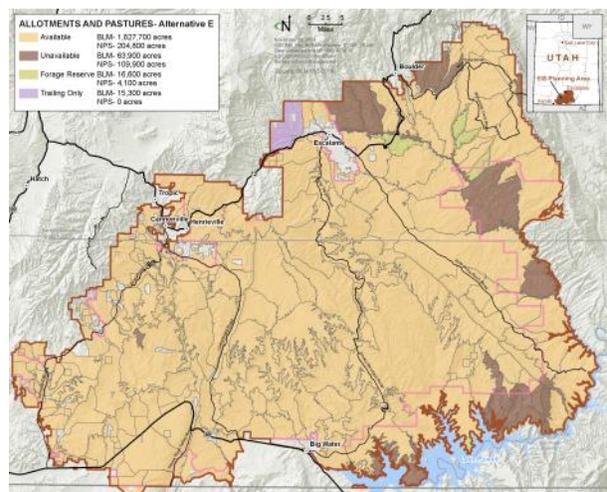
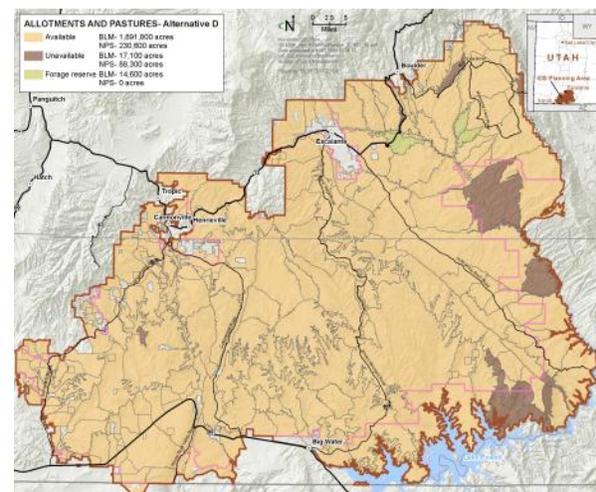
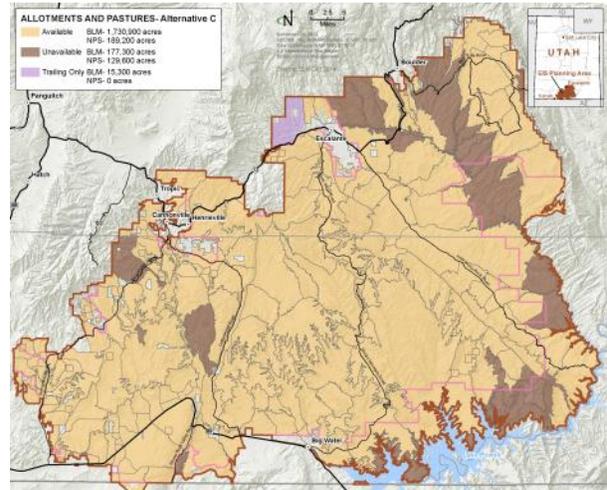
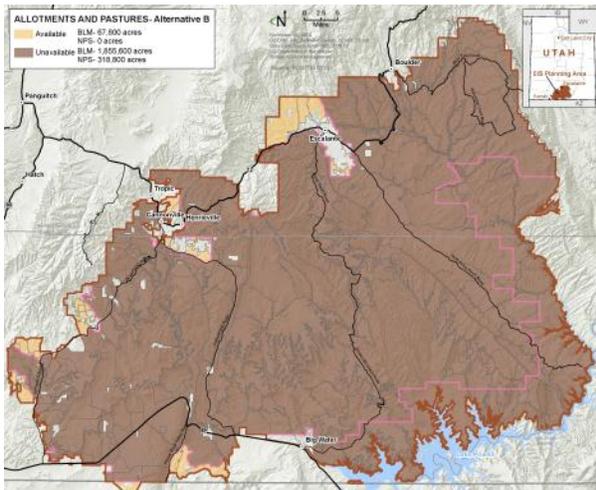
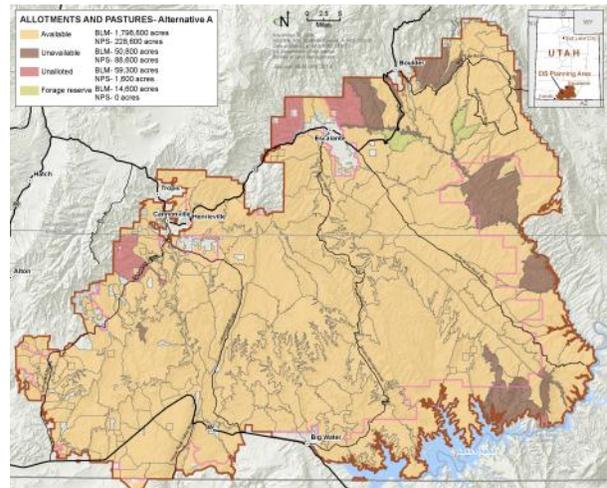


Livestock Grazing Plan Amendment EIS

Detailed Narrative of Preliminary Alternatives



The BLM is an agency in the US Department of the Interior that manages approximately one-quarter billion acres – more than any other Federal agency. This land, known as the National System of Public Lands, is primarily located in 12 Western states, including Alaska. Approximately 27 million acres of BLM administered lands make up the collection of National Conservation Lands, also known as the National Landscape Conservation System. These include BLM

National Monuments, National Conservation Areas, Wilderness Areas, Wilderness Study Areas, and National Scenic and Historic Trails. The mission of the National Conservation Lands is to conserve, protect, and restore these nationally significant landscapes that are recognized for their outstanding cultural, ecological, and scientific values.



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INTRODUCTION

This document contains several parts to describe the preliminary alternatives. First, a comparison table provides a summary of the alternatives. This table provides a brief overview showing some differences between the preliminary alternatives. Second, we have included a section titled Common to All Alternatives. Both BLM and NPS have existing planning decisions that will not be amended, modified, or updated during this plan amendment process. Existing planning decisions are described here to aid the reader in understanding the context of the preliminary alternatives. In addition to these existing decisions identified here, both BLM and NPS must comply with numerous laws (e.g. Federal Land Policy Management Act, NPS Organic Act, Glen Canyon enabling legislation) and regulations (e.g. BLM grazing regulations at 43 CFR Part 4100) during the preparation and implementation of management plans. The requirements related to these laws and regulations are not restated here, but have been consulted during preparation of the preliminary alternatives. Compliance with these laws and regulations is common to all alternatives. The third section of this document contains the goals, objectives, and actions associated with each preliminary alternative. This is the largest section of the document and contains the details of each preliminary alternative. Finally, this document contains a section defining some key terms and the acronyms used herein.

Throughout this document, including the summary comparison table, acres have been rounded to the nearest 100 acres.

SUMMARY COMPARISON OF PRELIMINARY ALTERNATIVES

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
Theme	No Action - Continue current management direction. Livestock grazing continues at current permitted levels. Areas currently closed remain unavailable to grazing.	Discontinue livestock grazing on GSENM and Glen Canyon NRA with 2-year notification. Permittees provided compensation for improvements. Areas in Kanab and Arizona Strip Field Offices remain available for grazing.	Emphasize restoring native species diversity. Livestock grazing managed to ensure little to no impact to resources. Changes in grazing systems (e.g. season of use, intensity, rotation) considered before implementing range improvements. Areas currently unavailable and unallotted remain unavailable. Additional areas identified as unavailable for grazing.	Recognize historic and cultural importance of the livestock industry while emphasizing healthy landscapes to support multiple uses. designed to be consistent with State and County ordinances and plans. Livestock management actively promotes rangeland health through adaptive management principles and innovative livestock practices. Some suspended AUMS and unavailable allotments returned to active use as conditions improve.	Emphasize sustainable use through livestock management designed to ensure rangeland health standards are achieved and land health is improved. Most areas unavailable remain unavailable; two areas would be made available. Some unallotted areas would be made unavailable.
Area (acres) and AUMs Available for Grazing					
Total Available:	2,102,900	67,800	1,935,400 ¹	2,137,000	2,068,500
Available:	2,088,300	67,800	1,920,100	2,122,400	2,032,400
Forage Reserve:	14,600	0	0	14,600	20,700
Trailing Only:	0	0	0	0	15,300
AUMs ² :	106,202 (76,957 active/ 29,245 suspended)	3,125	~40,000 - 45,000	~106,000	~75,000
Area (acres) Unavailable for Grazing					
Total Unavailable:	139,400	2,174,400	306,900 ¹	105,400	173,800
GCNRA unavailable:	88,600 (Harveys Fear, Navajo Bench, Spencer Bench, Escalante River)	318,900	129,600 (Harveys Fear, Navajo Bench, Spencer Bench, Escalante River, Lake, Rock Creek Mudholes, Lower Warm Creek, Fortymile Ridge)	88,300 (Harveys Fear, Navajo Bench, Spencer Bench, Escalante River)	109,900 (Harveys Fear, Navajo Bench, Spencer Bench, Escalante River, Lake, Fortymile Ridge)

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
Grazing Practices					
<i>Nonstructural Range Improvements GSENM (i.e. seedings)</i>	Maintain and/or restore with native and nonnative species consistent with MMP.	Restore with native species consistent with MMP.	Maintain and/or restore with native species.	Maintain and/or restore with native and nonnative species; allow new seedings using native and nonnative plants.	Maintain and/or restore with native and nonnative species.
<i>Nonstructural Range Improvements Glen Canyon</i>	Nonstructural range improvements and land treatments are not appropriate on NRA. Management-ignited fires will only be allowed for special circumstances, such as to control potentially new invasive exotic species.	Same as Alternative A.	Same as Alternative A.	Ecological restoration using native species may be approved by the NPS on a site-specific basis. No mechanical treatments.	Same as Alternative D.
<i>Nonstructural Range Improvements GSENM: Treatments</i>	Follow MMP.	Same as Alternative A.	Passive restoration and non-chemical methods will be the first priority for preventing the introduction, establishment, and/or spread of noxious weeds and/or non-native, invasive species.	Allow a variety of vegetation restoration methods including mechanical, chemical, biological, and prescribed fires.	Allow the appropriate treatment method for the site, including aerial treatment. Not all methods are appropriate for all site types.
	Livestock grazing after native seedings are established will be modified to ensure the survival of the native plants. The livestock exclusion period required to allow establishment of seeded native species and recovery of surviving	N/A	Livestock grazing after native seeding restoration will be modified to ensure the survival of the native plants. Post-treatment, suspend livestock grazing for at least 2 growing seasons or until the majority of native plant species in	Same as Alternative E.	After disturbance, modify livestock grazing practices until seedings are established in order to promote the survival of plants. Generally, areas will be rested from livestock grazing for two growing seasons or until site objectives are met. Site

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
	plants after a wildfire may be more than 2 years. Site evaluation will be required to determine when the native seedings should be grazed again and the effectiveness of the current or new grazing system on the persistence of native plants.		the area have seeded, whichever is longer. Site evaluation will be required to determine when the native seedings should be grazed again and the effectiveness of the current or new grazing system on the persistence of native plants.		evaluation will be required to determine when objectives for the seedings are met and grazing can be resumed.
<i>Structural Range Improvements General (includes, but not limited to, fences, cattle guards, corrals, and cabins)</i>	Authorize structural range improvements outlined in the MFPs within constraints of the MMP.	Evaluate structural range improvements associated with livestock grazing for utility, historical significance, or other purposes and remove unless needed to meet objectives for natural and cultural resources.	Authorize structural range improvements within constraints of the MMP.	Authorize structural range improvements. Maintain structural range improvements so that forage reserves will be ready for use when needed.	Authorize structural range improvements.
<i>Structural Range Improvements Glen Canyon</i>	New line shacks (i.e. cabins) are not appropriate in Glen Canyon.		Same as Alternative A.	New line shacks would be considered within Glen Canyon outside of proposed wilderness areas. Proposals would be evaluated on a case-by-case basis via an appropriate NEPA and NHPA process.	Same as Alternative D.
<i>Structural Range Improvements GSENM Water (includes pipelines, troughs, detention and retention ponds, drainage ditches)</i>	Water developments can be used as a management tool throughout the Monument for the following purposes: better distribution of livestock when deemed to have an overall beneficial effect on		Where water developments are necessary for livestock grazing and protection of Monument values, such developments will be fenced and will protect associated wetland/riparian resources. On/off valves	Authorize water developments for the following purposes: better distribution of livestock when deemed to have an overall beneficial effect on Monument resources, including water sources or riparian areas, or to	Same as Alternative D.

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
	<p>Monument resources, including water sources or riparian areas, or to restore or manage native species or populations. They can be done only when a NEPA analysis determines this tool to be the best means of achieving the above objectives and only when the water development would not dewater streams or springs. Developments will not be permitted to increase overall livestock numbers. Maintenance of existing development can continue, but may require NEPA analysis and must be consistent with objectives of this Plan.</p>		<p>will ensure that water remains in its natural course/site at all times livestock are not present in the allotment/pasture.</p>	<p>restore or manage native species or populations. They can be done only as a means of achieving MMP objectives and only when the water development would not dewater streams or springs. Exceptions would be allowed on a temporary basis such as to fill troughs or storage tanks.</p>	
<p><i>Structural Range Improvements Glen Canyon Water</i></p>	<p>All water developments must consider the needs of wildlife and recreation and will not be constructed, maintained, or utilized in such a way as to preclude the access to that source by wildlife or recreation users. When grazing permits are canceled or</p>	<p>Evaluate structural range improvements associated with livestock grazing for utility, historical significance, or other purposes and remove unless needed to meet objectives for natural and cultural resources.</p>	<p>New water developments would be considered within Glen Canyon outside of the proposed wilderness area. Proposals would be evaluated on a case-by-case basis via an appropriate NEPA and NHPA process.</p>	<p>Same as Alternative C.</p>	<p>Same as Alternative C.</p>

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
	modified for other than public purposes, existing range improvements will be evaluated for abandonment or removal. Removal may be completed by the benefitting party, owner, or agency.				
<i>Season of Use GSENM</i>	Manage season of use to meet land health standards.	N/A	<p>Adaptively manage season of use, duration, and stocking rate (AUMs) of livestock grazing to ensure that Goals and Objectives are met.</p> <p>At a minimum, there will be 6 weeks between the beginning of seasonal use of a particular allotment or pasture one year and when the season of use begins the following year when grazing occurs during growing season. If this is not possible in a particular area, the area will be rested every other year. During winter grazing, use rest rotation and do not graze an area more than 2 out of 3 years.</p>	<p>Adaptively manage season of use, duration, distribution, and stocking rate (AUMs) to meet land health standards.</p> <p>Allow flexibility in permit for season of use (i.e. manage for conditions rather than calendar dates).</p>	Adaptively manage season of use, duration, distribution, and stocking rate (AUMs) to meet land health standards.
<i>Season of Use Glen Canyon</i>	Follow Glen Canyon Grazing Management Plan (1999) – see spring	N/A	Adaptively manage season of use, duration, and stocking rate	Adaptively manage season of use, duration, and stocking rate	Same as Alternative C.

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
	grazing seasons.		(AUMs) of livestock grazing to ensure that NPS Goals and Objectives are met.	(AUMs) to meet Glen Canyon resource objectives as defined by the NPS Grazing Plan. Allow flexibility in permit for season of use (i.e. manage for conditions rather than calendar dates).	
<i>Riders</i>	Riders are an available tool but no specific action is identified.	N/A	Where allotments are not meeting or moving toward objectives, a rider will be present 5 out of every 7 days throughout the season of use.	Same as Alternative A.	Same as Alternative A.
Voluntary Relinquishment	<p>Comply with BLM policy for voluntary relinquishment (currently Instruction Memorandum No. 2013-184). The Authorized Officer may take one or more of the following actions:</p> <ul style="list-style-type: none"> • Issue a grazing permit to a different applicant. • Stock with livestock from another allotment with unmet resource objectives. • Combine with an adjacent allotment that has unmet resource objectives. • Consider use of the allotment as a forage reserve (i.e. continue livestock grazing but do not recognize an individual with preference to the forage). • Amend or revise the land use plan to allocate forage to uses other than livestock grazing. 				
	Follow current policy.	N/A	Preference would be for amending the MMP to allocate forage for a different purpose.	Preference would be for one of the following: <ul style="list-style-type: none"> • Issue a grazing permit to a different applicant. • Stock with livestock from another allotment with unmet resource objectives. • Combine with an adjacent allotment that has unmet resource objectives. 	Follow current policy.
Biological Soil Crust	Prior to any ground	Same as Alternative A.	Biological soil crusts are	Same as Alternative A.	Same as Alternative A.

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
	disturbing activity, the potential effects on biological soil crusts will be considered and steps taken to avoid impacts on their function, health, and distribution. Follow Glen Canyon Grazing Management Plan.		protected from trampling and other physical disturbance within at least 60 percent of their predicted available habitat within GSENM; and 80 percent within Glen Canyon NRA.		
Science	Follow MMP.	Follow MMP; no opportunities to study active grazing. There could be research associated with the effects of not grazing. The unavailable lands could act as reference areas for similar ecological sites.	Use science and research to gain an understanding of the impacts of livestock grazing in the decision area, of the potential for movement of grazed areas toward reference conditions if ungrazed, and to distinguish climate impacts from livestock grazing impacts.	GSENM will serve as a laboratory to research innovative grazing techniques. Use science and research as a means to achieve land health standards.	GSENM will serve as a laboratory to research innovative grazing techniques and a diversity of grazing practices. Use science and research as a means to achieve land health standards.
			Emphasize the use of large ungrazed reference areas to provide reference states.	Allow experimental use of electric fences, other fence design, season of use, supplement/salt placement, water developments, and/or vegetation treatments including prescribed fire.	Encourage innovation and experimentation. Allow experimentation of grazing techniques and grazing practices on all lands available for livestock grazing.
			Monitor ungrazed reference areas to see how they act under the management conditions of the decision area absent livestock grazing.	If ungrazed reference areas are established, do not exceed 0.5 percent in any allotment or 0.5 percent within GSENM. Allotments or	Use ungrazed reference areas to help distinguish climate impacts from livestock grazing impacts.

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
			Monitor reference areas established under to see how they move towards a reference state.	pastures identified as unavailable for livestock grazing do not count toward the 0.5 percent cap within GSENM.	
GSENM Objects and Values	Manage livestock grazing in a manner that protects the objects and values of the Proclamation. Follow MMP and BLM policy.	Eliminate impacts from grazing.	Manage livestock grazing in a manner that protects the objects and values. Reduce impacts from grazing through reduced grazing.	Same as Alternative A.	Same as Alternative A.
			When voluntarily relinquished or otherwise retired, allotments or pastures with Monument objects that are not compatible with or are impacted by livestock grazing (e.g., biological soil crust, riparian areas, declining native plant or wildlife species) may be put into non-use.		
Glen Canyon NRA Values and Purposes	Manage livestock grazing in a manner that protects the values and purposes of Glen Canyon; including soil, vegetation, wildlife, special status species, cultural resources, water, paleontology, recreation, and scenic resources.	Eliminate impacts from grazing.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.
Paleontology	Follow MMP and Glen Canyon Grazing	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
	Management Plan.				
Scenic resources	Follow MMP and Glen Canyon Grazing Management Plan.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.
Cultural resources	Follow MMP and Glen Canyon Grazing Management Plan.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.
Recreation GSENM	Follow MMP. No change to level of conflicts.	Livestock grazing would be discontinued in GSENM.	Follow MMP. Reduce some conflicts through reduced grazing and allocating areas near the Gulch, Buckskin Gulch, and Paria-Hackberry as unavailable for livestock grazing.	Allow fencing, hiker mazes, or other methods to reduce conflicts. Fence day use areas if needed. Give preference to livestock in Outback and Primitive Zones; give preference to recreation in Frontcountry and Passage Zones.	Follow MMP. Reduce some conflicts through changes in season of use at the Gulch and Buckskin Gulch. Allow fencing, hiker mazes, or other methods to reduce conflicts. Fence campgrounds, day use areas, picnic areas if needed to reduce conflicts.
	Installation of signs is allowed as needed for resource protection or public safety.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.
Recreation Glen Canyon NRA	Protect recreation resources and the visitor experience (enjoyment and use) by reducing or mitigating recreation/livestock conflicts.	Livestock grazing would be discontinued on 318,900 acres of Glen Canyon NRA.	Same as Alternative A. Reduce conflicts by finishing fencing of Escalante River side canyons and excluding livestock from Lower Warm Creek.	Same as Alternative A. Reduce conflicts by finishing fencing of Escalante River side canyons. Allow fencing, hiker mazes, or other methods to reduce livestock/recreation conflicts.	Same as Alternative D.

¹Alternative C includes an objective to establish a variety of ungrazed reference areas across 20 percent of the decision area; over time the acres unavailable will increase to an estimated 451,300 acres while available acres would be reduced to an estimated 1,805,300 acres.

²AUM estimates may vary from these figures.

COMMON TO ALL ALTERNATIVES

The existing MMP includes information relevant to livestock grazing that would not be modified or changed by any alternative. The following section highlights some of that information.

SCIENCE

The geology, soils, and erosional characteristics in the Monument and the resulting plant communities provide opportunities to test, validate, and develop management methods, criteria, or techniques which will lead to improved grazing practices. Similarly, the Monument may present opportunities for testing new partnership arrangements with grazing permittees and interested publics that will lead to improved grazing practices. It will be the policy of the Monument to encourage the use of the special characteristics of the Monument to facilitate such testing or research using scientific methods where appropriate (MMP, pp. 42-43).

Researchers will have to comply with the decisions in this Plan [the MMP]. 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 will 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 will also be considered for exceptions to zone prescriptions. The GSENM Advisory Committee will be consulted on whether research proposals which require restricted activities warrant the requested exceptions. Evaluation will consider whether the proposed research can be permitted in a manner consistent with the protection of Monument resources, and whether the methods proposed are the minimum necessary to achieve the desired research objective (SCI-7, pp. 45).

NPS will identify scientifically important areas and work with BLM and permittees to initiate steps necessary to protect them.

NPS and BLM will cooperatively develop a natural and cultural resources monitoring plan that will address levels of effort necessary to meet NPS resource goals and objectives to protect recreation area values and purposes and effectively meet BLM grazing policy, standards, and guidelines. This monitoring plan will identify inventory and monitoring needs for proposed actions as well as long term needs (Glen Canyon GMP, pp. 9-10).

ADAPTIVE MANAGEMENT

The Framework for Monitoring, Evaluation, and Adaptive Management in Chapter 3 of the MMP (pp. 71-72) would continue. Adaptive management, as defined here, is a formal process for continually improving management policies and practices by learning from the outcomes of operational programs and new scientific information. Under adaptive management, plans and activities are treated as working hypothesis rather than final solutions to complex problems.

Both NPS and BLM will evaluate natural and cultural resource conditions and initiate mitigation actions as needed to meet the resource objectives in the [Glen Canyon Grazing Management] Plan. The NPS will identify unacceptable resource conditions and, if degradation is the result of grazing activities, NPS will request that BLM initiate grazing administrative action(s) to mitigate unacceptable impacts to recreation area resources. BLM will ensure that grazing in the

recreation area is in compliance with the respective Utah and Arizona “Standards for Rangeland Health and Guidelines for Grazing Management” (Glen Canyon GMP, p. 10).

For all allotments or portions of allotments within Glen Canyon NRA, the BLM will administer grazing in accordance with applicable laws and regulations subject to the Glen Canyon NRA enabling legislation and grazing management plan to ensure that grazing activities are consistent with Glen Canyon NRA values and purposes.

MMP DECISIONS RELATED TO LIVESTOCK GRAZING

Livestock grazing allotments will be evaluated, and grazing as it relates to all endangered species will be addressed during this process. Evaluations will incorporate the latest research and information in the protection of species. Section 7 consultation will be conducted for all allotments that may affect listed species during the individual allotments evaluations. This process will provide protection for listed and sensitive species as the evaluation will be site specific for each of the allotments (MMP SSA-8, p. 14).

Actions will be taken to improve identified habitat (Kanab Ambersnail *Oxyloma hadeni kanabensis*) as consistent with the recovery plan objectives. Actions may include assuring flows in appropriate streams and seeps by removing non-native plants affecting the water table and reducing impacts from visitors and/or livestock. Surveys will also identify current habitat and habitat that is potential if modifications are made (MMP SSA-24, p. 17).

Fences may be used in certain circumstances to protect Monument resources, to manage visitor use, and to manage livestock, consistent with the Proclamation. They will be designed and constructed in accordance with visual resource management objectives and the Monument Facilities Master Plan (see the Visual Resource Management section for related decisions) (MMP FENCE-1, p. 39).

The BLM will be responsible for administrative routes which will be limited to authorized users. These are existing routes that lead to developments which 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. Routes designated open for certain administrative purposes (approximately 182 miles) are shown on Map 2 [of the MMP]. Access will be strictly limited and will only be granted for legitimate and specific purposes. Maintenance will 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 will 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 (MMP TRAN-15, pp. 47-48).

Beyond the routes shown on Map 2 [of the MMP], the BLM will work with any individual operating within the Monument 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 will not be maintained, but periodic vehicular access to these sites will be granted for required range monitoring uses (MMP TRAN-16, p. 48).

Grazing permits are also in this category [Valid Existing Rights and Other Land Use Authorizations]. Grazing permits or leases convey no right, title, or interest in the land or

resources used. Although the Proclamation specifically mentions livestock grazing, it does not establish it as a “right” or convey it any new status. The proclamation states “grazing shall continue to be governed by applicable laws and regulations other than this proclamation,” and says that the Proclamation is not to affect existing permits for, or levels of, livestock grazing within the Monument, just as in other BLM livestock grazing administration programs (MMP VER-8, p. 54).

Wildlife Services (formerly Animal Damage Control) activities within the Monument will be limited 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 (MMP WS-1, p. 56).

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 (MMP FAC-8, p. 37).

The condition of routes and distance from communities in the Passage Zone makes it a secondary zone for visitation. Similar facilities as allowed in the Frontcountry Zone could be provided for resource protection, visitor safety, or for the interpretation of Monument resources. Information kiosks approximately the size of two 3 foot by 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 (MMP FAC-11, p. 38).

Small signs to educate the public about a particular resource or safety hazard may be installed at limited sites [in the Outback Zone], but these sites will not be promoted in literature (MMP FAC-16, p. 39).

Limited signs could be allowed for resource protection or public safety [in the Primitive Zone]. Small directional signs may be needed, but these will be kept to an absolute minimum and will be rare (MMP FAC-19, p. 39).

New range developments within BLM Wilderness Study Areas may be approved only in limited circumstances such as if they meet the non-impairment standard or if they protect or enhance wilderness characteristics. New range developments would not be approved if they require motorized access (see BLM Manual 6330).

Within Glen Canyon NRA, all actions within proposed wilderness would be considered in accordance with NPS Management Policies. Generally, new developments are prohibited unless necessary to meet the minimum requirements for administering the area for the purpose of wilderness.

GLEN CANYON NRA GRAZING MANAGEMENT PLAN

The existing Glen Canyon Grazing Management Plan (Glen Canyon GMP), including goals, objectives, and actions described below, would apply to all alternatives in Glen Canyon NRA. Several goals, objectives, and actions would be updated and are noted in the individual alternative narratives for Alternatives C, D, and E.

The goals and objectives in the Glen Canyon GMP will be used to make values and purposes determinations regarding proposed actions that are ground disturbing, such as range improvements. Actions and monitoring requirements found in Appendix D of the Glen Canyon GMP will be applied where applicable.

The BLM will use resource goals and objectives in determining annual use levels to adjust the season of use or the number of animals as applicable.

The NPS will provide information regarding resource goals and objectives to the BLM to be incorporated into BLM planning documents such as Allotment Management Plans and annual authorizations.

Under ordinary circumstances, when a permit transfer is proposed, the Glen Canyon NRA Superintendent will respond with a Values and Purposes determination within 45 days. The NPS will evaluate all transfers. When a permit is transferred, the Superintendent may request that the BLM take action to incorporate changes necessary to meet resource goals and objectives into the permit. Such requests will be forwarded to the BLM as part of the Values and Purposes determination and identified as required mitigation for NPS approval of the proposed action or permit transfer.

Unless there is unacceptable resource damage or no allotment management plan exists, transfers of allotment permits in the Maintenance Category should not require extensive administrative changes.

Transfer of a permit for allotments in the Improvement Category will be approved only after the NPS has exercised the opportunity to amend the "terms" of the permit. The amendments will reflect the potential changes to management of a given allotment based upon monitoring data, standards and guidelines (BLM), goals and objectives (NPS), or an allotment evaluation. The purpose of the amendments will be to move the allotment from an improvement to maintenance category.

Transfers of permits for allotments in the Custodial Category will be addressed on a case-by-case basis.

Vegetation

Glen Canyon NRA Vegetation Objective I

Maintain in upland (dry site) plant communities, as natural a community as possible, including the full range of native species, a viable seedbank, and minimal presence of increasing undesirable species (BLM/NPS) (Glen Canyon GMP, p. 12).

Glen Canyon NRA Vegetation Actions

The following items are actions that may be taken to attain the desirable targets and accomplish Objective I (Glen Canyon GMP, pp. 13-15).

6. Establish trend plots in key areas to determine successional trend and ecological status.

7. Establish grazing exclosures in key areas through consultation with the BLM to determine long term effects and recovery from livestock grazing, as well as how climate affects species growth and abundance.

Glen Canyon NRA Vegetation Objective 2

To protect healthy populations of special status species, including federally listed threatened and endangered species, federal candidate C1 and former C2 species, and state heritage ranked rare and sensitive species (NPS/USFWS) (Glen Canyon GMP, p. 15).

Glen Canyon NRA Vegetation Actions

1. Determine population biology and ecology of species to assess if grazing causes significant impacts to populations.
3. If impacts are discovered and the species or populations require protection, determine the best method, including but not limited to fencing, changes in grazing seasons or pasture rotations, or removal of grazing.

Glen Canyon NRA Vegetation Objective 3

Manage and protect scientifically important areas and hanging gardens to prevent grazing induced changes (NPS) (Glen Canyon GMP, p. 12).

Glen Canyon NRA Vegetation Actions

Sensitive plant communities of importance for scientific research will not be subject to livestock grazing impacts (Glen Canyon GMP, p. 16).

1. Prioritize areas according to immediacy of threats, and importance of resource to Glen Canyon NRA.
2. Determine if RNA, PNA or ERA designation, and/or fencing is most appropriate to protect the site.

Glen Canyon NRA Vegetation Objective 4

Protect wetlands, riparian zones, and spring and seep vegetation (NPS/BLM) (Glen Canyon GMP, p. 16).

Glen Canyon NRA Vegetation Actions

For key riparian reaches in high priority or non-M[aintenance] allotments, maintain populations of all native species and specific conditions detailed below (Glen Canyon GMP, pp. 16-17).

1. Streambank alteration (e.g. bank collapse, loss of vegetation) shall not exceed 25% for streambanks in key areas.

2. Browse (of previous years growth) and forage utilization (of current years growth) shall not exceed 30% in key areas.
3. Reduce abundance of undesirable species to low levels (<5%) in areas where present (show declines through monitoring), and prevent establishment of undesirable species in areas where they are currently not present (see Table 9, Appendix C in Glen Canyon GMP).
4. Establish monitoring transects for vegetation status and trend determination in areas currently not meeting desirable conditions.
5. Adjust stocking rates, rest periods, reduce length of season, change season of use, or remove livestock until desirable conditions are met.

Glen Canyon NRA Vegetation Objective 5

Determine the current status and trend of the grazed rangelands in Glen Canyon NRA (NPS/BLM) (Glen Canyon GMP, p. 17).

Glen Canyon NRA Vegetation Actions

Baseline data are not available for all grazed portions of Glen Canyon NRA. This objective is designed to provide data essential for proper management of grazing activities and proper use of annual forage production. The results of this work may indicate changes are necessary in potential natural community composition (Glen Canyon GMP, p. 17).

Complete classification and inventory of the ecological status and successional trend of the upland vegetation in Glen Canyon NRA using the methods and steps outlined below.

1. Compile and analyze existing data.
2. Inventory the current status of the upland arid and semi-arid vegetation, including species richness, diversity, structure, and successional status.
3. Establish permanent monitoring transects to determine future trends.
4. Establish permanent photographic points in association with permanent transects.
5. Revise the current vegetation classification for the recreation area, incorporating new data.
6. Establish baseline community classification criteria to direct management of grazing.

Soils

The evolutionary and ecological processes of the soil (abiotic) ecosystem, which includes surface cover, microbial populations, soil nutrient cycling and physical/chemical transformations, are critical to the protection of scientific processes and scenic values within Glen Canyon NRA.

Glen Canyon NRA Soils Objective 2

Enhance soil productivity and surface cover by promoting deposition of sufficient cover and litter to protect the soil from excessive water and wind erosion, and to promote infiltration (NPS) (Glen Canyon GMP, p. 18).

Water Quality

Glen Canyon NRA Water Quality Goal

Maintain water quality in all natural bodies of water and sources of water (does not include stock ponds or reservoirs) and maintain natural flows to preserve water dependent resources. At a minimum, water quality standards will meet the Utah State water requirements of 303(d) and 317(e) as defined in the standards and guidelines (Appendix B) (Glen Canyon GMP, p. 18).

Glen Canyon NRA Water Quality Objective 1

In all natural surface waters accessible for public use, water quantity and quality including physical/chemical parameters of flow, temperature, conductivity, pH, turbidity, salinity, dissolved oxygen, suspended and dissolved solids, and nutrients will not be degraded (NPS) (Glen Canyon GMP, p. 18).

Glen Canyon NRA Water Quality Objective 2

Bacteriological levels for fecal coliform in natural surface waters will not exceed standards for recreational use (NPS) (Glen Canyon GMP, p. 19).

Glen Canyon NRA Water Quality Objective 3

Preserve naturally occurring aquatic species diversity, composition and abundance (NPS) (Glen Canyon GMP, p. 19).

Glen Canyon NRA Water Quality Objective 4

Maintain integrity of stream morphology, instream flows, riparian zone, and springs' natural emergence (NPS/BLM) (Glen Canyon GMP, p. 19).

Glen Canyon NRA Water Quality Objective 6

Ensure access to water sources for wildlife and recreational uses (Glen Canyon GMP, p. 19).

Wildlife

The terrestrial and aquatic wildlife resources of Glen Canyon NRA are an integral part of the desert ecosystem to be experienced and enjoyed by visitors to the recreation area. These wildlife resources, which the NPS is charged to protect and preserve for the enjoyment of future generations, have intrinsic and scientific value (Glen Canyon GMP, p. 19).

Glen Canyon NRA Wildlife Goal

Maintain components and processes of natural ecosystems, including the natural abundance, diversity and ecological integrity of the wildlife and fish (Glen Canyon GMP, p. 19).

Glen Canyon NRA Wildlife Objective 1

Protect federally listed and other special status species and their critical or required habitat (NPS/USFWS) (Glen Canyon GMP, p. 19)

Glen Canyon NRA Wildlife Objective 2

Maintain the natural abundance and diversity of bird species (NPS) (Glen Canyon GMP, p. 19).

Glen Canyon NRA Wildlife Objective 3

Maintain or establish populations of wild mammals where suitable habitat exists (NPS) (Glen Canyon GMP, p. 19).

Glen Canyon NRA Wildlife Objective 4

Maintain the natural abundance and diversity of herpetofauna (NPS) (Glen Canyon GMP, p. 19).

Desirable Conditions for Glen Canyon NRA Wildlife Actions for Objectives 1 - 5

Wildlife species will not be subject to grazing if studies show that significant impacts occur.

1. Consult with the US Fish and Wildlife Service on federally listed and candidate species.
2. Determine through research and monitoring studies the status of those wildlife species of concern in grazed allotments and pastures.
3. If impacts to wildlife populations are found, determine the best way to maintain healthy populations, including but not limited to fencing, changes in grazing season or rotation, adjustments in AUMs, or changes in vegetation utilization or other vegetation action items.

Glen Canyon NRA Wildlife Objective 6

Minimize the competition between livestock and wildlife. Consider livestock interactions and disease transmission (NPS/BLM) (Glen Canyon GMP, p. 20).

Glen Canyon NRA Wildlife Objective 7

General predator control activities will not be permitted. Based on documented predator activity that identifies an individual animal, or limited number of individual animals, a specific control action may be authorized by the NPS (NPS) (Glen Canyon GMP, p. 20).

Glen Canyon NRA Wildlife Objective 8

Feral or trespass animals will be removed (BLM/NPS) (Glen Canyon GMP, p. 20).

Cultural Resources

Cultural resource properties are irreplaceable and non-renewable resources with scientific, cultural, educational, and interpretive value (Glen Canyon GMP, p. 20).

Glen Canyon Cultural Resources Goal

Protect and preserve the scientific value, and foster appreciation for, the cultural resources and their settings within Glen Canyon NRA. This protection and preservation extends to both prehistoric and historic cultural resources as well as Traditional Cultural Properties (Glen Canyon GMP, p. 22).

Glen Canyon NRA Cultural Resources Objective 1

Protect cultural resources within the Primary and Secondary Area of Impact (AOI) (Glen Canyon GMP, p. 22).

A cultural resources inventory of the Primary Area of Impact (AOI) will be conducted on high priority projects and ground disturbing activities. The Primary AOI is the area directly affected by a proposed activity, and includes an additional buffer area to account for possible resource damage experienced during implementation of the proposed activity. If the proposed activity in the Primary AOI is a water development project, a Secondary AOI will also be inventoried. This Secondary AOI includes a minimum of up to a 2 mile radius around the water development site, which is the average daily range of livestock from their water source in cool weather.

The inventory will include both a Class I literature search for previously identified cultural resources, and a Class III intensive survey of the impact areas. Transects, 15 to 20 meters wide, will be walked until the entire Primary, and if necessary, the Secondary AOI has been inspected. Located sites will be plotted on appropriate 7.5 minute topographic quads and recorded using a global positioning system to ensure accurate georeferencing.

Glen Canyon NRA Cultural Resources Objective 3

All open surface sites identified within the Primary and Secondary AOI will be protected from damage or loss due to livestock grazing activities (NPS) (Glen Canyon GMP, p. 22).

All open surface sites identified within the Primary and Secondary AOI will be documented using the appropriate IMACS forms. Site condition evaluation, photo documentation, field and feature sketches, site mapping, artifact collections, and topographic plotting will be performed as appropriate. Open surface sites may be fenced or other action taken to prevent access to livestock. Prior to beginning any fencing activity, a Section 106 compliance will be required.

Glen Canyon NRA Cultural Resources Objective 4

All historic sites identified within the primary and secondary areas of impact will be protected from damage or loss due to livestock grazing activities (NPS) (Glen Canyon GMP, p. 22).

All historic sites identified within the Primary and Secondary AOI will be documented using the appropriate IMACS forms. Site condition evaluation, photo documentation, field and feature sketches, site mapping, artifact collections, and topographic plotting will be performed as appropriate. Historic sites may be fenced or other action taken to prevent access to livestock. Prior to beginning any fencing activity, a Section 106 compliance will be required.

Glen Canyon NRA Cultural Resources Objective 6

Mitigate potential impacts to cultural resources not protected in situ. This mitigation includes the curation of artifacts and other materials collected during mitigation efforts (NPS) (Glen Canyon GMP, p. 23).

Glen Canyon NRA Cultural Resources Objective 7

American Indian traditional, cultural, or ceremonial sites will be identified and protected (NPS) (Glen Canyon GMP, p. 23).

No ground disturbing activities will be authorized until a determination has been made that no traditional cultural properties (TCP) will be affected. If potential impacts to a TCP occur, formal consultation with Native American Tribes will be done.

Paleontological and Quaternary Resources

Dinosaur trackways found in the Morrison formation, shark teeth in the Mancos shale, and Quaternary Period resources including packrat middens and preserved faunal and floral remains are irreplaceable scientific resources (Glen Canyon GMP, p. 24).

Glen Canyon NRA Paleontological and Quaternary Goal

Preserve paleontological and quaternary resources in-situ or insure full data recovery and curation of recovered specimens (Glen Canyon GMP, p. 24).

Glen Canyon NRA Paleontological and Quaternary Objective 1

A literature search and first order survey to locate and record paleontological and quaternary resources will be completed prior to ground disturbing activities (Glen Canyon GMP, p. 24).

Scenic Resources

Glen Canyon NRA contains magnificent scenic vistas. Deep canyons, sheer cliffs, distant mountain ranges, colorful soils and vegetation, and a unique collection of mesas, buttes, and spires all form a mosaic of visual enchantment for the visitor specifically identified for protection in the enabling legislation (Glen Canyon GMP, p. 24).

Glen Canyon NRA Scenic Goal

Maintain scenic resources (Glen Canyon GMP, p. 26).

Glen Canyon NRA Scenic Objective 1

No long-term loss of scenic resources (NPS) (Glen Canyon GMP, p. 26).

Potential impacts to scenic views will be evaluated based on the seven elements [see GMP, p. 25]. Required mitigation such as location of improvements so that they do not affect the scene may be utilized. Determine “Visual Absorption Capability” and “Visual Vulnerability” of the affected scenic resources and do not permit impacts that diminish visual quality to include a determination of the area’s ability to recover from the impact. (Desert landscapes are fragile and susceptible to long-term degradation from short-term activities.)

Glen Canyon NRA Scenic Objective 2

Identify and protect cultural landscapes (NPS) (Glen Canyon GMP, p. 26).

Glen Canyon NRA Scenic Objective 3

Protect critical scenic resources in areas of heavy recreation use such as access road corridors, trailheads, major backcountry vehicle routes, boat accessible beach camping locations and developed scenic overlook viewsheds. In these critical scenic resource areas effects of grazing will be minimized so that vegetative components of the scene will be maintained (NPS) (Glen Canyon GMP, p. 26).

Recreational Resources

Glen Canyon NRA was established "...in order to provide for public outdoor recreation use and enjoyment of Lake Powell and lands adjacent thereto in the States of Arizona and Utah." Millions of visitors use the recreation area each year. There are millions of recreation overnights on the shores of Lake Powell and in the backcountry (Glen Canyon GMP, p. 26).

Glen Canyon NRA Recreational Goal

Protect recreation resources and the visitor experience (enjoyment and use) by reducing or mitigating recreation/livestock conflicts (Glen Canyon GMP, p. 27).

Glen Canyon NRA Recreational Objective I

Prevent or reduce livestock/recreation conflicts so that recreational use and enjoyment of the recreation area is not impaired (Glen Canyon GMP, p. 27.)

NPS MANAGEMENT POLICIES (2006)

Use only native species in Glen Canyon (NPS Management Policies 2006: 4.4.4). Utilize native seeds or seedlings of local genetic stock whenever possible.

In Glen Canyon, non-native species will not be used for restoration purposes (NPS Management Policies 2006: 4.4.4.1).

Management-ignited fires will generally not be allowed in the park except for special circumstances, such as to control potentially new invasive exotic species. Fire management will follow all applicable NPS laws and regulations (NPS Management Policies 2006: 4.5).

ALTERNATIVE A

Alternative A is the No Action alternative and is a continuation of the current management direction contained in the 2000 Monument Management Plan, the four BLM Management Framework Plans (MFPs), and the 1999 Grazing Management Plan for the Glen Canyon NRA. Existing policy and guidance such as regulations (specifically 43 CFR 4100 Grazing), BLM Manuals, and NPS Director's Orders will also be followed.

Livestock grazing would continue at the existing permitted levels. Areas that are currently closed to livestock grazing would continue to remain unavailable to livestock grazing. Areas that are currently unallotted (available for grazing but no current grazing use) would remain available for livestock grazing.

LIVESTOCK GRAZING

Land use plan level decisions for Livestock Grazing beginning on page 40 of the MMP would be retained. For allotments within the planning area, the allocation decisions made in the Escalante, Paria, Vermillion, and Zion MFPs would be retained. Grazing on the Glen Canyon NRA portion of the planning area would continue to be governed by its 1999 GMP.

Land use plan decisions from the six existing land use plans mentioned above have been reorganized to follow the general format in the BLM Land Use Planning Handbook (H-1601-1). Not all existing land use plan decisions readily fit into the goals, objectives, allowable uses, and management action categories described in the handbook. The interdisciplinary team used some judgment to place existing decisions into the four categories. Where there are any discrepancies, the original plan-level document should be used.

Goal

Grazing will ultimately be addressed after the completion of assessments for each grazing allotment and the preparation of new allotment management plans (MMP, p. 4).

Goal

Grazing uses within the Monument shall be managed, in keeping with applicable laws and regulations, and with the statewide Standards and Guidelines (MMP, p. 40).

Objective

Local plans and decisions may be more detailed than the Utah Standards and Guidelines, but must be in conformance with the Standards and be consistent with the Guidelines (MMP, p. 40).

Objective

Improve the condition on suitable and potentially suitable Federal range that is now in poor condition and achieve an upward trend on range that is in a static or downward trend (Escalante MFP RM-2, similar RM-2 in other MFPs).

Objective

During the interim period until intensive livestock management is achieved, maintain existing production of desirable livestock forage consistent with meeting plant and soil requirements. This includes regulating livestock numbers, season of use, and allowing AUMs for grazing on

allotments to the extent of the existing carrying capacity of suitable range (Escalante MFP RM-I, Similar in other MFPs).

Allowable Use

Allocate 2,102,900 acres as available to livestock grazing (see Alternative A map). Continue to authorize 76,957 AUMS of active livestock grazing use. Total permitted use would remain at 106,202 AUMs with 29,245 AUMS of suspended use.

These totals include 318,900 acres distributed among 18 allotments that are wholly or partially in Glen Canyon NRA. Of these acres, 194,000 have been determined to be suitable for livestock grazing.

Allowable Use

Allocate 139,400 acres as unavailable for livestock grazing.

This total includes 88,600 acres in Glen Canyon NRA that are unavailable to livestock grazing. These acres are within the Escalante River, Harvey's Fear, Navajo Bench, and Spencer Bench allotments.

Action

Manage the following areas as unavailable for livestock grazing:

- Big Bowns Bench (Escalante River portion)
- Deer Creek (Cottonwood and River pastures)
- Dry Hollow
- Escalante River
- Flag Point
- Harvey's Fear
- Long Neck
- McGath Point
- Muley Twist
- Navajo Bench
- Phipps (River pastures)
- Rattlesnake Bench
- Rock Creek-Mudholes (Dry Rock Creek and Middle Rock Creek pastures)
- Saltwater Creek
- Spencer Bench
- Steep Creek
- Willow Gulch (Lower Calf Creek Falls pasture)

Action

The following 3-step process will be followed so that grazing management conforms with the grazing regulations and Utah's Standards and Guidelines. In this process, each grazing allotment will be assessed, and new allotment management plans will be developed, consistent with the BLM-wide grazing permit renewal process and the Glen Canyon GMP, where applicable. (MMP pp. 40-41; this is not a complete restatement of GRAZ-1.)

Step 1: Assessment. All allotments will be assessed in accordance with the guidelines and guidance issued by BLM.

Step 2: Determination of Rangeland Health and Evaluation of Existing Grazing Management: The GSENM shall determine rangeland health for each allotment according to the Utah Standards and Guidelines for Grazing Administration.

Step 3: Develop Allotment Management Plans: The compatibility of grazing with other land uses will be evaluated in allotment management plans, and the results of the evaluation will be consistent with all applicable legal authorities, including FLPMA, the Taylor Grazing Act, the Public Rangelands Improvement Act, 43 CFR 4180, Utah Standards and Guidelines, and the National Wildlife Federation v. BLM, 140 Interior Board of Lands Appeals 85 (1997).

Action

As allotments are evaluated through monitoring studies, the season of use can be adjusted to fit current conditions and operator needs consistent with other resource objectives (Escalante MFP RM-1.1).

Action

Adjust each grazing allotment in the planning unit to the carrying capacity of the range and adjust the grazing period on the allotments proposed for winter grazing until after seed ripe time for key species (Vermilion MFP RM-2.2).

Action

As management is modified, the forage allocations will be adjusted accordingly. These adjustments will come through coordinated efforts with ranchers and other interested parties. (Escalante MFP RM-1.2)

Action

Mitigate recreation interactions by fencing recreation sites when developed, and restricting water hauling in Fiftymile Mountain and Paria Canyon recreation lands to existing roads and trails (Paria MFP RM-1.1)

Action

Critical riparian areas that are accessible to livestock will be fenced to keep cattle out (Zion MFP RM-1.2).

Action

Provide for intensive livestock management by construction of developments and facilities (Escalante MFP RM-2.4; similar to RM-2.5 in Vermilion and Zion MFPs).

Action

Complete land treatments (Escalante MFP RM-2.5; similar to RM-2.6 in Vermilion and Zion MFPs).

Action

Continue the unallotted status on Antone Flat (Escalante MFP RM-2.8), Flag Point (Vermilion MFP), and Varney Griffin by not allocating livestock forage in these areas. Protect the relict characteristics of No Man's Mesa (Vermilion MFP RM-3).

Action

Close the following allotments to grazing and allocate the AUMs to uses other than livestock grazing (Escalante MFP Amendment, p. 4): Escalante River, McGath Point, Saltwater Creek, and Steep Creek.

Action

Close (change to non-use) the following allotments to livestock grazing: Dry Hollow, Long Neck, Muley Twist, and Rattlesnake Bench (Escalante MFP, Table 1).

Action

Combine the Mudholes and Rock Creek allotments to help in the design and implementation of grazing systems (Escalante MFP RM-2.1). Close (change to non-use) portions of the Mudholes and Rock Creek Allotments (Escalante MFP, Table 1).

Action

Continue the closure of the Lower Calf Creek Falls pasture of the Willow Gulch Allotment.

Action

Do not activate use on Harvey's Fear, Navajo Bench, and Spencer Bench Allotments (Paria MFP RM-1.2).

Action

Close to grazing the portion of the Big Bowns Bench, Deer Creek, and Phipps allotments that are located in the Escalante River. Close the Cottonwood pasture of the Deer Creek allotment. Allocate the available forage in these areas to uses other than livestock grazing (Escalante MFP Amendment, p. 3).

Action

Create a grass bank or forage reserve with the remaining AUMs on Phipps allotment and all available forage on Little Bowns Bench allotment, and the Wolverine pasture (148 AUMs) of the Deer Creek allotment. This grass bank would only be used during emergencies or for research purposes. Emergencies would include, but would not be limited to drought, insect outbreaks, fire or floods. Any emergency use would not exceed current authorized use and could occur from October 1 to March 31 (Escalante MFP Amendment, p. 4).

Action

Use in Horse Canyon would be restricted to that part of the trail going onto Big Bowns Bench to the trail leaving Horse Canyon going onto King Bench. This area would only be used as a holding pasture to gather livestock at the end of the grazing season (Escalante MFP Amendment, p. 4).

Glen Canyon NRA Action

Non-structural range improvements are not appropriate in Glen Canyon (BLM/NPS Umbrella MOU).

VEGETATION

Goal

The Monument will be managed to achieve a natural range of native plant associations. Management activities will not be allowed to significantly shift the makeup of those associations, disrupt their normal population dynamics, or disrupt the normal progression of those associations (MMP, p. 22).

Objective

The overall objective with respect to riparian resources within the Monument is to manage riparian areas so as to maintain or restore them to properly functioning conditions and to ensure that stream channel morphology and functions are appropriate to the local soil type, climate, and landform (MMP, p. 20).

Action

All segments of riparian habitat previously inventoried will be reassessed as part of the grazing allotment assessments. Furthermore, riparian areas that have not been previously evaluated will be scheduled for assessment within three years commencing on the first July 1 following approval of the Plan, as part of the grazing evaluation schedule (MMP RIPA-2, p. 20).

Action

Monitoring of riparian resource conditions will be established to determine when actions should be taken to ensure movement towards proper functioning condition on all riparian stream segments in the Monument (MMP RIPA-3, p. 20).

Objective

A variety of vegetation restoration methods may be used to restore and promote a natural range of native plant associations in the Monument. Methods and projects which do not achieve this objective or which irreversibly impact Monument resources will not be permitted. Vegetation restoration methods fall into four broad categories: mechanical, chemical, biological, and management ignited fires. Each of these methods will be used in accordance with the overall vegetation objectives discussed above, and progress towards these objectives will be monitored as part of the adaptive management framework described in Chapter 3.

Action

Mechanical methods, including manual pulling and the use of hand tools (e.g., chainsaws, machetes, pruners) may be allowed throughout the Monument (MMP RM-1, p. 26).

Action

The use of machinery (e.g., roller chopping, chaining, plowing, discing) may be allowed in all zones except the Primitive Zone. Chaining has been used in the past to remove pinyon and juniper prior to reseeding with perennial grasses. Due to the potential for irreversible impacts to other Monument resources, such as archaeological sites and artifacts and paleontological resources, this treatment method will not be used to remove pinyon and juniper. It may be allowed to cover rehabilitation seed mixes with soil after wildfires only where:

- noxious weeds and invasive non-native species are presenting a significant threat to Monument resources or watershed damage could occur if the burned area is not reseeded,

- it can be demonstrated that Monument 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 (MMP RM-2, p. 26).

Action

Livestock grazing after native seedlings are established will be modified to ensure the survival of the native plants. The livestock exclusion period required to allow full establishment of seeded native species and recovery of surviving native plants after a wildfire may be more than two years. Site evaluation will be required to determine when the native seedlings should be grazed again and the effectiveness of the current or new grazing system on the persistence of native plants (MMP RM-3, pp. 26-27).

Action

Chemical methods will generally be restricted to the control of noxious weed species, and are discussed in that section. The use of chemicals may also be allowed in conjunction with research projects and must lead to the achievement of the overall vegetation objectives. These activities will be approved as determined appropriate through consultation with the GSENM Advisory Committee (MMP RM-4, p. 27).

Action

Management ignited fire is the vegetation restoration method most likely to be used in the Monument. This method will be used when fire has been documented to historically occur in an area, and where various factors have prevented natural fire cycles from occurring. In these circumstances, management ignited fires may be used, and will attempt to simulate natural fire intensity and timing. Specific objectives for all management ignited fires will be developed prior to its use in the Monument. All fire activities will be conducted and coordinated with appropriate fire management personnel, as provided for in the Color Country Interagency Fire Management Area annual operating plan (MMP RM-6, p. 27).

Action

With all of the methods described above, vegetation monitoring plots will be established to determine the effectiveness of the treatments in achieving management objectives and to provide baseline data of overall change. This monitoring will include species frequency, density, and distribution data, and will be part of the overall adaptive management framework described in Chapter 3 (MMP RM-7, p. 27).

Action

In keeping with the overall vegetation objectives and Presidential Executive Order 11312, native plants will be used as a priority for all projects in the Monument (MMP NAT-1, p. 28).

Action

Non-native plants may be used in limited, emergency situations where they may be necessary in order to protect Monument resources by stabilizing soils and displacing noxious weeds. This use will be allowed to the extent that it complies with the vegetation objectives, Presidential Executive Order 11312, and the Standards for Rangeland Health and Guidelines for Grazing

Management for BLM Lands in Utah (1997). In these situations, short-lived species (i.e., nurse crop species) will be used and will be combined with native species to facilitate the ultimate establishment of native species (MMP NAT-2, p. 28).

Action

Non-native plants will not be used to increase forage for livestock and wildlife (NAT-5, MMP, p. 30).

Action

Many factors will be considered when deciding to implement a revegetation or restoration strategy. Each project and area to be treated will be evaluated to determine the appropriate strategy. The following general guidelines can be applied to determine which strategy is the most appropriate and how it will be implemented in order to be consistent with the overall vegetation management objectives.

- 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).
- Species used in both restoration and revegetation projects will comply with the non-native plant policy described above (i.e., native plants will be used as a priority).
- 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 Monument 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 (MMP REV-1, p. 31).

SOILS AND BIOLOGICAL SOIL CRUSTS

Objective

The overall objective with respect to soil resources within the Monument is to:

- manage uses to prevent damage to soil resources and to ensure that the health and distribution of fragile biological soil crusts is maintained or improved,
- increase public education and appreciation of soils and biological soil crusts through interpretation, and
- facilitate appropriate research to improve understanding and management of soil resources and biological soil crusts (MMP, p. 21).

Action

The BLM will apply procedures to protect soils from accelerated or unnatural erosion in any ground disturbing activity, including route maintenance and restoration. The effects of activities such as grazing developments, mineral exploration or development, or water developments will be analyzed through the preparation of project specific NEPA documents. This process will

include inventories for affected resources and the identification of mitigation measures (MMP SOIL-1, p. 21).

Action

Prior to any ground disturbing activity, the potential effects on biological soil crusts will be considered and steps will be taken to avoid impacts on their function, health, and distribution. Long-term research toward preservation and restoration of soils will be part of the adaptive management framework described in Chapter 3. Further research will be conducted on these crusts, and the results interpreted for management and education purposes (MMP SOIL-2, pp. 21-22).

ALTERNATIVE B

This alternative would discontinue livestock grazing in GSENM and Glen Canyon NRA. Permittees would be given 2 years notification prior to the cancellation of permits (43 CFR 4120.4-2(b)) and be provided reasonable compensation for improvements placed or constructed by the permittee (43 CFR 4120.3-6(c)). Vegetation treatments for the purposes of improving land health, wildlife habitat, or natural communities, reducing weeds, or stabilizing cultural sites may still occur per existing decisions in the MMP and Glen Canyon General Management Plan (1979). Range seedings would not be maintained for livestock forage.

Lands in the decision area in the Kanab and Arizona Strip Field Offices would continue to be managed under the respective Resource Management Plans (RMPs). Approximately 65,400 acres in the Kanab Field Office would remain available for grazing. Approximately 2,300 acres in the Arizona Strip Field Office would remain available for grazing.

No monitoring of impacts from livestock grazing would be needed. While opportunities for science and research related to active grazing would be lost, there could be research associated with the effects of not grazing. The unavailable lands could act as reference areas for ecological sites outside of GSENM and Glen Canyon NRA.

All goals, objectives, and management actions from the MMP would remain the same except the Livestock Grazing section and associated decisions beginning on page 40 of the MMP would be replaced with the following:

Objective

Discontinue all livestock grazing in GSENM.

Allowable Use

Allocate 2,174,400 acres as unavailable for livestock grazing (see Alternative B map).

Allowable Use

Allocate any newly acquired lands as unavailable for livestock grazing.

Action

Cancel all livestock grazing permits.

Action

Evaluate livestock management facilities (i.e., structural range improvements for the purpose of livestock) for utility, historical significance, or other purposes within 2 years of the ROD. Remove livestock management facilities that are determined to be unneeded to meet other MMP objectives.

Action

Restore existing rangeland seedings consistent with the MMP.

Glen Canyon NRA Objective

Discontinue all livestock grazing in the Glen Canyon NRA portion of the planning area.

Glen Canyon NRA Allowable Use

Allocate 318,900 acres as unavailable for livestock grazing.

Glen Canyon NRA Action

The following allotments wholly or partially in Glen Canyon NRA would be unavailable for livestock grazing:

- Big Bowns Bench
- Escalante River
- Fortymile Ridge
- Harvey's Fear
- Lake
- Last Chance
- Lower Cattle
- Lower Warm Creek
- Moody
- Navajo Bench
- Rock Creek-Mudholes
- Spencer Bench
- Soda
- Unalloted (NPS)
- Upper Cattle
- Upper Warm Creek
- Wagon Box Mesa
- Wire Grass

Glen Canyon NRA Action

Allow land health treatments consistent with applicable law and policy within Glen Canyon NRA.

ALTERNATIVE C

This alternative emphasizes management that prioritizes native species diversity. Livestock grazing would be managed to ensure little or no impact to resources. A variety of ungrazed reference areas would be established over time. Changes in grazing systems (e.g., season of use, intensity, rotation) would be considered before implementing nonstructural range improvements.

LIVESTOCK GRAZING

All goals, objectives, and management actions for Livestock Grazing beginning on page 40 of the MMP would be replaced with the following:

Goal 1

Manage livestock grazing in a manner that conserves, protects, or restores the objects and values of the Proclamation and the values and purposes of Glen Canyon NRA.

Goal 2 (Common to alternatives C, D, and E)

In GSENM and Glen Canyon NRA manage livestock grazing to meet or make progress towards meeting rangeland health standards where grazing is a causal factor.

Objective

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.

Objective

GSENM and Glen Canyon NRA are in compliance with water quality standards established by the State of Utah (R.317-2) 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 (R.317-2) for surface and groundwater as indicated by:

- Water quality parameters, including but not limited to nutrient loads, total dissolved solids, chemical constituents, fecal coliform, water temperature and algae meet standards
- Macro invertebrate community diversity and composition meet standards and are within 80 percent of relevant reference stream reaches.
- Fine sediments do not exceed 80 percent of an equivalent ungrazed reference stream.

Objective

GSENM and Glen Canyon NRA native plant communities are healthy, diverse, and productive, or are making significant, measurable progress toward such conditions.

- Native plant communities reflect approximately 80 percent of the native plant diversity, density, age classes, and productivity of relevant ungrazed reference sites (i.e., GSENM or Glen Canyon NRA sites which are of similar potential to support the native diversity and have been ungrazed by domestic livestock for 10 years).

- Native plant communities support (at 80 percent of reference sites based on appropriate quantitative measures):
 - 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
 - Riparian, wetland, hanging garden and other spring communities
- Native species reoccupy habitat niches and voids caused by disturbances at 80 percent the rate of reoccupation in recovery reference sites (i.e., similarly disturbed sites recently excluded from grazing) based on appropriate quantitative measures.

Objective

GSENM and Glen Canyon NRA 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.

Objective

GSENM and Glen Canyon NRA 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.

- Streambank vegetation, at 80 percent of reference riparian areas:
 - consists of, or shows an independently measurable trend toward, native species with root masses capable of withstanding high streamflow events;
 - maintains cover adequate to protect stream banks and dissipate streamflow energy associated with high water flows, protect against accelerated erosion, capture sediment, and provide for groundwater recharge.
- Riparian vegetation reflects, at 80 percent 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; and provides food, cover and other habitat needs for dependent animal species.
- At 80 percent 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

In GSENM and Glen Canyon NRA 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.

- Ground cover (including litter) is maintained at 80 percent of a relevant (e.g., similar soil, vegetation type, precipitation) ungrazed site in the planning area 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) are protected from trampling and other physical disturbance within at least 60 percent of their predicted available habitat within GSENM; and within 80 percent of Glen Canyon NRA predicted available habitat.
- Indicators of excessive erosion such as rills, soil pedestals, mass wasting, and actively eroding gullies and headcuts are within 80 percent of appropriate, identified reference sites.

Allowable Use

Allocate 1,935,400 acres and 40,000-45,000 AUMs as available for livestock grazing (see Alternative C map).

These totals include 189,200 acres distributed among 18 allotments that are wholly or partially in Glen Canyon NRA.

Allowable Use

Allocate 306,900 acres as unavailable for livestock grazing.

This total includes 129,600 acres in Glen Canyon NRA that are unavailable to livestock grazing within the Escalante River, Fortymile Ridge, Harvey's Fear, Lake, Lower Warm Creek, Navajo Bench, Rock Creek-Mudholes, and Spencer Bench allotments.

Action

Maintain the following areas as unavailable for livestock grazing:

- Big Bowns Bench (River pasture and a portion of Horse Canyon pasture)
- Deer Creek (Cottonwood and River pastures)
- Dry Hollow
- Escalante River
- Flag Point
- Harvey's Fear
- Long Neck
- Lower Warm Creek
- McGath Point
- Muley Twist
- Navajo Bench
- Phipps (River pastures)
- Rattlesnake Bench
- Rock Creek-Mudholes (Dry Rock Creek and Middle Rock Creek pastures)
- Saltwater Creek
- Spencer Bench
- Steep Creek
- Willow Gulch (Lower Calf Creek Falls pasture)
- No Mans Mesa

Action

Make the following unallotted areas unavailable for livestock grazing:

- Antone Flat
- Unallotted areas in Glen Canyon NRA
- Upper Paria (portion unallotted - south)

Action

Make the following areas unavailable for livestock grazing:

- Big Bowns Bench (Seep Side pasture)
- Deer Creek (Wolverine pasture)
- Fortymile Ridge (East pasture)
- King Bench (King Bench pasture)
- Lake (Navajo Point pasture) (5,300 acres)
- Little Bowns Bench
- Lower Hackberry
- Lower Warm Creek
- Phipps (Phipps pasture)
- Rock Creek-Mudholes (portions of the Grand Bench pasture (1,700 acres))

Objective

Establish ungrazed areas of sufficient size, number, and ecological site diversity to compare grazed areas to ungrazed areas to measure progress toward meeting or achieving objectives for native plant communities, riparian and wetland areas, and soils. Grazed areas would be 80 percent of ungrazed areas.

Action

When voluntarily relinquished or otherwise retired, GSENM or Glen Canyon NRA allotments or pastures containing any of the following or combinations of the following may be put into non-use:

- Areas that would serve as valuable reference areas.
- Vegetation types that are either not represented or are underrepresented in the decision area that are ungrazed.
- Monument objects that are not compatible with or are impacted by livestock grazing (e.g., biological soil crust, riparian areas, declining native plant or wildlife species).
- Significant cultural resources, such as districts, sites, buildings, structures, and objects.
- Significant opportunities to conserve or restore historical, cultural, soil health, biological soil crust, fish, wildlife, riparian, vegetation and/or water quality objectives of the MMP and the Glen Canyon GMP.
- 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, endangered species; candidate or proposed threatened or endangered species; and special status species, or their habitat (e.g., Southwest willow flycatcher, sage grouse, desert bighorn sheep, Mexican spotted owl).

Action

GSENM and Glen Canyon NRA areas that are not meeting and measurably moving toward Objectives in relation to ungrazed reference areas would be put into temporary non-use until they are observed as meeting or measurably moving toward Objectives.

Action

Utilize a rider to aid in making measurable progress toward meeting Objectives. A pre-season plan and daily log will be filed for documentation of physical presence of a rider with livestock. A rider will be present 5 out of every 7 days throughout the season of use on allotment areas not meeting or moving toward objectives. More than one allotment may utilize a single rider if it is possible to be present as noted.

Action

Limit kind of livestock to cattle and horses only in GSENM and Glen Canyon NRA.

Action

Encourage a diversity of grazing arrangements, including such arrangements as:

- Collaborative grazing experiments
- Multiple allotments combined into a single system
- Range improvements
- Rest-rotation systems
- Deferred rotation systems
- On-off systems
- Forage reserve areas
- Reduced use areas
- Non-use areas

Action

In GSENM and Glen Canyon NRA adaptively manage season of use, duration, and stocking rate (AUMs) of livestock grazing to ensure that Goals and Objectives are met.

Action

In GSENM and Glen Canyon NRA at a minimum, there will be 6 weeks between the beginning of seasonal use of a particular allotment or pasture one year and when the season of use begins the following year when grazing occurs during the growing season. Avoid grazing an area at the same time every year. If this is not possible in a particular area, the area will be rested every other year.

Action

In GSENM and Glen Canyon NRA where grazing occurs during winter, use rest-rotation grazing so that areas are not grazed more than 2 out of 3 years.

Action

In GSENM and Glen Canyon NRA institute light utilization (30%), both for riparian and upland areas. Implement one pasture a year for each allotment until all pastures in each allotment have a light utilization limit.

Action

In GSENM and Glen Canyon NRA utilization limits of 25 percent will be operative within all pastures during a drought year using the Standardized Precipitation Index of the National Drought Mitigation Center.

Action

Allotment Action Plans. When monitoring of indicators shows a GSENM or Glen Canyon NRA allotment or pasture is failing to meet or move towards Objectives, action plans will be drawn up for meeting or moving towards Objectives. Unless explicitly experimental, with appropriate controls and monitoring of outcomes assured, action 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.

If movement toward Objectives is not being observed/measured, adjustments to the action plan will be made.

Action

In GSENM and Glen Canyon NRA fencing may be allowed or required to meet any of the Objectives. If fencing is necessary it will be constructed and maintained in accordance with 43 CFR 4120.3. All fences and other annual permit infrastructure must be maintained and functional prior to livestock entry for the season.

Action

In GSENM and Glen Canyon NRA where water developments are necessary for livestock grazing and protection of Monument values, such developments will be fenced and will protect all associated wetland/riparian resources. On/off valves will ensure that water remains in its natural course/site at all times livestock are not present in the allotment/pasture.

Action

The permittee(s) will manually maintain an area free of all invasive, exotic plant species within a 100-foot radius of a watering trough or watering pond in GSENM and Glen Canyon NRA.

Action

Whenever possible, avoid constructing range improvements (e.g. water developments) in areas with high percentage cover of biological soil crust or high biodiversity conservation value (e.g. gypsiferous soils).

Action

Where needed, relocate existing water developments to areas with low potential for biological soil crust development.

Action

Avoid placing salts or supplements in areas with high percentage cover of biological soil crust.

Action

Reduce grazing impacts to crust:

- In general, light to moderate stocking in early- to mid-wet season is recommended on biological soil crust.
- Use brush barriers to divert livestock trailing through sites with biological soil crust.

Action

Avoid soil surface disturbing projects in habitats of rare biological soil crusts, where biological crust diversity is high, or where removal of biological soil crust will degrade soil, hydrology, or biology ecosystem function.

Action

In GSENM and Glen Canyon NRA a permittee request for non-use or partial use will be granted for conservation or protection goals that can be objectively documented and measured. A monitoring plan, including relevant indicators, and schedule will be part of the request.

Action

In GSENM and Glen Canyon NRA upon receiving any request for voluntary relinquishment of permitted livestock grazing, the Authorized Officer will re-evaluate whether livestock grazing is in the best interest of achieving Management Plan goals and consider amending the MMP to allocate forage for a different purpose pursuant to Instruction Memorandum No. 2013-184 (or most recent policy).

Action

In GSENM and Glen Canyon NRA where needed, place signs on any gate 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. Signs should include instructions to keep the gate closed during those times the livestock should be in one of the two adjacent units.

Action

Monitoring. Within 1 year of the Record of Decision, BLM will designate, with interested public/permittee input, the methods BLM will use to monitor Indicators that Objectives are being met. BLM monitoring methods will include methods used to measure:

- Meeting or moving toward Objectives
- Existing long-term trend transects within GSENM and Glen Canyon NRA
- Interpreting Indicators of Rangeland Health points or transects
- Proper Functioning Condition assessment points or stream reaches
- Assessment, Inventorying, and Monitoring points
- Effectiveness of treatments at reaching both project and Monument-wide objectives
- Any other methods used systematically by the BLM within GSENM or Glen Canyon NRA

Action

Reference Areas. In GSENM and Glen Canyon NRA reference areas exist or are established in order to demonstrate potential for Objectives to be met, and/or potential rate of change toward meeting Objectives. Reference areas are established across the decision area that represent the 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 (see below) consists of a site that has not been grazed or accessible to livestock for at least 10 years.

- 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.

- 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.
- Establish and maintain at least two permanent range cages (at least 16 feet by 16 feet) in each grazed pasture, in representative areas frequently used by livestock.
- Recovery reference areas are areas where livestock grazing has ceased, but which have not been ungrazed for 10 years. Enclosures of various sizes can immediately begin to provide 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 stream bank protection; or for seed head production) can be compared with the recently-ungrazed sites for comparative rates and types of recovery.

Action

Utilization Cages. In GSENM and Glen Canyon NRA for purposes of quantitatively measuring utilization, utilization cages must have been in place for 2 years (rather than one) in order to depict expected production.

Action

80 percent. In GSENM and Glen Canyon NRA objectives generally will be considered to have been met when monitoring documents the Indicators are at least 80 percent (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). Such reference areas may consist of exclosures, ungrazed pastures/allotments, permanent range cages, or ungrazed recovery reference areas. Conditions below 80 percent of the reference site(s) are appropriate subjects for problem-solving among the BLM, NPS, permittees, and interested public.

Action

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 or NPS staff to discuss and propose solutions to the problem(s). A written record of evidence of the problem(s), solutions considered, and commitments by 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.

VEGETATION

Vegetation Restoration Methods decisions beginning on page 26 of the MMP would be amended as follows:

Decision from the MMP	Amended Decision
RM-3 (p. 26): Livestock grazing after native seedings are established will be modified to ensure the survival of the native plants. The livestock exclusion period required to allow full	Livestock grazing after native seeding restoration will be modified to ensure the survival of the native plants. In post-treatment areas, suspend livestock grazing for at least 2 growing seasons or

establishment of seeded native species and recovery of surviving plants after a wildfire may be more than two years. Site evaluation will be required to determine when the native seedings should be grazed again and the effectiveness of the current or new grazing system on the persistence of native plants.	until the majority of native plant species in the area have seeded, whichever is longer. Site evaluation will be required to determine when the native seedings should be grazed again and the effectiveness of the current or new grazing system on the persistence of native plants.
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The following new actions would be added to the Vegetation Restoration Methods section (MMP, p. 26):

Action

Restoration (including maintenance) of sites formerly seeded to exotic species will utilize native species only. This includes rangeland seedings within GSENM that were established prior to Monument designation.

Action

Vegetation treatments in GSENM and Glen Canyon NRA will:

- Restore or support 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.
- Utilize 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.
- 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, except these deterrents will either not be used in Glen Canyon NRA or will be evaluated on a case-by-case basis.
- Mimic natural processes to the degree possible, including, but not limited to succession and use of prescribed fire.

The following new allowable use and action would be added to the Noxious Weed Control section (MMP, p. 27):

Allowable Use

In GSENM and Glen Canyon NRA passive restoration and non-chemical methods will be the first priority for preventing the introduction, establishment, and/or spread of noxious weeds and/or non-native, invasive plant species.

Action

In GSENM and Glen Canyon NRA 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 noxious weeds and/or non-native, invasive plant species.

SCIENCE AND RESEARCH

The following new goals, objectives, or actions would be added for both GSENM and Glen Canyon NRA:

Goal

Use science and research to gain an understanding of the impacts of livestock grazing, of the potential for movement toward reference conditions if ungrazed, and to distinguish climate impacts from livestock grazing impacts.

Objective

Emphasize the use of large ungrazed reference areas to provide reference states.

Action

Monitor currently ungrazed reference areas to see how they act under the management conditions of the decision area absent livestock grazing.

Action

Monitor newly established reference areas (i.e. recovery reference areas where grazing is discontinued) to see how they move towards a reference state.

Action

Pursue implementation of a diversity of grazing arrangements to demonstrate potential for Objectives to be met and/or potential rate of change toward meeting objectives.

Action

Monitor both grazed and ungrazed areas to distinguish climate impacts from livestock grazing impacts.

GLEN CANYON NRA GRAZING MANAGEMENT PLAN

The existing Glen Canyon Grazing Management Plan (Glen Canyon GMP), including goals, objectives, and actions described below would be updated as noted below.

Decision from the GMP	Updated Decision
<p>Vegetation Goal</p> <p>Maintain naturally diverse plant communities and species populations similar to Potential Natural Community composition (see Appendix C). These include a full complement of native species, plant vigor and health, natural structure for wildlife habitat, dynamic changes, reproductive success, and populational genetic and evolutionary responses (Glen Canyon GMP, p. 12).</p>	<p>Vegetation Goal</p> <p>Manage vegetation in accordance with applicable laws and NPS Management Policies. Maintain naturally diverse plant communities and species populations similar to Potential Natural Community composition (see Appendix C). These include a full complement of native species, plant vigor and health, natural structure for wildlife habitat, dynamic changes, reproductive success, and population-level genetic and evolutionary responses.</p>
<p>Objective I, Vegetation Actions</p> <p>The following items are actions that may be taken</p>	<p>Objective I, Vegetation Actions</p> <p>The following items are actions that may be taken</p>

Decision from the GMP	Updated Decision
<p>to attain the desirable targets and accomplish Objective 1 (Glen Canyon GMP, pp. 13-15).</p> <ol style="list-style-type: none"> 1. Establish maximum utilization rates of 45% for Indian ricegrass in all key areas in allotments within Glen Canyon NRA, and also for other key species as necessary, until vegetation meets desirable community composition (PNC). 2. In allotments or pastures that are grazed in spring, utilization of Indian ricegrass and other key species will not exceed 25%. 3. In non-maintenance or other high-priority allotments, utilization of Indian ricegrass and other key species will not exceed 25% in spring. 4. Adjust grazing seasons for Glen Canyon NRA allotments until vegetation meets desirable community composition (PNC). 5. Maintain or increase amounts of desirable plant species and keep low or reduce numbers of undesirable increasing species (PNC; see Glen Canyon GMP, Appendix C). 8. Adjust stocking rates or change grazing prescription until key areas meet late seral or potential natural community composition criteria (see Appendix C). For specially designated areas (Research and Protected Natural Areas; see objective 3), conditions must meet potential natural community composition criteria, as set forth above. 	<p>to attain the desirable targets and accomplish Objective 1.</p> <ol style="list-style-type: none"> 1. Establish maximum utilization rates of 45% for forage species in all key areas in allotments within Glen Canyon NRA, and also for other key species as necessary, until vegetation meets desirable community composition (PNC). 2. In allotments or pastures that are grazed in spring, utilization of forage species and other key species will not exceed 25%. 3. In non-maintenance or other high-priority allotments, utilization of forage species and other key species will not exceed 25% in spring. 4. Adjust grazing seasons for Glen Canyon NRA allotments until vegetation meets desirable community composition (PNC and BLM Standards for Rangeland Health and Guidelines for Grazing Management). 5. Maintain or increase amounts of desirable plant species and keep low or reduce numbers of undesirable increasing species (PNC; see Glen Canyon GMP, Appendix C; and BLM Standards for Rangeland Health and Guidelines for Grazing Management). 8. Adjust stocking rates or change grazing prescription until key areas meet late seral or potential natural community composition criteria (see Appendix C), including BLM Standards for Rangeland Health and Guidelines for Grazing Management. For specially designated areas (Research and Protected Natural Areas; see objective 3), conditions must meet potential natural community composition criteria, as set forth above.
<p>Objective 2, Vegetation Actions</p> <p>Special status species will not be subject to grazing if studies show that impacts occur (Glen Canyon GMP, p. 15).</p> <ol style="list-style-type: none"> 2. Consult with the US Fish & Wildlife Service through Section 7 compliance procedures. 	<p>Objective 2, Vegetation Actions</p> <p>Special status species will not be subject to grazing if studies show that negative impacts occur.</p> <ol style="list-style-type: none"> 2. Consult with the US Fish & Wildlife Service through Section 7 compliance procedures on federally listed and candidate species.

Decision from the GMP	Updated Decision
<p>Objective 3, Vegetation Actions</p> <ol style="list-style-type: none"> 3. Prepare ERA, PNA, or RNA justification report. 4. Consult with the BLM on ways to exclude livestock from PNA or RNA areas. 	<p>Objective 3, Vegetation Actions</p> <ol style="list-style-type: none"> 3. Prepare ERA, PNA, or RNA justification report and necessary compliance. 4. Consult with the BLM on ways to exclude livestock from scientifically important areas.
<p>Soils Goal</p> <p>Maintain the evolutionary and ecological processes of the soil ecosystem (Glen Canyon GMP, p. 18)</p>	<p>Soils Goal</p> <p>Maintain the evolutionary and ecological processes of the soil ecosystem to prevent loss of soil resources.</p>
<p>Soils Objective 1</p> <p>Collect data on rates of soil erosion on various grazed and ungrazed plots, targeting areas showing excessive erosion, such as rills, soil pedestals, or actively eroding gullies (NPS) (Glen Canyon GMP, p. 18)</p> <p>Use a combination of rangeland monitoring and sedimentation studies to quantify annual losses or gains from selected, established trend and riparian plots. Determine values from plots and compare to expected erosion rates developed by the Natural Resources Conservation Service (NRCS) in all sample areas, through the year 2005. Field data may be collected during routine trend plot monitoring or plant utilization studies, etc., or incorporated into other studies conducted by other resource disciplines.</p>	<p>Soils Objective 1</p> <p>Collect data on rates of soil erosion on various grazed and ungrazed plots, targeting areas showing excessive erosion, such as rills, soil pedestals, or actively eroding gullies (NPS).</p> <p>Use a combination of rangeland monitoring and sedimentation studies to quantify annual losses or gains from selected, established upland trend and riparian plots. Determine values from plots and compare to expected erosion rates developed by the Natural Resources Conservation Service (NRCS) in all sample areas. Field data may be collected during routine trend plot monitoring or plant utilization studies, etc., or incorporated into other studies conducted by other resource disciplines. Determine through models and field studies areas where biological soil crusts (BSC) are critical components of ecosystem function, and develop standards for maintaining functional BSC.</p>
<p>Water Quality Objective 5</p> <p>Preserve the aesthetic value of natural water. Instream flows will be maintained in natural, unaltered condition (NPS) (Glen Canyon GMP, p. 19).</p>	<p>Water Quality Objective 5</p> <p>Preserve the aesthetic value of natural water. Instream flows will be maintained in natural, unaltered condition and will be used as needed to restore degraded riparian communities (NPS).</p>
<p>Wildlife Objective 5</p> <p>Maintain the natural abundance and diversity of insects (Glen Canyon GMP, p. 20).</p>	<p>Wildlife Objective 5</p> <p>Maintain the natural abundance and diversity of invertebrates.</p>
<p>Cultural Resources Objective 2</p> <p>All alcove sites identified within the Primary and Secondary AOI will be protected from damage or loss due to livestock grazing activities (fenced) (Glen Canyon GMP, p. 22).</p> <p>All alcove sites identified within the Primary and Secondary AOI will be documented using the appropriate Intermountain Antiquities Computer System (IMACS) forms. Site condition evaluation,</p>	<p>Cultural Resources Objective 2</p> <p>All alcove sites identified within the Primary and Secondary AOI will be protected from damage or loss due to livestock grazing activities.</p> <p>All alcove sites identified within the Primary and Secondary AOI will be documented using the appropriate Intermountain Antiquities Computer System (IMACS) forms. Site condition evaluation, photo documentation, field and feature sketches,</p>

Decision from the GMP	Updated Decision
<p>photo documentation, field and feature sketches, site mapping, artifact collections, and topographic plotting will be performed as appropriate. Alcove sites may be fenced or other action taken to prevent access to livestock. Prior to beginning any fencing activity, a Section 106 compliance will be required.</p>	<p>site mapping, artifact collections, and topographic plotting will be performed as appropriate. Alcove sites may be fenced or other action taken to prevent access to livestock. Prior to beginning any fencing activity, a Section 106 compliance will be required.</p>
<p>Cultural Resources Objective 5</p> <p>All rock art sites identified within the primary and secondary areas of impact will be protected from damage or loss due to livestock grazing activities (NPS) (Glen Canyon GMP, pp. 22-23).</p> <p>All rock art sites identified within the Primary and Secondary AOI will be documented using the appropriate IMACS forms. Site condition evaluation, photo documentation, field and feature sketches, site mapping, artifact collections, and topographic plotting will be performed as appropriate. Rock art sites may be fenced to prevent access to livestock. Prior to beginning any fencing activity, a Section 106 compliance will be required.</p>	<p>Cultural Resources Objective 5</p> <p>All rock art sites identified within the primary and secondary areas of impact will be protected from damage or loss due to livestock grazing activities (NPS).</p> <p>All rock art sites identified within the Primary and Secondary AOI will be documented using the appropriate IMACS forms. Site condition evaluation, photo documentation, field and feature sketches, site mapping, artifact collections, and topographic plotting will be performed as appropriate. Rock art sites may be fenced or other action taken to prevent access to livestock. Prior to beginning any fencing activity, a Section 106 compliance will be required.</p>
<p>Paleontological and Quaternary Objective 2</p> <p>Paleontological and quaternary resources will be protected in-situ whenever possible. Removal will occur only when necessary to safeguard resources from impacts that cannot be administratively controlled (NPS/BLM) (Glen Canyon GMP, p. 24).</p>	<p>Paleontological and Quaternary Objective 2</p> <p>Paleontological and quaternary resources will be protected in-situ whenever possible. Removal will occur only when necessary to safeguard resources from impacts that cannot be administratively controlled (NPS/BLM) through fencing or other exclusion methods.</p>

ALTERNATIVE D

This alternative recognizes the Escalante Region Grazing Zones in Garfield and Kane Counties and emphasizes the preservation of the history, culture, custom, and values of the grazing industry while emphasizing an improved landscape to maintain a wide variety of beneficiaries. This alternative is derived from and consistent with State and County ordinances and plans. Management actively promotes improving rangeland health, including development and maintenance of seedings, restoration of sagebrush/grassland ecosystems, control of noxious and invasive plants, and pinyon/juniper control. Management also promotes maintenance of range improvements, including fence repairs, fence installation, the use of machinery, and vehicle access for range improvements. This alternative incorporates adaptive management principles and innovative livestock management practices. The goal is to provide for an optimum level of livestock grazing and attainment of healthy rangelands, drought resilient landscapes, and multiple beneficiaries. Any AUMs in a suspended use category would be returned to active use when range conditions improve. Effort would be made to improve the rangeland conditions in a timely manner to remain consistent with local plans. Unavailable and unallotted allotments may be made available for livestock grazing.

LIVESTOCK GRAZING

All goals, objectives, and management actions for Livestock Grazing beginning on page 40 of the MMP would be replaced with the following:

Goal 1

Manage livestock grazing in a manner that protects the objects and values of the Proclamation and the values and purposes of Glen Canyon NRA.

Goal 2 (Common to alternatives C, D, and E)

Manage livestock grazing to meet or make progress towards meeting rangeland health standards where grazing is a causal factor.

Objective

Meet or make progress towards meeting rangeland health standards where grazing is a causal factor.

- In GSENM and Glen Canyon NRA upland soils exhibit permeability and infiltration rates that sustain or improve productivity, considering the soil type, climate, and landform (Rangeland Health Standard 1).
- In GSENM and Glen Canyon NRA riparian and wetland areas are in properly functioning condition. Stream channel morphology and functions are appropriate to soil type, climate, and landform (Rangeland Health Standard 2).
- In GSENM and Glen Canyon NRA desired species, including native, threatened, endangered, and special status species, are maintained at a level appropriate for the site and species involved (Rangeland Health Standard 3).
- In GSENM and Glen Canyon NRA apply and comply with water quality standards established by the State of Utah (R.317-2) and the Federal Clean Water and Safe Drinking Water Acts. Activities will fully support designated beneficial uses described in the Utah Water Quality Standards for surface and groundwater (Rangeland Health Standard 4).

Allowable Use

Allocate 2,137,000 acres and 106,202 AUMs (76,957 active and 29,245 suspended) as available for livestock grazing (see Alternative D map).

Action

Manage the previously unavailable Dry Hollow allotment as available for livestock grazing and combine with the Boulder Creek allotment.

Action

Manage the previously unallotted Flag Point allotment as available for livestock grazing and combine with the White Sage allotment.

Action

Manage the previously unallotted Antone Flat, Upper Paria (South pasture), and Varney Griffin allotments as available for livestock grazing.

Allowable Use

Allow the use of forage reserves on a nonrenewable basis under 43 CFR 4110.3-1(c) for a variety of reasons including, but not limited to,

- Facilitate research in grazing methods
- While pastures and allotments are rested, such as
 - After an emergency
 - After vegetation treatments
 - To make progress toward meeting rangeland health standards
- Remove decadent vegetation
- Occasional use to help maintain range improvements

Action

Maintain forage reserves in the Little Bowns Bench, Deer Creek (Wolverine pasture), and Phipps (Phipps pasture) allotments. Maintain structural range improvements such as fences and water developments so that forage reserves will be ready for use when needed.

Action

In Glen Canyon NRA, use the southern portion of the Grand Bench pasture (Rock Creek-Mudholes allotment) as an experimental pasture and/or forage reserve.

Allowable Use

Allocate 105,400 acres as unavailable for livestock grazing.

This total includes 88,600 acres in Glen Canyon NRA that are unavailable to livestock grazing. These acres are within the Escalante River, Harvey's Fear, Navajo Bench and Spencer Bench allotments.

Action

Manage the following areas as unavailable for livestock grazing:

- Escalante River
- Harveys Fear
- Muley Twist
- Navajo Bench
- Rattlesnake Bench
- Spencer Bench
- Willow Gulch (Lower Calf Creek Falls pasture)
- Unalloted (NPS)
- No Mans Mesa

Action

In GSENM and Glen Canyon NRA prioritize management of allotments that do not meet land health standards where grazing is identified as a causal factor.

Action

In GSENM and Glen Canyon NRA adaptively manage season of use, duration, distribution, and stocking rate (AUMs) of livestock grazing to ensure that land health standards are met.

Action

In GSENM and Glen Canyon NRA redefine allotments based on rangeland conditions. Work cooperatively with permittees before redefining allotments. Allotments and/or pastures may be reconfigured (i.e. combined or split) to aid in achieving rangeland health standards.

Action

In GSENM and Glen Canyon NRA alter the frequency and duration of grazing and recovery periods based on monitoring data.

Action

Return any AUMs that have been suspended to active use when range conditions improve.

Action

Change management to improve land health before reducing AUMs or season of use. In Glen Canyon NRA, reduce AUMs or season of use/rotations to achieve land health as needed. Actions to improve land health include, but are not limited to:

- Maintain existing developments (structural and nonstructural improvements)
- Install new developments (e.g. water developments, fences, seedings)
- Implement vegetation treatments (e.g. restore shrub lands, control juniper, control or eradicate invasive species)
- Distribute livestock

Objective

In GSENM increase forage with rangeland improvements aimed at restoring suspended and unused AUMs while improving ecological health of plant communities.

Allowable Use

Allow restoration of existing rangeland seedings using a mix of native and nonnative seeds. No existing seedings are within Glen Canyon NRA.

Action

Vegetation treatments will emphasize use of native seeds and every seed mix will contain native species.

Action

In GSENM design and implement vegetation treatments to increase vegetative cover, increase soil productivity, or reduce soil erosion.

Action

Restore and/or maintain seedings in GSENM in a timely manner to promote land health and grazing uses.

Allowable Use

Allow the development, improvement, expansion, or relocation of both structural and nonstructural range improvements.

Action

Provide range improvements (both structural and nonstructural) to increase effective grazing within allotments. Maintain or improve existing improvements.

Glen Canyon NRA Action

In Glen Canyon NRA non-structural range improvements would be limited to the restoration of native plant species in areas where past grazing practices have resulted in resource impacts. Structural range improvement (e.g. new line shacks or water developments) would only be considered outside of proposed wilderness areas on a case-by-case basis pursuant to a site-specific planning and compliance process.

Action

Distribute livestock use spatially to provide a diversity of plant offerings. A variety of methods can be used to distribute livestock including, but not limited to, water developments, seedings, salt/supplement placement, modifying fences, or use of riders.

Action

Conduct routine maintenance of range improvements in a timely manner to protect grazing uses.

Action

Use current and future science and proven methods to enhance rangelands. The use of current science and methods should be given priority in range development and livestock management and are considered best practices. Many of these best practices are not appropriate for use in Glen Canyon NRA. Best practices include, but are not limited to:

- Aerial application of tebuthiuron (i.e. Spike) or other herbicides for the control of brush in seedings; there are no seedings in Glen Canyon NRA.
- Chemical applications for brush control (e.g. rabbit brush); not in Glen Canyon NRA.
- Chaining for new seedings or improvements of existing seedings; not in Glen Canyon NRA.
- Bull hog or fire treatments for control of pinyon and/or juniper encroachments; not in Glen Canyon NRA.
- Cutting of cedar posts or jiggers for the improvement or maintenance of infrastructure on allotments; not in Glen Canyon NRA.
- Use mechanical equipment for the control of erosion or maintenance of service or administrative roads.
- Extend water lines for better distribution of livestock. (Example: Riparian areas fenced, where possible, and water head boxes constructed to move water away from riparian area.)
- Flexibility in grazing dates on allotments, both turning out and removal of cattle. Manage for conditions rather than calendar dates.
- Renewal of existing seedings and development of newly seeded areas. On a case-by-case basis, seeding of native species only may be used as ecological restoration in Glen Canyon NRA.
- Expand and allow new water developments, such as wells, extensions of water lines, and catchments. New water developments may be considered in Glen Canyon NRA, but not in proposed wilderness.
- Use applied science in the development of new and existing improvements.
- Use of controlled burns for brush, pinyon, and/or juniper control; generally, will not be used in Glen Canyon NRA (see Common to All Alternatives, NPS Management Policies).
- Allow permittees to use tractors and four-wheelers in dry washes to access and maintain or repair fences, waterlines, and other infrastructure.

Objective

Recognize the Escalante Region Grazing Zones in Garfield and Kane Counties. Recognize and preserve the significant history, culture, custom, and values of the grazing industry within the designation. Maximize efficient and responsible preservation, enhancement, and development of grazing practices and affected natural, historical, and cultural activities within the designation.

Action

Maintain access and infrastructure for normal ranching operations.

Action

In GSENM, actively match the stocking rate to resource availability.

Objective

In GSENM and Glen Canyon NRA reduce livestock/recreation conflicts.

Allowable Use

In GSENM and Glen Canyon NRA allow fencing, hiker mazes, or other methods to reduce livestock/recreation conflicts.

Action

When managing conflicts in GSENM, give preference to livestock in areas designated as accommodating visitation (i.e. Outback and Primitive Zones).

Action

Give preference to visitors in areas designated as the focal point of visitation in GSENM (i.e. Frontcountry and Passage Zones) and in Glen Canyon NRA. In GSENM change management to reduce conflicts before reducing AUMs.

Action

Construct small exclosures around recreation sites such as the Paria Contact Station, Paria Townsite, or day use areas. Exclosures would be the minimum size needed to minimize livestock/recreation conflicts.

Action

Continue to use existing monitoring techniques and implement others as new methods arise. Monitoring will focus on land health.

Action

Fence above ground distinct cultural sites. Monitor areas of high potential for cultural resources to minimize impacts to surface or subsurface sites.

VEGETATION

Vegetation decisions on pages 26 and 29, respectively, of the MMP would be amended as follows:

Decision from the MMP	Amended Decision
<p>RM-2 (p. 26): The use of machinery (e.g. roller chopping, chaining, plowing, discing) may be allowed in all zones except the Primitive Zone. Chaining has been used in the past to remove pinyon and juniper prior to reseeding with perennial grasses. Due to the potential for irreversible impacts to other Monument resources, such as archaeological sites and artifacts, and paleontological resources, this treatment method will not be used to remove pinyon and juniper. It may be allowed to cover rehabilitation seed mixes with soil and wildfires only where:</p> <ul style="list-style-type: none"> • noxious weeds and invasive non-native species are presenting a significant threat to Monument resources or watershed damage could occur if the burned area is not 	<p>Allow the use of machinery in all management zones (e.g. roller chopping, chaining, plowing, discing). Visual impacts of chaining will also be minimized near routes and other points of concern by covering the native seed mix with harrows or light chains. The GSENM Advisory Committee will be consulted before the use of machinery for treatments is permitted.</p>

<p>reseeded,</p> <ul style="list-style-type: none"> • it can be demonstrated that Monument 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. <p>Visual impacts of chaining will also be minimized near routes and other points of concern by covering the native seed mix with harrows or light chains. The GSENM Advisory Committee will be consulted before the use of machinery for treatments is permitted.</p>	
<p>RM-3 (p. 26): Livestock grazing after native seedings are established will be modified to ensure the survival of the native plants. The livestock exclusion period required to allow full establishment of seeded native species and recovery of surviving native plants after a wildfire may be more than two years. Site evaluation will be required to determine when the native seedings should be grazed again and the effectiveness of the current or new grazing system on the persistence of native plants.</p>	<p>After disturbance, modify livestock grazing practices until seedings are established in order to promote the survival of plants. Generally, areas will be rested from livestock grazing for two growing seasons or until site objectives are met. Site evaluation will be required to determine when objectives for the seedings are met and grazing can be resumed.</p>
<p>NAT-5 (p. 29): Non-native plants will not be used to increase forage for livestock and wildlife.</p>	<p>Allow the use of native and non-native species to optimize rangeland health, forage, and productivity.</p>

The following new goals, objectives, or actions would be added:

Objective

In GSENM and Glen Canyon NRA maintain and enhance diverse plant communities for the benefit of watersheds, wildlife populations, water quality, recreation, and livestock.

Allowable Use

Allow a variety of vegetation restoration methods including mechanical, chemical, biological, and prescribed fires.

Allowable Use

In GSENM allow the appropriate treatment method for the site, including aerial treatment. Not all methods are appropriate for all site types.

Allowable Use

Allow the use of livestock grazing to control noxious weeds or non-native, invasive plants.

Action

Restore shrub lands and grasslands by managing pinyon juniper to pre-1850 conditions in GSENM.

Action

Develop existing and future grazing resources.

Objective

In GSENM and Glen Canyon NRA maintain vigorous and healthy plant communities to inhibit spread of noxious weeds or non-native, invasive plants.

Action

In GSENM and Glen Canyon NRA eradicate tamarisk and Russian olive. Control State and County designated undesirable species.

SCIENCE AND RESEARCH

The following new goals, objectives, and actions would be added:

Goal

GSENM will serve as a laboratory to research innovative grazing techniques. Glen Canyon NRA will use science-based information to protect park resources and values.

Objective

Use science and research as a means to achieve land health standards.

Allowable Uses

Allow experimental use of electric fences or other fence design. Allow experimental use of changes in season of use, supplement/salt placement, water developments, seedings, and/or vegetation treatments including prescribed fire. Allow experimental use of other techniques that are currently known or unknown to enhance learning.

Action

Employ experimental approaches to advance and improve knowledge of rangeland health and resilience.

Action

If ungrazed reference areas are established, do not exceed 0.5 percent in any allotment or 0.5 percent within GSENM; size in Glen Canyon NRA will be determined based on best available science. Allotments or pastures identified as unavailable for livestock grazing do not count toward the 0.5 percent cap within the Monument.

WATER-RELATED DEVELOPMENTS (NON-CULINARY)

The water-related developments decision on page 55 of the MMP would be amended as follows:

Decision from the MMP	Amended Decision
<p>WDEV-I (p. 55): Water developments can be used as a management tool throughout the Monument for the following purposes: better distribution of livestock when deemed to have an overall beneficial effect on Monument resources, including water sources or riparian areas, or to restore or manage native species or populations. They can be done only when a NEPA analysis determines this tool to be the best means of achieving the above objectives and only when the water development would not dewater streams or springs. Developments will not be permitted to increase overall livestock numbers. Maintenance of existing development can continue, but may require NEPA analysis and must be consistent with the objectives of this plan.</p>	<p>Water developments can be used as a management tool throughout the Monument for the following purposes: better distribution of livestock when deemed to have an overall beneficial effect on Monument resources, including water sources or riparian areas, or to restore or manage native species or populations. Any new development will be consistent with Utah water laws. They can be done only after NEPA analysis and only when the water development would not permanently dewater streams or springs.</p>

The following new actions would be added:

Action

Maintenance of existing development can continue within the footprint of disturbance. Maintenance of existing water developments that extends beyond the footprint of disturbance may require NEPA analysis and must be consistent with the objectives of this plan. Use of heavy equipment, such as backhoes, excavators, etc., and relocation of existing water developments would undergo NEPA analysis.

Action

Install shut-off valves on any new water development. Shut-off valves allow the water collection system to be shut off when not needed or in order to protect the riparian area from dewatering.

Action

Install float valves on new troughs to allow unneeded water to remain in the riparian area. In situations where float valves are not feasible because of freezing, overflows can be installed to return unused water to the riparian area.

Glen Canyon NRA Action

Water developments will be considered on a case-by-case basis and will not occur in proposed wilderness.

GLEN CANYON NRA GRAZING MANAGEMENT PLAN

The existing Glen Canyon Grazing Management Plan (Glen Canyon GMP), including goals, objectives, and actions described in Alternative C would also be updated for Alternative D.

ALTERNATIVE E

This alternative emphasizes sustainable use through razing management designed to ensure that Rangeland Health Standards are achieved and land health is improved. Range seedings would be managed for both ecosystem processes and forage production.

LIVESTOCK GRAZING

All goals, objectives, and management actions for Livestock Grazing beginning on page 40 of the MMP would be replaced with the following:

Goal 1

Manage livestock grazing in a manner that protects the objects and values of the Proclamation and the values and purposes of Glen Canyon NRA.

Goal 2 (Common to alternatives C, D, and E)

In GSENM and Glen Canyon NRA manage livestock grazing to meet or make progress towards meeting rangeland health standards where grazing is a causal factor.

Objective

Meet or make progress towards meeting rangeland health standards where grazing is a causal factor.

- In GSENM and Glen Canyon NRA upland soils exhibit permeability and infiltration rates that sustain or improve productivity, considering the soil type, climate, and landform (Rangeland Health Standard 1).
- In GSENM and Glen Canyon NRA riparian and wetland areas are in properly functioning condition. Stream channel morphology and functions are appropriate to soil type, climate, and landform (Rangeland Health Standard 2).
- In GSENM and Glen Canyon NRA desired species, including native, threatened, endangered, and special status species, are maintained at a level appropriate for the site and species involved (Rangeland Health Standard 3).
- In GSENM and Glen Canyon NRA apply and comply with water quality standards established by the State of Utah (R.317-2) and the Federal Clean Water and Safe Drinking Water Acts. Activities will fully support designated beneficial uses described in the Utah Water Quality Standards for surface and groundwater (Rangeland Health Standard 4).

Allowable Use

Allocate 2,068,500 acres and approximately 75,000 AUMs as available for livestock grazing (see Alternative E map). Of this total, 20,700 acres will be allocated as forage reserves and 15,300 acres will be allocated as trailing only.

These totals include 209,000 acres distributed among 18 allotments that are wholly or partially in Glen Canyon NRA.

Action

Manage the previously unallotted Flag Point allotment as available for livestock grazing and combine with the White Sage allotment. Do not allocate additional AUMs above those permitted for the White Sage allotment.

Action

Manage the previously unallotted Varney Griffin allotment as available for livestock trailing only.

Action

Manage the previously unavailable Dry Hollow allotment as available for livestock grazing and combine with the Boulder Creek allotment. Do not allocate additional AUMs above those permitted for the Boulder Creek allotment.

Action

Maintain forage reserves in the Little Bowns Bench, Deer Creek (Wolverine pasture), and Phipps (Phipps pasture) allotments.

Action

In Glen Canyon NRA, maintain the following areas as forage reserves

- Portion of Big Bowns Bench (3,300 acres)
- Rock Creek Mudholes allotment, southern portion of Grand Bench pasture.

Action

Use forage reserves on a nonrenewable basis under 43 CFR 4110.3-1(c) for a variety of reasons including, but not limited to

- Facilitate research in grazing methods
- Offset potential temporary reductions in existing allotments, such as
 - After an emergency
 - After vegetation treatments
 - To make progress toward meeting rangeland health standards.

Action

Only permittees and lessees that hold permits in the planning area would be authorized to use forage reserves.

Action

Prioritize use of forage reserves based on the following:

- Permittees whose normally permitted allotments are undergoing seeding or other vegetation restoration projects.
- Permittees whose normally permitted allotments are temporarily unavailable due to wildland fire.
- Permittees whose normally permitted allotments are being rested to make progress toward meeting rangeland health standards.

Action

Re-evaluate Lower Warm Creek Allotment based on area available to be grazed.

Allowable Use

Allocate 173,800 acres as unavailable for livestock grazing.

This total includes 109,900 acres in Glen Canyon NRA that are unavailable to livestock grazing. These acres are within the Escalante River, Harvey's Fear, Lake, Lower Warm Creek, Navajo Bench, Rock Creek-Mudholes, and Spencer Bench allotments.

Action

Maintain the following areas as unavailable for livestock grazing:

- Big Bowns Bench (River pasture and a portion of Horse Canyon pasture)
- Deer Creek (Cottonwood and River pastures)
- Escalante River
- Harvey's Fear
- Long Neck
- McGath Point
- Muley Twist
- Navajo Bench
- Phipps (River pastures)
- Rattlesnake Bench
- Rock Creek-Mudholes (Dry Rock Creek and Middle Rock Creek pastures)
- Saltwater Creek
- Spencer Bench
- Steep Creek
- Willow Gulch (Lower Calf Creek Falls pasture)
- No Mans Mesa

Action

Manage the following areas as unavailable for livestock grazing:

- Antone Flat
- Lake (Navajo Point pasture)
- Lower Warm Creek
- Unallotted areas in Glen Canyon NRA

Action

Should an allotment or a portion of an allotment become available through a voluntary relinquishment or another reason, the Authorized Officer will comply with current BLM policy for voluntary relinquishment. The Authorized Officer may take one or more of the following actions:

- Issue a grazing permit to a different applicant.
- Stock with livestock from another allotment with unmet resource objectives.
- Combine with an adjacent allotment that has unmet resource objectives.
- Consider use of the allotment as a forage reserve (i.e. continue livestock grazing but do not recognize an individual with preference to the forage).
- Amend or revise the land use plan to allocate forage to uses other than livestock grazing.

Allowable Use

In GSENM and Glen Canyon NRA allow for changes in pasture or allotment boundaries.

Action

In GSENM and Glen Canyon NRA prioritize management of allotments that do not meet land health standards where grazing is identified as a causal factor.

Action

In GSENM and Glen Canyon NRA adaptively manage season of use, duration, distribution, and stocking rate (AUMs) of livestock grazing to ensure that land health standards are met.

Action

In GSENM and Glen Canyon NRA use a variety of grazing systems, such as:

- Rest-rotation
- Deferred rotation
- On-off
- Forage reserves

Action

Use range improvements, salting, supplements, or other techniques to ensure that land health standards are met, except where prohibited in Glen Canyon NRA.

Action

Do not place salt or supplements within 1/4 mile of a water source.

Action

In GSENM and Glen Canyon NRA where local reference areas are preferable but do not exist, designate reference areas. Depending on the purpose, reference areas can be various sizes and would occur in a variety of ecosystem and plant community types (both upland and riparian).

Allowable Use

In GSENM and Glen Canyon NRA allow fencing or other methods to protect natural and cultural resources from impacts related to livestock grazing.

Objective

In GSENM and Glen Canyon NRA reduce livestock-recreation conflicts.

Allowable Use

In GSENM and Glen Canyon NRA allow fencing, hiker mazes, or other methods to reduce livestock/recreation conflicts.

Action

Divide the Buckskin Pasture of the Mollies Nipple Allotment to protect the seep and reduce recreation conflicts near the mouth of Buckskin Gulch canyon.

Action

Develop a pasture use system in the King Bench Allotment so that the Gulch is not grazed after February 28 to reduce livestock/recreation use conflicts.

Action

Construct small enclosures around recreation sites such as the Paria Contact Station, Paria Townsite, campgrounds, picnic areas, or day use areas. Enclosures would be the minimum size needed to minimize livestock/recreation conflicts.

Action

Do not place salt or supplements within 1/4 mile of a developed recreation site (e.g., day use area, trailhead,). Do not place salt or supplements within the 10 special management designations identified in the MMP (pp. 57-58).

Action

In high use recreation areas, consider modifying grazing practices such as changing season of use or installing fences to reduce conflicts. Areas include the Escalante River, special management designations, slot canyons, hanging gardens, riparian areas, and other areas with constrained geology.

Existing Rangeland Seedings

Add a new section for Existing Rangeland Seedings on page 31 of the MMP (before the Water section). The following decisions would apply to existing rangeland seedings (nonstructural range improvements) that were established prior to Monument designation. Rangeland seedings were established for such reasons as erosion control, livestock forage, and watershed health. Glen Canyon NRA does not contain any rangeland seedings.

Goal

Promote healthy, sustainable rangeland ecosystems that provide wildlife habitat, livestock forage, recreation opportunities, and clean water.

Objective

Achieve a diversity of vegetation species that support multiple ecosystem functions, such as to reduce sediment load, maintain soil stability, and nutrient cycling.

Allowable Use

Allow restoration of existing rangeland seedings using a mix of native and nonnative species.

Allowable Use

Allow the appropriate treatment method for the site, including aerial treatment. Not all methods are appropriate for all site types.

Allowable Use

Allow use of machinery (e.g., roller chopping, chaining, bull hogging, discing, plowing) in existing seedings, including seedings in the Primitive Zone. Equipment selection will be made with an emphasis on minimizing surface disturbance and detrimental impacts to soils.

Action

Maintain or restore seedings for their intended purposes, including providing forage for livestock. Seedings will not be restored to a monoculture (e.g. crested wheatgrass only).

VEGETATION

Vegetation-related decisions beginning on page 26 of the MMP would be amended as follows:

Decision from the MMP	Amended Decision
<p>RM-3 (p. 26): Livestock grazing after native seedings are established will be modified to ensure the survival of the native plants. The livestock exclusion period required to allow full establishment of seeded native species and recovery of surviving native plants after a wildfire may be more than two years. Site evaluation will be required to determine when the native seedings should be grazed again and the effectiveness of the current or new grazing system on the persistence of native plants.</p>	<p>After disturbance, modify livestock grazing practices until seedings are established in order to promote the survival of plants. Generally, areas will be rested from livestock grazing for two growing seasons or until site objectives are met. Site evaluation will be required to determine when objectives for the seedings are met and grazing can be resumed.</p>

Objective

Maintain vigorous and healthy plant communities to inhibit spread of noxious weeds or non-native, invasive plants.

Allowable Use

Allow collection of locally adapted native seed for use in vegetation restoration projects in GSENM and Glen Canyon NRA.

Action

Vegetation treatments will emphasize and perpetuate the use of native seeds. Use of native species will be a priority for all vegetation treatments in GSENM and every seed mix will contain native species; in Glen Canyon NRA every seed mix will consist only of native species.

SCIENCE AND RESEARCH

The following new goals, objectives, or actions would be added:

Goal

GSENM will serve as a laboratory to research innovative grazing techniques and a diversity of grazing practices. Glen Canyon NRA will use science-based information to protect park resources and values.

Objective

Encourage innovation and experimentation to achieve land health standards.

Action

Allow experimentation of grazing techniques and grazing practices on all lands available for livestock grazing. Approved research-related experiments may be allowed to diverge from allowable uses if it can be demonstrated that knowledge gained would provide more benefit than

if the experiment were not allowed. Generally, these practices will not be used in Glen Canyon NRA unless they are used to restore park resources and values.

Action

In GSENM and Glen Canyon NRA, use ungrazed reference areas to help distinguish climate impacts from livestock grazing impacts.

WATER-RELATED DEVELOPMENTS (NON-CULINARY)

The water-related developments decision on page 55 of the MMP would be amended as follows:

Decision from the MMP	Amended Decision
<p>WDEV-I (p. 55): Water developments can be used as a management tool throughout the Monument for the following purposes: better distribution of livestock when deemed to have an overall beneficial effect on Monument resources, including water sources or riparian areas, or to restore or manage native species or populations. They can be done only when a NEPA analysis determines this tool to be the best means of achieving the above objectives and only when the water development would not dewater streams or springs. Developments will not be permitted to increase overall livestock numbers. Maintenance of existing development can continue, but may require NEPA analysis and must be consistent with the objectives of this plan.</p>	<p>Water developments can be used as a management tool throughout the Monument for the following purposes: better distribution of livestock when deemed to have an overall beneficial effect on Monument resources, including water sources or riparian areas, or to restore or manage native species or populations. They can be done only when a NEPA analysis determines this tool to be the best means of achieving MMP objectives and only when the water development would not permanently dewater streams or springs.</p>

The following new allowable uses and actions would be added:

Allowable Use

In GSENM and Glen Canyon NRA allow water gap fences in stream reaches where livestock impacts are occurring, but where animals still need access to water. These are short pieces of fence that usually run perpendicular to the flow of the stream and allow animals to access a short section of the stream reach.

Allowable Use

In GSENM and Glen Canyon NRA allow relocating water troughs away from riparian areas where livestock impacts are occurring, but where animals still need access to water. Water can be piped to a trough that is located outside of the riparian area.

Action

In GSENM and Glen Canyon NRA routine maintenance of existing development can continue within the footprint of disturbance. Maintenance of existing water developments that extends

beyond the footprint of disturbance or that are not routine in nature may require NEPA/NHPA analysis and must be consistent with the objectives of this plan. Use of heavy equipment, such as backhoes, excavators, etc., and relocation of existing water developments would undergo NEPA/NHPA analysis.

Action

In GSENM and Glen Canyon NRA install shut-off valves on any new water development and consider their installation during routine maintenance of existing water developments. Shut-off valves allow the water collection system to be shut off when not needed or to protect the riparian area from dewatering.

Action

In GSENM and Glen Canyon NRA accommodate wildlife and recreation needs when designing new water developments or relocating existing water developments. This includes installing wildlife escape ladders.

Action

In GSENM and Glen Canyon NRA during routine maintenance of existing water developments, consider installing float valves in water troughs to allow unneeded water to remain in the riparian area. In situations where float valves are not feasible, consider overflows to return unused water to the riparian area.

Action

Design and construct water developments to blend into the natural features of the surrounding landscape consistent with GSENM Visual Resource objectives and Glen Canyon NRA Scenic Resource objectives.

Glen Canyon NRA Action

Water developments will be considered on a case-by-case basis and will not occur in proposed wilderness.

COLLECTIONS

The collections decision on page 36 of the MMP would be amended as follows:

Decision from the MMP	Amended Decision
<p>COL-I (p. 36): Collection of Monument resources, objects, rocks, petrified wood, fossils, plants, parts of plants, animals, fish, insects or other invertebrate animals, bones, waste, or other products from animals, or of other items from within the Monument will be prohibited. 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; the collection of certain natural materials by Native American Indians under BLM permit; the collection of</p>	<p>Collection of Monument resources, objects, rocks, petrified wood, fossils, plants, parts of plants, animals, fish, insects or other invertebrate animals, bones, waste, or other products from animals, or of other items from within the Monument will be prohibited. 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; the collection of certain natural materials by Native American Indians under BLM permit; the collection of antlers or</p>

<p>antlers or horns as provided for by UDWR regulations; and the collection of dead and down wood for immediate use in campfires, where campfires are allowed. 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 Monument.</p>	<p>horns as provided for by UDWR regulations; the collection of dead and down wood for immediate use in campfires, where campfires are allowed; and collection of native seed for use in vegetation restoration projects on the Monument or NRA. 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 Monument.</p>
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GLEN CANYON NRA GRAZING MANAGEMENT PLAN

The existing Glen Canyon Grazing Management Plan (Glen Canyon GMP), including goals, objectives, and actions described in Alternative C would also be updated for Alternative E.

FREQUENTLY USED ACRONYMS AND TERMS

ACRONYMS

AOI: Area of Impact

AUM: Animal Unit Month

BLM: United States Department of the Interior, Bureau of Land Management

BSC: Biological Soil Crust

EIS: Environmental Impact Statement

ERA: Experimental Research Area

Glen Canyon NRA: Glen Canyon National Recreation Area

GMP: Glen Canyon NRA Grazing Management Plan

GSENM: Grand Staircase-Escalante National Monument

IMACS: Intermountain Antiquities Computer System

MFP: Management Framework Plan

MMP: Grand Staircase-Escalante National Monument Management Plan

MMP-A: Monument Management Plan Amendment

NEPA: National Environmental Policy Act

NHPA: National Historic Preservation Act

NRA: National Recreation Area

NPS: United States Department of the Interior, National Park Service

PNA: Protected Natural Area

PNC: Potential Natural Community

RMP: Resource Management Plan

RNA: Research Natural Area

TCP: Traditional Cultural Property

USFWS: U.S. Fish and Wildlife Service

GLOSSARY TERMS

Allotment. An area of land designated and managed for grazing of livestock (43 CFR 4100.0-5).

Alternative. One of at least two proposed means of accomplishing planning objectives by which the BLM can meet its purpose and need.

Amendment. The process for considering or making changes in terms, conditions, and decision of an approved land use plan (BLM H-1601-1).

Animal unit month (AUM). An AUM is the amount of forage necessary for the sustenance of one cow or its equivalent for a period of 1 month (43 CFR 4100.0-5).

Decision area. The lands in the planning area where the BLM and the NPS have authority to make land use and management decisions. The BLM's decision area for this plan amendment includes all BLM-managed lands for which GSENM has livestock grazing administration responsibility, including some lands in the BLM Kanab and Arizona Strip Field Offices. The NPS decision area includes lands in Glen Canyon NRA for which GSENM has livestock grazing administration responsibility. The decision area does not include state, municipal, or private lands.

Environmental Impact Statement. A detailed written statement as required by Section 102(2)(c) of the National Environmental Policy Act (40 CFR 1508.11).

Federal Land Policy and Management Act of 1976. The Federal Land Policy and Management Act (Public Law 94-579) establishes public land policy and guidelines for public land administration and provides for the management, protection, development, and enhancement of the public lands. Section 202 provides information on land use planning. The Federal Land Policy and Management Act was passed on October 21, 1976.

Glen Canyon NRA Grazing Management Plan. The Grazing Component of the General Management Plan prepared by the National Park Service for the Glen Canyon National Recreation Area. The Grazing Management Plan is composed of several elements; 1) descriptions of the existing resource protection and grazing administrative responsibilities of the NPS and BLM; 2) an assessment of the current range condition by resource; 3) goals, objectives, and recommendations for grazing practices and management actions; and 4) maximum grazing intensities (utilization) compatible with the purpose of the recreation area. The Glen Canyon Grazing Management Plan was finalized in 1999.

Monument Management Plan (MMP). The MMP is a land use plan that contains a set of decisions that establish management direction for BLM-managed land in GSENM. The MMP was prepared in 1999, under the provisions of the Federal Land Policy and Management Act, and became effective in February 2000.

National Environmental Policy Act of 1969. The National Environmental Policy Act (Public Law 91-190) establishes a national policy for the environment, provides for the establishment of a Council on Environmental Quality, and more. The National Environmental Policy Act ensures that environmental information is available before decisions are made and before actions are taken.

Permitted use. The forage allocated by or under the guidance of an applicable land use plan for livestock grazing in an allotment under a permit or lease and is expressed in AUMs (43 CFR 4100.0-5).

Planning area. The geographic area encompassing lands for which the BLM and the NPS will make decisions during this planning effort. The planning area encompasses approximately 2,316,000 acres in Garfield and Kane Counties, Utah, and Coconino County, Arizona. Small areas of state, municipal, and private lands are contained within the planning area.

Planning criteria. The standards, rules, and other factors developed by managers and interdisciplinary teams for their use in forming judgments about decision making, analysis, and data collection during planning (BLM H-1601-1).

Planning issues. A matter of controversy over resource management activities or land use that is well defined and entails alternative actions or decisions.

Range improvement. An authorized physical modification or treatment which is designed to improve production of forage; change vegetation composition; control patterns of use; provide water; stabilize soil and water conditions; and restore, protect, and improve the condition of rangeland ecosystems to benefit livestock, wild horses and burros, and fish and wildlife. The term includes, but is not limited to, structures, treatment projects and use of mechanical devices, or modifications achieved through mechanical means (43 CFR 4100.0-5).

Scoping. The process by which the BLM solicits internal and external input on the issues and effects that will be addressed, as well as the degree to which those issues and effects will be analyzed in the NEPA document. Scoping is one form of public involvement in the NEPA process. Scoping occurs early in the NEPA process and generally extends through the development of alternatives. External scoping, also known as formal scoping, involves notification and opportunities for feedback from other agencies, organizations, and the public (BLM H-1790-1).

Seeding. Nonstructural range improvements include seedings and other vegetation treatments. A rangeland seeding is a type of nonstructural range improvement where a vegetation type or community has been established through the artificial dissemination of seed. Seedings include the application of grass, forb, or shrub seed, either aerially or from the ground. Seeding allows the establishment of native species or placeholder species and restoration of disturbed areas to a perennial-dominated cover type, thereby decreasing the risk of subsequent invasion by exotic plant species.



For more information, please visit the GSENM Livestock Grazing Plan Amendment Webpage:
<http://blm.gov/pgld>

**Please submit your comments by
January 20, 2015.**

You can email, fax, or mail your comments.

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Before including your address, phone number, email address, or other personal identifying information in your comment, be advised that your entire comment, including personal identifying information, may be made publicly available at any time. While you can ask us to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.