS VALUES

Comments stated that wilderness is designated according to four essential qualities (untrammelled, undeveloped, natural, and opportunities for solitude) by law and suggested that it makes sense in environmentally challenged times such as these to hold all unique cultural and ecological public lands to these fundamental standards. Comments also suggested that the BLM recognize the wide range of values associated with wilderness character that supplement and benefit other resources, including the following:

- **Scenic values:** Unspoiled landscapes generally provide spectacular viewing experiences. Management of wilderness character would help ensure the scenic values of these lands exist for future generations.
- **Recreation:** Wilderness-quality lands provide opportunities for primitive recreation, such as hiking, camping, hunting and wildlife viewing. Many primitive recreation experiences would be severely impacted if the naturalness and quiet of these lands are not preserved.
- **Wildlife habitat, connectivity, and riparian areas:** wilderness-quality lands support biodiversity, watershed protection and overall healthy ecosystems and provide connectivity that facilitates wildlife migration, seasonal movements and dispersal of young. The low density of routes for motor vehicles, coupled with the absence of development activities, produces an area nearly free of motorized vehicles, which is integral to wilderness character, and also ensures the clean air, clean water, and lack of disturbance necessary for productive wildlife habitat, produces large-scale connectivity, and preserves undisturbed riparian areas (which support both wildlife habitat and human uses of water). Inventorying BENM lands will provide important data on existing large blocks of habitat and how the BLM can restore these blocks of habitat to better match the historic range of variability.
- **Cultural and historic resources:** The lack of intensive human activity helps to protect these resources and managing lands to protect wilderness qualities will also help protect cultural and archaeological sites.
- **Economic benefits:** The recreation opportunities provided by wilderness-quality lands also yield direct economic benefits to local communities.
- **Quality of life:** The wildlands located within the BENM help to define the character of this area and are an important component of the quality of life for local residents and future generations, providing wilderness values in proximity to the Canyon Country District Office, a major western tourism destination, and other communities near the Monument.
- **Balanced use:** The majority of BLM-administered lands are open to motorized use and development. The National Conservation Lands provide critical balance to public lands management by directing the agency to adopt conservation-focused management of our most spectacular western landscapes. Protection of wilderness characteristics will benefit many of the other multiple uses and values of BLM-administered lands such as air and water quality, night skies, soundscapes, and viewsheds, while other more exclusionary uses (such as off-road vehicle use and timber harvesting) will still have adequate opportunities on other BLM lands.

ALTERNATIVES/SUGGESTED MANAGEMENT

Range of Alternatives

The BLM can and should protect wilderness character and the many uses that wilderness character provides on the public lands through various management decisions, including by excluding or limiting certain uses of the public lands. This is necessary and consistent with the definition of multiple use and the purpose of the Monument and its inclusion in the National Conservation Lands, which are lands the agency is directed to manage with a conservation focus.

Pursuant to FLPMA, the BLM should evaluate a full range of alternatives for managing inventoried BLM and USFS units, including multiple alternatives that protect lands with wilderness characteristics. Each alternative should include management actions and allowable uses and restrictions for lands managed to protect wilderness characteristics.

The BLM should adopt meaningful protections for wilderness resources as part of its multiple use mission. BLM Manual 6320 provides examples of land use plan decisions that could protect wilderness characteristics, including recommended withdrawal from mineral entry; closure to leasing or no surface occupancy with no exceptions, waivers or modifications; right-of-way exclusion; closure to construction of new roads; closure to or limitation of motorized and/or mechanized use; designation of the area as VRM I or II.

BENM management of land with wilderness characteristics should include no logging, no hunting or trapping, protection of wildlife, declaration of the lands as wilderness, and to increase the size of wilderness areas.

The BLM should set baseline management actions, the most important being prohibiting construction or maintenance of roads (see Trails and Travel Management comments in this appendix), that will ensure appropriate protection of all units. From this baseline, BLM should tailor management prescriptions to individual units or categorizing units based on specific threats to wilderness values and supplemental values that are present. BLM should manage lands with wilderness characteristics in two categories: 1) very high-quality units meriting the strongest levels of protection, and 2) additional units in which other resources are emphasized. Both categories should include management direction to consider impacts to wilderness characteristics in implementation-level decisions and avoid, minimize or mitigate those impacts to the extent possible.

The BLM maintains the discretion to set management actions for units that it is managing for the protection of those wilderness characteristics as a priority over other multiple uses.

The BLM should manage a substantial amount of land in the MMPs to protect wilderness characteristics in order to meet the agency's statutory and regulatory obligations and argue that BLM should protectively manage all lands with wilderness characteristics in the BENM.

BASELINE CONDITIONS/AFFECTED ENVIRONMENT

Comments referenced reports published by the USFWS on the economic influence of outdoor and wildlife-based recreation, and highlighted a report by the Sonoran Institute on economic influences of protected lands on nearby communities (see also Socioeconomics section of this appendix).

BLM Inventory

Comments noted that the BLM is required under FLPMA to inventory and consider wilderness characteristics during the land use planning process. Comments stated that a thorough inventory of lands with wilderness characteristics should be made as part of the planning process, following the

BLM policies set forth in BLM Manual 6310 (Conducting Wilderness Characteristics Inventory on BLM Lands). Comments also noted that evaluating management alternatives for lands with wilderness characteristics requires an accurate inventory to serve as baseline information.

Comments also suggested that the affected environment discussion in the MMPs assess individual units as to the current and trending uses of those lands, including both values and threats, and that the environmental impacts analysis and alternatives should reflect the current conditions, including by evaluating management alternatives that ensure protection of existing values and/or target specific threats.

USFS Inventory

The USFS has specific duties to inventory, evaluate, and recommend areas for wilderness protection. Chapter 70 of the USFS's Land Management Planning Handbook 1909 governs the four-step wilderness inventory, evaluation, analysis, and recommendation process that forests are required to complete as part of a forest plan revision under the USFS's 2012 planning rule. To ensure a reasonable range of alternatives, the USFS should make sure to have at least one alternative that analyzes all or almost all of the potential wilderness areas identified in the inventory in the Draft EIS.

Comments directed the USFS to consider a Q&A developed by the USFS Washington Office (currently in Version 1.1) related to the Chapter 70 process, and two white papers by TWS on the Chapter 70 process that include case studies from early-adopter forests (attached to scoping comments).

Comments stated that the Manti-La Sal National Forest has released a draft wilderness inventory pursuant to the Chapter 70 but has yet to release a wilderness evaluation. Comments recommended that the USFS finish its draft evaluation before developing alternatives so that the alternatives are informed by the inventory.

Citizen-Based Inventory

Comments noted that citizen inventory data must be evaluated and considered in making decisions in the MMPs. Comments stated that the inventory information submitted previously by the Southern Utah Wilderness Alliance and others meets the criteria laid out in Manual 6310 as the "Minimum Standard for Review of New Information." Comments stated that the BLM should document this evaluation and make the documentation and findings available to the public as soon as practicable, and *before* the BLM moves forward with developing management alternatives for lands included in the citizen inventory.

IMPACT ANALYSIS

Comments stated that the MMPs/EIS should clearly tie the analysis of the affected environment and environmental impacts to the alternatives and ultimately to the management decisions. Comments noted that BLM Manual 6320 specifically provides that the BLM must document its rationale for its determination regarding the management of wilderness character. Factors for consideration include the following:

- Considering and documenting whether the lands can be effectively managed to protect their wilderness characteristics and if a boundary modification might improve manageability
- How wilderness characteristics will be managed over the life of the plan
- Documenting the land status and mineral ownership of the lands

- The potential impact of providing access to non-Federal inholdings
- The fact that incompatible activities or uses can be seen or heard from areas possessing wilderness characteristics should not be a determining factor when analyzing the manageability of such areas unless these impacts are pervasive and omnipresent
- The degree to which other resources or uses are present in the area with wilderness characteristics
- The potential for further development or use of the other resources on the unit
- The degree to which other resources or uses are present on other public and private lands outside the area containing wilderness characteristics
- Local, regional, or traditional (e.g., Tribal) economic value of various resources on the units and the potential to enhance the economic importance by protecting the wilderness character
- The degree to which use or development of each resource is compatible with or conflicts with management of the area to protect wilderness characteristics

Resource Uses

Forestry and Woodlands Resources

GENERAL CONCERNS

Comments in support of woodcutting expressed concern about potential restricting or banning of firewood gathering and stated that firewood gathering (by both Native Americans and non-Native Americans) should be allowed throughout the BENM (see Cultural Resources and Trails and Travel Management comments in this appendix). Comments stated that woodland products have been important to communities surrounding the BENM for hundreds of years; many of the region's residents depend on areas within the Monument to procure wood to heat their homes and cook their food; juniper trees are commonly used for fence posts, aiding ranching and other agriculture activities; cottonwood and willow harvesting continues to be used for ceremonial activities; and pinyon nuts are regularly used by local people to supplement their diets and incomes. Comments identified the following important areas for gathering firewood: Heats Point, the Maverick Point, and the mesa tops of the South Elks. Some comments also stated that the timber in the land controlled by the USFS should be harvested and used.

Comments stated that permits for woodland harvest need to continue to be available to the public. Comments also requested that the BLM streamline and strengthen management of woodcutting to allow for easier acquisition of permits. Other comments stated that woodcutting permits should be seriously reduced and suggested that woodcutting has led to the creation of undesigned roads in and out of the National Monument, even in wilderness areas. Comments provided an example of this issue at mile 0.7 of the Lime Canyon Road. Comments stated that there is a need for better or revised signage regarding areas open and closed to woodcutting.

Comments stated that a "dead and down" campfire wood collection policy may direct impacts to cultural resources when historic hogans are torn down in the Comb Ridge and Butler Wash areas for use as firewood.

Some submissions suggested that chaining should be banned across the entire region, because the science clearly shows that it negatively impacts the regeneration of pinyon pine over juniper; other submissions suggested chaining for grazing range improvements.

Comments stated that pinyon nuts are crucial resources for wildlife, especially birds, as well as the native tribes of the region. Commenters requested information on how the BLM would replenish this resource and if a tree nursery program has been enacted. Other comments also stated that pinyon-juniper forests are of little use other than for firewood and should not be allowed to grow back.

Commenters expressed concern about potential impacts of pine beetle damage and suggested that the forest management plan focus on a proactive approach to be resistant to extreme fire, insect outbreak, and timber harvesting. Comments also noted that the Utah Forest Practices Act focuses on preserving water quality and soil stability.

ALTERNATIVES/SUGGESTED MANAGEMENT

Management suggestions included the following:

- Manage the timber resources to ensure protection of the ponderosa pine.
- Allow firewood gathering through the BENM.
- Maintain the ability to gather firewood at Heats Point, the Maverick Point, and the mesa tops of the South Elks.
- Streamline the woodcutting permit process and ability to gather other woodlands products.
- Restrict woodcutting permits to prevent development of undesignated roads.
- Only allow dead or diseased trees to be cut down.
- Ban chaining.
- Prohibit ATV travel except on main roads.
- Prohibit construction of additional roads.
- Allow small commercial wood harvesting operations.
- Provide better signage for woodcutting areas.
- Reconsider “dead and down” campfire wood collection policy.

Livestock Grazing

GENERAL CONCERNS

Comments in support of grazing identified grazing as a key driver of both economy and rural/agrarian character of the area. Comments stated that Indian Creek was known historically for grazing. Comments stated that livestock grazing is a sustainable use and is an important economic contributor to local economies. Commenters identified San Juan County as the poorest county in Utah, with the highest unemployment and poverty. Comments stated that livestock grazing is one of the mainstays of San Juan County, and indicated that the cattle industry needs to be protected.

Submissions cited regulatory authority for livestock grazing on BLM lands in general and within the Monument in particular authorizing ecological restoration and active vegetation management activities consistent with management of Monument objects. Comments suggested that the MMPs should prioritize the multiple uses so that grazing is a high priority. Comments stated that vegetation improvement projects facilitate healthy wildlife populations, thereby increasing hunting, which also contributes to local economies. Comments acknowledged that conflicts between the BLM and ranchers need to be addressed to ensure long-term sustainability of the land for domestic animals and wildlife, but stated that these conflicts are best resolved by careful study of the ecology of the area and management practices that allow sustained yields rather than by decreasing the size of the Monument or eliminating regulations. Comments stated that area management needs to respect the seasonal movement of the herds and expressed concern that road closures may affect farmers and ranchers access to springs or ponds for cattle.

Comments requested that the MMPs address rangeland health standards and seek to maintain and enhance desired plant communities that will benefit watersheds, water quality, and forage production. Comments suggested that the BLM has an opportunity to design a grazing program for the BENM based on the best available science with an emphasis on restoration of ecosystem process including soils, hydrology, and native vegetation. Comments identified a variety of issues to be addressed in the MMPs, as follows:

- Land available/unavailable for grazing
- Water rights
- Use
- Season of use
- AUMs
- Drought
- Public involvement
- Livestock improvements (e.g., fences, watering)
- Compatibility of Monument uses with private land practices
- Conflicts between cattle operations and recreational users

Comments urged the BLM to base management decisions on scientific data, robust monitoring of forage availability, and rangeland and ecosystem health, and to take an adaptive approach to ensure the resiliency of our public lands in the face of a changing climate. Comments stated that adaptive management practices should be employed to allow for variability in seasonal moisture and forage growth through extended shoulder dates, flexible on/off dates, adjusted stocking rates, and varying rotation schedules.

Comment in opposition to grazing generally expressed that that livestock grazing was not compatible with a National Conservation Land management emphasis and had potential to damage the resource values within the Monument. Comments stated that poorly managed livestock grazing within and adjacent to protected landscapes can affect the health of key water sources and watersheds, vegetation communities, important wildlife habitat, and entire ecosystems wildlife; can crush fragile desert soils and plant life; and can increase wind and water erosion. Comments noted that livestock grazing has the potential to impact archaeological and historic resources directly by trampling artifacts, pushing over standing structures, and rubbing on rock art panels, and by surface disturbance from construction of range facilities.

Comments stated that grazing privileges are subject to reasonable regulation to accomplish the Monument's protective purposes and that the BLM may regulate stocking levels, designate foraging locations, establish seasonal timing restraints, and impose related restrictions to protect range resources. Comments encouraged the BLM to identify locations where grazing leases may be incompatible with the protection and preservation of prehistoric, historic, and cultural objects, including historic landscapes; wildlife habitat; and recreational resources. Comments expressed the following concerns about damage by cattle to wildlife habitat, recreation resources, and archeological resources (including sacred sites and traditional cultural properties):

- **Shash Jaá Unit:** Comments stated the unit as a whole is devastated by livestock grazing combined with ongoing severe drought. Comments suggested that all livestock should be removed, and all permits should be phased out until which time the range recovers. Comments provided examples of areas with dead animals and suggested that food and water is too scarce to support grazing. Comments noted that BLM IM 2013-094 requires the BLM to modify uses and management to lessen impacts from drought including activities such as grazing.
- **Comb Wash:** Comments suggested that the area is severely overgrazed and that vegetation types along Comb Wash provide little livestock forage, resulting in livestock concentrating in riparian and historically riparian areas.
- **Butler Wash:** Comments suggested the area is severely overgrazed; that grass cover and soil stability have been compromised in these areas, resulting in weed growth and severe erosion. Comments also stated that all riparian areas in Butler Wash are damaged.

Comments also specifically suggested that livestock grazing allotments should be evaluated as it relates to all endangered species. Comments stated that the BLM's rule-of-thumb measure to allow grazing to commence after 2 years after native seedings is arbitrary and may not be adequate to meet objectives and to protect the investment of time and tax dollars made in the project. Comments also stated that all vegetation treatments and/or stock-watering troughs for enhanced grazing of livestock and/or wildlife habitat must be minimal and done in strict compliance to NEPA to avoid damaging cultural and other natural resources.

Comments stated that increased recreational use in Bears Ears will likely lead to more grazing conflict and identified conflicts in the Comb Ridge Recreation Management Zone (RMZ) and on Cedar Mesa near Slickhorn Canyon and Kane Gulch.

ALTERNATIVES/SUGGESTED MANAGEMENT

Availability of Land for Grazing

Prohibit or strictly limit grazing in the Shash Jaá Unit to protect the archeological sites and the land that has been overgrazed.

Limit or eliminate grazing in overgrazed, damaged or otherwise sensitive archeological and paleontological areas (for example, Butler Wash and Comb Wash), significant ancient Puebloan sites or petroglyphs/pictographs and in or near the slot canyons.

Cancel or phase out ranching within the BENM altogether.

Allow grazing, in a controlled fashion, where appropriate with monitoring.

Do not change current livestock grazing management and regulations.

Reassess availability and unavailability for livestock under the new National Conservation Lands System guidance. Identify lands that would be available for other uses, such as watershed protection. Areas that are voluntarily relinquished should be considered for other uses and made unavailable for livestock grazing. Other priorities should be protection of rare species, vegetation communities, relict communities, restoration of degraded landscapes, protection of biological soil crust and cultural resources.

Permits

Keep grazing to limited permits. Refrain from issuing new grazing permits or renewing expired permits within the Monticello field area, unless adequate stipulations and restrictions are incorporated to prohibit grazing in areas with sensitive resources.

Establish a method for “conservation buy-outs” of grazing permits and leases from willing sellers, and retiring permits, especially in areas designated as ACECs and other historic districts or properties that are listed in or eligible for the NRHP.

Forage Decisions/Stocking Rates/Season of Use

No adjustments to grazing preference, season and time of use or livestock numbers shall not be made because of Monument designation.

Recalculate AUMs for each allotment without an up-to-date (within the last 10 years) forage capacity analysis. To determine the accurate number of AUMs in each allotment, a clip-and-weigh analysis of forage should be conducted immediately and then every ten years in each pasture of an allotment. This information will be used to adjust AUMs in the permit. The necessity of this assessment was borne out by a clip-and-weigh study in 2013 in the Valley of the Gods pasture in the Perkins Brothers allotment.

Analyze and reinstate all suspended AUMs as expeditiously as possible. There should be no-net-loss of AUMs. All reductions should be considered temporary until rangeland health standards return to a desired condition. AUMs should be set at pre-Monument numbers. The full usage of AUMs should be required on all allotments.

Consider an alternative that includes objectives and goals to restore rangeland in order to increase rangeland capacity and reinstate suspended AUMs.

Reduce livestock numbers to protect sensitive areas.

At a minimum, there should be 6 weeks between the beginning of seasonal use of a particular area one year. Use should be staggered so the same areas are not grazed during the same season for consecutive years, particularly in the spring and fall.

Reassess utilization. The BLM's 2008 *Monticello Field Office Record of Decision and Approved Resource Management Plan* says that utilization will be 50% unless conditions indicate an adjustment. Practice shows that grazing at that level in desert systems creates a great deal of damage. Research shows that 25% to 30% is more appropriate, especially in a National Monument with different priorities than those of a field office. Do not use stubble height measurements as a substitute for forage utilization in monitoring grazing activity.

- Consider drought. Because most years have precipitation in amounts less than the average precipitation, stocking levels should be based on forage production during below average years. Depending on site potential, a minimum of 50 to 150 pounds of residual herbage levels will be left on site prior and during a drought. Post-drought restocking should only occur after plant vigor and production have recovered to conditions prior to the drought.

- Monthly trends in precipitation, soil moisture, plants growth, and air temperature should be monitored to detect incipient drought conditions.
- Stocking rates should be kept to the capacity of the driest year in the last 10 years to anticipate drought and mitigate resource damage from overusing drought-stressed plants.
- When drought is predicted, permit holders and interested public should be notified and grazing during the growing season should be cancelled.
- Post-drought recovery should include using pastures only when forage species are dormant or less palatable species are green to shift grazing pressure away from key forage plants. In addition, grazing should be deferred until key forage species have produced mature seed and productivity has returned to pre-drought levels.

Identify the features of an effective adaptive management plan that would be used at the project level, including the following:

- Achievable and measurable objectives to provide accountability and guide future decisions
- Specific decision thresholds with identified indicators for each impacted resource
- Targets that specify a desired future condition
- Commitment to implement a monitoring plan with protocols to assess whether thresholds are being met
- Commitment to use monitoring results to modify management strategies as necessary
- Designated timeframes for completion of necessary management modifications

Vegetation Management

Use practices such as chaining for grazing range improvements instead of vegetation removal.

Prioritize the planting of native grasses instead of exotic if pinyon-juniper treatments are used (see also Vegetation).

Consider inclusion of the following stipulation to protect native seedings: Livestock grazing after native seedings are established will be modified to ensure the survival of the native plants. The livestock exclusion period required to allow full establishment of seeded native species and recovery of surviving native plants after a wildfire may be more than two years. Site evaluation will be required to determine when the native seeding should be grazed again and the effectiveness of the current or new grazing system on the persistence of native plant.

Require detailed monitoring plans with clearly-stated goals that need to be reached before grazing is allowed to resume. Vegetation monitoring plots should be established to determine the effectiveness of the treatments in achieving management objectives and to provide baseline data of overall change. Monitoring should include species frequency, density, and distribution data, and should be part of the overall adaptive management framework. Monitoring should include reference areas (non-grazed areas) to be used for comparison.

Special Status Species

Ensure that actions authorized do not jeopardize the continued existence of any special status plant species or result in the destruction or adverse modification of critical habitats. Conduct Section 7 consultation for all allotments that may affect listed species during the individual allotment evaluations.

Consider measures such as fencing, seasonal restrictions, or relocation of livestock developments to protect special status species.

No livestock waters or supplements should be placed on or near any special status species populations.

Soils, Riparian, and Water Resources Mitigation Measures or BMPs

Consider Special protections, such as buffer zones, for high quality riparian and wetland resources including springs and wet meadows.

Develop management to limit deposition of animal waste in and adjacent to waterbodies, including protecting or repairing any existing exclusions; providing upland water developments; and development of new range improvements to discourage congregation near waterbodies.

Require enhanced monitoring of resource conditions adjacent to high value water resources and monitoring to assess effectiveness of range improvements in protecting aquatic resources.

Consider management tools pasture rotation based on minimum stubble height, modification of allotment boundaries and controlled timing of grazing to prevent damage to stream banks and riparian areas when they are most vulnerable to trampling damage.

Develop potential grazing strategies for use during periodic droughts that will maintain vegetation and aquatic resources in their desired conditions.

Do not completely divert water sources into tanks or troughs. At least 70% of the flow should remain in the system to maintain riparian ecological processes and functions.

No development of new water developments constructed solely for livestock operations.

Reduce grazing impacts though light to moderate stocking in early- to mid-wet season on biological soil crust. Use grazing strategies that minimize the frequency of surface disturbance during dry seasons and maximize periods between disturbances to reduce impacts to biological soil crusts.

Relocate existing water development and nutrient block location to sites with low potential for biological soil crust development, such as rocky areas.

Use brush barriers to divert trailing from sites with biological soil crust also helps prevent trampling damage.

Consider a system of small fenced reserves to conserve habitat of the endemic biota.

Cultural Resources Mitigation or BMPs

Consider natural, low-impact barriers to prevent cows from accessing cliff dwellings.

- Consider enclosures or blocking access roads

Other

Designate areas to use as future reference areas for monitoring (i.e., at least 10 years of non-use by livestock).

Make information on utilization maps, annual use plans, data on utilization and trend, photos, etc. available to the public via the BENM website and notify and invite the public to attend when allotments will be monitored.

Clearly mark fences with information on how to report damage by livestock (or looters).

Increase access for ranchers, and use money to develop roads and water for ranchers.

Fund all development specifically or generally for livestock grazing specifically through the grazing fees charged on the land.

Collaborate with Colorado Plateau Landscape Conservation Cooperative to come up with strategies to respond to climate change in the Planning Area when addressing livestock grazing.

BASELINE CONDITIONS/AFFECTED ENVIRONMENT

Comments suggested that the BLM use the Colorado Plateau REA to assess baseline conditions and projections for climate change as it relates to livestock grazing.

Comments described historical grazing rights that were given to Native Americans through a memoranda of understanding with the Grazing Service and Bureau of Indian Affairs in the 1930s, but that were not officially carried forward and honored present-day.

Impact Analysis

Comments stated that that BLM should consider the environmental consequences of livestock grazing and ensure the highest level of scientific integrity when preparing the EIS and recommended inclusion of the following:

- Assessment of grazing impacts to wetlands and associated springs, including functional conversion of wetlands (e.g., predominate vegetation class shifts); changes to supporting wetland hydrology (e.g., snow melt patterns, sheet flow, and groundwater hydrology); and wetland disturbance. The Draft EIS must describe how the BLM and the USFS intend to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands, from activities such as livestock grazing.
- Discussion of how monitoring requirements will be applied at the project level to ensure that the *Utah Standards for Rangeland Health and Guidelines for Livestock Grazing Management* are met, including an explanation regarding how the annual operating instructions will ensure compliance with project level monitoring requirements for parameters such as water quality.
- A monitoring section that describes how monitoring will be implemented on an allotment level and watershed or sub-watershed level to determine rangeland conditions including water quality status and trends.

Comments also referred the BLM to the analysis contained in the *Determination of Compatibility of Current Livestock Grazing Practices with Protecting the Objects of Biological Interest in the Cascade-Siskiyou National Monument*, Table 1, p. 5 (available at: https://www.blm.gov/or/resources/recreation/csnm/files/CSNM_Determination_Proclamation.pdf).

Recreation and Visitor Services

GENERAL CONCERNS

Comments offered statements of support for a variety of recreational activities within the BENM, including wildlife viewing, hunting, fishing, recreational shooting, rock climbing, historical tourism and reenactments, firewood gathering, camping, hiking, horseback riding, OHV use, aviation, bikes, motorcycles, other RVs, and all other generally enjoyable uses (see Trails and Travel Management comments in this appendix for more information about aviation and OHV use).

Comments noted that having the Monument available for recreational use supports recreationists' desires to stay healthy, to stay physically and mentally fit, and to realize the associated benefits. Comments also noted that public lands can provide healing experience for veterans. Comments stated that future generations should also be able to benefit from these life-enhancing resources, and noted the enormous benefit to children's health, self-esteem, and confidence from recreation in challenging outdoor settings. Comments also stated that the Monument lands afford an up-close enjoyment of nature for those unable to hike. Some comments stated that the greatest value of the area was its undeveloped nature, wild beauty, and sense of solitude, and stated that the BLM should not develop additional tourist amenities.

Popular Recreational Activities

Camping

Comments contained anecdotal descriptions of camping in the Monument and stressed the value of providing dispersed camping opportunities that allow visitors to experience the solitude of the area, as well as providing campgrounds with restroom facilities. Comments noted that there are distinctions between front and backcountry camping and that there is a need for continued free, dispersed camping as well as designated camping (campgrounds or campsites) in highly visited areas, especially for car and RV camping, to limit the creation of new, disturbed areas.

Some comments noted that people are camping "everywhere" and suggested the addition of new campground and restrooms in areas with high use to discourage dispersed camping and to reduce surface disturbance and land degradation from off-road driving and human waste. Some would like to see more composting toilets or additional developed campgrounds. Comments also suggested there should be adequate pull outs for dispersed camping along road networks.

Comments stated that a "dead and down" campfire wood-collection policy may direct impacts to cultural resources when historic hogans are torn down in the Comb Ridge and Butler Wash areas for use as firewood.

Rock Climbing

Comments stated that the MMPs need to acknowledge rock climbing as appropriate and valued activities within the BENM. Comments stated that climbing in the BENM brings hundreds of thousands of visitors each year (well-known climbing routes include Supercrack, the incredible Hand Crack, Lightning Bolt Cracks, Dreamspeaker, Angel Arch, Lone Star, and the massive Texas Tower). Comments noted that climbing is special because of the presence of "splitter cracks," providing unique clean-cut crack climbing experiences in the Monument, particularly in Indian Creek (in addition to wilderness characteristics, quiet soundscapes, and general beauty). Comments supported retaining the primitive nature of Arch Canyon, Texas Canyon, and other climbing areas to protect the unique climbing experiences and other important cultural and conservation values.

Comments expressed that the rock climbing community, represented by Access Fund and American Alpine Club, deserves fair representation on the MAC (see the Consultation and Coordination section of this appendix).

Historical Tourism

Comments stated that most tourists interested in the BENM want to see the caves, panels, and sites in the Butler Wash area. Comments stated there has been a dramatic increase in traffic to the House on Fire, Wolfman Panel, Target and Ballroom site, the Tower site, as well as the Butler Wash Road. Comments expressed concern about looting and vandalism as well as damage resulting from visitation. Comments also expressed concern about impacts to cultural resources from camping and campfires in alcoves. Comments suggested that some trails to sites are difficult to identify and result in additional damage to areas around the sites as visitors attempt to find them.

Comments suggested that highly visited locations should be hardened to protect them from the damage from visitation. This should include roads, toilets, restoration, and visitation limits through permits. Active and visible on-the-ground management of human use by BLM representatives should be provided to educate visitors and prevent damage. Comments also noted the need to address the use of drones around archaeological sites, as well as within the entire Monument (See Lands and Realty comments in this appendix).

Submissions also included comments about experiences of Mormon pioneers who traversed southern Utah in 1879–1880 in search of new homes in what is now San Juan County, Utah. Comments identified these areas as “sacred” and expressed the value of visiting these areas to personally experience, to some degree, the difficulties the pioneers encountered and overcame. Comments identified Comb Wash, Comb Ridge, San Juan Hill, and the Hole-in-the-Rock Trails as areas of importance.

Other

Comments stated that there is a growing interest in biking but that there are few places where it is currently allowed or even appropriate in the BENM. Comments expressed concern about impacts to cultural and natural resources from slickrock biking on Comb Ridge.

Comments noted that target shooting (including paintball) has caused problems in the past, particularly with cultural sites, roads, and heavily visited areas.

Comments stated that boating occurs on the San Juan River near Mexican Hat and through the Goosenecks, and the river and canyons are extraordinary recreational resources; therefore, floating must be considered “valuable activities” within the BENM.

Comments noted that keeping the Monument lands open to hunting, fishing, and recreational shooting would be compliant with EO 13443.

Comments stated that although visitors enjoy having dog-friendly areas in the Monument, pets should either be leashed near cultural sites to help prevent damage or banned from all archaeological sites.

Managing Visitation

Comments expressed concern that the BENM designation has put the Monument on the map as a travel destination to millions of additional and potential visitors, and that visitation has increased. Commenters further expressed concern about the ability of the BLM to manage visitation and protect natural and cultural resources on the ground.

Comments also noted that National Parks are becoming ever more crowded, making remote and less-visited National Monuments such as the BENM even more important. Comments also noted that the BENM has been receiving more visitors and pointed out the challenges and concerns associated with increased visitation. Some of the concerns highlighted that recreational use has led to environmental degradation, especially in the heavily used Indian Creek corridor, through damages to sensitive soils and plant communities, including trampling of biological soil crusts. Comments indicated that the lack of designated public sites is one of the largest challenges in managing recreation and indicated a need for a strategic interim visitor management during the MMP process. Comments identified specific areas that will need to be addressed in strategic visitor management planning, including the Comb Ridge RMZ, Moon House, and Doll House.

Comments identified tourism as a threat and stated that there have been instances of tourists stealing cultural artifacts, graffitiing rock panels, and driving ATVs through ancestral burial grounds as many cultural sites are near roads and require very little hiking. Commenters suggested that clearly marked designated trails would help protect cryptobiotic soil and local flora/fauna. Concerns were also expressed about too many people being allowed in Comb Wash, particularly at the San Juan River and River House. Comments expressed concern about human waste getting into the San Juan River as a result of the high visitation. Comments also expressed a desire to have Butler Wash and other areas protected and secured without eliminating access.

Comments were also made regarding preparing a good access management plan to allow and accommodate large numbers of people visiting the area. Some stated that a healthy human environment includes adequate motorized access and recreational opportunities to meet the needs of the public, and commenters felt that their pursuit of happiness has been significantly impacted by the motorized closures. Comments noted that significant closure of motorized routes in the area does not meet the basic requirement of the NEPA: “Sec. 101 (b) (5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life’s amenities.” Comments also identified a number of group activities that require large group permits, including religious ceremonies, handcart treks, hunting groups, historical enactments, church groups, and Scout outings such as camping and jamborees.

Comments stated that the current planning process is being used as a backdoor process to create de facto wilderness areas by closing motorized access and motorized recreation on lands designated for multiple use. Comments stated that management of public lands must reflect the ratio of visitors and meet their needs in an equal manner. Comments requested that the excluded lands be managed as “Multiple Use and Sustained Yield,” with the main focus being recreation, and one of the main focuses being motorized recreation. Comments stated that local citizens want full access to the land and trails and that the BLM should ensure handicapped and elderly access to all lands within the BENM. Comments identified that visitors are being concentrated in a relatively small area in the Indian Creek Unit, essentially the valley of Indian and North Cottonwood Creeks, and because visitors are confined by topography and access, impacts are focused into an arid setting that risks compacted soils, trampled vegetation, and erosion. Comments noted that these uses may impact the viewshed of the Monument, as well as the view of the Monument from the private land. Comments stated that restrictions on the use of public lands and within the Monument should only apply to site-specific, small areas, such as archaeological sites that require only a 100 × 100-foot area rather than 1 acre of land, or 1 acre of land instead of 50 acres and controlled by signage and fencing (see Cultural Resources comments in this appendix).

Funding

Comments submitted about funding issues included more funding for personnel, development, and growth in use of the Monument; for educational outreach/interpretive programs; for preservation and conservation programs; for law enforcement to protect sites; and for the use of gas tax funds.

Management Zones

Comments felt that the MMPs would benefit greatly from delineating management zones to set the overarching goals for visitor experiences as well as a basis for designating routes in a Travel Management Plan. Other comments indicated that they generally support designation of ERMA for quiet-use recreation experiences and, therefore, recommended that the BLM designate ERMA for non-motorized recreation that overlap with other specially managed areas. They emphasized that both SRMA and ERMA require robust management prescriptions to protect and promote the recreation opportunities they are designated for.

Comments also requested that consistent recreation regulations be applied that match surrounding BLM and USFS lands. Comments emphasized that outfitters need stability and certainty around the future management of the public lands where they operate, and some outfitters have indicated that they have already lost business because of the confusion around the Monument boundaries.

ALTERNATIVES/SUGGESTED MANAGEMENT

Comments offered the following suggestions for recreation (specific comments about motorized travel are discussed in Trails and Travel Management section of this appendix).

Management Zones

Establish management zones throughout the Planning Area to provide and maintain a range of recreation and access for different user types with varying interests and abilities. Each separate zone would have distinct settings. Physical settings would consider the degree of naturalness and the amount and types of facilities, as well as proximity to roads. Social settings would consider the number of contacts with other people, the size of groups, and evidence of other users. Managerial settings would consider the amount of visitor management used to achieve desired social and resource conditions, the compatibility of traditional land uses with the recreational environment, and the type of access and vehicle use allowed in the area. Potential zones could include Passage, Primitive, Pristine, Rustic, and Wilderness zones, or could parallel labels for RMZs that are designated in SRMA. Each zone would have a discrete management goal that is aligned with management of values and objects.

- **Passage Zone:** These zones are special areas on the urban interface where the primary activities are non-motorized trail activities, yet there is a need for recreational and passenger vehicles to travel through to access other zones, internal trail heads, or for administrative purposes. These areas would have a high level of administrative control, including speed limits, and may further restrict vehicle travel to only passenger vehicles or authorized uses. These areas would be highly visible and serve a variety of non-motorized experiences at medium to high densities, often while protecting special resources. Emphasis in these zones would be on highly developed, well planned and designed non-motorized trail systems. The density of motorized use routes would be very low.

- **Motorized Backcountry Zone:** These areas provide routes or loops designated for motorized recreation. In addition to use of ATVs and motorcycles on roads, special ATV width or single track motorized trails may be developed or designated for the specific use of these machines. Full-size passenger vehicles may be restricted on certain trail segments. Routes in these areas should be designated to support long distance recreational travel, geo caching, and sightseeing activities by ATV or motorcycle. Administrative control will be at a moderate level, with trail and route markers and designated parking/staging areas. Density of routes may be medium to high in select areas to form loop experiences. Other non-motorized routes may exist in these zones at low densities. Routes for transportation and access may exist at varying densities as determined by need.
- **Primitive Zone:** These areas are special non-wilderness backcountry areas that serve quiet non-motorized recreation in a primitive setting where visitors may enjoy a less developed recreational experience. These areas generally have sensitive resources; therefore, non-motorized trails in these areas will have a low to medium density.
- **Pristine Zone:** These are lands with wilderness characteristics and other highly sensitive ecological areas where there will be no motorized routes or travel permitted. Evidence of administrative control should be little to none. Non-motorized routes are generally undeveloped, and areas are generally accessed by foot or horseback.

Keep currently designated ERMA and analyze the possibility of increasing those areas to accommodate increased demand. If ERMA cannot be expanded following planning analysis, SRMA should be tailored to allow as many distinct recreational uses as possible by implementing management strategies that are not unnecessarily restrictive.

Existing SRMA and ERMA designations may be changed, as ERMA are more appropriate for the remote areas of Bears Ears.

Update the Cedar Mesa SRMA to reflect new trends and information, while group size limitations and permitting is retained. Comb Ridge RMZ needs frontcountry rangers, signage, and a camping plan to control prohibited activities.

Perform an inventory to identify existing camping trends and previously disturbed areas, and the designation of RMZs in the BENM could strategically address camping needs for different user types. This can allow dispersed backcountry camping in more primitive areas and designated or developed camping areas in frontcountry areas of severe impact. The MMPs should have strong provisions to protect cultural resources from adverse impacts from camping.

Manage all but Comb Ridge and Butler Wash for more primitive recreation in order to control the number of visitors.

Do not add additional primitive-like zones, as both units of the BENM already include WSAs and ACECs, and should not be used to limit visitor opportunities.

Match future recreation management with surrounding Federal lands to ensure that permittees who have traditionally traveled across this entire contiguous landscape are not restricted from entering the new Monument boundaries, and is especially true for 1) any new group size restrictions, 2) new requirements to camp in designated areas, and 3) new trailhead allocations that might be considered in the new MMPs.

Access and Travel⁵

Allow continued public access and uses of the Monument consistent with law and the purposes for which the Monument was designated. The use of permit systems to monitor or restrict public access and uses of the Monument should be used as a last resort when absolutely necessary for management of objects and purposes for which the Monument was designated.

Plan for aviation as a recreational use.

Maintain current access restrictions to promote quiet, human-powered activities, including hiking, climbing, bicycling and other outdoor sports. Motorized and OHV use must be controlled and restricted to designated routes.

Limit access to foot traffic only in Arch Canyon to protect cryptobiotic soils from OHV use.

Develop a pro-recreation alternative that adequately addresses and meets the needs of the existing and future public for motorized access and recreation, including ATV, motorcycle single track, utility task vehicle, and full-size 4x4 enthusiasts.

Developed a reasonable alternative that addresses the need for motorized access and recreation for youth, the elderly, handicapped, and disabled to replace the closure of opportunities close to town.

Increase the number of hiking trails and pedestrian access.

Historical Tourism⁶

Prioritize protection of historical and scientific sites with greater emphasis on signage of education as well as punitive measures for those caught vandalizing or robbing these sites.

Incorporate the Canyons of the Ancients National Monument's "outdoor museum" concept into the MMPs, allowing for heavily visited areas to be developed with educational materials while still maintaining the primitive nature, but leaving sacred, backcountry sites for unmanaged, self-discovery (i.e., in their natural state without signs, maps, and established trails). Work closely with the Inter-Tribal Coalition's Land Management Planning Task Force and interested Tribal governments to identify and manage these sites.

Develop an interim management plan for visitation to cultural sites. It will be necessary to assess which cultural sites are already "visitor ready" or receiving high levels of visitation in order to designate a select number of cultural sites as public. This will allow land managers to prioritize visitor education and interpretation at these locations and tell the public about the locations of these sites, which will indirectly minimize impacts at other sites. This strategic visitor management planning will also need to look at the indirect and cumulative impacts of closing or opening routes and how that would indirectly funnel people to other places. Some designated trails will need to be created that go to designated sites.

Consider a robust Tribal consultation process to discuss designating Doll House a public interpretive site. Though remote and not accessible year-round, this Ancestral Puebloan granary site is less sensitive than other cultural sites and can be used as an educational area.

⁵ See also Trails and Travel Management comments in this appendix.

⁶ See also Cultural Resources comments in this appendix.

Establish a well-marked road to the Doll House site to reduce potential resource damage from visitors trying to find the site.

Heavily visited sites and previously designated pet-free sites should remain closed to pets. If pets are allowed on trails that become heavily visited, install doggie poop bag stations near the entryways to the trails to help prevent excessive accumulation of pet waste.

Consider fencing off the granaries on Comb Ridge to protect the sites and prevent visitors from falling off.

Exclude livestock from dwelling in Comb Ridge.

Prohibit camping in alcoves and archaeological sites.

Maintain access to canyons, cultural sites, and all other points of interest, and only use restrictions in extreme situations and in very sensitive areas.

Provide access to Comb Wash, Comb Ridge, and the pioneer ascent of that ridge known as San Juan Hill for extended family groups and youth pioneer treks to explore, connect with their ancestral histories, and experience the challenges of the pioneers in settling this area. Allowable uses could include handcart, wagon wheel, and ATV treks.

Consider the impacts of geocaching if it is allowed in or near cultural sites, and limiting geocaching to certain zones within the BENM.

Camping

Keep areas open for dispersed camping; provide for more dispersed camping with sufficient access for large, A Class RVs.

Establish human waste carry-out system and fire pan requirements in designated high-use areas.

Increase the price of the campground in Indian Creek, and add more pit toilets, more trash receptacles, and more public information on Leave No Trace ethics in the most heavily populated areas.

Turn the camping area at the top of Butler Wash into a more formal campground to control litter and provide better visitor services.

Provide additional restrooms at Superbowl and Cottonwood Campgrounds.

Develop limited new camping development in the Indian Creek Corridor. Comments stated that it would be beneficial to have some designated camping for RVs and tents and suggested the most logical place would be the Cottonwood Campground because the campsites there are large, and if designated, could accommodate more people.

Provide adequate pull outs for dispersed camping along road networks.

Develop a new campground along Elk Ridge Road, between the Sparks Wall and the Prow, or near that area.

Restrict development of recreation facilities to maintain scenic quality of the Monument, solitude and open lands character of the canyon.

Provide primitive camping in “established” sites with no RVs and encounter fewer OHVs.

Consider what future campground needs may be necessary and determine whether existing group sites should be expanded. Provide for a range of camping experiences throughout the BENM, while clustering the bulk of camping at specific locations (i.e., Super Bowl and Creek Pasture campgrounds) to protect the undeveloped character of the corridor.

Prohibit camping in alcoves and archaeological sites.

Consider requiring firepans in certain zones, like the existing regulations in the Comb Ridge RMZ. Designated campsites would benefit from metal fire rings. This would reduce the likelihood that a visitor will create a fire ring out of cultural materials, like room blocks from an ancient structure.

Reconsider the “dead and down” campfire wood collection policy.

Provide permitted and non-permitted backpacking opportunities based on RMZs throughout the Monument. Popular backpacking trailheads with daily limitations should be maintained. Consider whether some canyons should be removed from the online permitting process and only be available for in-person pickup so as to increase educational opportunities regarding cultural resource protection. Backpacking permits should reinforce regulations like no camping in alcoves. To increase backpacking education, the Cedar Mesa backcountry visitor video should be made available online.

Climbing

Work with the Access Fund to draft language that protects climbing routes and access.

Continue the existing rock climbing fixed anchor policy.

Include a long-term maintenance strategy for fixed anchors on climbing routes as part of the recreation infrastructure management plan. The Salt Lake Climbers Alliance offered its expertise in developing this aspect of the recreation infrastructure management plan. This plan should consider parking locations and capacity for popular climbing access trailheads.

Consider a regulation prohibiting climbing near a cultural site to minimize impacts on cultural resources, and reaffirm the rule that the use of climbing equipment to access cultural sites is prohibited unless permitted.

Provide free and undeveloped camping experiences at dispersed sites in the corridor. Developed camping fees should be commensurate with similar campgrounds in the area. Any fees collected at campsites should be kept within the Monument for maintenance of these facilities and recreation infrastructure investments.

Casual and Permitted Use

Group Sizes

Restrict the size of all visitor groups to 12 people, per current regulations, with no exemptions.

Restrict group size to six on over-visited sites on Comb Ridge.

Consider reducing the maximum group size for backcountry permits from 20 to approximately eight, because large groups are noisy and adversely impact the environment. However, do not reduce the total number of persons that can visit backcountry areas, just reduce the maximum group size.

Maintain existing group size limitations. The best way to improve the quality of recreation is to emphasize and enforce a strong Leave No Trace ethic.

Do not set arbitrary group size limitations except in critical situations. In some cases, group size limitations restrict visitor opportunities without actually providing the intended resource protection.

Continue allowing larger group sizes in Sand Island campground, which is a tremendous educational area for people visiting Bears Ears.

Allow access in the San Juan Hill area, and allow handcarts on existing roads, as well as provide an opportunity to occasionally have a large group of 250-300 people visit San Juan Hill at the same time.

Do not allow any large group of people to congregate in the Monument (e.g. LDS church holds pioneer re-enactments).

Special Recreation Permits

Manage the number of visitors to maintain the current recreational experiences, possibly through the use of a permit system. Additional visitor-use studies might be useful to identify thresholds and limit the number of people that can use areas at one time.

Allow large group permits for hunting groups.

Limit attendance at Moon House to 20 people per day.

Require permits to visit the Doll House site so that individuals must go through Kane Gulch or Edge of the Cedars, and so that they may be educated on the driving conditions and fragile nature of the site.

Require Special Recreation Permits (SRPs) for all groups, regardless of whether they are commercial or educational, including the Hole in the Rock groups.

No size exemptions should be granted to SRPs, which currently limit group sizes to 12 people.

Adopt unambiguous, protective criteria for issuance of SRPs to effectively manage the increase in commercial and competitive group activities that can have a significant impact on the lands. Recommend classifying SRPs into four distinct classes, ranging from least intensive to most intensive, based on specific factors such as type of equipment, size of area used, number of participants, etc.

Establish reasonable and set values for SRPs. Recreationists should know what the costs of permits will be prior to or while applying for permits, particularly since most non-profit organizations cannot budget for unknown expenses.

Distribute permits fairly; do not allow one group to reserve all the advance permitted slots at once.

Keep permit system in place for heavily used areas such as Moon House, etc. and consider establishing a permit system for the Citadel, Fish and Owl Creeks, Mule Canyon, and Arch Canyon.

Allow permits for large groups of 25 to 30 to facilitate youth pioneer tracks and other reenactments in some of these areas to provide a way to experience the historical, cultural, traditional and religious values of the area.

Other

Do not allow competitive events in the BENM.

Develop a reservation system for camping and climbing.

Charge hiking and backpacking fees.

Consider a yearly pass that could tie into supporting local search and rescue services and/or resources and could be purchased by locals. Install self-service fee kiosks for day-use, such as those on Cedar Mesa, where both Comb Wash and Butler Wash roads meet with Utah State Route 95 and U.S. Highway 163. Another fee kiosk could be considered at Comb Wash before going down to the river and up to Arch Canyon.

Allow locals to access lands within the boundaries without fees.

Prioritize having a local tour company for guided tours.

Use technology to monitor overused areas.

Consider the impacts of geocaching if it is allowed in or near cultural sites, and should limiting geocaching to certain zones within the BENM.

Staffing and Enforcement

Provide more staff. Kane Gulch Ranger Station lacks adequate hours to provide full assistance to the growing number of visitors. Volunteers or paid rangers could serve non-law enforcement roles by checking/making sure that recreationists have adequate water, maps, and verify that they know where they are going. They could also patrol the frequented hiking and canyoneering areas and provide assistance.

Increase public land staffing in the field (provide more rangers out on the land, talking with and giving citations). Shash Jaá could have rangers that are archaeologists, or archaeologists that are rangers, with the purpose of contacting and educating visitors in a cordial, friendly way. The mouth of Arch Canyon would be an ideal location for rangers or law enforcement officers to curtail looting. Add additional law enforcement at Indian Creek. Currently, WAG bags are encouraged but not enforced; so there needs to be more enforcement or more education because existing strategies obviously are not effective.

Increase the number of BLM staff on-site in the most highly visited areas, i.e., Mule Canyon, Moon House, and South Butler Wash Road, to monitor use and educate visitors on how to visit sites with minimal impact.

A hiking interpretive ranger position would be a great spring/fall internship or seasonal job for young Native Americans.

Education and Interpretation and Signage

Education and Interpretation

Create a digital app/map with updated Monument website and paper maps directing visitors to established campgrounds (e.g., Sand Island, Goosenecks, and those that exist in surrounding towns) and already hardened frontcountry sites (e.g., Butler Wash Indian site, Mule Canyon, Sand

Island, and other similar attractions) to provide information on camping while minimizing impact to cultural resources. A current list of local outfitters should be included in BLM informational products.

Create an education program to inform visitors about their impact on the resources in the Monument, and how to experience the area with minimum impact. Provide visitors with written guidelines for minimal impact visitation.

Add additional facilities in the Indian Creek area, as well as a visitor center/ranger station or educational/interpretive materials that would not only educate people about the area but provide an alternative activity when weather or conditions are not conducive for climbing.

Require commercial or other organized groups to watch a short film before they set out to camp, like Kane Gulch requires for permitted backpackers, and make the film available on a BLM app and in all regional visitor centers.

Strive to work with all current regional visitors' centers, including The Bluff Fort, about directing visitors to campsites appropriate to group size and vehicle type, emphasizing safety, water availability, archaeological site etiquette, and pack it in/pack it out requirements.

Guided tours should focus on education, teaching guests about the unique natural history of the area and including geology, botany, hydrology, paleontology and Native American history.

Post information posted around the Monument and in pamphlets, about who to contact when a site appears to be damaged or looted, and examples of what that looks like.

Develop visitor centers in Bluff and Blanding instead of in the BENM.

Signage

Place prominent signs at the Monument boundaries to direct visitors to the most public sites, and stress basic rules prohibiting off-road vehicles and the gathering of artifacts.

Provide more signs on the Monument. It is important to preserve the scientific interests and promote the educational values for future generations of young scientists to study the effects of conservation and earth's sustainability.

Provide more signage for safety, similar to the new signage at the Visitor Center.

Avoid sign proliferation at all costs to maintain the natural beauty and wildness of the area. Pursue a formal strategy of minimal signage, and limit signs to main "entrances" along the highways, and to a few self-service permit kiosks.

Use signage judiciously to help to reduce the number of people entering certain areas.

Improve the quality of the BLM roads and trails maps through better labelling using County road numbers and other identifying marks. Maps should be of the scale of other BLM maps of the area to be easier to compare the maps (see Trails and Travel Management comments in this appendix).

Consult with the Bears Ears Commission to ensure that any interpretive signs also reflect Tribal expertise and traditional and historical knowledge.

Provide better signage for where biking is and is not allowed to promote a culture of responsible bike riding.

Funding and Stewardship

Comments stated that the MMPs should be appropriately funded so they can address current and future needs. Priorities included increased staffing, hardened campsites and toilets, trails, educational outreach and interpretative programs, tools to help improve cultural and national resources, and monitoring. Comments regarding funding sources, volunteer efforts, or site stewardship are summarized below.

- The BLM should expedite the process of allowing volunteers to provide assistance. Organizations enjoy historical sites, on BLM lands, such as old cabins, mining sites, and other like places, and could help maintain these sites. In some cases, volunteer work could provide for at least short-term preservation of these sites.
- The Science Institution should support the Monument and science in the community, including being available for local school children, college classes, scientific work done on the Monument, and summer programs.
- The BLM should work with Access Fund and local climbers to continue stewarding climbing areas and approach trails, protecting cultural resources, and maintaining Indian Creek campgrounds and toilets.
- The BLM should partner with State and local governments as well as OHV groups in lieu of user fees and grants like the Recreational Trails Program. If user fees become necessary, they should not apply to OHV riders travelling through either unit of the BENM unless the revenue is used specifically to maintain or enhance OHV trails within the Monument.
- Non-governmental organizations such as the Access Fund, Rocky Mountain Field Institute, American Alpine Club, and others, along with partnerships with the outdoor industry companies such as with Petzl, Black Diamond, Patagonia, and others, have provided the funding and expertise to provide for the management and stewardship of the Indian Creek Corridor.
- The BLM should also consider allowing organizations that provide numerous public land management volunteer hours (from general upkeep, installation and maintenance of trail signs, and other activities) to receive some kind of “payment in lieu of services” for permit costs.
- Support the Edge of the Cedars Museum in Blanding, a place for visitor contact and information.
- Support the Friends of Cedar Mesa Visitors Center, which is being established by Friends of Cedar Mesa in Bluff, and which hosts an Ambassadors Program and the Site Stewardship Program.

Other

Allow all types of hunting throughout the BENM. Commenters stated that hunting and recreational shooting are currently allowed throughout the Planning Area and support maintaining the same level of access and opportunity in the MMPs, as well as the continued use of traditional ammunition for hunting and shooting activities.

Allow hunting only where appropriate.

BASELINE CONDITIONS/AFFECTED ENVIRONMENT

Comments provided the following reference to consult for the MMPs:

- Utah State University's Institute for Outdoor Recreation and Tourism (IORT) Spring 2013 survey of recreation visitors to the Indian Creek corridor, in collaboration with CRC scientists.

Comments also stated that baseline studies should include the following:

- Science-based planning using monitoring, traffic counters, etc.
- Site-specific studies and analyses of OHV recreation
- Data and studies to support the reasons for closing motorized opportunities
- Visitor use surveys

IMPACT ANALYSIS

Comments stated that the MMPs/EIS should analyze the following:

- Maintenance, funding, and gas tax issues, because if motorized uses are removed from the Monument, then motor-related tax funds should not be used in the area and also that motorized funds used previously in the area should be returned for use on other motorized projects.
- Impacts of a "dead and down" collection policy: this can cause direct impacts to cultural resources, like when historic hogans have been torn down in the Comb Ridge and Butler Wash areas for use as firewood.
- Impacts from target shooting.
- How to minimize recreation impacts to the area's cultural sites if they continue to allow larger group sizes.

Trails and Travel Management

GENERAL CONCERNS

Comments noted that National Conservation Lands policy requires designation of roads only when it is required for public health and safety, it is necessary for the exercise of valid existing rights, it minimizes impacts to fragile resources, or it further the purposes for which an area was designated. These roads constitute the "minimum road network" necessary for protection of the values for which the unit was designated. Comments stated that the BENM's objects and values can be adversely affected by motorized and mechanized travel, and suggested that the BLM limit these uses within the Monument to protect the resources and provide opportunities for quiet, backcountry recreation experiences.

Comments stated that a complete and detailed transportation network is necessary for the local County to provide law enforcement, emergency response, and rescue operations, as well as everyday personal and business needs of the citizens of the County in which the subject lands are located. Commenters suggested that visitors to the BENM may not be physically prepared or educated about the climate or terrain and could become lost or injured, which could lead to fatalities; an accessible road system could save lives as well as provide accessible routes for viewing the Monument.

OHV Use Areas

Comments stated that Federal regulation requires the BLM to designate all public lands as either open, limited, or closed to OHVs and suggested a “limited” designation provides the BLM with the opportunity to protect critical objects at the implementation planning stage and would also allow a full range of alternatives to be analyzed when the travel management plans are developed.

Comments stated that because of the breadth of the current network of roads available for OHV use, there is no need to increase that network within Monument boundaries. Comments noted that the area has challenges with OHVs going outside of established areas for motorized recreation. Comments also noted that RVs have damaged the lands by creating their own roads or paths.

Comment also expressed concern about OHV recreational use crossing illegally into the BENM and causing adverse resource impacts. Some comments stated that motorized vehicles should be banned entirely; other comments noted concern about off-road vehicle use in Arch Canyon, citing issues with resulting dust on vegetation and engine oil pollution in Arch Creek. Comments also expressed concern about impacts to sensitive resources in Davis and Lavender Canyons.

Comments in support of motorized recreation stated that the land should be available for a variety of activities, including riding OHVs, bikes, motorcycles, and other RVs. Comments noted that roughly 500,000 OHV recreationists from Utah and adjoining states regularly visit the Monticello and BENM areas. Comments also noted that there are more miles of non-motorized trails available than there are miles of motorized trails. Comments requested that the BLM return to their original mission of “Multiple Use and Sustained Yield” because the “preserve and protect” mission excludes certain user groups. Comments stated that San Juan County is developing an ATV system that includes BENM lands. Comments requested larger trails and stated that trails should not be limited to vehicles that are 50 inches wide or less.

Commenters suggested that restrictions on travel or motorized vehicles will be difficult to enforce within Shash Jaá Unit, because coherent management and oversight of the unit between Federal, State, and County entities will be a central challenge.

Comments specifically cited a management issue in the Cottonwood Falls area north of Utah State Route 95 due to potential impacts from camping and driving OHVs to Tower House and Arch Canyon.

Travel Management Plan

Some comments requested that the BLM develop a travel management plan to help manage visitation; other comments questioned whether resource conditions have changed enough to warrant any significant changes to the travel plan. Several comments stated that travel management planning should be put on hold until plan implementation or until intensive-level on the ground cultural resource surveys are conducted in the BENM to ensure all areas have been appropriately documented (see Cultural Resources section of this appendix). Comments also stated that the BLM must undertake Section 106 review prior to the designations of routes.

Some comments requested that the BLM consider non-motorized trail system in select frontcountry zones; other comments expressed concern about past motorized closure actions used to create non-motorized trail systems.

Comments stated that transportation and access routes to and across Federal lands, vested under RS 2477, must be duly honored and protected for the movement of people, goods, and services within a county.

Comments noted closure and decommissioning of roads and trails, without replacement of those routes, concentrates use onto the few designated routes left open, resulting in degradation of those routes and over use of the surrounding areas. Comments stated that the BLM should consider a reasonable level of motorized trail opportunities to meet current and future needs of motorized recreational enthusiasts.

Comments also noted that road closures may affect farmers and ranchers accessing springs or ponds for cattle (see Livestock Grazing comments in this appendix). Comments noted concerns about retaining access for local farmers and ranchers who use public roads to reach farms and ranches on private lands, as well as providing alternative travel routes during bad weather.

Comments noted that SPEAR partnered with San Juan County to develop an 400-mile ATV trail system crossing much of San Juan County. This system was developed not only to meet the increasing needs of the local people but also to meet the rapid growth of visitors to the County. All the roads and trails identified as ATV routes on SPEAR maps are designated by both the BLM and the USFS as open; comments stated that none of them should be eliminated during this planning process.

Comments also noted that future proposals for additional routes or trails are subject to site-specific NEPA, the minimization criteria, and all applicable other laws and regulations.

Aviation

Comments in support of backcountry airstrips were opposed to closing of any airstrips that could provide access to pilots, search and rescue teams, fire-fighting aircraft, and other emergency aircraft. Comments also discussed how backcountry airstrip usage can lower impacts to the surrounding area and how impacts are lower overall than those from ATVs and other motorized land vehicles. Comments noted aviation can provide access to those with disabilities to difficult reach areas in the BENM. Comments also noted that the Utah Back Country Pilots Association has provided volunteer efforts to help keep backcountry airstrips operational.

ALTERNATIVES/SUGGESTED MANAGEMENT

Area Designations

Permanently close Arch Canyon, Lavender Canyon, and Davis Canyon to motorized vehicle use to ensure protection of rich archeological and geologic/topographic values in those canyons and prohibit easy access to culturally rich resources in the upper end of Salt Creek and adjacent areas, to promote quiet types of recreation, and for the health of the creeks and riparian ecosystems.

Assign limited or open area designations to the entire Monument to allow flexibility in implementation-level planning.

Restrict OHV use on Butler and Comb Wash Roads and the roads to Mule and Arch Canyons.

Ban all motorized vehicles within the BENM.

Institute a strict prohibition against off-road vehicles or any other motor vehicle in the area of Comb Ridge consisting of the entire area between Butler Wash Road (Utah State Route 262) on the east, Utah State Route 235 on the west, and U.S. Highway 163 on the south running all the way north as far as Comb Ridge goes.

Restrict off-road vehicle use by limiting motorized vehicle in the BENM to street-licensed vehicles.

Provide access to Comb Wash and Comb Ridge for ATV treks (see Recreation and Visitor Services comments in this appendix).

Designate small areas in both BENM units as open to OHV use to alleviate motorized travel congestion and noise by isolating visitors who are looking for that type of off-road vehicle experience.

Enforce and manage existing designations.

General Use/Public Access

Cancel the annual Jeep Jamboree which takes place in Arch Canyon.

Provide for access over Monument lands to State and private inholdings.

Designate management zones for the BENM that emphasize certain types of management and experiences for the Monument to help guide a comprehensive travel and transportation management process, as well as other management decisions and prescriptions in the MMPs.

Manage traffic in high use areas. Increased traffic could bring stress to local infrastructure within the Monument; proper funding should be given to address this.

Provide for the continued operation, maintenance, and construction of infrastructure necessary for communication and transport of goods and services to and through the Monument.

Mechanized Use

Require bicycles to comply with the same travel rules as motorized vehicles.

Maintain bike access on existing designated routes.

Consider the removal of all wheeled vehicles from any off-road activity, permitted or otherwise. It has been my experience that all wheeled vehicles, whether motorized or non-motorized, such as handcarts, bicycles, or even Conestoga wagons, cause the same impact as a motorcycle or ATV when driven off road. The BLM's 2008 *Monticello Field Office Record of Decision and Approved Resource Management Plan* allowed bicycles and other mechanized vehicles on the lands around Bluff, and as a result, whenever bicycles have used the area, they have caused damage, unsightly scarring, and erosion issues.

Trails and Roads

Analyze a minimum road network alternative and choose it as the best option consistent with BLM policy and for the protection of Monument objects.

Limit roads to the minimum network necessary for the management of the BENM.

Leave travel management plans as they are and leave all current roads and trail systems in place.

Prohibit new designated routes.

Train all the roads and trails identified as part of the SPEAR San Juan County ATV trail system.

Do not change the existing travel management plans to increase OHV routes, and in fact, reduce OHV designated routes if access is creating safety issues, impacts to cultural resources, and/or user conflicts.

Recognize and maintain the use of existing travel plans, and provide for modifications to these plans and transportation systems to meet the needs of current and future users.

Inventory all existing roads for cultural resources present within or adjacent to the right-of-way, with the goal to mitigate or reroute where possible.

Allow continued use of pre-existing roads and trails for accessing cultural and work areas. Maintain existing trails and roads.

Limit the maintenance of dirt roads and do not pave roads.

Do not develop new roads, because they lead to more development and are detrimental to wildlife species.

Do not develop new roads or trails in ACECs or WSAs.

Maintain the current "unimproved" Butler and Comb Wash Roads for high-clearance, 4WD vehicles to discourage increased traffic volume.

Close routes receiving little use.

Establish a well-marked road to the Doll House site to reduce potential resource damage from visitors trying to find the site (see Cultural Resources and Recreation and Visitor Services comments in this appendix).

Close resource roads near cultural sites (see Cultural Resources comments in this appendix).

Aggressively block illegal routes, including trails and streambeds.

Block and revegetate illegally created roads. This is especially important in pinyon-juniper settings where firewood is being cut and gathered.

Non-Motorized or Mechanized Trails

Designate non-motorized trails to enable and encourage primitive and quiet recreation experiences, prioritize the protection of Monument objects, and identify this system as a separate network in the MMPs.

Construct or reconstruct new and old single-track trails providing access to historical sites and destinations with scenic values, with challenges suitable to hikers, equestrians, bicyclists, and wheelchairs.

Consider climbing access trails throughout the Indian Creek area for long-term maintenance and sustainability.

Motorized Trails

Do not close off or convert full-size 4WD roads to ATV trails. Keep trails out of riparian areas wherever possible. Where this is not possible, trails should be designed to minimize impacts by placing trails away from streams, using soil stabilization structures to prevent erosion, and planting native plants in areas where vegetation has been removed.

The following routes are key recreational experiences for OHV riders because they are scenic, relatively primitive, challenging, flowing, and varied; provide access to enjoy other resources of the public lands, such as cultural sites, wildlife, and geologic features; and provide connectivity with routes outside the BENM to make loops:

- Indian Creek Unit
 - Bridger Jack Mesa 4WD road
 - North Cottonwood Creek graded road
 - Heifer Mesa 4WD road
 - Shay Mesa 4WD road
 - Shay Mountain Trail (north end of motorized single-track)
 - Indian Creek Trail (north end of motorized single-track)
- Shash Jaá Unit
 - Texas Flat 4WD road
 - Arch Canyon 4WD road
 - Little Baullie Mesa 4WD road
 - Comb Ridge Dugway 4WD road
 - Snow Flat graded road
 - Comb Wash graded road
 - Butler Wash graded road
 - River House Ruin 4WD road

Comments suggested the following additional motorized trails/roads:

- **Shash Jaá:** The closed road in the Manti-La Sal National Forest, which extends from Section 21, Township 36 South, Range 21 East to Texas Flat on the BLM in Section 20, Township 37 South, Range 20 East. This section of road/trail is labeled 003 on the Forest Travel Map. The proposed route drops off the mesa top into Upper Rogers Flat and then proceeds around the head of Texas Canyon and proceeds south and east to Texas Flat. After reaching the west rim of Arch Canyon, this route gives an opportunity to go to the scenic lookout point that overlooks the Cathedral Arch in Arch Canyon. It also provides an additional route to go to Bear Cave just below the west rim of Arch Canyon and to view Texas Butte in Arch Canyon. In addition, the existing trail 467 that leaves Trail 003 in Upper Rogers Flat leads out onto Low Rogers Flat on the mesa top between Texas and Arch Canyon where there is another scenic opportunity to look down into the two canyons. It would take minimal work to make these routes usable again for motorized vehicles.
- **Shash Jaá:** Retain the existing road up Arch Canyon from its mouth at the Arch Canyon trail head to the forest boundary in Arch Canyon. Consider extending the route approximately 0.5 mile up the canyon so those with disabilities may have the opportunity to view Angel Arch.
- **Shash Jaá:** An old road that drops into the North Fork of Whisker Draw and goes south across the South Fork of Whiskers draw and continues southerly into Trail Canyon and eventually to Comb Wash. The road is located approximately 2 miles west of the forest boundary on Forest Road 092, in Section 10, Township 36 South, Range 20 East. This route could serve as a loop route for other existing trails such as the old U-95 road up the Comb Ridge to the South Cottonwood drainage.

- **Indian Creek Unit:** An existing road that takes off just south of Utah State Route 211, approximately 200 yards south of Newspaper Rock that goes up onto Shay Mesa and ends just west of Titus Canyon at the boundary line between the National Forest and the new Indian Creek Unit of the BENM. From there, the road ties into a trail labeled 449 on the forest travel map and drops below the Shay Mesa Rim and ties to a trail labelled 429 on the Forest Travel Map. Trail 429 runs south to Hop Creek and then west across Vega Creek to the old USFS Guard Sandstone Guard Station in Vega Creek. Trail 429 also runs north from the junction with 449 to the boundary line between the National Forest and the Monument where the trail is then shown as a road that goes down the east side of North Cottonwood Creek. A currently illegal motorized trail runs along trail 449 from the top of Shay Mesa down to trail 429. This trail could be used for motorized RVs and be part of a loop route that could tie the Indian Creek drainage to the North Cottonwood and Vega drainages.

Route Signage

Develop route signage planning in coordination with the Utah Department of Transportation (UDOT) and the County. Sign placement is resulting in damage to cultural resources near access areas to other cultural areas. An example of poor placement is the Butler Wash Indian Ruins sign on Utah State Route 95 east of the Butler Wash Ruins Overlook parking area, resulting in visitors creating an impromptu parking lot next to the highway and unintentionally accessing two cultural sites.

Coordinate with San Juan County on road signage and road number labels.

Improve the quality of the BLM roads and trails maps through better labelling using County road numbers and other identifying marks. Maps should be of the scale of other BLM maps of the area to be easier to compare the maps (see Recreation and Visitor Services section of this appendix).

Install signs to warn travelers about adverse weather conditions, especially on the road leading up to Bears Ears, over Elk Ridge, and down to Cottonwood Wash.

Do not include the RS 2477 San Juan County Class D road located north of the Comb Ridge Long Fingers site climbing up into the Comb in any official BLM map. Negotiate with San Juan County to close and remove it. The road passes right through a surface archaeological site (see Trails and Travel Management section of this appendix).

Improve route signage on designated open and closed routes. Post signage with posted regulations at the entrances to these routes where indirect effects will impact cultural sites and illegal off-road activities.

Aviation

Recognize aviation as a valid mode of transportation access within the BENM and allow for continued use of all backcountry airstrips or historical primitive landing areas, including Dry Fork Canyon and Mule Canyon airstrips (see Recreation and Visitor Services section of this appendix).

Consider creating new designated landing areas as a means of providing public access to remote areas with recreation potential, while protecting fragile environments from further degradation by wheeled vehicles.

Set use guidelines for the backcountry airstrips.

Incorporate language similar to that contained in the Grand Junction RMP:

Backcountry Airstrips

There are a number of locations throughout the GJFO that are commonly known and consistently used for aircraft landing and departure activities that, through such casual use, have evolved into backcountry airstrips (the definition contained in Section 345 of Public Law 106-914, the Interior and Related Agencies Appropriation Act of 2001). In accordance with that law, require full public notice, consultation with local and state government officials, the Federal Aviation Administration (FAA), and compliance with all applicable laws, including NEPA, when considering any closure of an aircraft landing strip.

In addition to compliance with applicable aviation regulations, backcountry airstrips will be designated and managed the same as travel routes for other forms of transportation. As such, management of backcountry airstrips would conform to all decisions, including those regarding route construction and maintenance, outlined in this travel management plan.

Public Outreach/Stewardship

Allow non-government organizations to volunteer to aid in upkeep, installation, and maintenance of BLM trail signage, because signage on BLM roads and trails is often used for target-practice and otherwise abused.

Seek Recreational Trails Program grants to fund trail creation and maintenance.

BASELINE CONDITIONS/AFFECTED ENVIRONMENT

Comments recommended the following publications to consult during trails and travel management planning:

- Hedquist, Saul L., Lee Anne Ellison, and Andy Laurenzi. 2014. Public Lands and Cultural Resource Protection: A Case Study of Unauthorized Damage to Archaeological Sites on the Tonto National Forest, Arizona. *Advances in Archaeological Practice* 2(4):298–310.
- Levi, Daniel and Sara Kocher. 2012. Perception of Sacredness at Heritage Religious Sites. *Environment and Behavior* 45(7):912–930.
- Plog, Fred. 1978. *An Analytical Approach to Cultural Resource Management: The Little Colorado Planning Unit*, Arizona State University, Anthropological Research Papers No. 13, Tempe.
- Spangler, Jerry D, Shannon Arnold, and Joel Boomgarden, 2006. *Chasing Ghosts: An Analysis of Vandalism and Site Degradation in Range Creek Canyon, Utah*. Utah Museum of Natural History Occasional Papers 2006-1. Available at: http://www.cparch.org/docs/Research_Library/Range_Creek_Vandalism_redacted.pdf
- BLM. 2008. *Upper Missouri River Breaks National Monument Record of Decision and Approved Resource Management Plan*. See Aviation section. Available at: [https://eplanning.blm.gov/epl-front-office/projects/lup/75546/101175/123248/UMRBNM_ROD_and_Approved_RMP_\(Part_1\)_\(December_2008\).pdf](https://eplanning.blm.gov/epl-front-office/projects/lup/75546/101175/123248/UMRBNM_ROD_and_Approved_RMP_(Part_1)_(December_2008).pdf).
- BLM. 2010. *Carrizo Plain National Monument Approved Resource Management Plan and Record of Decision*. Available at: <http://www.npshistory.com/publications/blm/carrizo-plain/rod-rmp-2010.pdf>. See section regarding motorized vehicle limitations]. Comments recommended contacting Gary Slagel, the former Upper Missouri River Breaks National Monument manager for additional information about backcountry airstrips.
- Publications and guidance on transportation planning submitted by the National Trust for Historic Preservation pertaining to Transportation Planning and NHPA Compliance.

IMPACT ANALYSIS

The comments requested the following analyses be conducted:

- Non-motorized opportunities versus motorized opportunities using variables including trail miles, costs, conditions, and number of users.
- Cumulative impacts from route proliferation, including loss of biocrust across a large area, looting and vandalism of cultural resources, and illegal woodcutting.

Lands and Realty

GENERAL CONCERNS

Acquisitions, Disposal, and Exchanges

Submissions stated that no lands within the BENM should be considered for disposal.

Comments stated that the MMPs should address the potential for exchange of State of Utah lands within Monument boundaries for Federal lands outside these boundaries. Comments with concerns about local economy and autonomy stated that the area needs the revenue that can be generated from SITLA lands. Commenters stated that any attempt to limit opportunities to SITLA lands would be a huge disservice to the future San Juan County citizens. Comments stated that the MMPs should address the potential for exchange of State of Utah lands within Monument boundaries for Federal lands outside these boundaries, with a preference for lands within San Juan County.

Commenters acknowledged a potential benefit to resource protection from a land exchange that removes SITLA inholdings from within the BENM and but stated that the exchange must be supported by FLPMA's parcel-specific analysis requirement, comply with NEPA, and comport with FLPMA's requirements that land exchanges advance the public interest and involve lands of equal value. Comments also suggested that if State lands are exchanged, the plan must allow for strong County involvement, because an exchange of acreage from San Juan County for acreage in another county could be detrimental to San Juan County's economy.

Access to Inholdings

Comments noted that the State and various private landowners have inholdings within the BENM and stated that access to State sections and private land must be preserved (see also Trails and Travel Management section of this appendix).

Trespass

Comments identified instances of trespass resulting from recreation use in Indian Creek. Comments stated that much of Indian Creek is privately owned and most of the Utah State Route 211 and County road rights-of-way are not fenced; hikers and climbers have created camping areas, new roads, and pullouts near private land, and the facilities and use are having an impact to the private land.

Land Authorizations

Comments stated that the MMPs should allow for the continued development and maintenance of power lines, pipelines, and other utility infrastructure necessary to the local community and State. Comments also stated that the MMPs/EIS should provide access to, and protection of, existing

water rights, including delivery systems such as ditches, canals, and pipelines. Comments stated that privately held water rights are separate and independent of landownership status and should be protected from encroachment or coerced acquisition.

Some comments stated that communication sites, utility rights-of-way, and road rights-of-way should not be permitted in known special status species populations. As permits are granted for these sites and rights-of-way, surveys should be completed to determine the presence of special status species in the area. If they are found, these activities should be moved to another location.

Comments regarding mineral leases are discussed in, Minerals Management section of this appendix (leasable, locatable, and salable).

Filming Permits

Comments express concern that photography, videography, and drones in the BENM may have adverse impacts on cultural, natural, visual, and auditory resources. Specific impacts mentioned include the following:

- Popularizing prohibited or discouraged activities, like entering prehistoric and historic structures and taking photographs at night by artificially lighting cliff dwellings
- Using cultural features or artifacts as tripods or staging pieces for photography and filming
- Non-permitted commercial filming
- Illegal use of UAVs (or drones) in WSAs
- Use of UAVs to discover sensitive, and normally inaccessible, cultural sites and the proliferation of this drone footage online
- Disturbance from UAVs to visitor experiences as well as animal habitat
- The accidental disclosure of cultural sites and artifacts on social media through geo-tagged photos

Comments suggested that to avoid damaging resources and compromising visitor experiences, use of UAVs (drones) should be more tightly regulated in general.

Comments about SRPs are discussed in Recreation and Visitor Services comments in this appendix. Comments about permits for woodland harvest or woodcutting are discussed in Forestry and Woodland Resources comments in this appendix.

ALTERNATIVES/SUGGESTED MANAGEMENT

Acquisitions, Disposal, and Exchanges

Identify lands for disposal to the extent allowed under FLPMA and other Federal laws.

No transfer or removal of any SITLA lands from designated National Monument area.

Consider exchanges of SITLA lands for other land within San Juan County.

Acquire a privately owned parcel immediately south of Arch Canyon and a privately owned parcel immediately north of U.S. Highway 163 on Comb Ridge or consider land exchange that would bring them into Federal ownership.

Access to Inholdings

Provide access to inholdings.

Consider less restrictive management to areas that provide access to these inholdings, so access issues can be analyzed during implementation-level planning.

Define in the MMPs an official process by which access can be obtained by the State and private landowners as future needs may arise.

Land Authorizations

Provide access to, and protection of, existing water rights and delivery systems.

Allow for the continued development and maintenance of power lines, pipelines, and other utility infrastructure necessary to the local community and State.

Trespass

Develop campground with consideration of proximity to private lands

Filming Permits

Prohibit UAVs in WSAs.

Develop clear definitions of non-commercial and commercial filming, with the former allowed in some or all zones of the BENM and the latter requiring a permit in all zones of the BENM.

Apply filming and UAC restrictions to different zones in the BENM.

Provide resources for learning about permit requirements and the permit process online and at field offices and stations.

Educate the public about impacts of UAVs.

BASELINE CONDITIONS/AFFECTED ENVIRONMENT

Comments stated that all private and SITLA parcels will need to be evaluated for cultural resources and visitor/permittee/access conflicts. Comments specifically noted the following issues:

- An inholding owned by Vicky Clark between Comb Ridge and Butler Wash, south of U.S. Highway 163, that stretches down to the river. People are already illegally crossing it from River House without permission to get to the Butler Wash Panel. This is a hugely complicated inholding involving SITLA, the Bureau of Indian Affairs, the Navajo Tribe, and the BLM, and its resolution and protection should be priority number one. There are significant archaeological sites on this property.
- The Hole in the Rock Foundation's desire to get access to San Juan Hill from U.S. Highway 163 could pose serious complications in management and liability, not to mention impact to the historic cultural resource. Hand-carts were never used historically on the Hole in the Rock trek and should not be permitted as part of proposed activities on San Juan Hill.
- Privately owned parcels immediately south of Arch Canyon and immediately north of U.S. Highway 163 on Comb Ridge.

IMPACT ANALYSIS

Analyze the impacts of photography, videography, and drones in the BENM to cultural, natural, visual, and auditory resources.

Minerals Management (leasable, locatable and salable)

GENERAL CONCERNS

Submissions included comments in support of and in opposition to mineral leasable development.

Submissions in support of leasable mineral development stated that responsible mining, oil extraction, and mineral extraction should be allowed on all public lands, including on the Shash Jaá and Indian Creek Units. Comments stated that extraction of oil, gas, uranium, and ore of all types should be allowed where mineral rights exist, and that all easements, contracts, and permits held by companies must be honored, and no restrictions other than sound environmental practices for responsible mining and extractions should be imposed. Comments specifically suggested that restrictions against surface occupancy should be eliminated, modified, or waived where reasonable.

Comments in opposition to leasable mineral development raised concerns that allowing uranium mining, coal mining, and fossil fuel drilling would directly damage the BENM and specific resources within it, would pollute and harm the ecosystem, and that associated road building would commercialize virgin areas and leave scars on the landscape. Comments also expressed concerns about visual impacts from mineral development (see Visual Resources comments in this appendix for more details). Comments stated that the release of VOCs and methane from oil and gas development would contribute to area haze and toxic air pollution. Expressed concerns specific to hydraulic fracturing included earthquake damage to archaeological sites from earthquakes and contamination of groundwater and spring habitat from the release of fracking fluids. Commenters also expressed concern that development of leased parcels often leads to reduced public access.

Concerns were raised about the wider secondary effects on the environment, including climate change, human health and safety issues, and insect damage to forests. Comments noted that BLM IM 2013-094 requires the BLM to modify uses and management to lessen impacts from drought, including activities such as minerals activities. Comments stated that the 1872 Mining Law allows oils and gas development with little to no responsibility for environmental degradation and stated that mining operations should be held to the highest standards of extraction and reclamation. Comments also expressed concern with public health issues stemming from uranium mining and processing in the area, specifically cancer (see also Public Health and Safety section of this appendix).

ALTERNATIVES/SUGGESTED MANAGEMENT

Comments offered the following management suggestions:

- Resource extraction should not be a management priority, and the BLM should restrict commercial, industrial, and extractive activities (oil and gas, mining) as much as possible.
- There should be no mining of any kind within the BENM, including coal, uranium, gas, and oil. All mining and oil leases granted in 2017 and 2018 should be revoked. All existing oil and gas leases should be suspended.
- There should be no commercial leases issued until Monument boundaries litigation is resolved.

- Oil and gas lease sales in the BENM are in contradiction of Federal trust responsibility to the Pueblo of San Felipe and should be cancelled until official consultation occurs with the Pueblo of San Felipe (see Cultural Resources comments in this appendix).
- Mining resources should be developed, and the BLM should eliminate, modify, or waive restrictions against surface occupancy wherever possible.
- Profits from resource extraction should be allocated to at least 80% all citizens of the United States, 10% to the Federal government, and 5% to the State government in which the Monument resides.
- No landscape scarring energy (e.g., coal, uranium) leases granted for mining techniques such as "mountain-topping."
- Mining operations should be held to the highest standards of extraction and reclamation. Management plans must guarantee that the full cost of repairing damage and degradation resulting from the extraction of resources must be paid by the extractors. The BLM should require bonds in advance that cover the entire future cost of reclamation/restoration. Any new development of radioactive minerals mining projects should ensure environmental commitments are met, remediation and restoration plans developed and fully funded, and liabilities are established. Land use plans should include plans for management of toxic mining-related waste and mining activities must be bonded for cleanup costs so that sites may be restored after mining, or after a toxic accident.
- Impacts from historic uranium exploration and mining within the Monument should be addressed, including the remediation of abandoned mines to avoid a Gold King Mine type of incident in our State. Reclamation of abandoned mine lands should continue as funding becomes available.
- Documentation related to mining claims and activities should be available electronically through a website without having to file a Freedom of Information Act request or go in person to a BLM field office to request them.

BASELINE CONDITIONS/AFFECTED ENVIRONMENT

Comment requested that the BLM update the Mineral Report and Reasonably Foreseeable Development Scenario (RFDS) in light of the outdated assumptions contained in prior documents. Comments stated that using prior planning documents without regard to new information and changed conditions could negatively impact literally thousands of sensitive resources.

Comments suggested examining the Utah Geological Survey's 2017 report on noting little energy potential in the BENM for the MMPs/EIS available at: <https://naturalresources.utah.gov/dnr-newsfeed/very-little-energy-potential-within-bears-ears-national-monument>.

Comments stated that the BLM should identify and evaluate historical impacts from uranium mining, including impacts from exploration drilling, such as drill holes, drill pads, disposal of drill muds, roads to facilitate exploration access, and other uranium exploration impacts. In addition, there should be an evaluation of restoration activities to remediate these impacts from the previous decades.

IMPACT ANALYSIS

Comments requested a thorough NEPA evaluation to assess the impact of mining and drilling on all migrating and local plants and animals in these protected habitats.

MITIGATION

Comments stated that the BLM should incorporate any “lessons learned” from other mining operations (e.g., coal and acid mine drainage) and make provisions of offset any damage. Some stated that bonds should be required in advance for any commercial, industrial, and extractive activities to cover the entire future cost of reclamation and restoration.

Renewable Energy

Some comments expressed support for renewable energy over fossil fuel development on public lands in general and in the BENM in particular; Other comments generally opposed any type of development project (including renewables) within the BENM, citing surface disturbance, visual disturbance, and other impacts. Comments recommended that the BLM require bonds in advance that cover the entire future cost of reclamation and restoration.

Special Designations

WILD AND SCENIC RIVERS

Comments generally identified the value of the San Juan River for recreation (e.g., rafting).

Comments stated that any Federal land management agency proposing a stream for inclusion in the Wild and Scenic Rivers System must show unequivocally that the stream contains outstandingly remarkable values on a regional scale, and that no streams or water courses should be managed “as if” they were Wild and Scenic until an official designation by Congress is made.

WILDERNESS AND WILDERNESS STUDY AREAS

General Concerns

Comments identified BENM Wilderness Areas as national treasures, with breathtaking landscapes, and full of wildlife and plant life that has evolved over long periods. Comments stated that Wilderness Areas, WSAs, and National Monuments should be preserved. Comments describing the unique wilderness characteristics within the BENM are summarized in the Lands with Wilderness Characteristics section of this appendix.

Some comments indicated that Wilderness Areas should be increased. Some comments stated that the entire Monument should be declared a Wilderness Area so that no grazing, mining, drilling, new roads, new logging, hunting, or trapping takes place on the land, which should be a place of peace for all people, wildlife, and birds alone. Comment also stated that the Monument should have been part of Canyonlands National Park and stated that White Canyon and its tributaries are renowned wilderness treasures.

Comments expressed support for continued management of WSAs “to prevent impairment and ensure continued suitability for designation as wilderness.” Comments noted that the BLM has taken the policy position that it does not designate new WSAs, but asserted that this policy should not be maintained; rather, the BLM should specifically identify potential WSAs during the planning assessment phase. Comments stated that local and regional interests do not support WSAs and the areas should be monitored for degradation.

Commenters noted that WSAs do not afford permanent and primary protection for cultural resources, because BLM policy considers cultural resource management within WSAs as a supplemental use.

Alternatives/Suggested Management

Submissions included the following suggested management actions related to designated Wilderness Areas and WSAs:

- WSA should stay closed to non-conforming uses.
- The BLM should not designate new Wilderness Areas within the Monument.
- The BLM should remove all restrictions from Wilderness Areas.
- No new roads should be developed within WSAs, and existing roads should be allowed to reclaim naturally.
- The BLM should patrol and document area conditions within WSAs.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

Comments stated that the MMP planning process provides a valuable opportunity to protect existing resources through the creation of new ACECs and noted that the obligations of the BLM with regard to ACECs under FLPMA remain in place in conjunction with the objective to protect Monument values and objects. Comments stated that the Secretary of the Interior is required to give priority to ACEC designation and protection and suggested that the BLM should immediately conduct a review of potential ACECs and engage the public in soliciting proposals for ACEC designations.

Comments stated that the BLM should also prioritize designation and protection of ACECs within the BENM even though the BLM is proposing to manage the BENM to protect its objects and values. Comments suggested that layering designations to protect the meaning of both designations is consistent with applicable law and policy and common in BLM land use planning, including for the National Conservation Lands (for example Perry Mesa and Larry Canyon ACECs in the Agua Fria National Monument as well as High Rock Canyon and Soldiers Meadows ACECs in the Black Rock Desert—High Rock Canyon Emigrant Trails National Conservation Area).

Other submissions cautioned that any land areas proposed for ACEC designation must adhere fully to the existing criteria for such designation as described in BLM Manual 1613, and must show unequivocally that the resource values under consideration are in imminent danger of irreparable damage and show where existing laws, policies, and guidelines are failing to protect the resource value. Any ACEC proposal must be limited to the geographical extent of the specific resource value needing protection. Some comments doubted the BLM's ability to effectively manage ACECs.

ROADLESS AREAS

Comments stated that the land use planning process improperly considers roadless areas, and effectively converts multiple-use lands to de facto wilderness lands, which circumvents congressional law and the wilderness designation process.

ALTERNATIVES/SUGGESTED MANAGEMENT

Submissions included the following suggested management actions related to ACECs:

- The BLM should retain existing ACECs and solicit public input for consideration of additional ACECs where special management is required.
- The BLM should consider layering designations for appropriate protections.

- The Comb Ridge area should be designated as an ACEC.
- The BLM should consider landscape-scale ACECs that help connect important habitat within the Monument.
- The BLM should include specific management prescriptions for each designated ACEC that will protect the highlighted values, such as mineral withdrawal and travel management and route designations, under at least one alternative. Setting out more detailed management prescriptions in the MMPs will ensure protection of the ACEC values and can obviate the need for additional planning activities.
- The BLM should designate the entire BENM as an ACEC, with appropriate management to protect the identified resources, systems, and processes, including no surface occupancy stipulations and requirements limiting vehicle use to existing designated roads and trails within the entire boundary.
- ACECs should also be managed as ERMA to complement conservation objectives.

Social and Economic Considerations

SOCIOECONOMICS

General Concerns

Social Concerns

Comments identified the value of Native American culture, spirituality, and history of the area and stated that this value is critical to understanding how the BENM should be managed (see Native American Concerns and Issues section in this appendix). Comments stated that they visit the Bears Ears area because it is a pristine, “untouched” place (see also Lands with Wilderness Characteristics section in this appendix). Comments stated that public places are needed for all Americans to enjoy solitude and peace. Comments also identified livestock grazing as a key driver of the rural/agrarian character of the area.

Economic Benefits of Recreation and Tourism

Comments in support of area conservation stated that intact lands serve as an economic engine for the area benefiting all people in the area. Comments cited National Park Service visitation statistics, which state that visitors are coming to experience the entire mosaic of spectacular public lands across the State, including the BENM. Comments stated that increased protection of public lands results in sustainable economic growth through long-term local business opportunities that benefit communities and the State. Comments recommended that the BLM protect the resources of the BENM, including air and water quality, cultural resources, dark night skies, natural sounds, and viewsheds.

Comments suggested that tourism is more beneficial to local economies than resource extraction and stated that southern Utah lands are a global destination for outdoor recreational activities. Comments included anecdotal statements about money spent while visiting the area for vacations and other recreation activities, as well as statements from local business owners about the economic benefits to local communities from recreational tourism and the National Monument designation. Comments noted that hunting and fishing are a part of Utah’s outdoor industry, which supports roughly 110,000 direct jobs across the State and provides a steady, reliable stream of tax revenue for all Utahans. Comments also specifically noted that motorized access plays a key role recreational spending. Comments also stated that recreational tourism results in better land stewardship through volunteer opportunities.

Comments suggested that impacting the natural landscape with oil industry development would noticeably reduce tourism to the area and in Utah overall, having a greater negative economic effect than the revenues generated by potential oil development. Comments also suggested that resource extraction outside the adjusted boundaries would irrevocably damage area values and tourism would decline. Comments expressed concern that a decline in tourism could result in a decline in the local medical care available in Monticello. Comments also expressed concern about human health and safety impacts and potential for area contamination from extractive activities, and suggested jobs in those industries could result in additional health care needs and costs for those who take jobs in those industries. Comments acknowledged the need for and importance of having jobs available, but stated that there are better, cleaner ways to create jobs than by extracting resources and impacting the natural environment.

Comments noted that night sky tourism (discussed in more detail in Visual Resources section of this appendix) could provide additional visitors during off-peak seasons.

Economic Benefits of Resource Development

Comments in support of mineral development stated that the economy of San Juan County should be a major concern in the development of the Monument. Comments stated that the economy of San Juan County was seriously affected when the Monument eliminated the use of the mineral resources in that area.

Comments noted that resource development brings taxable revenues into local businesses, which then benefits to the local economy. Comments suggested that the development of the Monument should now help recover that lost economy.

Comments in support of grazing identified it as a key driver of the economy of the area (see Livestock Grazing section of this appendix).

Comments also noted that any use allowed on National Monument property before the designation, e.g., grazing and logging, is retained, and stated that land can be protected without dramatic economic downfall and change in accessibility.

Economic Benefits of Federal Ownership

Comments stated that lands managed by the Federal entities contribute \$646 billion per year in economic stimulus from recreation on public lands and 6.1 million jobs. Comments also stated that “returning lands to the states” does not necessarily benefit the economy within the states (see Lands and Realty section of this appendix), because most states are unable to properly manage the lands that would be transferred to them and may be forced to sell the land to developers or gas and oil companies.

ALTERNATIVES/SUGGESTED MANAGEMENT

Submissions included the following suggested management actions related to socioeconomics:

- Increase protection of public lands to promote long-term sustainable economic growth.
- Management should aim for economic diversification and sustainability; promoting experiential recreation is one tool to achieve this (e.g., tours of archaeological and historic sites).

BASELINE CONDITIONS/AFFECTED ENVIRONMENT

Comments provided the following references to consult for the MMPs:

- A study from Missouri State University indicating that dark skies over the Colorado Plateau are estimated to generate (2013 to 2023) approximately \$2.5 billion in incremental tourism revenue and approximately 50,000 incremental jobs.
- Research from the Department of Commerce, prepared at the request of the Department of the Interior Secretary Sally Jewel in 2012, addressing the importance of recreational spending in the gross domestic product. This research also clearly identified the important role that motorized access plays in recreational spending, and that all recreation contributed more than \$521.5 million to the Utah economy.
- Studies from Headwaters Economics (available at: <https://headwaterseconomics.org/>), which show that local economies grew following creation of National Monuments.
- Visitation data from the National Park Service stating that 14.4 million people visited Utah's national parks in 2016, increasing to 15.2 million in 2017
- Research from the Outdoor Industry Foundation, indicating that in 2016, visitation translated into a contribution of \$12.3 billion to Utah's economy.

Other comments referenced a recent government study concluding that tourism brings more economic benefit to local economies than resource extraction but did not supply the name of the study.

IMPACT ANALYSIS

Comments regarding suggested approaches to impact analysis are summarized below.

- The BLM should conduct the socioeconomic analysis using the approach set out in TWS's *Socio-Economic Framework for Public Land Management Planning: Indicators for the West's Economy*. The evaluation must include nonmarket and wildland values, the baseline analysis of the regional economy and broader economic implications, and the benefits and costs of conservation and development.
- The BLM should use a Total Economic Valuation (TEV) Framework for evaluating alternatives (Peterson and Sorg 1987; Morton 1999, 2000a; Randall and Stoll 1983; Loomis and Walsh 1992). This framework avoids a narrow "regional accounting stance" that only includes local counties and considers the benefits and costs that accrue to Americans outside the region.
- The BLM should avoid using IMPLAN or other input-output models that are grounded in Economic Base Theory when estimating jobs and income for each alternative. Economists with the USFS and Office of Technology Assessment concluded that although IMPLAN is useful for appraising the total economic impacts of a management plan, the model is insufficient for evaluating the economic impacts for communities. The BLM should consider the EPS model developed by, and available for free from, the Sonoran Institute, which examines regional trends in jobs and income.
- Analyses must consider the benefits of ecosystem services, such as providing the tangible benefits of food, clean water, flood control from intact wetlands, and carbon sequestration from healthy forests, as well as intangible services such as beauty, cultural heritage, and a place for solitude and quiet. The analysis should consider that the loss of a service is a minus value.

- The analysis should consider that long-time residents and new residents earn retirement and investment income, which is becoming increasingly important to rural economies of the west and needs to be factored into the analyses (Whitelaw et al. 2003).
- The BLM should use total personal income as a basis for examining economic impacts. The analysis should include all sources of income (e.g., transfer payments and other sources of non-labor income, such as interest payments, rents, and profits), rather than relying solely on employment, which will dramatically overstate the importance of oil and gas industries to the local economy.
- The BLM should examine historic trends in County income and employment.

Environmental Justice

GENERAL CONCERNS

Comments identified the continuing need for early involvement of the local communities, including Tribal consultation and coordination, and the meaningful participation of community representatives in the NEPA process.

BASELINE CONDITIONS/AFFECTED ENVIRONMENT

Comments stated that the EIS must identify any minority, low-income, and Tribal communities within the geographic scope of the analysis area, including the sources of data and a description of the methodology and criteria used. Comments recommended comparing census block group percentages (if available, or, at a minimum, census tract data) for below poverty and minority populations with the State average or other appropriate reference population, and did not recommend use of higher thresholds.

IMPACT ANALYSIS

Comments recommended the analysis include the following:

- A discussion of the potential direct, indirect, and cumulative environmental impacts of potential BLM-authorized activities on the health of these communities, including air quality and water quality and quantity impacts
- An evaluation of the socio-economic impacts to the local communities, including the potential for any additional burdens placed on local communities' abilities to provide necessary public services and amenities
- A determination of whether there may be disproportionately high and adverse impacts, including cumulative impacts, on the identified communities

Comments provided the following analysis guidance: *Promising Practices for EJ Methodologies in NEPA Reviews*, available at https://www.epa.gov/sites/production/files/2016-08/documents/nepa_promising_practices_document_2016.pdf.

MITIGATION

Comments stated that mitigation should be developed for any identified disproportionate impacts.

Native American Concerns and Issues

GENERAL CONCERNS

Comments stated that the BENM preserves and protects some of the most sacred Tribal and scientifically important public lands in America. Comments stated that protecting areas of cultural significance to Native Americans needs to be a priority and requested that the BLM safeguard this land and its spiritual significance for future generations. Comments stated that Native American connections to the BENM are not just about protecting the past; rather, the lands remain vital to Tribal communities across the Colorado Plateau as a place of ongoing subsistence, spirituality, healing, and contemplation. Comments stated that recognition of the Tribes is central to future management of the BENM and that a thorough understanding of Native American culture, spirituality, and history is critical to understanding how the BENM should be managed. Comments suggested looking to Tribal oral stories to understand the importance of the lands. Comments noted that none of the five Tribes chose to name Bears Ears (called Shash Jaá in Navajo) in any one of their languages as a way honor *all* of the Tribes for whom these lands are significant.

Comments stated that Native Americans have been key leaders in envisioning this Monument; therefore, they should serve as the primary drivers behind the management of the BENM. Comments requested that the MMPs/EIS should include a vision statement and detailed history focused on this being the first successful Native American–led National Monument campaign, citing an addendum to the *Canyons of the Ancients National Monument Record of Decision and Resource Management Plan*, page 287 as an example (see also Purpose and Need section in this appendix).

Comments stated that the BLM should meaningfully engage with the five sovereign Federally recognized tribes (i.e., the Hopi, Navajo, Ute, Ute Mountain, and Zuni tribes) during the planning process and stated that these tribes have the lawful right to access and protect ancestral, sacred lands (see management suggestions below as well as the Consultation and Coordination section in this appendix). Comments also requested that the BLM initiate formal government-to-government consultation with Tribes. Commenters suggested that the Bears Ears Inter-Tribal Commission should be involved in its official capacity in the consultation process. Commenters also noted that the San Juan Southern Paiute, Kaibab Paiute, Paiute Tribe of Utah, and the Hualapai Tribe have connections to the BENM area and stated that they should be involved in the management planning process.

Comments stated that the BLM should identify and protect all Tribal, cultural, burial, and historic sites. Comments stated that cattle have damaged archaeological resources, sacred sites, and traditional cultural properties at Comb Ridge for many years (see the Cultural Resources and Livestock Grazing sections in this appendix). Comments also expressed concerns for lack of law enforcement in the area and potential for grave robbing.

Comments stated that MMPs and travel plans should provide for continued customary, traditional, ceremonial, and subsistence use; any restrictions should be the minimum necessary consistent with law and management of the objects and purposes for which the Monument was designated. Comments noted that travel routes between sacred cultural sites have been identified under AIRFA as “important and must be considered” and stated that the MMPs must address how travel routes between these and other non-contiguous cultural sites will be protected. Comments also stated that potential industrial development between the Comb Ridge portion of Shash Jaá, and Moon House, as well as the Bears Ears Buttes themselves, would damage travel routes to sacred and traditional cultural properties (see Trails and Travel Management comments in this appendix). Comments also suggested that the BLM study and conserve key wildlife species and medicinal plants.

Specific to mineral development, some comments suggested “special minerals” could be carefully extracted in order to help Native Americans who live on those lands. Comments also requested cancellation of any oil and gas lease sales in the BENM until after official consultation with the Pueblo of San Felipe.

Comments stated that the BLM would violate AIRFA by adoption of any management plan that fails to offer sufficient protections for the soundscape, dark skies, and viewshed.

ALTERNATIVES/SUGGESTED MANAGEMENT

As noted in the Consultation and Coordination section of this appendix, comments stated that the BENM should be co-managed by the Tribal Council and suggested establishment of a Tribal Management Council empowered with capacity to make and set policies and decision-making power for the BENM. Comments requested that the BLM work with the five sovereign Federally recognized Tribes (i.e., the Hopi, Navajo, Ute, Ute Mountain and Zuni tribes) during the planning process. Comments requested formal consultation between the BLM and the Tribes, including the Pueblo of San Felipe, the APCG, and all 20 of its member Pueblos, and requested the appointment of a representative from the Oljato Chapter on the Tribal Land Management Council. Other suggestions regarding specific information or avenues in which the BLM might solicit management input from Native Americans are summarized below:

- The BLM should work closely with the Tribes to identify certain areas within the Monument that should not be managed heavily, and instead be preserved in their natural state without signs, maps, and established trails (see the Cultural Resources section of this appendix).
- The BLM should request Native American input on all Tribal cultural and ceremonial uses, preservation of ancient structures and rock art, and management of the health of wildlife and medicinal plants. The BLM should engage experts, such as Tribal historians, Tribal elders, or other individuals knowledgeable, about cultural and sacred issues, designated by the Tribes in the management planning process.
- The BLM should engage in individual government-to-government consultation with interested Tribes regarding cultural resources and traditional religious and cultural properties in the area. The BLM should provide the Tribes with sufficient information about the agency’s plans to identify areas of traditional cultural and religious significance and should allow sufficient time and provide sufficient opportunities for the Tribe to respond to agency requests for information.
- The BLM should refrain from finalizing the MMPs until Native American tribes are given an adequate opportunity to raise concerns and those concerns are addressed.

Comments stated that the BENM must remain open to Tribal access and traditional uses, which include the following:

- Firewood gathering, cutting, and hauling should be allowed throughout the BENM for both Native Americans and non-Native Americans (see the Forestry and Woodland Resources section in this appendix).
- Access to and collection of medicinal plants should be allowed in the BENM for Native Americans.
- Access to ceremonial sites in the BENM for ceremonial uses
- Collection of eagle feathers for traditional uses
- Gathering of pinyon nuts and wild berries
- Gathering of willow bush for basket making

Agencies must ensure that the ancient structures and rock art are preserved to the greatest degree possible, including protection from looting, sound disturbances, development, and other intrusions; the spiritual significance of this region to tribes must be understood and managed accordingly.

Comment also stated that the MMPs must include measures to protect and maintain travel routes between sacred cultural sites within the unit and other non-contiguous cultural sites (see the Trails and Travel Management section in this appendix).

Comments offered the following additional management suggestions related to Native American concerns:

- Designate and recognize the K'aayelii refuge where K'aayelii took families and warriors to avoid being taken captive by the U.S. Military.
- Dedicate a statue or monument to Native American individuals who were born at Bears Ears, including K'aayelii and Wounded Knee.
- Study medicinal plants.
- Develop a program similar to the one at Canyon de Chelly National Monument in Arizona, where Tribal members are integral to guiding, interpreting, and patrolling antiquity sites. Such a program would create local employment opportunities for Native Americans, provide authentic visitor experiences, and enhance protections for the archeological resources.

BASELINE CONDITIONS/AFFECTED ENVIRONMENT

Comments provided the following references to consult for the MMPs:

- Bears Ears Inter-Tribal Coalition. Original Proposal to President Barack Obama for the Creation of the Bears Ears National Monument, dated October 15, 2015
- The Comments of the Hopi Tribe, Navajo Nation, Ute Mountain Ute, Ute Indian Tribe and Zuni Pueblo on the National Monument Review submitted May 25, 2017
- The Comments of the Navajo Nation on the National Monument Review submitted on May 24, 2017
- The Comments of the Ute Mountain Ute Tribe on the National Monument Review submitted on May 25, 2017
- The testimony of the five Tribes in opposition to HR 4532 as submitted to the House Committee on Natural Resources in January 2018
- Data from the Comb Ridge Heritage Initiative Project, including site forms

Public Health and Safety, Including Hazardous Materials

GENERAL CONCERNS

Comments expressed concern about the lack of Federal infrastructure in the area and the ability to accommodate in the influx of visitors into the area. Comments noted that the lack of facilities and lack of enforcement of policies are contributing to a proliferation of waste (trash and human) across the landscape. Commenters expressed concern about the level of use by climbers in Indian Creek and lack of facilities (e.g. toilets) that may result in public health issues. Comments suggested that additional restrooms would help alleviate the issue, identifying Indian Creek and San Juan River and River House as specific areas of concern.

Comments expressed concerns about the implications of allowing target shooting.

Comment stated that highways are substandard, area roads need maintenance, and that search-and-rescue efforts are not adequate. Comments suggested that enforcement staff should be increased to provide the public safety because of the increased visitation, and stated that relying on the Garfield County Sheriff and the volunteer search and rescue does not ensure the safety of visitors in the area. Comments also expressed concern that many visitors were not familiar with the harsh conditions of a desert climate.

Comments suggested that agencies carefully plan for adequate law enforcement resources to protect against vandalism, looting, inadvertent destruction of identified and unidentified resources, and inappropriate conduct in and around cultural sites. Comments stated there has been a consistent deficiency in the number of law enforcement officers assigned to patrol this area; BLM and USFS have obligations to include appropriate steps within the MMPs to control impacts to cultural resources.

Comments also expressed concern with public health issues stemming from uranium mining and processing in the area, specifically cancer. Comment stated that the cost to health from mining outweighs the jobs that could be created. Comments also expressed concern about long-term contamination to the area. Comments specifically expressed concern about the expansion of the Daneros Uranium Mine, which will increase shipments of ore along Utah State Route 95, which runs through the BENM and is used by recreationists for biking, hiking, and access to many popular areas.

ALTERNATIVES/SUGGESTED MANAGEMENT

Comments offered the following general management suggestions related to public health and safety concerns:

- Road safety concerns should be addressed with signage warning visitors about road conditions (particularly the roads accessing Moon House and Doll House, roads accessing the buttes [County Roads 092, 228, and 268], and roads over Elk Ridge and down to Cottonwood Wash).
- The County and BLM road numbers should match on signs and maps.
- The MMPs should consider access to drinking water in recreation planning and provide for better signage about water availability and fill-up locations.
- Hours at visitor locations like Kane Gulch Ranger Station and other locations in Bears Ears should be adjusted to respond to safety needs (e.g., overheating in the summer).
- The BLM should establish a cap on the number of climbers in any one area.
- The BLM should develop composting toilets or similar restroom facilities at key parking areas and trailheads, and should develop a minimal amount of waste disposal facilities across the BENM landscape to improve sanitation and public health conditions.
- The BLM should draft a framework outlining law enforcement and emergency services cooperation between Federal, State, and local agencies. Multi-agency law enforcement would help ease the strain on local law enforcement.
- The BLM should work with UDOT to consider rerouting hazardous truck traffic during periods of heavy visitation or severe weather, or to consider other available safety and visitor management measures to reduce the possibility of a uranium release or spill within the BENM.
- The BLM should consider a “pack it out” policy in the BENM.

BASELINE CONDITIONS/AFFECTED ENVIRONMENT

Comments provided the following references to consult for the MMPs: *Transportation Policy for Shipments of Colorado Plateau Uranium Ores to the White Mesa Uranium Mill* (Daneros Mine Plan of Operations Modification (MPOM)/Attachment N)

IMPACT ANALYSIS

Comments requested that the following be addressed in the EIS analysis:

- Identify the steps State and local authorities will take to assure compliance with the measures contained in Transportation Policy for Daneros Mine on roads through the BENM.
- Evaluate whether additional BENM visitors, including automobile, RV, bicyclists, hikers, or OHV users, could decrease traffic safety along Utah State Route 95.
- Analyze the cumulative effects of a “pack it out” policy.

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APPENDIX B

Comment Summary by Management Unit



INTRODUCTION

This appendix presents those management suggestions described in Appendix A that were associated with specific locations by respective management unit (Shash Jaá or Indian Creek).

Shash Jaá Unit

Comments about the Shash Jaá Unit as a whole stated that that oversight and management of the unit seem fragmented between the State, the BLM, the USFS, and the County, and suggested that coherent management of roads in this unit would be a central challenge.

Soils and Water

Comments expressed concern about soils crusts and riparian resources and suggested consideration of the following:

- Discontinue grazing in the Shash Jaá Unit to prevent livestock-related damage to water and riparian resources.
- Discontinue grazing in Comb Wash and Butler Wash to prevent livestock-related damage to water and riparian resources.
- Consider impaired waterbodies in unit management: Comb Wash and parts of the San Juan River.
- Limit access to foot traffic only in Arch Canyon to protect cryptobiotic soils from OHV use.

Vegetation

Comments recommended that the BLM develop a specific vegetation management plan to address the invasive tamarisk in Lower Butler Wash.

Fish and Wildlife

Comments stated that the BLM should consider the biological community within Shash Jaá Unit from a more regional perspective.

Cultural Resources

Comments requested the following management related to the protection and management of cultural resources in the Shash Jaá Unit:

- Prohibit or strictly limit grazing in the Shash Jaá Unit to protect the archeological sites.
- Close Arch Canyon to motorized vehicle use to protect uniquely rich archeological values in those canyons as well as in the upper end of Salt Creek and adjacent areas.
- Ensure sacred lands of both Native and Euro-American peoples of San Juan County are available to those who hold them sacred. San Juan Hill is an example of a “sacred site” for early Euro-Americans.
- Make the Cedar Mesa backcountry visitor video available online.
- Reconsider the “dead and down” campfire wood collection policy to protect hogans in the Comb Ridge and Butler Wash areas.

- **Site-specific management:**
 - Keep the Moon House site limited to 20 people per day.
 - Consider fencing off the granaries on Comb Ridge to protect the sites and to prevent visitors from falling off.
 - Increase protection and informational signage for sites with increased traffic such as House on Fire, Wolfman Panel, Target and Ballroom site, and Tower site.
 - Establish a well-marked road to the Doll House site in order to reduce potential resource damage from visitors trying to find the site.
 - Consider permitting for the Doll House site so visitors must go through Kane Gulch or Edge of the Cedars for orientation on the driving conditions and fragile nature of the site.
 - Improve fencing at Monarch Cave and other sites that are marked as non-grazing to prevent cattle from damaging the sites (see 4.8.2., Livestock Grazing).
 - Create a larger parking lot for the Lower Butler trail to Firehouse site hike. Consider advertising the hike officially as just the Firehouse site to limit visitation to the Wall site, Gazebo Kiva, and other sites upstream.
 - Create an official parking area and trail at heavily visited sites such as the Butler Wash site and the Tower House site and improve signage. The improved signage and trail could help direct visitors to those specific sites and take the visitation load off other sites in the area.
 - Do not include the RS 2477 San Juan County Class D road located north of the Comb Ridge Long Fingers site in any official BLM map. Negotiate with San Juan County to close and remove it. The road passes right through a surface archaeological site.

Paleontology

Comments recommended that the BLM close Arch Canyon to motorized vehicle use to ensure protection of the geologic topographic values in those canyons.

Forestry and Woodland Resources

Comments expressed concern about the creation of undesignated roads as a result of woodcutting at mile 0.7 of the Lime Canyon Road.

Comments requested that the BLM maintain the ability to gather firewood at the Maverick Point and the mesa tops of the South Elks.

Livestock Grazing

Comments requested the following restrictions to livestock grazing in the Shash Jaá Unit:

- Prohibit or strictly limit grazing in the Shash Jaá Unit to protect the archeological sites and the land that has been overgrazed.
- Limit or eliminate grazing in overgrazed, damaged or otherwise sensitive archeological and paleontological areas such as Butler Wash and Comb Wash.

Recreation and Visitor Services

Comments requested consideration of the following management actions relative to recreation in the Shash Jaá Unit.

- **General**
 - Update the Cedar Mesa SRMA to reflect new trends and information but retain group size limitations and permitting. Comb Ridge RMZ needs frontcountry rangers, signage, and a camping plan to control prohibited activities.
- **Access**
 - Consider a yearly pass that could tie into supporting local search and rescue services and/or resources and could be purchased by locals. Install self-service fee kiosks for day use, such as those on Cedar Mesa, where both Comb Wash and Butler Wash roads meet with Utah State Route 95 and U.S. Highway 163. Another fee kiosk could be considered at Comb Wash before going down to the river and up to Arch Canyon.
- **Camping and Hiking**
 - Limit access to foot traffic only in Arch Canyon to protect cryptobiotic soils from OHV use.
 - Consider requiring firepans in certain zones, like the existing regulations in the Comb Ridge RMZ. Designated campsites would benefit from metal fire rings. This would reduce the likelihood that a visitor will create a fire ring out of cultural materials, like room blocks from an ancient structure.
 - Reconsider the “dead and down” campfire wood collection policy to protect hogans in the Comb Ridge and Butler Wash areas.
- **Heritage Tourism**
 - Consider a robust Tribal consultation process to discuss designating Doll House a public interpretive site. Though remote and not accessible year-round, this Ancestral Puebloan granary site is less sensitive than other cultural sites and can be used as an educational area.
 - Establish a well-marked road to the Doll House site to reduce potential resource damage from visitors trying to find the site.
 - Consider fencing off the granaries on Comb Ridge to protect the sites and to prevent visitors from falling off.
- **Casual and Permitted Use**
 - Provide access to Comb Wash, Comb Ridge, and the pioneer ascent of that ridge known as San Juan Hill for extended family groups and youth pioneer treks to explore, connect with their ancestral histories, and experience the challenges of the pioneers in settling this area. Allow access in the San Juan Hill area, allow handcarts on existing roads, and provide an opportunity to occasionally have a large group of 250 to 300 people visit San Juan Hill at the same time. Allowable uses could include handcart, wagon wheel, and ATV treks.
 - Limit attendance at Moon House to 20 people per day.
 - Require permits to visit Doll House so that individuals must go through Kane Gulch or Edge of the Cedars, and so that they may be educated on the driving conditions and fragile nature of the site.
 - Require SRPs for all groups, regardless of whether they are commercial or educational, including the Hole in the Rock Trail groups.

- Continue allowing larger group sizes in the Sand Island campground, which is a tremendous educational area for people visiting Bears Ears.
- Keep permit system in place for heavily used areas such as Moon House, and consider establishing a permit system for the Citadel, Mule Canyon, and Arch Canyon.
- **Staffing, Education, and Interpretation**
 - Provide more staff. Kane Gulch Ranger Station lacks adequate hours to provide full assistance to the growing number of visitors. Volunteers or paid rangers could serve non-law enforcement roles by checking and making sure that recreationists have adequate water and maps and verifying that recreationists know where they are going. Volunteers or paid rangers could also patrol the frequented hiking and canyoneering areas to provide assistance.
 - Increase public land staffing in the field (provide more rangers out on the land, talking with and giving citations). Shash Jaá could have rangers that are archaeologists, or archaeologists that are rangers, with the purpose of contacting and educating visitors in a cordial, friendly way. The mouth of Arch Canyon would be an ideal location for rangers or law enforcement officers to curtail looting.
 - Create a digital app/map and update Monument website and paper maps directing visitors to established campgrounds (e.g., Sand Island, Goosenecks, and those that exist in surrounding towns) and to already hardened frontcountry sites (e.g., Butler Wash Indian Site, Mule Canyon, Sand Island, and other similar attractions) to provide information on camping while minimizing impact to cultural resources. A current list of local outfitters should be included in BLM informational products.
 - Strive to work with all current regional visitors' centers, including The Bluff Fort, about directing visitors to campsites appropriate to group size and vehicle type, emphasizing safety, water availability, archaeological site etiquette, and pack it in/pack it out requirements.
 - Support the Edge of the Cedars Museum in Blanding, a place for visitor contact and information.
 - Support the Friends of Cedar Mesa Visitors Center, which is being established by Friends of Cedar Mesa in Bluff, and which hosts an Ambassadors Program and the Site Stewardship Program.

Trails and Travel Management

Comments requested consideration of the following management actions related to trail and travel management in the Shash Jaá Unit:

- **Travel Designations**
 - Limit access to foot traffic only in Arch Canyon to protect cryptobiotic soils from OHV use.
 - Permanently close Arch Canyon to motorized vehicle use to ensure protection of rich archeological and geologic/topographic values in those canyons. Prohibit easy access to culturally rich resources in adjacent areas to promote quiet types of recreation and for the health of the creeks and riparian ecosystems.
 - Institute a strict prohibition against off-road vehicles or any other motor vehicle in the area of Comb Ridge consisting of the entire area between Butler Wash Road (Utah State Route 262) on the east, Utah State Route 235 on the west, and U.S. Highway 163 on the south running all the way north as far as Comb Ridge.
 - Provide access to Comb Wash and Comb Ridge for ATV treks.

- Trail and road designation and development
 - Establish a well-marked road to the Doll House site in order to reduce potential resource damage from visitors trying to find the site.
 - The following routes are key recreational experiences for OHV riders because they are scenic, relatively primitive, challenging, flowing, and varied; provide access to enjoy other resources of the public lands, such as cultural sites, wildlife, and geologic features; and provide connectivity with routes outside the BENM to make loops:
 - Texas Flat 4WD road
 - Arch Canyon 4WD road
 - Little Baullie Mesa 4WD road
 - Comb Ridge Dugway 4WD road
 - Snow Flat graded road
 - Comb Wash graded road
 - Butler Wash graded road
 - River House Ruin 4WD road
 - Comments suggested the following motorized trails/roads for designation:
 - The closed road in the Manti-La Sal National Forest, which extends from Section 21, Township 36 South, Range 21 East to Texas Flat on the BLM in Section 20, Township 37 South, Range 20 East. This section of road/trail is labeled 003 on the Forest Travel Map. The proposed route drops off the mesa top into Upper Rogers Flat and then proceeds around the head of Texas Canyon and proceeds south and east to Texas Flat. After reaching the west rim of Arch Canyon, this route gives an opportunity to go to the scenic lookout point that overlooks the Cathedral Arch in Arch Canyon. It also provides an additional route to go to Bear Cave just below the west rim of Arch Canyon and to view Texas Butte in Arch Canyon. In addition, the existing trail 467 that leaves Trail 003 in Upper Rogers Flat leads out onto Low Rogers Flat on the mesa top between Texas and Arch Canyon where there is another scenic opportunity to look down into the two canyons. It would take minimal work to make these routes usable again for motorized vehicles.
 - Retain the existing road up Arch Canyon from its mouth at the Arch Canyon trail head to the forest boundary in Arch Canyon. Consider extending the route approximately 0.5 mile up the canyon so those with disabilities may have the opportunity to view Angel Arch.
 - An old road that drops into the North Fork of Whisker Draw and goes south across the South Fork of Whiskers draw and continues southerly into Trail Canyon and eventually to Comb Wash. The road is located approximately 2 miles west of the forest boundary on Forest Road 092, in Section 10, Township 36 South, Range 20 East. This route could serve as a loop route for other existing trails such as the old U-95 road up the Comb Ridge to the South Cottonwood drainage.
- Signage
 - Develop route signage planning in coordination with UDOT and the County. Sign placement is resulting in damage to cultural resources near access areas to other cultural areas. An example of poor placement is the Butler Wash Indian Ruins sign on Utah State Route 95 east of the Butler Wash Ruins Overlook parking area, resulting in visitors creating an impromptu parking lot next to the highway and unintentionally accessing two cultural sites.

- Install signs to warn travelers about adverse weather conditions, especially on the road leading up to Bears Ears over Elk Ridge.
- Do not include the RS 2477 San Juan County Class D road located north of the Comb Ridge Long Fingers site climbing up into the Comb in any official BLM map. Negotiate with San Juan County to close and remove it. The road passes right through a surface archaeological site.
- Other
 - Recognize aviation as a valid mode of transportation access within the BENM and allow for continued use of all backcountry airstrips or historical primitive landing areas, including the Mule Canyon airstrip.
 - Cancel the annual Jeep Jamboree, which takes place in Arch Canyon.

Lands and Realty

Comments recommended the following lands and realty actions:

- Acquire a privately owned parcel immediately south of Arch Canyon and a privately owned parcel immediately north of U.S. Highway 163 on Comb Ridge, or consider a land exchange that would bring them into Federal ownership.
- Address trespass conflicts on the inholding owned by Vicky Clark, granddaughter of Jim Joe and daughter of Mary Black. This inholding is located between Comb Ridge and Butler Wash, south of U.S. Highway 163, and stretches down to the river. People are already illegally crossing it from River House without permission to get to the Butler Wash Panel. This is a hugely complicated inholding involving SITLA, the Bureau of Indian Affairs, the Navajo Tribe, and the BLM, and its resolution and protection should be priority number one as per inholdings. There are significant archaeological sites on this property.

Special Designations

Comments recommended that the BLM designate Comb Ridge area as an ACEC.

Native American Concerns

Most of the comments pertaining to Native American concerns would apply to the Shash Jaá Unit. Of specific note are the following:

- The use of *Shash Jaá*, a Navajo name, for one of the units is a good example of the need for broader conversation. None of the five tribes chose to name Bears Ears in any one of their languages in order to honor all of the tribes for whom these lands are significant.
- Potential industrial development in areas between Comb Ridge and Moon House or near the Bears Ears Buttes, would damage travel routes to sacred and traditional cultural properties.
- The soundscape, dark skies, and viewshed from Bears Ears Buttes are critical to their traditional cultural and spiritual properties, which should be considered the primary management issue. Soundscape, dark sky, and viewshed resources are particularly boundary sensitive, and should be measured and protected.

Public Health and Safety and Hazardous Materials

Comments noted that the lack of facilities and lack of enforcement of policies are contributing to a proliferation of human waste and identified San Juan River and River House as specific areas of concern.

Road safety concerns should be addressed with signage warning visitors about road conditions (particularly the roads accessing Moon House and Doll House, roads accessing the buttes (County Roads 092, 228, and 268), and roads over Elk Ridge and down to Cottonwood Wash.

Comments stated that all backcountry airstrips, including Dry Fork Canyon and Mule Canyon airstrips, should be preserved to provide access to pilots, search-and-rescue teams, fire-fighting aircraft, and other emergency aircraft.

Comment suggested that the hours at the Kane Gulch Ranger Station should be adjusted to respond to public safety needs (e.g., overheating in the summer).

Indian Creek Unit

Air and Climate Change

Comments suggested establishing areas to conduct long-term ecological and agricultural research to provide the much-needed scientific data to support future land use planning and land management decisions. Comments stated that the Indian Creek area has drawn the interest of researchers from many universities and agencies interested in understanding Canyon Country ecosystems and ways to sustainably manage them. The variety of land tenure (National Park Service, BLM, USFS, and private) across a wide elevational range presents a unique opportunity to study how the interaction of different management approaches, climate, and a wide range of soil types influence ecosystem function.

Soils and Water

Comments requested that the BLM manage Lavender and Davis Canyons for protection of riparian habitat, including limiting OHV use.

Comments also suggested that the BLM address in the MMPs how they will consider impaired waterbodies in the unit (North Cottonwood Creek and Cottonwood Wash).

Cultural Resources

Comments provided the suggestion to work with Access Fund and local climbers to continue stewarding climbing areas and approach trails, to protect cultural resources, and to maintain Indian Creek campgrounds and toilets.

Comments requested that the BLM close Lavender Canyon and Davis Canyon to motorized vehicle use to protect uniquely rich archeological values in those canyons as well as in the upper end of Salt Creek and adjacent areas.

Paleontology

Comments suggested that the presence of early vertebrate species fossils in nearby Valley of the Gods indicates similar resources may exist in the Shash Jaá and Indian Creek Units. Comments requested that the BLM consider alternatives that permanently close Lavender Canyon and Davis Canyon to motorized vehicle use to ensure protection of the geologic and topographic values in those canyons.

Wildland Fire Management

Comments requested that the BLM maintain the ability to gather firewood at Harts Point.

Livestock Grazing

Comments stated that Indian Creek was known historically for grazing and ranching.

Recreation and Visitor Services

Comments provided the following specific suggestions regarding recreation in Indian Creek:

- The BLM should increase the price of the campground in Indian Creek and add more pit toilets, more trash receptacles, and more public information on Leave No Trace ethics in the most heavily populated areas.
- The BLM should provide additional restrooms at Superbowl and Cottonwood Campgrounds.
- The BLM should add additional facilities in the Indian Creek area, as well as a visitor center/ranger station or educational/interpretive materials that would not only educate people about the area but provide an alternative activity when weather or conditions are not conducive for climbing.
- The BLM should develop limited new camping development in the Indian Creek corridor. Comments stated it would be beneficial to have some designated camping for RVs and tents and suggested the most logical place would be the Cottonwood Campground because the campsites are large and, if designated, could accommodate more people.
- The BLM should develop a new campground along Elk Ridge Road between the Sparks Wall and the Prow, or near that area.
- The BLM should work with Access Fund and local climbers to continue stewarding climbing areas and approach trails, protect cultural resources, and maintain Indian Creek campgrounds and toilets.
- The BLM should consider climbing access trails throughout the Indian Creek area for long-term maintenance and sustainability.
- The BLM should increase public land staffing in the field (provide more rangers out on the land, talking with and giving citations). The BLM should add additional law enforcement at Indian Creek. Currently, WAG bags are encouraged but not enforced so there needs to be more enforcement or more education because existing strategies are not effective.

Trails and Travel Management

Comments requested that the BLM permanently close Lavender Canyon and Davis Canyon to motorized vehicle use to ensure protection of rich archeological and geologic and topographic values in those canyons, to prohibit easy access to culturally rich resources in the upper end of Salt Creek and adjacent areas, to promote quiet types of recreation, and for the health of the creeks and riparian ecosystems.

Comments identified the following routes in Indian Creek as key recreational experiences for OHV riders because they are scenic, relatively primitive, challenging, flowing, and varied; provide access to enjoy other resources of the public lands, such as cultural sites, wildlife, and geologic features; and provide connectivity with routes outside the BENM to make loops:

- Bridger Jack Mesa 4WD road
- North Cottonwood Creek graded road
- Heifer Mesa 4WD road
- Shay Mesa 4WD road
- Shay Mountain Trail (north end of motorized single-track)
- Indian Creek Trail (north end of motorized single-track)

Comments suggested the following additional motorized trails/roads in Indian Creek: An existing road that takes off just south of Utah State Route 211, approximately 200 yards south of Newspaper Rock that goes up onto Shay Mesa and ends just west of Titus Canyon at the boundary line between the National Forest and the new Indian Creek Unit of the BENM. From there, the road ties into a trail labeled 449 on the forest travel map and drops below the Shay Mesa Rim and ties to a trail labelled 429 on the Forest Travel Map. Trail 429 runs south to Hop Creek and then west across Vega Creek to the old USFS Guard Sandstone Guard Station in Vega Creek. Trail 429 also runs north from the junction with 449 to the boundary line between the National Forest and the Monument where the trail is then shown as a road that goes down the east side of North Cottonwood Creek. A currently illegal motorized trail runs along trail 449 from the top of Shay Mesa down to trail 429. This trail could be used for motorized RVs and be part of a loop route that could tie the Indian Creek drainage to the North Cottonwood and Vega drainages.

Comments requested that the BLM Install signs to warn travelers about road conditions on the road down to Cottonwood Wash.

Comments suggested that the BLM work with Access Fund and local climbers to continue stewarding climbing areas and approach trails, protect cultural resources, and maintain Indian Creek campgrounds and toilets.

Comments requested that the BLM recognize aviation as a valid mode of transportation access within the BENM and allow for continued use of all backcountry airstrips or historical primitive landing areas, including Dry Fork Canyon airstrips.

Lands and Realty

Comments requested that the BLM address trespass issues in Indian Creek. Much of Indian Creek is privately owned and most of the Utah State Route 211 and County road rights-of-way are not fenced

Public Health and Safety and Hazardous Materials

Commenters expressed concern about the level of use by climbers in Indian Creek and lack of facilities (e.g., toilets) that may result in public health issues.

Comment stated that road safety concerns should be addressed with signage warning visitors about road conditions on the road down to Cottonwood Wash.

Comments stated that the Dry Fork Canyon airstrip should be preserved to provide access to pilots, search-and-rescue teams, fire-fighting aircraft, and other emergency aircraft.