



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

Grand Staircase-Escalante National Monument and Kanab-Escalante Resource Area Resource Management Plans and Environmental Impact Statement Scoping Report

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1 INTRODUCTION

The Bureau of Land Management (BLM) Grand Staircase-Escalante National Monument (GSENM or Monument) and the BLM Kanab Field Office, Kanab, Utah, intend to prepare Resource Management Plans (RMPs) for the three new GSENM managements units: Grand Staircase, Kaiparowits, and Escalante Canyons Units. A fourth RMP will be prepared for BLM-administered lands within the original Monument boundary but outside the boundaries of the three new units; these lands are referred to as the excluded lands. The BLM will also prepare a single Environmental Impact Statement (EIS) for the three new units and for the excluded lands to satisfy National Environmental Policy Act of 1969, as amended (NEPA), requirements for this planning process. The Planning Area for this effort is shown in Figure 1. The preparation of these documents 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 6920, as modified by Presidential Proclamation 9682. The BLM will not repeat or duplicate direction from law, regulation, policy, or agency guidance (e.g., instructional memoranda, manuals, handbooks) in the RMPs.

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 RMPs 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 13, 2018. This report summarizes the issues identified in the comments submitted.

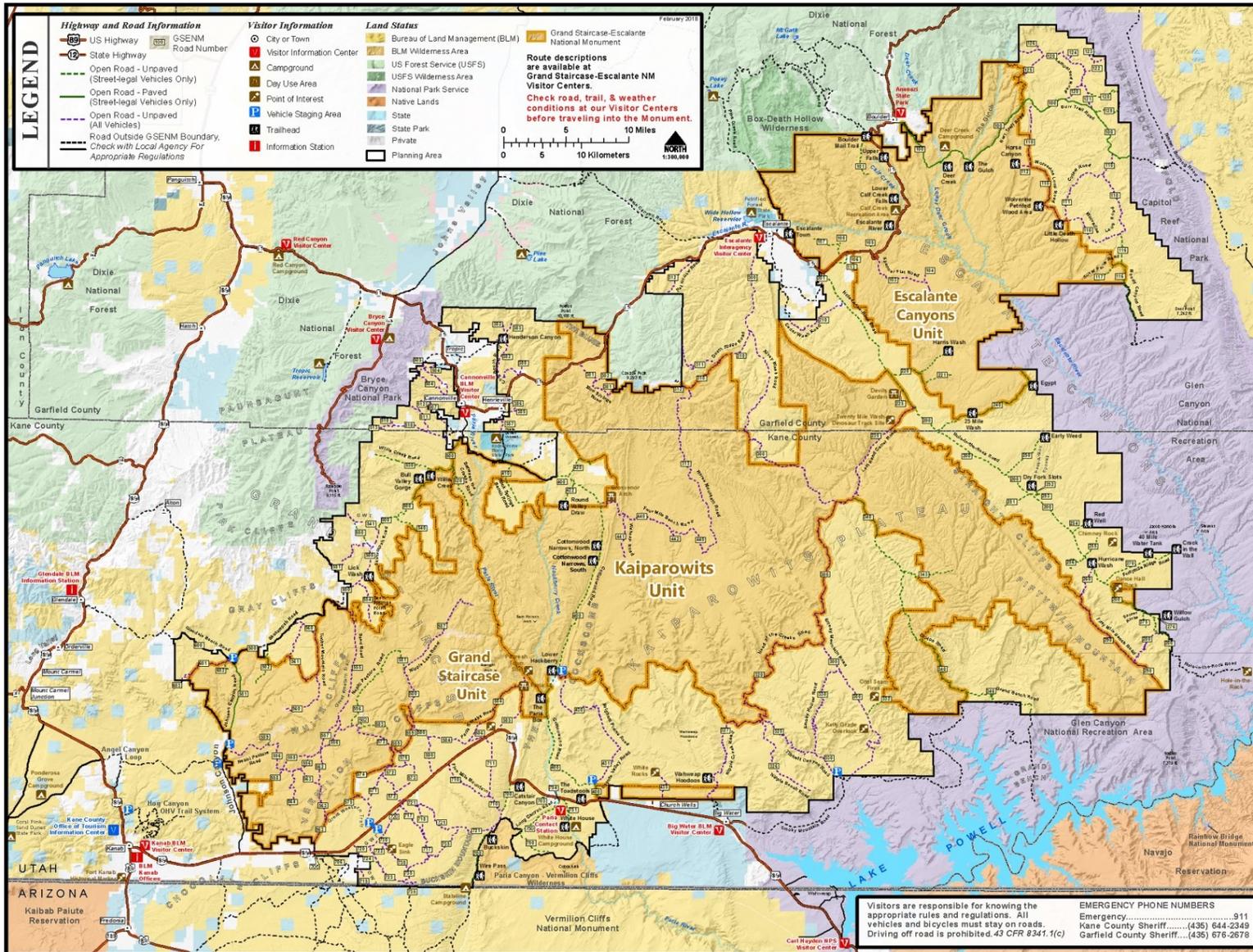


Figure 1. GSENM Planning Area.

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 RMPs/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 RMPs for the GSENM Grand Staircase, Kaiparowits, and Escalante Canyons Units; an RMP for the excluded lands; and an associated EIS for all four RMPs (*Federal Register* Vol. 83, No. 10, 2179). A copy of the *Federal Register* is available on the BLM's ePlanning website: <https://goo.gl/EHvhbc>. 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 29, 2018, and the public period closed on April 13, 2018, for a total scoping period of 107 days.

2.2.2 *Other Outreach Methods*

Other outreach methods comprised 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:

- Comments could be submitted using the BLM's ePlanning website at <https://goo.gl/EHvhbc>.
- 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_CCD_monuments@blm.gov.

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

BLM
669 South Highway 89A
Kanab, Utah 84741

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 RMPs/EIS (Table 1).

Table 1. Scoping Meetings

Date and Time	Location	Approximate No. Attendees
Monday, March 28, 2018, 4:30 p.m. to 8:00 p.m.	Kanab Middle School 690 South Cowboy Way Kanab, Utah 84741	191
Tuesday, March 29, 2018, 4:30 p.m. to 8:00 p.m.	Canyon Country Lodge 760 East Highway 12 Escalante, Utah 84726	211

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:

- Bryce Canyon National Park
- Capitol Reef National Park
- Garfield County Commission
- Glen Canyon National Recreation Area (GCNRA)
- Kane County Commission
- Public Lands Policy Coordinating Office
- State of Utah School and Institutional Trust Lands Administration

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:

- Kaibab Band of Paiute Indians
- Navajo Nation
- Paiute Indian Tribe of Utah
- Pueblo of Zuni
- The Hopi Tribe
- Uintah and Ouray Ute Tribe

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. Several other organizations and individuals were invited to be consulting parties under Section 106 of the NHPA in addition to the Utah State Historic Preservation Office and the Advisory Council on Historic Preservation. The BLM has not yet initiated Section 106 or Tribal consultation.

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 128,797 submissions from the public during and after the official public scoping period. The most common format used for submissions was email, and submittals were also received by U.S. Postal Service mail. Verbal statements and questions were made at the scoping meetings, and these were recorded, 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	2,256
Duplicate	85
Form letters	120,268
Duplicate form letters	7
Form plus letters	6,181
Total	128,797

Of the 128,797 submissions, 2,256 were unique, 126,456 were part of organized form letter campaigns (see details below), and 92 were duplicate submissions. Duplicate submissions are identical submissions sent by the same person or organization.

3.2 Comment-Level Coding

Once the 128,797 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 issues 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 8,500 individual comments, which were then coded according to planning issue categories. Table 3 shows the relative percentage of comments by issue category.

Table 3. Comments by Issue Category

Issue Category	Count	Percentage
Air and climate	8	0.1%
Soil and water	70	0.8%
Biological resources	171	2.0%
Cultural resources and Native American concerns	279	3.3%
Paleontology	85	1.0%
Aesthetic resources (visual resources and soundscapes)	38	0.4%
Wildland fire management	9	0.1%
Lands with wilderness characteristics	53	0.6%
Livestock grazing	204	2.4%
Recreation and visitor services	294	3.4%
Travel management	343	4.0%
Lands and realty	77	0.9%
Energy development (minerals and renewables)	164	2.0%
Special designations	99	1.2%
Socioeconomics and environmental justice	111	1.3%
Process	2,531	29.6%
Out of scope	4,027	47.0%
Total	8,563	100.0%

As noted above, close to 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. The topic with the second-most comments was Process, which includes subtopics such as alternatives, purpose and need, public involvement, and impacts analysis. 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. Support for Proclamation 9682
2. Opposition to Proclamation 9682
3. General legal concerns regarding monument modifications
4. Suggested revisions to Monument size and boundaries
5. Recommendations for existing and proposed state parks
6. Recommendations regarding management of public lands adjacent to the Planning Area
7. Recommendations for changes to Federal policies
8. Recommendations for threatened and endangered species listings
9. Recommendations for a World Heritage Site Designation
10. Recommendations for proposed legislation

These decisions on these issues are guided by laws, presidential actions, congressional actions, and other authorities that are beyond the scope of this project.

5 SUMMARY OF PUBLIC CONCERNS AND ISSUES

The following major issues and concerns have been extrapolated from the public comments and summarized for future consideration in the RMPs/EIS process. More detailed descriptions of issues and concerns raised during the public scoping period can be found in Appendices A and B. The issues presented in the forthcoming Draft RMPs/EIS may include additional issues raised by cooperating agencies.

5.1 Air and Climate

Issue: What would be the potential impacts on air quality and climate change from management activities in the Planning Area?

Comment Summary

Commenters expressed concerns regarding the potential impacts on air quality and climate change from management activities in the Planning Area, such as impacts from fossil fuel development. It was recommended that the BLM use the RMPs to analyze the impacts on the Planning Area from climate change over the next two decades. Commenters requested that the BLM analyze potential direct, indirect, and cumulative impacts on air quality and climate change from future BLM-authorized activities in the Planning Area. Commenters also provided recommendations regarding which pollutants should be analyzed and which analysis methods should be used. It was recommended that the Planning Area be managed as a Prevention of Significant Deterioration Class II Area as designated by the Clean Air Act.

5.2 Soils and Water

Issue: How will the BLM protect, maintain, and restore soils, riparian areas, and watersheds with respect to potential impacts from increased recreation use, livestock grazing, mineral development, and other resource uses?

Comment Summary

Commenters noted that some resource uses (e.g., grazing, mineral development, OHV use, and recreation) can impact the natural function and condition of watersheds. Commenters expressed concerns about potential impacts regarding sensitive soils, biological soil crusts, soil erosion, salinity, sedimentation, priority watersheds, impaired waters, floodplains, and water quality. Commenters recommended that water resources in the Planning Area be managed at the watershed level, and that both water quantity and quality be monitored.

5.3 Biological Resources

Issue: What impacts would resource uses (e.g., livestock grazing, recreation activities, OHV use, mineral development) have on vegetation in the Planning Area?

Comment Summary

Commenters requested that the BLM analyze potential impacts of any ground-disturbing activities in the Planning Area on the variety and condition of plant communities, as well as their connectivity. It was also requested that the BLM analyze potential impacts of any ground-disturbing activities in the Planning Area on the management and spread of noxious and invasive plant species.

Issue: How will the BLM determine the appropriate levels and methods of vegetation management?

Comment Summary

Commenters expressed a variety of concerns and recommendations regarding vegetation management in the Planning Area. Commenters recommended that certain vegetation management methods be restricted or prohibited in the Planning Area, such as chaining, bull-hogging, chemical treatments, and biological treatments, whereas other commenters recommended proactive vegetation management in the Planning Area using these methods. Commenters recommended a variety of factors to consider when deciding whether to implement a vegetation restoration strategy. Commenters recommended that the use of native plants and seeds be a priority in vegetation restoration projects, and that nonnative plants and seeds only be used in limited situations.

Issue: Will the BLM establish objectives to manage that habitat for special status species, such as Kodachrome bladderpod, Jones cycladenia, and Ute ladies'-tresses?

Comment Summary

Commenters expressed concerns regarding protections for special status plants habitat, including critical habitat for the Federally listed Kodachrome bladderpod (*Lesquerella tumulosa*), Jones cycladenia (*Cycladenia humilis* var. *jonesii*), and Ute ladies'-tresses (*Spiranthes diluvialis*). Commenters recommended that the BLM 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. It was also recommended that the BLM conduct an inventory and periodic survey of special status plant species in the Monument units.

Issue: How will the BLM address access to woodland products for subsistence and traditional uses, as well as for commercial harvesting and forest management?

Comment Summary

Commenters expressed concerns regarding the ability to collect firewood and other forestry products in the Planning Area. Commenters expressed both support for and opposition to allowing logging and commercial timber harvesting in the Planning Area. Commenters also expressed concerns about access to parts of the Planning Area for wood harvesting. It was recommended that Forest Management Plan objectives focus on a proactive approach to create forest stands that are resistant and resilient to extreme fire and insect outbreak through timber harvesting, mechanical treatments, and prescribed fire.

Issue: What would the impact of other resource uses (e.g., livestock grazing, recreation activities, OHV use, mineral development) and drought on wildlife species and their habitat?

Comment Summary

Commenters expressed a variety of concerns and recommendations regarding potential impacts to fish and wildlife. Commenters recommended that the BLM adopt planning and decision-making processes (including data collection, analysis, and monitoring) that employ measurable planning objectives at multiple biological scales (i.e., wildlife populations, habitat and ecosystem conditions) to ensure viable wildlife populations. Commenters expressed concerns about the potential for wildlife habitat fragmentation in the Planning Area. Commenters expressed both support for and opposition to predator control actions in the Planning Area. Commenters also recommended coordination with Utah Division of Wildlife Resources (UDWR) regarding wildlife management in the Planning Area. Commenters made specific recommendations regarding wild horses, raptors, big game, bees, and other wildlife species.

Issue: Will the BLM establish objectives to manage that habitat for special status species such as Mexican spotted owl, southwestern willow flycatcher, California condor, and Kanab ambersnail?

Comment Summary

Commenters expressed concerns regarding protections for special status animals, including a need for special management for the Mexican spotted owl (*Strix occidentalis lucida*), southwestern willow flycatcher (*Empidonax traillii extimus*), California condor (*Gymnogyps californianus*), and the Kanab ambersnail (*Oxyloma haydeni kanabensis*). Commenters recommended that the BLM ensure that actions authorized do not jeopardize the continued existence of any special status animal species or result in the destruction or adverse modification of critical habitats.

5.4 Cultural Resources and Native American Concerns

Issue: How will the BLM address the conflicts between other land uses (such as recreation activities, OHV use, mineral development, and livestock grazing) and protection and preservation of cultural resources?

Comment Summary

Commenters noted that the Planning Area contains multiple impressive rock art, artifact sites, and other cultural resources. It was noted that these cultural resources provide a direct link between Native Americans and their past, and that these resources should be protected from looting and ground-disturbing activities. It was suggested that the RMPs provide an opportunity to enhance cultural resource management within the Planning Area and address Tribal concerns and values. It was recommended that the entire Planning Area be inventoried for cultural resources to evaluate their potential for protection, research, and interpretation.

Issue: How will the BLM address increasing demand of recreational use centered on cultural heritage?

Comment Summary

Commenters expressed concerns about potential impacts from an increasing demand for recreational use that involves visitation to cultural resources sites. It was recommended that management in the Planning Area prioritize protection of cultural resources over recreational use. It was also recommended that the BLM increase public education efforts regarding protection and appreciation of cultural resources in the Planning Area. Commenters recommended that on-the-ground staff be increased to monitor and protect cultural resources in the Planning Area.

Issue: Will the BLM provide Native Americans access to public lands for their traditional uses and practices?

Comment Summary

Commenters requested that the BLM protect Native Americans' access to Planning Area lands for their traditional uses and practices, including access to areas held sacred by the Tribes. It was suggested that Native Americans be consulted regarding the traditional uses and practices and sacred areas that are in need of protection.

5.5 Paleontology

Issue: Will the BLM identify measures to reduce potential impacts to paleontological resources from resource uses such as mineral development, OHV use, and recreational use?

Comment Summary

Commenters noted that the Planning Area is world-renowned for its abundance of paleontological resources because many intact fossils and new dinosaur species have been discovered in the area. Commenters highlighted the unique aspect of near-perfect dinosaur preservation in certain areas of the Planning Area that are outside of the Monument unit boundaries, particularly in the Kaiparowits region of the Planning Area. Commenters expressed concerns about the potential that mineral development in the Planning Area, particularly coal extraction, would have on paleontological resources. It was recommended that the BLM inventory the Planning Area for paleontological resources and restrict ground-disturbing activities in areas with high potential for impacts to paleontological resources. It was also suggested that the BLM have a sufficient number of paleontologists on staff to manage and protect the paleontological resources in the Planning Area. Commenters also expressed concerns about illegal collection and removal of paleontological resources from the Planning Area.

Issue: Will the BLM identify appropriate opportunities for study and preservation of important paleontological resources?

Comment Summary

Commenters recommended that the BLM provide more opportunities to volunteers, universities, and other research institutions for research and interpretation regarding paleontological resources. It was also recommended that the BLM provide opportunities for local youth to be trained in paleontological research, fossil preparation, and curatorial storage. Commenters also provided specific suggestions for paleontological resources research, collection, and storage requirements and agreements.

5.6 Aesthetic Resources (visual resources and soundscapes)

Issue: How will the BLM protect the Planning Area's visual resources?

Comment Summary

Commenters noted that the Planning Area includes a large, relatively unbroken landscape with a diversity of terrain and scenic resources. It was suggested that the BLM review and establish visual resource management (VRM) class designations that reflect changes in recreation visitation and other resource uses. Commenters expressed concerns about the potential for mining activities to impact the natural beauty of the Planning Area. It was suggested that mineral development not be allowed directly outside the Monument unit boundaries because of potential impacts on viewsheds. It was also suggested that typical visual resources mitigation measures for oil, gas, and mining developments would be less effective in the Planning Area because of its open terrain, ruggedness, and the sheer number of sensitive viewpoints and open vistas. Other commenters noted that visual

resource management is not related to the purposes of the Antiquities Act nor Presidential Proclamation 9682, so visual resources in the Monument should be managed as they are managed on any other BLM-administered lands.

Issue: How will the BLM protect the Planning Area’s dark sky values?

Comment Summary

Commenters noted that the remoteness of the Planning Area offers exceptionally pristine night skies. It was recommended that actions proposed in the Planning Area that would contribute to light pollution should be restricted or prohibited. It was also recommended that the BLM work with communities surrounding the Planning Area to reduce light pollution. Commenters provided specific language regarding VRM classes and visual resource management that they recommended be included in the RMPs.

Issue: How will the BLM protect the Planning Area’s soundscape values?

Comment Summary

Commenters noted that the remoteness of the Planning Area offers exceptionally pristine soundscapes. It was recommended that the BLM inventory and determine current soundscape conditions in the Monument. It was also recommended that the BLM analyze the potential impacts that ground-disturbing activities in the Planning Area would have on soundscapes.

5.7 Wildland Fire Management

Issue: How will the BLM address wildland fire and fuels management and its potential impacts on other resources in the Planning Area?

Comment Summary

Commenters noted that the Planning Area is part of the Color Country Interagency Fire Management Area, which has an operating plan that is updated annually. Protection of other resources is fully integrated into the fire management strategies of the Color Country Interagency Fire Management Area. It was recommended that any changes in fire management zones and activities should be coordinated with the Color Country Fire Management Area staff following established processes. It was also recommended that the BLM’s objective for wildland fire management should be limited to protecting human life and property. It was suggested that the BLM should not be responsible for the protection of private inholdings or structures in the Planning Area. Commenters recommended flexibility in determining how to manage wildfire, including providing for proactive prevention and suppression when cultural, recreational, or property interests are involved. It was suggested that prescribed fire be allowed in the parts of the Planning Area where grazing is permitted. It was also suggested that the BLM use smaller scale prescribed burns to treat overgrown tree canopies or high fuel loads as a preventative measure. Commenters also provided specific recommendations for reseeding methods following fires.

5.8 Lands with Wilderness Characteristics

Issue: Will the BLM identify lands with wilderness characteristics and develop appropriate management allocations to manage for those characteristics as a priority?

Comment Summary

Commenters expressed concerns about protection for the wilderness characteristics of the Planning Area, such as its remoteness and primitiveness. Commenters recommended that land in the Monument units and Planning Area be managed to protect wilderness characteristics, including all of the BLM-identified lands with wilderness characteristics. Commenters noted the importance of the Planning Area's naturalness and opportunities for primitive recreation. Commenters also recommended that the BLM include an updated lands with wilderness characteristics inventory in the RMPs.

5.9 Livestock Grazing

Issue: How will the BLM determine which areas should be open or closed to livestock grazing, and what should be the proper animal unit month (AUM) levels for allotments?

Comment Summary

Commenters recommended both increased and decreased levels of livestock grazing in the Planning Area. Comments regarding decreased levels of livestock grazing generally cite grazing's potential negative impacts on Planning Area resources, such as water quality, sensitive soils, and habitat for sensitive plant and animal species, as well as user conflicts. Comments regarding increased levels of livestock grazing generally cited grazing's importance to the local economy, the historic and cultural importance of grazing in the region, and the benefits grazing and rangeland management can have for vegetation and wildlife. Commenters made site-specific recommendations for where livestock grazing should be allowed or prohibited. Commenters also recommended that the BLM increase public outreach in the grazing management process. Commenters also provided specific language regarding livestock grazing management that they recommended be added to the RMPs.

Issue: How will the BLM determine proper rangeland health management levels and practices?

Comment Summary

Commenters recommended that rangeland health management focus on protecting native plant communities, soils, water quality, habitats of species of concern, and riparian areas and wetlands. Commenters recommended using adaptive and holistic approaches to rangeland health management. Commenters also provided specific language regarding livestock grazing management that they recommended be added to the RMPs.

Issue: How can the BLM address permittees' ability to improve and maintain fences, water facilities, etc.?

Comment Summary

Commenters recommended that the RMPs make it easier for grazing permittees to maintain and improve fences, water facilities, and other grazing-related structures on allotments. Commenters suggested that maintenance and improvement projects can benefit both livestock and wildlife, as well as improve public safety.

Issue: How can the BLM reduce conflicts between grazing and other resource uses?

Comment Summary

Commenters suggested that the BLM identify measures to reduce conflicts between grazing, protection of sensitive resources, and recreational use. Commenters recommended increased use of exclosures in the Planning Area. Commenters also provided specific language regarding livestock grazing management that they recommended be added to the RMPs.

5.10 Recreation and Visitors Services

Issue: Can recreational use in both high-use and low-use areas be managed to provide recreation opportunities while minimizing conflicts with other resource values and uses (e.g., protection of sensitive resources, livestock grazing, vegetation management, and minerals management)?

Comment Summary

Commenters expressed concerns about the potential of losing recreational access to lands in the Planning Area. Commenters also noted that as the population of Utah grows, and as GSENM becomes more well-known, recreational use of the Planning Area will continue to grow, and this increase in recreational use needs to be managed appropriately to minimize user conflicts and protect other resource values and uses. Commenters made a variety of suggestions related to group sizes that should be allowed in the Planning Area, from smaller group size limits to no group size limits. Commenters recommended maintenance of existing Special Recreation Management Areas (SRMAs) to effectively manage recreational areas that receive high levels of use. Commenters expressed concerns regarding sensitive resource protection, public safety, user conflicts, and continued recreational access for both high-use and low-use areas.

Issue: Will the BLM determine the proper level of developed recreational facilities to address increased visitation while maintaining opportunities for primitive recreation and protecting sensitive resources?

Comment Summary

Commenters expressed both a desire for limitations on developed recreational facilities in the Planning Area as well as a desire for an increase in developed recreational facilities in the Planning Area. Commenters suggested that with increasing visitation to the Planning Area, more developed recreational facilities, such as campgrounds, parking areas, and restrooms, are needed to meet

demand as well as to prevent pollution from human waste and discarded trash. Commenters also suggested that development of recreational facilities should be limited to help retain the area's wilderness character and opportunities for primitive recreation experiences.

Issue: How can visitation and the permit system be managed to promote the optimum recreation experience and resolve issues caused by growing recreation use?

Comment Summary

Commenters recommended requiring backcountry permits only for areas where visitor use needs to be heavily restricted or regulated. Other commenters suggested that permits be required for overnight use in all parts of the Planning Area. Commenters suggested that the number of guiding permits and scientific research permits be increased. Commenters also recommended that the process for special recreation permits be simplified and made consistent for all three Monument units. Commenters suggested that the BLM provide annual training for outfitters and guides to keep them current on applicable research studies occurring in the Planning Area.

Issue: How will the BLM resolve recreation-related human health and safety problems, such as disposal of human waste, protection of water quality, and road safety?

Comment Summary

Commenters suggested that more trail and road signage is needed in the Planning Area to improve public safety in the Planning Area. Commenters recommended that more restrooms and other developed recreational facilities are needed in the Planning Area to prevent pollution from the spread of human waste and discarded trash. Commenters also recommended that more "leave no trace" educational materials be provided to visitors to the Planning Area. Commenters also suggested that more water stations are needed in the Planning Area. Commenters also recommended more on-the-ground staff to monitor public health and safety issues.

Issue: How can the transportation system in the Planning Area be managed to provide an appropriate level of access for a variety of user groups, such as hikers, cyclists, off-highway vehicle (OHV) users, equestrians, and aircraft pilots?

Comment Summary

Commenters from a variety of different recreational user groups expressed concerns and recommendations regarding recreational access in the Planning Area. Commenters recommended that the BLM continue to allow recreational access to the Monument units and Planning Area for activities such as hiking, dispersed camping, mountain biking, canyoneering, climbing, hunting and trapping, fishing, shooting, photography, drawing/painting, and horseback riding. Commenters expressed a desire for both less and more restrictions on OHV use in the Monument units and Planning Area. Commenters also provided lists of specific parts of the Planning Area where they recommended either less or more restrictions on OHV use. Restrictions on OHV use were recommended to protect sensitive resources and prevent user conflicts. Commenters made a variety of recommendations regarding equestrian use in the Planning Area, including recommendations on trail and area access, group sizes, developed facilities, access for equestrian

tourism groups, and partnerships with equestrian groups for volunteer work. Commenters also made a variety of recommendations regarding the management of aviation in the Planning Area, including opening more airstrips, keeping airstrips closed, coordinating with aviation groups for volunteer work, and recognizing the importance of aviation use in the Planning Area for public safety purposes.

5.11 Travel Management

Issue: How should the transportation system in the Planning Area be managed to accommodate increased visitation while protecting sensitive Planning Area resources?

Comment Summary

Commenters recommended both less and more restrictions on motorized vehicle use in the Monument units and Planning Area. Commenters also recommended construction of more roads in the Monument units and Planning Area, whereas other commenters recommended that no new roads be constructed in the Planning Area. Commenters suggested improvements and increased maintenance for unpaved roads in the Planning Area, including Hole-in-the-Rock Road, so that they can accommodate increased levels of visitation. Other commenters suggested that unpaved roads in the Planning Area, including Hole-in-the-Rock Road, remain unpaved to retain the area's primitive qualities and to protect sensitive resources from the potential impacts caused by increased visitation. Commenters also recommended increased signage for transportation system roads and trails to improve public safety, as well as more detailed road and trail maps.

Commenters also expressed a variety of concerns and recommendations regarding authority over the Planning Area transportation system. Commenters suggested that applicable county transportation systems and individual county roads be fully respected and incorporated in the RMPs. Commenters also suggested that county ordinances should control the types of vehicles, age of operators, etc. on county roads in the Planning Area. Commenters requested that the BLM address the counties' Revised Statute (RS) 2477 assertions in the Planning Area. Commenters recommended that Hole-in-the-Rock Road be managed by the State of Utah or Kane and Garfield Counties. Other commenters recommended that Hole-in-the-Rock Road should remain under Federal ownership and management.

5.12 Lands and Realty

Issue: What lands in the Planning Area will be identified for retention, disposal, and acquisition, as well as potential rights-of-way and utility corridors?

Comment Summary

Commenters noted that the Federal land in the Planning Area should remain public lands and should not be transferred to state or private control. Commenters recommended that more utility corridors and communication towers be allowed in the Planning Area to improve public safety and to address the needs of surrounding communities. Other commenters opposed new utility corridors in the Monument. It was recommended that the BLM acquire non-federal inholdings in the

Planning Area from willing private sellers and manage those acquisitions in accordance with the RMPs. Commenters provided specific stipulations/criteria that they recommended be applied to the management of any rights-of-way in the Planning Area.

Issue: How will the BLM address potential impacts to private inholdings and adjacent private lands?

Comment Summary

Commenters requested that the BLM not manage the Planning Area in a way that interferes with or manipulates the private property rights of landowners adjacent to or surrounded by Federal lands, including ingress/egress and any properly zoned uses. Commenters requested that access to private land parcels within the Monument be guaranteed and that access not be limited to one access route. Commenters suggested that the one access route requirement has been used to pressure landowners to sell inholdings to the Federal government. Commenters requested that the Federal government only acquire private inholdings if the owners are willing sellers.

5.13 Energy Development (Minerals and Renewables)

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

Comment Summary

Commenters expressed both support for and opposition to increased oil, gas, and mining development in the Planning Area. Support for increased oil, gas, and mining development generally cited the need for jobs in the region and the potential benefits to local economies. Opposition to increased oil, gas, and mining development generally cited potential negative impacts to the landscape, sensitive resources, recreational opportunities, and the local tourism economy. Commenters expressed opposition to the extraction of fossil fuels from the Planning Area because of the impacts that fossil fuels have on climate change.

Commenters also expressed opposition to the extraction of coal from the Planning Area because of the impacts that mining would have on the landscape, the impacts from transporting the coal, and the impacts from coal combustion. It was also suggested that it may not be financially viable to mine coal in the Planning Area because coal is on the decline in energy markets.

Commenters recommended that the BLM identify parts of the Planning Area that are viable for oil, gas, and mining development and identify any potential resource or user conflicts in those areas. It was also recommended that the BLM analyze potential impacts from mineral development and identify measures to reduce conflicts between mineral development and wildlife habitat, water quality, visual resources, other sensitive resources, and recreational use.

It was recommended that the BLM put more emphasize on renewable energy development than oil, gas, and mining development in the Planning Area.

5.14 Special Designations

Issue: How will the BLM manage the 16 existing Wilderness Study Areas (WSAs) in the Planning Area?

Comment Summary

Commenters recommended that all existing WSAs in the Planning Area be managed in accordance with existing WSA guidance. Commenters suggested that restrictions be applied and funding be allocated to protect WSA resources in the Planning Area. Commenters recommended that the BLM seek to establish wilderness designations for various parts of the Planning Area, and to manage any lands proposed for wilderness in “America’s Red Rock Wilderness Act” as de facto wilderness. Commenters also suggested that the BLM allow vegetation treatments in WSAs. Commenters requested that the BLM analyze potential impacts to WSAs from any ground-disturbing activities in the Planning Area.

Issue: Will the BLM revise existing designations in the Planning Area or propose new designations, including Areas of Critical Environmental Concern (ACECs), Wild and Scenic Rivers, National Trails, and Research Natural Areas?

Comment Summary

Commenters recommended that the RMPs consider ACEC nominations in the Planning Area. Commenters also recommended continued protections for existing ACECs in the Planning Area. Other commenters recommended that the BLM should ensure that any areas proposed for ACEC designation adhere fully to the criteria for such designation. It was recommended that areas with a high potential for paleontological resources, archaeological resources, special geologic features, threatened and endangered species habitat, scenic areas, and highly intact biological soil crusts be designated as ACECs. It was recommended that 50-Mile Mountain be designated as an ACEC or Research Natural Area rather than a SRMA.

Commenters expressed concerns and recommendations regarding Wild and Scenic Rivers determinations in the Planning Area. Commenters suggested that that BLM should show that any stream proposed for inclusion in the Wild and Scenic Rivers System meets the applicable criteria. It was recommended that the BLM continue to manage Wild and Scenic River suitable segments of waterways in the Planning Area to maintain suitability status.

Commenters expressed concerns regarding the Old Spanish National Historic Trail. It was recommended that the Old Spanish National Historic Trail be addressed in the RMPs using the specific laws, policies, and guidance pertaining to the trail.

5.15 Social and Economic Conditions

Issue: How will management of the Planning Area impact local economies?

Comment Summary

Commenters expressed concerns regarding the potential impacts that management of the Planning Area would have on local economies, including potential impacts to tourism, mining, logging, and other economic activities. Commenters suggested that management emphasizing preservation would benefit the local tourism economy. It was suggested that mineral extraction in the Planning Area would lead to an instable boom-and-bust economy in the region, and that outdoor recreation tourism would be more economically sustainable and longer-lasting than resource extraction. It was suggested that outdoor recreation tourism is much more important to local economies than livestock grazing. Commenters suggested that allowing more developed recreational facilities and small businesses catering to tourists inside the Monument would be economically beneficial. Other commenters stated that locals need land resource jobs, such as mineral extraction, commercial timber harvesting, and livestock grazing, rather than low-paying seasonal jobs.

Commenters expressed concerns about the potential impacts of increased tourism to the Planning Area. It was suggested that as the Planning Area becomes more publicized and more tourists visit the area, sensitive resources in the Planning Area would be impacted, and the infrastructures of the surrounding communities would not be able to handle the increased visitation. It was recommended that the BLM hire more staff to address increased visitation, with an emphasis on hiring new staff from local communities.

Commenters also expressed concerns about potential impacts on quality of life for surrounding communities. 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.

5.16 Process

Issue: How will State and local authorities, recreational groups, environmental groups, the GSENM Advisory Committee, or other management boards and stakeholders contribute to the planning process and ongoing management of the Planning Area?

Comment Summary

Comments from a variety of state and local authorities, recreational groups, environmental groups, and other stakeholder groups included a desire for the BLM to include these stakeholders in the planning process and in the ongoing management of the Planning Area. Commenters expressed opinions on how much influence different stakeholder groups should have on the process, as well as which groups have the most useful expertise on various resource issues. Commenters also inquired about the status of the GSENM Advisory Committee, whether it would continue to be involved in the Monument planning and management processes, and who would be members of the GSENM Advisory Committee. Commenters also recommended the creation of scientific advisory panels for each resource of concern in the Planning Area. Commenters requested that locals have more influence on the planning process than non-locals, whereas other commenters noted that the Planning Area is public land and that input from all U.S. citizens should be considered equally.

Issue: How will Native American Tribes be included in the planning process?

Comment Summary

Commenters requested meaningful government-to-government consultations between the Tribes and the Federal agencies. Comments requested continued consultation with the Hopi, Zuni, Navajo, Kaibab Paiute, Paiute Tribes of Utah, San Juan Southern Paiute, and Ute. Comments recommended retaining the existing provisions of the 1999 GSENM Management Plan relating to cooperation and consultation, with an amendment that Native American Indian Tribes should be added to the list of entities with whom cooperation and consultation are required.

Issue: How will information about the planning process be disseminated to the public, and how will meaningful public input on the planning process be facilitated?

Comment Summary

Commenters expressed concerns about the length of the public scoping comment period and requested more time for public input. Commenters also requested more public scoping meetings in more locations around the region and country. Commenters also suggested that the BLM be more deliberate in its public communication strategy because resolution of the pending lawsuits regarding the Monument modifications may end up affecting the planning process. Other commenters requested that the Draft RMPs be made available for public input as quickly as possible.

Issue: Will the BLM coordinate with nearby management entities, such as the National Park Service and state and local governments, to ensure that Planning Area management is consistent with other existing management plans?

Comment Summary

Commenters requested that the BLM coordinate with various management entities, such as the National Park Service, the State of Utah, Kane County, and Garfield County, to ensure that the RMPs are as consistent as possible with existing management plans such as county general plans, state wildlife plans, and national park and national recreation area management plans.

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 formulating alternatives, analyzing the effects of alternatives, publishing a Draft RMPs/EIS and a Proposed RMPs/Final EIS, and issuing the final ROD/Approved RMPs.

Figure 2 shows where the BLM is currently at in the NEPA process 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 RMPs/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 RMPs/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 RMPs and a Draft EIS. A Notice of Availability (NOA) will be published in the *Federal Register* when the Draft RMPs 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 RMPs/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 RMPs and a Final EIS. An NOA will be published in the *Federal Register* when the Proposed RMPs and Final EIS are available for the public to review.

Following publication of the Proposed RMPs 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 ROD and the Approved RMPs.



Grand Staircase-Escalante National Monument & Kanab-Escalante Area Resource Management Plans Scoping

Planning Process and Public Involvement

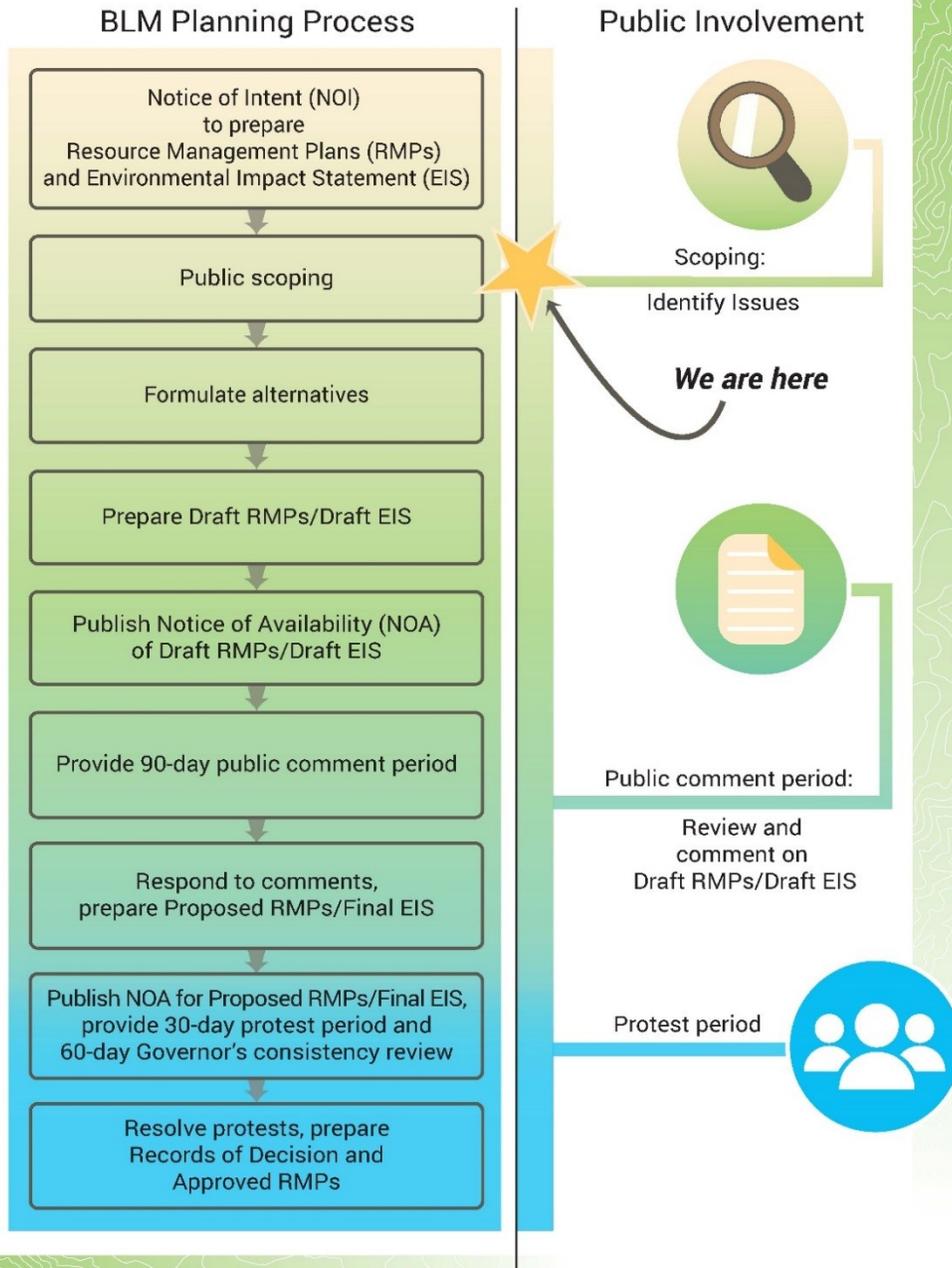


Figure 2. National Environmental Policy Act and land use planning process graphic.

7 CONTACT INFORMATION

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

Email: BLM_UT_CCD_monuments@blm.gov

Mail: BLM

Attention: GSENM and Kanab-Escalante Area RMPs
669 South Highway 89A
Kanab, Utah 84741



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

**Grand Staircase-Escalante National Monument and
Kanab-Escalante Resource Area
Resource Management Plans and Environmental Impact Statement
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. Commenters provided comments and recommendations for BLM's land use planning process in general, as well as for the Grand Staircase, Kaiparowits, or Escalante Canyons Units or the BLM-administered lands now outside the Monument boundaries (the excluded lands). Comments pertaining to all three Monument units AND the excluded lands are identified as the "Planning Area."

Process

General Process Guidance

Commenters provided the following recommendations regarding people, groups, and philosophies that should guide the BLM's planning process:

- The BLM's planning process should explicitly acknowledge that the three newly designated units are part of the National Landscape Conservation System, established to conserve, protect, and restore nationally significant landscapes that have outstanding cultural, ecological, and scientific for the benefit of current and future generations. Any planning effort relating to the units of the GSENM should clearly designate that compliance with this directive shall be given the highest priority in the RMP planning process.
- For each unit, the BLM must inventory and document specific, discrete, tangible "objects" as required by the Antiquities Act. The BLM should then focus management prescriptions on the actual area necessary for conservation of these objects.
- The BLM should conduct a deliberate planning process and not fast-track the RMPs, especially considering the ongoing legal challenges to the Monument modifications.
- The BLM should not limit Monument management plans to 150 pages.
- The BLM should include Native American traditional land management in all actions regarding Monument management, and Tribes should be included in the management and planning of the Monument.
- The BLM should use the best available science during the planning process and not just studies that support ranching, industry, or development. Decisions should be guided more by science than politics.
- The BLM should make decisions based on compassion and what benefits the largest number of both people and animals.
- The BLM should manage the Planning Area as it was managed prior to the GSENM's establishment in 1996.
- The BLM should adhere to its mission statement to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.
- The BLM should investigate or reevaluate how it puts together RMPs, because the planning process currently takes too long.
- The BLM should cooperate and coordinate with the National Park Service, the U.S. Forest Service, the Tribal entities, and other agencies concerned in management of these lands, including development of common standards and guidelines across jurisdictions to protect ecosystem integrity.

- The RMPs should be consistent with the directives outlined in Secretarial Order 3356 (Hunting, Fishing, Recreational Shooting, and Wildlife Conservation Opportunities and Coordination with States, Tribes, and Territories).
- The BLM should have staffing levels that are commensurate with the expansive nature of the Monument. A staffing level should be specified that will assure that the required agency review for permit applications and NEPA review processes can be completed in fewer than 30 days.
- The BLM should consider positive impacts of GSENM management since 1996 in the decision making for the management plans.
- The BLM should acknowledge that many problems are small-scale management issues that can be easily worked out within the framework of the existing 1999 GSENM Management Plan with minor tweaking and accommodations for small conveniences or ease of access to existing infrastructure.
- The BLM should create scientific advisory panels to address archaeological, paleontological, geological, and ecological issues in the Planning Area.
- The BLM should use modern techniques, such as building geographic information system (GIS) interfaces from true field data, high-resolution aerial photography, calibrated lidar information, catalogued geological data, basal mass production, plant distribution types, effective impervious area, water bathymetry, calibrated hydrology and hydraulic models, consideration of migration routes, habitat formation, and aquatic count deduction, along with other information including both public and private input from local experienced people and agencies to create the RMPs.
- The BLM should keep an updated, interlinked map that accounts for resource extraction, infrastructure, roads, and other activities in the Planning Area.
- The BLM should ensure that its planning process is consistent with applicable laws, regulations, and guidance, such as NEPA; Omnibus Public Land Management Act; Antiquities Act; FLPMA; Endangered Species Act (ESA); Paleontological Resources Preservation Act; and the President's National Fish, Wildlife, and Plants Climate Adaptation Strategy.
- The BLM should provide regular updates to the public on the costs associated with this planning process.
- The BLM should conduct Monument planning at the watershed level, regardless of landownership status or designation, rather than conducting planning by individual unit.
- The BLM should not use the 1999 GSENM Management Plan's management zone system (i.e., Front Country Zone, Passage Zone, and Primitive Zone) because it manages people in a National Park Service style and because a large portion of the management units is required to be managed to a non-impairment standard. Also, primitive zones restrict the BLM's ability to efficiently and effectively manage vegetation and conserve natural ecosystems through mechanical and chemical treatments. Primitive zones also limit the ability of grazing permittees to sustainably manage rangeland.
- The BLM should retain 1999 GSENM Management Plan's management zone system (i.e., Front Country Zone, Passage Zone, and Primitive Zone) but with some modifications (proposed in alternatives).

- The BLM should include language in the RMPs that highlights and encourages the important role of partnerships in the future stewardship of public lands, such as partnerships with the Escalante River Watershed Partnership, Glen Canyon Natural History Association, Grand Staircase-Escalante Partners, and research partnerships with universities.
- The BLM should acknowledge that enforcement of the RMP has not been prioritized in the past because management of the Monument has been underfunded. Commenters expressed concern that the BLM Kanab Field Office lacks the staff or budget to adequately administer three different Monument units.
- The BLM should not use “buffer zones” to influence management practices or decisions where those lands under question are not directly impacted by specific resource concerns.
- The BLM should move away from its current National Park Service type of management of the Monument and only focus such protective management on specifically identified historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest as stipulated in the Antiquities Act.
- The BLM should postpone further RMP planning until the Federal district court has ruled on the legality of Proclamation 9682.
- The BLM should adopt a sequential unit-by-unit approach to the planning process, as a way of preserving limited agency resources, to reduce waste that would result if Proclamation 9682 is overturned.
- The BLM should analyze in detail the financial costs of proceeding with the new RMP planning process, to determine the resources that stand to be wasted in the event Proclamation 9682 is overturned by the court.

Valid Existing Rights

Commenters noted that valid existing rights (VERs) and permits, such as grazing permits, water rights, and travel on main thoroughfares, have always been honored in the GSENM and the Planning Area, because it is required by law. Comment submissions provided the following specific stipulations to add into the plans.

ENERGY AND MINERAL ACTIVITIES

- The BLM should verify whether VERs are present by periodically reviewing the files related to existing mining claims and leases. This will help ensure that required actions, filings, and fees are in full compliance with the law. This process, known as adjudication, will continue for the life of each VER. With regard to mining claims and millsites located under the Mining Law of 1872, the BLM will initiate a validity examination process to verify the VERs of claimants before such claimants conduct surface-disturbing activities greater than casual use. Valid mining claims within the Planning Area require existence on September 18, 1996, of a discovery of a valuable mineral deposit, as well as a continuing discovery to the date of the validity examination and thereafter. For previously approved operations, the BLM should conduct validity examinations. For new proposals, except as described in the next sentence, the BLM should
 - withhold approval of plans of operations under 43 CFR 3802 or 3809 until the validity examination process is complete and the claims are determined to be valid; and

- inform persons who have written the BLM that they intend to commence notice-level operations under 43 CFR 3809 that such operations cannot commence until the BLM completes its validity examination process and has verified that there are VERs. Until the validity examination process is complete, the BLM may allow notice-level operations or approve a plan of operations under 43 CFR 3809 for operations on unreclaimed previously disturbed areas, which are limited to taking samples to confirm or corroborate mineral exposures that are physically disclosed and existing on the mining claim. The BLM may deny plans of operations without the performance of a validity examination if such denial is consistent with BLM regulations and policy.

In addition, VERs may be examined in the field for compliance with laws and regulations. The BLM will continue to monitor oil and gas activities through its Inspection Program.

- Once a VER is verified, the process used to address applications or notices filed under that VER (such as an application to drill on an oil or gas lease, or a plan of operations or notice filed on a mining claim) will vary by commodity and regulation. However, for all applications and notices, the BLM will use a NEPA analysis to determine potential impacts on the Planning Area resources that these RMPs are required to protect. Once such analysis is completed, the BLM will take the following actions on a case-by-case basis:
 - If the analysis indicates no impact to Planning Area resources, or indicates impacts to resources, but determines that the impacts are consistent with Proclamation 9682 and the RMP, the proposed operation can proceed in accordance with applicable regulations, standards and stipulations.
 - If analysis and documentation indicate that, under the laws, regulations, and stipulations discussed above, a proposal may have impacts that are not in conformance with Proclamation 9682 and these RMPs, the BLM will take the following actions on a case-by-case basis:
 - Work with the applicant to find alternatives or modifications to the proposal that will either:
 - Cause no adverse impacts to Planning Area resources, or
 - Minimize such impacts through special stipulations or other permit conditions, consistent with the applicant's rights.
 - If unable to prevent or minimize adverse impacts, disapprove the proposed action if disapproval is consistent with the applicants' rights. For persons with rights within WSAs within the Planning Area, the BLM will also be guided by its July 5, 1995 (or its update) *Interim Management Policy and Guidelines for Lands Under Wilderness Review*.

OTHER EXISTING RIGHTS OR INTERESTS

Authorizations, where they are valid and existed on September 18, 1996, should be recognized in the Planning Area and their uses will be allowed subject to the terms and conditions of the authorizing document. Where these uses conflict with the protection of Planning Area resources, and where legally possible, leases, permits, or easements will be adjusted to eliminate or minimize adverse impacts.

The Materials Act of 1947 specifically excludes the disposal of mineral materials from National Monuments. As a result, free use permits or contracts for mineral materials authorized under this Act should not be renewed.

Some mineral material sites are authorized under 23 United States Code 107 (1998), which provides for the appropriation of lands or interests in lands for highway purposes. Unlike free use permits or contracts for sale of mineral materials that are issued for a fixed term, Title 23 rights-of-

way continue indefinitely. The BLM does not resume jurisdiction over the land covered by the rights-of-way until the lands are returned to the BLM upon a determination by the Federal Highway Administration that the need for the material no longer exists. Existing Title 23 rights-of-way within the Planning Area are inconsistent with the protection of Planning Area resources. The BLM should request closure of those sites from the Federal Highway Administration and work with the Federal Highway Administration to find suitable replacement sources of mineral material.

NON-FEDERAL LAND INHOLDINGS

Owners of non-Federal land surrounded by public land managed under FLPMA are entitled to reasonable access to their land. Reasonable access is defined as access that the Secretary of the Interior deems adequate to secure the owner reasonable use and enjoyment of the non-Federal land. Such access is subject to rules and regulations governing the administration of public land. In determining reasonable access, the BLM has discretion to evaluate and should consider such things as proposed construction methods and location, reasonable alternatives, and reasonable terms and conditions as are necessary to protect the public interest and Planning Area resources.

The BLM should consider land exchanges and acquisitions so long as the current owner is a willing participant and so long as the action is in the public interest, and is in accordance with other management goals and objectives of the RMPs. The action must also result in a net gain of objects and values within the Planning Area, such as wildlife habitat, cultural sites, riparian areas, live water, threatened or endangered species habitat, or areas key to the maintenance of productive ecosystems. The action may also meet one or more of the following criteria:

- Ensures the accessibility of public lands in areas where access is needed and cannot otherwise be obtained
- Is essential to allow effective management of public lands
- Results in the acquisition of lands which serve a National priority as identified in National policy directives.

All land exchanges and acquisitions will be subject to VERs as determined by the BLM.

OTHER LAND USE AUTHORIZATIONS

There is a variety of other land use authorizations that were in effect as of September 18, 1996, and that, although they involve no “rights,” are being continued in the Planning Area. Outfitter and guide permits are an example. These permits authorize certain uses of public land for a specified time, under certain conditions, without conveying a right, title, or interest in the land or resources used. Such permits should be recognized in the Planning Area and fulfilled subject to the terms and conditions of the authorizing document. If at any time it is determined that an outfitter and guide permit, other such permit, or any activities under those permits, are not consistent with the approved Planning Area management plan, then the authorization should be adjusted, mitigated, or revoked where legally possible.

Grazing permits are also in this category. Grazing permits or leases convey no right, title, or interest in the land or resources used. Other applicable laws and regulations govern changes to existing grazing permits and levels of livestock grazing in the Planning Area, just as in other BLM livestock grazing administration programs. Management of livestock grazing is addressed previously in the Livestock Grazing section in this appendix.

ACQUIRED SCHOOL AND INSTITUTIONAL TRUST LANDS

The BLM will be acting in place of the State in administering all valid existing authorizations for the remainder of the applicable term in accordance with State laws and regulations. As part of such administration, BLM decisions will be subject to those Federal laws that are ordinarily attached to Federal decisions (NEPA, ESA, NHPA, etc.).

Land Management Emphasis

MULTIPLE USE EMPHASIS

Commenters recommended that the BLM manage the Planning Area with an emphasis on multiple uses. It was suggested that the BLM protect multiple uses, such as grazing, mineral extraction, tourism, OHV use, wood gathering, antler gathering, backpacking, camping, logging, hiking, hunting, fishing, tourism, motorized boating, harvesting of seasonal plants, oil and gas leasing, and others.

PRESERVATION EMPHASIS

Commenters recommended that the BLM emphasize preservation in its management of the Planning Area, including the following suggestions:

- The BLM should prioritize the protection of cultural and ecological resources on all the Monument lands.
- The BLM should continue to manage GSENM land consistent with Proclamation 6920 and the 1999 GSENM Management Plan until the courts resolve the ongoing legal challenges to the Monument modifications. Update the 1999 GSENM Management Plan to ensure consistency with the Paleontological Resources Protection Act: Public Law 111-011 Omnibus Public Land Management Act of 2009, and to reflect changes and advancements in standards and practices.
- The BLM should not authorize any management actions that could cause lasting or irreparable impacts until the ongoing legal actions challenging the Monument modifications are resolved.
- The BLM should prohibit any new extraction, roads, tourist amenities, or other changes on Planning Area lands excluded from the GSENM management units.
- The BLM should require a full environmental impact study for any new improvements or facilities (roads, power lines, buildings, etc.) in the Planning Area, or should generally not allow new improvements or facilities.
- The BLM should acknowledge that breaking up the Monument into three separate units would negatively impact the overall ecosystem because the protected lands would be disconnected.
- The BLM should not allow public lands to be used or destroyed for private profit.
- The BLM should protect the Planning Area at a large, landscape scale to support biological diversity, species interactions, and wildlife connectivity.
- The BLM should protect the land in the Planning Area in perpetuity.

- The BLM should not allow a small number of ranchers and extraction companies to benefit to the detriment of all other users of these lands.
- The BLM should acknowledge that damage to the landscape and resources within the Planning Area could be irreversible.
- The BLM should protect land in the Planning Area because of its intrinsic value and because open spaces are beneficial to people's physical and mental wellbeing.
- The BLM should consider closing off areas to all user groups for a predetermined amount of time if an area is getting overly damaged.
- The BLM should increase the number of backcountry rangers skilled in natural and cultural resources protection.
- The BLM should manage resources within the Monument on a systems basis that includes extensions beyond the Monument boundaries. For example, the paleontological resources in the Monument extend beyond the boundaries of the Monument and should be managed to assure that their value are not recklessly damaged or degraded.
- The BLM should manage land in the Planning Area that is adjacent to National Park Service lands consistent with National Park Service management.

Commenters noted that the National Monument currently allows ranching, fishing, hunting, hiking, camping, all-terrain vehicle (ATV) use, and scientific research. It was also noted that the designation of the GSENM did very little to change how those BLM-administered lands were managed and accessed prior to the designation, because of already existing designations such as WSAs. Commenters expressed concern that the only reason to reduce the Monument and change its management is to allow more grazing and extractive industries.

Public Involvement

SCOPING COMMENT PERIOD

Commenters requested an extension of the public scoping period, to 30, 90, 120, or 180 days after the last public hearing. Rationale for comments extension included the following:

- To allow people who had problems accessing the online commenting system to submit comments
- To account for the seasonal nature of tourism in the GSENM area (many residents are out of town during off season, which is when the scoping period was held)

Comments also questioned why the public scoping process was not more publicized. Commenters suggested that the Planning Area and Monument unit maps available for the scoping period are not detailed enough. For example, the maps do not make it clear that the Paria River has been excluded from the Monument boundary because it has been made a Monument boundary between the Grand Staircase and Kaiparowits Units.

SCOPING MEETINGS

Commenters requested more opportunities to provide input on the planning process. Commenters requested that additional public hearings be scheduled in Salt Lake City, Utah; Flagstaff, Arizona; Denver, Colorado; Washington D.C.; Las Vegas, Nevada; Albuquerque, New Mexico; California; Colorado; Idaho; Montana; and other cities and states in addition to the "gateway communities" of the Monument. Commenters suggested that more stakeholders live along the Wasatch Front than in the gateway communities of Kanab and Escalante. Some commenters requested that the public

involvement process be carried out at the local, State, regional, and national levels because many people across the State and country visit these lands, and Federal lands are held in trust for all Americans and not just for local interests. Commenters suggested more public meetings should be required. Other commenters requested that scoping meetings only be held in communities within 20 miles of the Planning Area.

Comments requested that the BLM hold meetings specifically to explain whether certain sites, trails, and other features are included within the management unit boundaries, because the maps currently available are not detailed enough. It was also requested that the mapping of the actual designation of the newly designated Monument units and the lands that were excised from the former GSENM be made available to the local stakeholders. Copies of detailed maps and other information should have been given to meeting participants, so they could study them at home. Commenters requested that the maps presented at the scoping meetings be made available online. It was also asked if the public would be able to call into the public meetings or whether the public would be able to watch a live broadcast of the meetings.

BLM'S COMMUNICATION STRATEGY

Commenters suggested that because of judicial scrutiny surrounding Proclamation 9682, the BLM should revise its current communication strategy and associated maps, interpretive signage, and webpages to include methods that engage with stakeholders in a more hesitant and deliberate manner, especially with the stakeholders focused on mineral extraction in the Monument's vicinity. It was suggested this approach would help the BLM avoid wasting money; help avoid harming the agencies' relationship with the energy, mining, and tourism sectors; help avoid a clash between the Federal judiciary and the administration; and help maintain the public's confidence in the agency.

CONSIDERATION OF STAKEHOLDER INPUT

Commenters expressed concern that decision makers are giving more weight to input from ranchers, mineral extraction industries, and people supportive of the Monument reductions than input from people that are opposed to the Monument reductions. Commenters requested that all comments be given equal weight. Other commenters requested that input from locals be given more weight than non-locals. Commenters also requested that the BLM not minimize the input from Tribal groups. It was recommended that Native American input be given priority during the planning process. Commenters requested that the BLM consider input from Native Americans on activities that affect Tribal lands. It was also requested that the BLM give more weight to input from people who have visited the GSENM. It was requested that the BLM end its relationship with the Grand Staircase-Escalante Partners group and the Escalante River Watershed Partnership because these groups conduct campaigns that harm local interests, such as grazing and resource extraction, and do not provide for full State and local government participation or a balanced representation of a full range of stakeholders. It was noted that the Secretary of the Interior refused to meet with Native American Tribes, local business owners, and other important stakeholders when he visited Utah for a listening tour prior to the recent Monument modifications.

Commenters suggested that the BLM sever any contracts with non-governmental advocacy groups and if outside contracts are used, they should require an open bidding process and public visibility. It was also suggested that the BLM not give special interest group priority access to staff and decision making, and cease using data and analysis generated by special interest groups unless the data are openly vetted with, and endorsed by, the State of Utah, the local counties, and the local communities.

Commenters recommended that the BLM receive input from representatives from other agencies, such as the U.S. Forest Service, U.S. Fish and Wildlife Service, U.S. Geological Survey, and representatives of GCNRA, Bryce Canyon National Park, Vermilion Cliffs National Monument, Vermilion Cliffs Wilderness, Box Death Hollow Wilderness, Dixie National Forest, and Capitol Reef National Park.

Commenters requested a 90-day notification of each action taken by the BLM during the planning process.

MAILING LIST

Commenters requested to be added to the project mailing list and requested to be informed about any planned or imminent changes that affect the GSENM.

DRAFT RMP OUTREACH

Commenters requested that the preparation of new RMPs be carried out as soon as possible and include comments from the local stakeholders, State, County, and city governmental agencies. It was requested that the Draft RMPs be made available for public comment in a timely fashion, including making mapping of the management units available to the public. It was also requested that public hearings on the RMPs be scheduled in the GSENM gateway communities. The Kaibab Band of the Southern Paiutes requested that the BLM keep the Tribe informed of any management decisions in the Planning Area.

Consultation and Coordination

ROLES OF FEDERAL, STATE, AND LOCAL AUTHORITIES

Commenters recommended that the BLM cooperate and coordinate with Federal, State, and local authorities in the management of the Planning Area, including the following suggestions:

- The BLM should increase cooperative/consensus land management with the State of Utah and County/local governments.
- The BLM should collaborate with neighboring entities to make sure the RMPs are consistent to the extent possible with the following:
 - Bryce Canyon National Park General Management Plan
 - Capitol Reef National Park General Management Plan
 - GCNRA General Management Plan
 - Dixie National Forest Land and RMP
 - Garfield County General Plan
 - Kane County General Plan
 - Kane County Water Conservancy Master Plan
 - Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances.
 - Final Recovery Plan Southwestern Willow Flycatcher
- The RMPs should be consistent with the County's plan to the maximum extent available under Federal law. All inconsistencies must be identified, attempted to be resolved, and disclosed. At least one viable alternative must be included that is consistent with State and local plans.

- The BLM should form innovative partnerships with Native American Indian Tribes, local and State governments, qualified organizations, and appropriate Federal agencies to manage lands or programs for mutual benefit consistent with the goals and objectives of the RMPs.
- The BLM should work with communities, counties, State and other Federal agencies, and interested organizations in seeking nontraditional sources of funding including challenge cost-share programs, grants, in-kind contributions, and allowable fee systems to support specific projects needed to achieve RMP objectives.
- The BLM should consider, where appropriate, contracting with private sector businesses, nonprofit organizations, academic institutions, or State and local agencies to accomplish essential studies, monitoring, or project development.
- The BLM should increase the use of citizen and organizational volunteers to provide greater monitoring of resource conditions and to complete on-the ground developments for resource protection, effective land management, and human use and enjoyment.
- The BLM should enter into cooperative agreements or memoranda of understanding with Federal, State, local, Tribal, and private entities to manage lands or programs consistent with the goals and policies of the RMPs. Non-profit organizations, citizens, and user groups that have adequate resources and expertise could enter into cooperative agreements to assist in the management of public lands in the Planning Area. Assistance could include resource monitoring, site cleanups, and the construction of authorized projects.
- The BLM should allow local employees to make more management decisions.
- The BLM should provide a clear pathway in the RMPs for qualified local residents to fill Monument positions.
- The BLM should remove staff who are believed to undermine the principles of the County's RMP unless objections are directly mandated by Federal law.
- The BLM should give locals more control over management of the Planning Area than people from outside of state.
- The BLM should allow ranchers and other locals to create management plans and manage the Planning Area.
- Kane County requested cooperating or joint lead agency status and to be involved in the planning process as soon as possible.

Commenters also suggested that the BLM's priority should be to properly care for and manage public lands, and not to enhance its relationship with the State of Utah and local communities when the priorities of the State and local communities differ from the BLM's priorities. It was also requested that local politicians not be allowed to manage the Federally funded Monument.

ROLE OF THE ADVISORY COMMITTEE

Commenters recommended retaining the provisions of the current 1999 GSENM Management Plan with respect to creating a GSENM Advisory Committee(s), and suggested the following:

- The BLM should resume regular meetings with the existing GSENM advisory committee and fill vacancies as required in the existing Monument management plan.
- The BLM should acknowledge that the role of the advisory committee should be to provide advice and information as to what management actions will be necessary to protect the features mandated for protection in Proclamation 9682.

- The BLM should ensure that most of the committee members are scientists, reflecting the advisory committee's science focus. There should be eight scientists representing the areas of archaeology, paleontology, geology, botany, wildlife biology, history, social science, and systems ecology. In addition, there should be seven members representing other agencies, local communities, interest groups, and users of the Monument.
- The BLM should appoint one or more OHV representative(s) to the advisory committee, as well as local counties, local communities, the State of Utah, and local private stakeholders.
- The BLM should limit scientific representation on any advisory committee to providing advice on specific scientific principles and documented evidence.
- The BLM should make the primary purpose of the committee to aid in achievement of the RMP objectives, through participation in the adaptive management program. In this capacity it will have several tasks: 1) review evaluation reports produced by the management science team and make recommendations on protocols and projects to meet overall objectives, 2) review appropriate research proposals and make recommendations on project necessity and validity, and 3) make recommendations regarding allocation of research funds. The management science team will be responsible for developing monitoring and adaptive management protocols and ensuring that documentation is sufficient to facilitate feedback into the adaptive management process.
- The BLM should expressly limit the role of any advisory committee to providing information and viewpoints from individual attendees, as opposed to advice, opinions, or recommendations from the group acting in a collective mode. No consensus advice or recommendations from group deliberation should be expected or solicited. Management should evaluate all advisory committee recommendations, but will ultimately be responsible for making all final decisions.
- The BLM should have the advisory committee meet at least twice a year.
- The BLM should make public any decision to terminate the advisory committee.

GOVERNMENT-TO-GOVERNMENT CONSULTATION

Commenters requested meaningful government-to-government consultations between the Tribes and the Federal agencies. Comments requested continued consultation with the Hopi, Zuni, Navajo, Kaibab Paiute, Paiute Tribes of Utah, San Juan Southern Paiute, and Ute. It was noted that the BLM has not conducted any outreach, communication, or government-to-government communication with the Pueblo of San Felipe. It was requested that the comment period be extended until there is proper government-to-government consultation with the Pueblo of San Felipe. It was also requested that any oil and gas lease sales currently being considered be cancelled until proper government-to-government consultation with the Pueblo of San Felipe.

Comments recommended retaining the existing provisions of the 1999 GSENM Management Plan relating to cooperation and consultation, with an amendment that Native American Indian Tribes should be added to the list of entities with whom cooperation and consultation is required.

Comments also suggested that the BLM continue its agreements to collect ethnographic data with the Hopi and the Kaibab Paiute and expand this effort to the other Tribal nations.

Purpose and Need

Commenters requested that the BLM conduct an environmental assessment prior to developing management plans for the Monument, including developing a purpose and need statement.

Alternatives

Alternatives Development Process

Commenters requested that the BLM analyze an alternative that protects all resources in the Planning Area (Monument units and excluded lands) consistent with the original GSENM designation set forth in Proclamation 6920. Commenters also recommended adopting the current 1999 GSENM Management Plan as the RMP for the three newly described units of the GSENM, and for the excluded lands.

Commenters suggested limiting planning efforts to the subject areas described in the five specific paragraphs included on the final page of Proclamation 9682 describing those subjects where new planning may modify existing planning under Proclamation 6920. The five paragraphs address 1) the creation of separate management plans for each of the three newly designated units, 2) the establishment of advisory committees, 3) allowing motorized and non-mechanized vehicle use of roads and trails existing before the issuance of Proclamation 6920, consistent with the protective goals set forth in the proclamation, and 4) a declaration that nothing in Proclamation 9682 shall provide authorizations for or the administration of livestock grazing.

Commenters also stated that the BLM must include at least one viable alternative that is consistent with State and local plans.

Commenters provided the following overarching goals and objectives to guide the alternatives development process:

- Maintaining the GSENM in its primitive frontier state, safeguarding the remote and undeveloped character of the Monument, as conditions essential to the protection of scientific and historic resources.
- Providing opportunities for the study of scientific and historic resources, including a focus on understanding the ways in which changes in environmental conditions on multiple geographic and time scales will impact the functioning of all current biological and ecological systems. These opportunities should be limited only when they would conflict with the protection and preservation of Monument resources.
- Continuing to use the current management zone system; Frontcountry, Passage, Outback, and Primitive.
- Adopting the current Transportation Plan map identifying open, closed and routes open only to administrative use, and which includes a prohibition on all cross-country vehicle travel.
- Integrating new information gathered from field inventories, assessments, research, other agency studies, and other scientific resources into the planning process
- Implementing adaptive management strategies to integrate new information into an ongoing planning process.

Three full alternatives were provided for BLM consideration:

- A “Sustainable Grand Staircase-Escalante Alternative” comprising, with some additions/differences, the 1999 GSENM Management Plan and the Sustainable Grazing Alternative proposed as in 2016 as Alternative C for the planned Monument Management Plan grazing amendment EIS.
- A complete alternative addressing specific components of the proposed new RMPs, using the existing 1999 GSENM Management Plan as an outline as well as proposed management for specifically identified units and to the excluded lands.
- The Sierra Club submitted a detailed “Conservation Alternative” that was originally submitted to the BLM in 2009 and describes proposed changes in range management for most allotments in the Planning Area.

These suggestions are included under the appropriate resources sections in this appendix. The Sustainable Alternative was accompanied by an appendix providing detailed rationale for many of the management actions (available in the project record) as well as a list of references that should be consulted (contained in the Resource References section of this appendix).

No Action

Commenters requested that the BLM’s evaluation of alternatives include a “No Action” alternative that manages the entire Planning Area under the 1999 GSENM Management Plan.

Natural, Biological, and Cultural Resources

Commenters expressed concerns regarding protection of ecological, paleontological, cultural, geological, and other natural resources in the Planning Area. Commenters requested that the BLM analyze the potential direct, indirect, and cumulative impacts to these resources from all management and research permit activities in the Planning Area.

Air and Climate Change

GENERAL CONCERNS

Commenters expressed concerns about the potential for fossil fuel development in the Planning Area and its potential impacts on air quality and climate change. Commenters also expressed concerns about the potential impacts that climate change could have on the Planning Area.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters requested that air quality be protected in the GSENM region. Commenters also requested that the RMPs consider the most robust, consensus-based science on changing atmospheric chemistry in any decision to allow for the development of fossil fuel infrastructure in this region. It was suggested that the BLM analyze the air quality element of the 1999 GSENM Management Plan for inclusion in the Planning Area RMPs.

Commenters recommended that the BLM implement a portfolio approach to land use planning that allows for diverse strategies and adaptive, dynamic planning as a climate change adaptation strategy. This involves establishing restoration, innovation and observation zones to “learn while doing.”

Commenters suggested the following management actions:

- The BLM should continue to manage the Planning Area as a Prevention of Significant Deterioration Class II Area as designated by the Clean Air Act. All BLM actions and use authorizations should be designed or stipulated so as to protect air quality within the Planning Area and the Class I areas on surrounding Federal lands.
- The BLM should review site-specific proposals affecting BLM and adjacent lands for compliance with existing air quality laws and policies. Mitigation should be incorporated into project proposals to reduce air quality degradation. Projects should be designed to minimize further degradation of air quality. New emission sources should be required to apply control measures to reduce emissions.
- The BLM should ensure that management of ignited fires comply with State of Utah requirements to minimize air quality impacts from resulting particulates. This procedure requires obtaining an open burning permit from the State prior to conducting a management ignited fire.

AFFECTED ENVIRONMENT

Commenters requested that the BLM evaluate current air quality conditions and trends in the Planning Area.

ENVIRONMENTAL CONSEQUENCES

Commenters noted that the planning process provides the BLM an excellent opportunity to analyze the impacts on the Planning Area from climate change over the next two decades. Commenters requested that the BLM analyze potential direct, indirect, and cumulative impacts from future BLM-authorized activities in the Planning Area. It was recommended that the analysis include the following:

- Each of the criteria pollutants and their appropriate National Ambient Air Quality Standards (NAAQS), i.e., ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide and lead
- Air quality-related values (AQRVs) in potentially impacted Class I areas and sensitive Class II areas
- Prevention of Significant Deterioration increment at potentially impacted Class I and Sensitive Class II Areas
- Estimated greenhouse gas emissions caused by the alternatives
- Hazardous air pollutants (HAPs) and relevant health-based risk thresholds for HAPs including acetaldehyde, benzene, ethyl benzene, ethylene glycol, formaldehyde, methanol, n-hexane, toluene, xylene (mixture), and any other compounds that the BLM identifies as potential HAPs in the Planning Area

Commenters requested that if the BLM intends to revise land allocations for tar sands leasing in any of the new RMPs for this Planning Area, then the EIS's air analysis should include any related potential impacts, as well as mitigation measures to address tar sands resource development.

Commenters requested that the BLM analyze the potential impacts on natural resources and climate change from the ultimate combustion of any coal, oil, and gas extracted from the Planning Area.

MITIGATION

Commenters requested that the BLM identify in the Draft EIS the mitigation measures (including control measures and design features) it would apply at the project level if potential adverse impacts to air quality or AQRVs on affected lands are predicted. These measures could include equipment type or design requirements, emission standards or limitations, best management practices (BMPs), dust suppression measures for unpaved roads and construction areas, add-on control technologies, and limitations on the density and/or pace of development. It was also recommended that the BLM identify the mechanisms it will use to ensure project-level implementation of these measures including lease stipulations, conditions of approval, and notices to lessees.

Commenters recommended that the BLM identify and implement an oil and gas surface occupancy buffer around occupied structures such as homes, schools, and office buildings. The buffer or “setback” distance should be sufficient to minimize the potential for public health impacts associated with exposure to the following: near-field criteria pollutants, HAPs emissions and any other potential toxic emissions such as hydrogen sulfide releases, and potential emissions associated with well blowouts or other explosive events. Setbacks can be an effective health protection tool because they provide an opportunity for emitted air pollutants to disperse before entering an area where they could affect human health. They also provide extra time to warn residents of any unintended releases or emissions. It was recommended that setback distances be informed by the following factors:

- The near-field modeling results for this EIS or similar projects that have been demonstrated to be relevant. It was recommended that the setback buffer ensures that people are not exposed to air pollution levels exceeding the NAAQS or other health-based thresholds.
- Whether mitigation measures and BMPs are being required to reduce risks to nearby residents and other building occupants. Examples of risk-reduction mitigation may include requiring closed-loop drilling and completion; prohibiting reserve pits or produced water ponds; using lower emitting engine technology; capturing emissions from tanks, separators, and glycol dehydrators; and implementing stringent fugitive vapor controls.
- The composition of the Planning Area’s oil and gas resources. For example, certain conditions may indicate the need for a larger setback buffer, including oil and gas resources with high HAPs content, higher explosive potential, or high sulfur or hydrogen sulfide content.

Soils and Water

GENERAL CONCERNS

Commenters expressed concerns about water quality and quantity in the Planning Area, including concerns about specific rivers. Commenters also expressed concerns about potential impacts to biological soil crusts in the Planning Area. Commenters expressed concern that removal of Monument protection would make riparian resources (e.g., canyon bottoms, hanging gardens, springs and seeps, wildlife concentration areas) vulnerable to destruction by motorized OHV use. Commenters also expressed concern that the Planning Area is a desert environment with limited water resources that is susceptible to drought and that the Colorado River watershed is already overallocated, so the RMPs need to be adaptable to best practices.

Comments recommended the following objectives with respect to soil resources:

- To manage uses to prevent damage to soil resources and to ensure that the health and distribution of fragile biological soil crusts are maintained, where at potential or improved, where below potential
- To increase public education and appreciation of soils and biological soil crusts through interpretation
- To facilitate appropriate research to improve understanding and management of soil resources and biological soil crusts

Comments recommended the following objectives with respect to water resources:

- To ensure that appropriate quality and quantity of water resources are available for the proper care and management of the objects of the Planning Area
- To increase public education and appreciation of water resources through interpretation
- To facilitate appropriate research to improve management of water resources

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters recommended the following management actions regarding soil and water resources in the Planning Area.

General

The BLM should protect soils and water within the Planning Area, such as the Escalante and Paria Rivers.

The BLM should develop alternatives that address how it will restore degraded soil and watershed conditions in the Planning Area.

The BLM should consider the existing soils, water, and riparian area elements of the 1999 GSENM Management Plan for inclusion in the Planning Area RMPs.

Soils

The BLM should ensure that an appropriate quantity and quality of water resources are available for conservation and preservation of Planning Area resources.

The BLM should identify areas where cryptobiotic crusts occur in the Planning Area and make protecting them a priority.

The BLM should apply procedures to protect soils from accelerated or unnatural erosion from any ground-disturbing activity, including route maintenance and restoration. The effects of activities such as mineral exploration or development, or water developments, should be analyzed through the preparation of project specific NEPA documents. This process should include inventories for affected resources and the identification of mitigation measures.

The BLM should consider the impacts of livestock trampling on loss of biological crusts and subsequent erosion in allowable uses by livestock.

The BLM should, prior to any ground-disturbing activity, consider the potential effects on biological soil crusts and take steps to avoid impacts on their function, health, and distribution. Long-term research toward preservation and restoration of soils should support adaptive management. Further research should be conducted on these crusts, and the results interpreted for management and education purposes.

The BLM should include 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).

The BLM should, when planning road and trail construction, avoid areas with a high percentage cover of biological soil crust or high biodiversity conservation value (such as gypsiferous soils) whenever possible. Enforcement of off-road vehicle regulations should be prioritized in these areas.

The BLM should construct a system of small fenced reserves to conserve habitat of the endemic biota, because several biological soil crust species and some vascular plant species are rare gypsum endemics, and gypsum soils cover very little of the Planning Area.

The BLM should 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 will degrade soil, hydrology, or biology ecosystem functions.

The BLM should use the following management techniques to stabilize or protect crusts:

- Reducing unnaturally frequent and intense fires, such as those resulting from annual grass invasions
- Concentrating recreational use by hikers and OHVs to reduce trampling and prevent disturbance
- Gathering information on the distribution of biological soil crusts
- Reevaluating allowable uses by livestock i.e., availability and unavailability for livestock use
- Relocating existing water development and nutrient block location to sites with low potential for biological soil crust development, such as rocky areas
- Using brush barriers to divert trailing from sites with biological soil crust

Riparian

The BLM should evaluate special status species habitat and ecological processes in all future riparian assessments. Management actions that prioritize recovery of these species should be implemented.

The BLM should establish monitoring of riparian resource conditions to determine when actions should be taken to ensure movement toward proper functioning condition on all riparian stream segments in the Planning Area.

The BLM should reassess all segments of riparian habitat previously inventoried as part any future grazing allotment assessment. Riparian areas that have not been evaluated in the past 10 years should be scheduled for assessment within 3 years starting on the first July 1 following issuance of the Record of Decision (ROD) adopting any new RMP.

The BLM should avoid riparian areas whenever possible when siting communication sites and utility rights-of-way.

The BLM should prohibit new recreation facilities in riparian areas, except for small signs for resource protection.

The BLM should consider group size limits in riparian areas, beyond the restrictions provided in the various zones.

The BLM should 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 BLM should not allow vegetation restoration methods in riparian areas, unless needed for removal of noxious weed species or restoration of disturbed sites. In these circumstances, consultation with an advisory committee should be used to determine the most appropriate control and restoration methods to ensure proper protection.

The BLM's noxious weed control program should target invasive species such as tamarisk and Russian olive, which will improve riparian functioning condition.

The BLM should work with the Escalante River Watershed Partnership to review, approve and implement the Long-Term Monitoring and Maintenance Plan for the Escalante River Riparian Area within the Planning Area to prevent invasions of riparian habitat by Russian olive or other invasive species

The BLM should manage all riparian areas to assure the continuance of their proper ecological functioning, and to assure that stream channel morphology and functions are appropriate to the local soil type, climate and landform.

Water Resources

The BLM should manage water resources at the watershed level.

The BLM should analyze the effects of activities such as grazing, grazing developments, mineral exploration and development, and water developments through the preparation of project-specific NEPA documents. All interested stakeholders should be kept on a permanent notice list for the receipt of NEPA documentation.

The BLM should identify, map, and monitor surface and groundwater resources in the Planning Area using water well transducers, surface flow methods, or other methods. Monitoring should include both quantity and quality of water.

The BLM should manage watersheds in the Planning Area to achieve and maintain water resources at the highest reasonably sustainable levels.

The BLM should oppose any proposed action that results in a decrease in water quality, quantity or flow, or negatively impacts flow timing.

The BLM should pursue partnerships with the State of Utah's Watershed Recovery Initiative and/or the Good Neighbor Authority articulated in the 2014 Farm Act.

Impaired Waters

The BLM should not permit any actions that further accelerate the diminishment of water quality, measured in terms of an increase in total maximum daily load (TMDLs). Water quality within the GSENM should be monitored on a permanent basis at no fewer than 60 sites.

The BLM should include a commitment in the Final EIS and ROD to provide notice to lessees regarding public drinking water supply source areas in the Planning Area. Lease notices for drilling within Source Water Protection (SWP) Zones of public water supplies are now being used for all wells drilled under BLM authority within SWP Zones in Utah.

The BLM should consider an alternative that closes specific areas to future grazing when considering water development projects that relate to grazing use. Diversions of water outside the GSENM should not be permitted beyond those currently existing.

The BLM should assess all activities, including the BLM's past efforts, in the Planning Area for their contributions to compliance with water quality standards established by the State of Utah (Utah Administrative Code R317-2) and the Federal Clean Water and Safe Drinking Water Acts. The following list shows 303(d) waters within the Planning Area and their associated load problems [Utah Department of Environmental Quality (UDEQ), Utah Division of Water Quality (UDWQ) 2018.] The list will be updated annually.

- Paria River from start of Paria River Gorge to its headwaters: temperature, total dissolved solids
- Paria River 2 from Cottonwood Creek confluence to start of Paria River Gorge: temperature, total dissolved solids
- Paria River 3 Paria River and tributaries from the Arizona-Utah state line to Cottonwood Creek confluence: O/E [observed-to-expected] bioassessment, total dissolved solids
- Escalante River Upper (from Boulder Creek confluence to Birch Creek confluence): O/E bioassessment, total dissolved solids
- Calf Creek (confluence with Escalante River to headwaters): temperature
- Wahweap Creek and tributaries from Lake Powell to headwaters: selenium, temperature
- Chance Creek and tributaries from Lake Powell to headwaters: O/E bioassessment, total dissolved solids
- Cottonwood Creek and tributaries from confluence with Paria River to headwaters: dissolved oxygen
- Johnson Wash 1 (Johnson Wash and tributaries from Utah-Arizona state line to Skutumpah Canyon confluence): selenium, boron, total dissolved solids
- Johnson Wash 2 (Johnson Wash and tributaries from Skutumpah Canyon to headwaters): dissolved oxygen, O/E bioassessment, temperature, zinc, copper, lead, total dissolved solids, copper
- Escalante River Upper from Boulder Creek to Confluence to Birch Creek Confluence: "bioassessment: biocriteria – macros"
- Calf Creek and tributaries from confluence with Escalante to Headwaters: temperature
- Paria River and tributaries from the Utah-Arizona state line to Cottonwood Creek confluence: bioassessment, total dissolved solids
- Johnson Wash and tributaries from the Utah and Utah-Arizona state line to Skutumpah Canyon confluence: boron, selenium, and total dissolved solids).

The BLM should conduct activities on BLM-administered lands that fully support the designated beneficial uses described in the Utah Water Quality standards (Utah Administrative Code R317-2) for surface and groundwater as indicated by water quality parameters, including nutrient loads, total dissolved solids, chemical constituents, fecal coliform, water temperature, and algae standards.

The BLM should request that the State of Utah accelerate development of TMDLs for 303(d) waters in the Planning Area.

The BLM should continue to develop a water quality monitoring program at 60 sites in conjunction with the UDWQ to ensure that State and Federal water quality standards are met. In addition, the BLM should develop a comprehensive water quality monitoring program to ensure the protection of Planning Area resources and visitor safety. The BLM should continue to work with UDEQ-UDWQ as water quality improvement programs and TMDLs are developed.

The BLM should implement water quality monitoring as a required part of all authorizations that could adversely affect water quality. Mitigation should be required if adverse effects are detected.

Water Quantity

The BLM should limit water use in the Planning Area to personal use and livestock use.

The BLM should retain the provisions of the current 1999 GSENM Management Plan relating to water-related developments (non-culinary).

The BLM should use water developments as a management tool only when a NEPA analysis determines this tool to be the best means of achieving Monument objectives and only when the water development would not dewater streams or springs.

The BLM should not compromise or relinquish Federal reserved water rights not associated directly with the creation of the GSENM.

The BLM should ensure that land management policies protect water resources. Because much of the water important to the Planning Area falls as precipitation within the Planning Area, its continued availability can be ensured by appropriate land management policies within the Planning Area. The BLM should exercise its existing land management authorities to protect and maintain all available water and natural flows in the Planning Area, as follows:

- In the limited cases where water is needed for a visitor facility, the acquisition of State appropriative water rights (discussed above) should be possible.
- New water developments should only be done when a NEPA analysis determines this tool to be the best means of achieving the above objectives and only when the water development will not dewater springs or streams.
- In general, diversions of water out of the Planning Area should not be permitted. There is an existing small-scale diversion of groundwater out of the Planning Area for the domestic water supply of the nearby town of Henrieville. The continuation and expansion of this diversion should not be prohibited if necessary to meet the municipal needs of population growth in Henrieville. Any proposed new groundwater diversion to meet Henrieville's municipal needs could be approved if the BLM and the Utah State Engineer complete a joint analysis to determine that such development would not adversely impact springs or other water resources within the Planning Area, and the BLM completes an environmental review analysis for public review under NEPA. Exceptions could be considered for other local community culinary needs if the applicant demonstrates, with independent professional review, that the diversion of water will not damage water resources within the Planning Area or conflict with other recommended objectives.

The BLM should monitor to ensure water flowing into the Planning Area is adequate to support Planning Area resources. The BLM should also assess whether the water flows coming into the Planning Area continue to be adequate. The BLM should work with the Water Resources Division of the U.S. Geological Survey, the Utah Department of Natural Resources, and others to gather comprehensive information concerning precipitation, surface water flows, and subsurface water flows into and out of the Planning Area. This could include establishing additional stream-gauging stations at selected locations, and continued inventorying of water sources such as seeps, springs, and wells. Established climate-data stations should be an integral part of the hydrologic monitoring network. Some of the main objectives of water resource investigations should include the following:

- Conceptualizing the surface and groundwater systems, and their interactions at the regional (Planning Area) scale.
- Subdividing the Planning Area into smaller-scale hydrologic “compartments” on the basis of hydrologic and geologic attributes. Attributes, among others, could include surface-water drainage areas, aquifer systems, precipitation zones, hydraulic conductivity of surficial deposits and bedrock.
- Cataloging and classifying hydrologic attributes of the compartments, and establishing appropriate long-term monitoring programs to collect spring and stream discharge and water chemistry data.
- Quantifying hydrologic processes such as surface-water and groundwater exchange, and precipitation, runoff, and sediment transport relationships within each compartment. In addition to new stream and spring monitoring stations, the existing network of climate stations should serve to gather appropriate data.
- Determining direct and indirect effects of humans on hydrologic attributes of each compartment and subsequent effects on Planning Area resources.
- The priority in data collection effort should be to collect data on flows entering the Planning Area. This should be done in order to ensure sufficient base and peak flows to support Planning Area resources.

The BLM should pursue other options for assuring water availability, if needed. At any point that data collection and assessment effort suggest that adequate water to protect Planning Area resources is not entering the Planning Area, or that water is otherwise being depleted to the detriment of the Planning Area, other measures for assuring water availability should be taken, as follows:

- Cooperation with other Federal agencies that may already have Federal reserved water rights. GCNRA is a Federal reservation and has a Federal reserved water right (as yet unquantified) that could indirectly provide adequate protection to the Planning Area resources. If the United States successfully establishes a Federal reserved water right for GCNRA, that water right would have a priority date of ca. 1965. The Planning Area will benefit from this water right, because some of the water necessary to satisfy the GCNRA’s water needs will pass through the Planning Area. The BLM should begin discussions with GCNRA to quantify this water right.
- Continue discussions with the Utah State Engineer (Utah Division of Water Rights), Utah Division of Water Resources, and State and local water users to identify how nearby communities could secure water supplies for expected future growth without interfering with the water flows needed for Planning Area resources. These discussions should include negotiations toward an agreement between the State and local water users similar to the agreement recently reached for Zion National Park. The Zion agreement (reached between the U.S. Department of the Interior, the State of Utah, and local water users) allows additional future non-Federal development of water that could affect the park, but caps it, and protects the continuation of “spike” or flood events in the park environment. The BLM

should explore options with the State of Utah and local communities, perhaps based on the Zion National Park model, for securing local water needs without jeopardizing the water needs of the Planning Area. If such an agreement is reached, or if any other agreement is reached with the State under the options below, segments of rivers determined to be suitable for Wild and Scenic River designation in the RMPs would be managed in accordance with that agreement.

- Other options are available to the BLM for assuring water availability. These are summarized below.
 - Appropriative Water Rights Under State Law. Options in this category include
 - pursuing a cooperative agreement between the BLM and one of the State agencies authorized to acquire and hold an instream flow right (where the State agency has a similar interest in protecting a particular resource);
 - approaching the Utah State Engineer with a request to use his authority to protect natural flows in the Planning Area by denying water rights applications where the water would serve a more beneficial purpose by remaining in the channel; and,
 - converting BLM-held water rights that may no longer be needed for grazing to wildlife rights after an appropriate proceeding to change the water right in the Office of the State Engineer.
- The BLM should acknowledge that Presidential Proclamation 9682 does not reserve water as a matter of Federal law. It does not, however, abolish or defeat the BLM's claims to Federal law-based water rights under other reservations or proclamations. Options in this category include the following:
 - Public water reserves
 - Wild and Scenic Rivers (upon designation by Congress, or the Secretary of the Interior upon application of the Utah Governor)
 - Congressional reservation of unappropriated water and by Presidential Proclamation

AFFECTED ENVIRONMENT

Commenters requested that the BLM describe current water quality conditions for surface waterbodies in the Planning Area, including intermittent, perennial, and ephemeral streams, rivers, lakes, reservoirs, and surface water drinking water resources. It was recommended that the BLM compare existing water quality conditions in the Planning Area to existing water quality standards or other reference conditions and presenting associated water quality status and trends.

Commenters recommended that the BLM's EIS include maps addressing water and soil resources that depict waterbodies within and downstream of the Planning Area that include

- perennial, intermittent, and ephemeral waterbodies;
- waterbody segments classified by the UDEQ as water quality impaired or threatened under the Clean Water Act (CWA) Section 303(d);
- waterbodies considered not impaired by UDEQ; and
- waterbodies that have not yet been assessed by the UDEQ for impairment status.

Commenters also recommended that a table be provided to identify the designated uses of waterbodies and the specific pollutants of concern, where applicable. In addition, descriptions or maps of topography and soils, specifically steep slopes and fragile or erodible soils near surface waters and intermittent and ephemeral channels, should further inform current conditions and future management decisions.

Commenters noted that the Planning Area may include important areas of alluvial aquifer recharge. It was noted 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. To ensure that future BLM-authorized activities are protective, it was recommended that the BLM identify and characterize both the existing and potential groundwater drinking water resources in the Planning Area. It was recommended that the EIS include the following information:

- A description of all aquifers in the Planning Area, noting which aquifers are Underground Sources of Drinking Water (USDWs). Federal Safe Drinking Water Act regulations define a USDW as an aquifer or portion thereof “(a)(1) which supplies any public water system; or (2) which contains a sufficient quantity of groundwater to supply a public water system; and (i) currently supplies drinking water for human consumption; or (ii) contains fewer than 10,000 mg/l total dissolved solids; and (b) which is not an exempted aquifer.” (40 CFR 144.3)
- Water quality and water yield information for 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)
- A map and discussion of proposed oil and gas wells, existing producing wells, and nonproducing wells in the area including their status (e.g., idle, shut-in, plugged, and abandoned), if available

Commenters suggested that current conditions in many areas of the Grand Staircase, Escalante Canyons, and Kaiparowits Plateau are characterized by loss of cryptobiotic crust cover, incised stream channels, and degraded wetlands and riparian areas along intermittent and perennial watercourses and springs.

ENVIRONMENTAL CONSEQUENCES

Commenters requested that the BLM analyze potential impacts to surface waters related to erosion and sedimentation from roads and trails (routes), land disturbance, grazing, motorized recreation and stream crossings, as well as potential impacts associated with oil and gas well development, including drilling and production and potential spills and leaks from pits, evaporation ponds, and pipelines. Commenters requested that any proposed agency action include an analysis of the impacts on water quality, quantity, stream flow, water yield, and timing of those yields. It was requested that the BLM conduct an environmental analysis of the potential impacts of mining in areas that drain into the Escalante River, as well as other waters that drain into Lake Powell.

Commenters recommended that the BLM analyze potential impacts to impaired waterbodies within or downstream of the Planning Area, including waterbodies listed on the most recent EPA-approved CWA Section 303(d) list and coordinate with the UDEQ if there are identified potential impacts to impaired waterbodies (to avoid causing or contributing to the exceedance of water quality standards). Where a TMDL exists for impaired waters in the area of potential impacts, it was recommended that pollutant loads comply with the TMDL allocations for point and nonpoint sources. Where new loads or changes in the relationships between point and nonpoint source loads are created, it was recommended that the BLM work with UDEQ to revise TMDL documents and develop new allocation scenarios that ensure attainment of water quality standards. Where TMDL analyses for impaired waterbodies within, or downstream of, the Planning Area still need to be developed, it was recommended that proposed activities in the drainages of CWA-impaired or CWA-threatened waterbodies be either carefully limited to prevent any worsening of the impairment or avoided where such impacts cannot be prevented.

Commenters noted that increased sediment from surface disturbance may degrade water quality. It was noted that because sediment loading has already caused impairment of waterbodies in the Planning Area, and because future activities (including livestock grazing, oil and gas development, and use of OHVs) that may be authorized under these plans could result in new surface disturbance that may enable erosion, it is important the EIS include information about this concern. Erodible soils may represent a significant source of pollutants in the Planning Area. Depending on a host of variables including soil characteristics, industrial operations, and topography, associated runoff from future surface disturbances could introduce sediments as well as salts, heavy metals, nutrients, and other pollutants into surface waters. To fully disclose and, if necessary, mitigate the potential impacts of future soil disturbance, it was recommended that the EIS include an estimate of erosion rates and resulting impacts to water quality for each alternative. It was recommended that the BLM consider using the Water Erosion Prediction Project (WEPP) model, a web-based interface developed by the U.S. Department of Agriculture, Agricultural Research Service, or another appropriate model that would be applicable to this Planning Area.

Commenters noted that contaminants from surface events such as spills, pit and pipeline leaks, and nonpoint source runoff from surface disturbance have the potential to enter and impact surface water resources if these events occur near waterbodies.

Because of the potential for mineral resource development in the Planning Area, commenters requested that the BLM's EIS provide a discussion of potential mineral extraction and processing over the planning horizon and related potential impacts to water resources. Specifically, it was recommended that the EIS

- include maps and descriptions of the areas and mineral resources that are likely to be developed during the planning period;
- identify BMPs for mineral exploration, development, and reclamation to minimize erosion, reduce sediment and avoid creating sources of poor water quality such as acid mine drainage or increased leaching of selenium (measures could include using existing roads to the fullest extent possible and following road construction standards to contain sediment, reduce erosion, and dissipate stormwater runoff using sediment basins);
- include a discussion of requirements for the adequate bonding of exploration activities to restore the mining site and repair any road damage that may increase erosion;
- identify areas that may be difficult or expensive to reclaim such as sites with acid generating minerals; and
- identify priority areas for potential projects to improve water quality and aquatic habitat from inadequately reclaimed historic mining areas.

Commenters recommended that the EIS include a map showing Planning Area waters juxtaposed with the existing road and trail network and the proposed travel management designations. Commenters suggested that a discussion of foreseeable construction, reconstruction, and improvement activities by alternative would be informative. In addition, it was recommended that the 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 to reduce 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

Commenters recommended that the BLM's EIS include a map that delineates source water protection areas used for public water supply wells and surface water intakes (streams, rivers, and reservoirs). It was also recommended that the BLM identify reservoirs that are drinking water sources. Once these resources are identified, it was recommended that the EIS include an analysis of the potential impacts to drinking water sources.

Commenters requested that the EIS describe potential impacts to the quality and quantity of groundwater related to resource extraction such as mining and oil and gas production. Potential impacts include those associated with the following: leaks and spills; production and disposal of produced water or processing waters; use of pits, underground injection control (UIC) wells, infiltration basins, and evaporation ponds; production wellbore integrity; closure requirements; pipeline use; and the re-stimulation and abandonment of existing wells.

Commenters noted that water demand associated with mining and oil and gas development can be substantial and has the potential to impact environmental resources. It was recommended that the EIS include within the scope of analysis a general discussion of the following:

- A range of estimated water demand per well developed in the Planning Area (based on reasonable foreseeable development, predicted well depths, formation characteristics, and well designs, as well as hydraulic fracturing operations, if used)
- Estimated water demand for mining activities in the Planning Area
- Possible sources of water for oil and gas development and mining activities
- Potential impacts of the water withdrawals (e.g., drawdown of aquifer water levels; reductions in stream flow; impacts to groundwater dependent ecosystems; impacts on aquatic life, wetlands, springs and other aquatic resources).

With respect to produced water from oil and gas development, commenters recommended that the EIS include a general discussion of how flow back and produced water will be managed including the following:

- Estimated volume of produced water per well (this could be presented as a range given the variability from well to well)
- Options and potential locations for managing the produced water (i.e., UIC wells, evaporation ponds, treatment and reuse)
- Possible target injection formations, formation characteristics and depth of any UIC wells
- Potential impacts of produced water management

Commenters recommended that the EIS address how water quality monitoring in the Planning Area would occur at the project level prior to, during, and after anticipated development to understand impacts to both surface water and groundwater resources resulting from oil and gas exploration and production, including private well monitoring.

Commenters requested that if the BLM intends to revise land allocations for tar sands leasing in any of the new RMPs for this Planning Area, then the EIS's water resources analysis should include any related potential impacts, as well as mitigation measures to address tar sands resource development.

Commenters requested that the BLM analyze potential impacts of any ground-disturbing activities in the Planning Area on soil resources, including cryptobiotic soil crusts. In addition, commenters recommended that the BLM consider existing research, such as the U.S. Department of the Interior's 2001 Technical Reference 1730-2 *Biological Soil Crusts: Ecology and Management*, when assessing potential impacts on soils.

Commenters expressed concern that water resources obtained by the Town of Escalante from Flaming Gorge are being used to support tourism to the Planning Area rather than to support the growth of the town.

MITIGATION

Commenters noted that if surface activities are set back from the immediate vicinity of surface water, wetlands, and designated source water protection zones, this provides an opportunity for accidental releases to be detected and remediated before impacts reach water resources. If accidental releases are not detected, the setback provides a safety factor and some possibility of natural attenuation occurring. Setbacks also help prevent nonpoint source pollutants such as sediments from impacting surface waters.

Commenters recommended that the BLM evaluate setback distances identified through leasing stipulations such as No Surface Occupancy (NSO) for perennial waters including lakes and reservoirs, intermittent and ephemeral streams, steep slopes, and impaired waters within the Planning Area. Commenters recommended the following minimum NSO setbacks:

- Minimum 100-foot NSO setback from slopes greater than 30%
- Minimum 500-foot NSO setback for flowing waters (rivers and streams) or 100-year floodplain, whichever is greater
- Minimum 500-foot NSO setback for lakes, ponds and reservoirs, wetland and riparian areas and springs
- Minimum 750-foot NSO setback for 303(d) impaired waters
- Minimum 1,000-foot NSO setback for special or significant waters
- Minimum 100-foot NSO setback for intermittent and ephemeral streams

Commenters recommended the 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. It was recommended that the BLM reduce impacts using BMPs and adaptive management strategies to protect sensitive soils, wetlands, riparian areas, meadows, stream crossings, and critical habitat. It was suggested that the inspection, maintenance, and adjustment of BMPs would help protect surface water resources. Commenters recommended the following potential mitigation measures:

- Minimize motorized route construction and reduce density to minimize potential adverse effects to watersheds.
- Locate routes away from streams and riparian areas, steep slopes, landslide prone areas, and erosive soils.
- Minimize the number of road stream crossings.
- Construct unavoidable road 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 routes 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 routes for 5 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.

Commenters recommended that any mitigation for CWA Section 404–related impacts be consistent with the 2008 Rule on Compensatory Mitigation for Losses to Aquatic Resources.

Commenters suggested that to ensure public drinking water supply sources (e.g., surface water sources, including groundwater under the direct influence of surface water (GWUDISW) sources, and groundwater sources) are fully protected from potential impacts associated with oil and gas leasing, commenters recommended the following NSO language:

- Drinking Water Supply Watersheds NSO within any of the following areas as deemed appropriate by the BLM:
 - The entire watershed;
 - Local Source Water Protection Planning Areas where delineated by the State or community; or
 - Source Water Assessment Areas delineated by the State.

If the above Drinking Water Supply Watersheds NSO is not deemed feasible by the BLM, then at a minimum, it was recommended that the Final EIS protect surface water sources by including a 1,000-foot NSO setback on both sides of the river or stream, for 10 miles upstream of the intake. For lakes and reservoir sources, this would include a 1,000-foot NSO around the waterbody. For groundwater and GWUDISW sources, it was recommended that the Final EIS include a minimum 0.5-mile (2,640-foot) NSO concentric buffer for these sources.

Commenters recommended that the EIS discuss measures that the BLM would require at the leasing, field-wide plan of development, or Application for Permit to Drill (APD) stage to minimize the potential for these impacts to occur and how the operations would be monitored to determine if the mitigation measures are effective. Appropriate groundwater protection measures can vary depending on hydrologic conditions and the presence of drinking water resources. It was recommended that the EIS discuss how groundwater would be protected according to existing regulations and guidance. In addition, it was noted that, in many cases, existing regulations and guidance leave much of the decision making regarding water resource protection to determinations by the authorized officer on a well-by-well basis. It was recommended that the BLM use the NEPA analysis and RMP revision process to streamline or add consistency to these decisions where possible. For example, an understanding of hydrogeological features can help to identify critical elements of well design that will likely be necessary to achieve effective protection of USDWs at the APD stage. In other cases, adequate information may exist at the RMP stage to identify stipulations that will apply to future leases, such as for protection of existing public and private drinking water supply wells.

Commenters recommended that the BLM consider and disclose potential groundwater protection, monitoring, and mitigation measures, including the following:

- BMPs and measures such as water reuse, closed loop drilling, lining of evaporation ponds, monitoring of water quality and water levels, closure and monitoring of tailings ponds, reserve pits, and evaporation ponds.
- Setback stipulations, such as a minimum 500-foot NSO setback, to minimize the potential for impacts to potential drinking water resources, including domestic water wells and public water supply wells. Setbacks are effective health and environmental protection tools because they provide an opportunity for released contaminants to attenuate before reaching a water supply well. They may also afford an opportunity for a release to be remediated before it can impact a well, or for an alternate water supply to be secured. It is also recommended that the BLM consider source water protection zones delineated by the UDEQ when evaluating the basis and need for setbacks from public water supply wells.

- A mitigation plan for remediating future unanticipated impacts to drinking water wells, such as requiring the operator to remedy those impacts through treatment, replacement, or other appropriate means.
- A general production well schematic that depicts the following: casing strings, cement outside and between the various casing strings, and the relationship of the well casing design to potentially important hydrogeological features such as confining zones and aquifers or aquifer systems that meet the definition of a USDW. Discuss how the generalized design will achieve effective isolation of USDWs from production activities and prevent migration of fluids of poorer quality into zones with better water quality.
- Abandonment procedures for sealing wells no longer in use to reduce the potential for inactive wells to serve as the conduits for fluid movement between production zone(s) and aquifer(s). This is particularly important in cases where existing wells do not have surface casing set into the base of USDWs and lack sufficient production casing cement.

Commenters recommended the RMPs include BMPs to encourage operators to consider recycling produced water for use in well drilling and stimulation. Such a practice would decrease the need for water withdrawals and for produced water management and disposal facilities, thereby minimizing the associated impacts.

Commenters requested that if the BLM intends to revise land allocations for tar sands leasing in any of the new RMPs for this Planning Area, then the EIS's water analysis should include mitigation measures. Mitigation measures related to engineering practices could include treating and recycling water to the greatest extent possible, minimizing the size of disturbed areas and reclaiming them as quickly as possible, and preparing erosion and sedimentation control plans.

Vegetation

GENERAL CONCERNS

Commenters expressed concerns regarding potential impacts to vegetation resources in the Planning Area. Commenters expressed both support for and opposition to vegetation treatment activities in the Planning Area, including suggestions regarding specific vegetation management techniques. Commenters also expressed interest in studying and protecting endemic plant species.

Commenters questioned pinyon-juniper encroachment as a basis for vegetation development projects and requested scientific validation from outside the BLM before incorporation into "purpose and need" NEPA statements.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters suggested the following vegetation management objectives:

- To restore and promote a functioning ecological system that promotes conservation of all critical system components. Priority should be given to areas where Planning Area resources are being damaged.
- To facilitate a strong research program into the vegetation communities found throughout the Monument, with a focus on observing and measuring changes in those communities over multiple time scales as those changes relate to changes in temperature and precipitation patterns, and to land uses associated with those communities.
- To increase public education and appreciation of vegetation through interpretation.

- To protect unique vegetation associations such as hanging gardens and relict plant associations.
- To restore and promote a natural range of native plant associations in the Planning Area. Methods and projects that do not achieve this objective or that irreversibly impact Planning Area resources should not be permitted.

General Vegetation Management

Commenters recommended the following management actions regarding vegetation management in the Planning Area:

- The BLM should analyze the vegetation element of the 1999 GSENM Management Plan for inclusion in the Planning Area RMPs, including the plan's protections for hanging gardens and relic plant communities.
- The BLM should define the desired plant community (DPC) by the Potential Natural Community (PNC). PNC is "(T)he stable biotic community that would become established on an ecological site if all successional stages were completed without human interference under present environmental conditions." The PNC for each community on the Monument should be defined by the best available science. Sources of information include the Natural Resources Conservation Survey (NRCS) Soil Survey, NRCS GSENM ecological site vegetation descriptions for specific soil types, reference sites/exclosures in the Planning Area, Rangeland Health assessments for reference areas, relict areas, and other relevant field data and scientific studies. PNC descriptions should contain information on state-and-transition models. Ecological site descriptions should be updated to reflect current knowledge on biological crusts and soil surface cover. The BLM should document any departure from potential natural communities and adjust management to allow sites to move toward PNC.
- The BLM should manage all flora and fauna recognized in Presidential Proclamations 6920 and 9682 to prevent any decline of on-site populations and restore habitats.
- The BLM should continue to coordinate with other organizations to inventory the Planning Area and to evaluate the need for vegetation protection strategies. Such research should be coordinated as part of implementation and adaptive management, and the results should be interpreted for management and public education purposes.
- The BLM should require all proposed developments or surface-disturbing activities to include a site assessment for impacts to vegetation. Appropriate strategies should be used to avoid sensitive vegetation associations, and restoration provisions should be included in projects.
- The BLM should proactively manage the Planning Area regarding the restoration of historical native vegetative rangelands and to reduce encroachment by pinyon-juniper, sagebrush, and tamarisk to increase forage for wildlife and livestock.
- The BLM should prioritize removal of Class II and Class III pinyon-juniper stands and restore treated areas to desirable vegetation.
- The BLM should implement vegetation treatments, such as chaining, bull hogging, and chemical and biological treatments to improve watersheds, reduce soil erosion, expand wildlife corridors, stabilize grazing, and improve endangered species habitat.
- The BLM should prohibit vegetation removal projects because of their negative impacts on natural resources and wilderness values.

- The BLM should stipulate review of vegetation management projects before implementation for potential contribution to noxious weed expansion in the Monument. Projects that contribute to noxious weed expansion should be prohibited.
- The BLM should only allow vegetation treatments in areas of the Planning Area that are proven to be different than the ecological site description.
- The BLM should allow manual methods, including manual pulling and the use of hand tools (e.g., chainsaws, machetes, pruners), throughout the Planning Area.
- The BLM should allow the use of machinery for restoration of native vegetation in all zones except the Primitive Zone. Because of the potential for irreversible impacts to other Planning Area resources, such as archaeological sites and artifacts, paleontological resources, and biological soil crusts, soil-disturbing machinery (chaining, Dixie harrow, mastication) should not be used to remove pinyon and juniper.
- The BLM should consult a Planning Area advisory committee before the use of machinery for treatments is permitted.
- The BLM should prohibit chaining of trees in the Planning Area.
- The BLM should only allow chaining to cover rehabilitation seed mixes with soil after wildfires only where
 - noxious weeds and invasive nonnative species are presenting a significant threat to Planning Area resources or watershed damage could occur if the burned area is not reseeded,
 - it can be demonstrated that Planning Area resources will 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.
- The BLM should modify livestock grazing after native seedlings are established 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 2 years. Site evaluation should be required to determine when the native seedlings should be grazed again and the effectiveness of the current or new grazing system on the persistence of native plants.
- The BLM should restrict chemical methods to the control of noxious weed species.
- The BLM should use management-ignited fire for vegetation restoration when fire has been documented to historically occur in an area, where various factors have prevented natural fire cycles from occurring, and where cheatgrass or other invasive vegetation is not present. In these circumstances, management ignited fires may be used, and should attempt to simulate natural fire intensity and timing. Specific objectives for all management ignited fires should be developed prior to its use in the Planning Area. All fire activities should be conducted and coordinated with appropriate fire management personnel, as provided for in the Color Country Interagency Fire Management Area annual operating plan.

- The BLM should consider a variety of factors when deciding to implement a revegetation or restoration strategy. Evaluate each project and area to be treated to determine the appropriate strategy. Consider the following general guidelines concerning which strategy is the most appropriate:
 - Restoration will be the goal whenever possible (i.e., an attempt will be made to return disturbed areas to conditions which promote a natural array of native plant and animal associations).
 - Native species used in both restoration and revegetation projects will be used except in emergencies.
 - Revegetation strategies will be used in areas of heavy visitation, where site stabilization is desired.
 - Restoration provisions will be included in all surface-disturbing projects including provisions for post restoration monitoring of the area. Costs for these activities will be included in the overall cost of the project and will come out of the entire project budget.
 - Priority for restoration or revegetation will be given to projects where Planning Area resources are being damaged. These sites will likely be in areas near development and/or heavy visitor use. Although these areas are more likely to be candidates for revegetation projects, careful evaluation of disturbed sites needs to be conducted to include desired future condition of an area. Restoration or revegetation of areas receiving heavy use may include limits on visitor use in order to promote recovery.
- The BLM should establish vegetation monitoring plots, including fenced control plots, to determine the effectiveness of the treatments in achieving management objectives and to provide baseline data of overall change. This monitoring should include species frequency, density, and distribution data, and should be part of overall adaptive management.
- The BLM should require every proposed vegetation management project to be supported by
 - an analysis of how scientifically predicted probable changes in future climatic conditions at the project site will affect the attainment of project goals;
 - an economic analysis illustrating the actual expense of the proposed project, the economic benefit expected to result;
 - a detailed post project monitoring plan designed to produce reliable scientific data on the short and long-term effects of the project; and
 - a review by an advisory committee, for the purpose assuring all such proposals are supported by the best available, current science. Proposals lacking strong scientific support should not be permitted. Vegetation restoration management projects whose ultimate success depends on the continuance of historic post settlement climatic conditions should not be permitted.
- The BLM should require that the entire cost of the proposed project, including pre-project inventory and analysis, be borne by the grazing permittee where an improvement in forage conditions for grazing cattle is a component of a vegetation restoration project. Each such vegetation treatment project should include a specific statement of purpose and need, supported by the best available science. Any project that includes improvement in forage conditions for grazing cattle should state specifically what percentage of the anticipated benefit will go to grazing uses (see the Livestock Grazing section in this appendix).
- The BLM should discontinue historic rangeland seeding in the Planning Area and return to natural system function.

- The BLM should not justify vegetation treatments with a management goal of increasing sage-grouse habitat, unless the treatment is to take place within historical sage-grouse range or designated priority habitat areas.
- The BLM should not obscure the purpose of proposed vegetation treatments. If the purpose is enhancing livestock forage, or for fire management, then it should be labeled as such.
- The BLM should acknowledge that “ecological restoration” and “active vegetation management” are only appropriate when clear, measurable objectives are outlined; efforts are supported by solid science; they are accompanied by adequate monitoring; when soil, water, and native biodiversity health is maintained; and when weed issues are addressed.
- The BLM should continue efforts toward the restoration of degraded rangelands through vegetation treatments and volunteer-led efforts to remove invasive plants.
- The BLM should analyze unsuccessful chaining projects, such as the Fin Little-Telegraph Flat project east of Kanab within the Monument, to assess problems before proceeding with new chaining projects.
- The BLM should break chaining projects into smaller parcels of a few hundred acres each, leaving some ridges, draws, hilltops, and flatland with scattered pinyon-juniper stands as the Kanab Field Office did along Hancock Road. Also, leaving the edges of the chained parcels rough rather than chaining right up to the edge in perfectly straight lines would soften the appearance and make the chaining project less likely to be perceived as having been performed exclusively for cattle forage.
- The BLM should clarify, with a study or otherwise, whether the pinyon-juniper that is being bulldozed near the Paria is truly an invasion into a grassland flat or if it is a forest moving to a climax state.
- The BLM should consider aerially seeding chained areas with native grasses.
- The BLM should prohibit collection of Planning Area plants or parts of plants. Exceptions could include collections authorized by permit in conjunction with authorized research or management activities; the collection of small amounts of fruits, nuts, and berries for personal, non-commercial use; and the collection of certain natural materials by Native American Indians under a BLM permit.
- The BLM should develop and coordinate practices for conducting ecological restoration with the Monument advisory committee. Prior to completion of an ecological restoration plan, these interim steps should be followed:
 - Determine that there is a significant departure from the potential natural plant community for a defined area. Further determine that there is a need for ecological restoration.
 - Determine the desired ecological condition as a goal for the restoration process. When possible, this ecological condition will resemble as closely as is possible the potential natural plant community structure, processes, and composition.
 - Design a restoration plan that has a series of steps that will lead to achieving the ecological goals. Identify stressors that caused the current condition and ensure that this plan removes the influence of stressors. Ensure that restoration methods are independently validated prior to applying on a large scale.
 - Design a monitoring program. Begin by collecting background data before restoration begins.
 - Execute the restoration plan. Apply adaptive management to monitor and adjust in order to stay on track to reach the restoration goal.
 - Post-project, continue monitoring human uses especially those that may be stressors and respond to any negative effect.

Native versus Nonnative Plants

The BLM should use native plants as a priority for all projects in the Planning Area to be consistent with the overall vegetation objectives and Presidential Executive Order 11312.

The BLM should use nonnative plants in limited, emergency situations. An emergency is a situation that, if action is not taken, would result in the immediate, severe degradation of soil, hydrology, or biotic conditions. If this degradation would hinder re-establishment of native communities, remedial action should be taken as soon as possible to prevent further resource degradation. In these situations, the restoration plants selected should be short-lived nurse crop species that are not competitive with natives, should not persist longer than a few years, and are unlikely to spread from the project site. In addition, they should be combined with native species to facilitate the ultimate establishment of native communities. This use should be allowed to the extent that it complies with the vegetation objectives, and implements research protocols that monitor for unintended consequences such as nonnatives species outcompeting natives. Native plants should be dominant within 10 years, or an active plan for removal of nonnatives and re-establishment of native species should be implemented.

The BLM should allow reseeding in the Planning Area and preference should be given to native seed but still allow for nonnative seed when a) native seed is not available, or b) nonnative seed is an effective alternative.

The BLM should require only plants native to the Colorado Plateau for vegetation projects and reseeding after fires; nonnative plants should not be used.

The BLM should require that all projects proposed in the Planning Area contain a restoration or revegetation component and budget for the cost of seeding with native species. All planning for projects, in all except limited, emergency situations, should use native species, and the use of nonnative species should not be analyzed as an alternative.

The BLM should make the priority of existing seedings the restoration of native communities as defined by the Ecological Site Descriptions and Potential Natural Community for the appropriate sagebrush grassland/soil type from the GSENM soil map.

The BLM should use nonnative plants for restoration-related research if the use is consistent with and furthers the overall vegetation management objectives, and after consultation with a Planning Area advisory committee.

The BLM should not use nonnative plants to increase forage for livestock and wildlife.

The BLM should establish monitoring plots, including adequate-size exclosures, in any areas treated in order to document changes in vegetation structure and composition and should be an integral part of adaptive management.

Noxious Weed Control

The BLM should place a priority on the control of noxious weed species and prevent the introduction of new invasive species in conjunction with Kane and Garfield Counties and the adjacent U.S. Forest Service and National Park Service units. Further, in keeping with the overall vegetation objectives and Presidential Executive Order 11312, native plants should be used as a priority for all projects in the Planning Area.

The BLM should control noxious weeds in accordance with national and State policies and directives. Control of noxious weeds is also a priority to achieve the overall vegetation objectives.

The BLM should design projects in conjunction with Kane and Garfield Counties and adjacent U.S. Forest Service and National Park Service staffs. With this strategy, the BLM could control noxious weed species and prevent introduction of new invasive species into the Planning Area and surrounding ecosystems.

The BLM should use an array of methods, as appropriate, for the control of specific noxious weed species. These methods could include the use of chemicals (aerial spraying, hand spraying, and painting), hand cutting, biological control agents, and manual pulling. Each of these methods has a place in the control of these invasive species and should be evaluated for their effectiveness as eradication projects are designed.

The BLM employees or contractors with appropriate certification should be responsible for use of chemicals used for vegetation treatment and should take precautions to prevent possible effects to non-target plant species.

The BLM should only use aerial chemical applications in limited circumstances where

- accessibility is so restricted that no other alternative means is available,
- it can be demonstrated that non-target sensitive species or other Planning Area resources will not be detrimentally affected, and
- noxious weeds are presenting a significant threat to Planning Area resources.
 - A Planning Area advisory committee should be consulted before the aerial application of chemicals is permitted.

The BLM's noxious weed control program should target species in a prioritized manner. Priorities for weed control may include invasiveness of the species, extent of invasion, sensitivity of the area being invaded, and accessibility. Areas with special status species habitat should have a high priority for weed removal. Project-level environmental assessments or other NEPA analysis should be completed prior to noxious weed removal project initiation.

The BLM should reduce the introduction of noxious weed species as stated in Presidential Executive Order 11312 on invasive species. Cooperative programs established for control of these species will also help identify potential new invasions before area-wide establishment has occurred. There are two policies that will help to reduce potential noxious weed introduction.

1. The BLM requires that all hay used on BLM lands be certified weed free. This is a statewide policy that applies to the Planning Area, as well as all other BLM lands in the State of Utah.
2. All machinery that has been used outside the Planning Area should be cleaned prior to use in the Planning Area. This provision generally applies to contract equipment used for projects such as construction of facilities and firefighting equipment. Both of these provisions will help reduce the introduction and spread of noxious weed species in the Planning Area.

The BLM should establish monitoring plots in key areas for major removal projects to determine effectiveness of methods and presence of noxious weed species. All projects should contain restoration and/or revegetation protocols to minimize re-colonization of treated areas by noxious weed species. Monitoring in these areas should be part of adaptive management.

AFFECTED ENVIRONMENT

Commenters suggested that current conditions in many areas of the Grand Staircase, Escalante Canyons, and Kaiparowits Plateau are characterized by deteriorated native grassland and shrub-steppe systems and loss of native plants. Commenters noted that many vegetation treatment areas, including those dating back before the Monument was established, have not achieved their forage goals for wildlife or livestock. Instead, these treated areas were observed to be dominated by invasive species and gullied from excessive erosion.

Commenters recommended that the BLM inventory all “old growth” (trees more than 250 years old) pinyon and juniper communities, as well as unique vegetation associations such as hanging gardens and relict plant associations.

ENVIRONMENTAL CONSEQUENCES

Commenters requested that the BLM analyze potential impacts of any ground-disturbing activities in the Planning Area on the variety and condition of plant communities and landscapes and their connectivity. It was also requested that the BLM analyze potential impacts of any ground-disturbing activities in the Planning Area on the management and spread of noxious and invasive plant species. Commenters recommended that the BLM disclose the positive impacts that vegetation treatments, including pinyon-juniper removal, can have on wildlife and ecosystem health. Commenters suggested that removing pinyon-juniper forests is detrimental to wildlife habitat and water supply.

Commenters expressed specific concerns about the plans to remove pinyon-juniper along the Glendale Bench, including the following:

- How will the project be timed to succeed given the present dry weather conditions? If Kane County is eligible for disaster relief funds because of drought, will the clearing project be timed so that hydrological conditions favor the reseeding projects to succeed and reduce invasion by cheatgrass, thistle, and other noxious weeds?
- Will there be an on-the-ground assessment of hydrological features, such as springs, weeps, and runoff basins, before the clearing begins to avoid destruction of currently available surface water sources used by wildlife and cattle?
- Will there be an on-the-ground assessment of areas of biological soil crusts, soil textures and surface stability types that will ensure success of the large clearings and not just extensive areas of cheatgrass?
- Will there be an on-the-ground assessment of cultural features such as important sites that will be lost in the severe ground disturbance caused by the brush hog?
- Will there be an on-the-ground assessment of paleontological resources such as important sites that will be lost in the severe ground disturbance caused by the brush hog?
- Will there be serious assessment given to “best practices” and “adaptive management” techniques to identify direct and indirect impacts on sections of the project sites?
- Will the BLM consider the shape of areas to be cleared in besides just large rectangular or square areas? Other resource agencies such as the U.S. Forest Service write plans that specify odd shaped areas such as oval or circles for many species such as birds. Remediation foresters report higher survival rates of seedlings groups planted in circles rather than just long linear lines.
- How will BLM range managers determine the short- and long-term success of the extensive clearing projects? Is there a timeline that can be followed by subsequent range managers to judge the success of the clearing technique?

Special Status Species

GENERAL CONCERNS

Commenters expressed concerns regarding protections for special status plants habitat, including critical habitat for the Federally listed Kodachrome bladderpod (*Lesquerella tumulosa*), Jones cycladenia (*Cycladenia humilis* var. *jonesii*), Ute ladies'-tresses (*Spiranthes diluvialis*), and Welsh's milkweed (*Asclepias welshii*). However, Welsh's milkweed does not occur in the Planning Area. Commenters also expressed concerns regarding protections for special status animals, including a need for special management for the Mexican spotted owl (*Strix occidentalis lucida*), southwestern willow flycatcher (*Empidonax traillii estimus*), California condor (*Gymnogyps californianus*), and the Kanab ambersnail (*Oxyloma haydeni kanabensis*).

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters recommended the following special status species management objectives:

- To adopt active and effective measures to promote the conservation and recovery of all special status plant species with the Monument, in so far as those measures are practical and feasible in the context of changing climatic conditions
- To avoid entirely or minimize the need for additional listing of species under the ESA
- To ensure that actions authorized do not jeopardize the continued existence of any special status plant and animal species or result in the destruction or adverse modification of critical habitats

Commenters recommended the RMPs incorporate the following special status species management actions.

General

The BLM should ensure that authorized actions do not jeopardize the continued existence of any special status animal species or result in the destruction or adverse modification of critical habitats. The BLM should consult with the 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. Coordination with the U.S. Forest Service, UDWR, and the National Park Service should occur in areas where species cross jurisdictional lines. The BLM should work with these agencies to develop recovery plans, when needed, and to implement existing recovery plans for all listed species.

The BLM should coordinate with Garfield County to proactively recover and conserve sensitive species through improved habitat; develop and designate crucial, critical, priority or, other habitat for each special status species; and quantitatively analyze the area's impact on local, regional and national populations of the targeted species prior to designating those habitats.

The BLM should promote recovery of greater sage-grouse by implementing treatments to reduce Class II and Class III pinyon-juniper stands by at least 25% based on a rolling 10-year average.

The BLM should establish and adopt minimum mandatory surface occupancy conditions, based on the best current scientific information, for all leasing activities on Monument lands prior to offering any specific parcel of land for lease, designed to communicate to potential lessees in advance the minimum restrictions that would attach to such leases, to protect special status species and their habitats.

The BLM should maintain natural water flows and flood events, sufficient for natural structure and function of riparian vegetation, which serves as habitat for many special status animal species.

The BLM should not allow vegetation restoration methods in areas where special status species roost or nest (unless consultation with USFWS indicates no effect or a beneficial effect to species).

The BLM should conduct an inventory and survey of special status plant species within the Monument within 3 years of the adoption of any new RMP, and at least every 10 years thereafter.

The BLM should make special status animal species habitat jeopardized by noxious weed invasions a high priority for control efforts. There should be an active noxious weed control program in the Planning Area. This program should focus on areas where habitat, including special status animal species habitat, is being lost due to changes in the water table and changes in vegetation structure and composition caused by noxious weeds. This weed control program should include the use of volunteer groups, BLM employees, County personnel, contractors, and adjacent agency personnel when appropriate. This program should target species in a prioritized manner. Priorities for weed control may include invasiveness of the species, extent of invasion, sensitivity of the area being invaded, and accessibility.

The BLM should allow no exceptions for cross-country vehicle travel in the known habitat or locations of sensitive plant species.

The BLM should not allow surface-disturbing research activities in threatened or endangered species habitat, and all scientific research projects near listed species populations or habitat should be evaluated by Monument biologists/an advisory committee/the USFWS, and appropriate experts prior to initiation to determine impacts to these populations or habitat. Any research project that may have an effect on populations of listed species should be coordinated with the USFWS and appropriate permits and Section 7 consultation should be completed as determined necessary. Projects that provide new information and understanding of listed species, their populations, and/or their habitat, may be allowed after approval by the BLM and the review and issuance of permits by the USFWS. All projects should be evaluated on a case-by-case basis.

The BLM should evaluate livestock grazing allotments and grazing as they relate to all 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 would provide protection for listed and sensitive species as the evaluation should be site specific for each of the allotments.

The BLM should restrict fuelwood cutting to designated areas, none of which occur in known nesting or roosting habitat. These areas are small in size and are unlikely to affect foraging activities of raptors or other listed species. Future identification of fuelwood cutting areas should consider listed animal populations and habitats prior to designation.

The BLM should concentrate its law enforcement efforts and increased field presence in areas with special status species habitat in order to curb non-compliance activities. The BLM has established a cooperative law enforcement agreement with the Sheriff department in Kane County and is pursuing an agreement with Garfield County to facilitate shared law enforcement and support for enforcing established closures.

Mexican Spotted Owl

The BLM should evaluate fire-suppression activities with fire resource advisors prior to implementation to provide appropriate protection measures in spotted owl habitat.

The BLM should implement allocations and/or group size restrictions or other measures to reduce disturbance if recreation activities (e.g., hiking, camping, backpacking) are determined to impact known nest sites. If allocations and group size limits are implemented, they should be developed in accordance with appropriate group size and recreation allocation provisions.

The BLM should generally limit trail construction to the Frontcountry and Passage Zones. Project-level assessments and consultation with the USFWS should be completed before construction of any trails that are near owl nest sites. Designated primitive camping areas, picnic areas, and trailheads should not be located within 0.5 mile of known spotted owl nesting, unless consultation with USFWS determines that impacts to nesting birds would not occur. This 0.5-mile buffer is recommended in the *Utah Field Guide for Raptor Protection from Human and Land Use Disturbances* (USFWS 2002).

The BLM should establish criteria for designation of climbing areas for the Planning Area. These criteria should not allow climbing areas to be designated in known Mexican spotted owl nest sites. If new nest sites are identified in areas designated for climbing, seasonal closures should be established in those areas to assure that disturbance of nesting activities does not occur.

The BLM should designate protected activity centers in accordance with the recovery plan after the comprehensive inventory for spotted owls in the Planning Area that was begun in 1999 is completed. This is a multi-year project that will look at occurrence of owls, current habitat, and potential habitat (i.e., habitat that is potential if modifications were made to that habitat). Activities such as recreational use in these protected areas may be limited (as described in SSA-18) to help protect this species.

Southwestern Willow Flycatcher

The BLM should encourage actions that promote the recovery and conservation of this species and habitat, and all activities should conform with the *Final Recovery Plan Southwestern Willow Flycatcher* (USFWS 2002b)

The BLM should exclude livestock from suitable southwestern willow flycatcher habitat (whether occupied or unoccupied) during the growing season (bud break to leaf drop). Unsurveyed suitable habitat should be considered occupied. If livestock are excluded using fencing, fencing should be inspected and maintained annually.

California Condor

The BLM and USFWS should discuss the California condor even though Section 7 consultation is not required for this species. Efforts should be made to protect potential habitat for this species and to limit activities which may be detrimental to their existence in cooperation with the counties and the USFWS.

Kanab Ambersnail

The BLM should take actions to improve identified habitat as consistent with the recovery plan objectives. Actions may include assuring flows in appropriate streams and seeps by removing nonnative plants affecting the water table and reducing impacts from visitors and/or livestock. Surveys should also identify current habitat and habitat that is potential if modifications are made.

The BLM should survey or resurvey all potential Kanab ambersnail habitat in Planning Area at least once every 10 years

Jones' Cycladenia

The BLM should apply stipulations on any permits to drill for oil and gas to prevent impacts to Jones' cycladenia populations in the Planning Area through avoidance or other conservation measures (after consultation with the USFWS). There are oil and gas leases in the area where Jones' cycladenia grows, some of which have been suspended. There are currently no mining or mineral operations in the area that will affect this population of plants or its habitat.

The BLM should conduct inventories to locate new populations of this species at least every 10 years to provide more accurate information on distribution and to facilitate protection and recovery.

Kodachrome Bladderpod

The BLM should prohibit cross-country vehicle travel in the Kodachrome bladderpod area. There is one route open in the Kodachrome bladderpod area. This route should be open to street legal vehicles only.

The BLM should place physical barriers as well as “closed” signs in strategic locations to prevent access into areas where the Kodachrome bladderpod grows. Restoration in closed areas may occur to eliminate impacts and return the area to pre-disturbance condition. Monitoring should continue in order to determine effects of closures and to measure the resilience of the population.

The BLM should develop additional monitoring sites in strategic locations to measure impacts to the population, following established protocols. If, through monitoring, impacts to the population from visitors are identified, visitor allocations or other measures should be imposed to eliminate any further impacts from increased visitation and use. Group size and numbers of groups allowed in the area, as well as the types of activities allowed, could be limited.

The BLM should not allow trails, parking areas, or other recreations facilities in the Kodachrome bladderpod population.

The BLM should not allow camping, overnight stays, and campfires in the Kodachrome bladderpod population.

The BLM should not allow livestock waters or supplements within or near any Kodachrome bladderpod populations.

Ute Ladies'-tresses

The BLM should acknowledge that the USFWS found that the 1999 GSENM Management Plan will affect, but is not likely to jeopardize, the continued existence of the Ute ladies'-tresses, provided the conservation measures in the Biological Assessment and that Management Plan are taken.

The BLM should prioritize the maintenance of natural flows and flood events. In addition, the maintenance of instream flows should provide adequate water for natural structure and function of riparian vegetation. Ute ladies'-tresses relies on these natural flood events to colonize new areas and maintain healthy and viable populations.

The BLM should use the results of the Ute ladies'-tresses surveys initiated in the 1999 growing season to determine any further actions.

The BLM should take appropriate actions to prevent trampling of Ute ladies'-tresses by visitors in high-use areas. These actions may include replanting native vegetation or construction of barriers.

The BLM should close areas if necessary to protect Ute ladies'-tresses. Barriers should be constructed and restoration work initiated to stabilize the soil and banks and provide the best possible habitat for this plant.

The BLM should not permit expansion of current or new facilities where Ute ladies'-tresses grows.

The BLM should relocate existing trails in areas where Ute ladies'-tresses grows away from the plants and potential habitat when possible. These protection measures apply to current as well as future potential habitat areas for this species.

The BLM should develop interpretive materials to educate the public about Ute ladies'-tresses and the actions being implemented to protect it.

The BLM should initiate restoration of social trails in known Ute ladies'-tresses populations, including obliteration of the trail by planting native species, and moving soil to return the area to its natural grade. Group size restrictions, allocations, or other measures should be initiated if continued monitoring indicates that visitor use in the area is causing impacts.

The BLM should apply stipulations to any permits to drill for oil and gas to prevent impacts to Ute ladies'-tresses populations through avoidance or other conservation measures (after consultation with the USFWS).

Relict Plant Communities and Hanging Gardens

The BLM should not allow vegetation restoration methods in relict plant communities and hanging garden areas, unless needed for removal of noxious weed species. In these circumstances, consultation with an advisory committee should be used to determine the most appropriate control methods to ensure proper protection.

The BLM should not authorize any new water developments in relict plant communities and hanging garden areas. Maintenance activities should be allowed if these resources are not affected.

The BLM should not allow parking and other recreation facilities in relict plant communities and hanging garden areas.

The BLM should not allow camping, overnight stays, and campfires in relict plant communities and hanging garden areas.

The BLM should impose group size limits in relict plant areas to restrict use beyond the restrictions provided in the various zones. Most of these areas occur in the Primitive Zone, which has limits of 12 people and 12 pack animals.

The BLM should not allow pack animals in relict plant areas.

The BLM should allow communication sites and utility rights-of-way in relict plant areas.

The BLM should allow surface-disturbing research in relict plant communities and hanging gardens only with the advance approval of the Monument manager.

The BLM should conduct, and/or revise at least every 10 years, inventories, modeling, and field investigations for both relict plant communities and hanging gardens. Current information on the location of these associations in the Planning Area is largely anecdotal and may change following consideration of inventory data.

AFFECTED ENVIRONMENT

Commenters noted that there is southwestern willow flycatcher habitat near the Escalante River.

ENVIRONMENTAL CONSEQUENCES

Commenters requested that the BLM analyze potential impacts of any ground-disturbing activities in the Planning Area on sensitive, threatened, and endangered plant and animal species. It was suggested that the NEPA analysis support the determination that the RMPs contribute to the recovery of ESA-listed species.

Fish and Wildlife

GENERAL CONCERNS

Commenters expressed concerns regarding the protection of wildlife species and habitat in the Planning Area. Commenters expressed concern that dividing up the Monument into three separate units does not guarantee connectivity at landscape scale for wildlife migrating through the GSENM from the North Kaibab National Forest to the Dixie National Forest, and from Capitol Reef National Park and GCNRA to Bryce Canyon National Park. Commenters suggested that the negative impacts of habitat fragmentation are underappreciated by the BLM, and wildlife need ecological corridors of protected habitat.

Comments suggested the following management objective: to manage fish, wildlife, and other animals in conjunction with Utah state agencies to achieve and maintain healthy populations of all component species of the existing ecosystem, population dynamics, and population distributions, as measured by ecological function, rather than solely by historical presence.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters recommended the following management actions regarding fish and wildlife in the Planning Area.

General

The BLM should adopt planning and decision-making processes (including data collection, analysis, and monitoring) that employ measurable planning objectives at multiple biological scales (i.e., wildlife populations, habitat and ecosystem conditions) to ensure viable wildlife populations.

The BLM should manage the Planning Area to protect biodiversity and wildlife habitat and manage habitat for native species.

The BLM should manage all flora and fauna recognized in Presidential Proclamations 6920 and 9682 to prevent any decline of on-site populations and restore habitats.

The BLM should analyze the fish and wildlife element of the 1999 GSENM Management Plan for inclusion in the Planning Area RMPs.

The BLM should prohibit any activities in the Planning Area that interfere with the protection of wildlife values. All proposed projects should be required to include a site assessment for impacts to fish and wildlife species. Appropriate strategies should be used to avoid sensitive habitat (i.e., construct barriers). Seasonal restrictions on visitor use could be implemented to protect crucial habitat and migration corridors.

The BLM should allow wildlife habitat restoration projects in the Planning Area, such as water guzzlers, spring development, and pinyon-juniper removal.

The BLM should allow water development for wildlife purposes only upon a determination that the proposed development will have a positive impact on all the wildlife species existing within the area to be served by the proposed development. Water development for wildlife should not compromise the ecological function of existing riparian areas.

The BLM should implement special protections for wild sheep populations in the area to protect against disease transmission from domestic sheep.

The BLM should place a priority on protecting riparian and water resources as they relate to fish and wildlife, and should work cooperatively with the U.S. Forest Service to coordinate maintenance of fisheries and flows.

The BLM should comply with Garfield County's RMP and coordinate with Garfield County to develop a Wildlife Habitat Evaluation Guide for each special status species.

The BLM should prioritize the value of predator species, including the ecosystem services these species provide, over the concerns of ranchers (livestock).

The BLM should not permit honeybee apiaries on Planning Area lands.

The BLM should protect wild horses in the Planning Area.

The BLM should prohibit collection of Planning Area animals, fish, insects or other invertebrate animals, bones, waste, or other products from animals, or of other items from within the Planning Area. Exceptions could include collections authorized by permit in conjunction with authorized research or management activities; the collection of certain natural materials by Native American Indians under BLM permit; and the collection of antlers or horns as provided for by UDWR regulations. The above prohibitions shall not be deemed to diminish the responsibility and authority of the State of Utah for management of fish and wildlife, including the regulation of hunting and fishing, on Federal lands within the Planning Area.

Big game, Wildlife Corridors, and Habitat Connectivity

The BLM should coordinate wildlife connectivity goals and objectives, as well as wildlife corridor designations, with adjacent BLM field offices, Dixie and Kaibab National Forests, and units managed by the National Park Service. Commenters noted that the BLM is required to implement best available scientific information when establishing wildlife corridors.

The BLM should designate wildlife corridors that contain sufficient ecologically effective habitat to facilitate wildlife movement for daily, seasonal or long-term needs in a relatively safe manner. It was recommended that the BLM maintain functioning wildlife habitats and migration and dispersal corridors that allow free movement and use of habitats. It was also recommended that the BLM manage the Planning Area to conserve and enhance crucial habitats and protect migration and movement routes for mule deer, other big game, and other wildlife, such as carnivores.

The BLM should develop a wildlife corridor strategy that incorporates the ecological network concept. The ecological network concept includes the following key elements: 1) conservation core areas; 2) corridors and linkages; 3) buffer zones and sustainable use of non-conservation lands; and 4) the inclusion of human cultural and socioeconomic factors along with the consideration of wildlife needs, such as rural communities that coexist with wildlife.

The BLM should encourage and participate in scientific research designed to identify specific wildlife corridors, both within the Monument, and to and from the Monument to adjacent lands, and should prioritize the protection of the corridors thus identified from future development.

The BLM should establish and implement in a timely manner measures for fencing and other structures that allow the safe movement of wildlife. It was noted that antelope are unable to jump over livestock fences in their historical range.

The BLM should identify all wildlife travel corridors in the Planning Area before any existing roads are re-opened for public travel.

The BLM should preserve the integrity of wildlife corridors, migration routes and access to key forage, nesting, and spawning areas by limiting adverse impacts from development in the Monument.

The BLM should, where possible, augment wildlife values through acquisition of non-Federal lands in the Planning Area by purchase from willing sellers, exchange, transfer or donation of additional acreage of crucial wildlife habitat for their migration, movement, and dispersal.

Pest Control

The BLM should allow predator management to protect and enhance ungulate populations.

The BLM should retain all provisions of the current 1999 GSENM Management Plan relating to wildlife services.

The BLM should not allow traps, poisons, snares, or M44s in the Planning Area due to safety concerns and potential conflicts with Planning Area resources.

The BLM should not allow the use of poisons by Wildlife Services within the GSENM due to safety concerns and potential conflicts with resources including bald eagles.

The BLM should require activity level assessments before the use of any chemical substances that may reach the Escalante River or Lake Powell.

The BLM should coordinate all pest control coordinated with Wildlife Services.

The BLM should limit Wildlife Services activities within the Planning Area to the taking of individual coyotes within the immediate vicinity after verified livestock kills, where reasonable livestock management measures to prevent predation had been taken and had failed. Reasonable livestock management measures could include preventative measures to control predation, such as managing where calving occurs, in order to develop improved land management practices.

The BLM should incorporate active management, removal, and avoidance of exotic and invasive species in the RMPs.

The BLM should acknowledge that control actions by the State of Utah, or actions taken under State law by private citizens, are not affected by this planning process.

Education

The BLM should establish collaborative partnerships with volunteers and universities to monitor and study biological resources consistent with the overall objective of protecting such resources.

Coordination with UDWR

The BLM should work with UDWR to meet the requirements of Executive Order 11312 (1999) as amended by Executive Order 13751 (2017) on Invasive Species.

The BLM should continue to coordinate with UDWR and other organizations to inventory for wildlife and to evaluate needs for habitat protection. Inventory and research efforts should be targeted to fill information gaps on habitat needs and support adaptive management.

The BLM should continue to work with UDWR to meet the goals described in adopted species management plans.

The BLM should recognize the State of Utah's authority to manage wildlife in the Monument. It was requested that the BLM allow the State to manage under multiple use principles that allow hunting, fishing, and trapping.

The BLM should allow for transplants of wildlife species and populations in and out of the Monument, coordinated and conducted by UDWR.

The BLM should manage habitats for the recovery or reestablishment of native populations through collaborative planning with local, State and Federal agencies, user groups, and interested organizations.

The BLM should work cooperatively with UDWR to reestablish native species such as pronghorn to historic ranges, and to take needed actions to protect and enhance the habitat of these native species, recognizing that in some instances reestablishment may not be feasible in light of changing climatic conditions, or the damage that restoration efforts may cause to other Monument resources.

The BLM should work in conjunction with UDWR in managing fish, wildlife, and other animals to achieve and maintain natural populations, population dynamics, and population distributions in a way that protects and enhances Planning Area resources,

Raptors

The BLM should establish criteria for designation of climbing areas for the Planning Area. These criteria should not allow climbing areas to be designated in known peregrine falcon nest sites. If new sites are identified as occupied for nesting in areas designated for climbing, seasonal closures should be established in those areas to assure that disturbance of nesting activities does not occur. If recreation activities (e.g., hiking, camping, backpacking) are determined to impact known bald eagle roost sites, allocations and/or group size restrictions or other measures should be implemented to reduce disturbance. If allocations and group size limits are implemented, they should be developed in accordance with appropriate group size and recreation allocation provisions.

The BLM should require project-level assessments and consultation with the USFWS before construction of any trails within 1 mile of falcon nest sites. Designated primitive camping areas, picnic areas, and trailheads should not be located within 1 mile of known falcon nests. This 1-mile buffer is recommended in the *Utah Field Guide for Raptor Protection from Human and Land Use Disturbances* (USFWS 2002).

The BLM should generally limit trail construction to the Frontcountry and Passage Zones. Project-level assessments of least-impacting trail locations should be completed before construction of any trails that are near bald eagle roost sites. Designated primitive camping areas, picnic areas, and trailheads should not be located in areas of known roost sites for bald eagles. Every effort should be made to protect potential roosting areas in the Planning Area from human disturbance activities.

AFFECTED ENVIRONMENT

Commenters noted that the Planning Area contains important habitat for pronghorn, mountain lions, bighorn sheep, elk, black bears, and peregrine falcons, and has the second-highest bee diversity in North America. Commenters noted that the Planning Area contains outstanding values for bird habitat, with more than 200 species of birds, including bald eagles and peregrine falcons. Wildlife, including neotropical birds, concentrate around the Paria and Escalante Rivers and other riparian corridors within the Planning Area. Commenters noted that there are four main wildlife migration corridors in the Planning Area that follow drainages flowing off the Paunsaugunt Plateau: Kanab Creek, Johnson Canyon, Paria River, and Deer Springs Wash. Commenters requested that

these corridors, along with any others identified by the BLM, be explicitly identified, both spatially on maps and described in written form. It was also noted that the Buckskin Mountains provide important mule deer winter range.

ENVIRONMENTAL CONSEQUENCES

Commenters requested that the BLM analyze potential impacts of any ground-disturbing activities in the Planning Area on the spread of invasive animal species. Commenters requested that the BLM consider the potential impacts on endemic pollinators, including bees, when planning grazing and OHV use in the Planning Area. Commenters recommended that the BLM evaluate all proposed activities, including recreational activities, in the Planning Area for their potential impacts on relevant wildlife values. It was recommended that the BLM evaluate any proposed changes in grazing fencing guidelines for wildlife, such as timing and intensity of use, for impacts on relevant wildlife values. Commenters requested that if the BLM considers opening any roads in the Planning Area that were previously closed under the 1999 GSENM Management Plan, potential impacts to all wildlife travel corridors should be analyzed, including impacts of any potential increase in vehicle traffic.

Commenters suggested that keeping large, contiguous areas of public lands protected, such as the GSENM and GCNRA, is beneficial to wildlife and flora because it prevents habitat fragmentation. Commenters cited research (Holly P. Jones, et. al., 2018: Restoration and repair of Earth's damaged ecosystems. Proceedings of the Royal Society B, February 28, 2018) that suggests that damaged ecosystems may never fully recover on a human time scale; therefore, it is important to protect ecosystems, such as the GSENM, that have remained substantially unaltered by human actions.

Cultural Resources

GENERAL CONCERNS

Sacred Tribal Areas and Current Native Americans

Commenters expressed concern that the Tribes who hold these lands as sacred are not being adequately consulted, and Native participation in this process is vital. Commenters also requested the management plan process be respectful of and honor the Native Americans and their lands. Some commenters argued that Native Americans should drive the process instead of just consult. Some commenters identified themselves as being a part of, or affiliated with, various Tribes and feel they have not been considered. These commenters expressed concern that their religious freedoms may be compromised by closing them off from their sacred sites, which would be a violation of the American Indian Religious Freedom Act of 1978. Commenters requested that these lands should be kept as they are, so Native Americans can share their history and sacred places with others in a respectful way, and not be opened to mining and industrial use.

Archaeological Sites and Landscapes²

Commenters noted that the Planning Area is associated with multiple Tribes, and that taking small pieces out of their larger context will hasten the destruction of the area. The idea of landscapes as opposed to sites was mentioned by commenters, emphasizing the importance of viewing sites in a larger context, not as separate entities.

Commenters also indicated concern about the responsibility of managing these lands in the Planning Area, because they have been repeatedly shown to have significant archaeological resources. It was emphasized that efforts to capitalize on these lands would be negligent and a

² Some submissions reference Monument values and objects, which are located in the BENM in their comments and not the GSENM.

violation of trust given to those who are keeping these lands protected. It was noted that these areas are being looted and vandalized without protections in place to keep them safe, and that the current focus should be on protecting sites and artifacts while preventing unlawful entry or use. Commenters noted concerns regarding the potential impacts of mining and mineral extraction activities on all cultural resources in the Planning Area.

Commenters expressed concern that impressive rock art panels and artifact sites along the southwestern border of the Monument along U.S. Highway 89, between Kanab and Big Water, appear to no longer fall under Monument status.

HISTORIC RESOURCES

Commenters noted that the excluded lands contain significant historic resources that require ongoing protection and preservation, including the Old Spanish National Historic Trail (between Wahweap and Fredonia, and potentially into the Kaiparowits and Grand Staircase Units, with consideration of the 1829 Armijo Route) and the Hole-In-The-Rock-Trail, which is a historic property listed on the National Register of Historic Places.

The lands these trails traverse should be maintained to reflect the conditions of 1879–1880. Any new RMP should state that the excluded lands between the Kaiparowits and Escalante Canyons Units will not be transferred to private or State control

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters suggested the following management objectives for archaeology and history programs:

- To (i) identify, document, and protect the array of archaeological resources in the Planning Area; (ii) manage uses to prevent damage to archaeological resources; (iii) increase public education and appreciation of archaeological resources to assure that the Monument is recognized as a laboratory for the preservation, study and appreciation of cultural heritage.
- To identify, document, and protect the historic resources of the Planning Area; manage uses on the Planning Area to prevent damage to historical resources, increase public education and appreciation of historic resources through interpretation; and facilitate appropriate research on historic resources so that the Planning Area is recognized as an outdoor classroom and laboratory for the preservation, study, and appreciation of cultural heritage.

Commenters recommended the following management actions regarding cultural resources in the Planning Area:

- The BLM should prioritize the protection of cultural resources, such as pictographs, petroglyphs, sacred sites and traditional cultural properties, in the Monument. Public education and interpretation should be emphasized to improve visitor understanding of archaeological resources and prevent damage.
- The BLM should expand inventory and research efforts to fill in information gaps in the archaeological record and to identify resources that will require specialized protection methods.
- The BLM should leave Sacred places within the Planning Area alone entirely to preserve Native American knowledge and heritage for their future generations.
- The BLM should continue to inventory and conduct project compliance for archaeological resources in order to evaluate their potential for protection, conservation, research, or interpretation. Cultural surveys in high-use areas, such as along trails and open routes, should be prioritized to ensure protection of vulnerable resources. Beyond these areas, inventory and research efforts should be expanded to fill in the information gaps and complete research that will contribute to the protection of sites and adaptive management.

The BLM should use the information collected to create a better understanding of cultures and should work to showcase and preserve remnants of Native American Indian cultures within the Planning Area.

- The BLM should emphasize public education and interpretation to improve visitor understanding of archaeological resources and to prevent damage. Archaeological site etiquette information should be readily available to Planning Area visitors. Collaborative partnerships with Native American Indians, outfitters and guides, volunteers and universities should be pursued to document, preserve, study, monitor or interpret sites consistent with the overall objective of protecting archaeological resources.
- The BLM should identify, respect, preserve, and manage Traditional Cultural Properties for continued recognized traditional uses. If the event of disagreement between BLM staff and contemporary Native American Communities over the type of protection such properties will require, the BLM should defer to proposals of Native American communities unless that BLM can establish beyond a reasonable doubt that specific proposals are not scientifically justified.
- The BLM should continue to inventory the Planning Area to identify historic resources and to evaluate their potential for conservation, research, or interpretation. This should include efforts to evaluate historic and cultural properties for nomination to the National Register of Historic Places. Surveys in high-use areas such as along trails and open routes should be prioritized to ensure protection of vulnerable resources. Beyond these areas, inventory and research efforts should be expanded to fill in the information gaps and complete research that will contribute to protection of sites and support adaptive management.
- The BLM should require all proposed projects to include a site inventory for historic resources, and appropriate strategies will be used to protect sensitive sites. This should include avoiding the site altogether, restricting access to the sensitive resource (i.e., construct barriers), interpreting the resource, stabilizing the resource, or as a last resort, excavating and curating the resource.
- The BLM should protect cultural resources in the Planning Area from looting. Funding should be increased to aid in protection.
- The BLM should prohibit commercial collecting of cultural resources, consistent with applicable laws and regulations.
- The BLM should consult scientists at the Kanab Field Office regarding cultural issues.
- The BLM should survey cultural resources, such as rock art and other archaeological sites, within the Planning Area. Surveys should be conducted in a manner consistent with current professional standards before any activities, including land transfers, occur. The surveys should be conducted by professional archaeologists with demonstrated experience in rock art discovery and recording.
- The BLM should map specific cultural resources relative to extractable mineral resources so that an accurate determination of actual conflict areas can inform the management process.
- The BLM should evaluate areas that are now outside the Monument to determine if those areas should be designated as ACECs.
- The BLM should provide more staffing and funding for archaeological research in the Planning Area.
- The BLM should use volunteers to help maintain historical sites such as old cabins and mining sites.
- The BLM should provide more education to visitors on the proper etiquette when visiting cultural sites, so that looting and other destruction of these sites is prevented.
- The BLM should increase public access to cultural resources with proper protections in place.

- The BLM should acknowledge that too many cultural resources are being removed from the Monument area at archaeological dig sites, and that trash is left at the sites after the digs are completed.
- The BLM should preserve the historic Hole-in-the-Rock Road.
- The BLM should maintain land traversed by the Old Spanish National Historic Trail and the Hole-In-The-Rock Trail to reflect the conditions of 1879–1880 and the new RMPs should expressly state that the excluded lands between the Escalante Unit and the Kaiparowits Unit will not be will transferred to private or State control.
- The BLM should establish continuing collaborative programs with local communities, organizations, local and State agencies, Native American Indian Tribes, outfitters and guides, volunteers, and other interested parties. This will be done to identify, inventory, monitor, and develop and implement plans for the restoration, stabilization, protection, and/or interpretation of appropriate sites and resources within the Planning Area. The collaborative programs should include the continuation of the current Oral History Program in cooperation with local communities. The BLM should use the information collected to create a better understanding of cultures and communities and will work to showcase the histories of the local communities.
- The BLM's Monument staff and Kanab Field Office staff should coordinate on cultural resources management including the following:
 - Revising the Table of Organization to facilitate a team approach for the combined Kanab Field Office/the GSENM
 - Sharing temporary positions
 - Conducting Section 110 inventories without regard to land status
 - Consider establishing a closer relationship with the adjoining Vermillion Cliffs National Monument. Both are part of the National Landscape Conservation System. Station personnel (archaeologists, law enforcement, etc.) in Kanab.
 - Clearly identifying land status of locally advertised archaeological sites as Public and protected by the Archaeological Resources Protection Act
 - Be closely involved with the selection of archaeological consultants for large-scale vegetation projects, etc., as well as compliance and final report review

AFFECTED ENVIRONMENT

Commenters indicated that numerous research studies (see the Resource References section in this appendix) that occurred after Monument establishment have documented an abundance and diversity of significant objects of scientific and historic significance, both within and outside the Monument boundaries. These studies have shown what needs protection in the public interest under the Antiquities Act. In addition, the 1996 GSENM Proclamation 6920 and the 1999 GSENM Management Plan should be referred to for previous cultural resource management during planning as a baseline for the new RMPs.

ENVIRONMENTAL CONSEQUENCES

Commenters requested that the BLM analyze direct, indirect, and cumulative impacts on cultural resources as part of the new management plan for the entire original Monument boundaries. Commenters requested that the BLM analyze the potential impacts that ground-disturbing activities, such as vegetation treatments, would have on cultural resources. It was also requested that best practices and adaptive management be used to identify potential direct and indirect impacts on cultural resources.

Commenters argued how irresponsible and insensitive it is, particularly to the native Tribes connected to the region, to allow destructive activities such as ATV use in areas where there are potentially hundreds of undiscovered and undocumented sites.

MITIGATION

Commenters indicated that they are certain that the protection of cultural sites has been a priority for years and suggested that adding new laws and further restrictions would not provide any additional protection beyond what is already there. The issues highlighted are that currently, on these protected lands, demolition and removal of sites are occurring. Many of these sites could be protected, possibly with volunteer work. It is suggested that closing the areas to the public may not be as helpful as education in the long term, that is, teaching people how to respect sites. It was mentioned that BLM brochures and educational videos do not adequately cover the importance of protection and proper etiquette when visiting cultural sites. It was suggested that these kinds of educational endeavors may be promoted by many agencies, such as the National Park Service, U.S. Forest Service, and Bureau of Indian Affairs, in addition to the BLM. It was also suggested that educational programs in schools may educate students about the importance of these resources. These approaches were suggested to provide a saturation of protection information, which will help people better understand the significance of these resources and why they need to be protected, while still allowing them to visit these pieces of history.

Geology and Paleontology

GENERAL CONCERNS

Commenters highlighted the unique aspect of near-perfect dinosaur preservation in certain areas of the Planning Area that are outside the Monument unit boundaries. Paleontologists, geologists, and volunteers argued that the fossil remains of dinosaurs, many only known here, are more important than the fossil fuels and minerals that also exist, particularly in the Kaiparowits region of the Planning Area. Commenters stated that skin remains have been recovered on many of the dinosaur fossils, demonstrating how rare and special these fossils are. Commenters suggested that allowing mineral development in the Kaiparowits region of the Planning Area is unacceptable because paleontological resources in this area are protected under the Paleontological Resources Preservation Act of 2009.

Commenters discussed that 15 to 25 new dinosaur species, many of them rare, have been discovered in the Planning Area. With the new Monument boundary, the areas of greatest fossil concentration are excluded from Monument units and may be opened to coal mining. Commenters stated that the excluded lands contain more than 700 scientifically important fossil localities, including the geologically older sections of the world's most completely preserved Cretaceous ecosystem including the Straight Cliffs, Tropic Shale, Naturita, and Cedar Mountain Formations, which contain a vast record of marine prehistoric life including unique ammonites, mosasaurs, short-necked plesiosaurs, and other forms of animals living in the ocean or near the ocean shoreline. Commenters noted that these three formations are valuable for determining whether parallels exist between previous mass extinctions and current climate changes. It was recommended that geological formations associated with the Cenomanian-Turonian Extinction and the Permian-Triassic Extinction should be preserved to permit scientific research.

It is noted with great concern that private parties have already been asked to identify areas for coal, making their intentions to potentially destroy these fossil resources clear. In addition, commenters noted concerns about the existing burning coal seam on the Smoky Mountain Road could expand and damage important paleontological resources if mining is allowed.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters identified the following management objectives for geology: to prevent damage to the geomorphologic features, increase public education and appreciation of geologic resources, and facilitate geologic research to improve understanding of geologic processes.

Commenters suggested the following management actions:

- The BLM should continue efforts to inventory and assess the potential for geologic hazards as they might relate to visitor safety, visitor facilities, rights-of-way, communication sites, and transportation routes.
- The BLM should restrict visitor activities in high-hazard areas or in areas where damage to sensitive geomorphologic features may occur. Examples include restrictions on camping in known flood channels, debris basins, or sensitive soil areas.
- The BLM should acknowledge that the design or placement of designated primitive camping areas, trailheads, or communication structures may be affected by geologic hazards. Prior to construction of any of these facilities, surveys should be conducted to assess impacts to geologic resources in the Planning Area.

Commenters identified the following management objectives for paleontology: to protect the abundant paleontological resources in the Planning Area from destruction or degradation, manage uses to prevent damage to paleontological resources in the Planning Area, increase public education and appreciation of paleontological resources through interpretation, and facilitate appropriate paleontological research to improve understanding of paleontological resources within the Planning Area.

Commenters recommended the following management actions regarding paleontological resources in the Planning Area:

- The BLM should prioritize the protection of paleontological resources, such as the fossils recently discovered in the Planning Area.
- The BLM should continue the GSENM's current management to protect paleontological resources.
- The BLM should inventory paleontological resources within the Monument management units and evaluate for their potential for protection, conservation, research, or interpretation. High use areas within the Planning Area should have high priority for inventory efforts. Beyond high-use areas, inventory and research efforts should be expanded to fill in the information gaps on formations and other information needs and to support adaptive management.
- The BLM should have the Tropic, Naturita, Cedar Mountain, Entrada, and Carmel Formations evaluated and inventoried by specialized marine-fossil paleontologists to determine if these formations need more extensive protection, and this work should be funded and completed within the next 2 years.
- The BLM should map specific paleontological resources relative to extractable mineral resources so that an accurate determination of actual conflict areas can inform the management process.
- The BLM should seek to designate the entire Planning Area as a paleontological resource and manage it according to the Paleontological Resources Preservation Act of 2009 (PRPA: Public Law 111-011 Omnibus Public Land Management Act of 2009).
- The BLM should create RMPs for the new Monument units and excluded areas that are 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.

- The BLM should not consider any extractive industry leases/permits, grazing permits, rangeland management projects, or fire breaks in the Planning Area until a thorough paleontological inventory and scientific exploration of the area is completed.
- The BLM should acknowledge that too many paleontological resources are being removed from the Monument area at paleontological dig sites, and trash is being left at the sites after the digs are completed.
- The BLM should develop a local field station and laboratory space for the preparation and display of paleontological resources and allows opportunities for local youth to be involved in research and trained in fossil preparation and curatorial storage.
- The BLM should increase the number of paleontology Monument staff to at least one full-time paleontologist and one full-time paleontological technician for each of the three new Monument units in addition to the existing full-time senior Monument paleontologist as well as at least one full-time education and outreach coordinator for the combined Monument units plus excluded areas.
- The BLM should prohibit commercial or other non-scientific collecting of paleontological resources, consistent with applicable laws and regulations.
- The BLM should use a monitoring program to assess management needs of sensitive sites and areas. All proposed projects should be required to include a paleontological site inventory, and appropriate strategies should be used to avoid sensitive sites, restrict access to the sensitive resource (i.e., construct barriers), or as a last resort, excavate and curate the resource. High-sensitivity sites could be monitored in conjunction with collaborative partnerships and volunteer organizations.
- The BLM should emphasize public education and interpretation to improve visitor understanding of paleontological resources and to prevent damage. Collaborative partnerships with volunteers, universities, and other research institutions should be pursued to document, preserve, monitor or interpret sites consistent with the overall objective of protecting paleontological resources
- The BLM should retain provisions of the 1999 GSENM Management Plan relating to collections.
- The BLM should prohibit collection of Planning Area resources, objects, rocks, petrified wood, fossils within the Planning Area will be prohibited. Exceptions could include collections authorized by permit in conjunction with authorized research or management activities.
- The BLM should require proof of a repository agreement granted by a public trust specimen repository for any collecting permissions.
- The BLM should protect outcrops of petrified wood from unauthorized collection.
- The BLM should provide paleontologists with flexibility in collecting techniques and methods with reasonable justification to recover and preserve paleontological resources.
- The BLM should provide funding for protecting and preserving paleontology resources at the new Monument units and excluded areas that supports the paleontology staff and facilitates 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 make protection of paleontological resources among the highest priorities of law enforcement for both inside the new Monument units and excluded areas.
- The BLM should encourage researchers 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.
- The BLM should acknowledge that 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.

- 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 should increase public access to paleontological resources with proper protections in place.
- The BLM should remove lands that are identified as having paleontological resources, especially vertebrate fossils, from any form of mineral entry, energy leasing, or road construction.
- The BLM should regulate traffic within the Planning Area to avoid or minimize damage to paleontological resources and paleontologically sensitive sites.
- The BLM should adequately survey all proposed mineral extraction sites (including oil and gas) and their associated passages in the excluded areas of the former GSENM for paleontological resources prior to the execution of mining activities. All proposals should incorporate effective, appropriate strategies for site protection.
- The BLM should have a Monument paleontologist periodically inspect mineral extraction sites (including oil and gas) that have a high potential for yielding paleontological resources based on the preliminary paleontological resource survey.
- The BLM should require that any paleontological resource of potential scientific importance encountered during mineral exploration and extraction (including oil and gas) be immediately reported to a Monument paleontologist.
- The BLM should keep scientific research, particularly projects using paleontological resources, as a priority and at the core of activities at the new Monument units and excluded lands. The BLM's support for research, education, and outreach is essential for enhancing the preservation, management, and appreciation by all U.S. citizens of the national paleontological resources.
- The Society of Vertebrate Paleontology, as part of the comment process, proposed a detailed paleontological RMP for the Planning Area. The society's recommended management actions are summarized above and are provided in detail in Appendix 1 of the society's submitted comments (available in the project record).

AFFECTED ENVIRONMENT

Commenters indicated that numerous research studies that occurred after Monument establishment have documented an abundance and diversity of significant objects of scientific and historic significance. These studies have shown exactly what needs protection in the public interest under the Antiquities Act. Commenters noted that there have been more than two dozen new species of dinosaurs discovered in the GSENM in the 21 years since President Clinton preserved it as National Monument. It was also noted that most of the GSENM's 1.9 million acres, one of the world's richest fossil sites for studying the age of dinosaurs, remains unexplored. Commenters requested that the BLM expand its baseline information on paleontological resources in the Planning Area. Existing surveys should be continued to further expand knowledge of geological history of the Colorado Plateau and how the GSENM and the Kanab Field Office BLM management areas fit into the landscape story.

ENVIRONMENTAL CONSEQUENCES

Commenters requested that the BLM analyze potential impacts of any ground-disturbing activities in the Planning Area, such as vegetation treatments, on paleontological resources.

Aesthetic Resources (visual resources, night skies, and noise)

GENERAL CONCERNS

Commenters requested that scenic resources be considered in the RMPs and stated that the management objective for visual resources management should be “to preserve the spectacular scenic assets of the Planning Area.” Commenters requested that protection for the darkness of night skies be considered in the RMPs. It was also requested that the BLM acknowledge the variety, magnitude, and scenic value of the different viewsheds found in the Planning Area. Commenters expressed concerns over the potential of mineral mining activities impacting the natural beauty and resources of the GSENM. Commenters stated that history and tradition have shown the critical role land can play in the understanding of cultural heritage, the maintenance of spiritual wellbeing, and the building of community.

The American Indian Religious Freedom Act of 1978 requires Federal agencies to evaluate its policies and procedures with the aim of protecting the religious freedoms of Native Americans (Public Law 953412). This law is violated by adoption of any management plan that fails to offer sufficient protections for dark skies, soundscape, and viewshed.

Commenters requested that the dark skies and viewshed be protected for the entire Monument. It was requested that the RMPs for the Grand Staircase, Kaiparowits, and Escalante Canyons Units preserve and enhance dark skies and the viewshed. It was also requested that the BLM conduct inventories of dark sky and viewshed resources to determine where it would be most appropriate to place resource extraction areas. It was recommended that resource extraction activities should not occur directly outside the Monument because it would mar the viewshed.

Commenters suggested that the typical oil and gas and/or mining development would not be able to be mitigated through the usual management tools such as color blending of structures, revegetation, and sensitive siting. It was also argued that such mitigation is not possible in such rugged, easily eroded, open terrain, given all the sensitive viewpoints and open vistas that are characteristic of the area.

Commenters suggested that VRM is not related to the purposes of the Antiquities Act nor Presidential Proclamations 6920 and 9682 and therefore visual resources in the Monument should be managed as they are managed for other BLM-administered lands managed for multiple uses. It was also requested that VRM not conflict with any VERs. Commenters recommended that the BLM comply with Garfield County’s VRM Plan and not let visual resource analysis halt issuance of permits.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters recommended that the BLM adopt the most recent visual resource inventory and retain the VRM class directives from the current 1999 GSENM Management Plan.

Comments recommended that all Planning Area lands be allocated to VRM II or III. Submissions included suggested VRM mapping and percentages allocated to VRM II and III.

Commenters suggested that development and extraction activities should be avoided near Monument boundaries to protect viewsheds. For example, it may be inappropriate to have oil rigs or power lines next to places such as the Dinosaur Track Site, Peekaboo Gulch, or Devil's Garden even if such structures are constructed outside the modified Monument boundaries. Commenters recommended incorporation of the following stipulations:

- All facilities, either permanent, temporary, or replacement, should be required to use "Dark Sky Friendly" lighting fixtures, except for emergency situations.
- "Flaring" from energy resource production sites should be prohibited.

Commenters recommended inclusion of the following language into the RMP:

- All proposed actions must consider the importance of visual values and must minimize the impacts the project may have on these values. While performing an environmental analysis for projects, the visual resource contrast rating system will be used as a guide to analyze potential visual impacts of the proposal. Projects will be designed to mitigate impacts and conform to the assigned VRM Class objective and other objectives including 1) using natural or natural appearing material as a priority, 2) meeting restoration/revegetation objectives, and 3) complying with a Planning Area facilities master plan.
- Some types of projects such as VERs, or ingress to private land, may be allowed on a case-by-case basis in Class II or III areas. Visual resource impacts in these instances will be minimized by such measures as screening, painting, project design, relocation, or restoration.
- The Planning Area manager may allow temporary projects, such as research projects, to exceed VRM standards in Class II and III areas, if the project terminates within 2 years of initiation. Rehabilitation will begin at the end of the 2-year period. During the temporary project, the manager may require phased mitigation to better conform with prescribed VRM standards.
- The VRM classes acknowledge existing visual contrasts. Existing facilities or visual contrasts will be brought into VRM class conformance to the extent practicable when the need or opportunity arises (i.e., rights-of-way renewals, mineral material site closures, abandoned mine rehabilitation).
- If areas are designated as Wilderness or designated as a wild section of a National Wild and Scenic River, they will be reassigned to VRM Class I.
- The BLM should seek to prevent light pollution within the Planning Area. No actions should be proposed within the Planning Area that will contribute to light pollution. The BLM should also work closely with the surrounding communities to minimize light pollution.

Commenters requested that the soundscape be protected for the entire Planning Area. It was requested that the RMPs for the Grand Staircase, Kaiparowits, and Escalante Canyons Units preserve and enhance the soundscape.

AFFECTED ENVIRONMENT

Recent studies within the GSENM, reported to Escalante River Watershed Partnership in October 2017, revealed results of ambient sound and light measurements, showing that from several points within the GSENM, the area has the least ambient light and the lowest level of ambient sound of any area in the continental United States. It was requested that the BLM inventory and determine current soundscape conditions in the GSENM.

ENVIRONMENTAL CONSEQUENCES

Commenters expressed concerns about potential impacts on night skies in the Planning Area, as well as potential impacts to night skies in adjacent National Parks. Commenters requested that the BLM analyze potential impacts of any ground-disturbing activities in the Planning Area on soundscapes.

Wildland Fire Management

GENERAL CONCERNS

Comments stated that wildfire has been an important and crucial factor in the dynamic ecology of Monument lands for many thousands of years and that natural fires will continue to occur.

Comments noted that the Planning Area is part of the Color Country Interagency Fire Management Area, which has an operating plan that is updated annually. Specific zoned areas and policies have been established in that plan to indicate how suppression activities will be managed in specific areas of the Planning Area. Most of the Planning Area is included in zones that have little fire-suppression activity. Some full suppression zones occur within the Planning Area and are found in areas where protection of structures and property are a concern. Protection of other resources is fully integrated into the fire management strategies for all of the zones in southern Utah and northern Arizona. Any changes in zones and activities should be coordinated with the Color Country Fire Management Area staff following established processes.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters recommended the following management actions regarding wildland fire management in the Planning Area:

- The BLM should retain the provisions of the current 1999 GSENM Management Plan relating to wildfire management.
- The BLM's objective for wildland fire management should be limited to protecting human life and property.
- The BLM is responsible for reducing the potential for wildfires on lands adjacent to wildland-urban interface areas.
- The BLM should make fire risk mitigation for private structures the responsibility of the private structure owner because inholdings in high risk ecosystems should not justify financial investments by the public, other than those undertaken by State and local communities using State and local tax funds.
- The BLM should allow flexibility in determining how to manage wildfire, including providing for proactive prevention and suppression when cultural, recreational, or property interests are involved.
- The BLM should allow prescribed fire in the parts of the Planning Area where grazing is permitted.
- The BLM should use smaller scale prescribed burns to treat overgrown tree canopies or high fuel load areas as a preventative measure.
- The BLM should manage areas of high cultural density within Monument lands for fire prevention.
- The BLM should consider many factors when deciding whether to reseed after fires. The overriding consideration is the vegetation management objective and priority to use native plants. In trying to make the determination of whether seeding will help attain these objectives, there are other considerations: 1) the structure and diversity of vegetation in the area before it burned, and 2) the presence of noxious weeds in the area and the likelihood

of such weeds increasing as a result of a fire. Areas with high species diversity and little potential for noxious weed spread should not be reseeded. Areas that had little diversity and little potential for noxious weed invasion should be seeded with native species exclusively. Areas of low diversity and high potential for noxious weed invasion should most likely be seeded, and nonnative/native seed mixes could be used if it was determined that timing was critical and nonnative species will help prevent weed spread. Each fire should be evaluated on a case-by-case basis to determine the appropriate actions to meet the established vegetation management objectives. Actions may change over time as a result of new research or other information in accordance with adaptive management. If seeding with nonnatives is deemed necessary, it should be in accordance with the provision stated above (short-lived, nurse crop species with natives in the mix).

- The BLM should allow the use of aircraft in areas for reseeding operations where appropriate. In areas with raptor species, timing should be appropriate to eliminate impacts to these species.
- The BLM should acknowledge that vegetation in the Planning Area generally evolved with fire as a minor part of the ecosystem, as is evident from the flora and soil characteristics. Periodic fires did occur in the Planning Area, but little information is known about the frequency or size of these fires. The objective of the fire management program will be to allow fire to play its natural role in the ecosystem.
- The BLM should initiate prescribed fires in areas where fire suppression has disrupted natural fire regimes. Specific objectives for prescribed fire should be developed prior to its use and with recommendations from the Planning Area Advisory Committee.
- The BLM should allow heavy equipment use through authorization of the Planning Area Manager.
- The BLM should consult a designated fire resource advisor familiar with WSA issues on all fires within the Planning Area that involve WSAs.

Lands with Wilderness Characteristics

GENERAL CONCERNS

Commenters suggested that the Planning Area's remoteness and primitiveness are among its most important and valuable characteristics. Commenters noted that true wilderness areas are getting harder and harder to find and noted that the Planning Area is one of the most pristine wilderness areas in the lower 48 states and offers more opportunities for solitude and wilderness experiences than the National Parks, including Southern Utah's very popular National Parks.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters requested that the BLM acknowledge and discuss values associated with lands with wilderness characteristics that supplement and benefit other resources that the BLM manages, including the specific resources identified in the Presidential Proclamation.

Commenters requested that the entire Monument be managed to protect wilderness characteristics, such as naturalness and opportunities for primitive recreation.

Commenters also requested that 459,000 acres of BLM-identified lands with wilderness characteristics present within the Planning Area boundaries should be managed for the protection of their existing wilderness characteristics.

It was requested that the BLM incorporate an updated lands with wilderness characteristics inventory into the RMPs. The updated lands with wilderness characteristics inventory should be completed and signed, with findings made available to the public before the publication of the draft NEPA analysis so the public has time to comment and provide input before the RMPs are

completed. The inventory should include ground-truthing and testing of any GIS analysis to ensure that such an inventory has accurate and up-to-date information. It was suggested that to establish a true set of baseline conditions as required under NEPA, the BLM must ensure its lands with wilderness characteristics inventory is fully compliant with Manual 6310 before the inventory can be used to inform management decisions.

Commenters suggested that the BLM should manage a substantial amount of land in the Planning Area for protection of wilderness characteristics to comply with FLPMA's unnecessary and undue degradation standard. It was recommended that all lands with wilderness characteristics within the Monument 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. It was requested that a full range of alternatives be evaluated for management of inventoried lands with wilderness characteristics. It was recommended that the BLM layer management of lands with wilderness characteristics with other administrative designations where necessary to adequately manage and protect all relevant resources and values.

Commenters requested that the BLM remove from management consideration all areas identified as lands with wilderness characteristics as defined in the 1999 lands with wilderness characteristics study, because this designation was biased, did not undergo NEPA analysis, and did not undergo systematic public review.

AFFECTED ENVIRONMENT

Comments identified 459,000 acres of BLM-identified lands with wilderness characteristics present within the Planning Area boundaries.

ENVIRONMENTAL CONSEQUENCES

Commenters requested that the BLM analyze potential impacts of any ground-disturbing activities in the Planning Area on solitude and wilderness experiences. Commenters suggested that Americans need the Planning Area's type of large-scale, undeveloped, remote, wilderness-quality landscape because it is essential to our wellbeing. Commenters also recommended that the economic benefits of protecting lands with wilderness characteristics be analyzed, and suggested that the protection of these lands provides economic benefits for regional communities.

Resource Uses

Forestry and Woodlands

GENERAL CONCERNS

Commenters expressed concerns regarding the ability to collect firewood and other forestry products in the Planning Area. Commenters expressed both support for and opposition to allowing logging and commercial timber harvesting in the Planning Area. Commenters also expressed concerns about access to parts of the Planning Area for wood harvesting.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters recommended the following management actions regarding forestry and woodlands in the Planning Area:

- The BLM should not allow logging or commercial timber harvesting within the Planning Area.
- The BLM should allow small commercial wood harvesting operations in the Planning Area.
- The BLM should allow access to cut and gather firewood and other woodland resources, particularly within previously-chained areas.
- The BLM should keep existing wood harvesting areas open with associated off-road travel.
- The BLM should limit commercial fuelwood cutting and authorize it in designated areas only, including identifying the two forestry product areas located in the Planning Area: Rock Springs Bench area and Buckskin Mountain area. Other commenters recommended that selective logging be allowed in the Planning Area only for maintenance purposes.
- The BLM should allow Christmas tree cutting only within designated area and only under a permit system.
- The BLM should allow fuelwood harvesting, post cutting, and Christmas tree cutting by permit only within designated areas or other future areas that go through a written investigation, analysis, and public comment period. Additional areas may be designated to meet the overall vegetation management objectives, but should not be allowed outside already disturbed areas. Access to all cutting areas should be subject to general transportation and access rules. Maps of designated areas should be provided to ensure compliance. Designated areas should focus on pre-treatment areas.
- The BLM should apply OHV restrictions to forestry product areas (i.e., travel should be allowed only on designated routes and vehicles should be permitted to pull no more than 50 feet off designated routes in the Outback Zone). However, because forestry product collection activities are controlled by a permit and permits are issued to further overall management objectives, the BLM could authorize access on administrative routes and, in some cases, in areas more than 50 feet away from routes. These areas/provisions should be delineated in the permit prior to its issuance.

Commenters also recommended that forest management plan objectives focus on a proactive approach to create forest stands that are resistant and resilient to extreme fire and insect outbreak through timber harvesting, mechanical treatments, and prescribed fire. It was noted that the Utah Forest Practices Act recommends that management objectives for forest areas should focus on preserving water quality and soil stability, minimize waste of timber resources, and protect forest regeneration and production.

Commenters requested that the BLM analyze the forestry products element of the 1999 GSENM Management Plan for inclusion in the Planning Area RMPs.

AFFECTED ENVIRONMENT

Commenters suggested that the Planning Area is primarily covered with sagebrush/pinyon/juniper and never has and never will contain much, if any, sawmill-quality lumber that would support a viable logging industry.

ENVIRONMENTAL CONSEQUENCES

Commenters requested that the BLM analyze the positive effects of harvesting timber. Commenters suggested that claims that the GSENM damaged the local Escalante sawmill are specious because the local mill experienced frequent closings and many ownership/management changes prior to the Monument designation, and it was unable to compete with southeastern U.S. and Canadian lumber.

Livestock Grazing

GENERAL CONCERNS

Commenters expressed concern that the ecological cost of livestock grazing exceeds that of any other western land use and is the most widespread cause of species endangerment. Grazing destroys vegetation and wildlife habitat and damages riparian areas.

Commenters also expressed the desire to release grazing from current management constraints, and to recognize grazing as an important part of local heritage and as a source of income for many in the local area. The public may not realize that stock watering projects may also benefit wildlife.

Commenters stated that the planning process should address grazing within the original Grand Staircase-Escalante Lands and GCNRA because some of the Monument's allotments extend into the GCNRA and a 2013 planning process was not completed. Also, the GCNRA's grazing plan was remanded for further analysis because it had not adequately evaluated cumulative impacts or impacts to recreation and cultural resources.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters suggested the following goals for the Livestock Grazing program:

- Watersheds are in, or are making significant measurable progress toward, properly functioning physical and biological condition, including their upland, riparian-wetland, and aquatic components; soil and plant conditions support infiltration, soil moisture storage, and the release of water that are in balance with climate and landform and maintain or improve water quality, water quantity, and timing and duration of flow.
- Native plant communities are healthy, diverse, and productive, or are making significant, measurable progress toward such conditions.
- Ecological processes, including the hydrologic cycle, nutrient cycle, and energy flow, are maintained, or there is significant, measurable progress toward their attainment, in order to support healthy biotic populations and communities.
- Riparian and wetland areas exhibit, or are making significant, measurable progress toward exhibiting potential native vegetation diversity, density, age structure composition, and cover. Stream channel morphology and functions are appropriate to soil type, climate, and landform.
- Soils exhibit, or are making significant, measurable progress toward permeability and infiltration rates that sustain potential site productivity or improve site productivity, considering the soil type, climate, and landform.
- Habitats are supporting, or are making significant, measurable progress toward supporting their full complement of Planning Area/GCNRA native species and are exhibiting conditions expected to provide for recovery ("conservation") of Federal threatened and endangered species or Federal proposed or candidate threatened or endangered and other special status species.

Comments suggested the following objectives for the Livestock Grazing program:

- **Objective 1. Native Plant Communities**
 - Native plant communities reflect $\geq 80\%$ of the native plant diversity, density, age classes, and productivity of relevant ungrazed reference sites (i.e., Planning Area or GCNRA sites, which are of similar potential to support the native diversity and have been ungrazed by domestic ungulates for 10 years).
 - Native plant communities support ($\geq 80\%$ of reference sites based on appropriate quantitative measures) specific values, including the following:
 - Plant species endemic to Planning Area or the Colorado Plateau
 - Rock crevice and canyon bottom native vegetation
 - Dunal pockets that hold unique plant species adapted to shifting sands
 - Plants highly adapted to saline areas
 - Relict plant communities
 - Native species reoccupy habitat niches and voids caused by disturbances at 80% the rate of reoccupation in recovery reference sites (i.e., similarly disturbed sites recently excluded from grazing) based on appropriate quantitative measures.
 - Native plant communities support the following, at levels of at least 80% of relevant ungrazed reference areas:
 - Pollinator diversity, with pollinators often dependent on a particular species, genus, or plant family
 - Cover, nesting, calving, and/or food habitat for native declining, uncommon, and endemic vertebrate animals
 - Diversity of native aquatic biota
 - Diversity of soil invertebrates
 - Habitats are connected at a level to enhance populations of native species, including pollinators, based on estimated connectivity requirements using best available science.
- **Objective 2. Riparian and Wetland Areas**
 - Streambank vegetation, at 80% of reference riparian areas
 - consists of, or shows an independently measurable trend toward, native species with root masses capable of withstanding high stream flow events; and
 - maintains cover adequate to protect streambanks and dissipate stream flow energy associated with high water flows, protect against accelerated erosion, capture sediment, and provide for groundwater recharge.
 - Riparian vegetation reflects, at 80% of reference riparian areas, maintenance of riparian and wetland soil moisture characteristics, diverse age structure and composition, high vigor, and large woody debris when site potential allows, as well as provides food, cover, and other habitat needs for dependent animal species.
 - At 80% of reference riparian areas, point bars are revegetating and lateral stream movement is associated with natural sinuosity, channel width, depth, pool frequency and roughness appropriate to landscape position.
 - An active floodplain is present.

- **Objective 3. Soils**
 - Ground cover (including litter) is maintained at 80% of a relevant (e.g., similar soil, vegetation type, precipitation) Planning Area ungrazed site in order to protect the soil surface from excessive water and wind erosion, promote infiltration, detain surface flow, retard soil moisture loss by evaporation, and provide appropriate biological soil crust ecosystem functions (hydrology and nutrient cycling).
 - Biological soil crusts (aka cryptobiotic soils), which are critical for soil stability and nutrient availability, are protected from trampling and other physical disturbance within at least 60% of their predicted available habitat within Planning Area and within 80% of GCNRA predicted available habitat.
 - Indicators of excessive erosion such as rills, soil pedestals, mass wasting, and actively eroding gullies and headcuts are within 80% of appropriate, identified reference sites.
- **Objective 4. Water Quality Standards.** The Planning Area is in compliance with water quality standards established by the State of Utah (Utah Administrative Code R317-2) and the Federal Clean Water and Safe Drinking Water Acts. Activities on BLM lands will fully support the designated beneficial uses described in the Utah Water Quality standards (Utah Administrative Code R317-2) for surface and groundwater as indicated by the following:
 - Water quality parameters, including nutrient loads, total dissolved solids, chemical constituents, *E. coli*, water temperature and algae meet standards.
 - Macroinvertebrate community diversity and composition meet standards and are within 80% of relevant reference stream reaches.
 - Fine sediments do not exceed 80% of an equivalent ungrazed reference stream.
- **Objective 5. Habitats of Species of Concern,** including native, threatened, endangered, proposed and special status-species, are sufficient to ensure reproductive capability and recovery. Habitats are, or are making significant progress toward, being restored or maintained for conservation (i.e., recovery) of Federal threatened, endangered, proposed, candidate or other special status species. “Significant progress toward restoration of habitat” for such species is demonstrated by maintaining progress at a rate that is 80% that of relevant ungrazed recovery reference areas

Comments recommended that the BLM consider a diversity of grazing arrangements to be encouraged within the Planning Area, including the following arrangements:

- Collaborative grazing experiments
- Multiple allotments combined into a single system
- Range improvements
- Changing kind and class of livestock (within existing limitations)
- Rest-rotation systems
- Deferred rotation systems
- On-off systems
- Grass banks/forage reserve areas
- Reduced use areas
- Suspended use areas
- Non-use areas
- Closed areas

Additional recommendations regarding grazing management are included below

General Grazing Management

Commenters recommended the following management actions regarding livestock grazing in the Planning Area:

- The BLM should manage livestock grazing in the Planning Area consistent with applicable laws and regulations, and not just consistent with Presidential Proclamation 9682.
- The BLM should include long-term grazing practices needed for recovery, and assessments and monitoring at each allotment to measure whether progress is actually being made toward compliance with the standards.
- The BLM should explicitly evaluate what additional restrictions, measures, or closures may be necessary to bring allotments into compliance with the health standards.
- The BLM should evaluate the impacts of grazing use at the permitted numbers, which are several times more than has been actually been grazed in recent years.
- The BLM should not assume that grazing is still central to the local economy when making grazing management decisions, because data show that service jobs such as travel, healthcare, engineering, and teaching, account for most of the employment growth in the region.
- The BLM must determine 1) if public lands are capable of supporting livestock, and if so, 2) the carrying capacity of the lands. If an area cannot support and sustain livestock grazing, then there is no benefit that stems from use for livestock and dedicating the land to other uses will almost necessarily be warranted.
- The BLM should implement the Sierra Club's livestock grazing capacity model, which is available for review in the project record as part of the Sierra Club's comment letter, and renew all grazing permits with new stocking rates and seasons of use.
- The BLM should consider a desired outcome and alternative that would increase the ability of livestock permittees to use adaptive management and provide flexibility to manage their livestock in a manner that allows actions toward achieving land health standards.
- The BLM should consider a desired outcome of increased forage productivity on the range. It was suggested that the BLM should manage rangelands to maximize forage production.
- The BLM should allow existing levels of grazing, including local grazing, to continue in the Planning Area with no net loss of AUMs.
- The BLM should take additional measures (such as removal) to address trespass livestock, including feral cows and cows that come on too early or stay on the winter range too long.
- The BLM should incorporate the alternatives, analysis, and principles developed as part of the recently abandoned GSENM grazing EIS, including Grazing Management Plan concepts and Sustainable Grazing Alternative, into the RMPs for each Monument unit that has grazing, as well as the excluded lands.
- The BLM should consider the "Sustainable Multiple Use Grazing Alternative" proposed by the Grand Staircase-Escalante Partners during preparation of the GSENM grazing EIS.
- The BLM should develop separate grazing plans for each unit, because each area has different vegetation, soils, and local communities and ranchers.
- The BLM should initiate a Monument-wide review of grazing practices overseen by an independent commission of range scientists and wildlife ecologists, to study and make enforceable recommendations regarding grazing practices, with the goal of improving range and riparian conditions throughout the Monument.
- The BLM should consider climate change when making livestock grazing decisions.
- The BLM should monitor livestock grazing in the Planning Area more closely.

- The BLM should recalculate AUM dollar values and charge ranchers a reasonable market rate. It was suggested that the current cost to ranchers is far below market value and represents a subsidy to ranchers from the Federal government. It was also suggested that the BLM should not spend millions of tax payer dollars on range improvements that equate to “cowboy welfare”. It was recommended that the BLM fund all development specifically or generally for livestock grazing using only the funds raised through grazing fees charged on the land. If fees to be collected do not support such development projects, they should not be undertaken.
- The BLM should determine the accurate number of AUMs in each allotment (associated with 30% utilization during absence of drought and 20% utilization during drought) by conducting a clip-and-weigh analysis of forage every 10 years in each pasture of an allotment. This information should be used to adjust AUMs in the permit
- The BLM should implement a management plan for the lake and Rock Creek/Mud Holes Allotments that allows for the flexibility to manage for regeneration by allowing more frequent moves, grazing larger groups of cattle for more even distribution of grazing impacts but for less overall time than what has been allowed in the past.
- The BLM should discuss a holistic management plan at the beginning of every year that tries to meet objectives that are determined to be of the greatest need on these allotments and that assessments be made during the grazing year, and progress, objectives, and goals can be discussed at the end of the grazing season.
- The BLM should encourage regenerative management of allotments; conservation of grasslands by prohibiting grazing is damaging in the long term and leads to decline; grasslands need some degree of grazing to renew themselves and persist.
- The BLM should conduct treatments to improve the health of the range to support the number of AUMs originally allotted rather than expecting grazing allottees to self-limit as they have been for decades.
- The BLM should address rangeland health standards and seek to maintain and enhance desired plant communities that will benefit watersheds, water quality, and forage production.
- The BLM should require development of Allotment Action Plans. When monitoring of indicators shows an allotment or pasture is failing to meet or move toward objectives, plans will be drawn up for meeting or toward objectives. The plans must be based on evidence that the proposed activities or management have resulted in movement toward the particular objectives in other settings and must include methods for measuring whether conditions are improving under the action plan. The actions taken must result in progress that is “as expeditious and effective as practical” (Rangeland Health Standards H-4180-1). If progress toward objectives is not being observed/measured, further conversations will be in order, and adjustments to the action plan will be made.
- The BLM should create Annual Use Plans that reflect the best estimate that the number of days authorized and other instructions will result in objectives being met or moved toward.
 - Staggered seasonal use. At a minimum, there will be 6 weeks between the beginning of seasonal use of a particular allotment or pasture 1 year and when the season of use begins the following year. If this is not possible in a particular area, the area will be rested every other year.
 - Pasture movement within annual permits. Gathering of livestock will commence prior to the end date of the use of a pasture or area such that all livestock will have been moved and stragglers found by the off date.
- The BLM should employ adaptive management practices in grazing programs 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. The BLM should not permanently close areas to grazing, because conditions can recover so that the areas can be used for grazing in the future.

- The BLM should never use stubble height measurements as a substitute for forage utilization in monitoring grazing activity because these measurements are only useful as an indicator of use and in guiding the timing to move cattle off a pasture, as agreed to in term grazing permits. The use of stubble height measurements should never be the basis for non-compliance judgments or punitive actions.
- The BLM should institute a 30% utilization standard, both for riparian and upland areas, one pasture a year for each allotment until all pastures in each allotment have a 30% utilization limit. Utilization limits of 25% should be operative within all pastures during a drought year using the Standardized Precipitation Index of the National Drought Mitigation Center
- The BLM Kanab Field Office-Escalante Area should manage and permit allotments when the allotments are split between the new boundaries of the GSENM and the Kanab Field Office-Escalante Area.
- The BLM should implement watershed restoration on all grazing allotments whether they are in the Monument units or excluded lands, but they should be managed under the Kanab Field Office-Escalante Area policy.
- The BLM should use a pre-season plan and daily log for documentation of physical presence of a rider with the rider's livestock 5 out of every 7 days throughout the season of use of the allotment.
- The BLM should maintain roads and trails essential for facilitating livestock grazing in a manner that minimizes the effects on landscape hydrology (avoids concentrating overland flow, prevents sediment transport, and minimizes compaction to maintain infiltration capacity).
- The Sierra Club submitted a detailed "Conservation Alternative" that was originally submitted to the BLM in 2009 and describes proposed changes in range management for most allotments in the Planning Area. The "Conservation Alternative" 1) preserves allotments currently unavailable to graze, 2) makes an additional allotment unavailable, and 3) prescribes grazing practices that lead to recovery for those allotments that have degraded riparian areas or don't meet rangeland health standards. Further, it is designed to 1) meet the non-impairment requirements for those parts of allotments that are within the GCNRA, 2) meet the Federal requirement of stocking rates that meet the carrying capacity of allotments, and 3) be consistent with Presidential Proclamation 6920. The "Conservation Alternative" is an attachment to the Sierra Club's comment letter and can be reviewed in the project record.

Availability and Unavailability for Livestock Use

Comments stated that designation of allotments as available or unavailable for livestock grazing is provisional; areas that are deemed "available" at one time may become "unavailable" depending on site conditions, and vice versa if conditions are significantly improved and grazing practices are predicted, on the basis of scientific evidence, to retain the improved resource conditions.

Comments recommended the following criteria to identify Planning Area areas that should be grazed by livestock:

- Areas currently grazed that meet objectives or are measurably and significantly moving toward such objectives in relation to ungrazed reference areas, using independently verifiable methods.
- The permittee(s) wish to continue livestock grazing on the allotment/pasture.
- Another permittee obtains the permit and continues to meet or move toward objectives.

Comments recommended the following criteria to identify areas that should not be grazed by livestock:

- Areas closed to livestock grazing via a ROD supported by NEPA analysis and documentation
- Areas in suspended use
- Areas that are not meeting or significantly and measurably moving toward objectives in relation to ungrazed reference areas

Comments also recommended the following criteria to identify areas in the Planning Area that may be set aside for other uses:

- Areas that are particularly difficult to graze on a geographic (e.g., remoteness), productivity, and/or environmental (e.g., lack of water sources or forage production) basis
- Areas voluntarily relinquished or otherwise available for retirement and containing any of the following or combinations of the following:
 - Areas that would serve as valuable reference areas
 - Vegetation types that are either not represented or are underrepresented in currently ungrazed Planning Area areas
 - Planning area objects that are not compatible with or are damaged and impacted by livestock grazing (e.g., biological soil crust, rare and scattered riparian areas, declining native plant or wildlife species)
 - Significant cultural resources
 - Significant opportunities to conserve or restore historical, cultural, soil health, biological soil crust, fish, wildlife, riparian, vegetation and/or water quality objectives of the Planning Area Management Plan
 - Riparian areas, springs, and hanging gardens that have potential to be impacted or are currently impacted by livestock grazing
 - Moderate to high recreation values that are compromised by livestock grazing
 - Populations or habitat for threatened or endangered species; candidate or proposed threatened or endangered species; and special status species, or their habitat (e.g., southwestern willow flycatcher, sage-grouse, desert bighorn sheep, Mexican spotted owl)
 - Allotments where grazing is not compatible with special use sites
 - Allotments or units within which soil capability classes of 3 or more are common

Decrease Grazing in Planning Area

Commenters recommended the following management actions regarding decreasing livestock grazing in the Planning Area:

- The BLM should prohibit grazing within the Monument, and all current grazing permits should be retired. The BLM should phase out ranching in the Planning Area.
- The BLM should protect the Monument from overgrazing and incorporate a sustainable grazing alternative. Rotate cows to private ranch lands long before the native forage runs out so that the land can recover. Monitor and limit grazing during drought years.
- The BLM should consider removing grazing from selected lands in the three Monument units, particularly the lands that are below standard in rangeland health standards. The Monument lands could be used as grass banks to be available for the ranchers that have their allotments burned by wildfires, or allotments that need to rest for 2 to 4 years or more because of vegetation treatments. Having grass banks on the Monument units would also allow for multi-year scientific studies by Utah State University or other qualified universities.

- The BLM should close the Deer Creek and The Gulch Allotments to grazing to protect cultural and ecological resources in those canyons.
- The BLM should evaluate the Clark Bench Allotment and follow an earlier BLM recommendation to retire this allotment from livestock grazing.
- The BLM should close the following allotments: Alvey Wash, Big Bowns Bench (Middle and Seep Side Pastures), Big Horn (Big Flat North Pasture), Cedar Wash, Circle Cliffs, Cottonwood (Gravelly Hills and Paria River Pastures), Deer Creek (Brigham Tea and Wolverine Pastures), Dry Valley, Flood Canyon, Forty Mile Ridge, King Bench (King Bench Pasture), Lake (Navajo Point Pasture), Last Chance (Summer Pasture), Little Bowns Bench, Lower Hackberry, Lower Warm Creek, Mollie's Nipple (Buckskin [outside Monument boundary], Jenny Clay, and Blue Spring Pastures), Phipps (Phipps Pasture), Rock Creek-Mudholes, Round Valley, Upper Hackberry (South Jody Pasture), Upper Paria (Willis Creek, Unallotted South, Henderson Creek, Upper Coal Bench, and Lower Coal Bench Pastures), Vermillion (Seaman Pasture), Wolverine, and all allotments listed in the Sierra Club's "Conservation Alternative."
- The BLM should restrict livestock grazing from waterways and riparian areas in the Planning Area during drought years to minimize damage to these resources.
- The BLM should prohibit or significantly limit grazing in all riparian canyons, popular slot canyon areas, and popular dispersed recreation areas to protect vegetation, soils, wildlife habitat, water quality, public safety, livestock safety, and the quality of recreation experiences. These locations include Buckskin Gulch, Hackberry, Willow Gulch, Steep Creek, Deer Creek, The Gulch (Upper and Lower), Twentymile Wash, Dry Fork Slot Canyons, Willis Creek, Little Death Hollow, Bull Valley Gorge, Spencer Flat, Phipps Death Hollow, Paria Movie Set, along House Rock Valley Road, along White House Road, along Cottonwood Road, and along Hole-in-the-Rock Road.
- The BLM should reduce grazing east of Deer Creek and near the Burr Trail because it is currently overgrazed.
- The BLM should prohibit livestock grazing on 50-Mile Mountain to protect unique archeological resources, wildlife habitat, and vegetation communities and designate the mountain as an archaeological district and zone for biological research.
- The BLM should allow for voluntary, permanent retirement of grazing allotments as opportunities arise.
- The BLM should grant a permittee request for multi-year non-use or partial use for conservation or recovery outcomes that can be objectively documented and measured. An approved monitoring plan and schedule should be part of the application.
- The BLM's authorized officer should, upon receiving any request for voluntary relinquishment of permitted livestock grazing, re-evaluate whether livestock grazing is in the best interest of achieving objectives and protecting Planning Area values and objects, using the above criteria, and consider amending the Planning Area Management Plan to allocate forage for a different purpose pursuant to Instructional Memoranda 2013-184.
- The BLM should maintain current closures and consider additional closures. The BLM should ensure that the 16 allotments in the Monument that are currently not available for grazing remain unavailable under any new plan.

Increase Grazing in the Planning Area

Commenters recommended the following management actions regarding increasing livestock grazing in the Planning Area:

- The BLM should identify every allotment in the Planning Area as available for livestock grazing, including previously retired allotments.
- The BLM should set AUMs at pre-Monument levels, and AUMs that have been suspended should be reinstated. This should include allowing grazing in allotments that were closed shortly after the GSENM was established in 1996, such as the Escalante River, McGatch Point, Salt Water Creek, Steep Creek, Escalante River Portion of Big Bowns Bench, Deer Creek, and Phipps Allotments.
- The BLM should require full usage of AUMs on all allotments, including those acquired by the Grand Canyon Trust or similar organizations, subject to temporary permittee-requested reductions for personal hardship or rangeland health issues.
- The BLM should support valid existing grazing privileges at the highest reasonably sustainable levels.
- The BLM should prohibit allotment buyouts and permanent retirement of allotments in the Planning Area.
- The BLM should remove the Cottonwood Pasture of the Deer Creek, the Wolverine Bench area of the Deer Creek Allotment, the remaining area of the Phipps Allotment, and Little Bowns Bench Allotment from the forage reserve designation and permit long-term livestock grazing.
- The BLM should cancel the Grand Canyon Trust's grazing preference and open Big Bowns Bench Allotment, and portions of the Willow Gulch and Last Chance Allotments, which have been in non-use since the establishment of the GSENM.

Drought

The BLM should determine drought within the Planning Area using the previous 3 months of cumulative Evaporative Drought Demand Index of 80% or greater, or using cumulative drought of "moderate" or higher for the previous 3 months using data from the U.S. Drought Monitor archive.

The BLM should keep stocking rates associated with 30% or less utilization to the capacity of the driest 3 years in the last 10 years, and 20% utilization during drought.

The BLM should post the absence or presence of drought on the BLM website monthly.

The BLM should keep grazing after drought has ended should at 20% or less until key native forage species have produced mature seed.

Vegetation Treatments

Vegetation treatments should do the following:

- Have the objective of restoring or supporting potential native vegetation and ecosystem processes.
- Address underlying causes of the problematic conditions prompting vegetation treatments. When livestock and/or wild ungulate grazing have contributed to the problematic conditions being treated, grazing will be managed to avoid return of the problematic conditions.

- Use native seeds or seedlings only of local genetic stock whenever possible.
- Include measurable desired outcomes and the methods that will be used to monitor outcomes when compared to outcomes in a portion of the treated area that is not grazed.
- Be detailed in project-level plans and NEPA analyses, which provide for public comment on a full range of reasonable alternatives.
- Use a variety of measures to protect planted and naturally regenerated seedlings from the effects of trampling, browsing, and girdling by livestock and wildlife. Such measures will typically include temporary suspension of grazing, and may include fencing, tubing, netting, and/or animal repellants.
- Mimic natural processes to the degree possible, including succession and use of prescribed fire.

The BLM should specify that where an improvement in forage conditions for grazing cattle is a component of a vegetation restoration project, the entire cost of the proposed project, including pre-project inventory and analysis, should be borne by the grazing permittee. Each such vegetation treatment project should include a specific statement of purpose and need, supported by the best available science. Any project that includes improvement in forage conditions for grazing cattle should state specifically what percentage of the anticipated benefit will go to grazing uses.

- The BLM should, where applicable, initiate communication with UDWR and/or Arizona Game and Fish Department to provide for protection of vegetation treatment.
- The BLM should conduct revegetation (including maintenance) of sites formerly seeded to exotic species using only native species. The BLM should prohibit seeding with exotic species for livestock grazing purposes.
- The BLM should make passive restoration and non-chemical methods the first priority for preventing the introduction, establishment, and spread of exotic, invasive plant species. If herbicides are deemed essential, least-use of herbicides will be accomplished using integrated vegetation management principles, including reducing or eliminating stressors contributing to the introduction, establishment, and/or spread of exotic, invasive plant species.
- The BLM should require permittee(s) to manually maintain an area free of all invasive, exotic plant species within 100 feet of a watering trough or watering pond.
- The BLM should suspend grazing from post-fire areas for at least 2 years or until most of the native plant species in the area have seeded, whichever is longer.

Enclosures, Fencing, and Other Improvement Projects

The BLM should allow water projects, such as wells, tanks, and guzzlers, in the Planning Area to benefit livestock and wildlife. New and restored water sources and facilities should be developed to maximize utility of new forage for livestock and wildlife.

The BLM should, pursuant to NEPA, allow water developments as a management tool throughout the Planning Area for better distribution of livestock when deemed to have an overall beneficial effect on Planning Area resources but should not be permitted to increase overall livestock numbers.

The BLM should make it easier for holders of grazing allotments to get access needed for maintenance of water facilities and fences.

The BLM should allow for water development projects in all areas of the GSENM, including WSAs.

The BLM should install self-closing gates or panels where possible to ensure livestock are unable to enter slot canyons and become trapped. This would help eliminate livestock being killed or starved to death, as well as improve public safety for hikers.

The BLM should implement changes to grazing fencing guidelines to benefit wildlife, and coordinate with permittees to identify fencing that is not critical for livestock operations. Fencing that is not critical for livestock operations and that is impeding wildlife movement should be removed.

The BLM should, if fencing is necessary to meet any objective, require permittees to construct and maintain fencing unless the BLM is required to do so by an existing authorization.

The BLM should ensure that all fences and other annual permit infrastructure are maintained and functional prior to livestock entry for the season.

The BLM should ensure that exclosures with gated openings accessible to livestock are locked, with Planning Area/GCNRA providing a key to the permittee and retaining another key for as-needed use by public members who wish to access the site for non-grazing purposes.

The BLM should place signs on gates through which the public passes to indicate the current dates of livestock in the unit (e.g., allotment, riparian pasture) on either side of the fence and direction to keep the gate closed during those times the livestock should be in one of the two adjacent units.

The BLM should add exclosures to the RMPs and use them more extensively. Exclosures, once built, should be maintained better. Citizen scientists, volunteers, and non-governmental organizations can assist in funding, construction, and monitoring.

Public Transparency and Engagement

Commenters stated that the BLM should notify the public of all matters regarding grazing actions, range improvements, vegetation treatments, or any actions that may affect grazing within the original boundaries of the GSENM.

Commenters recommended inclusion of the following measures to increase transparency in the grazing management program:

- Notice will be provided for a public tour to obtain comment and to provide input prior to allotment permit renewal, allotment management plan development, or vegetation projects for conditions impacted by livestock grazing.
 - All Environmental Assessments will provide for public comment on the alternatives and analyses prior to issuance of a decision.
 - Annual plans of use:
 - A map and annual plan of use for each allotment (with pastures) will be posted prior to livestock seasonal entry on the allotment.
 - Annual plans of use for the previous 2 years will be displayed on the website.
 - Mid-season adjustments of the annual permit will be posted as a revised annual permit.
 - Pre-annual permit meetings. When requested by a member of the public, the BLM will participate in a pre-annual permit meeting to discuss problems observed/documentated on the allotment the previous year, and proposed solutions to those problems. Such meetings will be available to the permittee and other members of the public.

- Collaborations. The BLM will encourage the establishment of independent, multi-stakeholder, consensus collaborations that include representatives of all relevant stakeholders, for purposes of advising the BLM on increasing the sustainability of grazing and diverse grazing arrangements on Planning Area/GCNRA. BLM staff may participate as resources for these consensus collaborations, which would be convened or co-convened by non-BLM entities.
- Interested publics will be encouraged to participate in and contribute to on-ground implementation and monitoring of grazing experiments developed by interested public, permittees and BLM personnel.
- Interested publics, including permittees, should be encouraged to engage with the BLM to discuss and propose management options
 - where native diversity, density, age class structure, and/or productivity are less than 80% of the potential native diversity of relevant ungrazed reference sites, or do not support values identified within Planning Area or are not reoccupying habitat niches and voids caused by disturbances;
 - where native vegetation support for wildlife is less than 80% of relevant ungrazed reference areas or stream reaches, permittees and interested public are encouraged to engage with the BLM to discuss options to achieve such support;
 - where ground cover is less than 80% of a relevant ungrazed site or indicators of excessive erosion are present;
 - when less than 60% of Planning Area biological soil crust predicted habitat is protected from trampling);
 - where native riparian or wetland plant diversity, density, age class structure, and/or productivity are less than 80% of the potential native diversity of relevant riparian or wetland reference sites, or desired stream dynamics are not present or a potential floodplain is not active;
 - where water quality standards are not being met or parameters are not being maintained within 80% of relevant reference stream reaches; and/or
 - where significant, measurable progress is not being made toward restoring habitat for Federal threatened or endangered species, or candidate or proposed threatened or endangered species, or other special status species.

Livestock Monitoring

Commenters recommended inclusion of the following language in the RMPs:

- Within 1 year of the ROD, the BLM will designate, with interested public/permittee input, the measurement protocols and indicators used to ensure that objectives are being met.
 - BLM monitoring methods will be posted on the Planning Area website, including methods used to measure the following
 - If the area is meeting or moving toward objectives
 - Existing long-term trend transects
 - Interpreting Indicators of Rangeland Health points or transects; proper functioning condition assessment points or stream reaches; BLM Assessment, Inventory, and Monitoring Strategy points
 - Effectiveness of treatments at reaching both individual project and Planning Area-wide desired outcomes
 - Any other methods used systematically by the BLM within Planning Area/GCNRA

- Reference areas. Reference areas exist or are established for all objectives in order to demonstrate potential for objectives to be met, and/or potential rate of change toward meeting objectives. Reference areas established across Planning Area represent the full range of ecosystem and plant community types (both riparian and upland) including sites that have received exotic vegetation treatments. A reference area, with the exception of recovery reference areas consists of a site that has not been grazed or accessible to livestock for at least 10 years. The following recommendations address the establishment and uses of reference areas:
 - Establishment of reference areas. Where local reference areas are preferable but do not exist, designate local areas to attain future reference area status (i.e., at least 10 years of non-use by livestock). In the interim, use a more distant, reference site that has not been grazed for at least 10 years.
 - Reference area size. Prioritize establishment of larger, landscape-scale reference areas whenever feasible, in order to allow for recovery and/or protection of ecosystem functions, a patchwork of habitats, species diversity, and other elements not easily documented within small reference areas.
 - Permanent range cages. At least two permanent range cages (at least 16 × 16 feet) are maintained in each grazed pasture, in representative areas frequently used by livestock.
 - Recovery reference areas are areas where livestock grazing has ceased, but that have been grazed within the previous 10 years. Enclosures of various sizes can begin to provide immediate benefits for comparison with sites on which livestock are being adaptively or experimentally managed for recovery toward particular objectives. Recovery on the grazed sites (particularly for such physical features as ground cover, sheet erosion, and streambank protection; or for seedhead production) can be compared with the recently-ungrazed sites for comparative rates and types of recovery.
- Utilization cages. For purposes of quantitatively measuring utilization, utilization cages must have been in place for 2 years (rather than 1) in order to more accurately depict expected production.
- Objectives generally will be considered to have been met when monitoring documents the Indicators are at least 80% (e.g., of soil cover, willow density, native plant species richness) of those in reference areas of the same ecological site (e.g., soil type, precipitation, elevation, slope as relevant). Such reference areas may consist of exclosures, ungrazed pastures/allotments, permanent range cages, or ungrazed recovery reference areas. Conditions below 80% of the reference site(s) are appropriate subjects for problem-solving among the BLM, permittees and interested public.
- Independent monitoring. Upon objective documentation of on-ground indications that objectives are not being met, any member of the public can arrange for a meeting with BLM staff to discuss and propose solutions to the problem(s). A written record of evidence of the problem(s), solutions considered, and commitments by the BLM, interested public, and/or permittees will be retained in the file(s) of the relevant allotment(s). Objective, repeatable data gathered independently (e.g., use of BLM monitoring methods or methods in Appendix 9 of the 2012 *Final Report and Consensus Recommendations of the Collaborative Group on Sustainable Grazing for National Forests in Southern Utah*) is required in problem-solving meetings. All such meetings are open to the permittees and other interested publics.

- Social and economic indicators will be used to monitor the social and economic sustainability of Planning Area grazing, including both the economic and cultural values of livestock grazing, and the social value of participation in public lands grazing management decision making by members of the public who are interested in public lands grazing and/or ecosystem services provided by public lands. Social and economic indicators are best developed via consensus among the BLM, Planning Area, GCNRA personnel; permittees; and interested publics. Social and economic indicators may include the following, which were published in the *Final Report and Consensus Recommendations of the Collaborative on Sustainable Grazing for National Forests in Southern Utah (2012)*:
 - Investment in grazing practices. Dollar value of time, capital and other investments (e.g., short and long-term infrastructure, monitoring, land improvement projects) related to grazing management changes on Planning Area-GCNRA/allotment by
 - permittees,
 - the BLM, and
 - other entities.
 - Total pounds of meat production/acre/allotment (5- to 10-year average)
 - Opportunities to participate in livestock grazing programs within Planning Area:
 - For permittees: Number of individual permits and AUMs per permittee
 - Permitted AUMS by month
 - Grazing use reported by month
 - For other entities: Identification of programs and partners engaged in grazing management arrangements, including the following:
 - UDWR
 - Conservation organizations
 - Utah Department of Agriculture and Food's Grazing Improvement Program
 - Watershed Restoration Initiative
 - NRCS
 - Diversity of grazing management arrangements: Number and acreage by year of diverse grazing management arrangements, including the following:
 - Multiple allotments combined into a single system
 - Range improvements
 - Changing kind and class of livestock
 - Rest-rotation systems
 - Deferred rotation systems
 - On-off systems
 - Reduced use

AFFECTED ENVIRONMENT

Commenters requested that the BLM acknowledge the historic and cultural significance of livestock grazing in Garfield and Kane Counties. Commenters noted that livestock grazing is currently allowed in most of the Planning Area. Commenters suggested that the grasses on conservation allotments, such as Big Bowns, are dying out. It was also suggested that the grasses in Little Valley and Buck Ridge are very healthy stands of desert grasses because of appropriate levels of grazing.

Commenters referenced the following scientific reports stating that they indicated that grazing may be having a detrimental effect on the environment (full citation not provided).

- deRoulhac, David, Collin Smith, and Mary O'Brien. Early and late successional biological soil crusts, cattle, and climate change: A landscape-scale survey in southern Utah. Manuscript in process.
- Miller, Mark E. *Broad-Scale Assessment of Rangeland Health*, Grand Staircase-Escalante National Monument, USA.
- D'Andrea, Robert M., Kevin H. Miller, and Momoka Maeda. Application of BLM's Assessment, Inventory and Monitoring Strategy at GSENM: Community Phases and Annual Biomass as Derived from 2014 Field Data.

The Resource References section of this appendix contains a list of references that were provided to the BLM.

ENVIRONMENTAL CONSEQUENCES

Commenters requested that the BLM do a comparison between "conservation" allotments and "regenerative management" allotments and how they affect the health of grasses. Commenters suggested that grazing activities in the Planning Area cause damage to soils, biological crusts, streams, springs, watersheds, and native plants. Commenters expressed concern that potential mineral development in the Circle Cliffs area could push livestock grazing off the land. It was suggested that the BLM consider livestock grazing's impact on water quantity, given the State's shrinking supply of fresh water. Commenters suggested that allowing grazing in allotments near the Escalante River, which are currently closed to grazing, would help remove undesirable vegetation from the area that makes recreational access to the river difficult. Commenters requested that the BLM analyze livestock grazing's impacts on upland, riparian-wetland, and aquatic components; soil infiltration, biological soil crusts, and moisture storage; healthy, diverse, and productive native plant communities; threatened, endangered, or sensitive species; cultural resources; and critical ecological processes.

Recreation and Visitor Services

GENERAL CONCERNS

Commenters expressed concern about losing recreational access to lands in the Planning Area. Commenters noted that as the population of Utah grows, and recreational use of public lands grows, large, protected areas of public lands such as the Planning Area will become more and more important.

Comments stated that visitor management was not adequately addressed the 1999 GSENM Management Plan, because managers did not foresee the boom in visitation that occurred. Comments recommended the planning effort revisit group sizes, desired visitor experiences and opportunities, natural quiet values, and the importance and enjoyment of dark skies with consideration of current and predicted visitor management. Comments stated that management should have discretion to implement permit systems or designate camping areas in specific heavily used areas. It was stated that recreational appeal is diminished if people can see commercial and industrial activity taking place in these wild places, and that recreation is also a boost for the economy. Commenters noted concerns regarding overcrowding in some areas in the GSENM, such as the Toadstools. It was asked whether hunting and recreational shooting currently occurs throughout the Planning Area and, if so, where it occurs and how many people participate on an annual basis. Commenters also requested clarification on why BLM staff does not provide more information about specific hiking destinations, which could be because of sensitive resource concerns or private property concerns.

Comments from outfitters expressed concern that management solutions aimed at limiting group sizes, shifting from dispersed to designated campsites, and applying strict trailhead allocations could have significant impacts on commercial operability, but do little to deal specifically with areas that see significant use and impact.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters recommended that the BLM manage visitor use allocations to prevent significant visitor-caused damage to the resources that the Monument was created to preserve. Commenters recommended the following indicators to determine when and where visitor allocations need to be made: 1) resource damage (e.g., proliferation of campsites, human waste problems, social trailing or vandalism to historical, archaeological, paleontological sites, or destruction of biological soil crusts), 2) conflicts with threatened and endangered plant or animal species, and/or 3) the number of social encounters become unacceptable. Options discussed included closing to visitor use areas sustaining significant visitor related damage, limiting visitor numbers and/or group size in areas sustaining significant visitor related damage, or otherwise imposing restrictions.

Comments stated that inventories, surveys, and studies should establish baseline data for Planning Area resources and be used to set up an ongoing monitoring program and to prioritize areas that require more restrictive management, in consultation from the Planning Area Advisory Committee.

Comments also recommended continuation of existing management.

Additional suggestions are included below.

Zones Management

Comments recommended incorporation of the management by zone as follows:

- **Frontcountry Zone:**
 - As the focal point for visitation, visitor day-use facilities and signs will be added as necessary for visitor use, safety, and the protection of sensitive resources, in addition to existing facilities. These facilities could include pullouts, parking areas, trailheads, trails, toilets, fences, and picnic areas. Day-use areas could include vault toilets, picnic tables, interpretive kiosks, and in some cases, interpretive trails, which will be universally accessible but not paved. Most day-use parking areas will be paved, but those off of unpaved roads, such as Grosvenor Arch and the Paria Movie Set, will remain unpaved. Most parking areas will be small, accommodating 10 to 20 cars. Construction of small spur routes or trails may be allowed to access parking areas or other facilities.
 - There should generally be no allocation in the Frontcountry Zone other than directing individuals to selected sites chosen for their interpretive values. However, allocations may be allowed in limited circumstances where other tools to protect resources are proving ineffective. Because the Frontcountry Zone is the focal point for visitation, social encounters will not trigger such action, but resource damage could if other tools are ineffective at protecting resources.
 - Scenic overlooks and other sites that have been developed along Utah State Route 12 will be maintained. Some of the parking areas will be better delineated with barriers or fences to prevent further expansion. Additional wayside exhibits may be developed for some of the existing sites to stimulate further learning and protect resources. The BLM will look for appropriate opportunities to highlight Planning Area resources along Utah State Route 12 and U.S. Highway 89, and around the communities of Boulder, Escalante, Henrieville, Cannonville, Tropic, Church Wells, and Big Water. The Planning Area will work with communities, visitors, and other interested publics to develop sites. Up to 15 of these sites could be developed in the Frontcountry Zone, and specific projects will go through the NEPA process with full public involvement.

- Calf Creek and Whitehouse Campgrounds are the only developed campgrounds in the Frontcountry Zone. Dispersed primitive camping will not be allowed in this zone, although up to 10 designated primitive camping areas (without amenities) may be identified for individuals or groups. Most of these will be designated in areas already used for camping. These areas could accommodate two to five vehicles with a few areas large enough for group camping. Camping areas will be designated with a small sign and barriers. Toilets, water, tables or other amenities will not be provided at these sites.
- **Passage Zone:**
 - The condition of routes and distance from communities in the Passage Zone make this zone a secondary zone for visitation. Similar facilities allowed in the Frontcountry Zone could be provided for resource protection, visitor safety, or for the interpretation of Planning Area resources. Information kiosks approximately the size of two 3 × 5-foot panels will be located at major trailheads (e.g., The Gulch, Deer Creek, and Dry Fork), and smaller kiosks or signs will be located at less-used trailheads. Rarely used trailheads will be identified with a small sign.
 - Allocation is possible in the Passage Zone for the protection of sensitive resources or visitor experience. The most likely places that allocation will occur is at trailheads in order to limit the number of people accessing the primitive areas.
 - Existing parking areas may be better delineated with barriers to prevent further expansion. Parking areas could accommodate up to 30 vehicles, but most will be designed for fewer than 10 cars. Construction of small spur routes or trails may be allowed to access parking areas or other facilities. Trails and parking areas will not be paved. Existing destinations such as Devils Garden and Dance Hall Rock will be maintained.
 - Up to 17 parking areas or pullouts (scenic overlooks) could be designated in this zone. These are generally areas that are already used for parking, and delineating them with natural barriers or fences will prevent further resource damage. Interpretive kiosks or signs could be provided at these sites as discussed above.
 - The existing Deer Creek Campground will be the only developed campground in this zone. Dispersed primitive camping will be assessed every 3 years for minimization of impacts to Planning Area resources. These areas could accommodate two to five vehicles with a few camping areas large enough for groups. Camping areas will be designated with a small sign and barriers. User-created camping areas will be removed if Planning Area resources are not being protected, and revegetated with native vegetation. Toilets, water, tables or other amenities will not be provided.
- **Outback Zone:**
 - Small signs to educate the public about a particular resource or safety hazard may be installed at limited sites, but these sites will not be promoted in literature. Facilities such as designated parking areas, toilets, or fences could be allowed for protection of resources in limited cases, only where other tools to protect resources are ineffective.
 - Allocation is moderately likely for the protection of sensitive resources or visitor experience in the Outback Zone. The first step will be designating primitive camping areas. Limiting the number of people in specific areas could also be used if other measures are ineffective.
 - Trails could be delineated if necessary to prevent widespread impacts from multiple trails.
 - Dispersed primitive camping will be allowed in this zone, but certain areas could be closed, and certain areas could be designated for camping if resource damage is occurring.
 - Adopting a permit allocation system designed to reduce visitor impacts in popular or sensitive areas.

- **Primitive Zone:**
 - Limited signs could be allowed for resource protection or public safety. Small directional signs may be needed, but these will be kept to an absolute minimum and will be rare.
 - Allocation is highly likely in the Primitive Zone for the protection of sensitive resources or visitor experience. Additional areas meeting the criteria will also be considered.
 - Trails could be delineated only if necessary to prevent widespread impacts from multiple trails.
 - No water, toilets, or other visitor amenities or facilities will be provided.
 - Dispersed primitive camping is allowed.
 - Adopting a permit allocation system designed to reduce visitor impacts in popular or sensitive areas.

Additional management by zone is also contained in recreational topics below, as well as in individual resource sections.

Special Recreation Management Areas

Comments recommended maintenance of all existing SRMAs.

Comments also recommended development of SRMA for areas where more intensive recreation management may be needed because the area will be a focal point for visitation (for example, the Highway 12 [i.e., Utah State Route 12] and Highway 89 [i.e., U.S. Highway 89] corridors) or because recreational uses within the area need to be closely managed or limited to prevent conflicts with Planning Area resources (for example, Escalante Canyons, Paria/Hackberry, and 50-Mile Mountain).

Comments recommended inclusion of the following language into the RMP:

- The Escalante Canyons, Paria/Hackberry, and Paria Canyons and Plateaus should continue to be managed as SRMAs. 50-Mile Mountain, Highway 12 Corridor, and Highway 89 Corridor should also be SRMAs. Management objectives for these areas are outlined below.
 - **Escalante Canyons SRMA:** The boundary of this SRMA should follow the geographical topography, including all the tributaries to the main Escalante Canyon. It should include trailheads for all the popular routes into the canyons. Activities in this SRMA include backpacking, canyoneering, non-motorized boating, and equestrian use. The overall recreation experience should continue to be primitive, uncrowded, and remote. Overall social encounters should remain low compared to other southwest canyon hiking opportunities. However, a range of social encounters should be available. Potential permit systems could address general public, commercial, and administrative users.
 - **Paria/Hackberry SRMA:** This area is bordered on the west by Kitchen Canyon Road, on the east by Cottonwood Canyon Road corridor, on the south by the confluence of Hackberry/Cottonwood Creeks and the Paria River, and on the north by Dixie National Forest, excluding the Skutumpah corridor. Activities in this SRMA include backpacking, canyoneering, and equestrian use. The overall recreation experience should continue to be primitive, uncrowded, and remote. Equestrian opportunities should be emphasized in Paria Canyon, while backpacking opportunities should be emphasized in Hackberry Canyon. Potential permit systems could address general public use and commercial users.
 - **Paria Canyons and Plateaus SRMA:** This area encompasses Buckskin Mountain, West Clark Bench, and Cedar Mountain to connect to the BLM Arizona Strip's "Canyons and Plateaus of the Paria Resource Conservation Area." These areas are located south of Highway 89, with the Planning Area boundary marking the east boundary. Activities in

- this SRMA include canyoneering, equestrian use, backpacking, hiking, hunting, and scenic touring along the House Rock Valley Road. The overall recreation experience should continue to be primitive, uncrowded and remote. Overall social encounters should remain low compared to other southwest canyon hiking opportunities. However, a range of social encounters occur. Management of this SRMA should be in coordination with the Kanab and the Arizona Strip Field Offices.
- **50-Mile Mountain SRMA:** This area includes the geographical area called 50-Mile Mountain including trail access points. Activities in this SRMA include equestrian use, backpacking, and hunting. The recreation experience should be primitive, uncrowded, and remote. Visitors should not be encouraged to go to this area and commercial outfitting should be extremely limited.
 - **Highway 12 Corridor SRMA:** This area encompasses the Utah State Route 12 corridor located in the Planning Area, including the Calf Creek Campground and Interpretive Trail. Activities in this SRMA include scenic driving, day-use hiking, camping, equestrian use, road bicycling, scenic and interpretive viewing. The recreation experience should focus on learning about geology, history, archaeology, biology, and paleontology, in addition to scenic viewing. Short interpretive trails and scenic overlooks should be developed to encourage visitors to learn more about these Planning Area resources. Opportunities should accommodate all visitors. Information stations located in Boulder, Escalante, and Cannonville should disseminate educational materials to further information about these resources.
 - **Highway 89 Corridor SRMA:** This area encompasses the U.S. Highway 89 corridor within the Planning Area, including the Paria Movie Set, the old Pahreah townsite, and the Paria Contact Station. Activities in this SRMA include scenic driving, day-use hiking, camping, road and mountain bicycling, scenic and interpretive viewing. The recreation experience should focus on learning about geology, history, archaeology, biology, and paleontology, in addition to scenic viewing. Short interpretive trails and scenic overlooks should be developed to encourage visitors to learn more about these Planning Area resources. Opportunities should accommodate all visitors. This corridor should be coordinated with the Vermilion Cliffs Highway Project.

General

The BLM should retain the provisions of the current 1999 GSENM Management Plan relating to camping, rock climbing, and facilities.

The BLM should prioritize recreation over resource extraction in the Planning Area, including low-impact, sustainable recreation.

The BLM should allow recreational activities such as hiking, dispersed camping, mountain biking, canyoneering, climbing, hunting, fishing, shooting, photography, drawing/painting, and horseback riding.

The BLM should promote and improve public safety through improved signage at trailheads and junctions. Signs should provide safety information specific to those areas to help reduce fatalities in the GSENM.

The BLM should continue the existing management of Paria Canyon because it prevents degradation of the canyon from too many visitors.

The BLM should ensure that recreation management of the units is similar to the surrounding BLM lands to ensure that permittees who have traditionally traveled across this entire contiguous landscape are not restricted from entering the new Monument boundaries. This 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 RMPs.

The BLM should employ more on-the-ground staff for monitoring and oversight of tourist traffic in the Monument and Planning Area to protect sensitive resources from growing and uncontrolled tourism, including high use areas such as Peekaboo and Spooky gulches.

The BLM should include wording in the RMPs that recognizes aviation as a valid form of recreation. And allow the role of aviation as a recreational activity in the Monument to grow. Backcountry airstrips should be a vital part of infrastructure for future planning. It was noted that aviation allows access to parts of the backcountry otherwise inaccessible.

The BLM should not allow radical environmentalists and other special interest groups to limit public access to the Monument, including preserving access to existing parks, campgrounds, and trails within the boundaries of the National Monument.

The BLM should spend time and money on planning, promoting, and managing the increasing visitation to the GSENM region instead of spending time and money on new management plans.

The BLM should not over-promote areas in the Planning Area, such as Calf Creek and Spooky Gulch, because it results in overcrowding.

The BLM should keep recreation as a priority on BLM-administered lands near Lake Powell.

The BLM should acknowledge that managing the GSENM under its original boundary would provide visitors an alternative to the small and overcrowded National Parks in Utah.

The BLM should address the high emotional needs for, and valuable aspects of pursuing and experiencing human emotions while accessing outdoor multiple-use recreation on public lands.

The BLM should consider increasing protections and management for areas that are receiving increased visitation, such as the canyons of the Escalante, Hole-in-the-Rock Road, the Burr Trail, the Kaiparowits Plateau, the Wahweap area, Cottonwood Wash Road, the Paria corridor, and the Grand Staircase area.

The BLM should prohibit development around areas that receive high recreational use, including Peekaboo Gulch, Spooky Gulch, Crack in the Wall, Willow Gulch (GCNRA), Hurricane Wash, Chimney Rock, 40-Mile Water Tank, Red Well, Dry Fork Slot Canyons, Early Weed, 25 Mile Wash, and Egypt.

The BLM should use trail counters to track use levels, because trail registration logs capture only a fraction of users.

The BLM should remove the Recreation Experience Baseline Study from management consideration because the study was biased, did not undergo NEPA analysis, did not undergo systematic public review, and contradicts actual visitor practices in Garfield County.

The BLM should incorporate a 5-year public input visitation planning process to help manage visitation increases.

The BLM should retain the provisions of the current 1999 GSENM Management Plan relating to Competitive and Special Events. Special Events involving human powered handcart use, horse-drawn wagon travel, and foot travel should be allowed by permit along the 50-Mile Mountain Road on the express condition that such travel shall not be supported by motorized vehicles.

Developed Recreation Facilities and Dispersed Camping

Commenters recommended the following management actions regarding developed recreation facilities in the Planning Area:

- The BLM should allow infrastructure to be built in the Monument, including lodging, campgrounds, and stores, as well as more bathroom facilities. GSENM employee housing should be considered when expanding visitor services infrastructure.
- The BLM should provide restrooms, including eco-friendly restrooms, and organized parking areas for highly visited areas in the Monument, such as Willis Creek, Dry Fork, Tin Can Flat, and the Ponderosa Pine area and along popular trailheads such as the Hole-in-the-Rock Road.
- The BLM should promote developed recreational vehicle campgrounds with amenities and other tourist facility development in local communities.
- The BLM should not develop a visitors' center on Hole-in-the-Rock Road.
- The BLM should prevent the Planning Area from becoming so developed that it receives the number of visitors that National Parks like Zion and Bryce Canyon receive.
- The BLM should develop the Planning Area so that it can bring in visitors and relieve pressure on the crowded National Parks in the State.
- The BLM should provide more parking at Lower Calf Creek Falls or limit visitors to the falls.
- The BLM should maintain adequate funding for the visitor's centers in Escalante, Cannonville, and Kanab.
- The BLM should provide more campground facilities with water and electricity.
- The BLM should provide more water stations at trailheads.
- The BLM should provide and incorporate an adequate number of pullouts along the road network for distributed camping.
- The BLM should allow for the development of primitive campgrounds to support organized and educational group use at the head of Hole-in-the-Rock, Spencer Flat, as well as small capacity designated primitive campgrounds throughout the Planning Area to help meet the ongoing and increasing demand and impact from lack of toilet facilities and levels of dispersed parking.
- The BLM should not allow ziplines or sky walks to be built.
- The BLM should improve ADA accessibility for visitors with disabilities.
- The BLM should allow camping in developed campgrounds or in designated primitive camping areas in the Frontcountry and Passage Zones. Do not allow dispersed primitive camping in these zones. Allow dispersed primitive camping Outback and Primitive Zones, but limit primitive camping to certain designated areas in these zones if resource damage occurs.
- The BLM should designate primitive camping areas for camping use. These areas should not have any developments, other than a small sign or barriers to delineate the site.

- The BLM should allow motorized or mechanized vehicles to pull off designated routes no more than 50 feet for direct access to dispersed camping areas in the Outback Zone, except in WSAs, threatened and endangered plant areas, relict plant areas, riparian areas, or other areas identified. Visitors should be encouraged to use existing disturbed areas for pulling off routes to access camping areas and are required to leave existing vegetation intact. In the Frontcountry and Passage Zones, vehicles should be confined to using designated pullouts and should not be allowed to pull off the route, except as provided for in emergencies.
- The BLM should prohibit campfires in the Escalante and Paria/Hackberry Canyons, No Mans Mesa, and other relict plant areas as they are identified. Campfires should also be prohibited in archaeological sites, rock shelters, or alcoves Planning Area-wide.
- The BLM should allow campfires only in designated fire grates, designated fire pits, or mandatory fire pans in the Frontcountry and Passage Zones, and wood collection for campfires should not be permitted. In the Outback and Primitive Zones, fire pans should be encouraged, and collection of dead and down wood should be allowed in areas where campfires are allowed.
- The BLM should manage camping to protect and manage Monument objects rather than managing visitors, because restrictions on off-road parking can be a safety issue impacting on-road travel.
- The BLM should allow dispersed and remote camping to save the extra wear and tear to roads and trails that would be necessary to otherwise ingress and egress the area.
- The BLM should allow camping and reenactments at historic sites to celebrate cultural and religious events.

Rock Climbing

- The BLM should not allow climbing in archaeological sites, on natural bridges or arches, or within identified threatened and endangered species nesting areas.
- The BLM should close climbing areas seasonally to assure that disturbance to raptor nesting activities does not occur.
- The BLM should work with the public to identify climbing areas and develop specific management plans for them. The BLM should also establish criteria for designation of climbing areas within the Planning Area.
- The BLM should restrict climbing as per zone and other specific management restrictions

Group Sizes

Commenters recommended the following management actions regarding group sizes in the Planning Area:

- The BLM should limit group sizes in the Planning Area to what is allowed under the 1999 GSENM Management Plan.
- The BLM should remove the existing group size limits, such as the 12-person group limits at Calf Creek and Deer Creek, to allow larger groups in the Planning Area.
- The BLM should limit group sizes in the Planning Area to 12 people.
- The BLM should allow larger group sizes at suitable picnic areas that are near roads, but not near protected lands.
- The BLM should apply group sizes only to off-road activities; exempt visitors traveling on country transportation system roads.

- The BLM should grant an exception to the 12-person group limit to allow groups from the Church of Jesus Christ of Latter-day Saints who want to tour the Hole-in-the-Rock area, including allowing a larger group camp near 40-Mile Ridge.
- The BLM should limit group sizes on trails accessed from Hole-in-the-Rock Road to sizes that protect the fragile environment in the area.
- The BLM should limit group sizes in the interior portions of the Monument to small groups of students and scientists on a controlled and permitted basis.
- The BLM should consider the following in regard to group sizes and zone development:
 - There should be no limit on group size in the Frontcountry Zone.
 - Group size camping at one site should be limited to 25 people in the Passage and Outback Zones.
 - Permits for groups of more than 25 people should be considered in the Passage and Outback Zones if the number of people and the activities proposed are consistent with the protection of Planning Area resources. Appropriate NEPA analysis should be prepared on areas where permits could be authorized. These permits should require that adequate sanitation and trash collection are provided, and that activities take place in areas where resources will not be damaged.
 - In the Primitive Zone, group size should be limited to 12 people and 12 pack animals. Within the Paria River corridor in the Primitive Zone, permits could be approved for groups over 12 people up to a maximum of 25 people.
- The BLM should acknowledge that in order to protect Planning Area resources, it may become necessary to place limits on the overall numbers of people and/or pack animals allowed, or to further restrict group sizes in areas where resource damage is occurring.
- The BLM should allow groups to travel the same direction in Paria Canyon, not separated by time or distance, and clarify why limiting group sizes to 25 people in Paria Canyon is important. Consider increasing the size of groups allowed in Paria Canyon.
- The BLM should eliminate group sizes. Limits on group sizes prohibit uses by scout groups and family reunions.

Hunting and Trapping

Commenters recommended the following management actions regarding hunting and trapping in the Planning Area:

- The BLM should prohibit hunting and trapping.
- The BLM should allow hunting of ungulates with limits and seasons set by UDWR and the Utah Wildlife Board, as well as allowing for State-authorized guide permits for hunting. It was recommended that no guide should have exclusive rights to guide in the Planning Area.
- The BLM should allow permitted hunts of desert bighorn sheep within the area.
- The BLM should allow historical roads to main open to provide hunting access.
- The BLM should work with UDWR in protecting and enhancing deer migration patterns.
- The BLM should work with UDWR to identify where big game are creating a problem on adjacent private lands and develop strategies to reduce such conflicts.
- The BLM should allow retrieval of big game from OHVs.
- The BLM should allow the continued use of traditional ammunition in hunting and shooting activities.

Recreation, Outfitter, Special Event, and Research Permits

Commenters recommended the following management actions regarding recreation, guiding, and research permits for the Planning Area:

- The BLM should provide backcountry camping permits for equestrian users.
- The BLM should only require backcountry permits in specific areas where visitor use needs to be heavily restricted or regulated, such as the Coyote Gulch (GCNRA) area of Hole-in-the-Rock Road. This is because backcountry permits are not available at visitors' centers after hours, are inconsistently available at trailheads, and it is not clear how information in the permits are used for recreation planning or public safety.
- The BLM should increase the number of available guiding permits and permits for scientific research.
- The BLM should simplify the special recreation permit process, including making the process consistent for all three Monument units.
- The BLM should identify a reasonable and set value for special recreation use permits in the RMPs, because it is not reasonable to expect public land users to apply for permits not knowing what the cost will be until the event is complete.
- The BLM should manage outfitter permits as though the Monument is still one unit, so that outfitters do not need separate permits for the different management units.
- The BLM should acknowledge that a larger Monument allows for a greater diversity of special recreation permits.
- The BLM should allow outfitter and guide operations within the GSENM in compliance with the constraints of zone designations and other Plan provisions. Applications for operations should be processed and returned in thirty days or less. Outfitters and Guides may be required to obtain liability insurance with coverage limits not to exceed \$25,000.
- The BLM should maintain provisions of the current 1999 GSENM Management Plan relating to science and research.
- The BLM should allow outfitter and guide operations throughout the Planning Area in compliance with the constraints of the zones and other Plan provisions.
- The BLM should provide training on an annual basis to keep outfitters and guides current on appropriate research studies occurring in the Planning Area.
- The BLM should strongly encourage outfitters and guides to incorporate interpretive/educational components into their trips.
- The BLM should permit special events if the event meets other zone requirements and Plan provisions. Permit special events in accordance with the requirements of the most restrictive zone that the event encounters.
- The BLM should prohibit competitive events in the GSENM.
- The BLM should require permits for overnight use in all zones.
- The BLM should eliminate permit requirements for overnight camping. Currently all overnight camping in the Monument requires a permit. This is extremely limiting to family and Boy Scout uses.

Equestrian Use

Commenters recommended the following management actions regarding horseback riding and other stock use in the Planning Area:

- The BLM should maintain existing provisions relating to recreational stock use.
- The BLM should acknowledge the historic role of pack and saddle stock use as a recreational activity.
- The BLM should address equestrian use in the Planning Area, including recreation and trails plan(s) that include an objective of promoting a series of non-motorized trail systems; support for continuing the ability to travel off-trail with pack stock when it does not conflict with the protection of cultural and natural resources; development and/or expansion of trailheads constructed and maintained to accommodate sufficient parking and trailer turn-around space; group camping spaces with safe areas to stable animals, such as corrals or high lines; and vault toilets.
- The BLM should not allow horses or other pack animals in relict plant communities, archaeological sites, rock shelters, or alcoves.
- The BLM should not allow sheep species for pack use.
- The BLM should limit recreational stock to 12 animals in the Primitive Zone.
- The BLM should require that all hay used on BLM lands be certified weed free.
- The BLM should partner with equestrian groups that could provide volunteer help to improve equestrian trails and facilities.
- The BLM should continue to allow stock use on trails that are currently open to stock use, such as Paria River Canyon and Willis Creek Canyon.
- The BLM should continue to allow the Red Rock Ride to conduct horseback riding trips in Paria Canyon and use their horse-drawn wagon to support their riders as they travel through the Paria Canyon. The wagon allows a unique historical perspective and provides an alternate mode of transportation for an injured rider or one whose riding animal becomes injured. The wagon also allows for additional emergency supplies to be available in this very remote area.
- The BLM should not allow motorized vehicles or mountain bikes on equestrian trails to help prevent user conflicts.

Facilities

Commenters recommended that the BLM limit developed recreation and visitor services facilities to minor facilities in peripheral areas of the Monument. It was suggested that all major developed recreation and visitor services facilities be located in nearby towns to protect the Monument and to generate increased economic activities. Locations should include a Planning Area headquarters in Kanab; an Interagency Office in Escalante; and visitor contact stations in Cannonville, Glendale, and Big Water. Locations should be developed collaboratively with communities and the BLM based on factors such as the availability of infrastructure; economic considerations, including market feasibility; the availability of financing; and managerial concerns. Facility construction would be contingent upon funding by Congress. Planning area staff should also be available at the Paria Contact Station and at the Anasazi State Park in Boulder.

Other suggestions related to facilities included the following:

- The BLM should ensure that all facilities and signs are consistent with the Planning Area Interpretive Plan, the Planning Area Facilities Master Plan, and the Planning Area Architectural and Landscape Theme (all in the process of development).
- The BLM's Planning Area Facilities Master Plan should address and be consistent with the Americans with Disabilities Act of 1973, the Rehabilitation Act of 1973, and the Architectural Barriers Act of 1968.
- The BLM should subject all projects causing surface disturbance to NEPA analysis and appropriate stipulations.
- The BLM should not allow projects or activities in the Planning Area that result in permanent fills or diversions in, or placement of permanent facilities on special flood hazard areas (as designated by the Federal Emergency Management Agency).
- The BLM should design all facilities and parking areas to be unobtrusive and to meet the visual resource objectives (see the Visual Resource Management section for related decisions).
- The BLM should only provide water facilities in limited circumstances, where necessary for visitor safety or resource protection, in the Frontcountry or Passage Zones. The provision of water at sites within the Planning Area will be very limited because the only facilities provided will be modest pullouts, parking areas, trailheads, picnic sites, toilets, and primitive camping areas. These sites do not require water, including most toilets which could use other technologies.
- The BLM should allow fences in certain circumstances to protect Planning Area resources, to manage visitor use, and to manage livestock. Fences should be designed and constructed in accordance with VRM objectives and the Planning Area Facilities Master Plan.

Vending

- The BLM should maintain the existing 1999 GSENM Management Plan provisions relating to vending.
- The BLM should only allow vending within the Planning Area occasionally, infrequently, and by permit on a case-by-case basis in the Frontcountry and Passage Zones, in association with approved special events or recreation sites. Generally, permits could be issued to provide services needed at recreation sites (such as firewood sales at campgrounds) and services that are commonly offered in conjunction with permitted special events. Criteria and/or stipulations to protect Planning Area resources should be included in all permits.
- The BLM should not allow vending in the Outback or Primitive Zones.
- The BLM should work with UDOT to regulate vendors along Utah State Route 12 and U.S. Highway 89.

Environmental Education/Outreach

Commenters noted that the BLM is currently working on an Interpretive Plan for the Planning Area. Commenters recommended the following management actions regarding environmental education and outreach for the Planning Area:

- The BLM should put more effort into educating the public about the fragility of the land and how to prevent damage, such as "leave no trace" ethics.

- The BLM should address education in the RMPs, including educating the public on subjects such as cultural resources protection, paleontology, travel, and recreation.
- The BLM should create more educational materials, such as brochures, that educate visitors about the paleontological and archaeological resources in the Planning Area.
- The BLM should develop educational programs for K–12 students to use in the GSENM and the visitors' center. The BLM should cooperate with colleges and universities in undergraduate and graduate programs as resources permit. Outreach efforts such as Planning Area–sponsored science publications and field schools should be incorporated into management programs to the extent possible. The BLM should help facilitate the transfer of research information to the public through periodic science forums and Planning Area-sponsored publications.
- The BLM should encourage researchers to incorporate a public outreach/education component into projects. Educators and students will have the opportunity to participate in research activities where appropriate. The BLM should involve communities in science and education activities.
- The BLM should use research sites and visitor centers to emphasize scientific interpretation. Results of scientific research and inventory data should be disseminated through interpretive displays, publications, forums, and public exhibition of objects and artifacts.

Science and Research

The BLM should protect areas for scientific research.

The BLM should focus Planning Area management priorities and budgets on a comprehensive understanding of the resources of the Planning Area while assisting in the development of improved and innovative land management, restoration, and rehabilitation practices. The natural, physical, and social sciences, including the study of history, should each play an essential role in science and research activities. Research projects should have a multi-scale and interdisciplinary approach when possible. Recreation and other uses should be managed to complement science and research objectives.

The BLM should make the first priority for conducting BLM-sponsored research to study, collect, or record scientific information that is most at risk of being damaged or lost through disturbance or the passage of time, including oral histories and ethnologies related to the Planning Area. The second priority should be to continue gathering baseline data on the biological, physical, cultural, and social sciences within the Planning Area. A third priority should be to conduct applied research regarding the management of natural systems, including disturbance and recovery strategies.

The BLM should require researchers to comply with the decisions in the RMPs. However, some science and research activities may require the use of equipment, surface disturbance, and/or personnel which could exceed the management prescriptions outlined for visitors and other users. Except where specifically prohibited (e.g., in relict plant areas, wildlife protected activity centers), the BLM should consider exceptions to the plan prescriptions during the special-use permitting process for extremely high-value research opportunities, especially for those opportunities that may not be available elsewhere. Research projects focused on protecting resources at risk should also be considered for exceptions to zone prescriptions. The Planning Area Advisory Committee should be consulted on whether research proposals which require restricted activities warrant the requested exceptions. Evaluation should consider whether the proposed research can be permitted in a manner consistent with the protection of Planning Area resources, and whether the methods proposed are the minimum necessary to achieve the desired research objective.

The BLM should require special-use permits for all research and related educational activities.

The BLM should require all research to meet Planning Area data collection standards, which should be established by the Planning Area manager with the advice of the Planning Area Advisory Committee, and should provide information that feeds directly into the adaptive management framework.

Fees

The BLM should continue to charge existing use fees.

The BLM should establish fee stations in areas of concentrated public use to collect fees to fund management of the Monument units. The BLM should make season passes available to the public and allow residents an opportunity to purchase passes granting permission for season use for a nominal cost. Grazing permittees/employees should be granted annual passes without charge. Twenty percent of all entrance fees should be paid on a 50/50 basis to Garfield County and Kane County.

Public input will be sought prior to the design and implementation of any fee system.

AFFECTED ENVIRONMENT

Commenters shared maps depicting existing outdoor recreation resources within the GSENM. Commenters noted that based on the history of special recreation permit holders, there has been minimal visitation and use of Paria Canyon. Commenters requested that the BLM acknowledge that outfitters and guides are an essential component of outdoor recreation in the GSENM and surrounding BLM lands.

ENVIRONMENTAL CONSEQUENCES

Commenters expressed concern that the press the Monument is getting will increase the problem of overcrowding that is already impacting and stressing local communities and the fragile landscape. Commenters requested that the BLM analyze potential impacts of any ground-disturbing activities in the Planning Area on non-motorized recreation. Commenters requested that the BLM analyze potential impacts of any ground-disturbing activities in the Planning Area on visitor management.

Commenters requested that the BLM analyze the potential impacts that transportation planning and designation of OHV areas would have on the visitor experience in the Monument units. For example, if OHV areas were designated between the Escalante Canyons Unit and Capitol Reef National Park, what would the impact be to use and visitor experience along the Burr Trail and in the town of Boulder and at Capitol Reef National Park and GCNRA. It was recommended that the BLM also analyze the impacts that any proposals to develop mineral resources in the same area would have on traffic, noise, and visitor experience.

Trails and Travel Management

GENERAL CONCERNS

Commenters expressed both support for and opposition to increased motorized vehicle access in the Planning Area. There were suggestions on specific road closures and roads that should be opened to motorized use. Commenters also expressed both support for and opposition to improvements to roads in the Planning Area. Management of Hole-in-the-Rock Road was a focus of

many comments. Authority over roads within the Planning Area (Federal vs. County) was identified as a concern. Consistent signage and maps for roads and trails were recommended. Commenters requested clarification on how the validity of RS 2477 rights-of-way will be determined. Commenters also expressed concern about the increasing traffic in and around the Monument. Commenters stated that the 1999 GSENM Management Plan did not adequately plan for the high levels of visitation the GSENM is receiving and that the Transportation Plan must be coordinated with the analysis of current and predicted visitor management. Commenters also requested that the RMPs address aviation management.

ALTERNATIVES/SUGGESTED MANAGEMENT

Restrictions on Motorized Vehicle Access and Road Construction/Improvements

Commenters requested that the BLM put limits on motorized vehicle use in the Planning Area to protect sensitive resources, such as fragile soils, canyon bottoms, hanging gardens, paleontological resources, geological formations, springs and seeps, wildlife, riparian areas, wilderness values, and vegetation. Commenters also requested restrictions on road construction and improvements.

Suggestions include the following:

- The BLM should prohibit the use of motorized vehicles in the following places in the Planning Area:
 - Drainages
 - Paria River Corridor/Paria Canyon—a fragile riparian corridor within an WSA—should remain closed to all motorized vehicles. Opening up Paria River to motorized vehicle use could result in ecological damage and vandalism at rock art sites.
 - WSAs and other roadless areas
 - Monument units
 - Horse Canyon
- The BLM should prohibit cross-country travel using motorized vehicles.
- The BLM should not designate OHV play areas in the Planning Area.
- The BLM should prohibit the use of ATVs in the Monument units.
- The BLM should establish OHV designations as either “closed” (in the Primitive Zone) or “limited to designated routes” (in the Frontcountry, Passage, and Outback Zones).
- The BLM should limit the use of bicycles to designated routes. And cross-country travel should not be allowed.
- The BLM should allow street-legal motorized vehicles, including four-wheel-drive and mechanized vehicles (including bicycles), on approximately 908 miles of routes designated open in the Frontcountry, Passage, and Outback Zones. In order to display all open routes, this mileage number should include sections of Utah State Route 12 and U.S. Highway 89 within the Planning Area. No routes should be designated open in the Primitive Zone.
- The BLM should allow hikers, horses, and pack animals in all zones, except where restrictions are needed to protect resources.
- The BLM should restrict non-street-legal ATVs and dirt bikes to those routes designated as open for their use. Non-street-legal ATVs and dirt bikes should be allowed on approximately 553 miles of the 908 miles of routes designated open to street legal vehicles in the Frontcountry, Passage, and Outback Zones; no routes should be designated open to these vehicles in the Primitive Zone.

- The BLM should establish road and motorized trail density standards in the Planning Area that conform with the best scientific recommendations, which are generally less than one mile per square mile. Ensure that there are no net increases in road densities above scientific credible threshold to maintain the security of core habitat areas.
- The BLM should restrict OHV and ATV trails and use to existing roads to protect vegetation, rangelands, water quality, wilderness qualities, and soundscapes.
- The BLM should prohibit the construction of permanent roads in wildlife corridors.
- The BLM should not loosen OHV use restrictions because it would create more dust, exacerbate climate change, increase erosion, increase occurrences of human-caused fires, disrupt wildlife, and disrupt ecological processes.
- The BLM should honor and protect transportation and access routes to and across Federal lands, vested under RS 2477, 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.
- The BLM should limit motorized travel to what is allowed under the 1999 GSENM Management Plan.
- The BLM should build no new roads in the Monument.
- The BLM should close some roads in the Planning Area.
- All existing roads identified by the Garfield and Kane County Commissioners should remain open or be re-opened, and be accessible to off-road vehicles (motorcycles, ATVs, utility task vehicles, dual sport motorcycles, and adventure touring motorcycles) on non-Monument BLM land.
- The BLM should preserve roadless areas as is.
- The BLM should promote recreational access through non-motorized means, such as walking and horseback riding.
- The BLM should strictly monitor OHV use in the Planning Area, and violations should be strictly punished.
- The BLM should only allow road improvements where road erosion has caused negative impacts to natural resources or cultural resources.
- The BLM should leave unpaved roads as unpaved to prevent increased access and potential damage to sensitive resources, such as cultural resources, and to protect the Planning Area's undeveloped, remote nature.
- The BLM should close cherry stem routes in WSAs to motorized use to protect wilderness values.
- The BLM should conduct a study of the impacts that off-road motorized travel has on wildlife, dust, visibility, and soils.
- The BLM should consider road decommissioning or rehabilitation at an equal or greater rate than new road construction to prevent increases in overall watershed impacts.
- The BLM should consider eliminating duplicative or unnecessary roads and those roads that threaten historic values, including historic landscapes.
- The BLM should prohibit any new roads from crossing over to Early Weed.

- The BLM should consider road decommissioning or rehabilitation at an equal or greater rate than new road construction to prevent increases in overall watershed impacts.
- The BLM should not allow vehicles to pull off routes no more than 50 feet for parking and camping in the Outback Zone, except where prohibited.
- The BLM should allow vehicles to pull immediately off designated routes for emergency circumstances, as well as other limited exceptions to be granted by the GSENM manager. These exceptions may allow OHV use, aircraft landing, motorized or mechanized access on closed routes, or use of mechanized equipment in closed areas. Exceptions may be made in emergencies, or where clearly essential to serve Planning Area management purposes. Exceptions may be made in cases such as carrying out search and rescue operations.
- BLM should explain its rationale for allowing a potential relaxation of Monument resource protections if OHV area designations are revised inside the Monument boundaries.

Increased Motorized Vehicle Access and Road Construction/Improvements

Commenters requested that the BLM increase OHV access in the Planning Area because of the growing population and number of OHV users. It was also noted that more roads and OHV use allow older and less able people to visit parts of the GSENM that they otherwise would be unable to visit. Suggestions include the following:

- The BLM should allow motorized vehicle access (OHVs, ATVs, etc.) in the following places in the Planning Area:
 - All 2,167 miles of road identified in the 1999 GSENM Management Plan
 - All roads and trails that have been closed since 1996 (pre-Monument designation)
 - All dirt roads
 - Roads and trails that have been closed to OHV use, such as the Paria River/Sheep Creek road and the Last Chance/Paradise Canyon road, to allow for more dispersed use of areas that are currently not as accessible to visitors, including access to rock art along the Paria River
 - The Paria drainage area from canyon wall to canyon wall (width) from Canyonville to U.S. Highway 89
 - The Harris Wash road (through the “V”)
 - All Egypt roads that have been closed
 - The road to the Wahweap Hoodoos
 - The road to the Everett Memorial south of Skutumpah Road. Access to the memorial should include an appropriate approach and vehicle turnaround within Everett Wash.
- The BLM should provide more access for OHV use within the GSENM management units.
- The BLM should support valid existing transportation privileges at the highest reasonably sustainable levels.
- The BLM should provide transportation planning that meets the recreational, personal, and business needs of the citizens of the County in which the subject lands are located.
- The BLM should acknowledge that a complete and detailed transportation network is necessary to provide to law enforcement, emergency response, and rescue operations.
- The BLM should allow travel on all existing roads and trails in limited OHV use areas, except for State highways within Monument boundaries.

- The BLM should keep all roads and trails on public lands open to public use.
- The BLM should improve motorized vehicle access to make hunting easier.
- The BLM should authorize new roads and trails, including travel in washes or canyons below the high-water mark and over sand dunes or boulder fields.
- The BLM should construct and reconstruct new and old single-track trails to allow access to sights, places, and challenges suitable to their use.
- The BLM should restore the “V” Road to previously constructed conditions.
- The BLM should build roads to allow access to points of interest.
- The BLM should keep roads open for access to livestock.
- The BLM should build roads to be all-weather to provide year-round access.
- The BLM should not close and decommission roads to create Roadless Areas that will eventually be studied for wilderness characteristics.
- The BLM should leave more primitive roads open for full-size four-wheel-drive vehicles.
- The BLM should establish and maintain two OHV designated riding areas in Escalante, Utah, in cooperation with local OHV enthusiasts, the American Motorcyclist Association, Utah Shared Access Alliance, and Blue Ribbon Coalition. One is the area identified locally as “Little Desert” immediately to the southwest of the Escalante Visitor Center/Interagency Office. The second is south of Escalante, running 2.0 miles south along Cedar Wash Road from the beginning of BLM land and approximately 0.5 mile to the west until the base of the cliffs.
- The BLM should increase quality OHV recreational opportunities and avoid unnecessary restrictions on OHV recreation, because OHV recreation creates many benefits, such as economic benefits, preservation of open space, stress reduction and exercise benefits, and creating corridors for plant and wildlife habitat.
- The BLM should keep roads and ATV trails well maintained.
- The BLM should allow road maintenance activities that are reasonable and necessary to maintain roads when routing changes are necessary for elements such as head-cutting of washes and streambed alterations, such as those in the Cottonwood Road area, to maintain the integrity of the travel routes without limits to exacting alignments.
- The BLM should allow County, State, or private parties to help with road maintenance if road maintenance is deferred because of BLM budget limits.
- The BLM should allow non-licensed OHVs use the Planning Area.
- The BLM should provide and incorporate an adequate number of pullouts along the road network for distributed camping.
- The BLM should create a community coalition to decide which roads should be open in the Planning Area.
- The BLM should construct sustainable, purpose-built mountain bike trails in the Planning Area.

Coordination with OHV Community

Commenters requested that the BLM coordinate with the OHV community when making decisions and managing the Planning Area. Suggestions included the following:

- The BLM management in Garfield and Kane Counties responsible for both non-Monument and Monument lands should adopt and sustain a public lands management plan that includes appropriate representation and participation of the OHV community, cooperate with those representatives without bias and prejudice, and be consistent with the BLM management actions for OHV access of their field offices in St. George, Utah, and Richfield, Utah.
- The BLM should use volunteer labor from the OHV community to help with the upkeep, installation, and maintenance of trail signage, as well as find a way to speed up the process of allowing volunteers to work on other BLM work projects.

Road and Trail Maps and Signage

Commenters requested maps, signage, and other information regarding roads and trails. Suggestions include the following:

- The BLM should provide more detailed road and trail maps, such as including County road numbers and other identifying marks for all trails and roads.
- The BLM should provide signage for all trails, including trailhead markers, mileage, and warnings for potential dangers.
- The BLM should ensure maps are to the same scale for the area, increasing navigability and maintaining safety for visitors.
- The BLM should provide proper signage for roads that are closed to motorized vehicle use so that people are not punished for unknowingly driving on a closed road.
- The BLM should change wording on all signs that state “This Is Your Land” to “This Is Everyone’s Land”.
- The BLM should place directional and warning signs at strategic locations as determined cooperatively with applicable County sheriffs.

Maintenance

The BLM should maintain roads to allow for safe travel and public use of the Monument.

The BLM should, with the exception of those segments listed below, maintain open routes within the disturbed travel surface area as of the current date; not widen, add passing lanes, or complete any other travel surface upgrades. Deviations from the current maintenance levels could be allowed as follows:

- **Hole-in-the-Rock Road:** Allow stabilization of washout prone areas, primarily along the southeastern end, to prevent erosion and sediment loading in drainages.
- **Smoky Mountain Road:** Allow stabilization in the Alvey Wash section to prevent erosion and sediment loading in drainages.
- **Cottonwood Wash Road:** Allow stabilization of washout prone areas, primarily along the southern section, to prevent erosion and sediment loading in drainages.

- **Skutumpah Road:** Allow new crossing for safety at Bull Valley Gorge, and stabilization of washout prone areas, primarily along the northern section, to prevent erosion and sediment loading in drainages.

In the event that Title 5 rights-of-way are issued, or in the event of legal decisions on RS 2477 assertions, maintenance activities should be governed under the terms of those actions.

The BLM should continue to work with the Utah Department of Transportation (UDOT) on issues related to route maintenance for Utah State Route 12 and U.S. Highway 89. This will cover maintenance and safety work activities. Any new ground disturbance will require site-specific environmental analysis.

Trails

The BLM should develop and maintain a full range of trails to provide opportunities for visitors in the Frontcountry Zone.

The BLM should develop and maintain trails in the Passage Zone where needed for protection of Planning Area resources or for public safety.

The BLM should only develop or maintain trails in the Outback and Primitive Zones where necessary to protect Planning Area resources.

The BLM should work with UDOT to explore the possibility of developing bicycle lanes or parallel bicycle routes along Utah State Route 12 and U.S. Highway 89.

The BLM should also allow for OHV travel on designated trails systems.

The BLM should include a network of hiking and biking trails for greater opportunities of recreation in the Monument.

Administrative Routes and Authorized Users

The BLM should be responsible for administrative routes that will be limited to authorized users. These are existing routes that lead to developments that have an administrative purpose, where the BLM or some permitted user must have access for regular maintenance or operation. These authorized developments include such things as powerlines, cabins, weather stations, communication sites, spring developments, corrals, and water troughs.

The BLM should strictly limit and only grant access to administrative routes for legitimate and specific purposes. Maintenance should be the minimum required to keep the routes open for limited use by high clearance vehicles. If the administrative purpose of the route ceases, the route should be evaluated for closure following public notification and opportunity to comment. Authorized users could include grazing permittees, researchers, State or Federal agencies, Native American Indians accessing recognized traditional cultural properties, and others carrying out authorized activities under a permit or other authorization.

The BLM should work with any individual operating within the Planning Area under existing permits or authorizations to document where access must continue in order to allow operation of a current permit or authorization. Routes that go only to BLM range monitoring and study areas should not be maintained, but periodic vehicular access to these sites will be granted for required range monitoring uses.

Road Restoration Strategy

The BLM should use a percentage of the Planning Area's base budget to restore routes in areas that are easily accessible to the public and that involve sensitive resources in immediate danger of being degraded. Generally, routes in the Frontcountry and Passage Zones should be closed first. The proposal for restoration will include the following:

- Not repairing washed-out routes
- Natural barriers, such as large boulders
- Dead and down wood to obscure route entryways
- Fences
- Ripping up the route bed and reseeding with vegetation natural to that area
- Replacing gates with a fence if area has a fence in place
- Visitor education and information
- Each route should be looked at individually, and the best, least intrusive method should be used based on the geography, topography, soils, hydrology, and vegetation. The first several hundred feet of select routes identified for closure could be left open to provide pullout areas or camping opportunities, preventing new ground disturbance elsewhere.

Enforcement

- The BLM should hire additional staff, including law enforcement personnel, to patrol by foot, horse, and vehicle. Staff should be scheduled to patrol on a regular basis throughout the year, with additional patrols added during intense use periods.
- The BLM should develop maps and signs to help educate the public about routes that are open and closed and post this information on the Planning Area website, at the visitor centers/contact stations, and send to the media.
- The BLM should recognize local law enforcement as having jurisdiction and as being the chief law enforcement authority on the GSENM.
- The BLM should pursue an agreement with Garfield County to facilitate shared law enforcement and support for enforcing established closures and continue its cooperative law enforcement agreement with the Sheriff department of Kane County.
- The BLM should continue to work with the counties, the State, the communities, and others to communicate correct information about the transportation network to the visiting public and to residents.
- The BLM should develop a volunteer program to assist in educating visitors about access and other issues.

Authority over Roads

Comments were submitted regarding who has authority over roads in the Planning Area and how those roads should be managed and regulated. Suggestions included the following:

- The BLM should fully respect and incorporate County transportation systems and individual transportation system roads into Monument planning as County public highways.
- The BLM should allow County ordinances, rules, and regulations to control the use, vehicle type, speed limit, and all other controls for the public's use of County transportation system roads.

- The BLM should close no County transportation system roads by Monument planning or by administrative decision.
- The BLM should not restrict County transportation system roads as to the public's use or access by Monument planning or by administrative action. This includes "administrative use" roads and "No Unlicensed" and "No ATV" designations placed on County transportation system roads.
- The BLM should allow County ordinances to control the types of vehicles, age of operators, etc. on County transportation system roads.
- The BLM should formally accept street-legal vehicle status, including OHVs, in the RMPs.
- The BLM should adopt the County transportation numbering system and County road regulations into the RMPs. The County road numbering system should also be extended to include non-County roads open to public travel within the Monument to avoid conflicting numbering systems that affects the public safety and the public's ability to easily navigate the road system
- The BLM should not apply road restoration any Kane County transportation system roads.
- The BLM should create a community coalition to resolve the "what roads are open" issue rather than letting Federal process dictate.
- The BLM should analyze at least one alternative that identifies Garfield County's RS 2477 assertion.

Commenters asked why roads that were approved County roads prior to the Monument designation are no longer under the jurisdiction of the County, which would allow the County to authorize use and maintenance of the roads. It was also asked why certain roads in the Monument are designated for "administrative use only." It was also asked why these roads are closed to the public and what harm would be done by allowing public access when there is already vehicle use on the roads.

Management of Hole-in-the-Rock Road

Commenters made suggestions on how Hole-in-the-Rock Road should be managed. These suggestions included the following:

- The BLM should not turn ownership or management of Hole-in-the-Rock Road over to the State of Utah because it could result in restricted public access.
- The BLM should give Kane and Garfield Counties full jurisdiction over Hole-in-the-Rock Road.
- The BLM should keep Hole-in-the-Rock Road unpaved to help retain the area's wild character, prevent potential damage to sensitive resources from increased access, prevent increased traffic and maintenance costs, and prevent public safety problems if people with two-wheel-drive vehicles gain more access to the rough dirt roads accessed from Hole-in-the-Rock Road.
- The BLM should pave Hole-in-the-Rock Road.
- The BLM should not pave Hole-in-the-Rock Road.
- The BLM should not widen Hole-in-the-Rock Road beyond 24 feet.
- The BLM should encourage parties interested in development of Hole-in-the-Rock Road as a historical trail to come up with a plan and investigate the possibility of leasing the road to the State of Utah rather than transferring ownership to the State.
- The BLM should make only minimal necessary improvements to Hole-in-the-Rock Road, such as fixing the washboard roughness.

- The BLM should improve Hole-in-the-Rock Road so that visitors in all types of vehicles, including tour buses, can access the road year-round.
- The BLM should not charge visitors a fee to access Hole-in-the-Rock Road.
- The BLM should provide more parking and turn-outs to allow space for vehicles at popular trailheads along Hole-in-the-Rock Road, such as Dry Fork and Harris Wash.
- The BLM should not sacrifice the wild nature of Hole-in-the-Rock Road to further the development of a potential Hole-in-the-Rock state park.

Aviation Management

Commenters made suggestions on how aviation should be managed in the Planning Area. Commenters noted that airplanes and airstrips would cause less surface disturbance, noise, and other environmental impacts than cars do in the Planning Area. Aviation management suggestions included the following:

- The BLM should recognize aviation as a specific and legitimate mode of travel and should specifically acknowledge and promote recreational aviation activities and access by aircraft, as follows:
 - Congress has recognized that backcountry landing strips on Federal lands are important assets to the national aviation infrastructure.
 - The BLM Land Use Planning Handbook indicated that acceptable modes of access and travel include fly-in access (remote airstrips and float planes).
 - The BLM may authorize the continued use and maintenance of airstrips within the wilderness areas if the uses were established and active at the time of designation.
- The BLM should work with the U.S. Department of Defense to ensure that military training routes are appropriate to Planning Area management. The BLM should work cooperatively with aircraft operators, adjacent land managing agencies, and the Federal Aviation Administration to direct overflights to appropriate management zones.
- The BLM should document necessary aircraft operations for rights-of-way holders, permittees, and other agencies in the appropriate permit, authorization, or a Memorandum of Agreement. Landing of aircraft for these purposes should be limited to the minimum necessary to meet the required maintenance or repair function.
- The BLM should acknowledge that the only active airstrip inside the Planning Area is the New Home Bench airstrip near Boulder, Utah, which is located partially on U.S. Forest Service and partially on BLM lands. No other airstrip should be permitted in the Planning Area.
- The BLM should recognize and maintain for public use all existing airstrips or historical primitive landing areas. Airstrips in the Planning Area should not be closed, the airstrips that are currently closed should be reopened, and additional future airstrips should be considered as a means of providing public access to remote areas with recreation potential, while protecting fragile environments from further degradation by wheeled vehicles.
- The BLM should open airstrips in the Planning Area, such as the Collett Top and Squaw Bench airstrips, to allow recreational aviation use and to provide access to pilots, search-and-rescue teams, firefighting aircraft, and other emergency aircraft.
- The BLM should authorize maintenance and management of the Boulder Airstrip by Garfield County.
- The BLM should allow aviation groups to help with volunteer labor efforts and fundraising in developing operational protocols and maintaining airstrips in the Planning Area.

AFFECTED ENVIRONMENT

Commenters recommended examining the GCNRA Foundation Document, available at <http://www.npshistory.com/publications/foundation-documents/glca-rabr-fd-overview.pdf>, for an example of OHV management.

ENVIRONMENTAL CONSEQUENCES

Commenters requested that the BLM analyze potential impacts of any ground-disturbing activities in the Planning Area on the amounts and flow of traffic and visitation on roads and transportation routes throughout the Planning Area. Commenters also requested that the BLM analyze the potential impacts from any changes to transportation and roads in the Planning Area, including the Hole-in-the Rock Road and roads in all other areas of the Monument and lands released from the original Monument. Commenters asked that the Draft EIS analyze the potential impacts that OHV use would have on the spread of noxious and invasive weeds.

Lands and Realty

GENERAL CONCERNS

Commenters expressed concerns about potential restrictions on public access to public lands in the Planning Area. Commenters also expressed concerns about the potential for public lands in the Planning Area to be transferred to State or private ownership. Private landowners expressed concerns about potential impacts to private property in and adjacent to the Planning Area, including access to inholdings. Commenters also expressed concerns about the development of utilities in the Planning Area.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters recommended the following management actions regarding lands and realty in the Planning Area:

- The BLM should keep Federal land addressed by this planning process under Federal control and management, because transferring Federal land to private ownership or State control would negatively impact public access to these lands. It was also emphasized that these are public lands owned by all American citizens.
- The BLM should maintain existing provisions in the 1999 GSENM Management Plan regarding utility rights-of-way and communication sites.
- The BLM should allow development of communication towers to improve emergency response and communication.
- The BLM should not allow sale of the excluded lands for commercial lodges, private ranches, subdivisions, or mineral development.
- The BLM should not transfer excluded lands traversed by the Old Spanish National Historic Trail and the Hole-In-The-Rock Trail to private or State control.
- The BLM should not designate new utility corridors or otherwise open the lands to utility projects through the Monument
- The BLM should not allow public lands to be used for private commercial benefit.
- The BLM should dispose no public lands before legal challenges to the Monument modifications are resolved by the courts.

- The BLM should provide public access to all public land in the Planning Area.
- The BLM should clarify how the Monument modifications affect the land exchange that occurred between the Federal government and the State of Utah when the GSENM was originally established.
- The BLM should provide access to, and protection of, existing water rights, including delivery systems such as ditches, canals, and pipelines. It was noted that privately held water rights are separate and independent of landownership status and should be protected from encroachment or coerced acquisition.
- The BLM should allow for the acquisition of non-Federal lands within the Planning Area through purchase from willing sellers, exchange, transfer or donation. Acquired lands should be managed consistent with the Planning Area's standards and guidelines.
- The BLM should adjust the Monument boundaries in Section 32, Township 34 South, Range 3 to run along Pine Creek instead of following the road. Pine Creek Irrigation Company's sluice and pipeline right-of-way are between the creek and road, which used to be Utah School and Institutional Trust Lands Administration land. The company's right-of-way contains approximately 9 acres, and the company would like it removed from Monument status. The company's priority water rights date back to 1882 which gives us a diligent claim and permanent easement.

Utility Rights-of-Way and Communication Sites

The BLM should allow for the continued development and maintenance of power lines, pipelines, and other utility infrastructure necessary to the local community and State (pursuant to NEPA).

The BLM should expedite approval for permits in utility corridors.

The BLM should prioritize easements for local governments and utilities that are critical for the power, broadband telecommunications, and public safety needs of local residents.

The BLM should not, in general, permit proposals for diverting water out of the Planning Area.

The BLM should allow communication sites and utility rights-of-way in the Frontcountry and Passage Zones, if they meet visual resource objectives. In the Outback Zone, communication sites and utility rights-of-way should be allowed within the constraints of the zone, where no other reasonable location exists, and should meet the visual objectives. In the Primitive Zone, utility rights-of-way should not be permitted. In cases of extreme need for local (not regional) needs and where other alternatives are not available, a plan amendment could be considered for these facilities in the Primitive Zone. Communication sites should only be allowed in the Primitive Zone for safety purposes and where no other alternative exists.

The BLM should acknowledge that per Public Law 105-35, a utility corridor has been designated along U.S. Highway 89 in Kane County, and a water pipeline has been designated within this utility corridor (to be developed pursuant to NEPA).

The BLM should apply the following criteria and/or stipulations to the management of all rights-of-way in the Planning Area where they are allowed:

- Bury new and reconstructed utility lines (including powerlines up to 34.5 kilovolts) unless visual quality objectives can be met without burying, geologic conditions make burying infeasible, or burying will produce greater long-term site disturbance.
- All reconstructed and future powerlines must meet non-electrocution standards for raptors. If problems with existing powerlines occur, corrective measures will be taken.

- Construct all powerlines using non-reflective wire. Steel towers will be constructed using galvanized steel. Powerlines will not be high-lined unless no other location exists.
- Strobe lights will not be allowed at any communication site. Other methods will be used to meet aircraft safety requirements.
- Communication site plans will be prepared for all existing or new sites before any new uses or changes in use occur.
- A Planning Area-wide feasibility study will be prepared to determine the most appropriate location for new communication sites.

The BLM should authorize only one access route to private land parcels unless public safety or local ordinances protective of Planning Area resources warrant additional routes.

Private Property and Inholdings

Commenters requested that the BLM not manage the Planning Area in a way that interferes with or manipulates the private property rights of landowners adjacent to or surrounded by Federal lands, including ingress/egress and any properly zoned uses. Commenters requested that access to private land parcels within the Monument be guaranteed and that access not be limited to one access route. Commenters suggested that the one access route requirement has been used to pressure landowners to sell inholdings to the Federal government. Commenters requested that owners of inholdings not be pressured to sell their inholdings to the Federal government.

Filming Permits

The BLM should streamline the process for obtaining permits to film in the Planning Area and base filming restrictions on object protection because filming is economically important to local counties and it is unnecessarily restricted under the current management plan.

The BLM should consider delegating to Kane County a master permitting process for filming in the Planning Area that allows the County to work with specific projects and does not require a permit for each project.

The BLM should create an easier, more streamlined process for allowing commercials to be filmed in the GSENM. Production companies have expressed frustration at not being able to receive the required permits in a timely manner, and complained about the difficult process to film on the GSENM. Tourism boards and local communities should be allowed to advertise and identify locations of photographs used in promotional brochures and County maps.

The BLM should allow filming that does not require ground disturbance, and that does not involve more than a two-person camera crew, in all zones on the express condition of compliance with zone requirements and other plan provisions. Commercial filming that does not meet this definition may be allowed by permit. Filming limited to “smart phones” should be allowed in all zones on the express condition of compliance with zone requirements and other plan provisions. Filming by use of drones should be limited to Frontcountry and Passage Zones, except when such use facilitates emergency management activities.

The BLM should approve filming in all zones if the activity complies with the zone requirements and Plan provisions. Require permits for commercial filming and potentially, the preparation of a project-level NEPA document.

ENVIRONMENTAL CONSEQUENCES

Commenters suggested that the value of private property that was adjacent to Monument lands prior to the Monument reduction will be negatively impacted by the Monument reduction. Commenters requested that the BLM analyze the potential direct, indirect, and cumulative impacts from any new utility corridors as well as the projects the corridors could enable.

Minerals Management

LEASABLE (INCLUDES OIL/GAS AND COAL)

Oil and Gas

Commenters requested that fossil fuels not be extracted from public lands because of the impacts on climate change and because they are rapidly being replaced by renewable energy sources.

Commenters suggested that the oil potential in the Planning Area is generally for heavy oils such as tar sands, which historically have been economically and technically challenging to develop. It was also suggested that the rise in shale oil development in places such as the Bakken Formation of North Dakota, the Niobrara Formation in Colorado and Wyoming, and the Permian Basin in New Mexico and Texas creates more economic difficulties for oil development in the Planning Area. It was noted that abundant supplies of light crudes that are already economic and have billions of dollars of investment in technological innovation such as horizontal drilling, hydraulic fracturing, and geophysical exploration will continue to suppress interest in the research and development necessary to develop the heavy oils in the Planning Area over the 20-year planning horizon.

Commenters also stated that if oil, gas, or mining is allowed in the GSENM before the planning process is completed, then the time and cost of reclaiming the land could be substantial. Commenters suggested that the oil and gas industry is already making record profits and do not need to explore or drill in our National Monuments.

Commenters expressed opposition to oil shale and tar sands extraction, through hydraulic fracturing or other methods, in the Planning Area. Commenters noted that development of oil shale and tar sands has been shown to be environmentally destructive, as well as water and energy intensive.

Commenters noted that oil and gas development on public lands has damaged ecosystems; harmed species; and contaminated soil, air, and water. The construction of drilling facilities fragments public lands, displacing wildlife and destroying habitat, whereas oil spills, fires, and other pollution can contaminate surface water and groundwater. Roads built for drilling increase human activity in formerly undisturbed areas and can lead to increased poaching, litter, roadkill and human-caused fires, and they facilitate the spread of exotic species that replace native flora and fauna. Oil and gas development also perpetuates our dependence on fossil fuels, committing the people and their public lands to more greenhouse gas emissions and global warming.

Coal

Commenters expressed opposition to coal mining on the Kaiparowits Plateau. It was noted that coal mining on public lands dramatically alters the landscape, causes erosion, degrades wildlife habitat, and leads to the deterioration of drinking water. It was also noted that these impacts are magnified by the transportation and combustion of coal, which heavily contributes to greenhouse gas emissions, pollution, and climate change.

Commenters suggested that BLM-administered lands in the Planning Area should not be disturbed to mine coal when coal is a resource in decline in the energy market. It was questioned whether it would be financially viable to mine the coal in the Planning Area and whether the BLM would determine this viability. It was noted that the coal deposits in the GSENM, although high-quality, have repeatedly been found to be unprofitable to mine by the many entities that have held the “rights” to that coal over the decades. It was suggested that the coal is located too far from the power plants/population centers that, in the past, have relied on coal as a fuel. It was also noted that the coal-fired power plant near Page, Arizona, is closing because coal-generated power is becoming less economically viable.

Commenters noted that parts of the GSENM were identified in the early 1960s and 1970s for potential development of the proposed 3,000-megawatt Kaiparowits Coal-Fired Generating Station, which did not occur. It was requested that the BLM avoid similar proposals in the Planning Area.

Commenters noted that although Kane County is coal-rich, the current market is not feasible for development (outside what is already being mined in the Alton Coal area). It was recommended that should market conditions change, the BLM should consider mineral, oil, and gas leases in a reasonable time; it cannot take 10 years to obtain a lease. It should take no more than 18 months to initiate an application and obtain a permit.

Commenters expressed support for coal mining in the Planning Area. It was suggested that coal combustion emissions are mainly water vapor because of clean coal technologies.

LOCATABLE AND SALABLE MINERALS

Commenters requested that the Planning Area be assessed for the location and value of any locatable minerals. It was noted that Kane County has very limited gravel resources, and it was requested that the BLM identify potential sources for gravel and fill materials in the Planning Area, including potential pit locations as well as abilities to chase up dry streambeds to capture rock and gravel resources for road maintenance.

Comments recommended that the BLM retain the provisions of the current 1999 GSENM Management Plan relating to withdrawal review.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters made the following observations and management action recommendations regarding minerals management in the Planning Area:

- The BLM should retain the current 1999 GSENM Management Plan provisions relating to VERs, with the following amendment: “The VER verification process described therein will apply with equal force to new all new mining claims and mineral leases filed on or after February 20, 2018.”
- The BLM should prohibit mineral entry and leasing (all extractive activities), as well as oil and gas development, in the Planning Area.
- The BLM should prohibit fossil fuel and mineral exploration and development in the Circle Cliffs area, because of the threats to native species and ecology, because access would be through Boulder Town or Capitol Reef National Park, and because the entire area drains into the Escalante River.
- The BLM should acknowledge that the lack of water and infrastructure would make development of the tar sands in the Circle Cliffs area economically infeasible.

- The BLM should not open the Planning Area to extraction industries because of the increased truck traffic it would cause.
- The BLM should open the Planning Area to extraction industries.
- The BLM should avoid mining in streambeds or places of relatively considerable plant growth.
- The BLM should open all land in the Planning Area not otherwise restricted by special designation to leasing, drilling, energy development, and mineral extraction. It was requested that restrictions against surface occupancy be eliminated, modified, or waived where reasonable.
- The BLM should work with the State of Utah and local counties to develop an alternative that analyzes the potential for hard rock and fluid mineral resources development in the Planning Area, including a plan that authorizes limited development of such resources while still protecting sensitive resources and other valuable objects within Monument units.
- The BLM should guarantee that the full cost of repairing damage that results from resource extraction be paid by the extractors and include plans for how to address toxic mining deposits.
- The BLM should acknowledge that archaic mining laws could allow people to immediately file mining claims on the GSENM, which could be irreversible even if the Monument reduction is declared illegal.
- The BLM should prohibit or limit uranium mining because it supports nuclear energy and threatens human safety.
- The BLM should preserve all resources in the Planning Area for national security purposes and only use them when there is a critical need or national emergency.
- The BLM should acknowledge that the mineral extraction potential in the Planning Area is limited.
- The BLM should support valid existing mineral privileges at the highest reasonably sustainable levels.
- The BLM should ensure that geological contiguous elements remain connected to facilitate fewer disturbances during extraction and yield greater economy.
- The BLM should conduct tests before any extractions activities to verify quantity and quantity of materials, including geo-resistivity survey tests to identify subsurface water, oil, minerals, gravels, and potential fossil locations. The RMPs should contain provisions for possible discoveries of unforeseen intrinsic elements, such as fossils, unique geological elements, or water resources.
- The BLM should prohibit the disposal of waste tailings into stream bodies.
- The BLM should require mining claimants and other extraction industries in the Planning Area to provide their own portable power plants because it does not make sense to construct power sources in such a remote area.
- The BLM should give special attention to any development of radioactive minerals mining projects to assure that environmental commitments are met, and remediation and restoration is fully funded as liabilities are established.

ENVIRONMENTAL CONSEQUENCES

Commenters stated that the BLM should evaluate what the impact that mining and drilling would have on plants and wildlife in the Monument.

Commenters also stated that the BLM must fully analyze the indirect effects and downstream impacts of making the lands available for the extraction of coal, oil, and gas, including

- how the ultimate combustion of these resources will contribute to climate change and the threats it poses to the viability and productivity of natural resources for current and future generations; and
- how opening lands to extraction is rational in light of the urgent need to constrain carbon emissions to protect, inter alia, the continued viability of resources on public lands.

Renewable Energy

GENERAL CONCERNS

Commenters expressed concerns about the potential for fossil fuels to be developed in the Planning Area and suggested that renewable energy development should be the focus of United States energy policy.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters requested that renewable energy resources, such as solar farms and wind turbines, be invested in and emphasized over fossil fuels. Commenters suggested that the BLM postpone any planning decisions regarding the Monument until the United States has a national energy policy, because we are moving towards a renewable energy future. It was also suggested that the Planning Area be closed to renewable energy development.

Special Designations

Commenters stated that all existing special management designations are consistent with Presidential Proclamation 9682 and recommended that the BLM should maintain all existing special designations identified in the 1999 GSENM Management Plan:

- Calf Creek Recreation Area
- Deer Creek Recreation Site
- Devils Garden Outstanding Natural Area
- Dance Hall Rock Historic Site
- Escalante Canyons Outstanding Natural Area (tracts 2, 3, 4 are included in North Escalante Canyon/The Gulch ISA and Tract 1 and 5 are separate)
- North Escalante Canyon Outstanding Natural Area
- The Gulch Outstanding Natural Area
- Phipps-Death Hollow Outstanding Natural Area
- No Mans Mesa Research Natural Area
- Wolverine Petrified Wood Natural Environmental Area

Wild and Scenic Rivers

GENERAL CONCERNS

Commenters expressed concerns regarding existing Wild and Scenic River suitability determinations in the Planning Area and how those areas should be managed.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters suggested that when proposing a stream for inclusion in the National Wild and Scenic Rivers System (NWSRS), the BLM must show that the stream contains outstandingly remarkable values on a regional scale. It was requested that no streams or water courses be managed as if they were wild and scenic until an official designation by Congress is made.

Commenters requested that the RMPs include language stating that the BLM will continue to manage the Wild and Scenic River suitable mainstem and tributaries of the Paria River (112 miles) and Escalante River mainstem and tributaries (140 miles) to maintain suitability status for possible inclusion in the national system. It was also recommended that the RMPs include language that the outstanding remarkable values for each of these segments will be protected. Other commenter also requested that the Paria River corridor be removed from Wild and Scenic River suitability because it is occupied by Kane County Transportation System Road #K6200 (Paria River Road).

Commenters recommended that the BLM retain the provisions of the current 1999 GSENM Management Plan relating to Wild and Scenic Rivers. Comments recommend the inclusion of the following language into the RMPs:

- Approximately 252 miles of river segments has been determined suitable and will be recommended for Congressional designation into the NWSRS. The suitable river segments include Escalante River 1, 2, 3; Harris Wash; Lower Boulder Creek; Slickrock Canyon; Lower Deer Creek 1, 2; The Gulch 1, 2, 3; Steep Creek; Lower Sand Creek and tributary Willow Patch Creek; Mamie Creek and west tributary; Death Hollow Creek; Calf Creek 1, 2, 3; Twenty-five Mile Wash; Upper Paria River 1, 2; Lower Paria River 1, 2; Deer Creek Canyon; Snake Creek; Hogeye Creek; Kitchen Canyon; Starlight Canyon; Lower Sheep Creek; Hackberry Creek; Lower Cottonwood Creek; and Buckskin Gulch.
- Those streams found suitable will be managed for protection of the resources associated with the stream. Such action will not entail any additional State water rights and will not result in a Federal reserved water right unless Congress acts to officially designate the stream or stream segment as part of the NWSRS. Upon such designation, if any, the Federal reserved water right thus established would, by law, be established with the priority date of the designation and would be junior to all preexisting water rights, in accordance with the existing State priority system. Senior rights in any stream designated would be unaffected.
- River segments determined non-suitable will be managed under the direction and prescriptions of the RMPs.

Wilderness and Wilderness Study Areas

GENERAL CONCERNS

Commenters expressed concerns regarding how existing WSAs in the Planning Area would be managed. Commenters also expressed a desire for more Wilderness designations in the Planning Area.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters recommended the following management actions regarding Wilderness and WSAs in the Planning Area:

- The BLM should include language in the RMPs that reinforces the importance of wilderness resources as part of the BLM mandate and national strategy for public lands.
- The BLM should include text in the RMPs that references law and policy and guidance per the various WSA manuals that give the overarching guidance for management of the Planning Area's 16 WSAs and portions of any WSAs now on adjoining lands, highlighting the requirement of no new surface disturbance.
- The BLM should retain all existing WSAs in the Planning Area unless they are designated as wilderness. The Paria River should be maintained as a WSA to protect riparian habitat and wildlife connectivity.
- The BLM should prohibit construction of new infrastructure in WSAs in the Planning Area, manage roadless areas to maintain their unroaded character, and manage WSAs under the current non-impairment standard, recognizing the valid uses that are identified in the Utah BLM Statewide Wilderness Final EIS, 1990.
- The BLM should manage all acquired Utah School and Institutional Trust Lands Administration parcels that are contiguous on all sides with existing WSAs as if they are WSAs.
- The BLM should manage all areas proposed for Wilderness in "America's Red-Rock Wilderness Act" as de facto Wilderness so that Congress retains the Wilderness option for these national interest lands.
- The BLM should adopt management actions, including permit allocation, fees, and restrictions, on dispersed vehicle camping in specific locations for areas within WSAs or adjoining road access points to reduce visitor congestion and protect resources by reducing human waste issues, which would also provide funding for increased staffing
- The BLM should acknowledge that WSAs should not affect Kane County transportation system roads because WSAs are roadless areas that cannot affect VERs.
- The BLM should allow vegetation treatments in WSAs. Proper vegetation treatments inside of WSAs would not diminish, but rather increases wilderness characteristics.
- The BLM should continue the existing management for the Dry Fork Slot Canyons, which are in a WSA, including no livestock access.
- The BLM should seek to establish wilderness designations and protections throughout the Escalante River Basin, specifically the upper Escalante River Basin and the severely rugged upper drainages between Escalante, Boulder, and the Aquarius Plateau (including Calf Creek, Sand Creek, Mamie Creek, and the Box-Death Hollow Wilderness); the drainages

between Aquarius Plateau and the Burr Trail; the middle Escalante River Basin between the Utah State Route 12 bridge and Horse Canyon; and the lower Escalante River Basin down to Lake Powell. Commenters also recommended the following areas be protected as wilderness: Red Breaks; Upper Harris Wash and its tributary basins (such as Big Horn Canyon, Zebra Canyon, and adjacent drainages); The V upland area; Coyote Gulch (GCNRA); Deer Creek and Boulder Creek Basins; the Gulch Canyon and basin; and all the eastern drainages (canyons and benches) of the Escalante Canyons that drain the Circle Cliffs Basin and enter the Escalante River Basin from the east.

- The BLM should manage the existing WSAs in the Planning Area under the BLM's Interim Management Policy (IMP) and Guidelines for Lands Under Wilderness Review (BLM Manual H-8550-1) until legislation takes effect to change their status. The major objective of the IMP is to manage lands under wilderness review in a manner that does not impair their suitability for designation as wilderness. In general, the only activities permissible under the IMP are temporary uses that create no new surface disturbance nor involve permanent placement of structures. Temporary, non-disturbing activities, as well as activities governed by VERs, may generally continue in WSAs. Actions allowed under the IMP should also be subject to other BLM laws and policies that govern the use of public land, including management prescriptions or other restrictions developed in this Plan (where they are consistent with the IMP). It is important to note that some uses and activities described in the RMPs may not be achievable under the IMP. Where conflicts occur between any recommended zone prescriptions and IMP, IMP should take precedence until action is taken by Congress to either designate the WSAs as Wilderness or release them from further protection. The recommended plan and zone prescriptions should apply to all public land within the Planning Area if Congress releases them from WSA status.

AFFECTED ENVIRONMENT

Commenters identified 16 WSAs, totaling approximately 881,997 acres, or approximately 47% of the BLM acres in the Planning Area.

ENVIRONMENTAL CONSEQUENCES

Commenters requested that the BLM analyze the potential impacts of any ground-disturbing activities on WSAs, other special status wilderness lands, and roadless areas in the Planning Area.

National Trails

GENERAL CONCERNS

Commenters expressed concerns about management of the Old Spanish National Historic Trail, and noted that the Armijo Route of the Old Spanish National Historic Trail traverses a significant portion of the Monument; is protected by Monument status; and is interpreted by Monument staff through programs, exhibits, and publications.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters requested that the RMPs address the Old Spanish National Historic Trail, using 1) the National Trail System Act (16 United States Code [USC] 1241 et seq.), 2) The National Landscape Conservation System Act (16 USC 7202), 3) BLM Policy Manual 6280, and 3) the Old Spanish National Historic Trail Comprehensive Administrative Strategy.

Areas of Critical Environmental Concern

GENERAL CONCERNS

Comments stated that designation of ACECs are appropriate in the RMPs. ACEC nominations should be considered by the BLM in the land use planning process. Submissions indicated that ACEC nominations would be forthcoming.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters recommended the following management actions regarding ACECs in the Planning Area:

- The BLM should acknowledge that it is required to apply special management to protect the values identified for each of the ACECs and identify new ACECs as appropriate to meet the statutory requirement of prioritizing the designation and protection of ACECs.
- The BLM should acknowledge that it will not meet its duty under FLPMA to prioritize ACECs if the designation is subsumed by the overlapping Monument.
- The BLM should ensure that any areas proposed for ACEC designation within the RMPs adhere fully to the existing criteria for such designation. It was requested that those areas nominated as an ACEC 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. It was also requested that any ACEC proposal be limited to the geographical extent of the specific resource value needing protection.
- The BLM should designate the Planning Area lands excluded from the Monument units as an ACEC to prevent irreparable harm to lands that may be restored to the GSENM by the pending legal actions, and to avoid the waste of financial resources that would be committed to developing a new RMP for the excluded lands.
- The BLM should designate ACECs for all areas with high potential for paleontological and archeological resources, special geologic features, threatened and endangered species habitat, scenic areas, and areas of highly intact biological soil crusts.
- The BLM should designate the excluded lands as an ACEC for their relevant historical and cultural heritage values.
- The BLM should consider NSO lease stipulations within ACECs or other valued areas where important aquatic resources may be impacted.
- The BLM should designate landscape-scale ACECs that help connect important habitat within the Monument pursuant to the Presidential Proclamation.
- The BLM should designate 50-Mile Mountain as an ACEC or Research Natural Area rather than a SRMA, because it does not warrant that level of recreational use planning.

Other Special Designations

GENERAL CONCERNS

Commenters expressed concerns about how National Park units adjacent to the Planning Area would be affected by the Monument management. Commenters also made recommendations for special designations within the Planning Area.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters requested that the BLM protect the ecosystems and landscapes adjacent to National Park units, such as Canyonlands National Park, Bryce Canyon National Park, and GCNRA, from harmful off-road vehicle use, tar sands, mining and oil and gas drilling, incompatible development, and looting.

Commenters requested that all lands excluded from the Monument boundaries be designated as ACECs, so that the cryptobiotic crust can recover from destruction caused by grazing and OHV use.

Commenters recommended that 50-Mile Mountain be set aside as a Research Natural Area and archaeological district and be closed to livestock grazing.

ENVIRONMENTAL CONSEQUENCES

Commenters requested that the BLM analyze potential impacts of any ground-disturbing activities in the Planning Area on the connectivity of protected areas, from a biological and experiential perspective. It was noted that this should include the relationship of disturbance activities to these newly fragmented BLM National Monuments as well as National Park Service-administered lands such as Capitol Reef National Park and GCNRA.

Social and Economic Considerations

Socioeconomics

GENERAL CONCERNS

Commenters expressed concerns about the potential impacts that management of the Planning Area would have on the local economy. Commenters suggested that the establishment of the GSENM has created a thriving tourist economy in the region. Other commenters suggested that the establishment of the GSENM has reduced job opportunities in the region, such as resource extraction jobs.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters recommended the following management actions regarding socioeconomics and the Planning Area:

- The BLM should analyze alternatives considering tourism and preservation efforts that could benefit the local economy.
- The BLM should begin the planning process for dealing with increased visitation and tourism in the Planning Area as soon as possible and involve the local communities in this planning process as much as possible.
- The BLM should not allow oil, coal, or other mining operations within the Monument, but small businesses, such as restaurants, hardware stores, animal feed stores, and gift shops should be allowed within the Monument if they are strictly regulated and have a negligible impact on the environment.
- The BLM should seek to contribute to the socioeconomic wellbeing and sustainability of these counties and communities.
- The BLM should acknowledge that the land newly open to extraction, specifically down Alvey Road, is too close to Escalante town, because trucks would deter tourism and negatively impact public safety.

- The BLM should provide robust funding for the management of public lands.
- The BLM should protect open spaces because they contribute to quality of life.
- The BLM should provide reimbursement to counties and cities on costs to operate the Monument.
- The BLM should employ family-oriented personnel in communities in which the Monument operates.
- The BLM should not advertise the Planning Area because it is already overrun with tourists that are impacting local communities with too much traffic.
- The BLM should stop leasing public lands to ranchers, miners, and other industries for far less than their actual value.
- The BLM should hire more local people for Monument jobs, such as land maintenance, cultural resource education, and data collection, because locals have not seen economic benefits from the Monument.
- The BLM should acknowledge that dividing the GSENM into several different units will increase management costs, when compared to managing one contiguous Monument.
- The BLM should acknowledge that extraction activities and unregulated public access in the Monument would result in the potential loss of scientific and historic research.
- The BLM should support commercial development in the communities adjacent to the Planning Area, but not within the Planning Area.
- The BLM should prioritize scientific research in the Planning Area and make the GSENM a show piece for scientific and educational research, as it was originally meant to be.
- The BLM should prioritize the interests of students in Kane and Garfield Counties, with consideration of the socioeconomic impacts that would benefit the students.
- The BLM should allow tourism boards and local communities to advertise and identify locations of photos used in promotional brochures and County maps.
- The BLM should conduct a study on the increase in visitation to the Planning Area since the establishment of the GSENM in 1996.
- The BLM should continue financial and other support for partnerships with external researchers and non-Federal public trust repositories because they are crucial for effective management, preservation of scientific and cultural resources and ensure continued public access to these resources and the new scientific knowledge they contain. The BLM should continue to provide financial and other support for non-Federal public trust entities to investigate, recover, prepare, preserve, curate, and research specimens and to make (non-sensitive) information about these collections available to the public. Any collection permission should require proof of a repository agreement granted by a public-trust repository. Researchers should be required to make their findings accessible to local, national, and international public audiences through a variety of means.
- The BLM should prohibit end-of-year funds being given to non-governmental entities for use in subsequent years.
- The BLM should not allow non-governmental organizations to use government property for free.

AFFECTED ENVIRONMENT

Commenters, including local business owners, suggested that the GSENM has increased economic activity (population, employment, personal income, and per-capita) in the region because of the tourists that have been drawn to the area since Proclamation 6920. Commenters also suggested that tourism at the Monument has not benefited the local economy because most tourists who visit the Monument do so in concentrated groups that travel from one National Park to another by bus. Commenters claimed that few tourists venture into the Monument, and those that do so remain within a mile or two of public roads. It was also suggested that all 1.9 million acres of the Monument is not worth seeing. Commenters also suggested that tourism jobs are seasonal and low paying in comparison to other industries.

Commenters noted that tourist visitation of the GSENM has doubled since its establishment, with the Monument receiving 923,236 visitors last year. It was noted that this represents more visitors than Canyonlands National Park received and is on par with visitation of Capitol Reef National Park.

Commenters noted that rural communities in the West rely on these landscapes to help fuel their economies and provide jobs. For example, in 2017, the Outdoor Industry Association published a report establishing that the outdoor recreation economy is responsible for generating upward of \$887 billion in consumer spending annually. This equates to \$65 million in Federal tax revenue, and nearly \$60 million in State tax revenue. Commenters suggested that wilderness experiences draw thousands of people to the Planning Area and provide significant economic stimulus to local communities.

Commenters noted that, currently, large corporate grazing consortiums are outcompeting small family ranches and these consortiums provide only a small number of low-wage, seasonal jobs to ranch hands. It was also noted that Utah accounts for less than 1% of U.S. cattle production and cattle revenues account for less than 1% of Utah's gross domestic product. It was also noted that more than 60% of Utah ranchers do not graze their livestock on public lands. Other commenters noted that 5% of the total employment in Garfield and Kane Counties comprises farm jobs, and agriculture accounts for 1.1% of the total economy of the counties.

Commenters suggested that the local communities lack the infrastructure, such as water, housing, and emergency services, to support heavy industry or a National Park in the Planning Area.

ENVIRONMENTAL CONSEQUENCES

Commenters suggested that Monument reduction would be good for the local economy because locals need land resource jobs, such as mineral extraction, firewood, and livestock grazing, rather than low-paying seasonal jobs. Commenters also suggested that extractive industries in the Monument could have a negative impact on the tourism economy in the region, including business owners in the region who rely upon outdoor recreation tourism. It was noted that mineral extraction in the Planning Area would lead to an instable boom and bust economy in the region. It was suggested that outdoor recreation tourism is more economically sustainable and long-lasting than resource extraction, and that the GSENM would benefit more people through tourism, hotels, car rentals, airlines, RV parks, restaurants, and outdoor outfitters than it would benefit through mining. Commenters expressed concern that people would choose to spend their tourist dollars somewhere other than Utah if the GSENM is reduced. Commenters recommended that the BLM consult the study done by Headwaters Economics that documents the economic benefits of the Monument.

Commenters requested that the analysis of socioeconomic impacts should consider changing land use on these lands and that the analysis should be based on honest assessments of revenue and job generating potential of the lands. It was recommended that the analysis be forward-projecting and consider issues such as a changing climate and the projected doubling of population of Utah by 2050. It was also requested that the analysis of the potential for coal mining address the remoteness of the location, the lack of infrastructure, declining coal markets, and the possibility of government subsidies. Commenters requested that the analysis address impacts on already existing agreements (economic, social, and ecological) that have been made regarding the GSENM, such as Congress's approval of the GSENM's boundaries and the State of Utah's land exchanges with the BLM.

Commenters requested that the BLM analyze potential impacts of any ground-disturbing activities in the Planning Area on local communities and the use of roads and highways in and out of these communities. It was also requested that the BLM analyze potential impacts of any ground-disturbing activities in the Planning Area on tourism and local tourist resources. Commenters also requested that the BLM analyze potential impacts of any ground-disturbing activities in the Planning Area on scientific research opportunities.

Commenters recommended that the BLM use a Total Economic Valuation framework to account for the full array of market and nonmarket wildland benefits, rather than relying on IMPLAN or other input-output models that are grounded in Economic Base Theory. It was suggested that the BLM use The Wilderness Society's *Socio-Economic Framework for Public Land Management Planning: Indicators for the West's Economy* for the socioeconomic baseline analysis of the region's economy, as well as the analysis of the potential impacts of proposed management alternatives on the area.

Commenters requested that the BLM consider the potential impacts on the locals' quality of life from potential pollution resulting from future infrastructure, extraction, and development in the Planning Area.

Commenters suggested that scientific study requires intact ecosystems and splitting the Monument into three units would negatively impact the efficacy of scientific studies in the Planning Area.

Environmental Justice

GENERAL CONCERNS

Commenters expressed concerns regarding potential environmental justice impacts in the region.

ENVIRONMENTAL CONSEQUENCES

Commenters recommended that the BLM's EIS identify any minority, low-income, and Tribal communities within the geographic scope of the impact area, including the sources of data and a description of the methodology and criteria used. It was recommended that the BLM compare 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. It is not recommended that the BLM use higher thresholds. If a block group percentage is greater than the State average, the BLM should analyze potential environmental justice impacts as described below.

Commenters recommended that the BLM's EIS include a detailed assessment of environmental justice and other socioeconomic concerns for any environmental justice communities, to the extent information is available, including 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 socioeconomic 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

MITIGATION

Commenters recommended that the BLM's EIS include environmental justice mitigation measures, developed with the affected communities, to reduce any disproportionate adverse impacts. Commenters noted a need for early involvement of the local communities, including Tribal consultation and coordination, and supported the meaningful participation of community representatives in the NEPA process.

Tribal Uses

GENERAL CONCERNS

Commenters requested that the spiritual significance of this region to Tribes be understood and managed accordingly. Since the beginning of time, the Kaibab Band of Paiutes has collected and continues to collect minerals and plants and be a steward of the land. The entire landscape is of great importance to the Kaibab Band of Paiutes. It was suggested that no single area is more important than others, and it must be viewed as an entire landscape—all are parts of one great whole.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters requested that Tribal collection of firewood and medicinal plants, and access for ceremonial use, be maintained in the Planning Area.

Public Health and Safety, including Hazardous Materials

GENERAL CONCERNS

Commenters expressed concern that mining and oil exploration in the Planning Area could affect the health of citizens in the region. Commenters also expressed concern about the potential public safety impacts from transporting coal on roads through local communities.

ALTERNATIVES/SUGGESTED MANAGEMENT

Commenters recommended the following management actions regarding public health and safety in the Planning Area:

- The BLM should allow law enforcement within the Monument to be handled by local law enforcement through contracts developed with local sheriffs' offices.
- The BLM should recognize the County sheriff as the chief law enforcement officer in the counties.
- The BLM should acknowledge that the counties have legal jurisdiction in the Monument.
- The BLM should only use Federal agents in the Planning Area when there is a direct nexus with Federal resource management law, such as the ESA.
- The BLM should address mechanisms that foster cooperation between the BLM and local law enforcement and emergency services.
- The BLM should provide budgeted financial support for individual first responder organizations providing for public safety on their lands to be used for updating or repairing equipment and vehicles.
- The BLM should share costs or reimburse local communities and counties for costs associated with search and rescue operations in the Planning Area.
- The BLM should increase staffing and funding for search and rescue operations, and address search and rescue operations and funding in the RMPs. It was suggested that emergency rescues be included as a line item in the Planning Area budget.
- The BLM should have formal documented standard operating procedures for cooperating and coordinating with each local first responder entity, including quarterly face-to-face meetings. It was suggested that all actions by first responder entities in the Planning Area must be documented and jointly reviewed by BLM management, the responsible County sheriff(s), and the local first responder leadership, with emphasis on risk identification and risk mitigation actions.
- The BLM should have a documented risk management plan, including participation by independent risk management professionals, and a yearly, independent and objective risk management audit.
- The BLM should allow new communication/cell towers in the Planning Area to increase public safety.
- The BLM should provide more education to visitors, especially non-English-speaking visitors, regarding public safety risks in the Planning Area, such as which roads are safe to drive on.

AFFECTED ENVIRONMENT

Commenters requested that the BLM acknowledge the sacrifices made by volunteer first responders, including economic losses; lost personal time with their families; emotional impacts from recovering and rescuing dead bodies or severely injured people; damages to vehicles, equipment, and horses; and putting their own safety and security at risk. Commenters noted that it is often ranchers who help Monument visitors that suffer injuries, get stranded, have automobile accidents, or need help with repairs.

ENVIRONMENTAL CONSEQUENCES

Commenters requested that the BLM needs to consider the potential impacts that increased traffic would have on the infrastructure, accommodations, and emergency services in towns surrounding the Planning Area, especially Boulder.

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Livestock Grazing

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Lampstand tract (report on file with the GSENM).

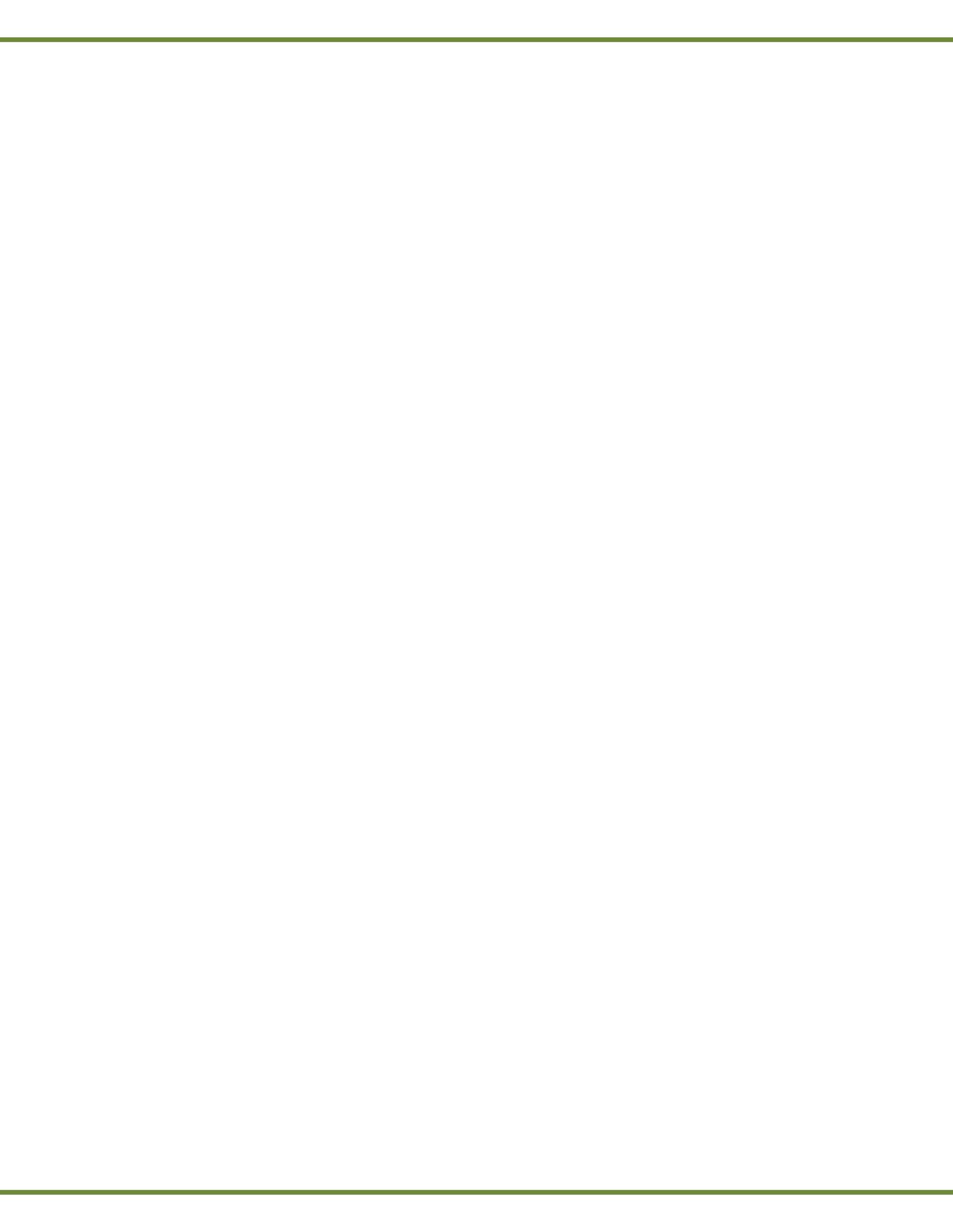
Escalante area inventories: Main Canyon Tract, Little Desert Tract, Cedar Pockets Tract, and Escalante Flats Tract (conducted by BYU).

Kaiparowits Plateau Sample Inventory Random sampling (Geib et al. 2001)

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APPENDIX B

Comment Summary by Management Area



Grand Staircase Unit

Wildland Fire Management

Commenters recommended that the BLM implement fire prevention in the Grand Staircase Unit through clearing and re-vegetation because this has been one of the most successful mechanisms the Kanab Field Office-Escalante Area has used in revitalizing areas for pasture and forage for livestock and wildlife.

Trails and Travel Management

Commenters recommended that the boundary between the Grand Staircase and Kaiparowits Units should be along the Cottonwood Road in the Cockscomb, because that is the actual boundary between those two geographic entities. Commenters suggested that the only reason to put the boundary between the two units where it currently is (along the Paria River) is to create a road corridor.

Commenters requested that the BLM put limits on motorized vehicle use in the Grand Staircase Unit to protect sensitive resources, such as fragile soils, canyon bottoms, hanging gardens, paleontological resources, geological formations, springs and seeps, wildlife, riparian areas, wilderness values, and vegetation. Commenters also requested restrictions on road construction and improvements. Suggestions included the following:

- The BLM should keep the Paria River Corridor (between this unit and in the Kaiparowits Unit) closed to motorized use according to the 1999 GSENM Management Plan and approved Monument Transportation System (pending resolution of RS 2477 claims, litigation of Proclamation 9682, and approval of new Monument Transportation Plan).
- The BLM should limit motorized vehicle use to designated roads that were open to such use in the 1999 Monument Management Plan and the Monument Transportation System (pending resolution of issues as described above).
- The BLM should allow authorized motorized vehicles on administrative roads but only for the specific use(s) and distance allowed as authorized in the written justification for that administrative road. The use of “ranch roads” permitted by verbal agreements should either be discontinued or the “ranch road” should receive an official administrative road designation.
- The BLM should enforce illegal ORV use on closed roads.
- The BLM should comply with the NEPA process for any re-construction of authorized roads.

Kaiparowits Unit

Fish and Wildlife

Commenters requested a study of wildlife migration between the Escalante Canyons and Kaiparowits Units.

Cultural Resources

Commenters requested that ground-disturbing activities for petroleum or coal extraction should be prevented in areas of high cultural resources value, such as the Kaiparowits Unit.

Paleontology

Commenters requested that ground-disturbing activities for petroleum or coal extraction should be prevented in areas of high paleontological value, such as the Kaiparowits Unit. Commenters noted that the fossils being discovered in the Kaiparowits Unit are of international interest; 15 to 20 new dinosaur species have been recovered in this unit, and preservation is so great some have skin remaining on the fossil.

Wildland Fire Management

Commenters recommended that the BLM implement fire prevention in the Kaiparowits Unit through clearing and re-vegetation because this has been one of the most successful mechanisms the Kanab Field Office-Escalante Area has used in revitalizing areas for pasture and forage for livestock and wildlife.

Livestock Grazing

Commenters requested that the cows on the Kaiparowits Unit be removed because of the damage they have caused to the springs.

Recreation and Visitor Services

It was recommended that the BLM address group access to the Hole-in-the-Rock, which is a culturally important site for the Church of Jesus Christ of Latter-day Saints faith, by allowing groups of 250 people or more to visit the site for reenactments.

Trails and Travel Management

Commenters recommended that the boundary between the Grand Staircase and Kaiparowits Units should be along the Cottonwood Road in the Cockscomb, because that is the actual boundary between those two geographic entities. Commenters suggested that the only reason to put the boundary between the two units where it currently is (along the Paria River) is to create a road corridor. Commenters suggested more routes be opened in the Kaiparowits Unit.

Commenters requested that the BLM put limits on motorized vehicle use in the Kaiparowits Unit to protect sensitive resources, such as fragile soils, canyon bottoms, hanging gardens, paleontological resources, geological formations, springs and seeps, wildlife, riparian areas, wilderness values, and vegetation. Commenters also requested restrictions on road construction and improvements. Suggestions included the following:

- The BLM should keep the Paria River Corridor (between this unit and in the Grand Staircase Unit) closed to motorized use according to the 1999 GSENM Management Plan and approved Monument Transportation System (pending resolution of RS 2477 claims, litigation of Proclamation 9682, and approval of new Monument Transportation Plan).
- The BLM should limit motorized use to designed roads approved in the 1999 GSENM Management Plan and Monument transportation system (pending resolution of issues as described above).
- The BLM should allow authorized motorized vehicles on administrative roads but only for the specific use(s) and distance allowed as authorized in the written justification for that administrative road. The use of “ranch roads” permitted by verbal agreements should either be discontinued or the “ranch road” should receive an official administrative road designation.
- The BLM should enforce illegal ORV use on closed roads and elsewhere.
- The BLM should comply with the NEPA process for re-construction of authorized roads.

Socioeconomics

Commenters expressed concern about the gap between the Kaiparowits and Escalante Canyons Units becoming commercialized.

Escalante Canyons Unit

Fish and Wildlife

Commenters requested a study of wildlife migration between the Escalante Canyons and Kaiparowits Units.

Livestock Grazing

Commenters requested that the Escalante Canyons Unit not be open along the mainstem for livestock grazing because the native vegetation and grasses are recovering nicely in the mainstem of the river.

Other commenters suggested that the number of cows be reduced or eliminated throughout the Escalante River and drainages.

Commenters also advocated for the removal of trespass cattle in the Escalante Canyon, which local residents say have been illegally present there for several years.

Recreation and Visitor Services

Commenters expressed concern that the new Escalante Canyons Unit would turn the area into an area for tourists and not an area for the people that live and work there. Commenters expressed concern that the Escalante Canyons Unit would be overly promoted, which would result in overuse and abuse. Commenters suggested that this area should not be turned into another highly trafficked area like Zion or Arches National Parks. Commenters also recommended that the Escalante Canyons Unit be given special attention regarding any mixed use contemplated such as mining or additional grazing in areas previously retired from grazing where recreational or extractive use conflicts could arise.

Commenters suggested that the BLM prioritize SRMA planning for the Escalante Canyons Unit and Utah State Route 12 because this part of the Planning Area receives the highest number of visitors.

Trails and Travel Management

Commenters requested that the BLM put limits on motorized vehicle use in the Escalante Canyons Unit to protect sensitive resources, such as fragile soils, canyon bottoms, hanging gardens, paleontological resources, geological formations, springs and seeps, wildlife, riparian areas, wilderness values, and vegetation. Commenters also requested restrictions on road construction and improvements. Suggestions included the following:

- The BLM should manage to prohibit motorized vehicle use in the Escalante River mainstem and all tributaries according to the 1999 GSENM Management Plan and approved Monument Transportation System (pending resolution of RS 2477 claims, litigation of Proclamation 9682, and approval of new Monument Transportation Plan).

- The BLM should allow authorized motorized vehicles on administrative roads but only for the specific use(s) and distance allowed as authorized in the written justification for that administrative road. The use of “ranch roads” permitted by verbal agreements should either be discontinued or the “ranch road” should receive an official administrative road designation.
- The BLM should enforce illegal ORV use on closed roads and elsewhere.
- The BLM should comply with the NEPA process for re-construction of authorized roads.

Minerals Management

Commenters expressed opposition to any tar sands mining in the eastern portion of the Escalante Canyons Unit, because of the proximity to Capitol Reef National Park.

Socioeconomics

Commenters expressed concern about the gap between the Kaiparowits and Escalante Canyons Units becoming commercialized.

Excluded Lands

Commenters noted that many extraordinary places were excluded from the Monument boundaries, including significant parts of the Kaiparowits Plateau, Paria Canyon, Circle Cliffs, the Lampstand village site, six forks of Egypt slot canyons, Spooky Gulch, Peekaboo Gulch, Brimstone Gulch, Batty Pass Caves, Chimney Rock, Headless Hen Slot, Raven Slot, Big Tony Slot, Upper Hurricane Wash, Forty Mile Ridge Road, Sunrise Arch, Sunset Arch, Sooner Rocks, Cave Point, 50-Mile Spring, Early Weed Bench, Cedar Wash Arch, Covered Wagon Natural Bridge, Left Hand Collet Top Road, Wahweap Hoodoos, the western section of The Blues, a significant portion of Carcass Canyon WSA, the Burning Hills, Nipple Bench, Hole-in-the-Rock Road corridor, Skutumpah Road, Cottonwood Road, Paria River Corridor, and Cretaceous coal-bearing rocks north of U.S. Highway 89 and the GCNRA. It was suggested that these places be analyzed and managed to ensure conservation of their unique geologic, cultural, and ecological values. Commenters also requested that the BLM analyze the potential cumulative impacts of potential future development on excluded lands, including analyzing the potential for these lands to be leased or transferred to State, local, or private ownership.

Vegetation

Commenters requested that no vegetation treatments to increase forage for game species or livestock be conducted on the excluded lands.

Cultural Resources

Commenters recommended that excluded lands be protected to celebrate the historical and cultural heritage of the region. Commenters noted that the excluded lands east of the Escalante Canyons Unit, including the Circle Cliffs area, have many cultural resources that need protection. Commenters noted that many archaeological sites were excluded from the Monument, such as the Lampstand village site, sites near Left Hand Collet Top Road, Boulder Ruins, sites at Cave Point, sites at 50-Mile Spring, and Double Stack Ruins.

Commenters noted that the Hole-in-the-Rock Trail needs to be addressed in the excluded lands RMP. Commenters recommended that the BLM follow the direction of the 1999 GSENM Management Plan to keep that trail and its landscape something similar to what was experienced in 1878 and 1879. It was noted that most of the original Hole-in-the-Rock Trail is visible today, and portions are listed on the National Register of Historic Places.

Commenters identified the following unique specific geological, archaeological, and paleontological features found within the excluded lands requiring protections (or re-inclusion in the Monument boundaries):

- **Hole-in-the-Rock corridor**
 - Cedar Wash Arch
 - Covered Wagon Natural Bridge
 - Ten-Mile Spring and Harris Wash
 - The approaches to Zebra and Tunnel slot canyons
 - Dry Fork Slot Canyons (Peekaboo and Spooky) and Egypt
 - Early Weed Bench and Scorpion
 - Batty Caves
 - Sooner Rocks
 - Chimney Rocks
 - Hurricane Wash
 - Sooner Slide
 - Cave Springs
 - Fifty Mile Bench
- **Circle Cliffs area**
 - Lampstand and surrounding area
 - Unrecognized petrified wood areas
 - Wolverine Loop Road
 - Cutoff Road
 - Studhorse Peaks
 - Wagonbox Mesa
 - Pioneer Mesa
 - Colt Mesa
 - Horse Pasture
 - Upper Moody's
 - Deer Point
- **Alvey Wash Road**
 - Petroglyph sites
 - Historic coal mines
- **Cottonwood Road**
 - Approach to Round Valley Draw and Hackberry Creek
 - Slickrock Bench
- **Skutumpah Road**
 - Coal seams and collapse features
 - Kelly Grade Overlook
- **Other**
 - Cockscomb Wash including Rimrocks and Toadstools
 - Wahweap Hoodoos
 - Willis Creek and Bull Valley Trailheads
 - Forty Mile Ridge including Sunset and Sunrise Arches
 - Upper Buckskin Gulch and Upper Paria near U.S. Highway 89
 - Western section of the Blues
 - Excluded sections of Carcass Canyon
 - Croton Canyon, Little Valley and Rock Creek south of 50-Mile Mountain
 - Burning Hills
 - John Henry Bench and Smoky Hollow
 - Nipple Bench
 - Excluded lands between Circle Cliffs and Capitol Reef National Park

Geology and Paleontology

Commenters noted that the excluded lands contain more than 700 scientifically important fossil localities. It was noted that the excluded lands contain geologically older sections of the world's most completely preserved Cretaceous ecosystem, including the Straight Cliffs, Tropic Shale, Naturita, and Cedar Mountain Formations. The Tropic, Naturita, and Cedar Mountain Formations contain a vast record of marine prehistoric life, including unique ammonites, mosasaur, and short-necked plesiosaur. It was suggested that these three formations should be re-evaluated by marine fossil paleontologists to determine if they need the more extensive protection of being within the appropriate units of the modified Monument boundary. Until that happens, it was suggested that paleontological resources be recognized as the dominant resource needing protection within the excluded lands containing these three formations when projects are identified that might impact paleontological resources.

Commenters noted that the Tropic, Naturita, and Cedar Mountain Formations occurred before or after the Cenomanian-Turonian extinction and additional protection is needed for any paleontological resources from immediately before or after one of the major extinctions that have occurred on this planet. It was requested that this additional protection be guaranteed in the RMP for excluded lands.

Commenters noted that significant scientific formations from the Triassic and Permian periods have been removed from the Monument. These includes the Chinle and Moenkopi Formations from Triassic and the Kaibab and Toroweap Formations from Permian. These formations contain the paleontological record leading up to the Permian-Triassic extinction and the formations that show the recovery of species following the extinction of 95% of this planet's species. It was requested that the RMP for the excluded lands containing these formations exposed or immediately below the surface needs to state that the paleontological resources are the dominant resource that takes precedent to avoid impact over any of the other resource uses planned for these lands.

Commenters noted that the Chinle Formation, with its record of post-extinction of vertebrate and vegetation life, is particularly important and thus merits additional protection by designation of paleontological resources as the dominant resource in the Chinle Formation. It was requested that the RMP for the excluded lands call for a re-evaluation of the Chinle, Moenkopi, Kaibab, and Toroweap Formations by Permian and Triassic specialized paleontologists to recommend whether lands containing these formations should be placed back within the Monument boundary.

Commenters identified unique specific geological, archaeological, and paleontological features found within the excluded lands requiring protections (or re-inclusion in the Monument boundaries) (see a list of features in the Cultural Resources section of this appendix.).

Visual Resources

Commenters noted that the excluded lands are valuable for their scenery and remoteness.

Recreation and Visitor Services

Comments requested that the BLM manage the lands excluded from the Monument for multiple use and sustained yield with recreation being a priority, especially motorized recreation.

Trails and Travel Management

Commenters requested that the BLM put limits on motorized vehicle use in the excluded lands to protect sensitive resources, such as fragile soils, canyon bottoms, hanging gardens, paleontological resources, geological formations, springs and seeps, wildlife, riparian areas, wilderness values, and vegetation. Commenters also requested restrictions on road construction and improvements.

Suggestions included the following:

- The BLM should allow limited motorized vehicle use on roads that are open to such use by the 1999 GSENM Management Plan and the approved Monument Transportation System 1999 (pending the outcome of the lawsuits filed against Proclamation 9682 or resolution of RS2477 claims and development of a new Monument Transportation Plan).
- The BLM should allow authorized motorized vehicles on administrative roads but only for the specific use(s) and distance allowed as authorized in the written justification for that administrative road. The use of “ranch roads” permitted by verbal agreements should either be discontinued or the “ranch road” should receive an official administrative road designation.
- The BLM should enforce illegal ORV use on closed roads and elsewhere.
- The BLM should comply with the NEPA process for re-construction of authorized roads.

Commenters requested that Hole-in-the-Rock Road and any other unpaved roads on the excluded lands remain unpaved.

Lands and Realty

Commenters requested that the excluded lands not be sold for private development or resource extraction. It was also requested that excluded lands remain under Federal control and not be put under the control of local counties. Property owners with private property near the original Monument boundaries expressed concern about the potential for development on now excluded lands near their property. Commenters also requested that excluded lands should be given back to the communities, so they can construct houses.

Minerals Management

Commenters noted that the BLM must manage minerals development on the excluded lands consistent with applicable Federal laws and regulations, such as FLPMA, NEPA, and the NHPA. Commenters also requested that the BLM not apply overly broad, blanket restrictions that preclude the ability to tailor individual minerals development project NEPA plans on the excluded lands, because sensitive resources on these lands are still protected by applicable laws and regulations.

Commenters recommended that the excluded lands not be opened to oil and gas drilling, coal mining, or mineral exploration. Commenters expressed opposition to mining in the excluded lands because it would negatively impact nearby National Parks, such as Bryce Canyon and Capitol Reef. It was also requested that mineral resources development be prohibited in the excluded lands around Hole-in-the-Rock Road because the road is highly trafficked by Planning Area visitors.

Commenters requested that the BLM’s EIS discuss the potential for coal resources to be explored or developed and anticipated market conditions (e.g., likelihood of development) during the 15- to 20-year planning horizon of the RMP. The analysis should also consider if the various coal resources have special factors that could increase environmental effects such as open pit mining,

high methane coal, or higher-than-typical impacts from transporting the coal to rail or end-users. If BLM lands outside the GSENM boundaries are made available for coal leasing, then this increase in available acreage would have associated resource impacts at the development stage, including potential air and water resources impacts associated with developing or expanding a mine in areas with limited previous commercial coal mining.

Commenters expressed support and opposition for coal mining in lands excluded from the National Monument. Some commenters requested that coal not be mined from the lands excluded from the Monument boundaries because coal is no longer cost-competitive, and it would threaten a world-famous Cretaceous fossil field. Other commenters expressed support for the extraction of coal in areas surrounding the Monument. It was also requested that the specifics of opening any of the excluded lands to coal leasing be analyzed with a site-specific environmental analysis.

Commenters requested that there be no surface occupancy for oil and gas development on excluded lands. It was also suggested that uranium mining and tar sands development be prohibited on the excluded lands.

Commenters noted that since Proclamation 9682 opened the unprotected parts of the disintegrated GSENM to leasing, the only claims filed have been on gypsum salt deposits in the Carmel Formation, not far from Grosvenor Arch along the Cottonwood Road. It was noted that gypsum is a relatively low-value industrial mineral that is typically used in making wallboard. It was suggested that a cost-benefit analysis of gypsum mining versus decreased tourism revenues would not favor such an extractive industry (particularly when figuring in substantial transportation costs).

Areas of Critical Environmental Concern

Commenters requested that the BLM prioritize the designation of ACECs in the excluded lands. Commenters recommended that ACECs be designated in excluded lands where there is a high potential for paleontological and archeological resources, special geologic features, threatened and endangered species habitat, biological soil crusts, and areas inventoried with high sensitivity and high scenic quality.

Wilderness and Wilderness Study Areas

Commenters requested that all the land excluded from the Monument be designated as special wilderness management areas to protect them from extractive industries. Commenters requested that the BLM designate wilderness areas and research areas in excluded lands.

National Trails

Commenters noted that the Old Spanish National Historic Trail goes through the excluded lands near the Comb and Paria Rivers and may cross into the Kaiparowits and/or Grand Staircase Units. Commenters suggested that this trail needs significant consideration to preserve the historical landscape and the route of Armijo.