

# **Grand Staircase-Escalante National Monument Draft Monument Management Plan Amendment & Draft Rangeland Health Environmental Impact Statement**

Grand Staircase-Escalante National Monument



October 2008

## **BLM Mission**

It is the mission of the Bureau of Land Management to sustain the health, diversity and productivity of the public lands for the use and enjoyment of present and future generations

**BLM-UT-PL-08-007-1610**

**UT-030-00-028-EIS**

**DES-08-36**

# United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office

P.O. Box 45155

Salt Lake City, UT 84145-0155

<http://www.blm.gov>

IN REPLY REFER TO:

1610

(ut-935)

Dear Reader:

Enclosed for your review is the Draft Monument Management Plan Amendment and Draft Rangeland Health Environmental Impact Statement (EIS) for the Utah Bureau of Land Management (BLM) Grand Staircase-Escalante National Monument (GSENM). This document was prepared by the BLM in consultation with cooperating agencies, and in accordance with the National Environmental Policy Act of 1969 (NEPA), the Federal Land Policy and Management Act of 1976 (FLPMA), implementing regulations, the BLM's land use planning handbook (H-1601-1), and other applicable law.

The planning area consists of about 2.1 million acres of land which includes lands in the Monument, non-monument lands administered by GSENM, lands administered by the Kanab Field Office and Arizona Strip Office of the BLM and portions of Glen Canyon National Recreation Area. These lands occur in Kane and Garfield Counties, Utah and a small area in Coconino County, Arizona.

The BLM is preparing this Plan Amendment because the land use plans that provide direction for livestock grazing and rangeland management for most of the areas administered by the Grand Staircase-Escalante National Monument were completed in 1981 and are more than 20 years old. Because the Monument Management Plan (MMP) did not address most of the prior livestock grazing decisions, these earlier plans continue to govern livestock use and rangeland management. This Plan Amendment will allow the integration of livestock and rangeland management with the other resources in the MMP. Decisions for livestock grazing and rangeland management on lands in the planning area outside of GSENM would be integrated into the Kanab Resource Management Plan (RMP) currently in preparation.

The GSENM also administers livestock grazing on lands managed by the National Park Service (NPS) within Glen Canyon National Recreation Area (GCNRA) as well as lands within BLM's Kanab and Arizona Strip Field Offices through intra-agency agreements. This Plan Amendment will incorporate current plans or portions of plans prepared by those agencies that address livestock grazing. The analysis in the EIS will also lead to the renewal of grazing permits on the Monument in conformance with the direction of the selected alternative.

The document may be viewed and downloaded in PDF format at:  
[http://www.blm.gov/ut/st/en/prog/planning/existing\\_plans.html](http://www.blm.gov/ut/st/en/prog/planning/existing_plans.html).

Copies will also be available for distribution and review in CD ROM or printed format during the comment period at the following BLM locations:

BLM GSENM Headquarters  
190 East Center St.  
Kanab, Utah 84741

Utah State Office, BLM  
440 W. 200 S, Suite 500  
Salt Lake City, UT  
84101

GSENM  
Cannonville Visitor Center  
10 Center Street  
Cannonville, UT 84718

GSENM  
Big Water Visitor Center  
100 Upper Revolution Way  
Big Water, Utah 84741

GSENM  
Escalante Visitor Center  
755 West Main  
Escalante, UT 84726

The BLM encourages you to provide information and comments pertaining to the analysis presented in this document. Of particular importance is feedback concerning the adequacy and accuracy of the five proposed alternatives, the analysis of their respective management decisions and any new information that would help the BLM produce a Proposed Plan Amendment and Final EIS, which is the next phase in the planning process. Comments should be as specific as possible and are more helpful if they include suggested changes, sources, or methodologies, and reference a specific section or page number. Comments that are only opinions or preferences will be considered in the decision-making process but will not receive a formal response from the BLM.

Your timely comments will help formulate the Proposed Plan Amendment and Final EIS and assist BLM's authorized officer in reaching a decision that best meets the needs of the resources and values in this area under the agency's multiple use and sustained yield mandates. Comments will be accepted for ninety (90) calendar days following the Environmental Protection Agency's publication of its Notice of Availability in the Federal Register.

We strongly encourage you to submit comments electronically at [UT\\_GSENM\\_NEPA@blm.gov](mailto:UT_GSENM_NEPA@blm.gov). Comments may also be submitted by mail to:

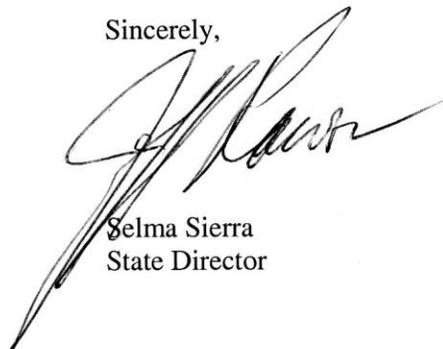
Draft Rangeland Health Amendment Comments  
Grand Staircase-Escalante National Monument  
Bureau of Land Management  
190 East Center Street  
Kanab, Utah 84741

Public meetings to provide an overview of the document, respond to questions, and take public comments will be held subsequent to the release of the draft. These meetings will be announced by local media and public mailings. Public meetings will be held at Kanab, Escalante, and Salt Lake City, Utah.

It is the practice of BLM to make comments, including names and addresses of respondents, available for public review. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, be advised that your entire comment, including your personal identifying information, may be made publicly available at any time. Although you may request us to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so. All submissions from organizations and businesses, and from individuals identifying themselves as representatives of officials of organizations and businesses, will be available for public inspection in their entirety.

Thank you for your continued interest in the management of the Grand Staircase-Escalante National Monument and your participation in this important process.

Sincerely,

A handwritten signature in black ink, appearing to read 'Selma Sierra', is written over a large, light-colored, stylized graphic element that resembles a signature or a large letter 'S'.

Selma Sierra  
State Director

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

GRAND STAIRCASE-ESCALANTE NATIONAL MONUMENT  
DRAFT MONUMENT MANAGEMENT PLAN AMENDMENT AND  
DRAFT RANGELAND HEALTH ENVIRONMENTAL IMPACT STATEMENT

PREPARED BY THE  
GRAND STAIRCASE-ESCALANTE NATIONAL MONUMENT

OCTOBER 2008



---

Selma Sierra  
State Director

Page Intentionally Left Blank

Grand Staircase-Escalante National Monument Planning Area  
Draft Monument Management Plan Amendment and  
Draft Rangeland Health Environmental Impact Statement

**Lead Agency:** U.S. Department of the Interior, Bureau of Land Management

**Type of Action:** Administrative

**Jurisdiction:** Portions of Kane and Garfield Counties, Utah and Coconino County, Arizona

**Abstract:** The Draft Grand Staircase-Escalante National Monument Management Plan Amendment and Draft Rangeland Health Environmental Impact Statement describes and analyzes alternatives for the planning and management of livestock grazing on public lands administered by the Bureau of Land Management, Grand Staircase-Escalante National Monument(GSENM). The planning area includes approximately 2,168,726 acres of Federal land in south-central Utah, mainly within the GSENM, but including portions of Glen Canyon NRA, lands administered by the Kanab Field Office and the Arizona Strip BLM. Approximately 68% of the planning area is in Kane County, with approximately 31% in Garfield County, with less than 1% occurring in Coconino County, AZ.

Public lands administered by the Bureau of Land Management (BLM) are managed under land use plans which require periodic updating. The BLM is preparing this Plan Amendment because the land use plans that provide direction for livestock grazing and rangeland management for most of the areas administered by the Grand Staircase-Escalante National Monument (GSENM) were completed in 1981 and are more than 20 years old. These plans need updating to reflect changes in resource conditions, revisions to grazing regulations, updates and/or amendments to allotment management plans, and the requirements of legal proceedings and court rulings. This Rangeland Health Plan Amendment (Plan Amendment) replaces the grazing portion of these older land use plans.

The existing land use plans providing direction for livestock grazing include the Escalante, Paria, Vermilion, and Zion Management Framework Plans (MFPs) along with the more recent Monument Management Plan (MMP). The Monument Management Plan prepared for the GSENM (2000) covers most of the lands in the planning area. Because the MMP did not address most of the prior livestock grazing decisions, these earlier plans continue to govern livestock use and rangeland management. This Plan Amendment will allow the integration of livestock and rangeland management with the other resources in the MMP and replaces the MFPs. Decisions for livestock grazing and rangeland management on lands in the planning area outside of GSENM would be integrated into the Kanab Resource Management Plan (RMP) currently in preparation.

The GSENM also administers livestock grazing on lands managed by the National Park Service (NPS) within Glen Canyon National Recreation Area (GCNRA) as well as lands within BLM's Kanab and Arizona Strip Field Offices through intra-agency agreements. This Plan Amendment will incorporate current plans or portions of plans prepared by those agencies that address livestock grazing.

Pursuant to BLM policy and regulations, as well as Federal law, the BLM is required to assess whether the public lands are achieving Rangeland Health Standards and complete the appropriate environmental review prior to renewing grazing permits. An interdisciplinary team has developed this Plan Amendment/Draft Environmental Impact Statement (DEIS) for the purpose of analyzing the potential effects of livestock grazing on resources that may be affected in the planning area. This approach is needed to ensure that all management actions on public land conform to the appropriate regulations and planning guidance, and balances the use between different resource values.

Where current land use plan decisions have been found to be valid, they are brought forward as valid existing management determinations. Where current land use plan decisions have been found to be outdated, new management actions are proposed and analyzed in this DEIS. If changes in the terms and conditions of existing grazing permits are required, the permits would be reissued with modified and/or additional terms and conditions.

To assist the BLM Authorized Officer in making decisions and to help cooperating agencies and the public focus on appropriate solutions to identified issues, five alternatives are considered in the DEIS.

**Alternative A (No Action):** The current level of resource use and protection would be continued. Grazing permits would be renewed with existing Terms & Conditions

**Alternative B:** Rangeland Health Standards, with minimal stocking adjustments and improved livestock distribution and management would be emphasized. Rangeland restoration and the future installation of structural improvements would be assessed. Grazing permits would be renewed with modified Terms and Conditions consistent with the actions proposed in this alternative.

**Alternative C (Agency Preferred Alternative):** Rangeland Health Standards would be achieved over the life of the MMP by making allotment specific modifications to grazing management. These management changes would include distribution adjustments, stocking adjustments, and temporary suspensions on less than 10% of allotments when Rangeland Health Standards assessments and monitoring indicate such actions are needed to meet resource objectives. This alternative includes range restoration and future structural improvements assessed under Alternative B. Grazing permits would be renewed with modified Terms and Conditions consistent with the actions proposed in this alternative.

**Alternative D:** Rangeland Health Standards would be achieved over the life of the MMP by making modifications to grazing management including temporary grazing suspensions on allotments which fail to meet Utah BLM's Rangeland Health Standards for upland soils or desired species. Range restoration and the installation of structural range improvements are assessed under this alternative, but to a lesser degree than in Alternatives B and C. Grazing permits would be renewed with modified Terms and Conditions consistent with the actions proposed in this alternative.

**Alternative E:** Rangeland Health Standards would be achieved over the life of the MMP by making modifications to grazing management including temporary grazing suspensions on allotments which fail Utah BLM's Rangeland Health Standards for upland soils, desired species, and riparian/wetland functionality. This alternative proposes an emphasis on vegetation restoration activity without structural range improvements. Grazing permits would be renewed with modified Terms and Conditions consistent with the actions proposed in this alternative.

When completed, this plan amendment and EIS will provide a set of comprehensive, long-range decisions for managing livestock grazing throughout the planning area. Comments are accepted for 90 days following the date the U.S. Environmental Protection Agency publishes the Notice of Availability for this Draft Plan Amendment/DEIS in the Federal Register. Comments may be submitted via e-mail at [UT\\_GSENM\\_NEPA@blm.gov](mailto:UT_GSENM_NEPA@blm.gov). Alternatively, written comments may be mailed to: Draft Rangeland Health Amendment Comments – Attention Paul Chapman, Grand Staircase-Escalante National Monument, Bureau of Land Management, 190 East Center Street, Kanab, Utah 84741.

Page Intentionally Left Blank

# TABLE OF CONTENTS

ABSTRACT .....	page i
TABLE OF CONTENTS.....	page iv
EXECUTIVE SUMMARY.....	ES-1

## CHAPTER 1 - INTRODUCTION

PURPOSE AND NEED FOR THE PLAN AMMENDMENT .....	Chapter 1 – page 1
BACKGROUND .....	Chapter 1 – page 2
DESCRIPTION OF THE PLANNING AREA .....	Chapter 1 – page 3
ISSUE IDENTIFICATION PROCESS .....	Chapter 1 – page 7
Issues assessed, but not considered further .....	Chapter 1 – page 7
ISSUE SUMMARY .....	Chapter 1 – page 12
Clarification of Monument Management Plan Direction .....	Chapter 1 – page 12
Livestock Grazing Management .....	Chapter 1 – page 13
Compliance with Standards and Guidelines for Rangeland Health .....	Chapter 1 – page 13
Socio-Economics .....	Chapter 1 – page 15
Cultural Resources .....	Chapter 1 – page 14
Recreation .....	Chapter 1 – page 15
PLANNING CRITERIA AND CONSIDERATIONS .....	Chapter 1 – page 15
PLAN AMENDMENT GOALS .....	Chapter 1 – page 16
Livestock Grazing Management .....	Chapter 1 – page 16
Vegetation Management .....	Chapter 1 – page 16
Soils .....	Chapter 1 – page 16
Revegetation .....	Chapter 1 – page 16
Riparian .....	Chapter 1 – page 17
Water Resources .....	Chapter 1 – page 17
Special Status Species .....	Chapter 1 – page 17
Wildlife .....	Chapter 1 – page 17
Socio-economic .....	Chapter 1 – page 17
Cultural Resources .....	Chapter 1 – page 17
Recreation .....	Chapter 1 – page 17
CONSISTENCY WITH OTHER PLANS .....	Chapter 1 – page 18
ORGANIZATION OF THE DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) .....	Chapter 1 – page 20

## CHAPTER 2 - ALTERNATIVES

INTRODUCTION .....	Chapter 2 – page 1
DEVELOPMENT OF THE ALTERNATIVES.....	Chapter 2 – page 1
IDENTIFICATION OF THE PREFERRED ALTERNATIVE (C).....	Chapter 2 – page 2
ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL .....	Chapter 2 – page 2
MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES .....	Chapter 2 – page 4
Existing Land Use Plan Decisions to be Carried Forward .....	Chapter 2 – page 5
Existing Land Use Plan Decisions to be Modified and Carried Forward .....	Chapter 2 – page 7
EXISTING MONUMENT MANAGEMENT PLAN DECISIONS TO BE AMENDED OR CLARIFIED .....	Chapter 2 – page 9
New Management Actions – Livestock Management .....	Chapter 2 – page 14
New Management Actions – Vegetation .....	Chapter 2 – page 16
New Management Actions – Special Status Plant Species .....	Chapter 2 – page 17
New Management Actions – Riparian And Water Resources .....	Chapter 2 – page 17
New Management Actions – Biological Soil Crust .....	Chapter 2 – page 18
New Management Actions – Wildlife .....	Chapter 2 – page 19
New Management Actions – Special Status Wildlife Species .....	Chapter 2 – page 21
New Management Actions – Cultural Resources .....	Chapter 2 – page 22

# TABLE OF CONTENTS

ALTERNATIVES ANALYZED IN DETAIL .....	Chapter 2 – page 45
ALTERNATIVE A (No Action) .....	Chapter 2 – page 45
Alternative Summary .....	Chapter 2 – page 45
Livestock Grazing Management Actions .....	Chapter 2 – page 45
Wildlife Management Actions .....	Chapter 2 – page 46
ALLOTMENT SPECIFIC MANAGEMENT ACTIONS COMMON TO	
ALTERNATIVES B, C, D, & E .....	Chapter 2 – page 46
ALTERNATIVE B .....	Chapter 2 – page 47
Alternative Summary .....	Chapter 2 – page 47
Livestock Grazing Management Actions .....	Chapter 2 – page 47
Wildlife Management Actions .....	Chapter 2 – page 52
ALTERNATIVE C – PREFERRED ALTERNATIVE .....	Chapter 2 – page 53
Alternative Summary .....	Chapter 2 – page 53
Livestock Grazing Management Actions .....	Chapter 2 – page 53
Wildlife Management Actions .....	Chapter 2 – page 62
ALTERNATIVE D .....	Chapter 2 – page 63
Alternative Summary .....	Chapter 2 – page 63
Livestock Grazing Management Actions .....	Chapter 2 – page 63
Wildlife Management Actions .....	Chapter 2 – page 69
ALTERNATIVE E .....	Chapter 2 – page 71
Alternative Summary .....	Chapter 2 – page 71
Livestock Grazing Management Actions .....	Chapter 2 – page 71
Wildlife Management Actions .....	Chapter 2 – page 77
COMPARITIVE SUMMARY OF IMPACTS .....	Chapter 2 – page 78

## CHAPTER 3- AFFECTED ENVIRONMENT

INTRODUCTION .....	Chapter 3 – page 1
LAND OWNERSHIP .....	Chapter 3 – page 1
TRANSPORTATION AND ACCESS .....	Chapter 3 – page 1
CLIMATE .....	Chapter 3 – page 1
LIVESTOCK GRAZING .....	Chapter 3 – page 4
Rangeland Monitoring .....	Chapter 3 – page 7
Rangeland Health Standards .....	Chapter 3 – page 15
VEGETATION .....	Chapter 3 – page 16
Vegetation Classification .....	Chapter 3 – page 17
Forests and Woodlands .....	Chapter 3 – page 18
Shrublands and Grasslands .....	Chapter 3 – page 21
Wetlands .....	Chapter 3 – page 26
THREATENED, ENDANGERED, and SENSITIVE PLANTS .....	Chapter 3 – page 28
RIPARIAN AND WATER RESOURCES .....	Chapter 3 – page 33
Paria River Subbasin .....	Chapter 3 – page 36
Kaiparowits Subbasin .....	Chapter 3 – page 37
Escalante River Subbasin .....	Chapter 3 – page 39
Kanab Creek Subbasin .....	Chapter 3 – page 40
BIOLOGICAL SOIL CRUST .....	Chapter 3 – page 41
SOILS .....	Chapter 3 – page 42
Soil Management and Soil Productivity .....	Chapter 3 – page 44
NOXIOUS WEEDS AND NON-NATIVE PLANTS .....	Chapter 3 – page 54
WILDLIFE .....	Chapter 3 – page 49
Birds .....	Chapter 3 – page 49
Bats .....	Chapter 3 – page 55
Game Species .....	Chapter 3 – page 56
Fish and Aquatic Species .....	Chapter 3 – page 59
Threatened and Endangered Wildlife Species .....	Chapter 3 – page 60
Other Species .....	Chapter 3 – page 65

# TABLE OF CONTENTS

CULTURAL RESOURCES .....	Chapter 3 – page 67
Culture History .....	Chapter 3 – page 67
The Archaeological Record .....	Chapter 3 – page 70
Site Types .....	Chapter 3 – page 70
RECREATION .....	Chapter 3 – page 72
Overall Recreation Setting .....	Chapter 3 – page 72
Recreation Use Activities .....	Chapter 3 – page 72
Recreation Use Areas and Use Levels .....	Chapter 3 – page 72
SOCIO-ECONOMIC .....	Chapter 3 – page 78
Introduction .....	Chapter 3 – page 78
General Methodology .....	Chapter 3 – page 78
History, Culture, and Change .....	Chapter 3 – page 79
The 1840s through the Present Day .....	Chapter 3 – page 79
Tradition and Change in Southern Utah .....	Chapter 3 – page 82
Regional Identity Workshops Facilitated by the Sonoran Institute .....	Chapter 3 – page 84
Garfield County .....	Chapter 3 – page 85
Kane County .....	Chapter 3 – page 93
Grand Staircase-Escalante National Monument .....	Chapter 3 – page 98

## CHAPTER 4 – ENVIRONMENTAL IMPACTS

OVERVIEW .....	Chapter 4 – page 1
ANALYSIS ASSUMPTIONS AND GUIDELINES .....	Chapter 4 – page 1
GENERAL EFFECTS EXPERIENCED UNDER ALL ALTERNATIVES .....	Chapter 4 – page 2
Cultural Resources .....	Chapter 4 – page 2
Biological Soil Crust .....	Chapter 4 – page 3
Recreation .....	Chapter 4 – page 4
ALTERNATIVE A – NO ACTION .....	Chapter 4 – page 6
Livestock Grazing .....	Chapter 4 – page 6
Vegetation .....	Chapter 4 – page 10
Threatened, Endangered and Sensitive Plant Species .....	Chapter 4 – page 13
Riparian and Water Resources .....	Chapter 4 – page 14
Soils .....	Chapter 4 – page 14
Noxious Weeds and Non-native plants .....	Chapter 4 – page 15
Wildlife .....	Chapter 4 – page 15
Cultural Resources .....	Chapter 4 – page 19
Recreation .....	Chapter 4 – page 19
ALTERNATIVE B .....	Chapter 4 – page 20
Livestock Grazing .....	Chapter 4 – page 20
Vegetation .....	Chapter 4 – page 26
Threatened, Endangered and Sensitive Plant Species .....	Chapter 4 – page 29
Riparian and Water Resources .....	Chapter 4 – page 30
Soils .....	Chapter 4 – page 32
Noxious Weeds and Non-native plants .....	Chapter 4 – page 33
Wildlife .....	Chapter 4 – page 33
Cultural Resources .....	Chapter 4 – page 38
Recreation .....	Chapter 4 – page 39
ALTERNATIVE C – MANAGEMENT PREFERRED .....	Chapter 4 – page 40
Livestock Grazing .....	Chapter 4 – page 40
Vegetation .....	Chapter 4 – page 47
Threatened, Endangered and Sensitive Plant Species .....	Chapter 4 – page 50
Riparian and Water Resources .....	Chapter 4 – page 51
Soils .....	Chapter 4 – page 53
Noxious Weeds and Non-native plants .....	Chapter 4 – page 54
Wildlife .....	Chapter 4 – page 55

# TABLE OF CONTENTS

Cultural Resources .....	Chapter 4 – page 60
Recreation .....	Chapter 4 – page 61
ALTERNATIVE D .....	Chapter 4 – page 63
Livestock Grazing .....	Chapter 4 – page 63
Vegetation .....	Chapter 4 – page 70
Threatened, Endangered and Sensitive Plant Species .....	Chapter 4 – page 73
Riparian and Water Resources .....	Chapter 4 – page 74
Soils .....	Chapter 4 – page 76
Noxious Weeds and Non-native plants .....	Chapter 4 – page 77
Wildlife .....	Chapter 4 – page 77
Cultural Resources .....	Chapter 4 – page 83
Recreation .....	Chapter 4 – page 84
ALTERNATIVE E .....	Chapter 4 – page 86
Livestock Grazing .....	Chapter 4 – page 86
Vegetation .....	Chapter 4 – page 91
Threatened, Endangered and Sensitive Plant Species .....	Chapter 4 – page 91
Riparian and Water Resources .....	Chapter 4 – page 92
Soils .....	Chapter 4 – page 95
Noxious Weeds and Non-native plants .....	Chapter 4 – page 96
Wildlife .....	Chapter 4 – page 96
Cultural Resources .....	Chapter 4 – page 101
Recreation .....	Chapter 4 – page 102
SOCIO-ECONOMIC IMPACTS (ALL ALTERNATIVES) .....	Chapter 4 – page 104
Impacts on Custom and Culture .....	Chapter 4 – page 104
Economic Impacts of the Grazing Alternatives .....	Chapter 4 – page 105
A Final Comment on Methods and Assumptions .....	Chapter 4 – page 116
Alternative Specific Impacts .....	Chapter 4 – page 117
CUMULATIVE IMPACTS .....	Chapter 4 – page 118
Livestock Grazing .....	Chapter 4 – page 118
Socio-Economic .....	Chapter 4 – page 119
Vegetation .....	Chapter 4 – page 119
Riparian and Water Resources .....	Chapter 4 – page 120
Soils and Biological Soil Crusts .....	Chapter 4 – page 120
Noxious Weeds .....	Chapter 4 – page 121
Wildlife .....	Chapter 4 – page 121
Cultural .....	Chapter 4 – page 121
Recreation .....	Chapter 4 – page 121
CHAPTER 5:	
PUBLIC NOTIFICATION PROCESS .....	Chapter 5 – page 1
CONSULTATION AND COORDINATION WITH FEDERAL, STATE, TRIBAL AND LOCAL GOVERNMENTS .....	Chapter 5 – page 2
PREPARERS/TEAM MEMBERS .....	Chapter 5 – page 2
GLOSSARY .....	Page G-1
ABBREVIATIONS AND ACRONYMS .....	Page A-1
REFERENCES .....	Page R-1

# TABLE OF CONTENTS

## LIST OF TABLES

### CHAPTER 2:

Table 2-1	Allotments Closed by Previous Land Use Plan .....	Chapter 2 – page 6
Table 2-2	Summary of the Alternatives .....	Chapter 2 – page 24
Table 2-3	AUM Numbers by Allotment and Alternative .....	Chapter 2 – page 34
Table 2-4	Proposed Livestock Grazing in Allotments Meeting RLH Standards (Alternative C) .....	Chapter 2 – page 54
Table 2-5	Proposed Livestock Grazing in Allotments Not Meeting RLH Standards Due to Livestock Grazing (Alternative C) .....	Chapter 2 – page 55
Table 2-6	Proposed Livestock Grazing in Allotments Meeting RLH Standards (Alternative D) .....	Chapter 2 – page 64
Table 2-7	Proposed Livestock Grazing in Allotments Not Meeting RLH Standards Due to Livestock Grazing (Alternative D) .....	Chapter 2 – page 65
Table 2-8	Proposed Livestock Grazing in Allotments Meeting RLH Standards (Alternative E) .....	Chapter 2 – page 72
Table 2-9	Proposed Livestock Grazing in Allotments Not Meeting RLH Standards Due to Livestock Grazing (Alternative E) .....	Chapter 2 – page 73
Table 2-10	Comparative Summary of Impacts by Alternative .....	Chapter 2 – page 78

### CHAPTER 3:

Table 3-1	Average Monthly Precipitation and Temperature – Escalante, Utah (422592) .....	Chapter 3 – page 2
Table 3-2	Average Monthly Precipitation and Temperature – Big Water, Utah (420688) .....	Chapter 3 – page 3
Table 3-3	Average Monthly Precipitation and Temperature – Kanab, Utah (424508) .....	Chapter 3 – page 3
Table 3-4	Current Grazing Allotments.....	Chapter 3 – page 5
Table 3-5	Areas Closed to Livestock Grazing by Previous Land Use Plan Decisions.....	Chapter 3 – page 6
Table 3-6	Utilization Monitoring Summary .....	Chapter 3 – page 10
Table 3-7	Trend Monitoring Summary .....	Chapter 3 – page 11
Table 3-8	Biological Indicators .....	Chapter 3 – page 12
Table 3-9	Hydrological Indicators .....	Chapter 3 – page 13
Table 3-10	Soil Indicators .....	Chapter 3 – page 14
Table 3-11	Allotments Evaluated as Not Meeting Standards for Rangeland Health Due to Existing Livestock Grazing .....	Chapter 3 – page 15
Table 3-12	Vegetation Classification .....	Chapter 3 – page 17
Table 3-13	Threatened and Endangered Plant Species .....	Chapter 3 – page 29
Table 3-14	BLM Sensitive Plant Species .....	Chapter 3 – page 31
Table 3-15	GSENM Water Quality Monitoring Sites .....	Chapter 3 – page 34
Table 3-16	Decision Area Riparian Condition Summary .....	Chapter 3 – page 36
Table 3-17	Upland Rangeland Health Ratings for Sites in the Paria River Subbasin .....	Chapter 3 – page 37
Table 3-18	Upland Rangeland Health Ratings for Watersheds in the Kaiparowits Subbasin .....	Chapter 3 – page 38
Table 3-19	Upland Rangeland Health Ratings for Sites in the Escalante River Subbasin .....	Chapter 3 – page 40
Table 3-20	Upland Rangeland Health Ratings for Sites in the Kanab Creek Subbasin .....	Chapter 3 – page 40
Table 3-22	Noxious Weed Species Identified In or Near the Planning Area .....	Chapter 3 – page 45
Table 3-23	Non-native Plant Species of Management Concern .....	Chapter 3 – page 46
Table 3-24	Bat Species Brought Forward for Analysis .....	Chapter 3 – page 56
Table 3-25	Visitation to Utah Parks and Scenic Areas, 2004 .....	Chapter 3 – page 84

# TABLE OF CONTENTS

Table 3-26	Population of Garfield County, By Sex and Age, 1990 and 2000 .....	Chapter 3 – page 85
Table 3-27	Employment by Industry in Garfield County, Changes from 1980 to 2000 .....	Chapter 3 – page 86
Table 3-28	Wages and Income in Garfield County, 1970–2000 .....	Chapter 3 – page 87
Table 3-29	Personal Income from Agriculture in Garfield County, 1970–2000 .....	Chapter 3 – page 89
Table 3-30	Gross Income and Expenditures for Agriculture in Garfield County, 1970–2000 .....	Chapter 3 – page 89
Table 3-31	Gross Income, Expenses, and Net Income from Farming and Ranching in Garfield County (in Thousands of Year 2000 Dollars) .....	Chapter 3 – page 110
Table 3-32	Population of Kane County, by Sex and Age, 1990 and 2000 .....	Chapter 3 – page 93
Table 3-33	Employment by Industry in Kane County, Changes from 1982 to 2000 .....	Chapter 3 – page 94
Table 3-34	Wages and Income in Kane County, 1970–2000 .....	Chapter 3 – page 95
Table 3-35	Gross Income, Expenses, and Net Income from Farming and Ranching in Kane County (in Thousands of Year 2000 Dollars) .....	Chapter 3 – page 96
Table 3-36	Personal income from Agriculture in Kane County, 1970–2000 .....	Chapter 3 – page 96
Table 3-37	Gross Income and Expenditures for Agriculture in Kane County, 1970–2000 .....	Chapter 3 – page 97

**CHAPTER 4:**

Table 4-1	Summary of Impacts on Bats (Alternative A).....	Chapter 4 – page 17
Table 4-2	Impacts on Birds by Habitat Type (Alternative B) .....	Chapter 4 – page 34
Table 4-3	Summary of Impacts on Bats (Alternative B) .....	Chapter 4 – page 35
Table 4-4	Impacts on Birds by Habitat Type (Alternative C) .....	Chapter 4 – page 56
Table 4-5	Summary of Impacts on Bats (Alternative C).....	Chapter 4 – page 57
Table 4-6	Impacts on Birds by Habitat Type (Alternative D).....	Chapter 4 – page 79
Table 4-7	Summary of Impacts on Bats (Alternative D).....	Chapter 4 – page 80
Table 4-8	Impacts on Birds by Habitat Type (Alternative E).....	Chapter 4 – page 97
Table 4-9	Summary of Impacts on Bats (Alternative E).....	Chapter 4 – page 98
Table 4-10	Average Monthly Beef Prices in the U.S. ....	Chapter 4 – page 106
Table 4-11	U.S. Beef Prices From 1970 - 2002, with Projections to 2015 (in Constant 1990 Dollars) .....	Chapter 4 – page 106
Table 4-12	Land Ownership in Garfield and Kane Counties, Utah .....	Chapter 4 – page 107
Table 4-13	Acres Grazed in Garfield and Kane Counties .....	Chapter 4 – page 108
Table 4-14	Beef Cattle Inventories in Garfield and Kane Counties, 1995–2004 .....	Chapter 4 – page 108
Table 4-15	Permitted and Actual AUM Use, 1982–2004 .....	Chapter 4 – page 110
Table 4-16	Reductions in Overall Economic Output under the Various Alternatives (2002 Dollars) .....	Chapter 4 – page 112
Table 4-17	Reduction in Output, Jobs, and Labor Income under the Various Alternatives (2002 Dollars) .....	Chapter 4 – page 112
Table 4-18	Annual Losses in Personal Income under the Various Grazing Alternatives .....	Chapter 4 – page 113
Table 4-19	Change in Personal Farm Income as a Percent of Non-farm Personal Income in Garfield and Kane Counties, Utah .....	Chapter 4 – page 114
Table 4-20	Expected Job Losses under the Various Grazing	

# TABLE OF CONTENTS

	Alternatives .....	Chapter 4 – page 114
Table 4-21	Data for Figure Showing Percent Output Reduction .....	Chapter 4 – page 115
Table 4-22	Output Reduction for the Cattle Ranching Industry .....	Chapter 4 – page 115
Table 4-23	Data for Job Loss by Alternative .....	Chapter 4 – page 115
Table 4-24	Job Loss by Alternative .....	Chapter 4 – page 116
Table 4-25	Likely Impact of Alternatives on Large and Small Permittees .....	Chapter 4 – page 117

## LIST OF MAPS

### CHAPTER 1:

Map 1. General Location .....	Chapter 1 – page 5
Map 2. Land Status .....	Chapter 1 – page 6

### CHAPTER 2:

Map 3. Alternative A (No Action) .....	Chapter 2 – page 35
Map 4. Alternative B .....	Chapter 2 – page 37
Map 5. Alternative C (Preferred) .....	Chapter 2 – page 39
Map 6. Alternative D .....	Chapter 2 – page 41
Map 7. Alternative E .....	Chapter 2 – page 43

### CHAPTER 3:

Map 8. Rangeland Improvements – Seedings .....	Chapter 3 – page 25
Map 9. Threatened & Endangered Plants .....	Chapter 3 – page 28
Map 10. Hydrologic Units .....	Chapter 3 – page 33
Map 11. Physiographic Regions .....	Chapter 3 – page 43
Map 12. Sage Grouse Habitat .....	Chapter 3 – page 52
Map 13. Desert Bighorn Habitat .....	Chapter 3 – page 57
Map 14. Mule Deer Habitat .....	Chapter 3 – page 58
Map 15. Pronghorn Antelope Habitat .....	Chapter 3 – page 59
Map 16. Mexican Spotted Owl Habitat .....	Chapter 3 – page 62
Map 17. Southwest Willow Flycatcher Habitat .....	Chapter 3 – page 64
Map 18. Chuckwalla Habitat .....	Chapter 3 – page 66
Map 19. High-Density Recreation Use .....	Chapter 3 – page 74

### Foldout Map

Map 20. Allotments and Pastures .....	Inside Back Cover
---------------------------------------	-------------------

# TABLE OF CONTENTS

## LIST OF APPENDICES

Appendix 1	Allotment Descriptions (CD ROM – Inside Back Cover)
Appendix 2	Drought Policy
Appendix 3	Cultural Resource Management Protocol
Appendix 4	Riparian Toolbox
Appendix 5	County General Plan Consistency
Appendix 6	Vegetation Desired Plant Community
Appendix 7	Relinquishment Policy
Appendix 8	Fundamentals of Rangeland Health
Appendix 9	Sensitive Wildlife Species List
Appendix 10	Standard Operating Procedures
Appendix 11	Rangeland Health Assessment and Evaluation Process

# EXECUTIVE SUMMARY

---

## INTRODUCTION

The Draft Grand Staircase-Escalante National Monument Management Plan Amendment and Draft Rangeland Health Environmental Impact Statement describes and analyzes alternatives for the planning and management of livestock grazing on public lands administered by the Bureau of Land Management, Grand Staircase-Escalante National Monument(GSENM). The planning area includes approximately 2,168,726 acres of Federal land in south-central Utah, mainly within the GSENM, but including portions of Glen Canyon NRA, lands administered by the Kanab Field Office and the Arizona Strip BLM. Approximately 68% of the planning area is in Kane County, while the remaining percentage is in Garfield County.

Public lands administered by the Bureau of Land Management (BLM) are managed under land use plans which require periodic updating. The BLM is preparing this Plan Amendment because the land use plans that provide direction for livestock grazing and rangeland management for most of the areas administered by the Grand Staircase-Escalante National Monument (GSENM) were completed in 1981 and are more than 20 years old. This Rangeland Health Plan Amendment (Plan Amendment) replaces the grazing portion of these older land use plans. These plans need updating to reflect changes in resource conditions, revisions to grazing regulations, updates and/or amendments to allotment management plans, and the requirements of legal proceedings and court rulings.

The existing land use plans providing direction for livestock grazing include the Escalante, Paria, Vermilion, and Zion Management Framework Plans (MFPs) along with the more recent Monument Management Plan (MMP). The Monument Management Plan prepared for the GSENM (2000) covers most of the lands in the planning area. Because the MMP did not address livestock grazing decisions, these earlier plans continue to govern livestock use and rangeland management. This Plan Amendment will allow the integration of livestock and rangeland management with the other resources in the MMP. Decisions for livestock grazing and rangeland management on lands in the planning area outside of GSENM would be integrated into the Kanab Resource Management Plan (RMP) currently in preparation.

The GSENM also administers livestock grazing on lands managed by the National Park Service (NPS) within Glen Canyon National Recreation Area (GCNRA) as well as lands within BLM's Kanab and Arizona Strip Field Offices through intra-agency agreements. This Plan Amendment will incorporate current plans or portions of plans prepared by those agencies that address livestock grazing.

Pursuant to BLM policy and regulations, as well as Federal law, the BLM is required to assess whether the public lands are achieving Rangeland Health Standards and complete the appropriate environmental review prior to renewing grazing permits. An interdisciplinary team has developed this Plan Amendment/Draft Environmental Impact Statement (DEIS) for the purpose of analyzing the potential effects of livestock grazing on resources that may be affected in the planning area. This approach is needed to ensure that all management actions on public land

## EXECUTIVE SUMMARY

conform to the appropriate regulations and planning guidance, and balances the use between different resource values.

Where current land use plan decisions have been found to be valid, they are brought forward as continuing management determinations. Where current land use plan decisions have been found to be outdated, new management actions are proposed and analyzed in this DEIS. If changes in the terms and conditions of existing grazing permits are required, the permits would be reissued with modified and/or additional terms and conditions as part of the implementation of the MMP.

### **PURPOSE AND NEED**

In general, the purposes of this proposal are to:

- Integrate decisions for livestock and rangeland management into the GSENM MMP through a plan amendment
- Revise GSENM MMP sections affected by rangeland management to integrate livestock grazing into existing resource management
- Update and amend livestock management decisions in land use plans for non-GSENM lands where GSENM has grazing management responsibility.
- Provide the management direction necessary to ensure that public lands are achieving or making progress towards achieving Rangeland Health Standards.

This proposal is needed to:

- Renew livestock grazing permits.
- Update allotment management plans.
- Consider proposed Glen Canyon National Recreation Area grazing management actions.
- Allocate multiple resources to resolve conflicts.
- Incorporate current resource condition inventories into land use decisions.
- Fulfill the mandates of the GSENM Proclamation, and the GSENM Monument Management Plan

### **PUBLIC INVOLVEMENT**

#### **PUBLIC NOTIFICATION PROCESS**

A Notice of Intent to Prepare an Environmental Impact Statement for Livestock Grazing Allotments Administered by the Bureau of Land Management, Grand Staircase-Escalante National Monument, Utah, was published in the Federal Register on August 31, 2000. The

## EXECUTIVE SUMMARY

public was invited as part of the scoping process to provide “information, data or concerns related to the potential impacts of livestock grazing...”.

Three scoping open houses were held on Sept. 18, 2000 in Kanab, Utah; Sept. 20, 2000 in Salt Lake City, Utah; and October 4, 2000 in Escalante, Utah.

In July 2001, an update letter was sent to interested publics. In July 2004, a second update letter was sent to interested publics.

During public review of this Draft Plan Amendment/Environmental Impact Statement public meetings will be held in Kanab, Escalante and Salt Lake City at a minimum.

On March 31, 2008 another update letter was sent to interested publics. This letter was sent 938 groups, organizations, agencies, and individuals. This letter notified the public that the DEIS will be available in three formats;

- viewing and downloading in PDF format at [http://www.blm.gov/ut/st/en/prog/planning/existing\\_plans.html](http://www.blm.gov/ut/st/en/prog/planning/existing_plans.html)
- Mailed upon request in CD ROM format
- Mailed upon request in hardcopy (paper) format

This letter included a post card with instructions to return if the reviewer wished to receive the DEIS by mail in the CD ROM or hardcopy format otherwise it is assumed the web site version would be used. The letter also indicated that a response could be sent via e-mail to [UT\\_GSENM\\_NEPA@blm.gov](mailto:UT_GSENM_NEPA@blm.gov).

Post cards or e-mail responses were received from 109 groups, organizations, agencies, and individuals. The post office returned 124 letters as undeliverable. The names on these were removed from the mailing list.

### **CONSULTATION AND COORDINATION WITH FEDERAL, STATE, TRIBAL AND LOCAL GOVERNMENTS**

#### ***Federal***

Informal consultation with the U.S. Fish and Wildlife Service (USFWS) has occurred throughout the process. USFWS provided general comments and a list of species of concern. The Environmental Protection Agency has been requested to review this PA/DEIS. Coordination with the Dixie National Forest has occurred informally at the local level through staff at the Escalante Interagency Office. The National Park Service, Glen Canyon National Recreation Area is a Cooperating Agency.

#### ***State***

The State of Utah is a Cooperating Agency. During the scoping period numerous informal discussions were held with State officials as to the most effective method for State participation.

## EXECUTIVE SUMMARY

A representative of State of Utah is a member of the planning team and as such is invited to participate in all team meetings.

### ***Tribal governments***

Consultation with tribal governments has been initiated.

### ***Counties***

BLM has implemented Cooperating Agency Agreements with both Kane and Garfield counties. Representatives from both Kane and Garfield Counties are members of the planning team and as such are invited to participate in all team meetings.

## ISSUE SUMMARY

### **CLARIFICATION OF MONUMENT MANAGEMENT PLAN DIRECTION**

- The MMP direction was developed without an assessment of the interaction between livestock grazing, rangeland management, and other resources uses or an analysis of the impacts on livestock grazing.
- MMP direction for habitat (vegetation) management, while emphasizing the use of native species, does not provide specific direction related to existing rangeland seeding projects. The MMP is inconsistent because it both prohibits and allows the use of non-native species under the same possible set of circumstances.
- Grazing related range improvements, specifically seedings, are not addressed in the MMP.
- Proposed restoration and revegetation projects are not prioritized.
- Existing MMP determinations do not comply with new direction regarding the use of management ignited fire.
- The MMP determination concerning “Noxious weeds” is insufficient, since it does not include exotic or invasive non-native species.

### **LIVESTOCK GRAZING MANAGEMENT**

- There is no consistent direction regarding coordinated management, including recognition of enabling legislation intent and compliance with existing management plans, with the Glen Canyon National Recreation Area, Capital Reef National Park, the U.S. Forest Service, the BLM Arizona Strip Field Office, and the BLM Kanab Field Office.
- Corrective action is required on allotments where periodic monitoring has documented downward trend and/or overuse of forage resources, or BLM has determined that current livestock grazing practices are significant factors in not achieving one or more rangeland health standards or do not conform to grazing management guidelines.

# EXECUTIVE SUMMARY

## COMPLIANCE WITH STANDARDS AND GUIDELINES FOR RANGELAND HEALTH

### *Standard 1: Soils*

- Analysis of potential impacts of management actions on areas where soil conditions are not meeting the desired Standard due to a lack of vegetative cover and evidence of increased erosion
- Analysis of impacts of management actions that have the potential to degrade soil quality and increase soil erosion due to reduction in vegetative cover

### *Standard 2: Riparian and Wetland Areas*

- Analysis of potential impacts of management activities on riparian areas focusing on areas that currently do not meet the existing Standard for properly functioning condition
- Analysis of potential impacts to watershed health degradation due to cumulative impacts of land use activities

### *Standard 3: Desired Species*

- Identification of rangelands not meeting Standard 3 for the desired species including native, threatened, endangered, and special status species and analysis of management actions on these rangelands
- Analysis of potential impacts of rangeland activities on the habitat characteristics needed for the conservation of migratory bird species of concern as required under Executive Order 13186 *Responsibilities of Federal Agencies to Protect Migratory Birds* (66FR 3853), January 17, 2001
- Analysis of the potential impacts of livestock distribution and season of use on the Paunsaugunt Deer Herd wintering and migration areas
- Analysis of the potential impacts of rangeland activities on the habitat and viability of populations of federally listed threatened or endangered species, BLM State Sensitive Species, or species of special concern listed by the Utah Division of Wildlife Resources, the GSENM, and other state and Federal agencies
- Analysis of the potential impact of rangeland management activities on the recovery of threatened, endangered, and sensitive plant and animal species
- Analysis of potential impact to vegetative ecosystems from livestock management activities

## EXECUTIVE SUMMARY

- Analysis of the potential impacts of invasive non-native plants on native plant and animal communities, soil and hydrologic functions, fire regime, wildlife habitat, and recreational opportunities
- Analysis of potential impacts to biological soil crust cover that has been reduced below expected amounts at many sites

### *Standard 4: Water Quality*

- Analysis of management activities on streams and springs that do not currently meet the State of Utah's water quality standards

### **SOCIO-ECONOMICS**

- Analysis of the potential impacts to local custom and culture values due to modification or reduction in traditional uses

### **CULTURAL RESOURCES**

- Analysis of potential impacts of rangeland management activities and related improvements on historic and prehistoric cultural resource sites

### **RECREATION**

- Analysis of the potential competition between recreation and rangeland management activities that compete for use of space, and for use of water resources
- Analysis of the potential impacts rangeland management activities and related improvements on recreational aesthetics and scenic values

## **ALTERNATIVES**

To assist the BLM Authorized Officer in making decisions and to help cooperating agencies and the public focus on appropriate solutions to identified issues, five alternatives are considered in the DEIS. A summary of the alternatives is provided below. A full discussion of the alternatives is provided in Chapter 2.

**Alternative A (No Action):** Livestock management would continue at the present authorized active use levels with minimal, if any, changes to grazing permit terms and conditions. Changes to existing management would be limited to short-term adjustments commonly associated with on-going allotment administration such as requests for change of season of use, modification to pasture rotation use, voluntary non-use, and temporary non-renewable use. Temporary reductions may be necessary in areas selected for forage restoration projects. Currently closed

## EXECUTIVE SUMMARY

areas would remain closed to livestock grazing, but no additional closures would be proposed. Range improvements would be considered on a case-by-case basis.

This Alternative would not be in compliance with existing regulations if minimal changes to grazing permit terms and conditions were not affective at improving the condition of allotments currently failing to achieve the Standards and Guideline for Rangeland Health (Standards) 43 CFR 4180.2 (c).

**Alternative B:** Grazing management would be modified only as necessary to begin the process of making progress towards meeting Rangeland Health Standards in areas not now meeting Standards and to meet the goals and objectives of the land use plan. Emphasis would be placed on reducing grazing impacts by improving distribution and season-of-use of livestock. Management changes would consist of routine techniques such as modified levels and timing of grazing use. Active use reductions will only be proposed when other options fail to produce improvements in range condition. Where reduced active use is warranted, temporary non-use or temporary suspensions would be used in lieu of reductions in permitted active use.

This alternative would place a high priority on reducing impacts through the use of range improvements. Improvements would be proposed which improve livestock distribution (fences, and water developments), reduce grazing pressure in areas which fail to meet Standards (exclosures or exclusionary devices), or restore lost forage (seeding restoration).

**Alternative C (Agency Preferred Alternative):** Grazing management would be modified with priority on restoring rangeland health while providing research opportunities in restoration and monitoring success. Emphasis will be placed on modifying livestock management on allotments which fail multiple Standards and where rangeland monitoring shows no indication of positive change. For planning purposes and the estimation of future uses, an assumption has been made that restoration actions would restore forage availability to previous levels. However, allotment specific evaluations would determine the actual active use levels upon successful restoration.

Site specific measures to correct identified problems would be implemented in allotments which did not meet the riparian Standard, or which show declining conditions.

Research opportunities concerning vegetation restoration would be pursued, with emphasis on restoring failed seedings and riparian areas. Coincident with this will be studies involving monitoring techniques. Specific attention will be on determining whether site specific upland stubble height standards have use as a management tool. Implementation monitoring would also be a high priority.

**Alternative D:** Grazing management would be modified with priority on restoring rangeland health while providing research opportunities in restoration and monitoring success. Livestock grazing would be temporarily suspended in six allotments that did not meet Rangeland Health Standards, and where a determination has been made that the failure to meet Standards was due to existing livestock grazing management practices or levels of use. A future decision to re-initiate active use in these allotments will be considered when rangeland monitoring shows an indication of positive change and Rangeland Health Standards are being met. For planning

## EXECUTIVE SUMMARY

purposes and the estimation of future uses, an assumption has been made that restoration actions would restore forage availability to previous levels. However, allotment specific evaluations would determine the actual active use levels upon successful restoration.

**Alternative E:** Livestock grazing would be temporarily suspended in Collet, Ford Well, Soda, Mollies Nipple, School Section, Upper Paria, Vermilion, Death Hollow, Rock Creek-Mudholes allotments where Rangeland Health Standards are not being met, and where a determination has been made that the failure to meet Standards was due to existing livestock grazing management practices or levels of use. These temporary suspensions would remain in effect until Standards are met, at which time, allotment specific levels of active use and management criteria would be established and the suspension ended. A portion of the Coyote allotment would also be temporarily suspended for restoration purposes. Rehabilitation efforts, such as re-seeding, watershed and riparian projects would be emphasized in those areas. For planning purposes and the estimation of future uses, an assumption has been made that restoration actions would restore forage availability to previous levels. However, allotment specific evaluations would determine the actual active use levels upon successful restoration.

Innovative rangeland management science and techniques would receive priority under this alternative. Scientific study of improved rangeland management methods and practices would be encouraged.

### AFFECTED ENVIRONMENT

The planning area includes approximately 2,168,726 acres of Federal land in south-central Utah, mainly within the GSENM, but including portions of Glen Canyon NRA, lands administered by the Kanab Field Office and the Arizona Strip BLM. Approximately 68% of the planning area is in Kane County, with approximately 31% in Garfield County, with less than 1% occurring in Coconino County, AZ.

The planning area is primarily surrounded by other federal lands. Dixie National Forest borders the planning area to the north, Capitol Reef National Park and Glen Canyon National Recreation Area to the east and southeast, Bryce Canyon National Park to the northwest, and other Bureau of Land Management (BLM)-administered lands to the south and west. Kodachrome Basin State Park south of Cannonville, Utah is surrounded by lands within the planning area.

Livestock use is permitted at different times and seasons throughout the year. Season-of-use is largely determined by elevation. Generally, the lower elevation allotments are grazed during the winter, the mid-elevation allotments are grazed during the spring/fall season, and the high elevation allotments in the summer. The majority of livestock permittees do not graze year-round. Most operators have their livestock on non-BLM lands (such as Forest System land, private base property and state lease) at least part of the year. There are 82 separate grazing allotments within the planning area and sixteen closed areas. Currently, 92 permittees are authorized to graze horses and cattle. The authorized active preference is 76,457 Animal Unit Months (AUMs). Total authorized AUMs (active and suspended) are 106,138.

## EXECUTIVE SUMMARY

The planning area is located along the western boundary of the Colorado Plateau physiographic province in south-central Utah. The vegetation and flora of the Colorado Plateau are sufficiently distinct and uniform to be recognized as their own ecologically-based land area or eco-region. Within the Colorado Plateau eco-region, variations in climate, geology, topography, and influences from adjacent eco-regions have resulted in localized differences in vegetation and species composition. Over the past seven decades, 958 vascular plant taxa have been documented.

Most of the soils in the planning area are semiarid, young, and poorly developed. Chemical and biological soil development processes, such as rock weathering, decomposition of plant materials, accumulation of organic matter, and nutrient cycling, proceed slowly in this environment. In many areas, natural or geologic erosion rates are too fast to develop distinct, deep soil horizons. Most soils are less than one-half meter deep to bedrock. The deeper soils are formed in recent alluvium. Almost all of the local soils are derived from sedimentary rock. The dominant topographic features are structural benches, mesas, valley floors, valley plains, alluvial fans, stream terraces, hills, cuerdas, and mountainsides.

There are 82 verified mammalian species within the area, along with 21 species questionably present, 4 introduced species reported, and 6 currently extirpated species. There are also approximately 243 bird species, 20 different fish more than 1,900 invertebrates and 29 species of reptiles and amphibians.

There are more than 4,000 archaeological and historical sites recorded within this planning area, the majority of which are considered eligible to the National Register of Historic Places. This represents only a small fraction of the archaeological and historical sites within this same area but it is safe to assume that there are thousands of sites that have not yet been identified. Within Glen Canyon National Recreation Area (GCNRA), site densities of up to 108 sites per square mile have been recorded. In some areas within GSENM site densities of up to 70 sites/square mile have been recorded.

Encompassing a combined total of approximately 2.3 million acres of scenic, high-plateau canyon country, the planning area provides a wide range of opportunities for diverse recreational activities.

Socioeconomic conditions indicate that there are small but increasing populations within the two counties that have lower income and higher unemployment rates than the average for the State of Utah. Labor income has been decreasing over the past 20 years, while investment and transfer income has increased. The services sector and the government sector have provided the greatest amount of wages and salaries, and both show substantial upward trends. In Garfield County, both mining and construction earnings declined substantially in the early 1980s and have not gone back up. In Kane County, the trade industry has provided substantial and increasing amounts of wages and salaries. Agricultural wages and salaries have been volatile in both counties, including some periods of negative earnings. Today, although fewer families earn their livelihood solely from natural resources such as grazing, timber, and minerals than in previous times, the descendants of the area's settlers still have strong connections to the land. Access to

## EXECUTIVE SUMMARY

public land and resources, whether for earning a living or for recreation, is important to the local people.

### **PREFERRED ALTERNATIVE**

Alternative C, “modify grazing management on allotments not meeting Standards including changes in season of use, pasture rotations and suspensions in current authorized active use levels” is the preferred alternative. In developing this alternative, the BLM included an array of actions from among the various proposals that provide advantages with respect to the guiding principles given in Chapter 1. This array of action became Alternative C.

### **NEXT STEPS**

The comment period on this Draft Monument Management Plan Amendment and Draft Rangeland Health Environmental Impact Statement will extend for 90 days following publication of the EPA’s Notice of Availability in the Federal Register. After comments are received they will be evaluated. Substantive comments could lead to changes in one or more of the alternatives, or in the analysis of environmental consequences. A Proposed Plan Amendment/Final EIS will then be completed and released for public review. If protests are received on the Proposed Plan Amendment/Final EIS, they will be reviewed and addressed by the Director of BLM before a Record of Decision and Approved Plan Amendment is released.

In addition, allotment specific decisions will be issued to implement provisions of the Plan Amendment and EIS. The public will be afforded an opportunity to participate in this process in accordance with grazing regulations in Title 43 CFR part 4300.