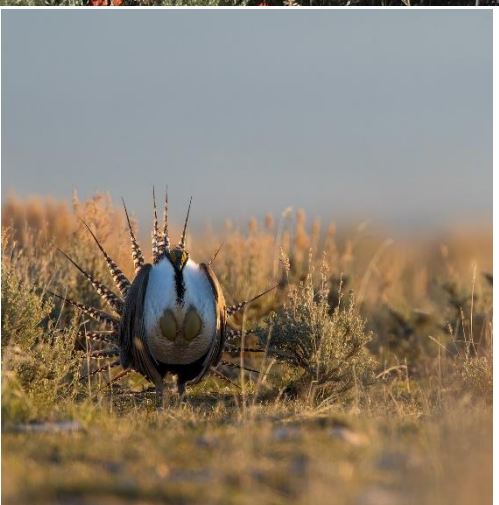
U.S. Department of the Interior
Bureau of Land Management

October 2024

Gunnison Sage-Grouse Record of Decision and Approved Resource Management Plan Amendment



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BLM/CO/PL-25-001

Cover Photos:

Main photo (Gunnison Basin, sagebrush landscape): Rachel Miller, BLM Gunnison Field Office
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Gunnison Sage-Grouse (Gunnison Basin, female): Andrew Arell
Gunnison Sage-Grouse (Crawford, strutting male): Neil Losin
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In Reply Refer To:
1610 (LLCO930000)

Dear Reader:

The Bureau of Land Management (BLM) is pleased to present the Record of Decision (ROD) and Approved Resource Management Plan (RMP) for the Gunnison Sage-Grouse (*Centrocercus minimus*). The Approved RMP Amendment will provide guidance for managing approximately 2,182,660 acres of BLM surface lands (1,951,440 acres in Colorado and 231,220 acres in Utah) and 2,852,390 acres of Federal subsurface mineral estate (2,563,220 acres in Colorado and 289,170 acres in Utah). Gunnison sage-grouse is federally listed as a threatened species under the Endangered Species Act (16 U.S.C. §1531-1544). The Gunnison sage-grouse populations are spread across 10 Colorado counties and two Utah counties; Delta, Dolores, Gunnison, Hinsdale, Mesa, Montezuma, Montrose, Ouray, Saguache, and San Miguel Counties in Colorado and Grand and San Juan Counties in Utah.

The Approved RMP Amendment provides a framework to conserve and enhance habitat for the Gunnison sage-grouse in all BLM land use plans with occupied and unoccupied habitat across the current eight populations in southwest Colorado and southeast Utah and, as applicable, aligns with the U.S. Fish and Wildlife Service's 2020 Final Recovery Plan. The landscape level management decisions in the Approved RMP Amendment provide habitat conservation and reduction of threats on Gunnison sage-grouse populations. They reflect a long-term commitment by BLM and cooperating agencies for conservation of the species by continuing protection, restoration, and enhancement of Gunnison sage-grouse habitat.

The Proposed RMP Amendment/Final Environmental Impact Statement (EIS) was subject to a 30-day protest period that ended on August 5, 2024. The BLM received 5 unique protest submissions. The BLM Director reviewed all valid protest issues for the proposed planning decisions. The Director concluded that the BLM Colorado and Utah State Directors followed the applicable laws, regulations, and policies, and considered all relevant resource information and public input. The BLM Director dismissed the protests, and that decision is the final decision of the U.S. Department of the Interior. A copy of the Protest Resolution Report is available at: https://www.blm.gov/programs/planning-and-nepa/public-participation/protest-resolution-reports

The 60-day Governor's consistency review period for the Proposed RMP Amendment/Final EIS, which promotes consistency with State government plans or policies, concluded on September 3, 2024. The State of Utah identified potential inconsistencies with State policy, and the State Resource Management Plan. In response, BLM modified a travel management action and

followed up with a response letter to address additional topics of concern. The State of Colorado did not identify any inconsistencies with state or local plans, policies or program identified during the Governor's consistency review of the Proposed RMP Amendment.

The ROD and Approved RMP Amendment are available on the BLM website at: https://eplanning.blm.gov/eplanning-ui/project/2019031/510. Printed copies of the ROD/Approved RMP Amendment are available for public inspection at the following BLM offices: Colorado: Gunnison Field Office, Gunnison, CO; San Luis Valley Field Office, Monte Vista, CO; Tres Rios Field Office, Dolores, CO; Uncompahgre Field Office, Montrose, CO; Grand Junction Field Office, Grand Junction, CO and Utah: Moab Field Office, Moab, UT; Monticello Field Office, Monticello, CO.

The BLM greatly appreciates everyone who participated in this important planning effort for the Gunnison sage-grouse. This decision is rooted in the careful review of substantive comments from federal, tribal, state, and local governments, as well as input from the public, industry stakeholders, and the 30 cooperating agencies that engaged throughout the planning process. Your commitment and dedication throughout have played an integral role in shaping a comprehensive and effective plan. Thank you once again for your invaluable contributions.

Sincerely,

DOUGLAS VILSACK Digitally signed by DOUGLAS VILSACK
Date: 2024.10.17 10:59:26 -06'00'

Doug Vilsack
State Director

Gunnison Sage-Grouse

Record of Decision and Approved Resource Management Plan Amendment

U.S. Department of the Interior
Bureau of Land Management
Colorado State Office
Utah State Office

Cooperating Agencies:

U.S. Department of Agriculture, Animal and Plant Health Inspection Service
U.S. Department of Agriculture, Forest Service
U.S. Department of Energy, Office of Legacy Management
U.S. Department of the Interior, National Park Service
U.S. Environmental Protection Agency
U.S. Fish and Wildlife Service, Colorado Ecological Services Field Office
U.S. Fish and Wildlife Service, Utah Ecological Services Field Office
Natural Resources Conservation Service, Colorado State Office
Natural Resources Conservation Service, Utah State Office
Western Area Power Administration
Colorado Department of Agriculture, Conservation Services Division
Colorado Department of Natural Resources
Colorado Department of Transportation
Colorado Parks and Wildlife
State of Colorado, Upper Gunnison River Water District
State of Utah, Grand Conservation District
State of Utah, Public Lands Policy Coordinating Office
State of Utah, San Juan Conservation District
Delta County, Colorado
Dolores County, Colorado
Gunnison County, Colorado
Mesa County, Colorado
Montezuma County, Colorado
Montrose County, Colorado
Ouray County, Colorado
Saguache County, Colorado
San Miguel County, Colorado
San Juan County, Utah
Grand County Commission, Utah
Dolores County Conservation District

October 2024

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TABLE OF CONTENTS

I. Record of Decision I-1
I.1. Introduction I-1
I.1.1. Overview I-1
I.2. Decision I-1
I.3. Alternatives I-3
I.3.1. Introduction I-3
I.3.2. Alternatives Analyzed in Detail I-4
I.3.3. Environmentally Preferable Alternative I-6
I.3.4. Implementation Decisions I-7
I.3.5. Clarifications and Modifications Since the Proposed RMP Amendment I-7
I.4. Rationale For The Decision I-7
I.5. Application of the Resource Management Plan AMendment to Existing Projects I-9
I.6. Mitigation Measures I-10
I.7. Plan Monitoring I-10
I.8. Public Involvement I-11
I.8.1. Public Scoping I-11
I.8.2. Public Comment on the Draft RMP Amendment/EIS I-11
I.8.3. Review and Protest of the Proposed RMP Amendment/Final EIS I-11
I.8.4. Governor's Consistency Review I-12
I.9. Consultation and Coordination I-12
I.9.1. Cooperating Agency Collaboration I-13
I.9.2. Tribal Government-To-Government Consultation I-14
I.9.3. US Fish and Wildlife Service Section 7 Consultation I-15
I.9.4. State Historic Preservation Office Section 106 Consultation I-16
I.10. Approval I-16
II. Approved Resource Management Plan Amendment II-1
II.1. Introduction II-1
II.1.1. Purpose and Need for the Resource Management Plan Amendments II-1
II.1.2. Lands in the Planning Area and Decision Area II-2
II.1.3. Scoping and Issues II-6
II.1.4. Related Plans II-7
II.1.5. Consistency with Laws and Policy II-8
II.2. Management Decisions II-8

II.2.1. Special Status Species (SSS) II-13
II.2.2. Land Health (LH) II-22
II.2.3. Vegetation (VEG) II-22
II.2.4. Livestock Grazing Management (LG) II-26
II.2.5. Wildland Fire Ecology and Management (FIRE) II-30
II.2.6. Recreation (REC) II-31
II.2.7. Travel and Transportation (TTM) II-34
II.2.8. Mineral Split Estate (MSE) II-36
II.2.9. Fluid Minerals (FM) II-36
II.2.10. Solid Minerals (SM) II-38
II.2.11. Lands and Realty (LR) II-39
II.2.12. Renewable Energy (RE) II-44
II.2.13. Areas of Critical Environmental Concern (ACEC) II-44
II.3. Public Involvement II-52
II.4. Management Plan Implementation II-52
II.5. RMP Evaluation, Maintenance, and Monitoring II-53
II.5.1. Evaluation II-53
II.5.2. Maintenance II-53
II.5.3. RMP Monitoring II-54
II.6. Glossary II-54
II.7. References II-68

LIST OF APPENDICES

Appendix A Maps

Appendix B Best Management Practices and Required Design Features

Appendix C Gunnison Sage-Grouse Mitigation Strategy

Appendix D Gunnison Sage-Grouse Monitoring Framework

Appendix E Methodology for Calculating Net Surface Disturbance

Appendix F Habitat Monitoring and Reporting

Appendix G Buffer Distances and Evaluation of Impacts on Leks

Appendix H Livestock Grazing Management Implementation Guidelines

Appendix I Recreation Management Areas

Appendix J Stipulations Applicable to Fluid Mineral Leasing and Land Use Authorizations

LIST OF TABLES

Table 1.1. Applicable BLM Programs to Address Issues and USFWS Threats.....I-4

Table II-1. Surface Management in the Planning Area in Occupied and Unoccupied Habitat by Gunnison Sage-Grouse Population Area..... II-3

Table II-2. BLM-Administered Surface and Mineral Estate in the Decision Area by Gunnison Sage-Grouse Habitat Management Area (OHMA and UHMA) and GUSG population..... II-6

Table II-3. Management Action Resource Topic Summary..... II-8

Table II-4. Summary of Allocation Decisions by GUSG Management Area..... II-12

LIST OF FIGURES

Figure I-1. GUSG RMP Amendment Planning Area I-2

ACRONYMS AND ABBREVIATIONS

ACEC	Area of Critical Environmental Concern
ACHP	Advisory Council on Historic Preservation
AIM	Assessment, Inventory, and Monitoring
AMP	Allotment management plan
APD	application for permit to drill
ARMPA	Approved RMP Amendment
BA	Biological Assessment
BCA	backcountry conservation area
BLM	Bureau of Land Management
BMP	best management practice
BO	Biological Opinion
CFR	Code of Federal Regulations
COA	condition of approval
CSU	controlled surface use
DOI	U.S. Department of the Interior
EIS	environmental impact statement
ERMA	Extensive Recreation Management Area
ESA	Endangered Species Act of 1973
ES&R	Emergency Stabilization and Rehabilitation
FLPMA	Federal Land Policy and Management Act of 1976
GIS	geographic information system
GUSG	Gunnison sage-grouse
HAF	Habitat Assessment Framework
HMAs	Habitat Management Areas
LCMA	Linkage-Connectivity Management Areas
MA	Management Action
NCA	National Conservation Area
NEPA	National Environmental Policy Act of 1969
NGD	No Ground Disturbance
NSO	No surface occupancy
OHMA	occupied habitat management areas
RAC	Resource Advisory Council
RAD	Resist-Accept-Direct
RDFs	required design features
RMP	resource management plan
ROD	record of decision
ROWs	rights-of-way
R&PP	Recreation and Public Purposes
SHPO	State Historic Preservation Office
SRMA	Special Recreation Management Area
SRP	Special Recreation Permit
TL	Timing limitation
TMP	travel management plan

U.S.	United States
UDWR	Utah Division of Wildlife Resources
UHMA	unoccupied habitat management areas
USFWS	U.S. Fish and Wildlife Service
VRM	Visual Resource Management
WEMs	waivers, exceptions, and modifications
WSA	Wilderness Study Area

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I. RECORD OF DECISION

I.1. INTRODUCTION

I.1.1. Overview

The Federal Land Policy and Management Act (FLPMA) (43 U.S.C. 1701 et seq.) directs the United States (U.S.) Department of the Interior (DOI), Bureau of Land Management (BLM) to develop and periodically revise or amend its resource management plans (RMPs). RMPs are the plans that guide the management of BLM-administered lands. This record of decision (ROD) approves the attached RMP Amendment to provide a set of management decisions focused on conservation measures for Gunnison sage-grouse (GUSG) (*Centrocercus minimus*), a species listed as threatened under the Endangered Species Act (ESA). This ROD will modify decisions on public lands administered by the following Colorado and Utah RMPs:

Colorado:

- Canyons of the Ancients National Monument RMP (2010)
- Dominguez-Escalante National Conservation Area RMP (2017)
- Grand Junction Field Office RMP (2015)
- Gunnison Gorge National Conservation Area RMP (2004)
- Gunnison Resource Area RMP (1993)
- McInnis Canyons National Conservation Area RMP (2004)
- San Luis Resource Area RMP (1991)
- Tres Rios Field Office RMP (2015)
- Uncompahgre Field Office RMP (2020)

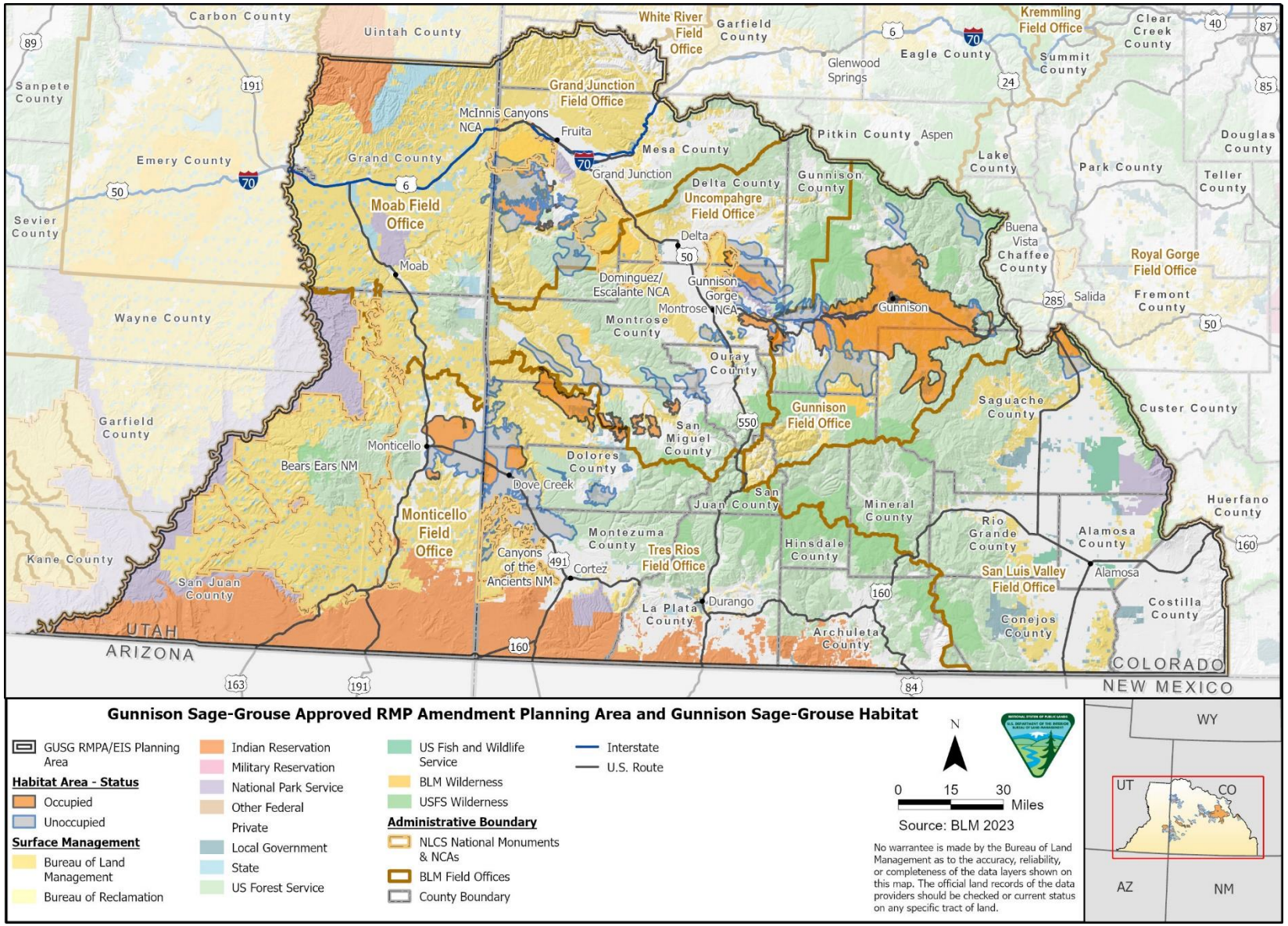
Utah:

- Moab Field Office RMP (2008)
- Monticello Field Office RMP (2008)

I.2. DECISION

The decision is hereby made to approve the attached RMP Amendment for the 11 BLM RMPs in the planning area (Figure I-1). The BLM prepared this plan under the authority and regulations implementing FLPMA (43 Code of Federal Regulations [CFR] 1600). The Approved RMP Amendment (ARMPA) includes broad land use plan decisions that provide direction for managing resources and resource uses in the decision area (BLM-administered public lands and Federal mineral estate) to conserve and enhance habitat for Gunnison sage-grouse. The BLM prepared an environmental impact statement (EIS) for this RMP Amendment in compliance with the National Environmental Policy Act of 1969 (NEPA). Land use plan decisions identified in the ARMPA are final and become effective when this ROD is signed. The decisions in this ROD and ARMPA supersede portions of BLM land use plans that guide management to conserve and enhance habitat for GUSG.

Figure I-1. GUSG RMP Amendment Planning Area



I.3. ALTERNATIVES

I.3.1. Introduction

An RMP provides broad guidance for managing public lands. The FLPMA directs the BLM to develop RMPs as the primary means to identify and allow for appropriate uses of BLM-administered land. RMP decisions establish goals and objectives (desired outcomes) for resource management that guide future implementation decisions. The RMP also identifies measures necessary for achieving objectives, expressed as allowable uses (lands that are open or closed to certain uses) and management actions (proactive management techniques).

NEPA and BLM land use planning regulations (43 CFR 1610.4-5) require the BLM to develop a reasonable range of alternatives that are technically and economically feasible and meet the purpose and need, including a no action alternative, to analyze impacts and guide decision-makers in developing and selecting the Approved RMP. The BLM developed five alternatives, in addition to the no action alternative, and analyzed them in detail in the proposed RMP Amendment/Final EIS.

The focus of the alternatives is to promote the recovery of GUSG and the conservation of its habitat. The Approved RMP Amendment only modifies existing RMP decisions that affect GUSG conservation.

The alternatives outlined in the Proposed RMP Amendment/Final EIS were designed to incorporate:

- The U.S. Fish and Wildlife Service (USFWS) Final Recovery Plan for Gunnison Sage-Grouse (*Centrocercus minimus*) (USFWS 2020a) and associated Recovery Implementation Strategy for Gunnison Sage-Grouse (USFWS 2020b), including goals and objectives to conserve and enhance GUSG habitat.
- Applicable elements from related plans.
- Comments received during the public scoping process to ensure that all issues and concerns were addressed, as appropriate, when developing the alternatives. The BLM identified the issues to be addressed in the RMP Amendment/EIS based on broad concerns or controversies related to conditions, trends, needs, and existing and potential land use allocations, authorizations, and use of resources within the planning area.
- Comments received during the public review of the Draft RMP Amendment/EIS to provide additional clarification, incorporate scientific studies, and update analyses, as needed.
- The BLM's Interdisciplinary Team (IDT) of resource specialists and cooperating agencies coordinated on the appropriate range of alternatives. As the alternatives were developed, the IDT and cooperating agencies were provided opportunities to review and comment, and their input was incorporated into the range of alternatives.

Ensuring the BLM fully considered threats to GUSG, as identified by the USFWS, was a key component of the alternative's development process. In developing management actions, the BLM began by evaluating threats and resource conditions in the USFWS Species Status Assessment (SSA) report (USFWS 2019), determining if the threat was identified during the scoping process, and then addressing the issue or threat within the applicable resource program. The following Table 1.1 summarizes the results of this process.

Table 1.1. Applicable BLM Programs to Address Issues and USFWS Threats

USFWS Threat[1]	Scoping Issue	Applicable BLM Program Area for Addressing Threat
Habitat decline due to residential development and conversion to agriculture	No similar issue was identified.	No program specifically addresses habitat decline from residential development or conversion to agriculture. Habitat decline from other disturbances is addressed under the "Small population size and structure" threat below.
Effects of global climate change	Climate change	No program specifically addresses climate change, but effects of climate change on resources will be analyzed.
Invasive plants	Invasive species	Vegetation, Livestock Grazing Management, Recreation, and best management practices and required design features for multiple programs
Pinyon-juniper encroachment	Vegetation management	Special Status Species and Vegetation
Improper grazing practices	Livestock grazing	Livestock Grazing Management
Disease	No similar issue was identified.	Best management practices and required design features for multiple programs.
Predation	Predation control	Special Status Species
Small population size and structure	Fish and Wildlife	Special Status Species, Recreation, Livestock Grazing Management, Lands and Realty Management, Mineral Split Estate, Fluid Minerals, Solid Minerals, Vegetation, Wildland Fire Ecology and Management, Wildlife, and Areas of Critical Environmental Concern
Drought	Drought management	Livestock Grazing Management and Vegetation
Recreation	Recreation and travel management	Recreation and Travel and Transportation Management
No similar threat was identified	Special Management Areas	Areas of Critical Environmental Concern
No similar threat was identified	Lands with Wilderness Characteristics	Lands with Wilderness Characteristics

[1]As identified in the Final Recovery Plan for Gunnison Sage-Grouse (*Centrocercus minimus*) (USFWS 2020a).

1.3.2. Alternatives Analyzed in Detail

1.3.2.1 Alternative A: The No Action Alternative

Alternative A is the no action alternative and would continue current BLM management direction in the 11 RMP administrative units in the planning area. Under this alternative, management and levels of protection for GUSG habitat are highly variable across administrative units. Several of the existing RMPs, especially those recently completed (as recent as 2020), provide management direction that meet the existing purpose and need of this amendment, while others completed in the early 1990s do not provide adequate protection for GUSG consistent with the latest measures and recently completed USFWS recovery plan. Although Alternative A would not meet the purpose and need for the 11 BLM RMPs, it is included to allow for comparison of existing management with the action alternatives and to meet NEPA and BLM land use planning regulations.

I.3.2.2 Alternative B

Alternative B would meet the purpose and need and would prioritize removing identified threats within occupied and unoccupied habitat and reducing impacts within a 4-mile buffer around habitat, and potential linkage-connectivity areas, to the maximum extent. Alternative B contains two sub-alternatives for livestock grazing management actions in response to recommendations made in public scoping comments. Because this alternative focuses on eliminating threats over the greatest geographic range compared to the other alternatives, it is the most restrictive when it comes to other uses. For example, this alternative would make livestock grazing unavailable for the life of this plan, within some or all occupied and unoccupied habitat (depending on which sub-alternative is applied). The BLM would also designate all nominated ACECs that meet relevance and importance criteria; this includes an ACEC encompassing all GUSG occupied and unoccupied habitat, which overlaps all other nominated ACECs.

I.3.2.3 Alternative C

Alternative C would achieve the purpose and need of the RMP Amendment by minimizing, avoiding, and compensating for impacts from resource uses and activities in occupied and unoccupied habitat. This alternative does not include creation of buffer zones around all occupied and unoccupied habitat and does not designate linkage-connectivity areas between populations. Instead, this alternative focuses on management within occupied and unoccupied habitat. Under this alternative, resource uses and other actions would be allowed if their impacts to GUSG could be avoided, minimized, or mitigated through compensatory mitigation. BLM would carry forward currently designated GUSG ACECs but would not designate any new ACECs for GUSG management under Alternative C.

I.3.2.4 Alternative D

Alternative D would achieve the purpose and need of the RMP Amendment by (1) allocating resource uses and conserving resource values while sustaining and enhancing ecological integrity, and (2) designating a specific subset of nominated ACECs where focused management and conservation actions can be strategically implemented. Under this alternative, conservation measures focus on occupied and unoccupied habitat. This alternative includes analysis of the 1-mile adjacent non-habitat buffer around occupied and unoccupied habitat and includes linkage-connectivity areas, where select management actions could apply, based on the latest science, input from BLM specialists, and cooperating agencies, as appropriate. The BLM's identification of issues and management approaches for energy development, livestock grazing, recreation, and other program areas was informed by public scoping comments, guidance outlined in the USFWS Final Recovery Plan for Gunnison Sage-Grouse (*Centrocercus minimus*) (USFWS 2020a) and associated Recovery Implementation Strategy for Gunnison Sage-Grouse (USFWS 2020b), as well as related management direction from the BLM Greater Sage-Grouse RMP Amendment. Alternative D aims to ensure consistency in management actions across the 11 RMP administrative units and implementation consistent with the USFWS Recovery Plan.

I.3.2.5 Alternative E

Alternative E considers adopting applicable management direction from the interagency Candidate Conservation Agreement (CCA) for the Gunnison Sage-Grouse, Gunnison Basin Population. Some of the goals of the CCA were to: (1) engage key stakeholders in the Gunnison Basin community in a collaborative planning and review process to support GUSG conservation, (2) prioritize conservation measures across occupied habitat, and (3) account for cumulative impacts of habitat fragmentation.

Alternative E allows the BLM to compare elements of the CCA for the Gunnison Basin population to the other rangewide alternatives (B, C, D). This alternative would allow for different management actions to be applied within the Gunnison Basin, in cases where the management actions may need to be different than those applied in the satellite populations. The management actions analyzed in Alternative E would only apply to the Gunnison Basin for comparison purposes. In addition to applicable management from the CCA, with valuable input from cooperating agencies, Alternative E expands management direction for resources and resource uses in the Gunnison Basin not addressed in the CCA and applies management to unoccupied habitat, including 1-mile and 4-mile buffers, for some resources. Alternative E would meet the purpose and need for the Gunnison Basin.

1.3.2.6 Alternative F (Proposed Plan Amendment)

Alternative F is the BLM's Proposed Plan Amendment and similar to Alternative D, would achieve the purpose and need for the RMP Amendment. Alternative F differs from Alternative D in that it was informed by public comments on the Draft RMP Amendment/EIS. Similar to Alternative D, conservation measures focus on occupied and unoccupied habitat but under the Proposed Plan would apply to all lek statuses (i.e., active, inactive, historic, unknown, occupied, and unoccupied). This Proposed Plan includes a 1-mile Adjacent Non-habitat buffer around occupied and unoccupied habitat, where select management actions could apply. For recreation and lands and realty, the Proposed Plan would apply specific management for satellite populations and the Gunnison Basin population, which differs from Alternative D. Whereas Alternative D creates disturbance caps in GUSG habitat, the Proposed Plan would manage occupied habitat management areas (OHMA) and unoccupied habitat management areas (UHMA) with the objective for no increase in net surface disturbance. Managing for the objective would be accomplished by restoring existing disturbances, reducing fragmentation, and avoiding new disturbances.

1.3.3. Environmentally Preferable Alternative

When considering the human social and economic environment and natural environment, the BLM has determined that Alternative B is the environmentally preferable alternative. The DOI defines the environmentally preferable alternative as the one that best promotes the national environmental policy in Section 101 of NEPA.

Section 101 of NEPA, 42 U.S.C. 4331, identifies six broad policy goals for all Federal plans, functions, programs, and resources, to allow the nation to:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.
- Ensure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings.
- Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences.
- Preserve important historic, cultural, and natural aspects of the national heritage and maintain, wherever possible, an environment that supports diversity and a variety of individual choice.
- Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.

- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

I.3.4. Implementation Decisions

The ARMPA does not contain implementation decisions. The BLM will implement land use planning decisions that involve closures or use restrictions, such as closed travel areas, through supplementary rules that allow enforcement measures.

I.3.5. Clarifications and Modifications Since the Proposed RMP Amendment

As a result of internal BLM review and cooperating agency consultation, the BLM clarified or modified language between the Proposed RMP Amendment/Final EIS and the ARMPA, where appropriate. Minor grammatical and editorial corrections are not identified, but other changes since the Proposed RMP Amendment/Final EIS are as follows (all changes are within the range of alternatives considered in the Final EIS).

- For management of the Gunnison Sage-Grouse ACEC/Important Bird Area, an action as analyzed in Alternatives A and D in the Final EIS (GGNCA REC-39) was clarified with seasonal restriction dates (March 1–July 15) for consistency with other similar actions in the planning effort.
- In coordination with USFWS during consultation, at MA-LR-5 and MA-LR-6, a revision was made to clarify language and intent from "*no adverse impacts"* to "*impacts from* the proposed authorization *have been minimized."* The defining criteria for this management action and determining no adverse impacts or similarly how impacts have been minimized remains unchanged and can be found in the respective management action bullets.
- On September 3, 2024, BLM received a letter from the State of Utah regarding consistency review of the BLM's Gunnison Sage-Grouse Proposed RMP Amendment and Final EIS. In response, BLM modified management action at MA-TTM-10 to address these concerns as follows:
    - *During travel management planning in Occupied Habitat Management Areas (OHMA) and Unoccupied Habitat Management Areas (UHMA), Field Offices will look for opportunities to evaluate route density and minimize impacts to GUSG habitat in accordance with 43 CFR 8342.1.*

I.4. RATIONALE FOR THE DECISION

The ARMPA reflects statutory, regulatory, and national policy considerations. The decision is also based on review of substantive comments from Federal, Tribal, State, and local governments and agencies; the public; industry; and the 30 cooperating agencies that participated in the planning process.

The ARMPA provides the best combination of management decisions to meet the purpose and need for a land use plan in consideration of the threats to GUSG, planning issues, and management concerns identified through the planning process. The ARMPA is consistent with law and reflects national policy considerations including ESA. The management actions promote the recovery of GUSG and maintain and enhance occupied and unoccupied habitat for the species and is consistent with the USFWS Final

Recovery Plan for GUSG (USFWS 2020a) and associated Recovery Implementation Strategy for GUSG (USFWS 2020b), including goals and objectives to conserve and enhance GUSG habitat. The decision is also based on review and substantive comments from Federal, Tribal, State, and local governments and agencies, the public, industry, and the cooperating agencies that participated in the planning process.

The ARMPA provides a comprehensive framework for managing BLM-administered lands and minerals in the decision area.

The BLM GUSG ARMPA comprehensive framework is built on the following key concepts:

- **Landscape level** – The planning effort encompasses the occupied, unoccupied, linkage-connectivity areas and adjacent non-habitat areas for GUSG on BLM-administered lands, across portions of two states – Utah and Colorado. As such, the management strategy provides a coherent framework across the BLM land use plans to implement landscape-level conservation for GUSG, a Federally listed species; at the same time, allows for flexibility to effectively address threats to GUSG in the context of the agency's multiple-use and sustained yield mandates under FLPMA. The management actions included as part of landscape-level conservation address identified threats to the species. They also recognize local ecological conditions and incorporate existing conservation efforts where they are consistent with the overall objective of conserving GUSG across its range.
- **Best available science –** The ARMPA is grounded in the best available science, drawn from published literature and input from recognized experts, State agencies, the U.S. Geological Survey, the USFWS, cooperating agencies with special expertise and other sources. The USFWS listing decision (USFWS 2014) and Species Status Assessment (USFWS 2019) provided a blueprint for GUSG conservation by identifying specific threats to each GUSG population and recommending measures to address each category of threat. The USFWS Final Recovery Plan and the Recovery Implementation Strategy for GUSG provided additional guidance for addressing the most significant threats to GUSG and priority conservation actions. The concepts set forth in Instruction Memorandum (IM)-2023-005, Habitat Connectivity on Public Lands, and related issues are reflected in the land allocation and resource management decisions.
- **Coordination and Collaboration –** The ARMPA reflects extensive input from the public, the States, collaborators, and stakeholders. During the land use planning amendment process BLM worked with 30 cooperating agencies. Cooperating agencies include 11 counties, nine State agencies, and 10 Federal agencies, each with special expertise. The BLM worked closely with the USFWS and Colorado Parks and Wildlife as part of a technical team to aid in understanding how to address threats.

The management actions in the ARMPA reflect over a decade of research and collaborative conservation measures and restoration activities, including those implemented under the CCA (CPW et al. 2014) for the Gunnison Basin population and the more recent USFWS Recovery Implementation Strategy. The ARMPA is designed to directly address the specific threats to the species as identified by the USFWS in its 2014 listing decision and further explained and ranked in the Species Status Assessment in 2019. Extensive coordination with the States and cooperating agencies, including regular engagement with the USFWS, helped inform land allocation and related management decisions to eliminate new surface disturbance and improve habitat conditions, especially in the most important habitat areas.

The land use plan decisions in the ARMPA focus on the current stronghold for the species within occupied habitat by considering land use allocations—which identify where activities are allowed, restricted, or excluded based on desired future conditions—and management actions within OHMA. Several resource uses would be excluded from OHMA, including non-energy leasable, salable minerals, and renewable energy development (i.e., wind and solar). In addition, the majority of OHMA would be closed to fluid mineral leasing in areas of low or no potential. For some resources, such as recreation and rights-of-way (ROW), management actions were tailored for the satellite populations compared to the Gunnison Basin population. For satellite populations, new development of trails and ROWs would be excluded in order to conserve the remaining available habitat and prevent habitat fragmentation. For the Gunnison Basin population, new trail development would be focused in the designated special recreation management areas (SRMAs) and new ROWs would be excluded within one mile of all leks. Focused management within OHMA also includes the designation of three areas of critical environmental concern (ACECs) and one backcountry conservation area (BCA), where an additional level of management decisions have been applied as conservation measures and habitat protection. The land use plan decisions in the ARMPA would ensure that management not only aligns with the USFWS Final Recovery Plan and Recovery Implementation Strategy, but also provides for a targeted strategy to conserve GUSG habitat and reduce anthropogenic disturbances to all populations.

Management actions in UHMA are less restrictive for some resource uses compared to OHMA because these areas are not currently occupied by GUSG. However, the management actions for UHMA focus on maintaining existing habitat areas through use of minimization measures and improving potential habitat, while reducing threats to the species. For example, UHMA would be open to non-energy leasable and salable minerals and apply a no surface occupancy (NSO) stipulation to fluid mineral leasing where there is medium or high potential. For all populations, new ROWs would be avoided in UHMA outside of the 1-mile lek buffer exclusion. Similar to OHMA, renewable energy development would also be excluded from UHMA. These allocation level decisions along with multiple restoration management actions and additional minimization and conservation measures ensure the BLM's objective to improve habitat quality and quantity by restoring sagebrush ecosystems aligns with the USFWS's recovery plan for the species.

The landscape-level strategy outlines allocation level decisions, conservation actions, and minimization measures that through implementation will aid in habitat conservation and reduction of threats on GUSG populations. They reflect a long-term commitment by BLM and cooperating agencies in conservation of the species by continuing protection, restoration, and enhancement of GUSG habitat. This ARMPA affects approximately 40 percent of the total OHMA surface acres, which are of great importance to the GUSG and its remaining habitat across the range of the species. In conjunction with this plan and similar conservation efforts by other Federal and State agencies, private landowners, and local partners, the conservation of GUSG will continue to be a collaborative effort to conserve and restore the sagebrush ecosystems this species depends on.

I.5. APPLICATION OF THE RESOURCE MANAGEMENT PLAN AMENDMENT TO EXISTING PROJECTS

All management direction and actions developed as part of the ARMPA are subject to valid existing rights. Valid existing rights include all valid leases, permits, ROWs, or other land use rights or authorizations in effect on the date of approval of this RMP. Projects that require a decision to extend

an existing authorization or permit may require modification to conform to the ARMPA before approval, such as ROW grant and grazing permit renewals. Projects for which site-specific decisions have not yet been approved, but for which preparation of NEPA documents began before the ROD's effective date, may also require modification to conform to the ARMPA.

Any new activity-level or project-specific authorization or management action must conform with the ARMPA (i.e., be specifically provided for in the RMP or consistent with the terms, conditions, and decisions in the Approved RMP Amendment; 43 CFR 1601.0-5(b)).

I.6. MITIGATION MEASURES

Practicable means to avoid, minimize, or reduce environmental harm, commensurate with the landscape level of planning, are included in the ARMPA and appendices. In developing the ARMPA and alternatives, the BLM used a variety of management methods and tools, including the identification of allowable uses; temporal, spatial, and/or methodological restrictions on uses; where specific uses would be prohibited; and specific actions needed to achieve the goals and objectives. Restrictions on uses include seasonal closures, surface disturbance limitations, and application of required design features (RDFs) and best management practices (BMP).

Appendix B in the ARMPA provides a list of BMPs and RDFs that the BLM could apply. BMPs are established guidelines followed by the BLM to be incorporated into management activities where necessary, appropriate, and/or technically feasible. BMPs may be applied to site-specific proposals to avoid, minimize, reduce, or rectify adverse environmental or social impacts of land use activities. RDFs are required for certain activities in all GUSG habitat. RDFs establish the minimum specifications for certain activities to help mitigate adverse impacts. Appendix C in the ARMPA provides the GUSG mitigation strategy that identifies avoidance, minimization, and compensatory mitigation and design criteria, that the BLM could employ. A robust and transparent mitigation strategy will contribute to GUSG habitat conservation by reducing, eliminating, or minimizing threats and compensating for residual impacts on GUSG and its habitat. More specific BMPs based on local conditions and resource-specific concerns could be developed once a specific proposal is evaluated through the environmental analysis process. The BLM's Regional Mitigation Manual, MS-1794 and BLM Mitigation Handbook 1794-1, serve as a framework for developing and implementing the strategy.

I.7. PLAN MONITORING

Land use plan decision monitoring is a continuous process occurring over the life of the RMP, with an aim to maintain a dynamic RMP. Monitoring data are collected, examined, and used to draw conclusions about: (1) whether planned actions have been implemented in the manner prescribed by the RMP (implementation monitoring), (2) whether RMP allowable use and management action decisions and the resultant implementation actions are effective in achieving program-specific objectives or desired outcomes (effectiveness monitoring), and (3) calculating the cost of delivering a service or product (efficiency monitoring by program elements).

The BLM uses conclusions drawn from monitoring to make recommendations on whether to continue current management or to determine what changes need to be made to implementation practices to better achieve RMP goals. Indicators, methods, locations, units of measures, frequency, and action triggers can be established by national policy guidance, in RMPs, or by technical specialists to address specific issues.

Based on staffing and funding levels, monitoring is prioritized annually consistent with the goals and objectives of the RMP Amendment. The BLM may work in cooperation with local, State, and other Federal agencies, or it may use data collected by other agencies and sources when appropriate and available. Appendix D in the ARMPA describes methods to monitor and evaluate the implementation and effectiveness of the GUSG ARMPA, and includes a monitoring report template.

I.8. PUBLIC INVOLVEMENT

I.8.1. Public Scoping

The BLM initiated the public scoping period for this planning effort on July 6, 2022, with the publication of a Notice of Intent in the *Federal Register* (87 FR 40262, July 6, 2022). The scoping period ended August 22, 2022. The process included soliciting input from interested individuals and organizations, elected officials, and potential Federal, State, local and Tribal governments, and cooperating agencies to identify the scope of issues to be addressed in the RMP Amendment and assist in formulating reasonable alternatives.

The BLM hosted four public scoping meetings, consisting of two Zoom virtual meetings and two in-person open houses. The two in-person meetings occurred in Dove Creek and Gunnison, both rural communities in Colorado which contain environmental justice populations. The in-person meetings were open house and allowed the public to learn more about the project and to talk directly with BLM resource specialists and other staff.

The BLM received a total of 357 comment submittals by U.S. mail and through the project website. Form and form plus letters represented 308 of the total submittals. The BLM received 49 unique written comment submissions.

I.8.2. Public Comment on the Draft RMP Amendment/EIS

The BLM published the Notice of Availability in the *Federal Register* on November 9, 2023 (88 FR 77353, November 9, 2023) releasing the Draft RMP Amendment/EIS and initiating a 90-day public comment period ending February 6, 2024. During the comment period, the BLM held two in-person public meetings and one virtual public meeting to inform the public about, and solicit comments on, the draft RMP Amendment/EIS. The BLM received 141 comment letters (including 115 unique letters and 26 form, form plus, or duplicate letters) that contained 528 substantive comments during the comment period. The BLM reviewed all letters submitted, analyzed the comments, considered substantive comments, and revised the RMP Amendment/EIS accordingly where warranted. The details of the comment analysis process as well as the comments and the BLM's responses can be found in Appendix W of the Proposed RMP Amendment/Final EIS (BLM 2024).

I.8.3. Review and Protest of the Proposed RMP Amendment/Final EIS

Pursuant to the BLM's planning regulations (43 CFR 1610.5-2), any person who participated in the Gunnison Sage-Grouse RMP Amendment/EIS planning process and had an interest that might be adversely affected by the planning decisions could protest approval of the proposed plan. The protest period was available within 30 days from the date the U.S. Environmental Protection Agency published the Notice of Availability in the *Federal Register* (89 FR 55655, July 5, 2024), from July 5 to August 5, 2024.

The BLM received five unique protest letter submissions during the 30-day protest period. The planning regulations at 43 CFR 1610.5-2 outline the requirements for a valid protest. The BLM evaluated all protest letters to determine which protest letters were complete and timely, and which persons have standing to protest. The BLM determined that all letters were complete, timely, and were from parties who had standing to protest. Three of these letters contained valid protest issues. The following is a summary of issues raised by protesters:

- Impacts analysis and environmental justice/access
- Best available information
- ACECs and FLPMA violation
- FLPMA violation and BLM's multiple-use mandate
- Impacts analysis and socioeconomics concerns
- Response to comments
- ESA violation

The BLM Director and staff at the BLM headquarters reviewed all of the protest issues. After review, the protests were denied by the BLM Director, whose decision is the final decision for the DOI. The BLM Director concluded that the BLM Colorado and Utah State Directors followed the applicable laws, regulations, and policies and considered all relevant resource information and public input in developing the Proposed RMP Amendment. The BLM Director also concluded that the Proposed RMP Amendment did not require changes. The Director's resolution report is available on the BLM's Protest Resolution website: https://www.blm.gov/programs/planning-and-nepa/public-participation/protest-resolution-reports.

1.8.4. Governor's Consistency Review

In a letter dated July 3, 2024, and as required by its regulations (43 CFR 1610.3-2(e)) to promote consistency with State government plans or policies, the BLM initiated the Colorado Governor's Consistency Review for the Gunnison Sage-Grouse Proposed RMP Amendment/Final EIS. The consistency review period concluded on September 3, 2024.

On September 3, 2024, BLM received a letter from the State of Utah regarding consistency review of the BLM's Gunnison Sage-Grouse Proposed RMP Amendment and Final EIS. In response, BLM modified management action at MA-TTM-10 to address these concerns as follows:

- *During travel management planning in Occupied Habitat Management Areas (OHMA) and Unoccupied Habitat Management Areas (UHMA), Field Offices will look for opportunities to evaluate route density and minimize impacts to GUSG habitat in accordance with 43 CFR 8342.1.*

On September 11, 2024, BLM also sent a response letter to the State of Utah addressing additional concerns on topics such as net surface disturbance standards, increased mitigation ratios, linkage-connectivity management areas (LCMA), lek status protection, and the impacts of potential uses.

1.9. CONSULTATION AND COORDINATION

Federal regulations including BLM land use regulations (43 CFR 1610.3), FLPMA (43 U.S.C. 1712), and regulations implementing NEPA (40 CFR 1501.8) direct the BLM to invite eligible Federal agencies and State and local governments to participate as cooperating agencies when drafting an EIS.

I.9.1. Cooperating Agency Collaboration

The BLM worked closely with the cooperating agencies to develop alternatives and guide the analysis contained in the EIS. This process included the development of the preliminary alternatives; review of issues raised during scoping and revision of the alternatives; reviews of the analysis contained in the EIS; review of public comments on the Draft RMP Amendment/EIS; and development of the Proposed RMP Amendment/Final EIS.

Cooperating agencies included:

- Environmental Protection Agency, Region 8
- National Park Service, DOI Intermountain Region (Regions 6,7, and 8), Curecanti National Recreation Area/Black Canyon of the Gunnison National Park
- Natural Resources Conservation Service, Colorado State Office
- U.S. Department of Agriculture Animal and Plant Health Inspection Service, Wildlife Services
- U.S. Department of Energy, Office of Legacy Management
- U.S. Fish and Wildlife Service, Colorado Ecological Services Field Office
- U.S. Fish and Wildlife Service, Utah Ecological Services Field Office
- U.S. Forest Service, Rocky Mountain Region
- Western Area Power Administration, Rocky Mountain Region
- Natural Resources Conservation Service, Utah State Office
- Colorado Department of Natural Resources
- Colorado Parks and Wildlife
- Conservation Services Division, Colorado Department of Agriculture
- Dove Creek Conservation District
- Upper Gunnison River Water Conservancy District
- Colorado Department of Transportation
- Grand Conservation District
- San Juan Conservation District
- Public Lands Policy Coordinating Office (includes Utah Division of Wildlife Resources)
- Delta County, Colorado
- Dolores County, Colorado
- Grand County Commission, Utah
- Gunnison County, Colorado
- Mesa County, Colorado
- Montezuma County, Colorado
- Montrose County, Colorado
- Ouray County, Colorado

- Saguache County, Colorado
- San Miguel County, Colorado
- San Juan County, Utah

Throughout the planning process, the BLM held regular meetings for all cooperating agencies as well as numerous meetings with individual cooperating agencies. The BLM encouraged the cooperating agencies to attend the scoping meetings and public meetings and to provide comments on draft documents. The agencies have been engaged throughout the planning process, including alternatives development.

I.9.2. Tribal Government-To-Government Consultation

Executive Order 13175, Consultation and Coordination With Indian Tribal Governments, requires Federal agencies to coordinate and consult on a government-to-government basis with sovereign Native American Tribal governments whose interests may be directly and substantially affected by activities on Federally administered lands. Consultation with Federally recognized Native American Tribes is also required under NEPA and FLPMA. Additionally, there are numerous laws, regulations, and guidance requiring Tribal consultation to identify any Native American cultural values, religious beliefs, or traditional practices that could be affected by BLM actions on Federal lands. Below are the Tribes with whom the BLM invited to consult during the GUSG RMP Amendment/EIS planning process.

- Apache Tribe of Oklahoma
- Cheyenne & Arapaho Tribes of Oklahoma
- Cheyenne River Sioux Tribe
- Colorado River Indian Tribes
- Comanche Nation, Oklahoma
- Confederated Tribes of the Goshute
- Crow Creek Sioux Tribe
- Eastern Shoshone Tribe
- Jicarilla Apache Nation
- Kaibab Band of Paiute Indians
- Kewa Pueblo
- Kiowa Tribe
- Navajo Nation
- Northern Arapaho Tribe
- Northern Cheyenne Tribe
- Northwest Band of Shoshone Nation
- Oglala Sioux Tribe
- Ohkay Owingeh
- Paiute Indian Tribe of Utah
- Pawnee Nation
- Pueblo de Cochiti
- Pueblo of Acoma
- Pueblo of Isleta
- Pueblo of Jemez
- Pueblo of Laguna
- Pueblo of Nambe
- Pueblo of Picuris
- Pueblo of Pojoaque
- Pueblo of San Felipe
- Pueblo of San Ildefonso
- Pueblo of Sandia
- Pueblo of Santa Ana
- Pueblo of Santa Clara
- Pueblo of Taos
- Pueblo of Tesuque
- Pueblo of Zia
- Rosebud Sioux Tribe
- San Juan Southern Paiute
- Skull Valley Band of Goshute Indians

- Southern Ute Indian Tribe
- Standing Rock Sioux
- The Hopi Tribe
- Ute Indian Tribe of the Uintah and Ouray Reservation
- Ute Mountain Ute Tribe
- Ute Mountain Ute Tribe, White Mesa Community
- Ysleta del Sur Pueblo
- Zuni Pueblo

The BLM received no responses to its requests for formal participation in the planning process, from the 47 Tribes contacted. The BLM sent a follow-up letter to all 47 Tribes on March 13, 2023, providing a status update on the planning effort relative to issues raised and the development of alternatives.

The BLM regularly engages in government-to-government consultation with the Southern Ute Tribe, Ute Mountain Ute Tribe, and the Ute Indian Tribe of the Uintah and Ouray Reservation regarding areas of interest and concern, which include the planning area. Issues raised include areas of tribal importance that are open or closed to leasing, and actions related to the Brunot Agreement. The Ute Mountain Ute Tribe has expressed interest and concern regarding livestock grazing management, as well as management decisions that may impact private lands on Pine Crest Ranch in the Gunnison Basin.

On October 11 to 14, 2022, the BLM met with the Ute Indian Tribe of the Uintah and Ouray Reservation during the Biannual Ute/BLM consultation meeting. On April 3 to 7, 2023, the BLM met with the Southern Ute Tribe, Ute Mountain Ute Tribe, and the Ute Indian Tribe of the Uintah and Ouray Reservation during the Biannual Ute/BLM consultation meeting. On August 28 to September 1, 2023, the BLM met with the Southern Ute Indian Tribe and the Ute Mountain Ute Indian Tribe during the Biannual Ute/BLM consultation meeting. With the release of the Draft RMP Amendment/EIS for public comment, the BLM provided notification to the list of Tribes through a letter sent on November 8, 2023. No responses or comments were received during the 90-day comment period on the Draft RMP Amendment/EIS from any Tribes. Again, on April 9, 2024, BLM provided an overview of the RMP Amendment during the Biannual Ute/BLM consultation meeting. The BLM will consult with Tribes for future actions related to the RMP Amendment/EIS.

I.9.3. US Fish and Wildlife Service Section 7 Consultation

The BLM coordinated with the USFWS early in the planning process as a cooperating agency. The USFWS provided input on planning issues, data collection and review, and alternatives development. To comply with Section 7(c) of the Endangered Species Act of 1973 (ESA), the BLM consulted with the USFWS to develop the Biological Assessment (BA). The BA analyzes the potential impacts from the implementation of management actions authorized under the RMP Amendment/EIS on plant and animal species listed, or proposed to be listed, as threatened or endangered under the ESA. The BLM provided the BA for USFWS review on March 11, 2024. The BLM held several meetings with USFWS to address questions and comments during the consultation process. A revision to further clarify language and intent within an avoidance allocation management action (specifically MA-LR-5 and MA-LR-6) was made. The USFWS issued a Biological Opinion (BO) for the Gunnison Sage-Grouse RMP Amendment on August 23, 2024. The USFWS concurred with the BLM's determination of *may affect, not likely to adversely affect* on six listed species and designated critical habitat for one listed species.

Additionally, the USFWS concurred with the BLM's determination of *may affect, likely to adversely affect* for the Gunnison sage-grouse and its designated critical habitat. As concluded in the USFWS BO, "we believe that the proposed RMPA is in line with the GUSG recovery plan and the recovery

implementation strategy. Therefore, we conclude that the proposed RMPA provides an adequate framework to support the survival and recovery of the GUSG." The full effects of the proposed action on GUSG and its designated critical habitat by the USFWS are outlined within the associated BO. The BO is available on the RMP Amendment project website: https://eplanning.blm.gov/eplanning-ui/project/2019031/510.

1.9.4. State Historic Preservation Office Section 106 Consultation

The BLM initiated Section 106 consultation for the planning effort with the Colorado State Historic Preservation Office (SHPO), in accordance with the 2019 *State Protocol Agreement between the Colorado State Director of the Bureau of Land Management and the Colorado State Historic Preservation Officer Regarding the Manner in which the BLM will meet its Responsibilities Under the National Historic Preservation Act and the 2012 National Programmatic Agreement among the BLM, the Advisory Council on Historic Preservation (ACHP), and the National Conference of State Historic Preservation Officers* in a letter dated March 1, 2023. The SHPO responded by email on April 5, 2023, stating it had no comments on the planning effort due to its "nondestructive project planning" per 36 CFR 800.1(C), concluding the Section 106 process for Colorado.

The BLM informed the Utah SHPO that the planning effort is exempt from Section 106 consultation, in accordance with the 2020 *State Protocol Agreement between the Bureau of Land Management and the Utah State Historic Preservation Office Regarding the manner in which the Bureau of Land Management will meet its responsibilities under the National Historic Preservation Act as provided for in the National Programmatic Agreement*, after having determined the planning effort has no potential to cause effects to cultural resources.

The BLM will consult with the SHPOs, as appropriate per each state's protocol agreement, on future actions related to the Approved RMP Amendment.

1.10. APPROVAL

The decision is hereby made to approve the Gunnison Sage-Grouse Resource Management Plan Amendment. This ROD serves as the final decision for the Resource Management Plan Amendment and becomes effective on the date it is signed by the BLM State Directors.

DISTRICT MANAGER RECOMMENDATION

I recommend the adoption and implementation of the Gunnison Sage-Grouse Resource Management Plan Amendment.

GREGORY LARSON Digitally signed by GREGORY LARSON
Date: 2024.10.15 10:40:13 -06'00'

Greg Larson
District Manager, BLM Colorado Upper Colorado River District

CATHERINE COOK Digitally signed by CATHERINE COOK
Date: 2024.10.15 11:23:42 -06'00'

Catherine L. Cook
District Manager, BLM Colorado Rocky Mountain District

STEPHANIE MCCORMICK Digitally signed by STEPHANIE MCCORMICK
Date: 2024.10.15 11:12:19 -06'00'

Stephanie McCormick
District Manager, BLM Colorado Southwest District

NICOLLEE GADDIS-WYATT Digitally signed by NICOLLEE GADDIS-WYATT
Date: 2024.10.15 10:36:11 -06'00'

Nicollee Gaddis-Wyatt
District Manager, BLM Utah Canyon Country District

STATE DIRECTOR APPROVAL

In consideration of the foregoing, I approve the Gunnison Sage-Grouse Resource Management Plan Amendment.

DOUGLAS VILSACK Digitally signed by DOUGLAS VILSACK
Date: 2024.10.17 10:57:33 -06'00'

Doug Vilsack
BLM Colorado State Director

STATE DIRECTOR APPROVAL

In consideration of the foregoing, I approve the Gunnison Sage-Grouse Resource Management Plan Amendment.

JOSEPH MENDEZ Digitally signed by JOSEPH MENDEZ
Date: 2024.10.17 08:36:06 -06'00'

Joseph C. Mendez
BLM Utah State Director (Acting)

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II. APPROVED RESOURCE MANAGEMENT PLAN AMENDMENT

II.1. INTRODUCTION

The U.S. Department of the Interior (DOI) Bureau of Land Management (BLM) prepared this Approved Resource Management Plan Amendment (ARMPA) with an associated environmental impact statement (EIS) to amend nine land use plans in southwestern Colorado and two in southeastern Utah containing Gunnison sage-grouse (GUSG) habitat (see ROD Section I.1 for a list of plans). The management actions in this ARMPA are designed to promote the recovery of GUSG, a species listed as threatened under the Endangered Species Act.

In October 2020, the USFWS released the Final Recovery Plan for Gunnison Sage-Grouse (USFWS 2020a) and an associated Recovery Implementation Strategy for Gunnison Sage-Grouse (*Centrocercus minimus*) (USFWS 2020b). In Criterion 2 and Priority 1 Action Number 3 of the Final Recovery Plan (USFWS 2020a) as well as Priority 1 Action 3.01 in the Recovery Implementation Strategy (USFWS 2020b), the USFWS identified conservation measures in land use plans as the principal regulatory mechanism for protecting GUSG on BLM-administered lands. Based on this, the BLM identified conservation measures and management actions to amend the existing eleven RMPs across the current range of GUSG. Amended conservation measures include restrictions on resource uses and programs that negatively affect GUSG or their habitat, as well as measures to reduce impacts from authorized programs and uses. The BLM strategy for the GUSG ARMPA is to ensure conservation and management actions align with current science and the USFWS guiding recovery documents (Final Recovery Plan and Recovery Implementation Strategy).

The BLM prepared this ARMPA in compliance with its planning regulations (43 CFR 1600) under the authority of the Federal Land Policy and Management Act of 1976 (FLPMA). This document also meets the requirements of the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality Regulations for Implementing the NEPA (40 CFR 1500-1508), the BLM's NEPA regulations (43 CFR 46), and requirements of the BLM's NEPA Handbook, 1790-1 (BLM 2008c).

For this planning amendment effort, no change is proposed to existing RMP decisions that provide more protective measures for other resources beyond those specific to GUSG. For example, if there is an existing right-of-way (ROW) exclusion area to protect cultural resources, the existing decision developed during the localized planning process of the applicable RMP will prevail, if more protective. However, management actions specific to GUSG, including any that may be less or more restrictive, could be amended through this planning process. In addition, all management decisions recognize valid existing rights and are only applicable to BLM-administered surface lands and mineral estate.

II.1.1. Purpose and Need for the Resource Management Plan Amendments

Plan amendments (as defined in 43 CFR 1610.5-5) change one or more of the terms, conditions, or decisions of an approved RMP. Decisions include those related to desired outcomes, measures to achieve desired outcomes, or land tenure decisions. The purpose of the GUSG ARMPA is to:

- Promote the recovery of the threatened GUSG and maintain and enhance BLM-administered occupied and unoccupied habitat upon which the species depends, while continuing to manage the land wherever possible for multiple use and sustained yield.
- Ensure management actions on BLM-administered lands support conservation goals for GUSG and their habitat.
- Ensure that BLM management aligns with current science and data; relevant Federal, State, and local decisions supporting recovery; the DOI Climate Action Plan (DOI 2021); and the USFWS Final Recovery Plan for Gunnison Sage-Grouse (USFWS 2020a) and Recovery Implementation Strategy for Gunnison Sage-Grouse (*Centrocercus minimus*) (USFWS 2020b).
- Provide consistent guidance for addressing threats to GUSG populations and their habitat.

This GUSG ARMPA is necessary to accomplish the following:

- Address the rangewide downward population trend of GUSG since 2014 and address issues related to land management that may affect occupied and unoccupied habitat.
- Respond to the ESA Section 7(a)(1) requirement that the BLM use its authority to further the purposes of the ESA by implementing management actions for the conservation of Federally listed species and the ecosystems upon which they depend.
- Respond to changing ecological and climate conditions affecting BLM-administered lands, including drought, habitat loss and fragmentation, reduced riparian areas, and more frequent wildland fires.

II.1.2. Lands in the Planning Area and Decision Area

II.1.2.1 Planning Area

The **planning area** for this ARMPA is the geographic boundary of the 11 BLM administrative units included in this planning effort (see Figure I-1). The planning area consists of lands administered by the BLM, other Federal agencies, Tribal governments, the State of Colorado, the State of Utah, and local governments, as well as lands under private ownership. The planning area totals approximately 25,564,710 acres and spans portions of nineteen Colorado counties: Alamosa, Archuleta, Conejos, Costilla, Delta, Dolores, Garfield, Gunnison, Hinsdale, La Plata, Mesa, Mineral, Montezuma, Montrose, Ouray, Rio Grande, Saguache, San Juan, and San Miguel; and two Utah counties: Grand and San Juan. Table II-1 identifies the acres of surface land management in occupied and unoccupied habitat by GUSG population area at the time this RMP Amendment is approved.

Table II-1. Surface Management in the Planning Area in Occupied and Unoccupied Habitat by Gunnison Sage-Grouse Population Area

GUSG Population Area	BLM		BOR, NPS, and Other Federal[1]		Private		State and Local Government[2]		USFS		Total Rounded
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres
Cimarron/Cerro/ Sims Mesa	**9,100**	**15%**	**1,570**	**3%**	**47,680**	**76%**	**4,360**	**7%**	**0**	**0%**	**62,710**
Occupied	1,790	6%	470	1.5%	25,550	80%	4,060	13%	0	0%	31,870
Unoccupied	7,320	24%	1,100	4%	22,120	72%	300	<1%	0	0%	30,840
Crawford	**32,310**	**28%**	**12,430**	**11%**	**68,020**	**59%**	**380**	**<1%**	**2,190**	**2%**	**115,330**
Occupied	22,160	63%	4,400	13%	8,450	24%	0	0%	0	0%	35,010
Unoccupied	10,150	13%	8,020	10%	59,570	74%	380	<1%	2,190	3%	80,310
Dove Creek	**53,480**	**17%**	**40**	**<1%**	**250,320**	**78%**	**8,540**	**3%**	**9,980**	**3%**	**322,360**
Occupied	5,250	13%	0	0%	34,280	82%	2,360	6%	0	0%	41,880
Unoccupied	48,230	17%	40	<1%	216,040	77%	6,180	2%	9,980	4%	280,480
Gunnison	**367,300**	**48%**	**21,840**	**3%**	**234,820**	**30%**	**23,530**	**3%**	**124,400**	**16%**	**771,890**
Occupied	304,860	51%	13,840	2%	171,490	29%	23,520	4%	86,100	14%	599,810
Unoccupied	62,440	36%	8,000	5%	63,320	37%	20	<1%	38,290	22%	172,080
Monticello	**4,880**	**3%**	**0**	**0%**	**140,180**	**96%**	**920**	**<1%**	**0**	**0%**	**145,980**
Occupied	3,240	5%	0	0%	66,500	94%	920	1%	0	0%	70,660
Unoccupied	1,640	2%	0	0%	73,690	98%	0	0%	0	0%	75,320
Piñon Mesa	**117,160**	**44%**	**20**	**<1%**	**106,060**	**40%**	**0**	**0%**	**43,720**	**16%**	**266,970**
Occupied	19,630	29%	0	0%	46,030	68%	0	0%	2,160	3%	67,820
Unoccupied	97,530	49%	20	<1%	60,020	30%	0	0%	41,570	21%	199,140
Poncha Pass	**24,820**	**51%**	**0**	**0%**	**16,250**	**34%**	**2,080**	**4%**	**5,170**	**11%**	**48,330**
Occupied	13,160	48%	0	0%	8,010	29%	1,120	4%	4,990	18%	27,280
Unoccupied	11,660	55%	0	0%	8,240	39%	960	5%	180	<1%	21,040

GUSG Population Area	BLM		BOR, NPS, and Other Federal[1]		Private		State and Local Government[2]		USFS		Total Rounded
	Acres	%	Acres	%	Acres	%	Acres	%	Acres	%	Acres
San Miguel Basin	**58,570**	**29%**	**0**	**0%**	**116,660**	**57%**	**15,310**	**7%**	**14,440**	**7%**	**204,980**
Occupied	35,940	35%	0	0%	49,030	48%	14,980	15%	1,420	1%	101,370
Unoccupied	22,630	22%	0	0%	67,630	65%	330	<1%	13,020	13%	103,610
Grand Total	**667,630**	**34%**	**35,910**	**2%**	**979,980**	**51%**	**55,120**	**3%**	**199,910**	**10%**	**1,938,540**
Total Occupied	406,030	42%	18,710	2%	409,340	42%	46,960	5%	94,670	10%	975,700
Total Unoccupied	261,600	27%	17,180	2%	570,630	59%	8,170	1%	105,230	11%	962,820

Source: BLM 2023

[1] Other Federal consists of surface management agency category of other Federal lands.

[2] Includes State, county, city park and outdoor recreation areas.

II.1.2.2 Decision Area

The **decision area** (Map A.1 in Appendix A) is a subset of the planning area subject to decisions made for this ARMPA based on the following:

- Contains Federal mineral estate and/or BLM-administered surface lands (the decision area does not include National Forest System land and other Federal land where the BLM does not make planning decisions about Federal minerals or other uses); and
- Is located within occupied habitat management areas (OHMA), unoccupied habitat management areas (UHMA), adjacent non-habitat within 1 mile of OHMA and UHMA, and within linkage-connectivity management areas (LCMA) (Table II-2). Table II-2 shows acres of OHMA and UHMA by GUSG population at the time this RMP Amendment is approved.

The decision area consists of approximately 2,182,660 acres of BLM surface lands (1,951,440 acres in Colorado and 231,220 acres in Utah) and 2,852,390 acres of Federal subsurface mineral estate (2,563,220 acres in Colorado and 289,170 acres in Utah) (see Map A.1 in Appendix A), which is approximately 11 percent of the planning area. Map A.2 in Appendix A shows the decision area, including the LCMA. Map A.3 in Appendix A shows the decision area, including the 1-mile Adjacent Non-habitat buffer.

The decision area includes approximately 656,940 acres of split estate, which consists of an area with Federal minerals that lie beneath surface land owned by a non-Federal entity, such as a State trust, local government, or private owner. It does not include National Forest System land and other Federal land where the BLM does not make planning decisions. Within the planning area in cases where another Federal agency is making the leasing or planning decisions, such lands are not included in the decision area.

The following are the identified management areas for this planning effort:

- OHMA – Areas of suitable continuous habitat, which do not have effective barriers to Gunnison sage-grouse movement from known use areas, where breeding takes place or is known to have taken place previously (Rangewide Conservation Plan, USFWS Recovery Plan).
- UHMA – Areas outside of occupied habitat that were likely formerly occupied by GUSG and may still contain some of the appropriate biological and physical characteristics for Gunnison sage-grouse habitat recovery (USFWS Recovery Plan).
- LCMA – Areas that have been identified as potential broad regions of connectivity that may facilitate the movement of GUSG between populations or habitat areas. Areas offer a heterogeneous landscape, within the historical range of GUSG, composed of isolated patches of landcover types that may be used by sage-grouse for movement.
- Adjacent Non-habitat – Areas within a 1-mile buffer around OHMA and UHMA that are considered non-habitat because they do not contribute to the annual life-cycle of GUSG.

Table II-2. BLM-Administered Surface and Mineral Estate in the Decision Area by Gunnison Sage-Grouse Habitat Management Area (OHMA and UHMA) and GUSG population.

GUSG Population and Habitat Management Area	BLM Surface		BLM Mineral Estate[1]	
	Acres	%[2]	Acres	%[3]
Cerro Summit-Cimarron-Sims Mesa				
Occupied	1,790	12%	15,330	3%
Unoccupied	7,320	48%	15,400	4%
Crawford				
Occupied	22,160	81%	27,400	5%
Unoccupied	10,150	42%	24,300	6%
Dove Creek				
Occupied	5,250	38%	13,640	2%
Unoccupied	48,230	48%	99,530	25%
Gunnison Basin				
Occupied	304,860	79%	372,590	67%
Unoccupied	62,440	63%	98,460	24%
Monticello				
Occupied	3,240	27%	11,990	2%
Unoccupied	1,640	20%	8,260	2%
Piñon Mesa				
Occupied	19,630	53%	35,840	6%
Unoccupied	97,530	82%	117,910	29%
Poncha Pass				
Occupied	13,160	84%	15,040	3%
Unoccupied	11,660	98%	11,900	3%
San Miguel Basin				
Occupied	35,940	55%	64,920	12%
Unoccupied	22,630	79%	27,680	7%
Total Acres	**667,630**	**68%**	**960,200**	**100%**
Total Occupied	406,030	71%	556,760	100%
Total Unoccupied	261,600	64%	403,440	100%
Linkage Connectivity Management Area	215,350	75%	285,670	100%
Adjacent Non-Habitat (1-mile buffer)	369,720	72%	513,180	100%

Source: BLM 2023

[1] BLM mineral estate includes the mineral estate of BLM surface lands and that of split-estate (Federal minerals that lie beneath surface land owned by a non-Federal entity).

[2] Percentage of a GUSG population's habitat management area (occupied or unoccupied) that occurs on BLM-administered surface land.

[3] Percentage of a GUSG population's habitat management area (occupied or unoccupied) that overlies BLM mineral estate in the decision area.

II.1.3. Scoping and Issues

The BLM initiated the public scoping period for this planning effort on July 6, 2022, with the publication of an Notice of Intent in the *Federal Register* (87 *FR* 40262, July 6, 2022). The public scoping period ended August 22, 2022.

II.1.3.1 Issues Addressed

A planning issue is a point of disagreement, debate, or dispute with a proposed action that can be addressed in many ways. It is based on an anticipated environmental effect. An issue may be affected by a proposed action or alternative; has not already been decided by law or a previous decision; and can be scientifically analyzed (BLM 2008).

During public scoping and through BLM staff input, the BLM identified general issues and topics that are considered in the GUSG RMP Amendment. Some key planning issues addressed in the RMP Amendment are as follows:

- How should the BLM respond to new relevant scientific information/data affecting management of GUSG populations and habitat?
- How should the BLM prioritize and manage the leasing and development of mineral resources in GUSG habitat and consider the use of waivers, exceptions, and modifications related to the development of these resources?
- How should the BLM apply the mitigation hierarchy, including compensatory mitigation, to address impacts on GUSG populations and habitat, ensure that additional disturbance will not contribute to population decline or habitat loss, and support resilient habitat?
- How should the BLM manage livestock grazing activities in GUSG habitat areas?
- How should the BLM apply adaptive management strategies for livestock grazing during drought conditions and on grazing allotments not meeting standards for GUSG habitat due to livestock grazing?
- What are the most appropriate strategies for restoring GUSG habitat while avoiding unintended consequences to habitat for other species?
- How should the BLM manage recreation in GUSG habitat that reduces degradation of habitat and disturbance to the GUSG and still offers the public recreation opportunities and contributes to a strong local economy?
- How can the BLM implement collaboration with local agencies to ensure successful protection of GUSG populations?

All current program-specific issue statements are listed under their appropriate topics in the scoping summary report.

II.1.3.2 Issues Considered but Not Further analyzed

Public scoping raised issues that were not addressed in the RMP Amendment such as those that are resolved through policy or administrative actions and issues that were otherwise outside the scope of the GUSG RMP Amendment. These issues are discussed more thoroughly in section 2.4.16 of the final scoping report.

II.1.4. Related Plans

The BLM considered Federal, State, local, and Tribal plans that are germane to the development of the RMP Amendment. The BLM worked closely with Federal, State, local, and Tribal governments during preparation of the RMP Amendment. The findings for alternatives considered by BLM relative to local land use plans can be found in Section 1.4 of the Proposed RMP Amendment/Final EIS. Chapter 4 of the

Proposed RMP Amendment/Final EIS describes coordination that has occurred throughout the development of the RMP Amendment.

II.1.5. Consistency with Laws and Policy

This ARMPA is consistent with and incorporates requirements identified in all applicable laws and policies. These include executive orders, statutes, regulations, and court settlements and rulings. The policies and decisions that existed before this RMP Amendment are outside its scope; however, they have influenced the decisions and constrained the alternatives and are needed to understand management of the decision area.

II.2. MANAGEMENT DECISIONS

This section of the ARMPA presents goals, objectives, management actions, allowable uses, and stipulations established for BLM-administered lands (Federal mineral estate and/or BLM-administered surface lands) in the decision area. Most of the desired future conditions are assumed to require several years to achieve. These management decisions are presented by program area:

- Special Status Species (SSS)
- Land Health (LH)
- Vegetation (VEG)
- Livestock Grazing Management (LG)
- Wildland Fire Ecology and Management (FIRE)
- Recreation (REC)
- Travel and Transportation (TTM)
- Mineral Split-Estate (MSE)
- Fluid Minerals (FM)
- Solid Minerals (SM)
- Lands and Realty (LR)
- Renewable Energy (RE)
- Areas of Critical Environmental Concern (ACEC)

The below Table II-3 provides an indexed summary topic of each management action by resource for the ARMPA. Refer to individual management actions for decisions and management specifics.

Table II-3. Management Action Resource Topic Summary

Management Action	Resource Topic Summary	Management Action	Resource Topic Summary
Special Status Species (SSS)			
MA-SSS-1	Management Areas	MA-SSS-9	HAF Site-scale
MA-SSS-2	Management Area Exception Criteria	MA-SSS-10	Noise
MA-SSS-3	Adjacent Non-habitat	MA-SSS-11	Buffers
MA-SSS-4	HAF Mid- and Fine-scales	MA-SSS-12	BMPs and RDFs
MA-SSS-5	Net Surface Disturbance	MA-SSS-13	Predators
MA-SSS-6	Compensatory Mitigation	MA-SSS-14	Seasonal Timing Limitations
MA-SSS-7	HAF Mid- and Fine-scales	MA-SSS-15	Minimization Criteria

Management Action	Resource Topic Summary	Management Action	Resource Topic Summary
MA-SSS-8	HAF Site-scale	-	
Land Health (LH)			
MA-LH-1	Land Health Evaluations	-	
Vegetation (VEG)			
MA-VEG-1	Vegetation Treatments	MA-VEG-15	Conifer Treatments and Pinyon Jay
MA-VEG-2	Vegetation Treatments and HAF	MA-VEG-16	Connectivity
MA-VEG-3	Sagebrush Treatments	MA-VEG-17	Connectivity
MA-VEG-4	Sagebrush Treatments	MA-VEG-18	Wet Meadows and Riparian Areas
MA-VEG-5	Habitat Guidelines	MA-VEG-19	Riparian & Wetland AIM
MA-VEG-6	Vegetation Treatments	MA-VEG-20	Wet Meadows and Riparian Areas
MA-VEG-7	Ecological Site Potential	MA-VEG-21	Willow Patches
MA-VEG-8	Post-treatment Monitoring	MA-VEG-22	Cheatgrass
MA-VEG-9	Native Seeds	MA-VEG-23	Invasive Species and Weeds
MA-VEG-10	Seeding	MA-VEG-24	Chemical Treatments
MA-VEG-11	Treatment Monitoring Plan	MA-VEG-25	Monitoring Invasive Species
MA-VEG-12	AIM and Monitoring	MA-VEG-26	Seedings and Passive Restoration
MA-VEG-13	Treatment Effectiveness Monitoring	MA-VEG-27	BMPs for Equipment
MA-VEG-14	Conifer Treatment	-	
Livestock Grazing Management (LG)			
MA-LG-1	Components of Fully Processed Permits	MA-LG-10	Relinquished or Vacant Allotments
MA-LG-2	Best Livestock Management Practices	MA-LG-11	Riparian Season of Use
MA-LG-3	Meeting GUSG Habitat Suitability	MA-LG-12	Salt and Mineral Supplements
MA-LG-4	Levels of Grazing Use	MA-LG-13	Spring Development
MA-LG-5	Adaptive Management Plans	MA-LG-14	Water Developments
MA-LG-6	Permittee Coordination	MA-LG-15	Water Developments
MA-LG-7	Permittee Coordination	MA-LG-16	New Fences
MA-LG-8	Integrated Ranch Planning	MA-LG-17	Range Improvements
MA-LG-9	Livestock Trailing	MA-LG-18	Existing Range Improvements
Wildland Fire Ecology and Management (FIRE)			
MA-FIRE-1	Native Seeds	MA-FIRE-9	Invasive Species and Weeds
MA-FIRE-2	Emergency Stabilization and Rehabilitation (ES&R) Plan	MA-FIRE-10	Rest Treated Areas
MA-FIRE-3	Climate and Seeding	MA-FIRE-11	Native Seeds
MA-FIRE-4	Burned Areas	MA-FIRE-12	Post Fuels Management
MA-FIRE-5	Sagebrush Treatments	MA-FIRE-13	Habitat Suitability and Connectivity
MA-FIRE-6	Seasonal Restrictions	MA-FIRE-14	Fire Suppression
MA-FIRE-7	Prescribed Fire	MA-FIRE-15	Temporary Closures
MA-FIRE-8	Prescribed Fire	-	
Recreation (REC)			
MA-REC-1	Facility Construction	MA-REC-5	Special Recreation Permits (SRPs)
MA-REC-2	Trail and Infrastructure Development	MA-REC-6	Sugar Creek BCA Designation

Management Action	Resource Topic Summary	Management Action	Resource Topic Summary
MA-REC-3	Special Recreation Permits (SRPs)	MA-REC-7	Signal Peak SRMA Designation
MA-REC-4	Special Recreation Permits (SRPs)	MA-REC-8	Hartman Rocks SRMA
Travel and Transportation (TTM)			
MA-TTM-1	OHV and Mechanized Travel	MA-TTM-8	OHV and Mechanized Travel
MA-TTM-2	Powderhorn Wilderness	MA-TTM-9	Route Evaluation
MA-TTM-3	Route Rehabilitation	MA-TTM-10	Route Density
MA-TTM-4	Recreational Trail Development	MA-TTM-11	Implementation Planning
MA-TTM-5	Invasive Species	MA-TTM-12	Travel Management Planning
MA-TTM-6	Gunnison ERMA	MA-TTM-13	Route Reduction and Maintenance
MA-TTM-7	New Routes and Fragmentation	-	
Mineral Split Estate (MSE)			
MA-MSE-1	Federal Minerals and Non-Federal Surface	MA-MSE-2	Federal Surface and Non-Federal Minerals
Fluid Minerals (FM)			
MA-FM-1	Closed to Leasable Fluid Minerals	MA-FM-5	Leased Fluid Minerals Surface Occupancy
MA-FM-2	NSO Leasable Fluid Minerals	MA-FM-6	Geophysical Exploration
MA-FM-3	NSO Leasable Lek Buffers	MA-FM-7	Pipeline Compressors
MA-FM-4	Expired or Terminated Leases	-	
Solid Minerals (SM)			
MA-SM-1	Recommend Mineral Withdrawal	MA-SM-6	Non-energy Solid Leasable Minerals
MA-SM-2	Seasonal Restrictions	MA-SM-7	Non-energy Solid Leasable Stipulations
MA-SM-3	Salable Mineral Material Sites	MA-SM-8	Net Surface Disturbance
MA-SM-4	Salable Mineral Material Disposal	MA-SM-9	Non-energy Solid Existing Leases
MA-SM-5	Salable Mineral Material Sites	-	
Lands and Realty (LR)			
MA-LR-1	Existing Transmission Lines	MA-LR-7	Land Tenure Retention
MA-LR-2	ROW Exclusion ACECs	MA-LR-8	Land Tenure Disposal
MA-LR-3	ROW Exclusion OHMA	MA-LR-9	Land Tenure Disposal
MA-LR-4	ROW Exclusion UHMA	MA-LR-10	Land Tenure Acquisition
MA-LR-5	ROW Avoidance OHMA	MA-LR-11	Recommend Mineral Withdrawal
MA-LR-6	ROW Avoidance UHMA	-	
Renewable Energy (RE)			
MA-RE-1	Wind Energy Development	MA-RE-2	Solar Energy Development
Areas of Critical Environmental Concern (ACEC)			
Obj-ACEC-1	Designated ACECs	-	
Dry Creek Basin ACEC			
ACEC-MA-1	Trail Development	ACEC-MA-4	Recommend for Withdrawal

Management Action	Resource Topic Summary	Management Action	Resource Topic Summary
ACEC-MA-2	Trail and Road Realignment	ACEC-MA-5	ROW Exclusion
ACEC-MA-3	Closed to Fluid Minerals	-	
Chance Gulch ACEC			
ACEC-MA-1	Forage Reserve Allotment	ACEC-MA-8	Route Closures
ACEC-MA-2	Human Use Closure	ACEC-MA-9	Over-snow Vehicle Travel
ACEC-MA-3	Recreation and Pets	ACEC-MA-10	Designated Routes
ACEC-MA-4	Recreation Education	ACEC-MA-11	Designated Route Closure
ACEC-MA-5	Trail Development	ACEC-MA-12	Route Decommissioning
ACEC-MA-6	Trail Realignment	ACEC-MA-13	Recommend for Withdrawal
ACEC-MA-7	Motorized and Mechanized Travel	ACEC-MA-14	ROW Exclusion
Sapinero Mesa ACEC			
ACEC-MA-1	Livestock Grazing	ACEC-MA-8	Route Closures
ACEC-MA-2	Human Use Closure	ACEC-MA-9	Over-snow Vehicle Travel
ACEC-MA-3	Recreation and Pets	ACEC-MA-10	Seasonal Closure
ACEC-MA-4	Recreation Education	ACEC-MA-11	Designated Routes
ACEC-MA-5	Trail Development	ACEC-MA-12	Route Decommissioning
ACEC-MA-6	Trail Realignment	ACEC-MA-13	Recommend for Withdrawal
ACEC-MA-7	Motorized and Mechanized Travel	ACEC-MA-14	ROW Exclusion
Gunnison Sage-Grouse ACEC/Important Bird Area (IBA)			
ACEC-MA-1	Seasonal Timing Limitations	ACEC-MA-6	Motorized and Mechanized Travel
ACEC-MA-2	Recreation and Pets	ACEC-MA-7	Human Use Closure
ACEC-MA-3	Recreation Use	ACEC-MA-8	Recommend for Withdrawal
ACEC-MA-4	OHV-limited	ACEC-MA-9	ROW Exclusion
ACEC-MA-5	Motorized and Mechanized Closure	-	
West Antelope Creek ACEC			
ACEC-MA-1	Motorized and Mechanized Travel	ACEC-MA-3	Over-snow Vehicle Travel
ACEC-MA-2	Designated Route Closure	ACEC-MA-4	Recommend for Withdrawal
South Beaver Creek ACEC			
ACEC-MA-1	Research Activities	ACEC-MA-4	Over-snow Vehicle Travel
ACEC-MA-2	Motorized and Mechanized Travel	ACEC-MA-5	Designated Routes
ACEC-MA-3	Designated Route Closure	ACEC-MA-6	Recommend for Withdrawal

All acreages and maps presented in the ARMPA are estimations based on current data. Given the scale of the analysis, the compatibility constraints between datasets and lack of data for some resources, all calculations are approximate; they are for comparison and analytic purposes only. Likewise, the figures and maps are provided for illustrative purposes and subject to the limitations discussed above. Updating these data is considered plan maintenance, which will occur over time as the ARMPA is implemented, additional surveys are completed, and information is revised.

Section II.2.1 through Section II.2.13 identify the goals, objectives, and management actions in the ARMPA. Maps depicting resource information and stipulations applicable to surface-disturbing activities in the ARMPA are provided in Appendix A. Additional appendices containing supporting information for decisions outlined in the ARMPA are as follows:

- Appendix A Maps
- Appendix B Best Management Practices and Required Design Features
- Appendix C Gunnison Sage-Grouse Mitigation Strategy
- Appendix D Gunnison Sage-Grouse Monitoring Framework
- Appendix E Methodology for Calculating Net Surface Disturbance
- Appendix F Habitat Monitoring and Reporting
- Appendix G Buffer Distances and Evaluation of Impacts on Leks
- Appendix H Livestock Grazing Management Implementation Guidelines
- Appendix I Recreation Management Areas
- Appendix J Stipulations Applicable to Fluid Mineral Leasing and Land Use Authorizations

Table II-4 is a summary of the allocation decisions presented for each GUSG management area.

Table II-4. Summary of Allocation Decisions by GUSG Management Area

Resource	OHMA	UHMA	LCMA	Adjacent Non-habitat (1-mile buffer)
Livestock Grazing	Available	Available	Available	Available
Travel Management	Limited, to include mechanized travel, to routes that existed at the time of this plan's issuance, except for areas already managed as OHV-Closed	Limited, to include mechanized travel, to routes that existed at the time of this plan's issuance, except for areas already managed as OHV-Closed	-	-
Fluid Minerals	Closed in areas with no known or low potential. NSO without WEMs in areas with medium or higher potential.	Closed in areas with no known or low potential. NSO with WEMs in areas with medium or higher potential.	-	NSO without WEMs within 1-mile buffer of all leks.
Nonenergy Leasable Minerals	Closed	Open	Open	Open
Salable Minerals	Closed to new mineral material sites; open for expansion of existing mineral	Open if criteria are met; already closed or withdrawn areas would remain as such.	-	-

Resource	OHMA	UHMA	LCMA	Adjacent Non-habitat (1-mile buffer)
	material operations.			
Locatable Minerals	ACECs/BCA recommended for withdrawal	ACECs/BCA recommended for withdrawal	-	-
Lands and Realty Rights-of-way (ROW)	Exclusion (ACECs, BCA, Satellite populations, Gunnison Basin population within 1-mile of all leks)	Exclusion within 1-mile buffer of all leks	-	-
Lands and Realty ROW Avoidance	Avoidance (Gunnison Basin population outside of 1-mile all lek buffers)	Avoidance (Satellite populations – areas outside 1-mile all lek buffers) Avoidance (Gunnison Basin population – areas outside 1-mile of all lek buffers)	-	-
Land Tenure	Retain	Retain	Retain	-
Solar Energy	Exclusion	Exclusion	Open with Minimization Criteria (MA-SSS-15)	Open with Minimization Criteria (MA-SSS-15)
Wind Energy	Exclusion	Exclusion	Open with Minimization Criteria (MA-SSS-15)	Open with Minimization Criteria (MA-SSS-15)

II.2.1. Special Status Species (SSS)

Habitat Management Areas

Goal SSS-1: Promote recovery and resiliency of GUSG populations by conserving, enhancing, or restoring the sagebrush ecosystems which populations depend on, in collaboration with other conservation partners.

Objective SSS-1: *Conserve existing habitats by collaborating with State and local governments and private landowners to improve conservation efforts across landownerships (RIS Priority Action 1 – 3).*

Participate in local GUSG conservation efforts and working groups to implement landscape-scale habitat conservation across landownerships and identify funding opportunities for treatments on private lands and for maintaining high-quality native rangelands. Leverage incentives, funding, and resources for conservation actions to support consistent management to benefit GUSG with partners, private landowners, State, and local governments (RIS Priority Action 1 – 2.02).

Objective SSS-2: *Maintain, and increase where possible, the abundance, distribution, and viability of GUSG populations and habitats.*

Objective SSS-3: *Objectives for the specified management areas are as follows:*

Occupied (OHMA): Conserve and sustain connected sagebrush areas. Maintain and improve habitat quality, quantity, and connectivity by restoring sagebrush ecosystems.

Unoccupied (UHMA): Improve habitat quality and quantity by restoring sagebrush ecosystems.

Linkage-Connectivity (LCMA): Identify and prioritize areas for habitat enhancement and connectivity. In adjacent opportunity areas or areas that offer potential connectivity within and between populations; maintain, improve, and restore GUSG connectivity, or associated vegetation types, to support GUSG movement or enhance connectivity.

Adjacent Non-habitat (1-mile buffer on OHMA/UHMA): Minimize effects of discrete activities which may impact GUSG populations and their habitats for projects proposed within 1-mile of adjacent OHMA and UHMA. Minimize effects (direct and indirect) from discrete anthropogenic disturbances in areas that may impact GUSG populations or their habitat.

Management Actions (MA)

MA-SSS-1: Identify OHMA, UHMA, LCMA, and Adjacent Non-habitat (Map A.2 through Map A.5 in Appendix A) as follows:

Population Area	OHMA			UHMA		
	Total Surface[1]	BLM Surface[2]	Split Estate Minerals[3]	Total Surface[1]	BLM Surface[2]	Split Estate Minerals[3]
Cimarron/Cerro/Sims Mesa	31,870	1,790	13,150	30,840	7,320	7,140
Crawford	35,010	22,160	5,230	80,310	10,150	13,060
Dove Creek	41,880	5,250	8,390	280,480	48,230	51,680
Gunnison	599,810	304,860	70,190	172,080	62,440	29,650
Monticello, UT	70,660	3,240	8,950	75,320	1,640	6,630
Piñon Mesa	67,820	19,630	17,100	199,140	97,530	21,890
Poncha Pass	27,280	13,160	2,460	21,040	11,660	240
San Miguel Basin	101,370	35,940	28,980	103,610	22,630	5,930
Total	**975,700**	**406,030**	**154,450**	**962,820**	**261,600**	**136,220**
Percent of Total Habitat	**50.3%**	**20.9%**	**8.0%**	**49.7%**	**13.5%**	**7.0%**

[1] Acreage associated with total OHMA/UHMA polygon in the Planning Area, regardless of land ownership.
[2] Acreage within OHMA/UHMA where the BLM has managerial authority on the surface estate.
[3] Acreage where the surface and mineral estates are owned or administered by separate entities. These acres show where the surface estate is not BLM (e.g., private, State, local government), but that have Federal mineral estate administered by the BLM. Most minerals decisions apply to the combination of the BLM surface and mineral estates.

Administrative Area	LCMA			Adjacent Non-habitat 1-mile buffer		
	Total Surface	BLM Surface	Split Estate Minerals	Total Surface	BLM Surface	Split Estate Minerals
Canyons of the Ancients NM	0	0	0	50,800	49,720	1,080
Dominguez/Escalante NCA	16,310	16,230	16,230	15,300	15,300	0
Grand Junction FO	58,630	42,770	42,770	38,340	26,340	12,000
Gunnison FO	1,720	0	0	78,610	40,750	28,150
Gunnison Gorge NCA	4,080	3,980	100	10,430	10,030	400
McInnis Canyons NCA	32,670	32,670	0	15,260	15,260	0
San Luis Valley FO	2,440	1,810	1,240	6,240	4,610	340
Tres Rios FO	75,860	44,540	3,190	125,430	86,550	9,430
Uncompahgre FO	58,040	40,780	630	124,120	80,000	1,630
Moab FO	31,720	30,480	31,240	19,220	18,880	38,740
Monticello FO	5,290	2,090	17,240	31,710	22,290	39,070
Total	**286,760**	**215,350**	**69,620**	**515,460**	**369,730**	**130,840**
Percent of Total Adjacent Non-habitat	**49%**	**37%**	**12%**	**48%**	**35%**	**12%**

FO=Field Office, NCA=National Conservation Area, NM=National Monument

OHMA: Areas of suitable continuous habitat, which do not have effective barriers to GUSG movement from known use areas, where breeding takes place or is known to have taken place previously.

UHMA: Areas outside of occupied habitat that were likely formerly occupied by GUSG and may still contain some of the appropriate biological and physical characteristics for GUSG habitat recovery. While some areas of unoccupied habitat may need practical restoration or treatments to provide the desired habitat characteristics for GUSG, there are some unoccupied habitat inclusion areas that currently have the potential to support GUSG, but these habitats are not contiguous with occupied habitat or current occupancy of GUSG is unknown. Other areas within unoccupied habitat may not support GUSG and restoration may not be practical.

LCMA: Areas that have been identified as potential broad regions of connectivity that may facilitate the movement of GUSG between populations or habitat areas. Areas offer a heterogeneous landscape, within the historical range of GUSG, composed of isolated patches of landcover types that may be used by sage-grouse for movement. Potential habitat within LCMA is composed of a mosaic of contrasting landforms, landcover types, and land uses.

Adjacent Non-habitat: Areas within a 1-mile buffer around OHMA and UHMA that are considered non-habitat because they do not contribute to the annual life-cycle of GUSG.

MA-SSS-2: The habitat management boundaries are not intended to represent a survey-grade boundary and are not expected to be used exclusively for habitat determinations at a project or site-specific level. In accordance with the adaptive management framework and existing law, regulation and

policy, inventories will continue to be conducted to provide information on GUSG habitat and distribution (FLPMA, 43 USC 1701 Sec. 201 (a), BLM Manual 6840.04 D 3; BLM-M-6840.04 E 2).

Prior to considering proposed actions within OHMA or UHMA, a field investigation should be conducted by a qualified biologist and the interdisciplinary team, in collaboration with Federal and State biologists. If in the review of a proposed action, there are discrepancies between the mapped habitat management areas and the site-specific conditions, then these aspects will be disclosed, with supporting data (e.g., vegetation monitoring, state and transition models, ecological site descriptions, etc.) and analyzed through a NEPA process. A final determination, based on the site-specific analysis, on whether the specific management or proposed action will be applied within the identified management area will be issued.

The objectives and management decisions will apply within the respective OHMA and UHMA polygons to existing sagebrush areas and areas with the ecological potential to have sagebrush as one of the vegetative components. In the mapped OHMA and UHMA there may be areas that lack the principal habitat components necessary for GUSG, including but not limited to rock outcrops, alkaline flats, pinyon-juniper ecological sites, and Douglas-fir and associated conifer forest. These are areas that may not have existing sagebrush or ecological potential to contain sagebrush, however indirect and direct impacts to GUSG populations or their habitat still need to be considered when planning and authorizing projects within OHMA and UHMA.

These areas of non-habitat may be identified during a site-specific project review by agency biologists, in coordination with the appropriate State and Federal agency biologist.

Because of the importance of occupied and unoccupied habitat to conserve, enhance, and restore GUSG populations, the objectives and management decisions will apply to all the areas within the respective OHMA and UHMA polygons, including areas of non-habitat unless **all of the** following criteria are met.

Exception criteria will be based on the following items, all criteria must be met for an exception to be permitted:

- The non-habitat does not have the potential to provide important linkage-connectivity: (1) within or between populations, (2) between seasonal habitats (e.g., habitat indicators and guidelines), or (3) within or between existing or potential habitat;
- Access through GUSG habitat (as verified through site-specific field checks) only occurs on existing routes, and no new roads or upgrades to roads that would change vehicle use, vehicle type, or traffic volume.
- There would be no direct or indirect impacts to adjacent seasonal habitats or individuals occupying the habitat due to project design and required design features (RDFs) (e.g., minimize noise, preclude tall structures, require perch deterrents, etc.), as demonstrated in the project's NEPA document.
- Coordination with the appropriate Federal and State agencies has occurred (i.e., USFWS and State wildlife agency).

Any exception granted based on the above criteria would only apply to the site-specific, project-level authorization. Proposed projects in the same area would need to undergo individual analysis to confirm

the criteria are met prior to subsequent authorizations. Excepting a site-specific project from conformance with GUSG management in an area of non-habitat would not change the boundaries of OHMA or UHMA or alleviate the BLM from its consultation obligations with the USFWS.

Exceptions may only be granted by the Authorized Officer. If there is not concurrence between the coordinating State and Federal agencies, then the decision will be at the discretion of the BLM State Director.

MA-SSS-3: During implementation, analyze effects of discrete activities which may impact GUSG populations and their habitats for projects proposed within Adjacent Non-habitat (1 mile buffer of OHMA and UHMA) and LCMA. Incorporate the HAF mid- and fine-scale assessments into the analysis and decision-making process. Minimize effects (direct and indirect) from discrete anthropogenic disturbances in areas that may impact GUSG populations or their habitat.

If site-specific analysis shows a potential to adversely affect GUSG populations or their habitat (direct or indirect), consider other viable alternatives for authorization and apply minimization criteria and RDFs.

Objective SSS-4: *Manage OHMA and UHMA to provide suitable habitat for GUSG (where ecological site potential allows), by managing for connected mosaics of sagebrush shrublands that provide for seasonal habitats, dispersal, and migration, while limiting anthropogenic disturbances.*

In OHMA and UHMA, for all populations, manage for no increase in net surface disturbance. This objective would be accomplished by restoring existing disturbances, reducing fragmentation, and avoiding new disturbance in GUSG habitat for Federal authorizations or actions and where there is a Federal nexus. For example, construction of new roads or trails should first be offset at a greater or equal amount of reclaimed and restored roads or trails. Although the objective is to increase habitat and reduce overall net disturbance, the BLM must recognize valid existing rights which could lead to an increase in net surface disturbance for some scenarios. In these instances, the BLM will work to apply minimization measures and conditions of approval with authorizations in OHMA and UHMA.

These objectives will be accomplished through the combination of RMP land use allocations and management actions, proactive habitat treatments, and application of mitigation (avoiding, minimizing, and compensating) to internal and external project proposals.

MA-SSS-4: In OHMA and UHMA, evaluate the suitability of GUSG habitat at HAF mid- and fine-scales based on the methods in the Sage-Grouse Habitat Assessment Framework (HAF; Stiver et al. 2015, BLM TR 6710-1, as revised), BLM Implementation Guidelines, and the Habitat Indicators and Guidelines Table (see Table F.1 in Appendix F, *Habitat Monitoring and Reporting*).

MA-SSS-5: In OHMA and UHMA, net surface disturbance calculations will be updated and calculated annually for any authorizations where there is a Federal action or nexus per the methodology outlined in Appendix E, *Methodology for Calculating Net Surface Disturbance*. Net surface disturbance acres will be provided for the current year, in addition to past years, to allow decision-makers to evaluate net disturbance trends. These net surface disturbance calculations will be incorporated into the cumulative impact analysis during project-scale NEPA.

In OHMA and UHMA, the following will apply to evaluation and analysis of new anthropogenic surface disturbances:

- Minimization Criteria (MA-SSS-15)

- Compensatory Mitigation (MA-SSS- 6)
- Analysis of net surface disturbance for OHMA and UHMA within NEPA cumulative impacts
- Habitat Exception Criteria (MA-SSS-2)
- Exceptions for surface-use activities, listed under the applicable resource program (e.g., Lands and Realty, Solid Minerals)
- Annual reporting under the Monitoring Framework (see Appendix D, *Gunnison Sage-Grouse Monitoring Framework*)

MA-SSS-6: In OHMA and UHMA, avoid, minimize, and compensate (mitigate) for impacts on GUSG and their habitat. In undertaking BLM management actions and consistent with valid existing rights and applicable law, in authorizing third-party actions that result in habitat loss and/or degradation, the BLM will require and ensure a compensatory mitigation strategy that meets the conservation objectives and management decisions outlined for GUSG within this plan.

The mitigation strategy will incorporate a *minimum* of a 5:1 ratio where 1 acre of surface disturbance (temporary or permanent and short-term or long-term) results in 5 acres of mitigation. Mitigation ratios may need to be higher than 5:1 to account for indirect impacts and result in compensatory mitigation to meet conservation objectives for GUSG. Project-specific analysis will be necessary to determine how a compensatory mitigation proposal addresses both direct and indirect impacts from a proposed action. The BLM will cooperate with the State to determine appropriate project design and alignment with State policies and requirements, including those regarding compensatory mitigation. The mitigation strategy will account for any uncertainty associated with the effectiveness of such mitigation. This will be achieved by avoiding, minimizing, and compensating for impacts by applying beneficial mitigation actions.

Authorizations which meet the Habitat Exception Criteria (MA-SSS-2) and where analysis shows there are no direct or indirect effects to GUSG, or their habitat, may not require compensatory mitigation. This will need to be analyzed and considered at the project-scale in coordination with Federal and State agencies.

The Mitigation Hierarchy actions include:

- Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree of magnitude of the action and its implementation.
- Repairing, rehabilitation, or restoring the affected area.
- Compensating or mitigating for the residual adverse direct and indirect impact by replacing or providing substitute resources or environments at a minimum ratio of 5 acres per 1 acre disturbed.

Money for research or monitoring will not be counted as mitigation. However, mitigation funds may be used toward acquisitions or conservation easements to protect private lands, prioritizing those adjacent to public lands, that contain moderate to high quality GUSG habitat in collaboration with State, Federal, local, and conservation partners (e.g., land trusts, conservation realtors, etc.) (RIS Priority 1 – 3.05).

Compensatory mitigation includes actions that are designed to create new habitat or ameliorate disturbances by the creation of or protection of other habitat, within the same population or in other GUSG populations. The preference is that mitigation for impacts within OHMA and UHMA will occur

within the same population area of the impact and meet suitable habitat guidelines as outlined in the HAF (see Appendix F, *Habitat Monitoring and Reporting*). For off-site mitigation associated with mitigation of actions within OHMA, project proponents will work closely with the BLM and the State wildlife agency to identify OHMA where off-site mitigation could occur.

For compensatory mitigation (either on site or off site), actions should consider the type and quality of habitat being impacted by a project and the proportional impact a project will have on the population, both direct and indirect. In turn, proposed mitigation actions should address the same type and quality of habitat that may be impacted (e.g., breeding, nesting, brood-rearing, wintering, transitional habitats). The value of the habitat may increase if the birds use the area for more than one time of the year, if it is relatively higher in quality, or if the type of habitat is a limiting factor for the local population. Similarly, mitigation should account for the proportional impact a project will have on a specific population (if a given project impacts 1 percent of wintering habitat versus 30 percent of the wintering habitat).

Mitigation strategies will be developed and conducted according to the mitigation framework outlined in Appendix C, *Gunnison Sage-Grouse Mitigation Strategy*, which include the BLM's Mitigation Manual Section (MS-1794) and the BLM's Mitigation Handbook (H-1794-1).

MA-SSS-7: In coordination with partners across land management jurisdictions, use mid- and fine-scale habitat assessments, in conjunction with other best-available data and science, to strategically design and implement conservation and restoration projects that will maintain or increase habitat suitability, availability, and connectivity.

Habitat Management

Objective SSS-5: *Manage OHMA and UHMA to provide suitable seasonal habitats for GUSG, where appropriate relative to ecological site potential. Seasonal habitat may include areas where sagebrush is the current or potential dominant vegetation type or is a primary species within the various states of the ecological site description or other areas important to the GUSG life cycle, such as mesic habitat, riparian areas, or wet meadows. This objective will be accomplished through the combination of RMP land use allocations and management actions, proactive habitat treatments, and the project-level application of mitigation (avoid, minimize, compensate) to internal and external project proposals.*

MA-SSS-8: Within each population area, evaluate suitability separately for OHMA and UHMA, using the site-scale methods from the Sage-Grouse Habitat Assessment Framework guidelines (Stiver et al. 2015, BLM TR 6710-1, as revised) and the BLM Sage-Grouse HAF Implementation Guidelines. The Habitat Indicators and Guidelines (Table F.1 in Appendix F, *Habitat Monitoring and Reporting*) provides a list of site-scale habitat suitability indicators (e.g., sagebrush cover, perennial grass and forb cover, preferred forb availability). The suite of indicators and guidelines should also be used to inform measurable project objectives during implementation-level planning for BLM-permitted and BLM-initiated actions within OHMA and UHMA.

MA-SSS-9: In OHMA and UHMA, and in coordination with partners, use results of site-scale habitat assessments to inform management decisions and the design and implementation of habitat projects to improve or maintain the suitability of GUSG seasonal habitats. For example, projects should be designed to improve sagebrush cover where it is a limiting factor and can be accomplished based on the ecological potential of the area. The indicators and guidelines in Table F.1 in Appendix F, *Habitat*

Monitoring and Reporting, will be used to inform measurable project objectives during implementation-level planning for BLM-permitted and BLM-initiated actions in OHMA and UHMA.

Objective SSS-6: *Minimize and avoid additional fragmentation, through application of minimization criteria (MA-SSS-15), in OHMA, UHMA, and LCMA from anthropogenic disturbances that will reduce distribution, movement, or abundance of GUSG and their habitat.*

MA-SSS10: In OHMA, UHMA, and Adjacent Non-habitat, limit noise from permitted discrete anthropogenic disturbances, whether during construction, operation, or maintenance, to not exceed 10 decibels above ambient sound levels at all leks from 2 hours before to 2 hours after official sunrise and sunset during breeding season, (March 1 to May 15). Support the establishment of ambient baseline noise levels for leks in OHMA.

Limit project related noise in other OHMA habitats and seasons where it would be expected to reduce functionality of habitats that support associated GUSG populations from March 1 to July 15.

MA-SSS-11: The BLM will use the buffer distances to inform application of minimization criteria (MA-SSS-15/ROW avoidance) to new authorizations for the following features within the specified buffer distance of all leks (i.e., active, inactive, historic, unknown, occupied, and unoccupied) (see Appendix G, *Buffer Distances and Evaluation of Impacts on Leks*):

- At a minimum, no new above ground development, infrastructure (e.g., pipelines, utility lines), or roads within 1 mile of all leks. Buried infrastructure (e.g., pipelines, utility lines) could be considered within the 1-mile lek buffer with application of seasonal timing limitations and minimization criteria. Development of new recreational trails are addressed under the Recreation Management Actions.
- Apply minimization criteria/ROW avoidance to low structures (e.g., structures that are taller than the surrounding sagebrush such as fences, weather stations) within 1.2 mile of leks.
- Apply minimization criteria/ROW avoidance to tall structures (e.g., communication or transmission towers, transmission lines) within 2 miles of leks.
- Apply minimization criteria/ROW avoidance/CSU to infrastructure related to energy development within 3.1 miles of leks.

Justifiable departures to decrease or increase from these distances based on local data, best available science, landscape features, habitat or vegetation types, and other existing protections (e.g., land use allocations, State regulations) may be appropriate for determining activity impacts at a site-scale.

All variations in lek buffer-distances will require appropriate analysis and disclosure in addition to coordination/consultation with the appropriate Federal and State agencies (e.g., USFWS and State wildlife agency) during site-specific authorizations. In determining lek locations, the BLM will use the most recent lek data in coordination/consultation with the appropriate Federal and State agencies (e.g., USFWS and State wildlife agency).

MA-SSS-12: Apply BMPs and RDFs (see Appendix B, *Best Management Practices and Required Design Features*) for authorized activities or infrastructure within OHMA, UHMA, and LCMA to reduce opportunities for GUSG predators, such as limiting food sources (trash reduction), nesting, cover, or

perches. Apply actions specific to the predators of concern for the given GUSG population (e.g., ravens, red fox, badgers, raccoons, raptors).

MA-SSS-13: In OHMA, UHMA, and LCMA, support the control of predators. Coordinate in predation research and monitoring with other partners.

Consider predator control measures if a local GUSG population is below 25 breeding individuals or 25% of the long-term population goal (especially if it is a declining or recently augmented population). Lethal removal of predators that are included under the Migratory Bird Treaty Act (e.g., ravens) requires a USFWS depredation permit and coordination with Federal, State, and local cooperating agencies will be identified and included in planning and implementing predator control.

Quantifiable objectives within a specific time-frame must be specified, and long-term monitoring of both predator and prey communities, are necessary in order to objectively evaluate the success of implementation.

MA-SSS-14: In OHMA and UHMA, and in coordination with the appropriate State, Federal, and local government agency, apply seasonal restrictions, as appropriate, during the period specified below to manage and reduce discretionary discrete anthropogenic disturbances (including scheduled maintenance activities), surface disturbance and uses on public lands to prevent disturbance to GUSG populations and habitat during seasonal life cycle periods as follows:

- In breeding/lekking areas from March 1 – May 15
- In nesting habitat from April 15 – June 30
- In brood-rearing habitat from July 1 – September 30
- In known winter habitat concentration areas from December 1 – March 15

At a minimum, prohibit surface-disturbing activities* in OHMA during lekking, nesting, or brood-rearing from March 1 – July 15. **See Section II.6, Glossary, for surface-disturbing activities definition.*

Specific time and distance determinations will be based on site-specific conditions and may be modified, in coordination with the appropriate State wildlife agency and USFWS, due to documentation of the following:

- local variations (e.g., higher/lower elevations),
- annual climactic fluctuations (e.g., early/late spring and long or heavy winter)
- located within an area of non-habitat (e.g., forest, sandflat)

MA-SSS-15: Apply minimization criteria in OHMA, UHMA, LCMA, and Adjacent Non-habitat (1-mile buffer), as applicable for resources that allow use of OHMA, UHMA, LCMA, and Adjacent Non-habitat.

Minimization criteria will apply to all surface-disturbing activities and allow some use and occupancy while protecting identified resources or values. Areas where minimization criteria are applied are potentially open to surface-disturbing activities, but the BLM may require special constraints during the implementation phase, or the activity could be shifted to protect the specified resource or value. Examples could include timing limitations, relocation of a project away from sensitive habitat areas, application of minimization measures such as design features, or re-siting of a project outside of habitat.

During the evaluation and NEPA process the following factors at a minimum will be analyzed:

- Co-location, consider feasibility and safety concerns
- Lek buffers (MA-SSS-11, see Appendix G, *Buffer Distances and Evaluation of Impacts on Leks*)
- Sensitive habitat areas (e.g., concentrated nesting, brood-rearing, winter habitats)
- Topology and topographic features
- Timing limitations (MA-SSS-14)
- Net surface disturbance (MA-SSS-5)
- Apply BMPs and RDFs – see Appendix B, *Best Management Practices and Required Design Features*

Activities that are not considered surface disturbing include, but are not limited to, livestock grazing, cross-country hiking or equestrian use, installing signs, minimum impact filming, vehicular travel on designated routes, and general use of the land by wildlife.

II.2.2. Land Health (LH)

Goal-LH-1: Manage soils, riparian-wetland areas, native plant and animal communities, special status species, and water quality to meet land health standards.

Objective-LH-1: *Manage OHMA and UHMA to minimize impacts on GUSG habitat, and to achieve BLM Colorado Public Land Health Standards (BLM 1997a) and Utah Standards for Rangeland Health (BLM 1997b). Measure BLM Land Health Standards on uplands using foliar cover, species composition, canopy gap, soil stability, and other appropriate indicators, and use best available science to determine benchmarks for achieving standards. For aquatic and riparian systems, measure bank stability, floodplain connectivity, aquatic health, water quality, and other appropriate indicators, and use best available science to determine benchmarks for achieving standards.*

Management Actions (MA)

MA-LH-1: In OHMA and UHMA, for all resource uses, proposed actions, or authorizations, given valid existing rights, evaluate the impacts of the proposed authorization on land health standards and guidelines. The Monitoring Framework provided in Appendix D should also be considered when authorizing actions in OHMA and UHMA. Apply BLM Colorado and Utah Rangeland Health Standards to manage, maintain and improve the condition of the public rangelands.

Investigate areas identified in land health evaluations and identify new areas that have high potential for restoration and for reducing erosion, including from animal or human-made features (e.g., culverts, trails, roads) (RIS Priority Action 1 – 1.05).

II.2.3. Vegetation (VEG)

Sagebrush Steppe

Objective-VEG-1: *Conserve and improve habitat quality and quantity, and recruitment, by restoring and maintaining seasonal habitats for GUSG in all populations (RIS Priority Action 1-1).*

Management Actions (MA)

MA-VEG-1: All GUSG habitat improvement projects and vegetation manipulation within habitat should clearly articulate and document the need for the project to achieve desired habitat guidelines (Appendix F, *Habitat Monitoring and Reporting*).

MA-VEG-2: Documentation for vegetation treatments will require a HAF report and site-specific vegetation monitoring data to evaluate treatment objectives as they relate to GUSG seasonal habitats. Sagebrush manipulation and removal should be limited to areas of high sagebrush mortality, and where understory may be limited in OHMA, UHMA, and LCMA. Carefully consider the timing of treatments during drought conditions in the project-specific NEPA analysis.

MA-VEG-3: All vegetation treatments in sagebrush should consider and incorporate seasonal GUSG habitat indicators into project design, analysis, and approval. Projects should include the following:

- No sagebrush removal or treatments within 1 mile of all leks (Beck et al. 2012, Coates et al. 2013, Dahlgren et al. 2015).
- Treatments must have recovery objectives that meet the habitat guidelines listed in Appendix F, *Habitat Monitoring and Reporting.*
- Treatment blocks should be small (i.e., < 50 acres), interspersed across the landscape, and irregular in shape.
- Treatment areas should not be distributed systematically or predictably across the landscape.

MA-VEG-4: Caution should be taken when treating sagebrush (Smith et al. 2023, Smith and Beck 2017, Dahlgren et al. 2015). Sagebrush treatments should only be considered in areas where sagebrush cover exceeds habitat structural guidelines and is limiting understory grass and forb growth (i.e., the majority of monitoring plots exceed GUSG habitat guidelines, see Appendix F, *Habitat Monitoring and Reporting*) (conceptually RIS Priority Action 5.02). Consultation and coordination with the USFWS and State wildlife agency will be required prior to sagebrush treatments.

MA-VEG-5: GUSG habitat guidelines will be incorporated as part of treatment and restoration monitoring objectives within OHMA and where appropriate based on ecological site information in UHMA and LCMA. Provide exceptions for inclusions of non-habitat.

MA-VEG-6: In OHMA, UHMA, and LCMA, use vegetation treatments, (e.g., mechanical treatments, chemical treatments, biological treatments, prescribed fire, reseeding, targeted grazing) to move toward meeting habitat guidelines where ecological site information indicates treatments are reasonable and feasible. Treat appropriate areas of OHMA, UHMA, and LCMA using the Resist-Accept-Direct (RAD) framework and considering near future (next 20-30 years) climate, prioritize areas with the highest chance of success and that have the greatest benefit to GUSG (Schuurman et al. 2020 and Schuurman et al. 2022).

MA-VEG-7: Treat OHMA, UHMA, and LCMA to improve or maintain sites that have ecological site potential to support sagebrush habitat. Rely on best available science to determine where treatments will be most beneficial. Actions may include conifer removal, sagebrush planting, and native forb and grass seeding or planting. Prioritize areas that hinder connectivity between intact habitats.

MA-VEG-8: In OHMA and UHMA, implement post-treatment monitoring and management to promote long-term persistence of seeded native plants and treatment success. This may require temporary or long-term changes to grazing, travel management, recreation, and other uses to achieve and maintain the desired condition of treatments. Resume regular management only once treatment objectives have been met or after two growing seasons post treatment.

Seed Mixes

MA-VEG-9: Require the use of native seeds for restoration based on availability, adaptation (ecological site potential), current and near-future (next 20-30 years) climate, and probability of success. When selecting seed mixes prioritize site-specific native species with a diversity of grasses, forbs, and sagebrush. Prioritize forbs when treating nesting and brood-rearing habitat. If appropriate native seed is unavailable or likelihood of success is low, use species that meet GUSG habitat guidelines. Ensure seed mixes do not contain State-listed noxious weeds (National Seed Strategy for Rehabilitation and Restoration 2015-2020 [Plant Conservation Alliance 2020]).

Seed Source Priority:

1. Native seed sourced from the local area.
2. Native species (found in local ecotypes) sourced commercially
3. Cultivars of native species (found in local ecotypes), sourced commercially
4. Non-invasive, non-native species that meet GUSG habitat objectives only when no other options are available and:
    - The natural biological diversity of the proposed management area will not be diminished;
    - Exotic and naturalized species can be confined within the proposed management area;
    - Analysis of ecological site inventory information indicates that a site will not support reestablishment of a species that historically was part of the natural environment; and
    - Resource management objectives cannot be met with native species.

MA-VEG-10: Where loss of soil organic matter, drought, or other conditions limit likelihood of seed germination prioritize use of proven amendments like compost, biochar, or use of hydromulch, straw, or wood straw to promote native vegetation establishment. Complete monitoring to evaluate success.

Inventory and Monitoring

MA-VEG-11: Establish a monitoring plan that includes specific quantitative objectives, for treatments in OHMA and UHMA. Consider use of the Assessment, Inventory, and Monitoring (AIM) protocol (or similar approved quantitative monitoring method) as a primary method or develop a treatment-specific comparable quantitative methodology. Monitoring will ideally begin 1-2 years prior to treatment to establish baseline conditions and may include a control as a point of comparison.

MA-VEG-12: Use AIM (or similar approved quantitative monitoring method) as the primary monitoring method to assess habitat conditions relative to habitat guidelines at a landscape scale.

MA-VEG-13: All habitat treatments and vegetation management prescriptions in GUSG habitat should incorporate appropriate effectiveness monitoring to determine whether one or more of the following goals are being achieved:

- Meeting site-specific GUSG habitat guidelines consistent with best available science as shown in Appendix F, *Habitat Monitoring and Reporting*.
- Enhancing the long-term sustainability of local GUSG populations.
- Promoting the maintenance of large intact sagebrush stands.
- Limiting the expansion and dominance of invasive species.
- Maintaining or improving soil site stability, hydrologic function, and biological integrity.
- Enhancing the native plant community, including the native shrub reference state in the State and Transition Model, with appropriate shrub, grass, and forb composition identified in the applicable ecological site description where available.
- Meeting specific project or management objectives as they relate to GUSG or the HAF report.

Conifer Encroachment

MA-VEG-14: Plan conifer removal treatments using best available methods in areas where conifers are encroaching into sagebrush habitats, in a manner that considers Tribal cultural values. Incorporate existing and new science into treatment design and implementation to improve or create suitable GUSG habitat in OHMA, UHMA and LCMA where ecological potential exists. In planning treatment locations, consider ecological site potential, near-future (next 20-30 year) climate, and likelihood of meeting GUSG habitat objectives.

MA-VEG-15: In OHMA, UHMA, and LCMA balance treatments so as not to harm other species, such as pinyon jays, by considering timing and design of the project with other migratory bird needs. Specifically, pinyon-juniper projects should include evaluation of potential habitat characteristics, habitat use, and surveys for pinyon jay. Treatment of pinyon-juniper should be avoided during the seasonal breeding and nesting period for pinyon jays from February 15 – May 30.*

Project design and treatment size should consider surrounding pinyon-juniper habitat available within the larger landscape (e.g., watershed) and maintaining a balanced ecotone between sagebrush and pinyon-juniper woodlands. In OHMA, UHMA, and LCMA use the Resist-Accept-Direct (RAD) framework to identify priority areas for treatments (Schuurman et al. 2020 and Schuurman et al. 2022).

*See Partners in Flight Pinyon Jay Working Group, full reference provided in reference section.

MA-VEG-16: Prioritize treatments in areas that provide connectivity and linkage between intact sagebrush habitat or riparian habitat.

Minimize Fragmentation

Objective-VEG-2: *Reduce and prevent further fragmentation to improve connectivity of intact vegetation.*

MA-VEG-17: Use best available science, data, and analysis, to develop habitat suitability and connectivity models to aid in prioritizing vegetation treatments within OHMA, UHMA, and LCMA, to improve connectivity where ecological site information indicates sagebrush could exist.

Riparian/Brood-Rearing Habitat

Objective-VEG-3: *Maintain and improve mesic meadows and riparian areas (RIS Priority Action 1-1).*

MA-VEG-18: Prioritize restoration of meadows and riparian areas using low-tech, process-based restoration in areas not meeting land health standards in OHMA and UHMA, then LCMA. Place higher priority on sites with erosional features that cause lowered water tables and proneness to drought. Adapt management where needed, temporarily or long-term, to ensure treatment success (conceptually from RIS Priority Action 1-1).

MA-VEG-19: Establish monitoring on restoration projects to determine if objectives have been met. Follow Riparian & Wetland AIM protocols or comparable quantitative methods.

MA VEG-20: Manage wet meadows and riparian areas to maintain diverse forb communities (relative to reference state). If seeding riparian areas, prioritize inclusion of appropriate native sage-grouse preferred forbs in the seed mix to improve brood-rearing habitat in OHMA, UHMA, and LCMA.

MA-VEG-21: Maintain and improve willow patches that provide late summer habitat (RIS Priority Action 1.04).

Invasive Species

Objective-VEG-4: *Control, suppress, eradicate, and prevent the spread of noxious and invasive species using integrated vegetation management practices (RIS Priority Action 1- 2).*

MA-VEG-22: Identify and address vectors of cheatgrass (Bromus tectorum) and non-native, invasive weeds (RIS Priority Action 2.03), prioritizing OHMA followed by all other habitat types.

MA-VEG-23: Monitor all surface-disturbing activities for establishment of invasive species and implement adaptive management. Respond with integrated weed management strategies.

MA-VEG-24: Chemical treatments in OHMA and UHMA may include treatments using backpack sprayers, boom sprayers, and aerial application.

MA-VEG-25: Include a monitoring plan and adaptive management for all treatments. Work across management boundaries whenever possible to treat large-scale infestations (conceptually from RIS 2.04).

MA-VEG-26: Where native vegetation or seedbanks remain intact, rely primarily on passive restoration post-treatment. Where native vegetation is no longer present, revegetate with native seed or plantings. Implement monitoring and adaptive management when needed (conceptually from RIS Priority Action 2.06).

MA-VEG-27: Implement BMPs for equipment use on BLM lands (i.e., clean all equipment of soil and seed between sites, minimize off-road travel, minimize soil disturbance).

II.2.4. Livestock Grazing Management (LG)

Objective LG-1: *Manage permitted livestock grazing to maintain, restore, and enhance GUSG habitat to meet or make significant progress toward meeting GUSG seasonal habitat objectives and guidelines, based on ecological site potential. Continue to coordinate with permittees and partners on sustainable grazing practices that offer long-term stability to GUSG populations and ranch operations.*

Management Actions (MA)

MA-LG-1: In OHMA and UHMA, incorporate the following components when fully processing permit renewals:

- Monitoring plan
- Adaptive management plan
- Drought monitoring and response plan
- Thresholds and responses
- Livestock utilization levels
- Duration of use requirements

Ensure all components are compatible with meeting GUSG habitat suitability, based on ecological site potential (see Appendix F, *Habitat Monitoring and Reporting,* and Appendix H, *Livestock Grazing Management Implementation Guidelines*).

An exception to MA-LG-1 may be considered in OHMA and UHMA where site-specific information indicates habitat potential, or value is low as determined by the interdisciplinary team. If GUSG habitat potential or value is determined to be low, the BLM may consider, in coordination with the permittee/lessee, at least one alternative that analyzes relevant thresholds and defined responses into the terms and conditions of the grazing permit or lease, and additional components identified above if applicable.

MA-LG-2: In OHMA and UHMA (Map A.6 in Appendix A), issue or renew and allow transfer of livestock grazing permits, provided livestock can be managed to meet or make progress toward meeting land health standards (see Appendix D, *Gunnison Sage-Grouse Monitoring Framework*). When fully processing permits, implement appropriate Best Livestock Management Practices (see Appendix B, *Best Management Practices and Required Design Features*).

MA-LG-3: If current livestock grazing management is not compatible with meeting GUSG habitat suitability, apply appropriate livestock management guidelines and livestock best management practices (see Appendix B, *Best Management Practices and Required Design Features*, and Appendix H, *Livestock Grazing Management Implementation Guidelines*). These may include adjusting season of use, intensity, and duration.

MA-LG-4: In OHMA and UHMA, the authorized officer shall take appropriate action as soon as practicable but not later than the start of the next grazing year upon determining that existing grazing management practices or levels of grazing use on public lands are significant factors in failing to achieve the standards and conform with the guidelines that are made effective under section 43 CFR 4180.2 (c).

MA-LG-5: In OHMA and UHMA, develop adaptive management plans that incorporate appropriate livestock management guidelines into livestock grazing permits that will address potential drought and allow significant progress toward meeting GUSG habitat guidelines (see Appendix H, *Livestock Grazing Management Implementation Guidelines*, and Appendix B, *Best Management Practices and Required Design Features*).

Coordination

MA-LG-6: Work cooperatively with permittees to reduce potential impacts to GUSG habitat. Inform livestock grazing permittees of assessments and land health determinations. Provide opportunities to review data, incorporate data collection, review the assessment, visit areas not meeting standards due to current livestock grazing with a range specialist, and provide responses and solutions to data analysis during the land health assessment.

MA-LG-7: Develop management strategies that are as seamless as possible with respect to actions on public and private lands, within the terms and conditions of current permits, until the permit can be fully processed. See Appendix B, *Best Management Practices and Required Design Features*.

MA-LG-8: Work cooperatively on integrated ranch planning in GUSG habitat. Develop management strategies that are as seamless as possible with respect to actions on public and private lands, but which are not unduly restrictive of private land actions and are in conformance with BLM-management.

Livestock Trailing

MA-LG-9: Authorize livestock crossing/trailing permits through OHMA and UHMA on existing approved trailing routes in compliance with the existing terms and conditions. New routes could be approved. Priority for new trail route proposals:

(1) State/County roads (at the discretion of the State/county),

(2) Open BLM roads,

(3) Existing closed BLM roads, and

(4) Areas with marginal or no potential to become suitable habitat.

Only allow livestock crossing/trailing outside of existing roads/trails through suitable habitat when no other reasonable route exists or where trailing on existing routes will result in a greater than twice the distance as a cross country route. Only allow new crossing/trailing routes between March 1 and May 15 when necessary to get to private pasture or other Federal/State grazing permits with on/off dates between March 1 and May 15. Incorporate terms and conditions into all new crossing/trailing permits that limit impacts to seasonal sage-grouse habitat (such as, designate overnight stop locations that are away from leks and outside of nesting habitat during the lekking and nesting season, do not trail up riparian corridors or swales, etc.).

Retirement of Grazing Privileges

MA-LG-10: When a qualified permittee or lessee voluntarily relinquishes a grazing permit or lease on an allotment or for existing vacant allotments in OHMA or UHMA, the BLM will consider:

- Reissuing a permit on the allotment with terms and conditions that are consistent with meeting the Land Health Standards (43 CFR, Part 4180.2).
- Converting the allotment to a forage reserve allotment that is available for occasional use by permittees when other allotments need to be rested from use to meet resource objectives. Priority for use of reserve allotments in GUSG habitat will be given to operations that need to be rested to enhance or restore GUSG habitat. Maintenance of fences and other range improvements on reserve allotments will be completed by the temporary user prior to livestock

grazing in the reserve allotment. Temporary use of reserve allotments will not be allowed due to overuse of an individual's permitted allotment(s).

- Merging the allotment with adjacent allotment(s) in GUSG habitat to enhance management flexibility and reissuing a permit with terms and conditions that are consistent with meeting the Land Health Standards (43 CFR, Part 4180.2).
- Temporarily or permanently closing the allotment to livestock grazing for the life of this plan.

Riparian Areas and Wet Meadows

MA-LG-11: Manage livestock grazing season of use, duration, and utilization to retain adequate residual vegetation in riparian areas to maintain healthy, native riparian plant communities and to prevent accelerated erosion of riparian soils. Where livestock grazing is not allowing riparian areas to retain adequate residual vegetation, incorporate appropriate livestock management guidelines into livestock grazing permits based on ecological site potential (see Appendix B, *Best Management Practices and Required Design Features*, and Appendix H, *Livestock Grazing Management Implementation Guidelines*).

MA-LG-12: Place salt, minerals, and supplements at least 0.25 mile away from riparian areas, to the extent feasible within existing pasture boundaries.

Water Developments and Structural Range Improvements

MA-LG-13: Previously undisturbed springs and seeps in OHMA and UHMA may be developed for livestock water if they minimize changes to the natural flow of the water, enhance livestock distribution, and will not result in a reduction of riparian/mesic habitat. Site-specific consultation and coordination with USFWS and CPW will need to be considered.

MA-LG-14: In OHMA and UHMA, evaluate existing water developments to determine where incorporating best management practices will enhance GUSG habitat. Prioritize modification, relocation, management of, or removal of unneeded developments in areas with high concentrations of active leks or naturally occurring riparian habitat. This could include draining of water from tanks when not in use to reduce predator attraction.

MA-LG-15: In OHMA and UHMA, incorporate appropriate design features (see Appendix B, *Best Management Practices and Required Design Features*) for all new water developments.

MA-LG-16: In OHMA, new fences must be necessary to improve habitat conditions for GUSG or serve as meaningful boundary fence.

MA-LG-17: In OHMA and UHMA, incorporate appropriate design features (see Appendix B, *Best Management Practices and Required Design Features*) for all new range improvements. Design new range improvement projects to enhance livestock distribution and to control the timing and intensity of utilization.

MA-LG-18: In OHMA and UHMA, implement appropriate design features (see Appendix B, *Best Management Practices and Required Design Features*) on all existing range improvements as time and funding allow. Prioritize modification, relocation, management of, or removal of unneeded developments.

II.2.5. Wildland Fire Ecology and Management (FIRE)

Objective FIRE-1: *Manage the wildland fire, fuels, and fire rehabilitation program to avoid GUSG habitat loss, enhance contiguous sagebrush habitat, restore damaged habitats, and address post-wildfire threats to GUSG Habitat.*

Management Actions (MA)

Emergency Stabilization and Rehabilitation

MA-FIRE-1: In OHMA and UHMA require use of native plant seeds that are beneficial for GUSG for vegetation treatments based on availability, adaptation (site potential), probability for success (Richards et al. 1998), and the vegetation management guidelines for the area covered by the treatment. Where attempts to use native seeds have failed, or native seed availability is low, use species that meet soil stability and hydrologic function guidelines as well as vegetation and GUSG habitat guidelines. Guidelines from MA-VEG-9 should be followed for seed selection.

MA-FIRE-2: In OHMA and UHMA design post-fire Emergency Stabilization and Rehabilitation (ES&R) plan management to ensure long-term persistence of seeded or pre-burn native plants. This may require temporary or long-term changes in livestock grazing, travel management, and other uses to achieve and maintain the desired condition of Burned Area ES&R projects to benefit GUSG (Eiswerth and Shonkwiler 2006).

MA-FIRE-3: In OHMA and UHMA, when using native plants for restoration, consider potential changes in climate (Miller et al. 2011). Consider collection from warmer areas of the species' current range (Kramer and Havens 2009).

MA-FIRE-4: In OHMA and UHMA rest burned areas from grazing for two full growing seasons. If vegetation objectives for GUSG recovery are not making progress, then consider resting the area from grazing for additional growing seasons to establish and recover vegetation.

Fuels Management

MA-FIRE-5: In OHMA and UHMA do not reduce sagebrush canopy cover to less than 15 percent (Connelly et al. 2000; Hagen et al. 2007) in a project area unless a vegetation management objective requires additional reduction in sagebrush cover to meet strategic protection of GUSG OHMA and UHMA. Ensure consultation and coordination with the State wildlife agency and USFWS prior to treatments.

MA-FIRE-6: In OHMA and UHMA apply appropriate seasonal restrictions for implementing fuels management treatments according to the type of seasonal habitats present in the HMA (see MA-SSS-14).

MA-FIRE-7: Prescribed fire in known GUSG winter concentration areas shall only be considered after the NEPA analysis for the burn plan has addressed the four bullets:

- why alternative techniques were not selected as viable options;
- how GUSG objectives and habitat guidelines will be met by its use;
- how the RIS objectives will be addressed and met;
- a risk assessment to address how potential threats to GUSG habitat will be minimized.

Any prescribed fire in winter habitat will need to be designed to strategically reduce wildfire risk around and within winter habitat and designed to protect winter habitat quality.

MA-FIRE-8: In OHMA and UHMA do not use prescribed fire to treat sagebrush in less than 12-inch precipitation zones (e.g., Wyoming big sagebrush or other xeric sagebrush species) (Connelly et al. 2000; Hagen et al. 2007; Beck et al. 2009). However, if as a last resort and after all other treatment opportunities have been explored, and site-specific variables allow, the use of prescribed fire for fuels breaks that would disrupt fuel continuity or enhance land health could be considered where cheatgrass is deemed a minor threat.

If prescribed fire is used in GUSG habitat, the NEPA analysis for the burn plan will address the four bullets listed in MA-FIRE-7 above.

MA-FIRE-9: In OHMA and UHMA monitor and control invasive weeds post-treatment as outlined in MA-VEG- 22 through MA-VEG-26 for invasive species.

MA-FIRE-10: In OHMA and UHMA rest treated areas from grazing for two full growing seasons. If vegetation objectives for GUSG recovery are not making progress, then consider resting the area from grazing for additional growing seasons to establish and recover vegetation.

MA-FIRE-11: In OHMA and UHMA require use of native plant seeds for vegetation treatments as outlined in MA-VEG-9 for seed mixes.

MA-FIRE-12: In OHMA and UHMA design post fuels management to ensure long-term persistence of seeded or pre-burn native plants. This may require temporary or long-term changes in livestock grazing, travel management, and other uses to achieve and maintain the desired condition of fuels projects to benefit GUSG (Eiswerth and Shonkwiler 2006).

MA-FIRE-13: In OHMA and UHMA, use best available science, data, and analysis to assess habitat suitability and connectivity to aid in design of vegetation treatments in GUSG habitats. Ensure treatment design strategically facilitates firefighter safety, reduces wildfire threats, and prevents extreme fire behavior. This may involve spatially arranging new vegetation treatments with past treatments, vegetation with fire-resistant seral stages, natural barriers, and roads in order to constrain fire spread and growth. This may require vegetation treatments to be implemented in a more linear versus block design (Launchbaugh et al. 2007).

Fire Operations

MA-FIRE-14: In OHMA and UHMA prioritize suppression immediately after firefighter and public safety and threats to real property. Consider GUSG habitat requirements commensurate with all resource values at risk managed by the BLM.

MA-FIRE-15: In OHMA and UHMA, temporary closures will be considered in accordance with 43 CFR 9212.2.

II.2.6. Recreation (REC)

Objective REC-1: *While managing for recreational outcomes, within Special Recreation Management Areas (SRMAs) manage recreation to avoid, minimize, and compensate for activities that (1) disrupt GUSG or their habitat, (2) fragment and result in loss of GUSG habitat, or (3) spread noxious weeds.*

Management Actions (MA)

Recreation Management

MA-REC-1: In OHMA, allow no new recreation facility construction from March 1 – July 15, unless needed for human health and safety.

MA-REC-2: In OHMA and UHMA apply minimization criteria (MA-SSS-15) for development of trails and small-scale recreation-related infrastructure. Net surface disturbance will be analyzed during project scale NEPA (See MA-SSS-5).

Satellite Populations:

In OHMA, no new development or construction of recreation-related infrastructure (e.g., parking areas, campgrounds). In addition, new recreational trails will not be developed unless:

- New trails are first offset by a greater or equal amount of reclaimed trails or routes in habitat of equal or higher quality and
- New trail development or realignments will conserve or enhance habitat quality, improve sustainability over existing alignments, or prevent and address other resource concerns.

Gunnison Basin Population:

In OHMA, no new development of recreational trails within 1-mile of all leks. Within designated SRMAs a justifiable departure of 0.6-mile lek buffer may be applied provided topology and seasonal timing limitations.

Justifiable departures to decrease from this distance based on local data, best available science, landscape features, and other existing protections (e.g., seasonal timing limitations, land use allocations, State regulations) may be appropriate given activity impacts at a site-scale.

Variations in the recreational lek buffer-distance will require appropriate analysis and disclosure, in addition to coordination and consultation with the appropriate Federal and State agencies (e.g., USFWS and State wildlife agency) during site-specific authorizations. In determining lek locations, the BLM will use the most recent lek data in coordination and consultation with the appropriate State wildlife agency and USFWS.

MA-REC-3: For Special Recreation Permits (SRPs) issued within OHMA, include additional educational/etiquette messaging in all use authorization stipulations.

MA-REC-4: Redirect SRPs which are disruptive to GUSG or their habitat away from undesignated lands and into SRMAs whenever possible, except when those activities (e.g., environmental education field trip, wildlife observation or photography) are conducted during a time (i.e., seasonal timing limitations or daily times) or in a manner that is not disruptive to GUSG or GUSG habitat.

MA-REC-5: Do not allow SRPs in OHMA or UHMA which will result in the degradation or removal of GUSG habitat or adversely affect GUSG.

Designated Areas
Sugar Creek Backcountry Conservation Area (BCA)

Objective REC-2: *While allowing multiple use, BCAs will be managed for wildlife habitat and backcountry recreation and hunting.*

MA-REC-6: Designate Sugar Creek BCA (17,300 acres) in the Gunnison Field Office. Management framework can be found in Appendix I, *Recreation Management Areas*.

Sugar Creek BCA-MA-1: Manage as Visual Resource Management (VRM) Class II.

Sugar Creek BCA-MA-2: Manage as ROW exclusion, subject to valid existing rights, with the following exceptions (does not except authorizations from the applicable timing limitations, minimization criteria, and compensatory mitigation):

- West-Wide Energy Corridors.
- Designated utility corridors.
- 100-foot buffer from center line of county roads and highways (200-foot total) (these areas will be managed as ROW avoidance).
- Allow ROWs for private inholdings or edge holdings for reasonable access and utilities in locations that minimize, to the extent feasible, impacts to leks (these areas will be managed as ROW avoidance).
- Recognize the valid existing rights of grant holders to continue to use, operate, and maintain. In addition, upgrades, amendments, and renewals of existing facilities may be considered with application of latest terms and conditions.
- Exceptions to seasonal timing limitations may be considered and evaluated on a case-by-case basis to conduct maintenance on utilities, especially those that may cause significant risk, safety concern, or fire danger.

Sugar Creek BCA-MA-3: Recommend to the Secretary of the Interior for withdrawal from mineral entry and location.

Sugar Creek BCA-MA-4: Subject to valid existing rights, close Sugar Creek BCA to mineral exploration, leasing, and development. No new fluid mineral leasing within the BCA.

Sugar Creek BCA-MA-5: Close to nonenergy solid mineral leasing.

Sugar Creek BCA-MA-6: All SRPs must be beneficial or neutral. No commercial use will be permitted during established seasonal closure periods.

Sugar Creek BCA-MA-7: Vegetation management activities including approved herbicide application may be undertaken to accomplish resource objectives, while maintaining the character of the area. Allow prescribed fire and mechanical manipulation, such as chainsaws and helicopters, while maintaining the character of the area. Allow the suppression of wildfires using mechanized equipment.

Sugar Creek BCA-MA-8: Prioritize restoration and re-vegetation of decommissioned or closed routes.

Sugar Creek BCA-MA-9: Allow livestock grazing within the BCA as outlined in the ARMPA, under the Livestock Grazing Management section.

Sugar Creek BCA-MA-10: Allow vegetation treatments and wildlife habitat improvements for the benefit of the identified relevant and important values.

Sugar Creek BCA-MA-11: Close to motorized (including e-bikes) travel during lekking and nesting season (March 15 to July 15) to prevent disturbance to breeding sage-grouse with exceptions for administrative access and emergency maintenance.

Sugar Creek BCA-MA-12: Maintain current, designated route system limiting both motorized and mechanized travel and to include over-snow vehicle travel. Any route subsequently approved by the BLM will be incorporated into the designated route system.

Sugar Creek BCA-MA-13: Prohibit new trail development.

Sugar Creek BCA-MA-14: Allow trail/road realignment only if found to be beneficial for the relevant and important values.

Sugar Creek BCA-MA-15: Close to all human use during lekking season (March 15 to May 15) with exceptions for administrative access and emergency maintenance.

Sugar Creek BCA-MA-16: Pets must remain on leash within the BCA at trailheads and trails designated by a BLM sign or map. In all other areas, pets must be controlled by physical or audible means.

Sugar Creek BCA-MA-17: Close to all dispersed camping during lekking and nesting season (March 15 – July 15).

MA-REC-7: Designate Signal Peak as a SRMA (13,200 acres) in the Gunnison Field Office. Manage OHMA with emphasis on a variety of personal, community, economic environmental benefits and compatible with conservation of GUSG habitat. SRMA-specific outcomes, proposed recreation setting characteristics and management framework can be found in Appendix I, *Recreation Management Areas* (Map A.7 in Appendix A).

MA-REC-8: Management for Hartman Rocks SRMA (Gunnison Field Office) will remain as approved in the Hartman Rocks Recreation Area Management Plan (2014).

II.2.7. Travel and Transportation (TTM)

Objective TTM-1: *In the context of multiple-use management, travel and transportation are managed to (1) decrease habitat fragmentation and increase habitat connectivity and function, (2) reduce mortality from vehicle collisions, (3) avoid, minimize, and compensate for habitat fragmentation, (4) limit the spread of noxious weeds, and (5) limit disruptive activity associated with human access.*

Management Actions (MA)

MA-TTM-1: Manage OHMA and UHMA as OHV-limited, to include mechanized travel, except for areas already managed as OHV-Closed, which will remain closed (Map A.8 in Appendix A), in accordance with the definition of an off-highway vehicle (OHV) provided for in 43 CFR 8340.0-5a (including drone landing and backcountry airstrips).

MA-TTM-2: The Wilderness Study Areas (WSAs) adjacent to the Powderhorn Wilderness will be managed as OHV-Closed.

MA-TTM-3: When rehabilitating routes, seed, plant, or vertical mulch closed roads and trails to promote habitat connectivity (RIS 3.19 and 5.04). See MA-VEG-9 for seed mix information. Prioritize closed routes within riparian areas and within 4 miles of all leks within OHMA and UHMA followed by all other occupied, unoccupied, and linkage-connectivity management areas.

MA-TTM-4: Focus recreational (experience driven) trail development in SRMAs, limiting the extent of fragmentation of OHMA to the extent possible. For recreational trail development see MA-REC-2.

MA-TTM-5: Promote healthy landscapes, free of invasive species, by including noxious weed interpretation (identification, observation reporting numbers, pre/post washing practices, etc.) into travel management maps and related messaging.

MA-TTM-6: In OHMA and UHMA in the Gunnison Extensive Recreation Management Area (ERMA), maintain current, designated route system limiting both motorized (Gunnison Field Office TMP (2010)) and mechanized travel and to include over-snow vehicle travel. Any route subsequently approved by the BLM will be incorporated into the designated route system (Map A.9 in Appendix A).

MA-TTM-7: When analyzing new route proposals in OHMA through implementation level planning, seek to minimize impacts to habitat fragmentation by location/relocation (edge of habitat vs. bisecting), mitigation/offset (add a mile, subtract a mile), management controls (gating/authorized use only, timing limitations, etc.), and similar methods.

Travel Management Planning

Objective TTM-2: *In areas where travel management planning has not been completed, or where existing travel management plans have not addressed GUSG, implement a travel management plan (TMP) per Handbook 8342.*

MA-TTM-8: Field Offices will prioritize travel management efforts in GUSG habitat over other areas. Until travel management plans to designate routes are completed, limit OHV- and mechanized travel to routes that existed at the time of this plan's issuance. Any route subsequently approved by the BLM will be incorporated into the designated the route system.

MA-TTM-9: During implementation level planning, place high priority on improving and restoring intact habitat within OHMA and UHMA when making route designation decisions, while maintaining access connectivity to key locations, facilities, amenities, and allowing for the exceptions to the definition of an OHV provided for in 43 CFR 8340.0-5.

MA-TTM-10: During travel management planning in OHMA and UHMA, Field Offices will look for opportunities to evaluate route density and minimize impacts to GUSG habitat in accordance with 43 CFR 8342.1 (conceptually RIS Priority Action 2 – 8.01).

MA-TTM-11: During implementation level planning, evaluate the effectiveness and implement-ability of restricting mechanized use (and e-bikes) to designated routes in OHMA during lekking season (March 1-May 15). Except for access required by law or for emergency services or administrative or permitted activities.

MA-TTM-12: During implementation planning, evaluate opportunities to limit use on BLM managed roads and trails within OHMA to minimize disturbance to GUSG, including seasonal timing limitations. Consider management directives and available resources.

MA-TTM-13: During implementation level planning, emphasize reduced route maintenance levels (Level 1) on BLM managed routes within OHMA and focus pro-active (Level 3 or 5) maintenance on routes outside of OHMA.

II.2.8. Mineral Split Estate (MSE)

Objective MSE-1: *Utilize Federal authority to protect GUSG habitat on split-estate lands to the extent provided by law.*

Management Actions (MA)

MA-MSE-1: In OHMA and UHMA where the Federal government owns the mineral estate and the surface is in non-Federal ownership, apply the same stipulations, Conditions of Approval (COAs), conservation measures, and design features applied to public lands to the maximum extent permissible under existing authorities, and in coordination with the landowner.

MA-MSE-2: In OHMA and UHMA where the Federal government owns the surface and the mineral estate is in non-Federal ownership, apply appropriate surface use COAs, stipulations, and design features through ROW grants or other surface management instruments, to the maximum extent permissible under existing authorities, in coordination with the mineral estate owner/lessee.

II.2.9. Fluid Minerals (FM)

Leasable Fluid Minerals

Objective FM-1: *(Leasable Fluid Minerals): Manage fluid minerals, including geothermal, to avoid, minimize, and compensate for: (1) direct disturbance, displacement, or mortality of GUSG (2) direct loss of habitat or loss of effective habitat through fragmentation and (3) cumulative landscape-level impacts.*

Management Actions (MA)

MA-FM-1: In OHMA and UHMA, subject to valid existing rights, close areas identified as no known potential and low potential, to fluid mineral exploration, leasing, and/or development (Map A.10 in Appendix A).

MA-FM-2: In OHMA, for areas with medium or higher potential, apply No Surface Occupancy (NSO) stipulation without waivers, exceptions, and modifications (WEMs). In UHMA, for areas with medium or higher potential, apply NSO stipulation in UHMA with WEMs (Map A.10 in Appendix A). See Appendix J, *Stipulations Applicable to Fluid Mineral Leasing and Land Use Authorizations* for stipulations, modifications, waivers, and exceptions.

MA-FM-3: In Adjacent Non-habitat areas, apply NSO stipulation within a 1-mile buffer of all leks without WEMs. See Appendix J, *Stipulations Applicable to Fluid Mineral Leasing and Land Use Authorizations* for stipulations, modifications, waivers, and exceptions.

MA-FM-4: In OHMA and UHMA, upon expiration or termination of existing leases, consider issuance of new leases with application of stipulations.

Leased Fluid Minerals

Objective FM-2: *(Leased Fluid Minerals): Where a proposed fluid mineral development project on an existing lease could adversely affect GUSG populations or habitat, the BLM will work with the lessees, operators, or other project proponents to avoid, minimize, and compensate for adverse impacts to the extent compatible with valid existing rights.*

MA-FM-5: Within OHMA and UHMA, during the implementation phase of existing leases, preclude surface occupancy and apply seasonal restrictions to disruptive activities, when feasible given valid existing rights.

If it is determined that this restriction will render the recovery of fluid minerals infeasible or nonviable, considering the lease as a whole, or where development of existing leases prohibits surface disturbance, use the criteria* below to site proposed lease activities to meet GUSG habitat guidelines and require mitigation.

Criteria*:

- Location of proposed lease activities in relation to GUSG seasonal habitat and lekking areas.
- An evaluation of the potential threats from proposed lease activities that may affect the local population as compared to benefits that could be compensatory or off-site mitigation.
- An evaluation of the proposed lease activities, including design features, in relation to the site-specific terrain and habitat features.

To authorize an activity based on the criteria above, the environmental record of review must show avoidance and minimization (see minimization criteria in MA-SSS-15) of direct or indirect disturbance, displacement, or mortality of GUSG.

MA-FM-6: In OHMA, during the implementation phase, prohibit geophysical exploration in OHMA.

In UHMA, allow for geophysical exploration, to obtain information for existing Federal fluid mineral leases. Allow geophysical operations only using helicopter-portable drilling, wheeled, or tracked vehicles on existing roads, or other approved methods conducted in accordance with other restrictions that may apply.

If it is determined that this restriction will render the recovery of fluid minerals infeasible or nonviable, considering the lease as a whole, or where development of existing leases prohibits surface disturbance, use the criteria* below to site proposed lease activities to meet GUSG habitat guidelines and require mitigation.

Criteria*:

- Location of proposed lease activities in relation to GUSG seasonal habitat and lekking areas.
- An evaluation of the potential threats from proposed lease activities that may affect the local population as compared to benefits that could be compensatory or off-site mitigation.
- An evaluation of the proposed lease activities, including design features, in relation to the site-specific terrain and habitat features.

To authorize an activity based on the criteria above, the environmental record of review must show avoidance and minimization of direct or indirect disturbance, displacement, or mortality of GUSG (see minimization criteria MA-SSS-15).

MA-FM-7: In OHMA, UHMA, and Adjacent Non-habitat (1-mile buffer), during the implementation phase, prohibit the siting of pipeline compressors when there is a potential for activity to be disruptive to GUSG.

If it is determined that this restriction will render the recovery of fluid minerals infeasible or nonviable, considering the lease as a whole, or where development of existing leases prohibits surface disturbance, use the criteria* below to site proposed lease activities to meet GUSG habitat guidelines and require mitigation.

Criteria*:

- Location of proposed lease activities in relation to seasonal GUSG habitat areas.
- An evaluation of the potential threats from proposed lease activities that may affect the local population as compared to benefits that could be accomplished through compensatory or off-site mitigation.
- An evaluation of the proposed activities, including design features, in relation to the site-specific terrain and habitat features.

To authorize an activity, the environmental record of review must show avoidance and minimization of direct or indirect disturbance, displacement, or mortality of GUSG (see minimization criteria in MA-SSS-15).

II.2.10. Solid Minerals (SM)

Objective SM-1: *Manage solid mineral programs to avoid, minimize, and compensate for adverse impacts to GUSG habitat to the extent practical under the law and BLM jurisdiction.*

Management Actions (MA)

Locatable Minerals

MA-SM-1: Recommend to the Secretary of the Interior withdrawal from mineral entry and location the following areas totaling 89,340 acres (82,670 acres OHMA and 1,530 acres UHMA) (Map A.11 in Appendix A):

- Dry Creek Basin ACEC (10,920 acres), Tres Rios Field Office
- Chance Gulch ACEC (13,150 acres), Gunnison Field Office
- Sapinero Mesa ACEC (17,240 acres), Gunnison Field Office
- Gunnison Sage-Grouse ACEC/IBA (22,180 acres), Gunnison Gorge NCA
- West Antelope Creek ACEC (28,280 acres), Gunnison Field Office
- South Beaver Creek ACEC (4,570 acres), Gunnison Field Office
- Sugar Creek BCA (17,210 acres), Gunnison Field Office

MA-SM-2: To the extent allowable by law, work with claimants to apply the seasonal restrictions. To the extent consistent with the rights of a mining claimant under existing laws and regulations, provide for compensatory mitigation.

Regardless of agreements with the claimant, disturbance from locatable mineral development will be included as disturbance when calculating disturbance for other land uses.

Saleable Minerals

MA-SM-3: Close OHMA to new mineral material sites (i.e., gravel pits) (Map A.12 in Appendix A). However, these areas will remain open to free use permits and the expansion of existing sites, only if the following criteria are met:

- The activity evaluated and analyzed the net surface disturbance.
- The activity is subject to the provisions set forth in the mitigation strategy.
- All applicable RDFs are applied.

MA-SM-4: UHMA will remain open to mineral material disposal (Map A.12 in Appendix A) if the following criteria are met:

- The activity evaluated and analyzed the net surface disturbance.
- The activity is subject to the provisions set forth in the mitigation strategy.
- All applicable RDFs are applied.

MA-SM-5: In OHMA restore salable mineral material sites no longer in use to provide suitable GUSG habitat. Require reclamation/restoration of GUSG habitat as a viable long-term goal to improve habitat.

Non-energy Solid Leasable Minerals

MA-SM-6: Close OHMA, subject to valid existing rights, to new leasing or lease modification of surface non-energy leasable minerals (Map A.13 in Appendix A). This includes not issuing or modifying leases to expand existing mines that will result in surface mining.

MA-SM-7: In UHMA, LCMA, and Adjacent Non-habitat (1-mile buffer), apply the following conservation measures as COAs or stipulations where applicable:

- Preclude new surface occupancy on existing leases within 1 mile of all leks (Blickley et al. 2012; Harju et al. 2012).
- If the lease is entirely within 1 mile of any lek, require development to be placed in an area of the lease that is least harmful to GUSG based on vegetation, topography, or other habitat features.
- Preclude new surface disturbance on existing leases within 2 miles of all leks within OHMA. If the lease is entirely within 2 miles of a lek, require development to be placed in an area of the lease that is least harmful to GUSG based on vegetation, topography, or other habitat features.

MA-SM-8: In OHMA and UHMA, evaluate permitted disturbances under the net surface disturbance across the landscape.

MA-SM-9: In OHMA, for existing nonenergy mineral leases, apply the following conservation measures as COAs where applicable:

- Preclude new surface structures or facilities on existing leases within 1 mile of all leks (Blickley et al. 2012; Harju et al. 2012).
- If the lease is entirely within 1 mile of a lek, require any development to be placed in an area of the lease that is least harmful to GUSG based on vegetation, topography, or other habitat features.
- Preclude new surface disturbance on existing leases within 2 miles of all leks within OHMA. If the lease is entirely within 2 miles of a lek, require development to be placed in an area of the lease that is least harmful to GUSG based on vegetation, topography, or other habitat features.

II.2.11. Lands and Realty (LR)

Objective LR-1: *Manage the Lands and Realty program to avoid, minimize, and compensate for the loss of habitat and habitat connectivity during the authorization of ROWs (including other land use authorizations), land tenure adjustments, and proposed land withdrawals.*

Objective LR-2: *Effects of infrastructure projects, including siting, will be minimized using the best available science, updated as monitoring information on current infrastructure projects becomes available.*

Management Actions (MA)

MA-LR-1: In OHMA, if an existing transmission line is being upgraded outside an existing corridor:

- the existing transmission line must be removed within a reasonable amount of time after the new line is installed and energized; and
- the new line must be constructed in the same alignment as the existing line unless an alternate route would benefit GUSG or GUSG habitat.
- new surface disturbance will require compensatory mitigation for the impacts.

Rights-of-Way Exclusion Areas

MA-LR-2: The following designations (66,240 acres) will be ROW exclusion areas (provided valid existing rights and exceptions) (Map A.14 in Appendix A):

- Dry Creek Basin ACEC
- Gunnison Sage-Grouse ACEC/IBA
- Chance Gulch ACEC
- Sapinero Mesa ACEC
- Sugar Creek BCA

MA-LR-3: In OHMA, ROW exclusion areas will be managed as follows:

Satellite Populations:

In OHMA, new ROWs, that lead to additional or new surface disturbance, will be excluded in Satellite Populations, provided valid existing rights, and with the following management action exceptions. Renewals, authorizations, or other amendments will not be excepted from the applicable timing limitations as terms and conditions applied to the grant, minimization measures, or compensatory mitigation.

Gunnison Basin Population:

Within OHMA, manage 1-mile buffer of all leks as ROW exclusion areas with the following management action exceptions. Renewals, authorizations, or other amendments will not be excepted from the applicable timing limitations as terms and conditions applied to the grant, minimization measures, or compensatory mitigation.

Exceptions within OHMA (all populations) include, (but does not except authorizations from the applicable timing limitations, minimization measures, and compensatory mitigation upon issuing the grant or updating terms and conditions):

- West-Wide Energy Corridors
- Designated utility corridors
- 100-foot buffer from center line of county roads and highways (200-foot total)
- Recognize the valid existing rights of grant holders to continue to use, improve, operate, and maintain the ROW within the confines of similarly-sized and type of infrastructure. Upgrades, amendments, and renewals of existing facilities or infrastructure will be considered with application of latest terms and conditions (i.e., timing limitations, minimization measures, and compensatory mitigation). For example, an existing ROW for a road may not be upgraded or improved to a utility line.
- Co-locating buried infrastructure (e.g., pipelines, utility lines) could be considered within the existing ROW if it does not lead to additional vegetation disturbance (e.g., an existing road could be co-located with a buried utility line), with application of seasonal timing limitations and minimization criteria.
- Exceptions to seasonal timing limitations on maintenance activities may be considered and evaluated by a biologist on a case-by-case basis when there is a significant risk, safety concern, or fire danger.
- Allow ROWs for private inholdings or edge holdings for reasonable access and utilities in locations that minimize (see MA-SSS-15) impacts to leks and habitat (these areas will be managed as ROW avoidance).
- In OHMA, new road ROWs could be authorized when necessary for public safety, administrative access, or subject to valid existing rights. If the new ROW is necessary for public safety, administrative access, or subject to valid existing rights and creates new surface disturbance, then apply the minimization criteria (MA-SSS-15) and compensatory mitigation for the impacts.
- In OHMA, limit route construction to realignments of existing ROWs if the realignment maintains or enhances GUSG habitat or lekking areas, eliminates the need to authorize a new ROW to construct a new road that could be more detrimental to GUSG, or is necessary for public safety or public need.
- The BLM will continue to coordinate with San Miguel County on the rerouting of County Road U29. Coordination and subsequent NEPA analysis will be prioritized for this reroute.

MA-LR-4: In UHMA (all populations), manage 1-mile buffer of all leks as ROW exclusion areas with the following management action exceptions. Renewals, authorizations, or other amendments will not be

excepted from the applicable timing limitations as terms and conditions applied to the grant, minimization measures, or compensatory mitigation.

Exceptions within the 1-mile lek buffer include, (but does not except authorizations from the applicable timing limitations, minimization measures, and compensatory mitigation upon issuing the grant or updating terms and conditions):

- West-Wide Energy Corridors
- Designated utility corridors
- 100-foot buffer from center line of county roads and highways (200-foot total)
- Recognize the valid existing rights of grant holders to continue to use, improve, operate, and maintain the ROW within the confines of similarly-sized and type of infrastructure. Upgrades, amendments, and renewals of existing facilities or infrastructure will be considered with the application of the latest terms and conditions (i.e., timing limitations, minimization measures, and compensatory mitigation). For example, an existing ROW for a road may not be upgraded or improved to a utility line.
- Co-locating buried infrastructure (e.g., pipelines, utility lines) could be considered within the existing ROW if it does not lead to additional vegetation disturbance (e.g., an existing road could be co-located with a buried utility line), with application of seasonal timing limitations and minimization criteria.
- Exceptions to seasonal timing limitations on maintenance activities may be considered and evaluated by a biologist on a case-by-case basis when there is a significant risk, safety concern, or fire danger.
- Allow ROWs for private inholdings or edge holdings for reasonable access and utilities in locations that minimize (see MA-SSS-15) impacts to leks and habitat (these areas will be managed as ROW avoidance).
- Realignments of existing ROWs may be considered if the realignment maintains or enhances GUSG habitat or lekking areas, eliminates the need to authorize a new ROW to construct a new road that could be more detrimental to GUSG, or is necessary for public safety or public need.

Rights-of-Way Avoidance Areas

MA-LR-5: In OHMA, ROW avoidance areas will be managed as follows:

Satellite Populations: see MA-LR-3 above.

Gunnison Basin Population:

Manage OHMA and UHMA as ROW avoidance areas outside of 1-mile of all lek buffers (Map A.14 in Appendix A). ROWs may be issued if it can be demonstrated that impacts from the proposed authorization have been minimized on GUSG and its habitat based on at least one of the following:

- The location of the proposed authorization is determined to be nonhabitat, lacks the ecological potential to become habitat, does not provide important connectivity between habitat areas, and the project includes design features to prevent indirect

disturbance to or disruption of adjacent seasonal habitats that will impair their biological or ecological function.

- Topography/areas of non-habitat create an effective barrier to impacts.
- By co-locating (consider feasibility and safety concerns) the proposed authorization with existing disturbance, impacts will be minimized or similar to the impacts associated with the existing infrastructure.
- The proposed location would be undertaken as an alternative to a similar action occurring on a nearby parcel (for example, due to landownership patterns), and authorizing the ROW on the parcel in question will have less of an impact on GUSG or its habitat than on the nearby parcel; this criterion must also include measures sufficient to allow the BLM to conclude that such benefits will endure for the duration of the proposed action's impacts.

In addition to meeting one of the criteria above, applicable minimization criteria (see MA-SSS-15), timing limitations (see MA-SSS-14), compensatory mitigation (see MA-SSS-6), required design features (see Appendix B, *Best Management Practices and Required Design Features*), and other site-specific constraints will be included as Terms & Conditions of the ROW.

MA-LR-6: Manage UHMA (all populations) as ROW avoidance areas outside of 1-mile of all lek buffers (Map A.14 in Appendix A).

ROWs may be issued if it can be demonstrated that impacts from the proposed authorization have been minimized on GUSG or its habitat based on at least one of the following:

- The location of the proposed authorization is determined to be nonhabitat, lacks the ecological potential to become habitat, does not provide important connectivity between habitat areas, and the project includes design features to prevent indirect disturbance to or disruption of adjacent seasonal habitats that will impair their biological or ecological function.
- Topography/areas of non-habitat create an effective barrier to impacts.
- By co-locating (consider feasibility and safety concerns) the proposed authorization with existing disturbance, impacts will be minimized or similar to impact associated with the existing infrastructure.
- The proposed location would be undertaken as an alternative to a similar action occurring on a nearby parcel (for example, due to landownership patterns), and authorizing the ROW on the parcel in question will have less of an impact on GUSG or its habitat than on the nearby parcel; this criterion must also include measures sufficient to allow the BLM to conclude that such benefits will endure for the duration of the proposed action's impacts.

In addition to meeting one of the criteria above, applicable minimization criteria (see MA-SSS-15), timing limitations (see MA-SSS-14), compensatory mitigation (see MA-SSS-6), required design features (see Appendix B, *Best Management Practices and Required Design Features*), or other site-specific constraints will be included as Terms & Conditions of the ROW.

Land Tenure Adjustment

Objective LR-3: *Land disposal and acquisitions are used to consolidate and conserve GUSG habitat to enhance management of the species.*

MA-LR-7: Maintain public ownership of OHMA, UHMA, and LCMA. Consider exceptions to retention for disposal through exchanges, State selections, boundary adjustments, Recreation and Public Purposes (R&PP) Act leases and patents, leases under Section 302 of FLPMA, sales under Sections 203 and 209 of FLPMA, and sales authorized by other Congressional Acts and special legislation in cases where:

(1) disposal of the lands, including land exchanges, will result in a conservation benefit for GUSG; or

(2) disposal of the lands, including land exchanges, will not cause any direct or indirect adverse effect on GUSG conservation; or

(3) in areas with mixed ownership, disposal of the lands, including land exchanges, will be considered to facilitate additional or more contiguous Federal ownership within OHMA and UHMA.

MA-LR-8: In isolated Federal parcels within OHMA and UHMA, only allow tract disposals that are beneficial or neutral to long-term management of GUSG populations.

MA-LR-9: For lands in OHMA and UHMA that are identified for disposal, the BLM will only dispose of such lands consistent with the goals and objectives of this RMP Amendment, including, but not limited to, the RMP Amendment objective to maintain or increase GUSG abundance and distribution.

MA-LR-10: Consider acquiring lands or easements for GUSG habitat values. For example identify key GUSG habitats on private land, adjacent to existing BLM land, where acquisition and protection by BLM could substantially benefit the local GUSG population (RIS Priority Action 1 – 3.05). This could be accomplished via purchase, exchange, or donation to satisfy mitigation requirements.

MA-LR-11: Recommend to the Secretary of the Interior withdrawal from mineral entry and location the following areas totaling 89,340 acres (82,670 acres OHMA and 1,530 acres UHMA) (Map A.11 in Appendix A):

- Dry Creek Basin ACEC (10,920 acres), Tres Rios Field Office
- Chance Gulch ACEC (13,150 acres), Gunnison Field Office
- Sapinero Mesa ACEC (17,240 acres), Gunnison Field Office
- Gunnison Sage-Grouse ACEC/IBA (22,180 acres), Gunnison Gorge NCA
- West Antelope Creek ACEC (28,280 acres), Gunnison Field Office
- South Beaver Creek ACEC (4,570 acres), Gunnison Field Office
- Sugar Creek BCA (17,210 acres), Gunnison Field Office

II.2.12. Renewable Energy (RE)

Objective RE-1: *Manage the Lands and Realty program to avoid, minimize, and compensate for the loss of habitat and habitat connectivity during the authorization of ROWs (including other land use authorizations), land tenure adjustments, and proposed land withdrawals.*

Management Actions (MA)

MA-RE-1: Manage OHMA and UHMA as exclusion areas for wind energy development (Map A.15 in Appendix A). Apply minimization criteria (MA-SSS-15) for wind energy development within Adjacent Non-habitat (1-mile buffer) and LCMA.

MA-RE-2: Manage OHMA and UHMA as exclusion areas for industrial solar energy development (Map A.16 in Appendix A). Apply minimization criteria (MA-SSS-15) for solar energy development within Adjacent Non-habitat (1-mile buffer) and LCMA.

II.2.13. Areas of Critical Environmental Concern (ACEC)

The designated ACECs will be managed per the associated Management Actions for OHMA and UHMA for resources as outlined in the ARMPA, and with the special Management Actions outlined in each ACEC section below.

Goal ACEC-1: Manage ACECs to protect significant resource values and prevent damage to important natural and biological values.

Objective ACEC-1: *Manage the following areas as ACECs (Map A.17 in Appendix A):*

Manage the following ACECs for protection and enhancement of GUSG habitat:

- *Dry Creek Basin ACEC (10,920 acres), Tres Rios Field Office*
- *Chance Gulch ACEC (13,150 acres), Gunnison Field Office*
- *Sapinero Mesa ACEC (17,240 acres), Gunnison Field Office*
- *Gunnison Sage-Grouse ACEC/IBA (22,180 acres), Gunnison Gorge NCA*

Manage existing ACECs in OHMA (updated management) for protection of other relevance and important values:

- *West Antelope Creek ACEC (28,280 acres), Gunnison Field Office*
- *South Beaver Creek ACEC (4,570 acres), Gunnison Field Office*

II.2.13.1 Dry Creek Basin ACEC

Manage 10,920 acres as the Dry Creek Basin ACEC, Tres Rios Field Office, for protection and enhancement of Gunnison sage-grouse habitat and to reduce disruption to wildlife by users (Map A.18 in Appendix A).

In addition to management actions in the ARMPA the following special management applies:

Management Actions (MA)

Travel and Transportation

Dry Creek Basin ACEC-MA-1: Prohibit new trail development.

Dry Creek Basin ACEC-MA-2: Allow trail/road realignment only if found to be beneficial for the relevant and important values.

Fluid Minerals

Dry Creek Basin ACEC-MA-3: Subject to valid existing rights, close Dry Creek Basin ACEC, to fluid mineral exploration, leasing, and development.

Solid Minerals

Dry Creek Basin ACEC-MA-4: Recommend to the Secretary of the Interior for withdrawal from mineral entry and location.

Lands and Realty

Dry Creek Basin ACEC-MA-5: Manage as ROW exclusion, subject to valid existing rights, with the following exceptions (does not except authorizations from the applicable timing limitations, minimization measures, and compensatory mitigation):

The following exceptions will apply to ROW exclusions:

- West-Wide Energy Corridors.
- Designated utility corridors.
- 100-foot buffer from center line of county roads and highways (these areas will be managed as ROW avoidance).
- Allow ROWs for private inholdings or edge holdings for reasonable access and utilities in locations that minimize, to the extent feasible, impacts to leks (these areas will be managed as ROW avoidance).
- Recognize the valid existing rights of grant holders to continue to use, improve, operate, and maintain. In addition, upgrades, amendments, and renewals of existing facilities may be considered with application of latest terms and conditions.
- Exceptions to seasonal timing limitations may be considered and evaluated on a case-by-case basis to conduct maintenance on utilities, especially those that may cause significant risk, safety concern, or fire danger.

II.2.13.2 Chance Gulch ACEC

Manage 13,150 acres as the Chance Gulch ACEC for protection and enhancement of Gunnison sage-grouse habitat and to reduce disruption to wildlife by users (Map A.19 in Appendix A).

In addition to management actions in the ARMPA the following special management applies:

Management Actions (MA)

Livestock Grazing

Chance Gulch ACEC-MA-1: Establish Tomichi Allotment, within the Chance Gulch ACEC, as a forage reserve allotment (i.e., an allotment without a term grazing permit that is grazed on a temporary and nonrenewable basis). This allotment may be used to provide temporary grazing to rest other areas following wildfire, habitat treatments, or to allow for more rapid attainment of rangeland health.

The forage reserve allotment will be managed to continue to meet land health standards and GUSG habitat guidelines. Use will be authorized on a temporary, nonrenewable basis. The amount of use, season of use, and duration of use will be determined by the Gunnison Field Office and Authorized Officer.

Applicants will be required to meet qualifications per the grazing regulations and show the ability and commitment to repair and maintain improvements and infrastructure. The Gunnison Field Office will rank qualified applicants according to the following criteria in priority order:

(1) Implementing restoration projects, vegetation management or treatments, or range improvement projects, including projects with new technology such as virtual fencing, on BLM lands.

(2) Facilitating a change in management to improve resource conditions on BLM allotments.

(3) Accommodating permittees or lessees displaced by natural causes (i.e., wildland fire, drought, insect infestations, etc.)

The criteria found at 43 CFR 4130.1-2 (USDI-BLM 2006) will be used to determine priority when conflicting applications are submitted.

Recreation

Chance Gulch ACEC-MA-2: Close to all human use during lekking season (March 15 to May 15) with exceptions for administrative access and emergency maintenance.

Chance Gulch ACEC-MA-3: Pets must remain on leash within the ACEC at trailheads and trails designated by a BLM sign or map. In all other areas, pets must be controlled by physical or audible means. Working dogs, such as livestock dogs, will be precluded.

Chance Gulch ACEC-MA-4: Provide adequate protection (e.g., signs, use stipulations, barricades, as needed) to protect sage-grouse and their habitats.

Travel and Transportation

Chance Gulch ACEC-MA-5: Prohibit new trail development.

Chance Gulch ACEC-MA-6: Allow trail/road realignment only if found to be beneficial for the relevant and important values.

Chance Gulch ACEC-MA-7: Limit motorized and mechanized travel to designated route system (Gunnison Field Office TMP 2010).

Chance Gulch ACEC-MA-8: Close designated routes to motorized travel from March 15 – May 15 (Gunnison Field Office TMP 2010).

Chance Gulch ACEC-MA-9: Limit over-snow vehicle travel to designated routes. Any route subsequently approved by the BLM will be incorporated into the designated the route system.

Chance Gulch ACEC-MA-10: Maintain current, designated route system limiting both motorized and mechanized travel and to include over-snow vehicle travel. Any route subsequently approved by the BLM will be incorporated into the designated route system.

Chance Gulch ACEC-MA-11: Close BLM designated routes to motorized (including e-bikes) travel during lekking and nesting, season (March 15 to July 15) to prevent disturbance to breeding sage-grouse with exceptions for administrative access and emergency maintenance.

Chance Gulch ACEC-MA-12: Prioritize restoration and re-vegetation of decommissioned or closed routes.

Solid Minerals

Chance Gulch ACEC-MA-13: Recommend to the Secretary of the Interior for withdrawal from mineral entry and location.

Lands and Realty

Chance Gulch ACEC-MA-14: Manage as ROW exclusion, subject to valid existing rights, with the following exceptions (does not except authorizations from the applicable timing limitations, minimization measures, and compensatory mitigation):

The following exceptions will apply to ROW exclusions:

- West-Wide Energy Corridors.
- Designated utility corridors.
- 100-foot buffer from center line of county roads and highways (these areas will be managed as ROW avoidance).
- Allow ROWs for private inholdings or edge holdings for reasonable access and utilities in locations that minimize, to the extent feasible, impacts to leks (these areas will be managed as ROW avoidance).
- Recognize the valid existing rights of grant holders to continue to use, improve, operate, and maintain. In addition, upgrades, amendments, and renewals of existing facilities may be considered with application of latest terms and conditions.
- Exceptions to seasonal timing limitations may be considered and evaluated on a case-by-case basis to conduct maintenance on utilities, especially those that may cause significant risk, safety concern, or fire danger.

II.2.13.3 Sapinero Mesa ACEC

Manage 17,240 acres as the Sapinero Mesa ACEC for protection and enhancement of Gunnison sage-grouse habitat and to reduce disruption to wildlife by users (Map A.20 in Appendix A).

In addition to management actions in the ARMPA the following special management applies:

Management Actions (MA)

Livestock Grazing

Sapinero Mesa ACEC-MA-1: Close the area west of County Road 26 to livestock grazing (associated with Sapinero Mesa allotment).

Recreation

Sapinero Mesa ACEC-MA-2: Close to all human use during lekking season (March 15 to May 15) with exceptions for administrative access and emergency maintenance.

Sapinero Mesa ACEC-MA-3: Pets must remain on leash within the ACEC at trailheads and trails designated by a BLM sign or map. In all other areas, pets must be controlled by physical or audible means.

Sapinero Mesa ACEC-MA-4: Provide adequate protection (e.g., signs, use stipulations, barricades, as needed) to protect sage-grouse and their habitats.

Travel and Transportation

Sapinero Mesa ACEC-MA-5: Prohibit new trail development.

Sapinero Mesa ACEC-MA-6: Allow trail/road realignment only if found to be beneficial for the relevant and important values.

Sapinero Mesa ACEC-MA-7: Limit motorized and mechanized travel to designated route system (Gunnison Field Office TMP 2010).

Sapinero Mesa ACEC-MA-8: Close designated routes to motorized travel from March 15 – May 15 (Gunnison Field Office TMP 2010).

Sapinero Mesa ACEC-MA-9: Limit over-snow vehicle travel to designated routes. Any route subsequently approved by the BLM will be incorporated into the designated the route system.

Sapinero Mesa ACEC-MA-10: Close the area west of County Road 26 to motorized and mechanized travel during lekking, nesting, and brood-rearing season (March 15 to July 15) to prevent disturbance to breeding, nesting, and brood-rearing sage-grouse, with exceptions for administrative access and emergency maintenance.

Sapinero Mesa ACEC-MA-11: Maintain current, designated route system limiting both motorized and mechanized travel and to include over-snow vehicle travel. Any route subsequently approved by the BLM will be incorporated into the designated route system.

Sapinero Mesa ACEC-MA-12: Prioritize restoration and re-vegetation of decommissioned or closed routes.

Solid Minerals

Sapinero Mesa ACEC-MA-13: Recommend to the Secretary of the Interior for withdrawal from mineral entry and location.

Lands and Realty

Sapinero Mesa ACEC-MA-14: Manage as ROW exclusion, subject to valid existing rights, with the following exceptions (does not except authorizations from the applicable timing limitations, minimization measures, and compensatory mitigation):

The following exceptions will apply to ROW exclusions:

- West-Wide Energy Corridors.
- Designated utility corridors.
- 100-foot buffer from center line of county roads and highways (these areas will be managed as ROW avoidance).
- Allow ROWs for private inholdings or edge holdings for reasonable access and utilities in locations that minimize, to the extent feasible, impacts to leks (these areas will be managed as ROW avoidance).

- Recognize the valid existing rights of grant holders to continue to use, improve, operate, and maintain. In addition, upgrades, amendments, and renewals of existing facilities may be considered with application of latest terms and conditions.
- Exceptions to seasonal timing limitations may be considered and evaluated on a case-by-case basis to conduct maintenance on utilities, especially those that may cause significant risk, safety concern, or fire danger.

II.2.13.4 Gunnison Sage-Grouse ACEC/Important Bird Area (IBA)

Manage 22,180 acres as the Gunnison Sage-Grouse ACEC/IBA in the Gunnison Gorge NCA for protection and enhancement of Gunnison sage-grouse habitat and to reduce disruption to wildlife by users (Map A.21 in Appendix A).

In addition to management actions in the ARMPA the following special management applies:

Management Actions (MA)

Special Status Species

Gunnison Sage-Grouse ACEC/IBA-ACEC-MA-1: Livestock management, road and trails management, recreation activity management, and vegetation management will be conducted to maintain and restore Gunnison sage-grouse habitat in this area subject to seasonal timing restriction for surface disturbing activity from March 1 – July 15.

Recreation

Gunnison Sage-Grouse ACEC/IBA-ACEC-MA-2: Pets must remain on leash within the ACEC at trailheads and trails designated by a BLM sign or map. In all other areas, pets must be controlled by physical or audible means. Working dogs, such as livestock dogs, will be precluded.

Gunnison Sage-Grouse ACEC/IBA-ACEC-MA-3: Implement additional management actions if needed to ensure recreation use, including motorized and non-motorized, and mechanical vehicular use, within Gunnison Sage-Grouse ACEC/IBA is consistent with ACEC objectives. Actions could include: special stipulations for commercial, competitive (outside NCA), and organized group permits, as well as seasonal restrictions (March 1–July 15) on camping and/or other recreational activities in GUSG habitat.

Travel and Transportation

Gunnison Sage-Grouse ACEC/IBA-ACEC-MA-4: Limited OHV area.

Gunnison Sage-Grouse ACEC/IBA-ACEC-MA-5: The ACEC will be closed to motorized and mechanized travel from December 1 to May 15 annually to prevent disturbance to wintering big game or breeding/strutting sage-grouse. Closure could be extended an additional 30-days if warranted by circumstances.

- Exception: administrative access for livestock grazing permittee grazing operations may be permitted during the seasonal travel closure without prior BLM authorization.

Gunnison Sage-Grouse ACEC/IBA-ACEC-MA-6: Motorized and mechanized travel on public lands in this ACEC will be limited to the existing routes, until travel management plans to designate routes are completed.

Gunnison Sage-Grouse ACEC/IBA-ACEC-MA-7: Close to all human use during lekking season (March 15 to May 15) with exceptions for administrative access, including livestock grazing permittees, and emergency maintenance.

Solid Minerals

Gunnison Sage-Grouse ACEC/IBA-ACEC-MA-8: Recommend to the Secretary of the Interior withdrawal from mineral entry and location.

Lands and Realty Management Actions

Gunnison Sage-Grouse ACEC/IBA-ACEC-MA-9: Manage as ROW exclusion, subject to valid existing rights, with the following exceptions (does not except authorizations from the applicable timing limitations, minimization measures, and compensatory mitigation):

The following exceptions will apply to ROW exclusions:

- West-Wide Energy Corridors.
- Designated utility corridors.
- 100' buffer from center line of county roads & highways (these areas will be managed as ROW avoidance).
- Allow ROWs for private inholdings or edge holdings for reasonable access and utilities in locations that minimize, to the extent feasible, impacts to leks (these areas will be managed as ROW avoidance).
- Recognize the valid existing rights of grant holders to continue to use, improve, operate, and maintain. In addition, upgrades, amendments, and renewals of existing facilities may be considered with application of latest terms and conditions.
- Exceptions to seasonal timing limitations may be considered and evaluated on a case-by-case basis to conduct maintenance on utilities, especially those that may cause significant risk, safety concern, or fire danger.

II.2.13.5 West Antelope Creek ACEC

Manage 28,280 acres as the West Antelope Creek ACEC in the Gunnison Field Office to improve the capabilities of the resources in the unit to support wintering elk, deer, and bighorn sheep (Map A.22 in Appendix A).

In addition to management actions in the ARMPA the following special management applies:

Management Actions (MA)

Travel and Transportation

West Antelope Creek ACEC-MA-1: Limit motorized and mechanized travel to designated route system (Gunnison Field Office TMP 2010).

West Antelope Creek ACEC-MA-2: Close designated routes to motorized travel from December 1 – May 15.

West Antelope Creek ACEC-MA-3: Limit over-snow vehicle travel to designated routes. Any route subsequently approved by the BLM will be incorporated into the designated route system.

Solid Minerals

West Antelope Creek ACEC-MA-4: Recommend to the Secretary of the Interior withdrawal from mineral entry and location.

II.2.13.6 South Beaver Creek ACEC

Manage 4,570 acres as the South Beaver Creek ACEC in the Gunnison Field Office for protection and enhancement of existing populations and habitat for skiff milkvetch (Map A.23 in Appendix A).

In addition to management actions in the ARMPA the following special management applies:

Management Actions (MA)

Special Status Species

South Beaver Creek ACEC-MA-1: Any research activities will require approval by the BLM.

Travel and Transportation

South Beaver Creek ACEC-MA-2: Limit motorized and mechanized travel to designated route system (Gunnison Field Office TMP 2010).

South Beaver Creek ACEC-MA-3: Close designated routes to motorized travel from March 15 – May 15 (Gunnison Field Office TMP 2010), apply seasonal closures as outlined in Hartman Rocks Recreation Area Management Plan (2014) for the Hartman Rocks Recreation Area.

South Beaver Creek ACEC-MA-4: Limit over-snow vehicle travel to designated routes.

South Beaver Creek ACEC-MA-5: Any route subsequently approved by the BLM will be incorporated into the designated the route system.

Solid Minerals

South Beaver Creek ACEC-MA-6: Recommend to the Secretary of the Interior for withdrawal from mineral entry and location.

II.3. PUBLIC INVOLVEMENT

The BLM will continue to work with existing partners, to cultivate new partnerships, and to seek the views of the public. The public will have the opportunity to participate in the NEPA process as individual actions are reviewed and implemented, including the development of implementation-level plans identified in the ARMPA. The BLM will use such techniques as news releases and website postings to ask for participation and to inform the public of new and ongoing management actions and site-specific implementation planning. The public may engage through the 11 RMP administrative units.

The BLM will continue to coordinate, both formally and informally, with the numerous Federal and State agencies, Native American Tribes, local agencies, and officials interested and involved in the management of public lands in the 11 administrative units.

II.4. MANAGEMENT PLAN IMPLEMENTATION

Planning decisions go into effect upon approval of the ROD and ARMPA. Planning decisions require no additional analysis and provide the framework for any subsequent activities proposed in the decision area. All future authorizations must conform to the ARMPA (43 CFR 1610.5-3(a)). The BLM will prepare

supplementary rules to provide full authority to BLM law enforcement to enforce management decisions made in the ARMPA pursuant to the BLM's authority under 43 CFR 8365.1-6.

The BLM will issue decisions about proposed actions to implement the ARMPA. During implementation of the ARMPA, the BLM will prepare additional documentation to comply with NEPA before approving specific actions. This can vary from a simple statement of conformance with the ARMPA and adequacy of existing NEPA analysis to more complex environmental assessments or EISs that analyze several alternatives.

II.5. RMP EVALUATION, MAINTENANCE, AND MONITORING

The BLM will monitor and periodically evaluate implementation of the ARMPA based on guidance in the BLM's Land Use Planning Handbook, H-1601-1 (BLM 2005), as amended.

II.5.1. Evaluation

In accordance with the BLM's Land Use Planning Handbook (H-1601-1; BLM 2005), the BLM will periodically evaluate the ARMPA. Evaluation is the process of reviewing the land use plan and the periodic plan monitoring reports to determine whether the land use plan decisions are still appropriate and how effectively the plan is being implemented. Land use plan evaluations determine whether:

- Decisions remain relevant to current issues;
- Decisions are effective in achieving (or making progress toward achieving) desired outcomes;
- Any decisions should be revised, amended, or clarified;
- Any decisions should be dropped from further consideration; and
- Any areas require new decisions.

In making these determinations, the BLM's evaluation will consider whether mitigation measures such as those described in the ARMPA are effective in mitigating impacts, whether there are significant changes in the related plans of other entities, or whether there is significant new information. In addition to periodic evaluations, special evaluations may be required to review unexpected management actions or significant changes in the related plans of Native American Tribes, other Federal agencies, and State and local governments, or to evaluate legislation or litigation that has the potential to trigger an amendment or revision process for the RMP. Evaluations may identify resource needs, as well as the means for correcting deficiencies and addressing issues through plan maintenance, amendments, or revisions. Evaluations should also identify where new and emerging issues and other values have surfaced.

II.5.2. Maintenance

BLM regulations in 43 CFR 1610.5-4 stipulate that RMP decisions and supporting actions can be maintained to reflect minor data changes. Maintenance is limited to further refining, documenting, or clarifying a previously approved decision incorporated in the RMP.

Maintenance must not expand the scope of resource uses or restrictions or change the terms, conditions, and decisions of the approved RMP. Some examples of maintenance actions are:

- Correcting minor data, typographical, mapping, or tabular data errors, such as updating acreage figures shown throughout the RMP. Acreages are based on geographic information system (GIS) data, which are subject to constant refinement.

- Refining baseline information as a result of new inventory data (e.g., refining the known habitat of special status species, or adjusting the boundary of a fire management unit based on updated fire regime condition class inventory, fire occurrence, monitoring data, and/or demographic changes).

Plan maintenance will be documented in supporting records. Plan maintenance does not require formal public involvement, interagency coordination, or the NEPA analysis required for making new land use plan decisions.

II.5.3. RMP Monitoring

Land use plan monitoring is the process of tracking the implementation of land use plan decisions (implementation monitoring) and collecting data/information necessary to evaluate the effectiveness of land use plan decisions (effectiveness monitoring) in meeting the purpose and need of the plan or plan amendment. Monitoring strategies for GUSG habitat and populations must be collaborative, as habitat occurs across jurisdictional boundaries. Therefore, efforts will continue to be conducted in partnership with Federal and State fish and wildlife agencies. The BLM and other partners will use the resulting information to guide implementation of conservation activities.

In accordance with BLM's Land Use Planning Handbook, the BLM will develop a monitoring plan as a part of the implementation plan. Appendix D, *Gunnison Sage-Grouse Monitoring Framework*, describes the methods to monitor and evaluate the implementation and effectiveness of the GUSG ARMPA. The BLM will track and compile the components described in Appendix D to evaluate implementation and effectiveness of the GUSG planning strategy and the conservation measures within the land use plan amendment. To monitor habitats, the BLM will measure and track attributes of occupied habitat and unoccupied habitat and habitat availability. Field Offices with OHMA or UHMA will prepare a final activity monitoring report which documents authorized actions in OHMA and UHMA, progress toward objectives, issues encountered, and plan effectiveness of conservation actions. Appendix D includes an example annual report template.

Appendix I, *Recreation Management Areas*, includes a monitoring component for ERMAs, SRMAs, and BCAs. Monitoring will be supported by BLM field staff in conjunction with collaborating partners and agencies.

During implementation of this ARMPA, population trends will be monitored by BLM, USFWS, CPW, and Utah Division of Wildlife Resources (UDWR) biologists. This monitoring will evaluate the effects on GUSG habitat and populations due to BLM permitted activities and make recommendations for changes in management. Monitoring will also evaluate the effectiveness of restoration activities and mitigation (to include compensatory mitigation) associated with permitted activities.

II.6. GLOSSARY

Adaptive management. A type of natural resource management in which decisions are made as part of an ongoing science-based process. Adaptive management involves testing, monitoring, and evaluating applied strategies and incorporating new knowledge into management approaches that are based on scientific findings and the needs of society. Results are used to modify management policy, strategies, and practices.

Adjacent non-habitat. Areas within a 4-mile buffer around occupied habitat management areas (OHMA) and unoccupied habitat management areas (UHMA) that are considered non-habitat because they do not contribute to the annual life-cycle of Gunnison sage-grouse. The alternatives consider a range of distances from 1 to 4 miles.

Administrative access. Administrative access pertains to travel on routes that are limited to authorized users (typically motorized access). These are existing routes that lead to developments that have an administrative purpose, where the BLM or a permitted user must have access for regular maintenance or operation.

Allotment. An area of land in which one or more livestock operators graze their livestock. Allotments generally consist of BLM-administered or National Forest System lands but may include other Federally managed, State-owned, and private lands. An allotment may include one or more separate pastures. Livestock numbers and periods of use are specified for each allotment.

Allotment management plan (AMP). A concisely written program of livestock grazing management, including supportive measures if required, designed to attain specific, multiple-use management goals in a grazing allotment. An AMP is prepared in consultation with the permittees, lessees, and other affected interests. Livestock grazing is considered in relation to other uses of the range and to renewable resources, such as watersheds, vegetation, and wildlife. An AMP establishes seasons of use, the number of livestock to be permitted, the range improvements needed, and the grazing system.

Amendment. The process for considering or making changes in the terms, conditions, and decisions of approved resource management plans or management framework plans. Usually only one or two issues are considered that involve only a portion of the planning area.

Anthropogenic (human) disturbances. Features include paved highways, graded gravel roads, transmission lines, substations, wind turbines, oil and gas wells, geothermal wells and associated facilities, pipelines, landfills, agricultural conversion, homes, and mines.

Application for a Permit to Drill (APD). An application by which an oil and gas operator with a valid lease applies to the BLM or the Colorado Energy and Carbon Management Commission to begin drilling. Regulation 43 CFR 3170 specifies what must be included in BLM applications for permit to drill.

Area of Critical Environmental Concern (ACEC). Administrative designation established through the BLM's land use planning process (43 CFR 1610.7-2) where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards. The level of allowable use within an ACEC is established through the collaborative planning process. Designation of an ACEC allows for resource use limitation in order to protect identified resources or values.

Avoid/Avoidance. These terms usually address mitigation of some resource use. Paraphrasing the CEQ Regulations (40 CFR, Part 1508.20), avoidance means to circumvent or bypass an impact altogether by not taking a certain action or parts of an action. Therefore, avoidance does not necessarily prohibit a proposed activity, but it may require relocating or totally redesigning an action to eliminate any potential impacts resulting from it.

Avoidance area. See "right-of-way avoidance area" definition. Right-of-way avoidance area: "an area identified through resource management planning to be avoided but may be available for ROW location

with special stipulations. A ROW avoidance area is comparable to the SSR restriction applied to other resources."

Brood-rearing area. Areas supporting sage-grouse broods. This generally includes wet areas such as meadows, springs, ponds, streams which all function as important brood-rearing sites.

Candidate species. Taxa for which the USFWS has sufficient information on their status and threats to propose the species for listing as endangered or threatened under the Endangered Species Act, but for which issuing a proposed rule is currently precluded by higher priority listing actions. Separate lists for plants, vertebrate animals, and invertebrate animals are published periodically in the Federal Register (BLM Manual 6840, Special Status Species Manual).

Closed area. Where one or more uses are prohibited, either temporarily or over the long term. Areas may be closed to such uses such as off-road vehicles, mineral leasing, mineral or vegetation collection, or target shooting. In areas closed to off-road vehicle use,] off-road vehicle use is prohibited. Use of off-road vehicles in closed areas may be allowed for certain reasons; however, such use would be made only with the approval of the BLM Authorized Officer (43 CFR, Part 8340.0-5).

Compensatory mitigation. Compensating for the residual impact by replacing or providing substitute resources or environments (40 CFR, Part 1508.20).

Concentration area. That portion of the overall habitat range of the species where activity is greater than the surrounding overall habitat range. For severe winter range areas it could be considered as the part of winter habitat range where 90 percent of the individuals are located when annual snow pack is at its maximum and/or temperatures are at a minimum in the two worst winters out of ten. For Colorado, the winters of 1983-84 or 1996-97 are good examples.

Controlled surface use (CSU). Areas open to fluid mineral leasing, but the stipulation allows the BLM to require special operational constraints, or the activity can be shifted more than 656 feet to protect the specified resource or value.

Cooperating agency. Assists the lead Federal agency in developing an environmental assessment or environmental impact statement. This can be any agency with jurisdiction by law or special expertise for proposals covered by NEPA (40 CFR, Part 1501.6). Any tribe or Federal, State, or local government jurisdiction with such qualifications may become a cooperating agency by agreement with the lead agency.

Cumulative Effect. Effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

Decision area. Public lands and mineral estate managed by the United States Department of the Interior, Bureau of Land Management, and that are within the planning area and that are encompassed by all designated habitat, which includes OHMA, UHMA, LCMA, and Adjacent Non-habitat.

Direct Effect. Effects that are caused by the action and occur at the same time and place.

Directional Drilling. A drilling technique whereby a well is deliberately deviated from the vertical in order to reach a particular part of the oil- or gas-bearing reservoir. Directional drilling technology enables the driller to steer the drill stem and bit to a desired bottom hole location. Directional wells initially are drilled straight down to a predetermined depth and then gradually curved at one or more

different points to penetrate one or more given target reservoirs. This specialized drilling usually is accomplished with the use of a fluid-driven downhole motor, which turns the drill bit. Directional drilling also allows multiple production and injection wells to be drilled from a single surface location such as a gravel pad, thus minimizing cost and the surface impact of oil and gas drilling, production, and transportation facilities. It can be used to reach a target located beneath an environmentally sensitive area.

Disruptive activities. Public land resource uses or activities that are likely to alter the behavior, displace, or cause stress to sage-grouse populations occurring at a specific location or time. In this context, disruptive activity(ies) refer to those actions that alter behavior or cause the displacement of individuals such that reproductive success is negatively affected, or an individual's physiological ability to cope with environmental stress is compromised. This term does not apply to the physical disturbance of the land surface, vegetation, or features (see "surface disturbance" definition). Examples of disruptive activities may include noise, vehicle traffic, or other human presence regardless of the activity. The term is commonly used in conjunction with protecting wildlife during crucial life stages (e.g., breeding, nesting, birthing). The use of this term is not intended to prohibit all activity or authorized uses.

Durability (protective and ecological). The maintenance of the effectiveness of a mitigation site and project for the duration of the associated impacts, which includes resource, administrative/legal, and financial considerations. (Adopted and modified from BLM Manual Section 1794.)

Exclusion area. An area on public lands where certain activities are prohibited to ensure protection of other resource values on the site. The term is frequently used in reference to lands and realty actions and proposals (e.g., ROWs) but is not unique to them. This restriction is functionally analogous to no surface occupancy, which is used by the oil and gas program, and is applied as an absolute condition to those affected activities. The less restrictive analogous term is avoidance area. Also see *right-of-way exclusion area.*

Facility, Energy or Mining. Human-constructed assets designed and created to serve a particular function and to afford a particular convenience or service that is affixed to a specific locations, such as oil and gas well pads and associated infrastructure.

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

Federal mineral estate. Subsurface mineral estate owned by the United States and administered by the BLM. Federal mineral estate under BLM jurisdiction is composed of mineral estate underlying BLM-administered lands, National Forest System lands, private lands, and State-owned lands.

Fluid minerals. Oil, gas, coal bed natural gas, and geothermal resources.

Geophysical exploration. Efforts to locate depositions of oil and gas resources and to better define the subsurface.

Geothermal energy. Natural heat from within the Earth captured for production of electric power, space heating, or industrial steam.

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

Grazing relinquishment. The voluntary surrender by an existing permittee or lessee (with concurrence of any base property lienholders) of their priority (preference) to use a livestock forage allocation on public land and their permission to use this forage. Relinquishments do not require the consent by or approval of BLM. The BLM's receipt of a relinquishment is not a decision to close areas to livestock grazing.

Guidelines. Establish a general range of desired conditions for habitat indicators across the seasonal habitat types for GUSG. These were created by bounding the means of each habitat indicator by the standard errors to create a variable "distribution range" and develop the guideline. Additional information on habitat guideline development can be found in the Gunnison Sage-Grouse Rangewide Conservation Plan (Gunnison Sage-Grouse Rangewide Steering Committee 2005).

Gunnison Basin Population. The primary population of Gunnison Sage-Grouse located in Gunnison and Saguache Counties in Colorado (see Figure 1 in the USFWS Final Recovery Plan for Gunnison Sage-Grouse). The population occurs in a landscape that is dominated by Wyoming big sagebrush at the lower and drier elevations and mountain big sagebrush at the upper and wetter elevations.

Habitat Assessment Framework (HAF). The habitat assessment framework (HAF) is a multi-scaled approach to inform project-level planning, implementation, and decision making at landscape scales in relation to sage-grouse seasonal habitat and movement. The HAF addresses two primary factors: (1) applying the hierarchy for implementing landscape conservation, and (2) providing the inventory and outcome-based evaluation tools necessary for assessing effectiveness of resulting conservation actions. Detailed information can be found in the Technical Reference 6710-1 Sage-Grouse Habitat Assessment Framework (HAF).

Horizontal drilling. A more-specialized type of directional drilling that allows a single well bore at the surface to penetrate oil- or gas-bearing reservoir strata at angles that parallel or nearly parallel the dip of the strata. The well bore is then open and in communication with the reservoir over much longer distances. In development wells, this can greatly increase production rates of oil and gas or volumes of injected fluids. Horizontal drilling may involve underbalanced drilling, coiled tubing, bi steering, continuous logging, multilateral horizontals, and horizontal completions. Lateral step-outs are directional wells that branch off a main borehole to access more of the subsurface.

Indirect Effect. Effects that are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Land tenure adjustments. Landownership or jurisdictional changes. To improve the manageability of BLM-administered lands and their usefulness to the public, the BLM has numerous authorities for repositioning lands into a more consolidated pattern, disposing of lands, and entering into cooperative management agreements. These land pattern improvements are completed primarily through the use of land exchanges but also through land sales, through jurisdictional transfers to other agencies, and through the use of cooperative management agreements and leases.

Land use plan. A set of decisions that establish management direction for land within an administrative area, as prescribed under the planning provisions of FLPMA; an assimilation of land use plan-level decisions developed through the planning process outlined in 43 CFR, Part 1600, regardless of the scale at which the decisions were developed. The term includes both RMPs and management framework plans (from H-1601-1, BLM Land Use Planning Handbook).

Land use plan decision. Establishes desired outcomes and actions needed to achieve them. Decisions are reached using the planning process in 43 CFR, Part 1600. When they are presented to the public as proposed decisions, they can be protested to the BLM Director. They are not appealable to Interior Board of Land Appeals.

Large transmission lines. The movement or transfer of electric energy over an interconnected group of lines and associated equipment between points of supply and points at which it is transformed for delivery to customers or is delivered to other electrical systems. Transmission is considered to end when the energy is transformed for distribution to the customer. For purposes of this EIS, large transmission lines are considered to be 69 kilovolts or higher; generally require a larger disturbance footprint to accommodate larger infrastructure.

Late brood-rearing area. Habitat that includes mesic sagebrush and mixed shrub communities, wet meadows, and riparian habitats, as well as some agricultural lands (e.g., alfalfa fields).

Leasable minerals. Those minerals or materials designated as leasable under the Mineral Leasing Act of 1920. These include energy-related mineral resources, such as oil, natural gas, coal, and geothermal, and some nonenergy minerals, such as phosphate, sodium, potassium, and sulfur. Geothermal resources are also leasable under the Geothermal Steam Act of 1970.

Lease. Section 302 of FLPMA provides the BLM's authority to issue leases for the use, occupancy, and development of public lands. Leases are issued for such purposes as commercial filming, advertising displays, commercial or noncommercial croplands, apiaries, livestock holding or feeding areas not related to grazing permits and leases, native or introduced species harvesting, temporary or permanent facilities for commercial purposes (does not include mining claims), residential occupancy, ski resorts, construction equipment storage sites, assembly yards, oil rig stacking sites, mining claim occupancy (if the residential structures are not incidental to the mining operation), and water pipelines and well pumps related to irrigation and non-irrigation facilities. The regulations establishing procedures for processing these leases and permits are found in 43 CFR, Part 2920.

Lease stipulation. A modification of the terms and conditions on a standard lease form at the time of the lease sale.

Lek. An arena where male GUSG display to gain breeding territories and attract females. These arenas are usually open areas with short vegetation within sagebrush habitats, usually on broad ridges, benches, or valley floors where visibility and hearing acuity are excellent. It is also called a "strutting ground" (Colorado Department of Natural Resources, Parks and Wildlife 2008a). For the purposes of this RMP Amendment, "all leks" would include every lek status as defined by the State wildlife agency.

Lek, active. For a given season, a lek must have at least one male (satellite populations) or two males (Gunnison population) in attendance during two count periods to be considered active. An area used by displaying males in the last 5 years is considered an active lek. This status is used by Colorado Parks and Wildlife (Gunnison Sage-grouse Rangewide Steering Committee 2005).

Lek, inactive. For a given year, a lek must have zero males in attendance for at least two count periods within the season. For the official status of a lek to be considered inactive, a lek needs to be seasonally inactive for five consecutive years. This status is used by Colorado Parks and Wildlife (Gunnison Sage-grouse Rangewide Steering Committee 2005).

Lek, unknown. A lek is considered unknown for a given season if it did not meet the requirements for active or inactive during a given season. This is a situation where the status of the lek is "pending." For

example, birds are observed strutting in an area for the first time (regardless of numbers). A second year of observation is needed (in most populations) to determine the official status. This status is used by Colorado Parks and Wildlife.

Lek, historic. A formerly active lek that has not known to be utilized for display or breeding within the last 10 years (Colorado Division of Wildlife 2004a). This status is used by Colorado Parks and Wildlife.

Lek, occupied. A lek that has been active during at least one strutting season within the past 10 years. This status is used by the Utah Division of Wildlife Resources.

Lek, unoccupied. A lek that has either been destroyed or abandoned and has not been active during at least one strutting season within the past 10 years. This status is used by the Utah Division of Wildlife Resources.

Lek, destroyed. A formerly active lek site and surrounding sagebrush habitat that has been destroyed and is no longer suitable for GUSG breeding.

Lek, abandoned. A lek in otherwise suitable habitat that has not been active for 10 consecutive years. To be designated abandoned, a lek must be inactive (see above) in at least four nonconsecutive strutting seasons spanning 10 years. The site of an abandoned lek should be surveyed at least once every 10 years to determine whether it has been reoccupied.

Linkage-connectivity area. Areas that have been identified as potential broad regions of connectivity that may facilitate the movement of Gunnison sage-grouse between populations or habitat areas. Areas offer a heterogeneous landscape, within the historical range of Gunnison sage-grouse, composed of isolated patches of landcover types that may be used by sage-grouse for movement.

Locatable minerals. Minerals subject to exploration, development, and disposal by staking mining claims as authorized by the Mining Act of 1872, as amended. This includes deposits of gold, silver, and other uncommon minerals not subject to lease or sale.

Mineral entry. The filing of a claim on public land to obtain the right to any locatable minerals it may contain.

Mineral estate. The ownership of minerals, including rights necessary for access, exploration, development, mining, ore dressing, and transportation operations.

Mineral material (salable minerals salable mineral materials). Common varieties of mineral materials such as soil, sand and gravel, stone, pumice, pumicite, and clay that are not obtainable under the mining or leasing laws but that can be acquired under the Materials Act of 1947, as amended.

Mineral material sites. Authorized areas that involve sampling, testing and removal of mineral materials, in accordance with 43 CFR 3600. The authorized areas include, but are not limited to, operations and disturbance associated with sampling, mining, access and support activities.

Mineral patent. A claim on which title has passed from the Federal government to the mining claimant under the Mining Law of 1872.

Minimization mitigation. Minimizing impacts by limiting the degree or magnitude of the action and its implementation (40 CFR 1508.20 (b)).

Mining claim. A parcel of land that a miner takes and holds for mining, having acquired the right of possession by complying with the Mining Law of 1872 and local laws and rules. A mining claim may contain as many adjoining locations as the locator may make or buy. There are four categories of mining claims: lode, placer, mill site, and tunnel site.

Mining Law of 1872. Provides for claiming and gaining title to locatable minerals on public lands. Also referred to as the General Mining Law or Mining Law.

Mitigation. Includes specific means, measures, or practices that could reduce, avoid, or eliminate adverse impacts. Mitigation can include avoiding the impact altogether by not taking a certain action or parts of an action, minimizing the impact by limiting the degree of magnitude of the action and its implementation, rectifying the impact by repairing, rehabilitation, or restoring the affected environment, reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action, and compensating for the impact by replacing or providing substitute resources or environments.

Modification. A change to the provisions of a lease stipulation, either temporarily or for the term of the lease. Depending on the specific modification, the stipulation may or may not apply to all sites within the leasehold to which the restrictive criteria are applied.

Monitoring (plan monitoring). The process of tracking the implementation of land use plan decisions and collecting and assessing data necessary to evaluate the effectiveness of land use planning decisions.

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

Multiple-use. The management of public lands and their various resource values so that they are used in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to changing needs and conditions; the use of some land for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output (FLPMA; BLM Manual 6840, Special Status Species Manual).

National Environmental Policy Act of 1969 (NEPA). Public Law 91-190. Establishes environmental policy for the nation. Among other stipulations, NEPA requires Federal agencies to consider environmental values in decision-making processes.

No Ground Disturbance (NGD). Areas restricted by NGD are closed to all surface-disturbing activities. Activities that are not considered surface disturbing include, but are not limited to, livestock grazing, cross-country hiking or equestrian use, installing signs, minimum impact filming, vehicular travel on designated routes, and use of the land by wildlife. An NGD stipulation cannot be applied to operations conducted under the 1872 Mining Law without a withdrawal. A withdrawal is not considered a land use planning decision because it must be approved by the Secretary of the Interior. Therefore,

unless withdrawn, areas identified as NGD are open to operations conducted under the mining laws subject only to TL and CSU stipulations that are consistent with the rights granted under the mining law. In addition, the following actions or activities are not subject to the NGD stipulation because specific laws and program terminology constrain them. However, these actions or activities may be subject to SSR, or TL stipulations: right-of-way location; coal leasing; nonenergy solid mineral leasing; and mineral material disposal.

Nonenergy leasable minerals. Those minerals or materials designated as leasable under the Mineral Leasing Act of 1920. Nonenergy minerals include such resources as phosphate, sodium, potassium, and sulfur.

No surface occupancy (NSO). A major constraint where use or occupancy of the land surface for fluid mineral exploration or development and all activities associated with fluid mineral leasing (e.g., truck-mounted drilling and geophysical exploration equipment off designated routes, construction of wells or pads) are prohibited to protect identified resource values. Areas identified as NSO are open to fluid mineral leasing, but surface occupancy or surface-disturbing activities associated with fluid mineral leasing cannot be conducted on the surface of the land. Access to fluid mineral deposits would require horizontal drilling from outside the boundaries of the NSO area.

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

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

Occupied habitat management area (OHMA). Areas of suitable continuous habitat, which do not have effective barriers to Gunnison sage-grouse movement from known use areas, where breeding takes place or is known to have taken place previously (Rangewide Conservation Plan, USFWS Recovery Plan).

Off-highway vehicle. Any motorized vehicle capable of or designated for travel on or immediately over land, water, or other natural terrain. It excludes the following:

- Any non-amphibious registered motorboat
- Any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes
- Any vehicle whose use is expressly authorized by the BLM Authorized Officer or otherwise officially approved
- Vehicles in official use
- Any combat or combat support vehicle when used for national defense emergencies (43 CFR, Part 8340.0-5)

Open. Generally, denotes that an area is available for a particular use or uses. Refer to specific program definitions found in law, regulations, or policy guidance for application to individual programs. For example, 43 CFR, Part 8340.0-5, defines the specific meaning as it relates to OHV use.

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 expressed in AUMs (43 CFR, Part 4100.0-5; from H-4180-1, BLM Rangeland Health Standards Manual).

Permittee. A person or company permitted to graze livestock on public land.

Plan of operations. Required for all mining exploration on greater than five acres or surface disturbance greater than casual use on certain special category lands. Special category lands are described under 43 CFR, Part 3809.11(c), and include such lands as designated areas of critical environmental concern, lands in the National Wilderness Preservation System, and areas closed to off-road vehicles, among others. In addition, a plan of operations is required for activity greater than casual use on lands patented under the Stock Raising Homestead Act with Federal minerals where the operator does not have the written consent of the surface owner (43 CFR, Part 3814). The plan of operations needs to be filed in the BLM field office with jurisdiction over the land involved. It does not need to be on a particular form but must address the information required by 43 CFR, Part 3809.401(b). It is required for all mining conducted under the General Mining Act of 1872, as amended, if the proposed operations will likely significantly disturb surface resources. The plan of operations describes the type of operations proposed and how they would be conducted, the type and standard of existing and proposed roads or access routes, the means of transportation to be used, the period during which the proposed activity will take place, and measures to be taken to meet the requirements for environmental protection (36 CFR, Part 228.4).

Planned Ignition. See "Prescribed Fire" definition.

Planning area. The geographical area of the BLM administrative units within which the BLM will make decisions during this planning effort.

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

Planning issues. Concerns, conflicts, and problems with the existing management of public lands. Frequently, issues are based on how land uses affect resources. Some issues are concerned with how land uses can affect other land uses or how the protection of resources affects land uses.

Prescribed Fire. A wildland fire originating from a planned ignition in accordance with applicable laws, policies, and regulations to meet specific objectives.

Project area. Encompasses the United States Department of the Interior, Bureau of Land Management, including all lands, regardless of ownership.

Public land. Land or interest in land owned by the United States and administered by the Secretary of the Interior through the BLM without regard to how the United States acquired ownership, except lands on the Outer Continental Shelf and lands held for the benefit of Indians, Aleuts, and Eskimos (H-1601-1, BLM Land Use Planning Handbook).

Range improvement structures. Structures intended to enhance the management of livestock grazing, including, but not limited to, cattleguards, fences, enclosures, corrals, or other livestock handling structures; pipelines; troughs; storage tanks (including moveable tanks used in livestock water hauling); windmills; ponds/reservoirs; solar panels; and spring developments.

Reasonable foreseeable development scenario. The prediction of the type and amount of oil and gas activity that would occur in a given area. The prediction is based on geologic factors, past history of drilling, projected demand for oil and gas, and industry interest.

Reclamation. The suite of actions taken within an area affected by human disturbance, the outcome of which is intended to change the condition of the disturbed area to meet predetermined objectives or to make it acceptable for certain defined resources, such as wildlife habitat, grazing, and ecosystem function.

Recreation-related infrastructure. Recreation infrastructure are those structures intended to enhance the management of recreational opportunities, public education, and/or public health and safety, including, but not limited to, parking lots, vault toilets, kiosks, or accessibility ramps.

Renewable energy. Energy resources that constantly renew themselves or that are regarded as practically inexhaustible. These include solar, wind, geothermal, hydro, and biomass. Although particular geothermal formations can be depleted, the natural heat in the Earth is a virtually inexhaustible reserve of potential energy.

Required design features (RDFs). These are required for certain activities in all sage-grouse habitat. RDFs establish the minimum specifications for certain activities to help mitigate adverse impacts. However, the applicability and overall effectiveness of each RDF cannot be fully assessed until the project begins, when the project location and design are known. Because of site-specific circumstances, some RDFs may not apply to some projects (e.g., a resource is not present on a given site) or may require slight variations (e.g., a larger or smaller protective area). All variations in RDFs will require that at least one of the following be demonstrated in the NEPA analysis associated with the project or activity:

- A specific RDF is documented to not be applicable to the site-specific conditions of the project or activity (e.g., due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable.
- An alternative RDF, State-implemented conservation measure, or plan-level protection is determined to provide equal or better protection for GUSG or its habitat.
- A specific RDF would provide no additional protection to GUSG or its habitat.

Reserve common allotment. An area designated in a land use plan as available for livestock grazing but reserved for use as an alternative to grazing in another allotment to facilitate rangeland restoration treatments and recovery from natural disturbances, such as drought or wildfire.

Resource management plan. A land use plan as prescribed by FLPMA that establishes, for a given area of land, land use allocations, coordination guidelines for multiple use, objectives, and actions to be achieved.

Restore/restoration. Implementation of a set of actions that promotes plant community diversity and structure that allows plant communities to be more resilient to disturbance and invasive species over the long term. The long-term goal is to create functional high quality habitat that is occupied by GUSG. The short-term goals may be to restore the landform, soils, and hydrology and to increase the percentage of preferred vegetation, seeding of desired species, or treatment of undesired species.

Residual impacts. Impacts that remain after applying avoidance and minimization mitigation; also referred to as unavoidable impacts.

Restriction/restricted use. A limitation or constraint on public land uses and operations. Restrictions can be of any kind, but they most commonly apply to certain types of vehicle use, temporal or spatial constraints, or certain authorizations.

Right-of-way (ROW). Public lands authorized to be used or occupied for specific purposes, pursuant to a right-of-way grant, which are in the public interest and require ROWs over, on, under, or through such lands.

Right-of-way avoidance area. An area identified through resource management planning to be avoided but may be available for ROW location with special stipulations.

Right-of-way exclusion area. An area identified through resource management planning that is not available for ROW location under any conditions.

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

Road, primitive (primitive road). Linear routes managed for use by four-wheel drive or high clearance vehicles. Primitive roads do not normally meet any BLM road design standards and are not regularly maintained.

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

Satellite population. These populations are the San Miguel Basin, Piñon Mesa, Crawford, Cerro Summit-Cimarron-Sims Mesa, Poncha Pass, and Dove Creek populations in southwestern Colorado and the Monticello population in southeastern Utah (see Figure 1 in the USFWS Final Recovery Plan for Gunnison Sage-Grouse).

Scoping process. An early and open public participation process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action.

Seeding. Seeding is a vegetation treatment that applies grass, forb, or shrub seed, either by air or on the ground. In areas of gentle terrain, seed is often applied with a rangeland drill.

Severe winter range/area. That portion of the overall habitat range of the species where activity is greater than the surrounding overall habitat range. For severe winter range areas it could be considered as the part of winter habitat range where 90 percent of the individuals are located when annual snow pack is at its maximum and/or temperatures are at a minimum in the two worst winters out of ten. For Colorado, the winters of 1983-84 or 1996-97 are good examples.

Special status species. BLM special status species are those listed, candidate, or proposed for listing under the Endangered Species Act and those requiring special management consideration to promote their conservation and to reduce the likelihood and need for future listing under the Endangered Species Act that are designated as BLM sensitive by the BLM State Director. All Federally listed candidate species, proposed species, and delisted species in the five years following delisting are conserved as BLM sensitive species.

Split-estate. This is the circumstance where the surface of a particular parcel of land is owned by a different party than the one that owns the minerals underlying the surface. Split-estates may have any

combination of surface or subsurface owners: Federal/State, Federal/private, State/private, or percentage ownerships. When referring to split-estate ownership on a particular parcel of land, it is generally necessary to describe the surface or subsurface ownership pattern of the parcel.

Standard lease terms and conditions. Areas may be open to leasing with no specific management decisions defined in a resource management plan; however, these areas are subject to lease terms and conditions defined on the lease form (Form 3100-11, Offer to Lease and Lease for Oil and Gas; and Form 3200-24, Offer to Lease and Lease for Geothermal Resources).

Stipulation (general). A term or condition in an agreement or contract.

Stipulation (oil and gas). A provision that modifies standard oil and gas lease terms and conditions in order to protect other resource values or land uses and is attached to and made a part of the lease. Typical lease stipulations include no surface occupancy, timing limitations, and controlled surface use. Lease stipulations are developed through the land use planning (RMP) process.

Suppression. All the work to extinguish or limit wildland fire spread.

Surface disturbance. Suitable habitat is considered disturbed when it is removed and unavailable for immediate sage-grouse use.

- Long-term removal occurs when habitat is removed through activities that replace suitable habitat with long-term occupancy of unsuitable habitat, such as roads, power lines, well pads, or active mines. Long-term removal may also result from any activities that cause soil mixing, soil removal, and soil exposure to erosion.
- Short–term removal occurs when vegetation is removed in small areas but is restored to suitable habitat within fewer than five years of disturbance, such as a successfully reclaimed pipeline, or successfully reclaimed drill hole or pit.
- Suitable habitat rendered unusable due to numerous human disturbances.
- Human surface disturbance are surface disturbances meeting the above definitions that result from human activities.

Surface-disturbing activities. An action that alters the vegetation, surface/near surface soil resources, or surface geologic features, beyond natural site conditions and on a scale that affects other public land values. Examples of surface-disturbing activities may include operation of heavy equipment to construct well pads, roads, pits and reservoirs; installation of pipelines and power lines; and the conduct of several types of vegetation treatments (e.g., prescribed fire). Surface-disturbing activities may be either authorized or prohibited.

Surface use. This is all the various activities that may be present on the surface or near-surface, such as pipelines, of public lands. It does not refer to those subterranean activities, such as mining, occurring on public lands or Federal mineral estate. When administered as a use restriction (e.g., no surface use), this phrase prohibits all but specified resource uses and activities in a certain area to protect particular sensitive resource values and property. This designation typically applies to small acreage sensitive resource sites (e.g., plant community study exclosure) or administrative sites (e.g., government ware-yard) where only authorized agency personnel are admitted.

Tall structure. A tall structure is defined as any man-made structure that provides for perching/nesting opportunities for predators (e.g., raptors, ravens) that may naturally be absent, or that decreases the use of an area. A determination as to whether something is considered a tall structure would be made

based on local conditions, such as existing vegetation or topography. Tall structures include but are not limited to: communication towers, meteorological towers, power lines, and transmission lines.

Tier 1 habitat. Per the Candidate Conservation Agreement for the Gunnison Sage-Grouse, *Centrocercus minimus* Gunnison Basin Population, Tier 1 habitats are areas identified by the Habitat Prioritization Tool (Gunnison Basin Sage-grouse Strategic Committee 2018), and are generally characterized by two or more overlapping seasonal habitats and minimal existing development (roads and homes).

Tier 2 habitat. Per the Candidate Conservation Agreement for the Gunnison Sage-Grouse, *Centrocercus minimus* Gunnison Basin Population, Tier 2 habitats are areas identified by the Habitat Prioritization Tool (Gunnison Basin Sage-grouse Strategic Committee 2018), and generally represent the more fragmented areas on the landscape. The standards for grouse conservation in Tier 2 habitat should be consistent with the Rangewide Conservation Plan, to the extent practicable. The Rangewide Conservation Plan is a baseline for grouse management in the Basin.

Timeliness. The lack of a time lag between impacts and the achievement of compensatory mitigation goals and objectives (BLM Manual Section 1794).

Timing limitation (TL). The TL stipulation, a moderate constraint, is applicable to fluid mineral leasing, all activities associated with fluid mineral leasing (e.g., truck-mounted drilling and geophysical exploration equipment off designated routes, and construction of wells and pads), and other surface-disturbing activities (those not related to fluid mineral leasing). Areas identified for TL are closed to fluid mineral exploration and development, surface-disturbing activities, and intensive human activity during identified time frames. This stipulation does not apply to operation and basic maintenance activities, including associated vehicle travel, unless otherwise specified. Construction, drilling, completions, and other operations considered to be intensive are not allowed. Intensive maintenance, such as workovers on wells, is not permitted. TLs can overlap spatially with NSO and CSU, as well as with areas that have no other restrictions.

Trail. A linear route managed for human-powered, stock, or off-highway vehicle forms of transportation or for historical or heritage values. Trails are not generally managed for use by four-wheel drive or high-clearance vehicles.

Transfer of grazing preference. The BLM's approval of an application to transfer grazing preference from one party to another or from one base property to another or both. Grazing preference means a superior or priority position against others for receiving a grazing permit or lease. This priority is attached to base property owned or controlled by the permittee or lessee.

Transmission. The movement or transfer of electric energy over an interconnected group of lines and associated equipment between points of supply and points at which it is transformed for delivery to consumers or is delivered to other electric systems. Transmission is considered to end when the energy is transformed for distribution to the consumer.

Transmission line (large). An electrical utility line with a capacity greater than or equal to 69 kilovolts or a natural gas, hydrogen, or water pipeline greater than or equal to 24 inches in diameter.

Travel management areas. Polygons or delineated areas where a rational approach has been taken to classify areas as open, closed, or limited and where a network of roads, trails, ways, landing strips, and other routes have been identified or designated that provide for public access and travel across the planning area. All designated travel routes within travel management areas should have a clearly

identified need and purpose and clearly defined activity types, modes of travel, and seasons or time frames for allowable access or other limitations (BLM Handbook H-1601-1, Land Use Planning Handbook).

Unitization. Operation of multiple leases as a single lease under a single operator.

Unoccupied habitat management area (UHMA). Areas outside of occupied habitat that were likely formerly occupied by Gunnison sage-grouse and may still contain some of the appropriate biological and physical characteristics for Gunnison sage-grouse habitat recovery (USFWS Recovery Plan).

Use of Wildland Fire. Management of wildfire or prescribed fire to meet resource objectives specified in land/resource management plans.

Utility corridor. Tract of land varying in width forming passageway through which various commodities are transported, such as oil, gas, and electricity.

Valid existing rights. Documented legal rights or interests in the land that allow a person or entity to use said land for a specific purpose and that are still in effect. Such rights include fee title ownership, mineral rights, rights-of-way, easements, permits, and licenses. Such rights may have been reserved, acquired, leased, granted, permitted, or otherwise authorized over time.

Vegetation treatments. Management practices that change the vegetation structure to a different stage of development. Vegetation treatment methods include use of wildland fire, chemical, mechanical, and seeding.

Wildfire. A wildland fire originating from an unplanned ignition, such as lightning, volcanos, unauthorized and accidental human-caused fires, and prescribed fires that are declared wildfires.

Wildland fire. Any non-structure fire that occurs in vegetation or natural fuels. Includes wildfires and prescribed fires.

Wildland fire use. *A term no longer used; these fires are now included in the "Use of Wildland Fire" definition.*

Withdrawal. An action that restricts the use of public land and segregates the land from the operation of some or all of the public land and mineral laws. Withdrawals are also used to transfer jurisdiction of management of public lands to other Federal agencies.

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APPENDIX A. MAPS

A.1. Introduction A-1

A.2. Maps A-1

Map A.1. GUSG Approved RMP Amendment Decision Area A-2
Map A.2. GUSG Occupied and Unoccupied Habitat Management Areas and Linkage Connectivity Management Areas, BLM Lands A-3
Map A.3. GUSG Occupied and Unoccupied Habitat Management Areas and Adjacent Non-Habitat 1-mile Buffer, BLM Lands A-4
Map A.4. GUSG Occupied and Unoccupied Habitat Management Areas and Linkage Connectivity Management Areas, All Jurisdictions A-5
Map A.5. GUSG Occupied and Unoccupied Habitat Management Areas and Adjacent Non-habitat (1-mile Buffer), All Jurisdictions A-6
Map A.6. Livestock Grazing Management – Areas Available for Livestock Grazing – Approved RMP Amendment A-7
Map A.7. Recreation – Recreation Management Areas – Approved RMP Amendment A-8
Map A.8. Travel and Transportation – OHV Designations – Approved RMP Amendment A-9
Map A.9. Travel and Transportation – OHV Route Designations in the Gunnison Basin – Approved RMP Amendment A-10
Map A.10. Fluid Minerals Leasing – Approved RMP Amendment A-11
Map A.11. Locatable Minerals – Withdrawals – Approved RMP Amendment A-12
Map A.12. Salable Minerals – Mineral Material Disposal – Approved RMP Amendment A-13
Map A.13. Leasable Solid Mineral Designations – Approved RMP Amendment A-14
Map A.14. Lands and Realty – Right-of-Way Exclusion and Avoidance Areas – Approved RMP Amendment A-15
Map A.15. Renewable Energy – Wind Energy Exclusion Areas – Approved RMP Amendment A-16
Map A.16. Renewable Energy – Solar Energy Exclusion Areas – Approved RMP Amendment A-17
Map A.17. Areas of Critical Environmental Concern – Approved RMP Amendment A-18
Map A.18. Dry Creek Basin ACEC A-19
Map A.19. Chance Gulch ACEC A-20
Map A.20. Sapinero Mesa ACEC A-21
Map A.21. Gunnison Sage-Grouse Important Bird Area (IBA)/ACEC A-22
Map A.22. West Antelope Creek ACEC A-23
Map A.23. South Beaver Creek ACEC A-24

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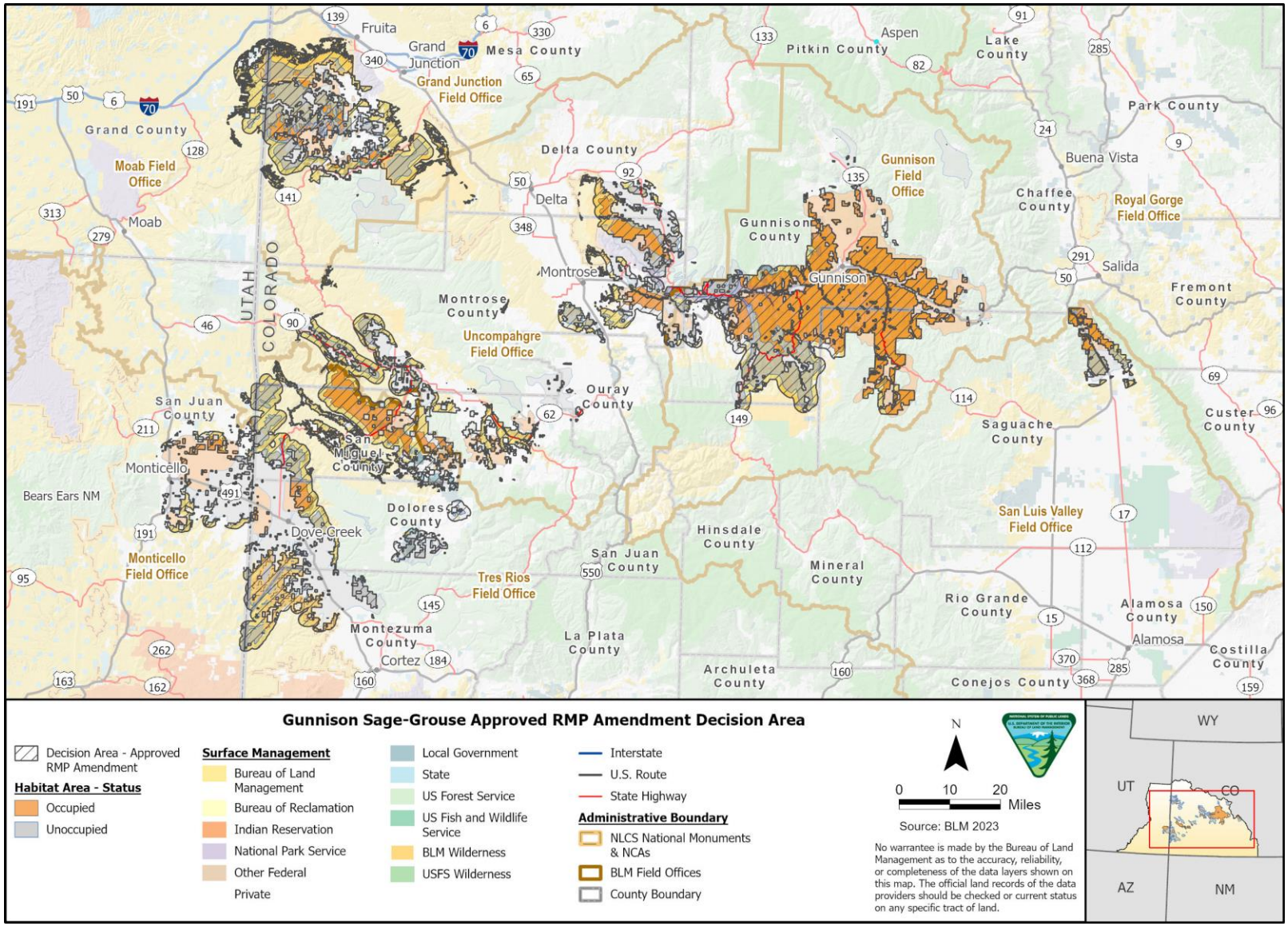
A.1. INTRODUCTION

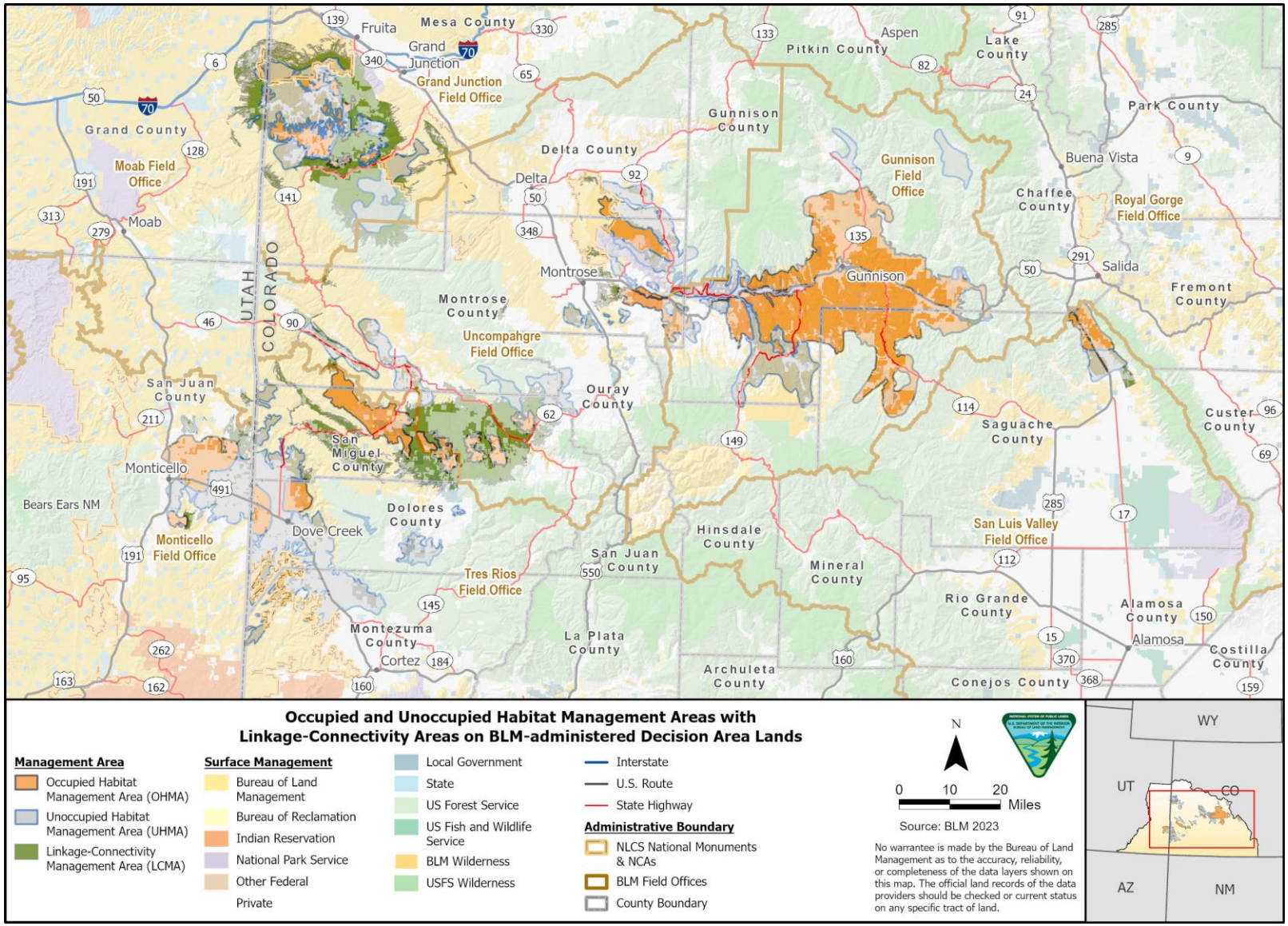
The maps in this appendix are intended to support the information presented in the Gunnison Sage-grouse (GUSG) Approved Resource Management Plan (RMP) Amendment (ARMPA). The maps show the areas that would be allocated or restricted for each resource or resource use, based on the management actions and allowable uses in the ARMPA. For this planning effort, no change was made to existing RMP decisions that provided more protective measures for resources. For example, if there was an existing right-of-way exclusion area to protect cultural resources, the existing decision developed during the localized planning process of the applicable RMP will prevail, if more protective. All management decisions recognize valid existing rights and are only applicable to Bureau of Land Management-administered surface lands and mineral estate.

A.2. MAPS

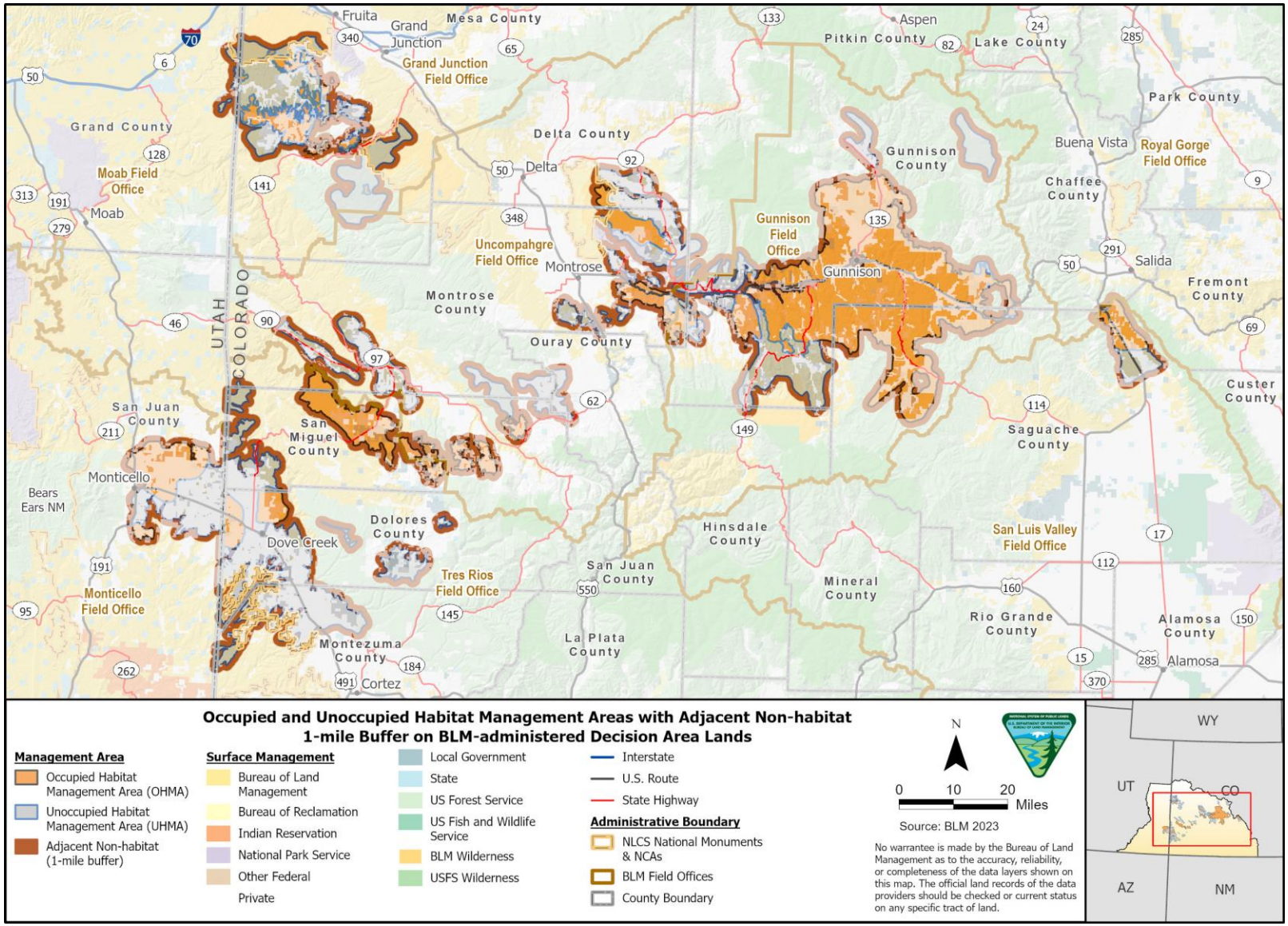
Map A.1. GUSG Approved RMP Amendment Decision Area



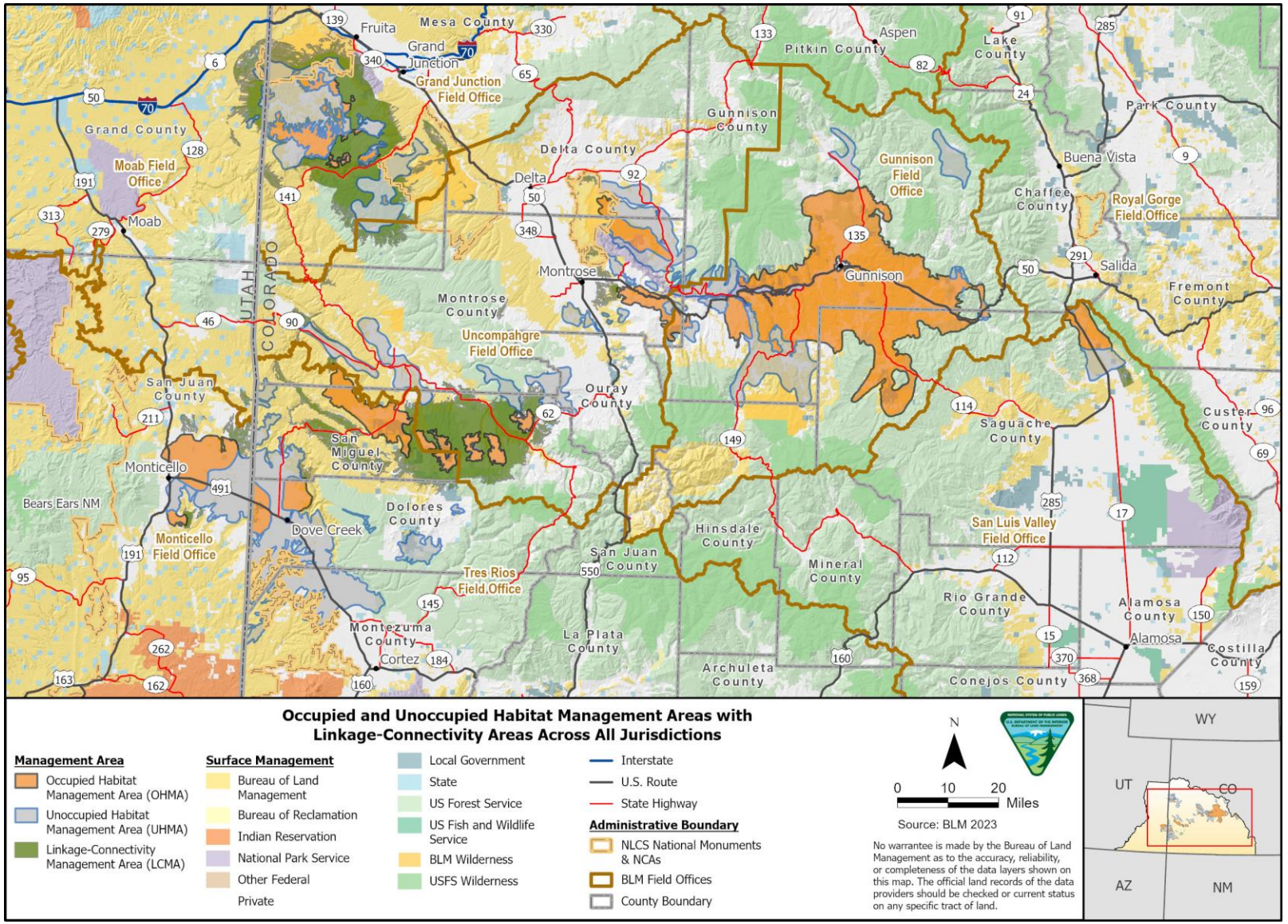
Map A.2. GUSG Occupied and Unoccupied Habitat Management Areas and Linkage Connectivity Management Areas, BLM Lands



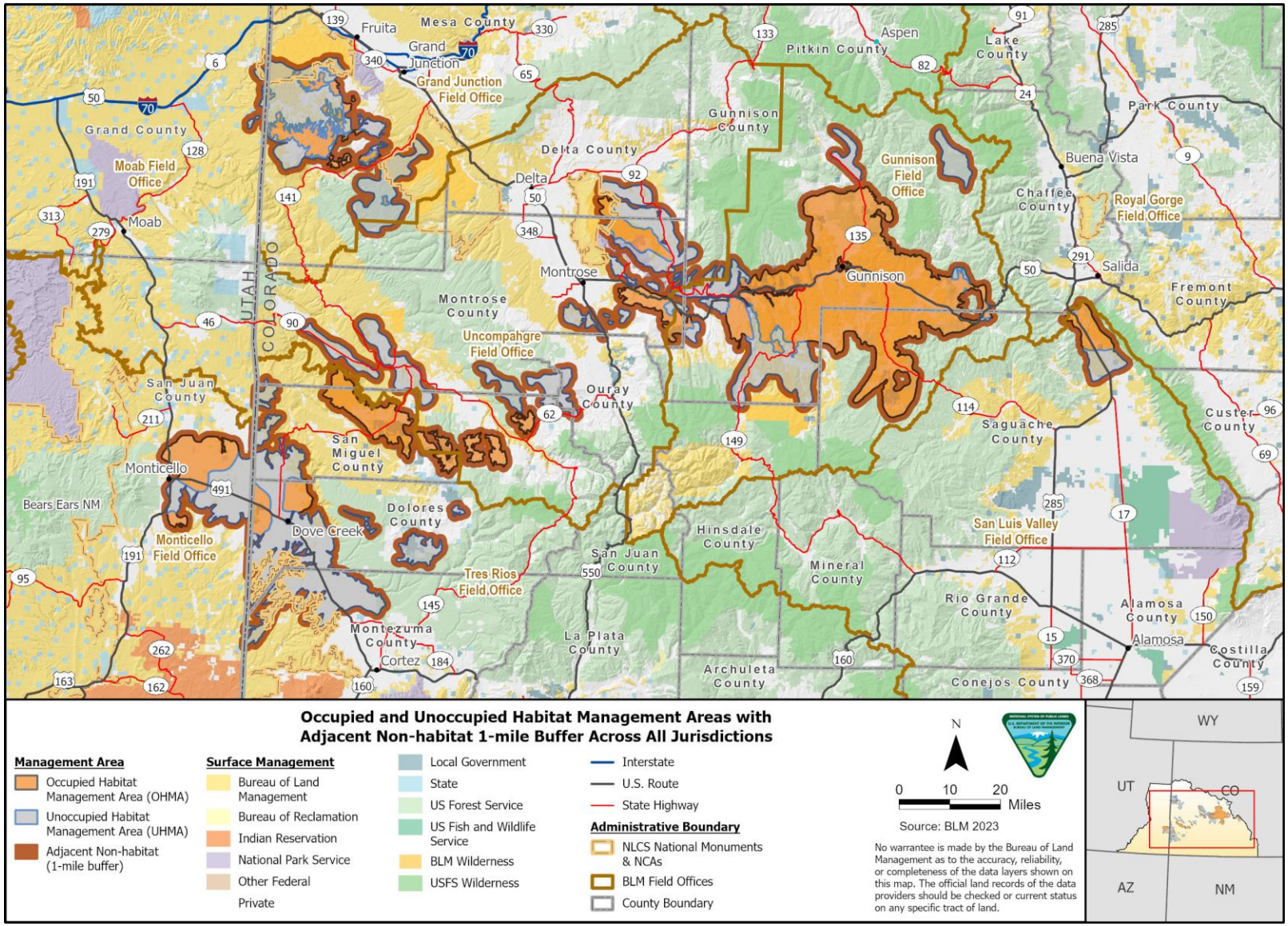
Map A.3. GUSG Occupied and Unoccupied Habitat Management Areas and Adjacent Non-Habitat 1-mile Buffer, BLM Lands



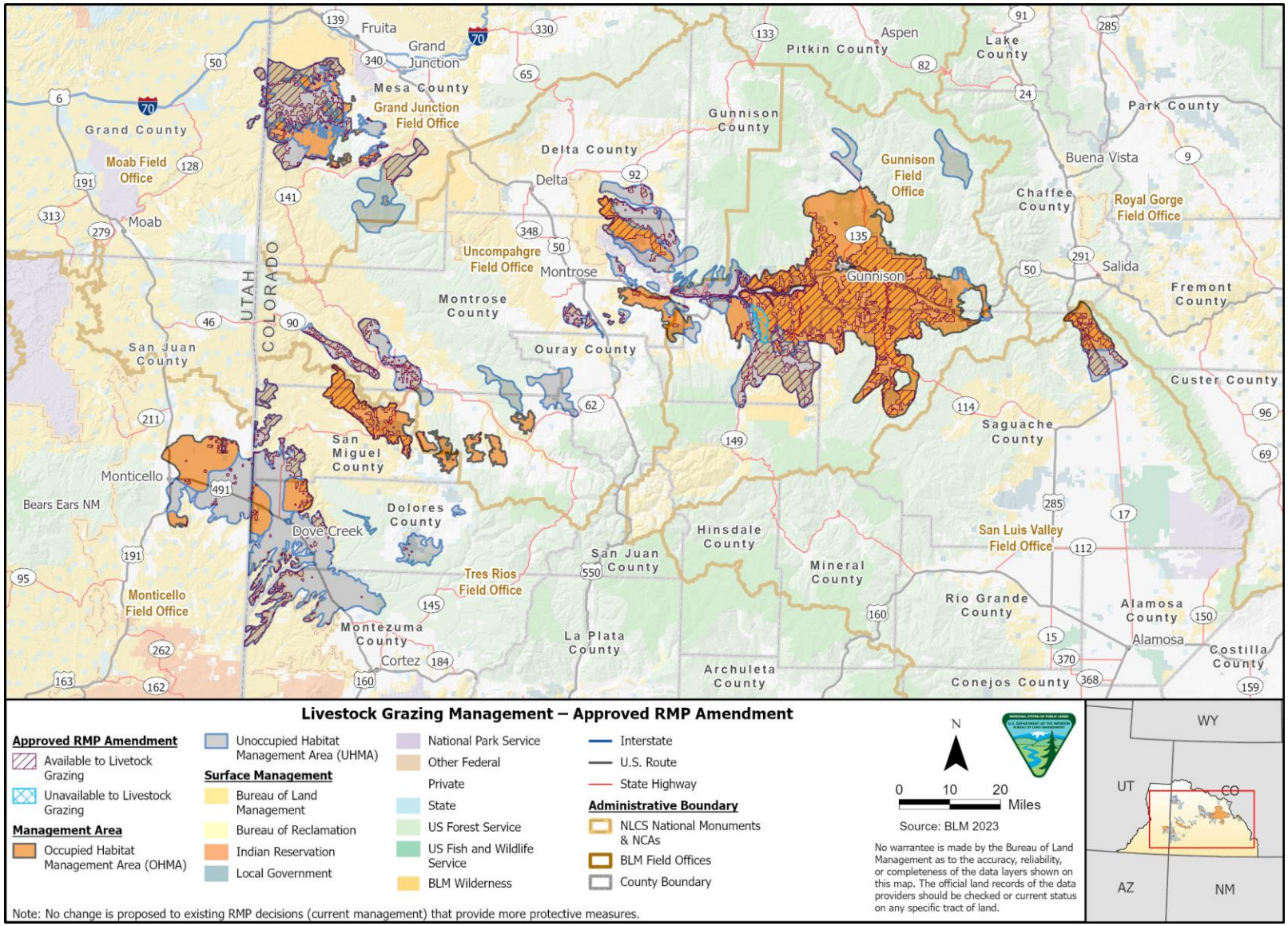
Map A.4. GUSG Occupied and Unoccupied Habitat Management Areas and Linkage Connectivity Management Areas, All Jurisdictions



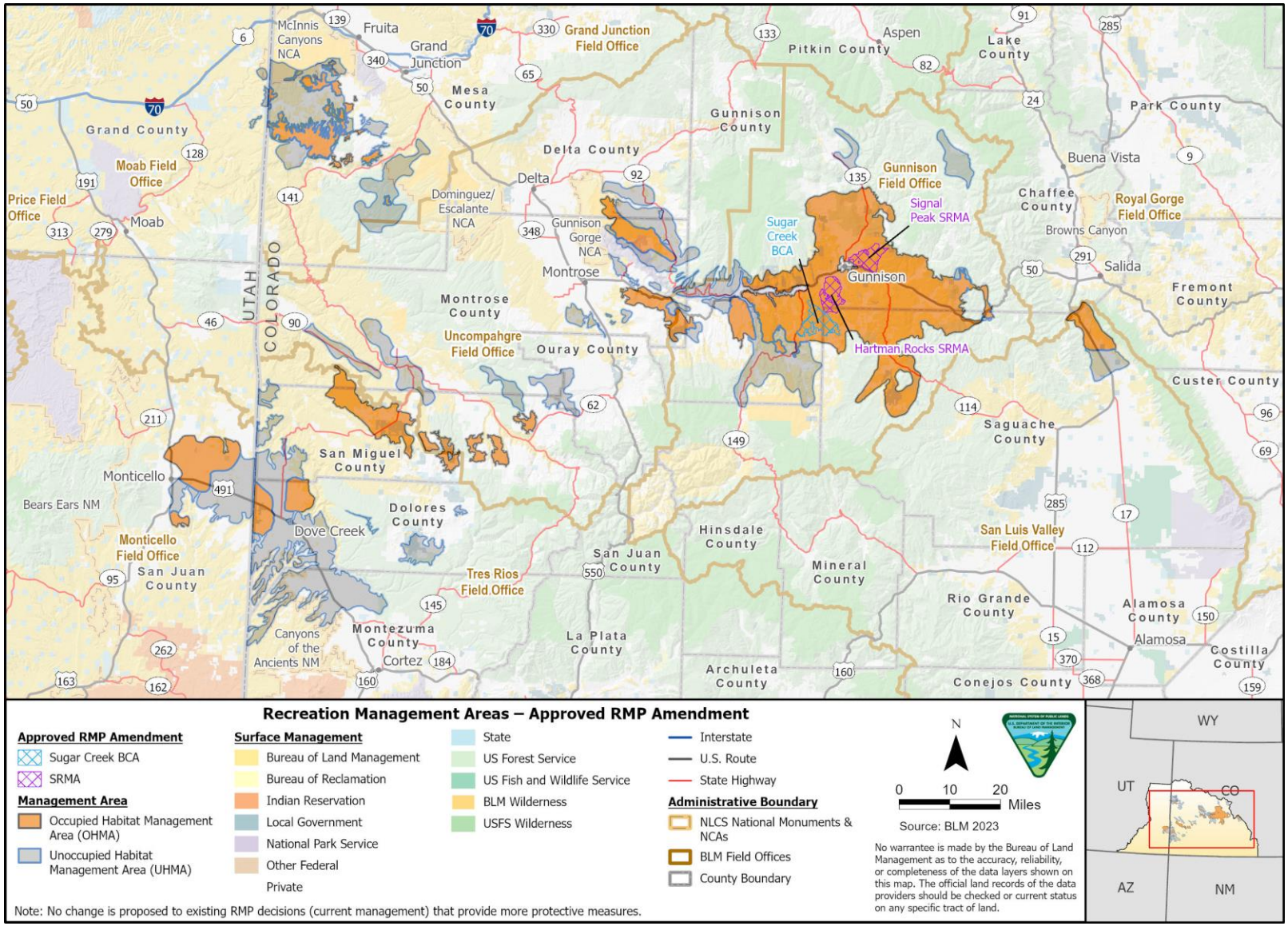
Map A.5. GUSG Occupied and Unoccupied Habitat Management Areas and Adjacent Non-habitat (1-mile Buffer), All Jurisdictions



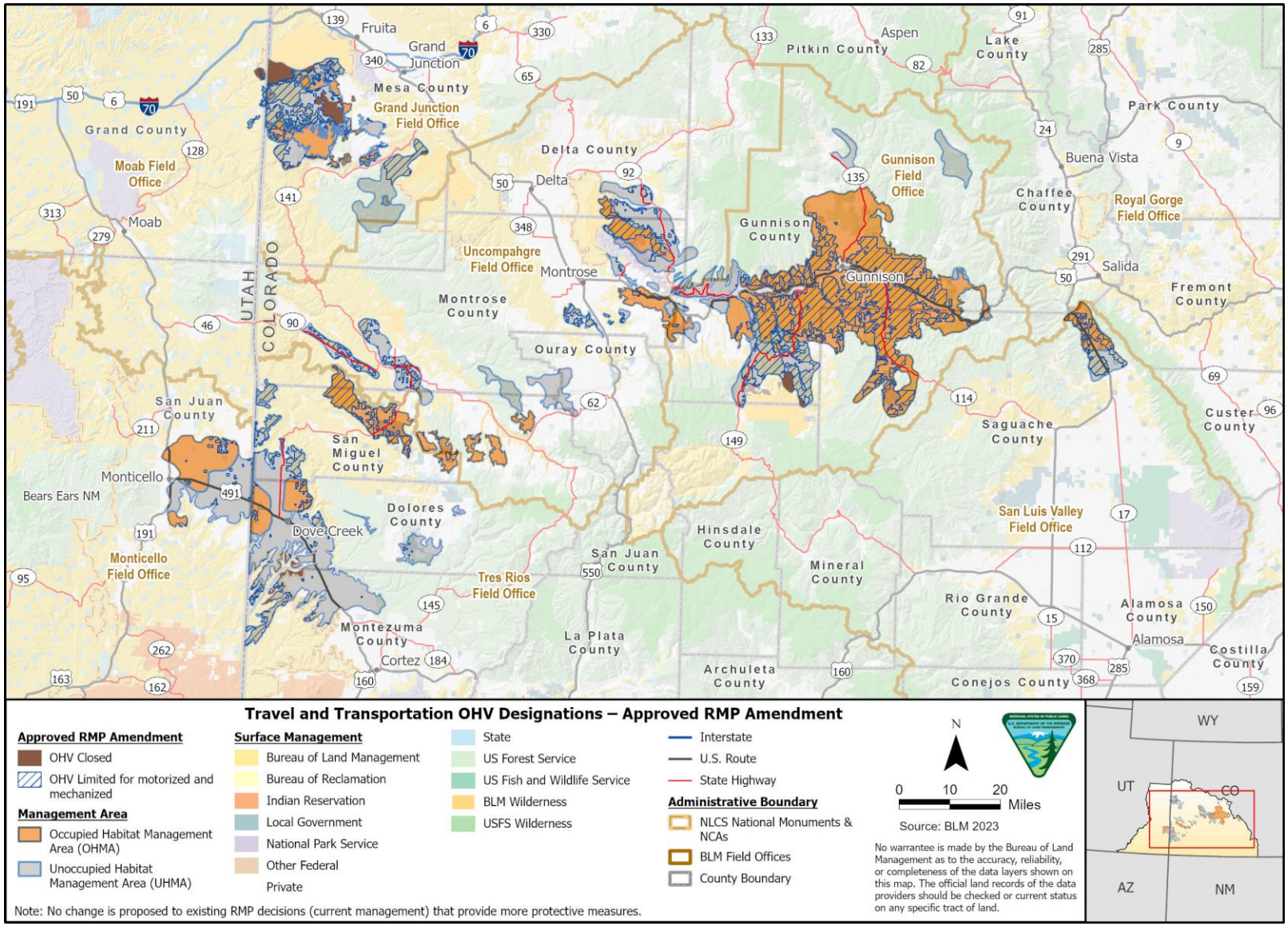
Map A.6. Livestock Grazing Management – Areas Available for Livestock Grazing – Approved RMP Amendment



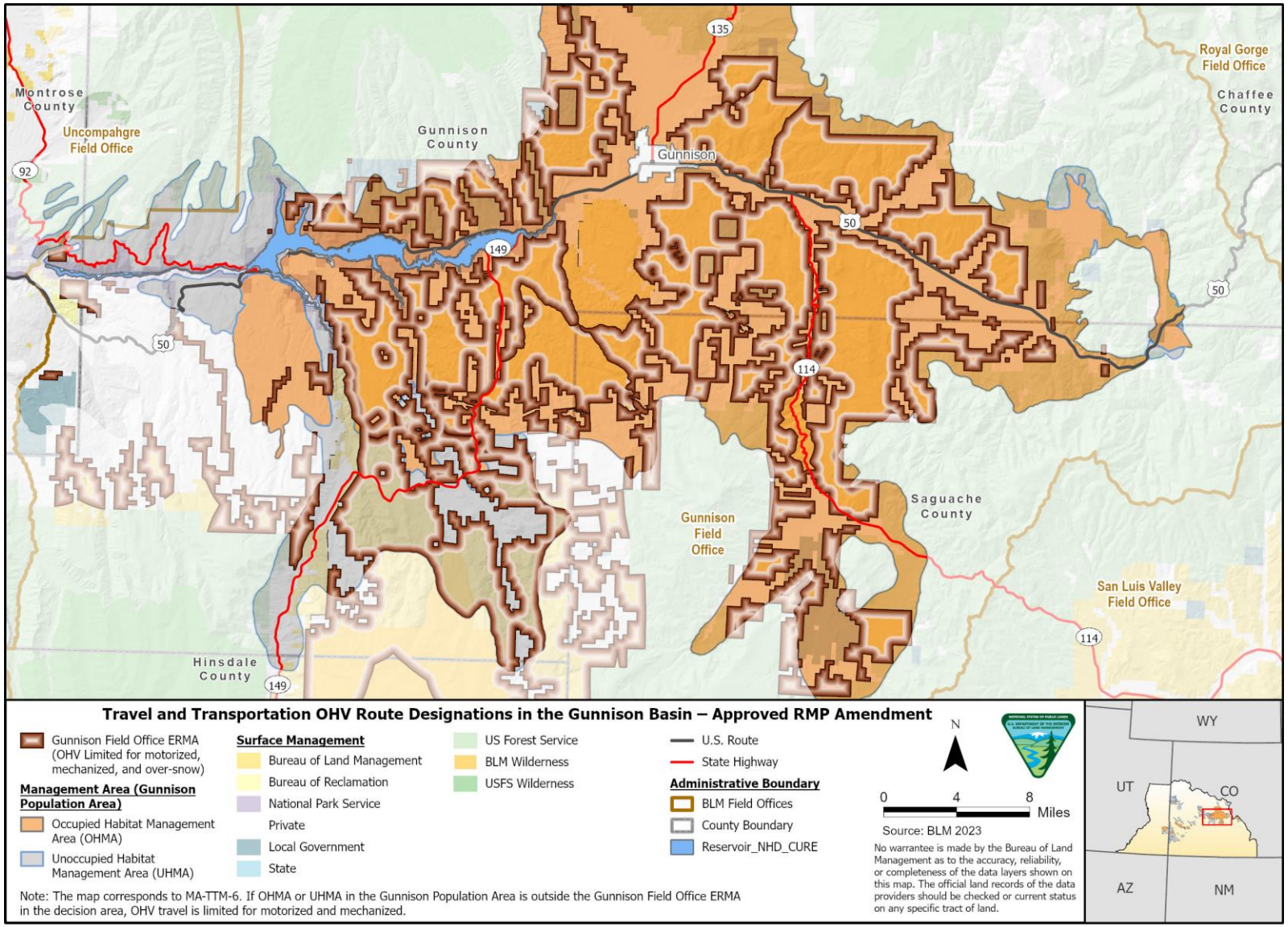
Map A.7. Recreation – Recreation Management Areas – Approved RMP Amendment



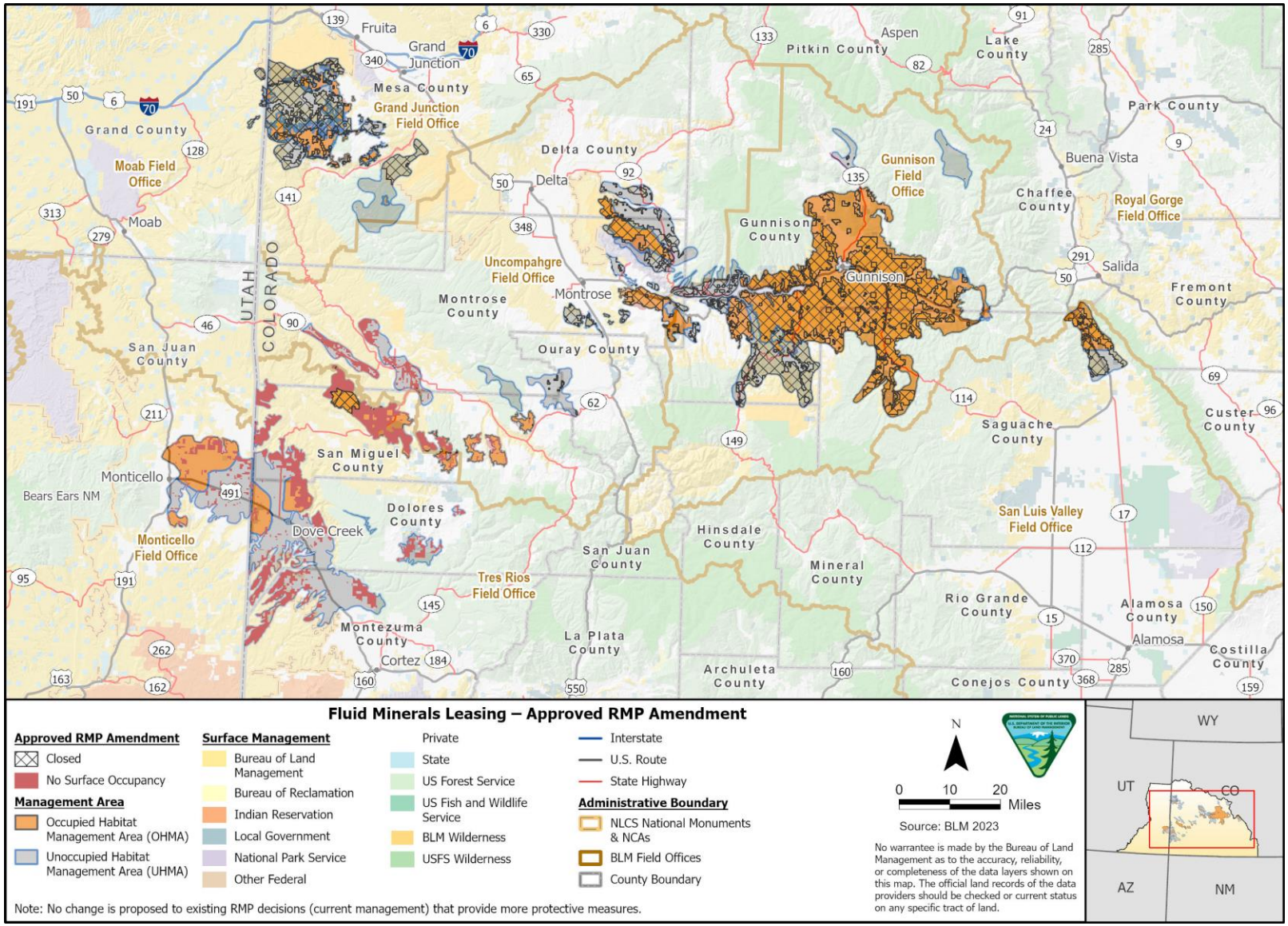
Map A.8. Travel and Transportation – OHV Designations – Approved RMP Amendment



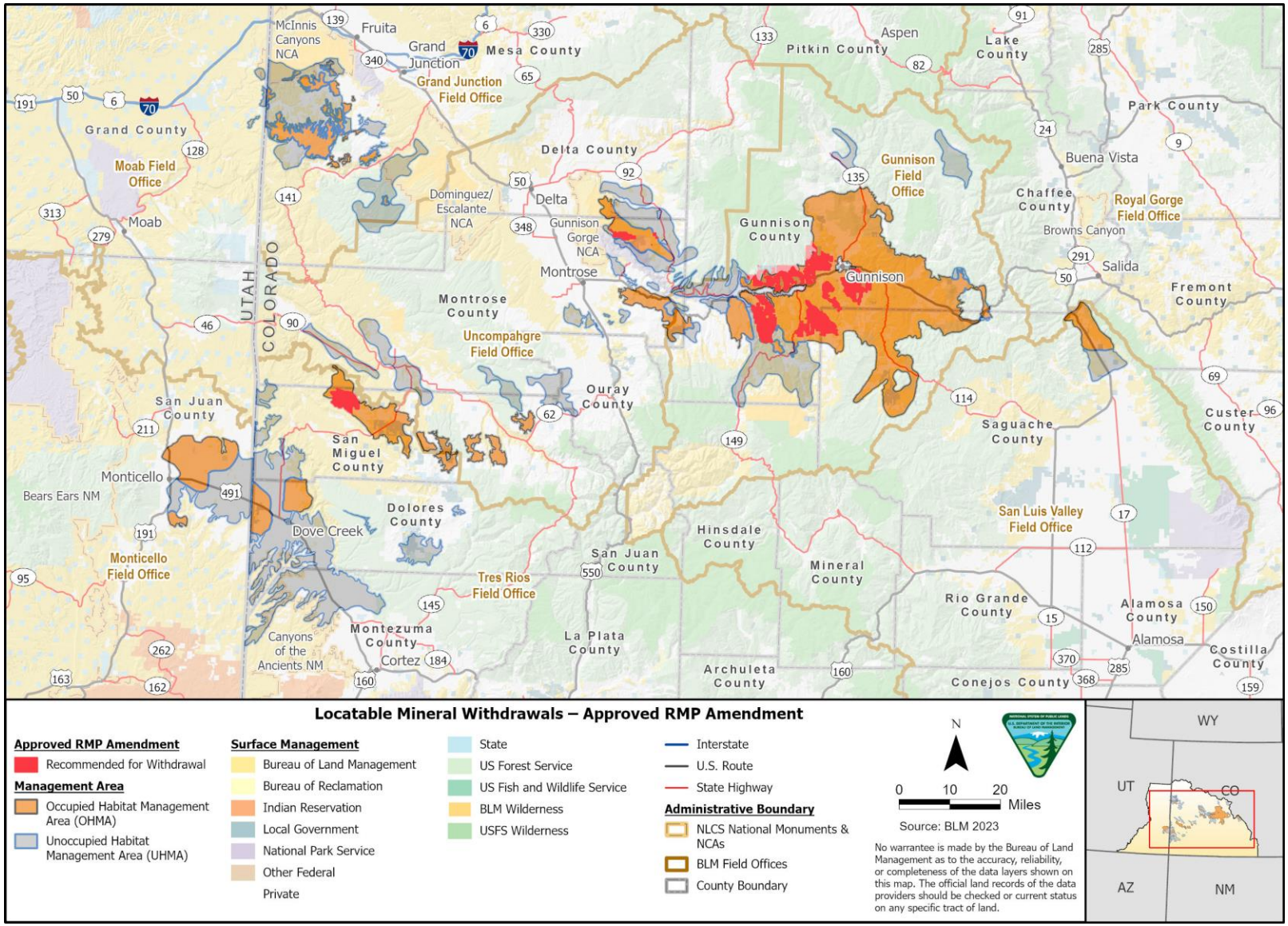
Map A.9. Travel and Transportation – OHV Route Designations in the Gunnison Basin – Approved RMP Amendment



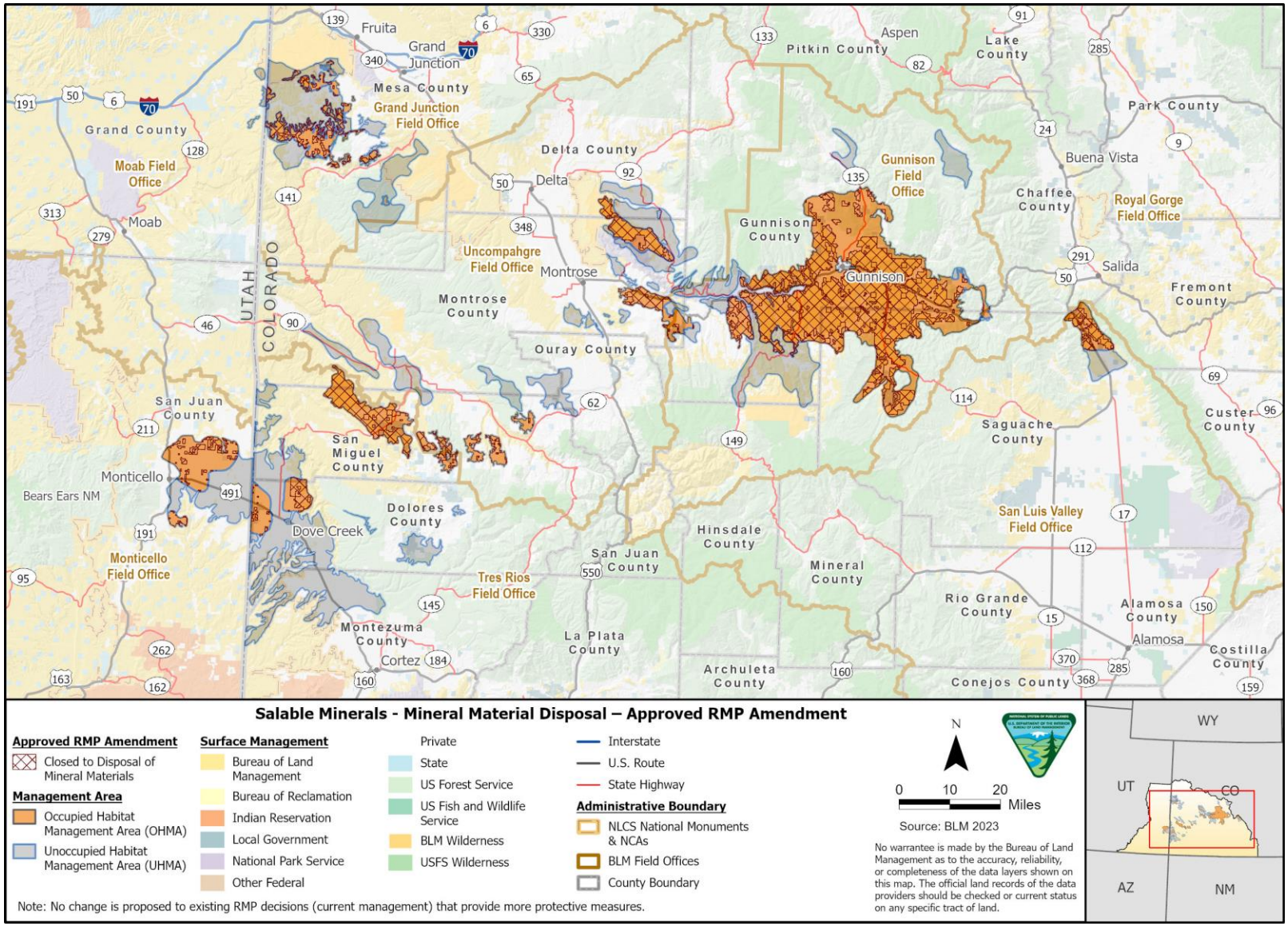
Map A.10. Fluid Minerals Leasing – Approved RMP Amendment



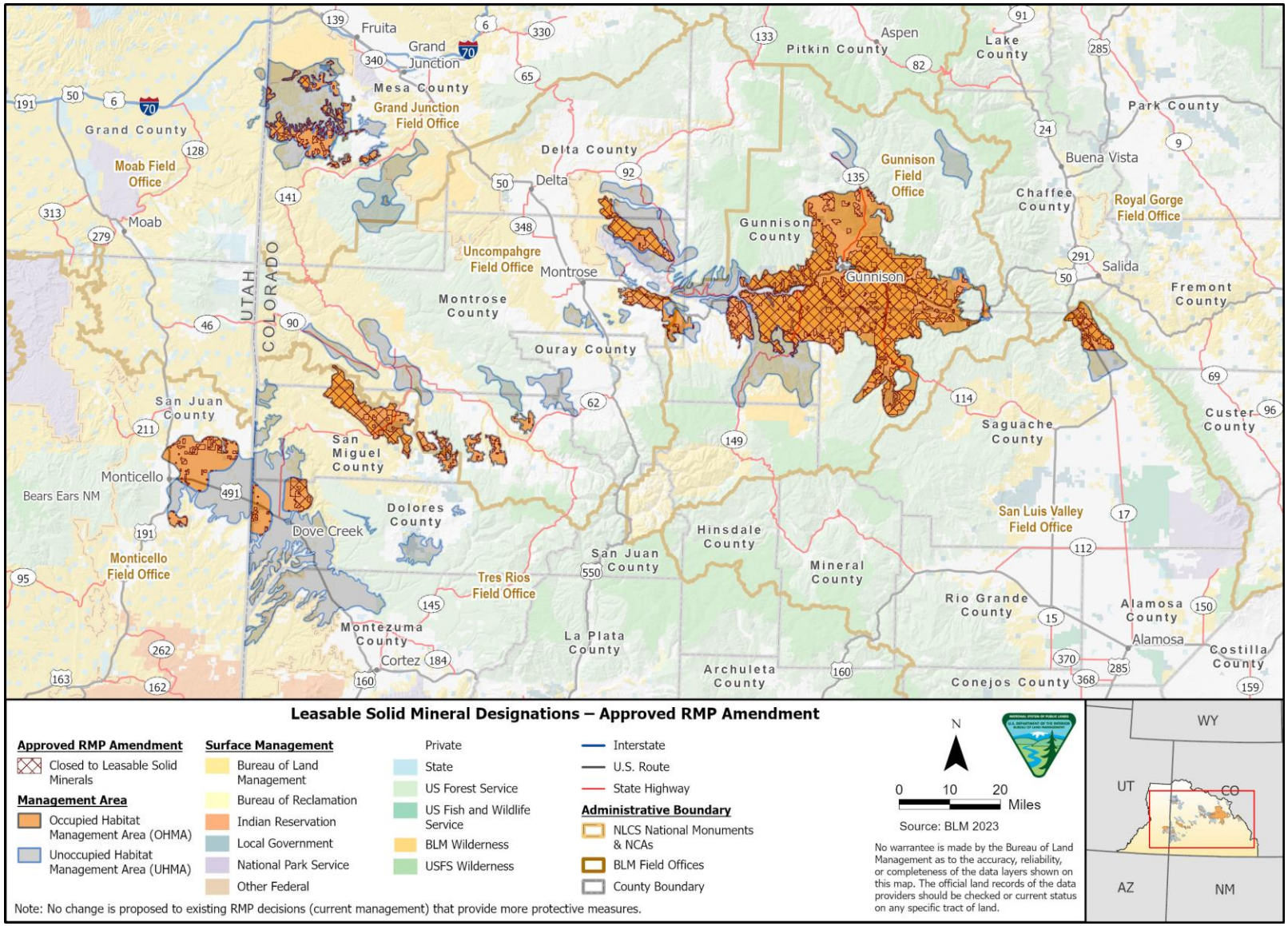
Map A.11. Locatable Minerals – Withdrawals – Approved RMP Amendment



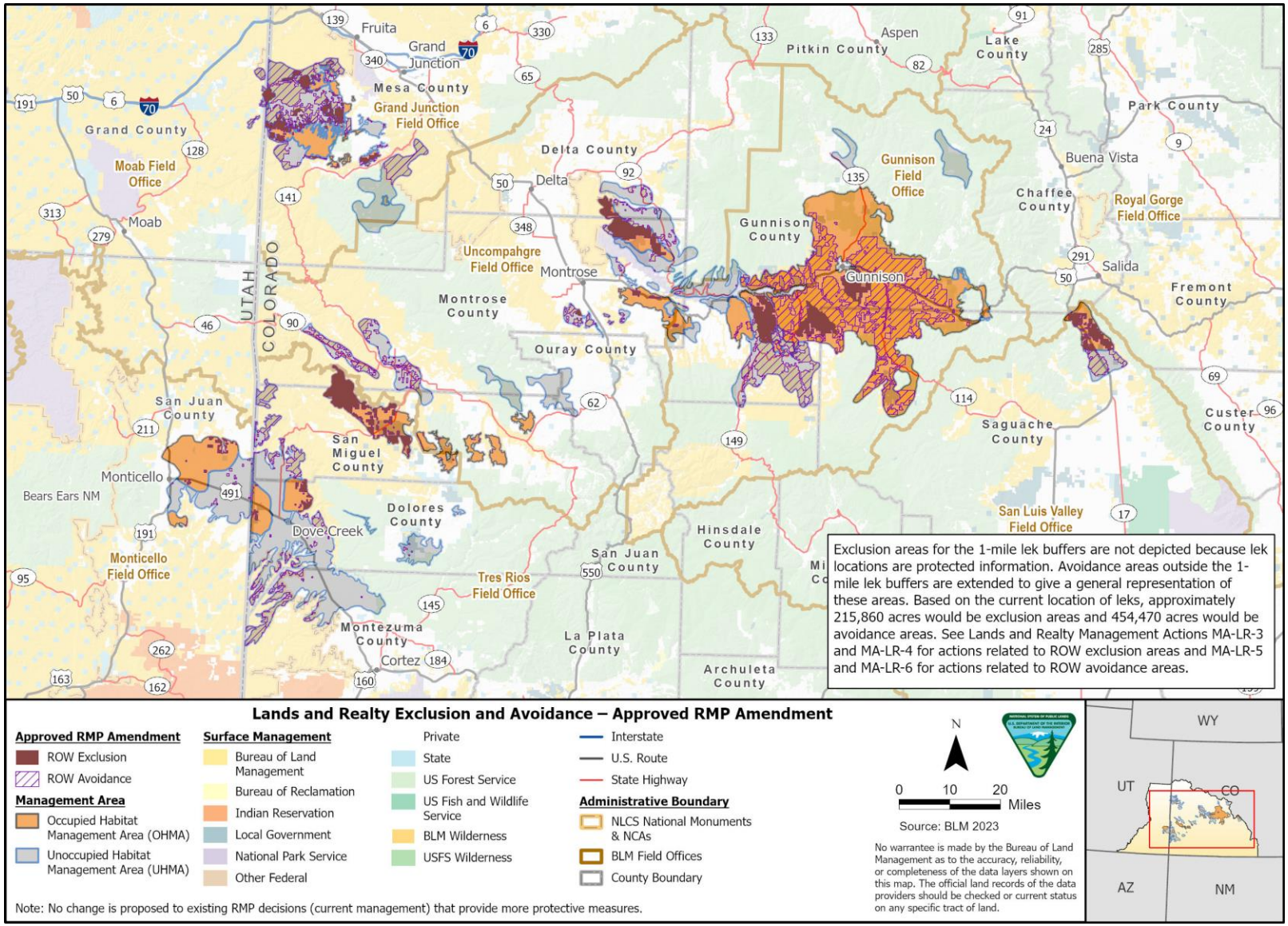
Map A.12. Salable Minerals – Mineral Material Disposal – Approved RMP Amendment



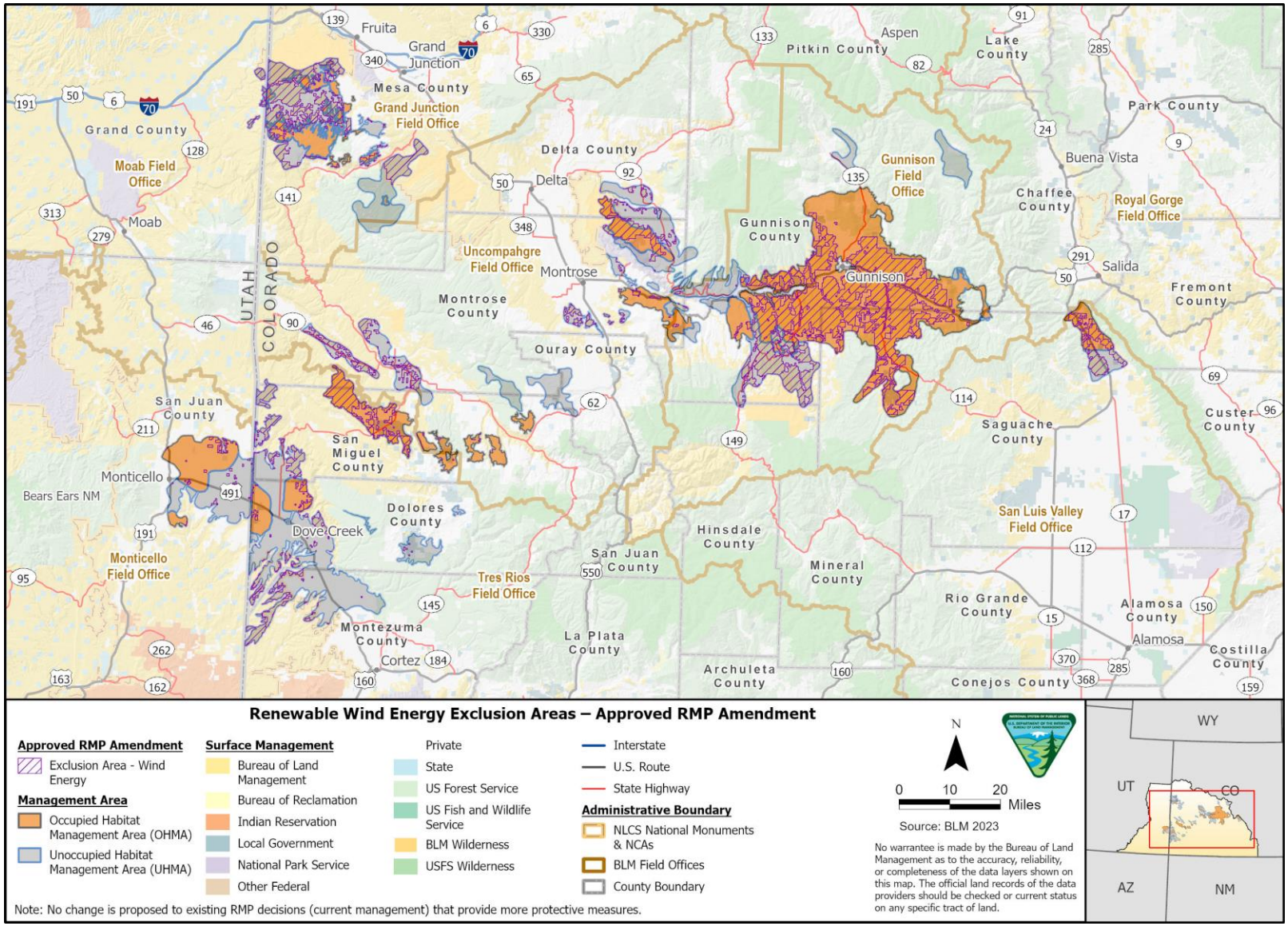
Map A.13. Leasable Solid Mineral Designations – Approved RMP Amendment



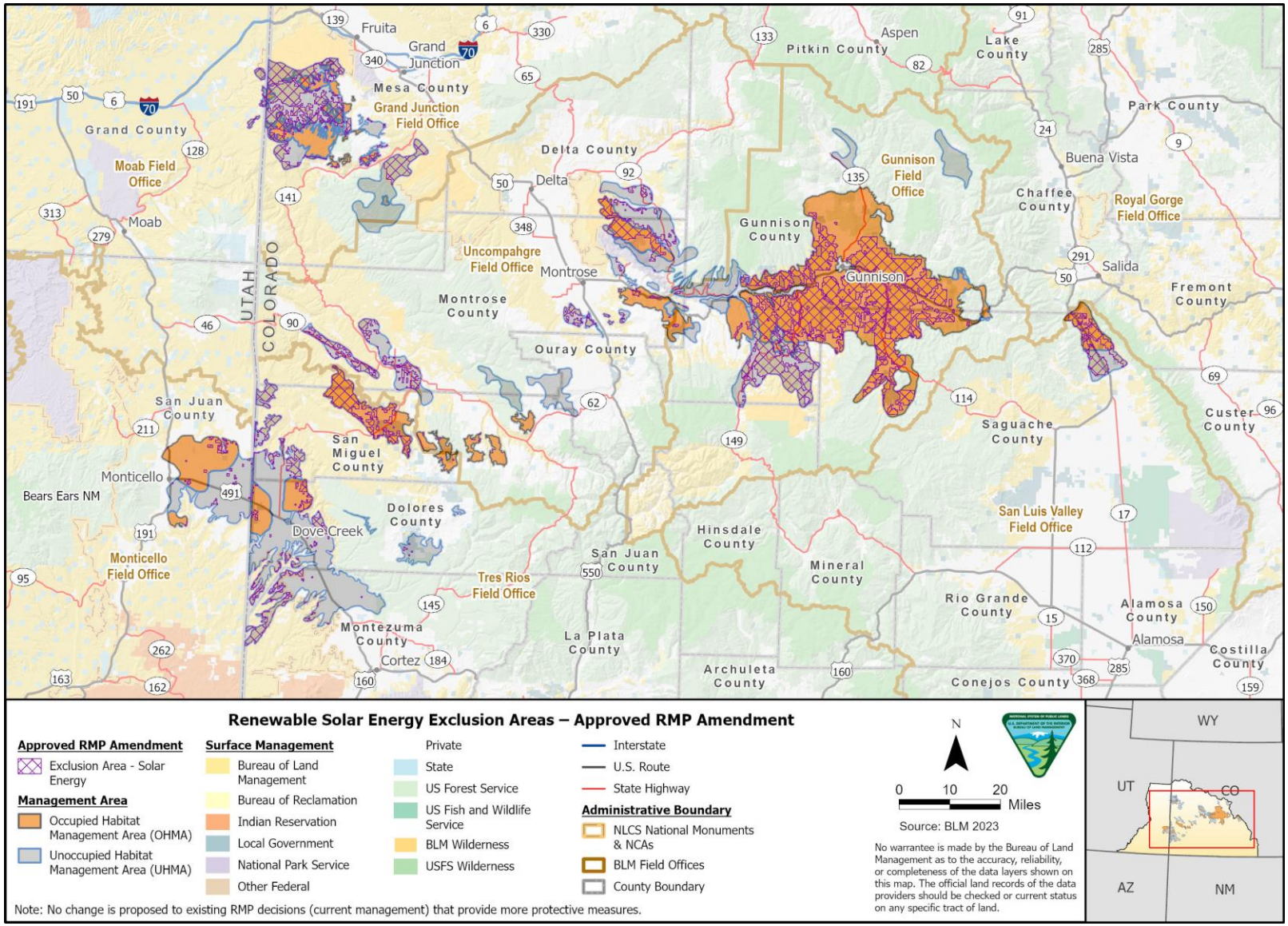
Map A.14. Lands and Realty – Right-of-Way Exclusion and Avoidance Areas – Approved RMP Amendment



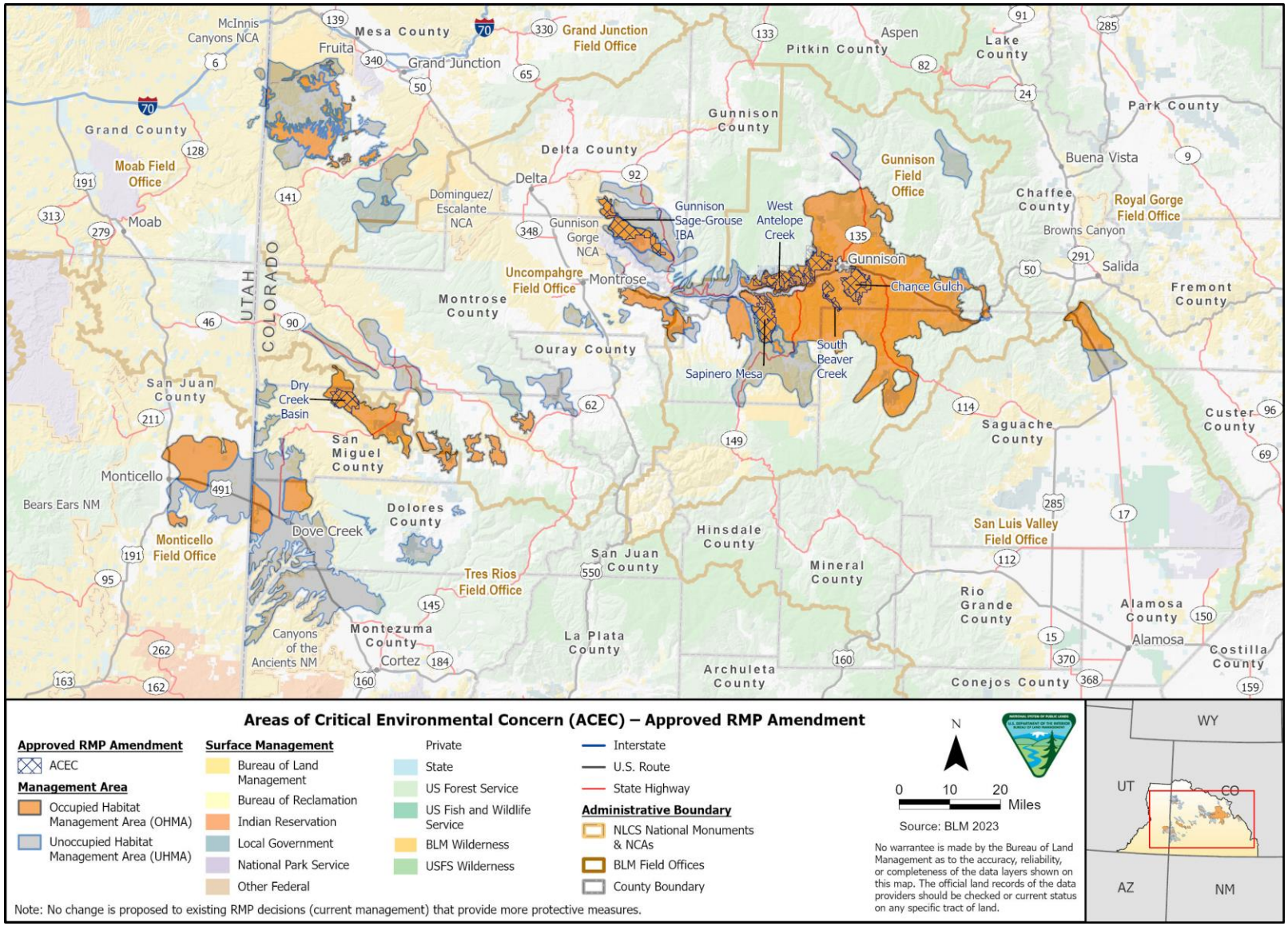
Map A.15. Renewable Energy – Wind Energy Exclusion Areas – Approved RMP Amendment



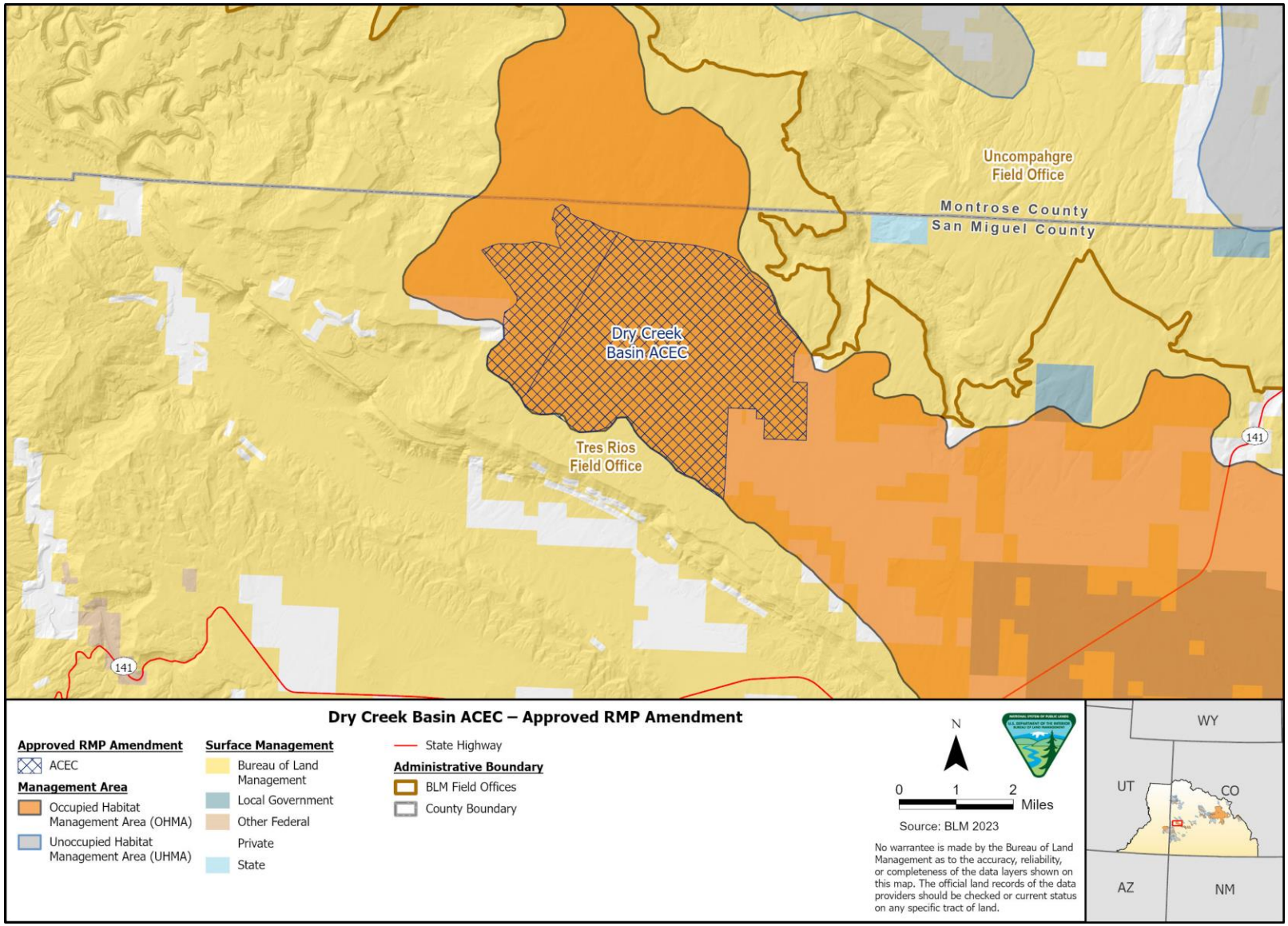
Map A.16. Renewable Energy – Solar Energy Exclusion Areas – Approved RMP Amendment



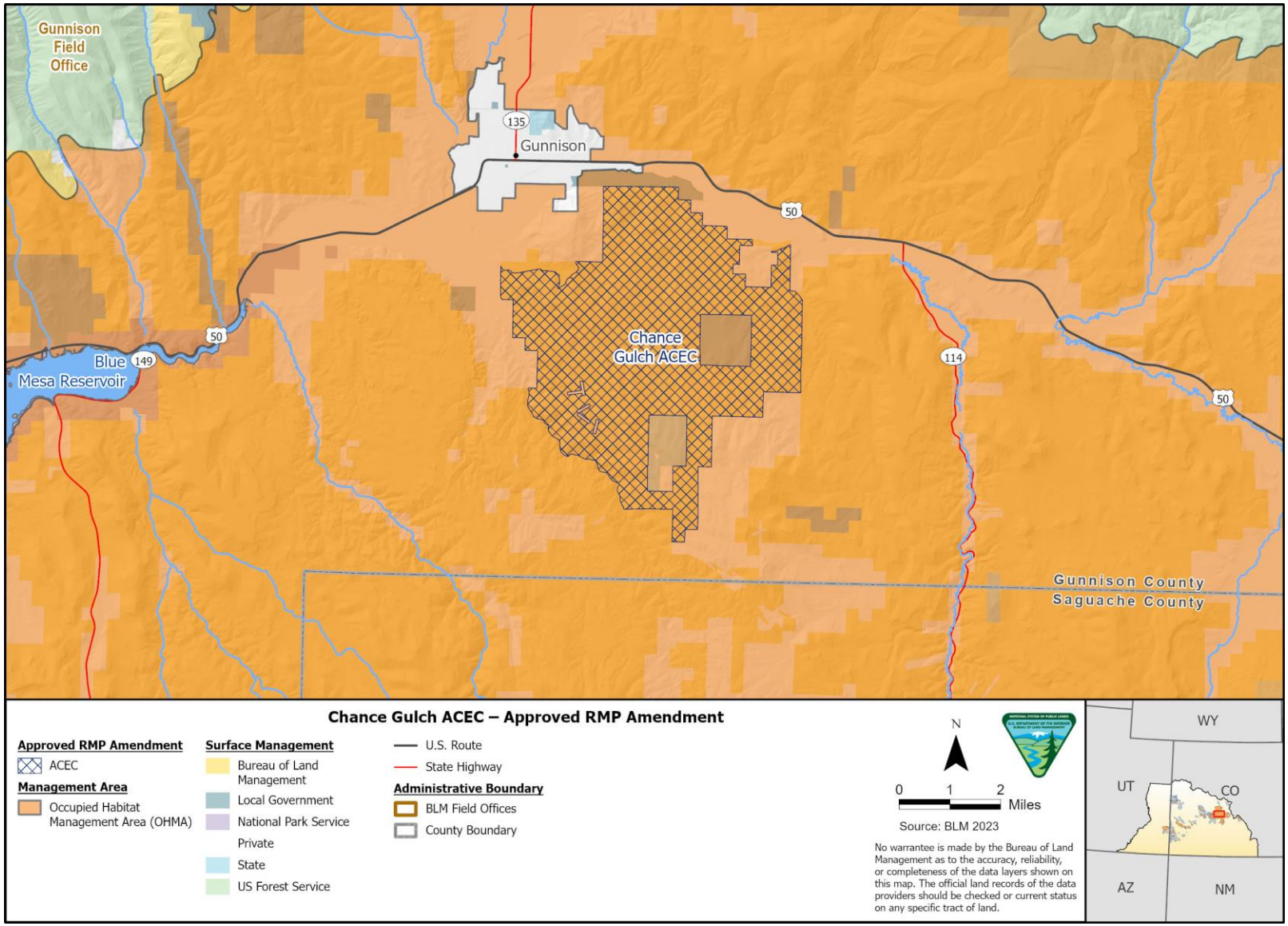
Map A.17. Areas of Critical Environmental Concern – Approved RMP Amendment



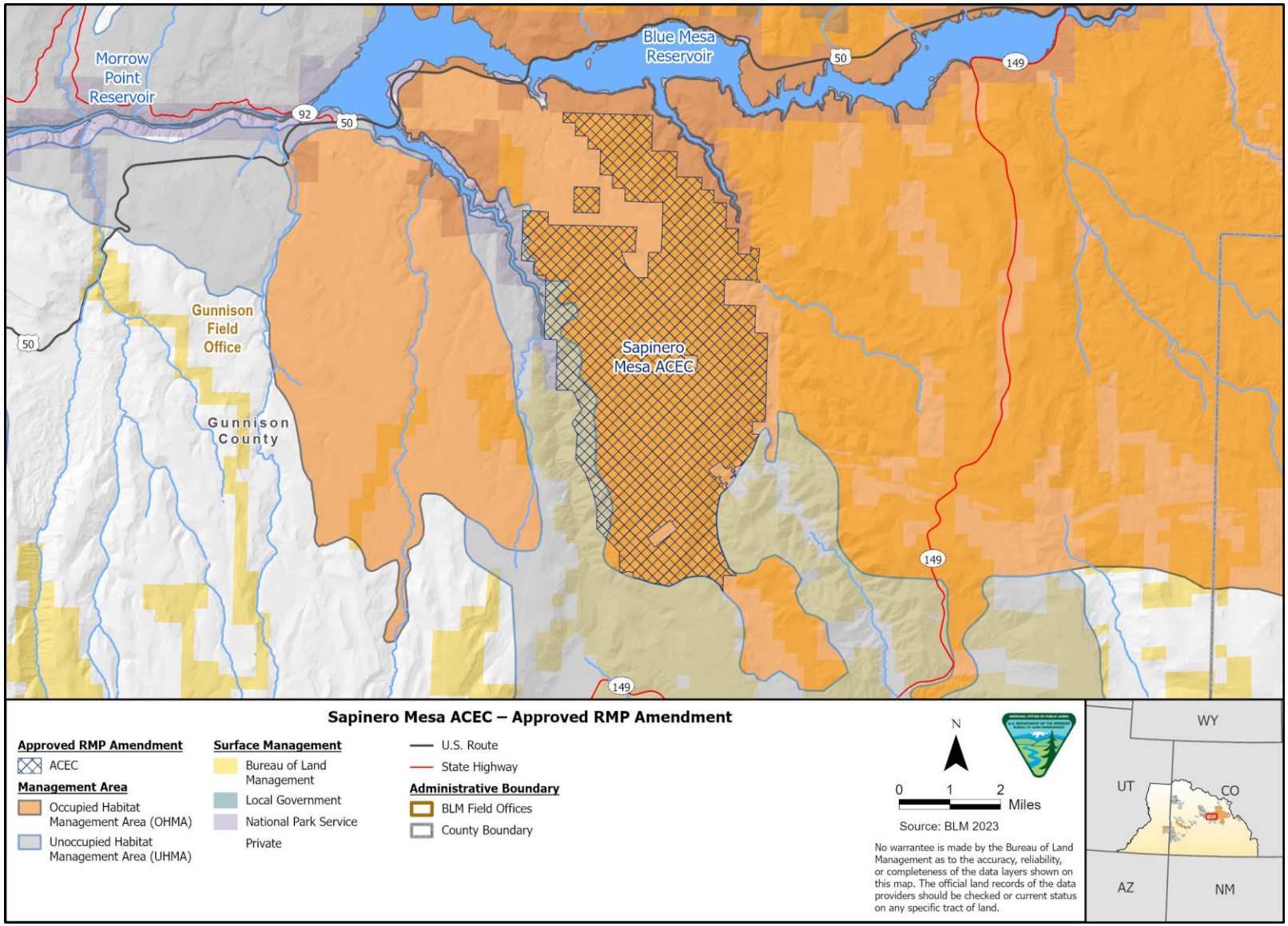
Map A.18. Dry Creek Basin ACEC



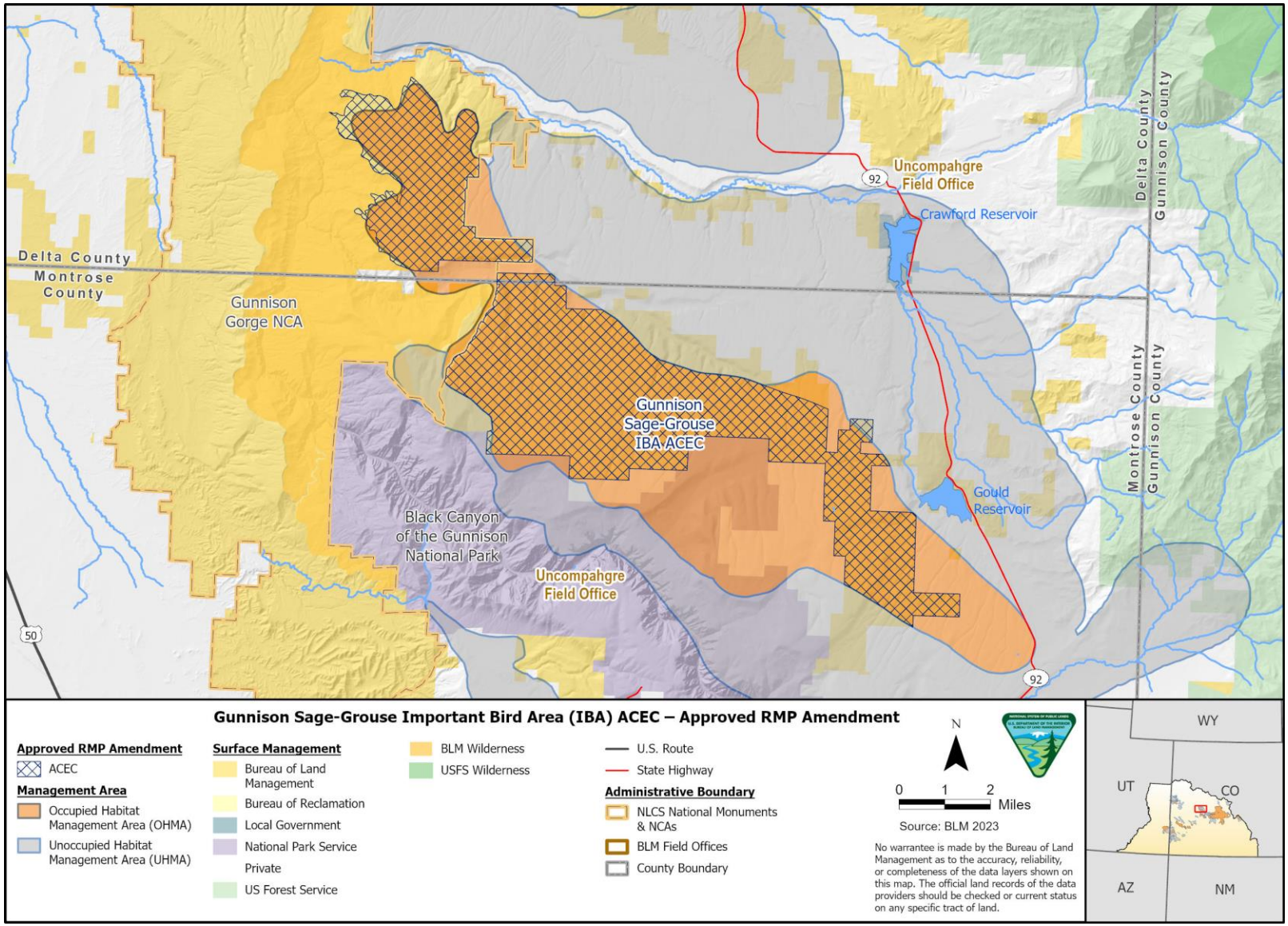
Map A.19. Chance Gulch ACEC



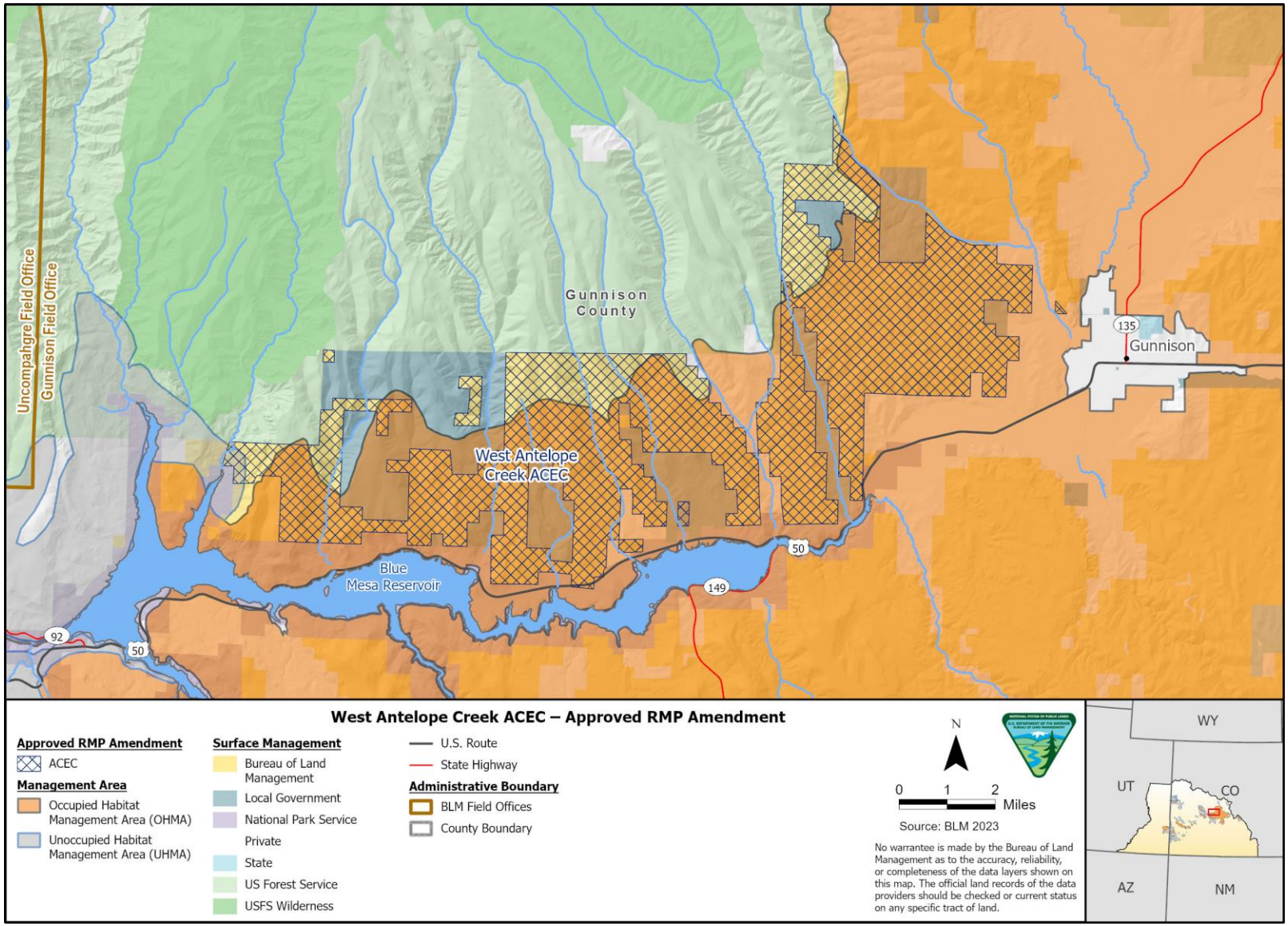
Map A.20. Sapinero Mesa ACEC



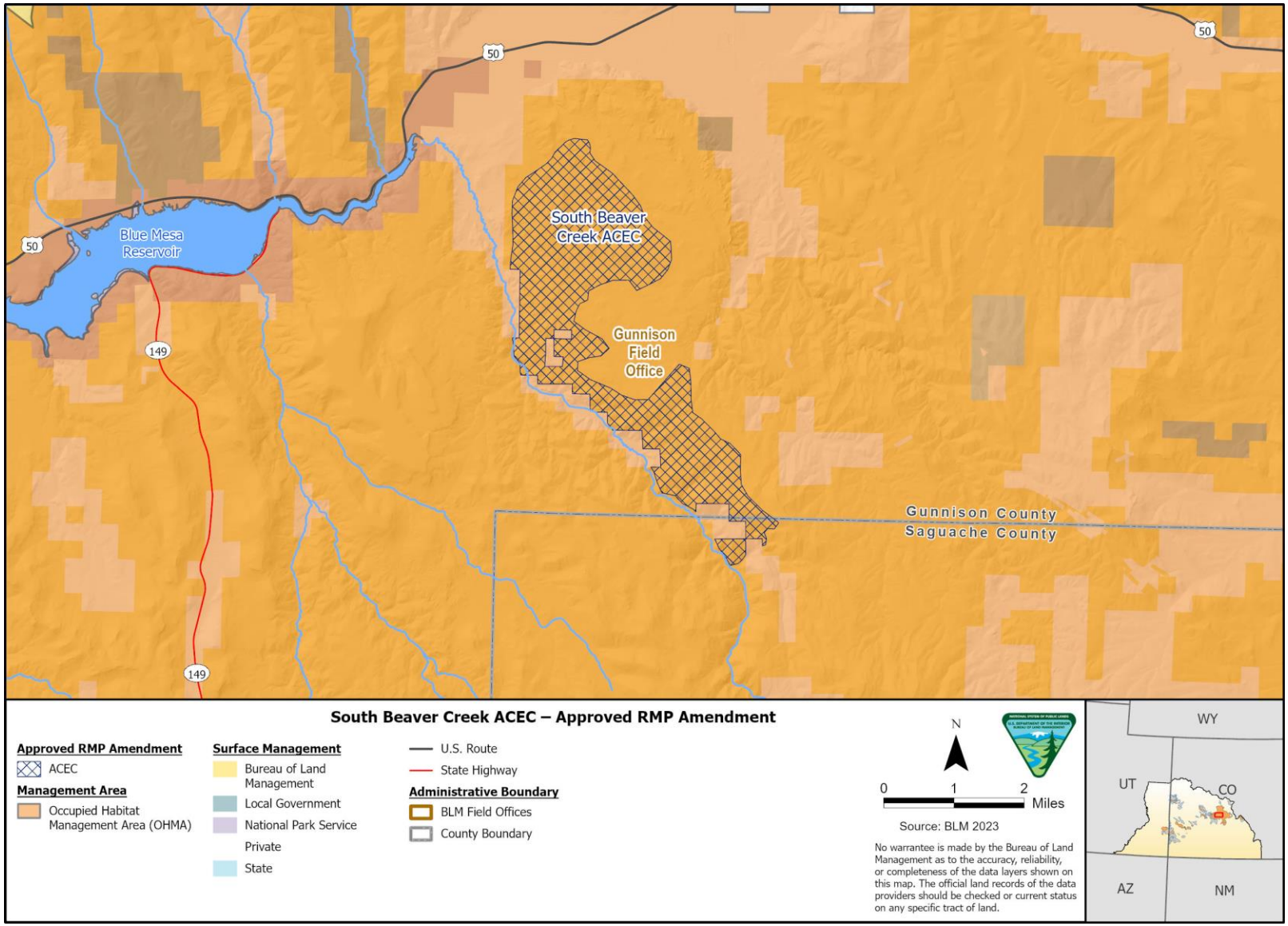
Map A.21. Gunnison Sage-Grouse Important Bird Area (IBA)/ACEC



Map A.22. West Antelope Creek ACEC



Map A.23. South Beaver Creek ACEC



APPENDIX B. BEST MANAGEMENT PRACTICES AND REQUIRED DESIGN FEATURES

TABLE OF CONTENTS

APPENDIX B. BEST MANAGEMENT PRACTICES AND REQUIRED DESIGN FEATURES B-1
B.1. Introduction B-3
B.2. Livestock Grazing B-3
B.2.1. Best Management Practices (OHMA and UHMA) B-3
B.2.2. Range Development Design Features (OHMA and UHMA) B-5
B.3. Fire and Fuels B-6
B.3.1. Fire Operations B-6
B.3.2. Fuels Management B-7
B.4. Solid Minerals (Including Locatable Minerals) B-8
B.4.1. Best Management Practices (OHMA and UHMA) B-8
B.4.2. Required Design Features (OHMA and UHMA) B-8
B.5. Fluid Minerals B-9
B.5.1. Required Design Features (OHMA and UHMA) B-9
B.6. West Nile Virus B-11
B.6.1. Best Management Practices (OHMA and UHMA) B-11
B.6.2. Required Design Features (OHMA and UHMA) B-12
B.7. Lands and Realty B-12
B.7.1. Best Management Practices (OHMA and UHMA) B-12
B.7.2. Required Design Features (OHMA and UHMA) B-13
B.8. References B-13

B.1. INTRODUCTION

The following conservation measures have been provided to ensure consistency during implementation level planning for conservation of Gunnison sage-grouse (GUSG).

Best management practices (BMPs) are established guidelines followed by the BLM to be incorporated into management activities where necessary, appropriate, and/or technically feasible. BMPs may be applied to site-specific proposals to avoid, minimize, reduce, or rectify adverse environmental or social impacts of land use activities. The BMPs in the RMP Amendment are not intended to be a complete list, but rather to provide examples of commonly used practices that Bureau of Land Management (BLM) specialists may employ to reduce impacts of surface-disturbing activities, use, or occupancy. More specific BMPs based on local conditions and resource-specific concerns could be developed once a specific proposal is evaluated through the environmental analysis process. Additional BMPs can be recommended by proponents of proposed activities on BLM-administered lands.

Design features are required for certain activities in all GUSG habitat. Required design features (RDF) establish the minimum specifications for certain activities to help mitigate adverse impacts. However, the applicability and overall effectiveness of each RDF cannot be fully assessed until the project location and design are known. Because of site-specific circumstances, some RDFs may not apply to some projects (e.g., a resource is not present on a given site) and/or may require slight variations (e.g., a larger or smaller protective area). All variations in RDFs, including non-use, would require that at least one of the following be demonstrated in the environmental analysis associated with the project/activity:

- A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g. due to site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable;
- An alternative RDF, a state-implemented conservation measure, or plan-level protection is determined to provide equal or better protection for GUSG or its habitat;
- A specific RDF will provide no additional protection to GUSG or its habitat.

The RDFs are required for the activities associated with each heading below. In addition, all project proponents are encouraged to include other appropriate conservation measure in their proposals. The BLM will require application of all appropriate conservation measures, warranted by site-specific analysis, in order to avoid, minimize, or compensate for impacts. Conservation measures not included in project proposals and determined appropriate from the site-specific analysis will be required as conditions of approval, stipulations, terms and conditions, etc. Conditions of approval developed through consultation with other Federal, State, and local regulatory and resource agencies may be applied when supported by site-specific analysis.

B.2. LIVESTOCK GRAZING

B.2.1. Best Management Practices (OHMA and UHMA)

- Design the placement of livestock nutritional supplements (salt, mineral, protein, etc.) to improve livestock distribution and range management. Place supplements at least 0.25 mile away from meadows, aspen tree stands, riparian areas, swales, and leks, to the extent feasible within existing pasture boundaries, and place in locations that enhance livestock distribution.

- During the lekking season (March 1 to May 15), encourage permittees to minimize vehicle use and maintenance activities during lekking hours (before 9 am and after 5 pm). Motorized access for livestock grazing operations will be limited to existing roads and routes, unless otherwise specified in the terms and conditions of the permit.
- Look for opportunities for periodic rest in pastures and use areas during the nesting season (roughly April through July) to reduce livestock use of native cool season understory grasses, and protect ground nests.
- Look for opportunities to implement rotational grazing strategies, which would rotate spring and fall grazing use between pastures or use areas to ensure pastures are not used during the same time period in any two consecutive years.
- Develop rotational grazing strategies, incorporating rest, deferment, and/or other grazing methods where needed to improve rangeland health.
- Use grazing practices that promote the growth and persistence of native shrubs, grasses, and forbs needed by sage-grouse for seasonal food and concealment. Grazing practices include:
    - Changing season of use or timing
    - Numbers of livestock (including temporary non-use or livestock removal)
    - Grazing intensity or duration of use (e.g., utilization)
    - Distribution of livestock use
    - Changing annual/seasonal turnout location within the allotment/pasture
    - Type of livestock (sheep, cattle, or horses)
- Manage livestock grazing to ensure vegetation heights provide adequate cover for sage-grouse during the nesting period.
- The permittee is required to notify the BLM Rangeland Management Specialist prior to beginning any maintenance activities that require the use of heavy equipment, such as tractors, backhoes, or graders.
- Whenever found and when feasible, remove dead livestock from public land. If it is not possible to entirely remove livestock carcasses, they should, at a minimum, be removed at least 100 meters from riparian areas and water sources whenever possible.
- Pursue opportunities for virtual fencing or other non-structural methods of livestock management such as herding/riding.
- Base management decisions on monitoring and/or other appropriate information that provides plant and soil response with respect to land uses, development impacts, weather, wildlife use, insects and other environmental factors. Monitoring should be implemented, and results should be applied in an adaptive management process to adjust maintenance strategies or treatments on similar projects conducted in the future. Appropriate spatial scales should be considered when developing monitoring strategies.
- Manage livestock grazing in a way that does not encourage the establishment or spread of weeds or other invasive plants and does not conflict with efforts to treat such weeds and invasive plants. In addition, livestock may be used where feasible as a tool to inhibit or stop the spread of noxious weeds. Timing of grazing and effects on residual native plants need to be carefully evaluated.
- Coordinate with State wildlife agencies where wildlife use detrimentally affects sage-grouse habitat quality.

- Maintain seeps, springs, wet meadows, and riparian vegetation in a functional and diverse condition for young sage-grouse and other species that depend on forbs and insects associated with these areas. Consider fencing if vegetation associated with these wet areas cannot be maintained with current livestock, wildlife or wild horse and burro use and the impacts of the fence are outweighed by the improved habitat quality.
- Where other grazing management options are not achieving, or cannot achieve, the desired objectives, a short-term option may be livestock exclusion. Temporary exclusion can provide the plant community the opportunity to progress toward a point where grazing can again be reintroduced once desired conditions are reached. Removing livestock may not reverse the condition of severely altered habitats and often must be combined with reseeding and other rehabilitation methods to restore appropriate sagebrush habitat.
- Consider annual planning meetings/coordination with permittees, and other cooperating agencies, when possible to coordinate on monitoring and livestock grazing management.

B.2.2. Range Development Design Features (OHMA and UHMA)

- Install shutoff valves at spring sources and troughs. Unless needed for wildlife habitat water, ensure shutoff valves are closed and troughs are drained when livestock are not utilizing the pasture.
- Install bird ramps in all permanent and temporary troughs. Monitor troughs frequently to ensure ramps are functional.
- Install perch deterrents on water storage tanks and other potential perch/raptor nesting sites.
- Install lids on spring collection boxes.
- Limit tall structures (greater than 3 meters), and, where they are necessary, place them near taller natural features or partially/entirely bury them whenever possible.
- Where compatible with the pipeline system, install floats in troughs to prevent overflow and keep water at spring sources.
- Locate troughs outside meadows, swales, and riparian areas.
- Design new water developments to maintain hydrologic function of spring sources, water courses and associated riparian habitat.
- Construct new fences using wildlife friendly fence designs (such as those found in the 2009 Colorado Parks and Wildlife Publication "Fencing with Wildlife in Mind").
- Flag or use high visibility top wires on fences.
- Mark all fences in GUSG habitat areas with priority in high collision risk areas, such as near leks. Where marking fences does not reduce fence-related GUSG mortality, modify fences, if feasible.
- Remove unneeded fences. Coordinate with adjacent landowners and other agencies and BLM cadastral survey before removing or modifying allotment boundary fences.
- Require all heavy equipment used in construction of range improvements to be thoroughly cleaned of all soil and plant material prior to entering public lands.
- To minimize livestock concentration impacts on nesting and early brood rearing sage-grouse, locate new livestock handling facilities away from active leks and outside of nesting habitat where possible.
- Where in compliance with applicable Travel Management Plans, identify closed roads that need to be retained (kept open for administrative use) for range development maintenance.

- Where livestock handling and/or watering facilities are resulting in lowering the downstream water table and dewatering of wet meadows or mesic habitat, relocate or remove these facilities when doing so will halt or reverse the dewatering.
- Do not develop new projects or conduct maintenance activities that require the use of heavy equipment, such as tractors backhoes, and graders, between March 1 and July 15.
- Monitor for and control invasive plant species following any surface disturbance.
- During the lekking season (March 1 to May 15), encourage permittees to minimize vehicle use and maintenance activities during lekking hours (before 9 am and after 5 pm).
- Consider developing artificial water sources (wells, catchments, etc.), where development would allow rehabilitation of naturally occurring water sources at springs, seeps, and streams.

B.3. FIRE AND FUELS

B.3.1. Fire Operations

B.3.1.1. Best Management Practices (OHMA and UHMA)

- On critical fire weather days, pre-position additional fire suppression resources to optimize a quick and efficient response in GUSG habitat areas.
- Power-wash all firefighting vehicles, to the extent possible, including engines, water tenders, personnel vehicles, and all-terrain vehicles prior to deploying in or near GUSG habitat areas to minimize noxious weed spread.
- To the extent possible, locate wildfire suppression facilities (e.g., base camps, spike camps, drop points, staging areas, and heli-bases) in areas where physical disturbance to GUSG habitat can be minimized. These include disturbed areas, grasslands, near roads/trails, or other areas where there is existing disturbance or minimal sagebrush cover.
- Utilize retardant, mechanized equipment, and other available resources to minimize burned acreage during initial attack.
- As safety allows, conduct mop-up where the black adjoins unburned islands, dog legs, or other habitat features to minimize sagebrush loss.

B.3.1.2. Required Design Features (OHMA and UHMA)

- Compile District level information into state-wide GUSG tool boxes. Tool boxes will contain maps, listing of resource advisors, contact information, local guidance, and other relevant information for each District/Forest, which will be aggregated into a state-wide document. These state-specific GUSG reference and resource materials are for internal use only.
- Provide localized maps to dispatch offices and extended attack incident commanders for use in prioritizing wildfire suppression resources and designing suppression tactics.
- Assign a resource advisor who has GUSG expertise or access to GUSG expertise to all extended attack fires in or near GUSG habitat. Prior to the fire season, provide training to GUSG resource advisors on wildfire suppression organization, objectives, tactics, and procedures to develop a cadre of qualified individuals. Involve State wildlife agency expertise in fire operations through:
    - instructing resource advisors during preseason trainings
    - qualification as resource advisors

  - coordination with resource advisors during fire incidents
  - contributing to incident planning with information such as habitat features or other key data useful in fire decision making
- During periods of multiple fires, ensure line officers are involved in setting priorities.
- Eliminate unnecessary cross-country vehicle travel during fire operations in GUSG habitat.
- Adequately document fire operation activities in GUSG habitat for potential follow-up coordination activities.

B.3.2. Fuels Management

B.3.2.1. Best Management Practices (OHMA and UHMA)

- Provide training to fuels treatment personnel on GUSG biology, habitat requirements, and identification of areas utilized locally.
- Use burning prescriptions which minimize undesirable effects on vegetation or soils (e.g., minimize mortality of desirable perennial plant species and reduce risk of annual grass invasion).
- Where appropriate, ensure that treatments are configured in a manner that promotes use by GUSG.
- Power-wash all vehicles and equipment involved in fuels management activities, prior to entering the area, to minimize the introduction of undesirable and/or invasive plant species.
- As funding and logistics permit, restore annual grasslands to a species composition characterized by perennial grasses, forbs, and shrubs.
- Protect wildland areas from wildfire originating on private lands, infrastructure corridors, and recreational areas. Coordinate with Federal and State forest service and local fire districts to allow quick and effective management of fire across land ownerships.
- Reduce the risk of vehicle- or human-caused wildfires and the spread of invasive species by installing fuel breaks and/or planting perennial vegetation (e.g., greenstrips) paralleling road rights-of-way.
- Strategically place and maintain pre-treated strips/areas (e.g., mowing and herbicide application) to aid in controlling wildfire should wildfire occur near Occupied Habitat Management Areas (OHMA)/Unoccupied Habitat Management Areas (UHMA) or important restoration areas (such as where investments in restoration have already been made).
- Emphasize the use of native plant species, recognizing that non-native species may be necessary depending on the availability of native seed and prevailing site conditions.
- Give priority for implementing specific GUSG habitat restoration projects in annual grasslands first to sites which are adjacent to or surrounded by GUSG habitats and/or active leks. Annual grasslands are second priority for restoration when the sites not adjacent to habitat or active leks, but within 2 miles of habitat or active leks. The third priority for annual grasslands habitat restoration projects are sites beyond 2 miles of habitat. The intent is to focus restoration outward from existing, intact habitat.

B.3.2.2. Required Design Features (OHMA and UHMA)

- Ensure proposed sagebrush treatments are planned with interdisciplinary input from BLM, and/or State wildlife agency biologist and that treatment acreage is conservative in the context of surrounding GUSG seasonal habitats and landscape.

- Design vegetation treatments in areas of high fire frequency that facilitate firefighter safety, reduce the potential acres burned, and reduce the fire risk to GUSG habitat. Additionally, develop maps for GUSG habitat which spatially display existing fuels treatments that can be used to assist suppression activities.
- Where applicable, design fuels treatment objectives to protect existing sagebrush ecosystems, modify fire behavior, restore native plants, and create landscape patterns to address other values-at-risk.

B.4. SOLID MINERALS (INCLUDING LOCATABLE MINERALS)

The following measures would be applied as RDFs for all solid minerals. They would also apply to locatable minerals consistent with applicable law.

B.4.1. Best Management Practices (OHMA and UHMA)

B.4.1.1. Operations

- Site and/or minimize linear rights-of-way or special use authorizations to reduce disturbance to sagebrush habitats.
- Bury power lines when feasible.
- Where appropriate, incorporate BLM Technical Note 457, Night Sky and Dark Environments: Best Management Practices for Artificial Light at Night on BLM-Managed Lands.

B.4.2. Required Design Features (OHMA and UHMA)

B.4.2.1. Roads

- Design roads to an appropriate standard no higher than necessary to accommodate their intended purposes.
- Locate roads to avoid important areas and habitats (important habitats include seasonal habitats within OHMA and UHMA); require as necessary to prevent unnecessary or undue degradation under 43 CFR 3809.
- Request rights-of-way holders coordinate road construction and use with other rights-of-way holders; require as necessary to prevent unnecessary or undue degradation under 43 CFR 3809.
- Construct road crossing at right angles to ephemeral drainages and stream crossings.
- Establish speed limits on BLM system roads or design roads to be driven at slower speeds to reduce vehicle/wildlife collisions.
- Do not issue rights-of-way or special use authorizations to counties on mining development roads, unless for a temporary use consistent with all other terms and conditions including this document.
- Restrict vehicle traffic to only authorized users on newly constructed routes (e.g., use signing and gates).
- Use dust abatement practices on roads and pads.
- Close and reclaim duplicate roads by restoring original landform and establishing desired vegetation.

B.4.2.2. Operations

- Cluster disturbances associated with operations and facilities as closely as possible.

- Place infrastructure in already disturbed locations where the habitat has not been restored.
- Restrict the construction of tall facilities and fences to the minimum number and amount needed.
- Cover (e.g., fine mesh netting or use other effective techniques) all pits and tanks regardless of size to reduce sage-grouse mortality.
- Equip tanks and other above ground facilities with structures or devices that discourage nesting of raptors and corvids.
- Control the spread and effects of non-native plant species (Gelbard and Belnap 2003; Bergquist et al. 2007).
- Restrict pit and impoundment construction to reduce or eliminate threats from West Nile virus (Doherty 2007). See Required Design Features for Preventing West Nile Virus.
- Remove or re-inject produced water to reduce habitat for mosquitoes that vector West Nile virus. If surface disposal of produced water continues, use the following steps for reservoir design to limit favorable mosquito habitat:
    - Overbuild size of ponds for muddy and non-vegetated shorelines.
    - Build steep shorelines to decrease vegetation and increase wave actions.
    - Avoid flooding terrestrial vegetation in flat terrain or low lying areas.
    - Construct dams or impoundments that restrict down slope seepage or overflow.
    - Line the channel where discharge water flows into the pond with crushed rock.
    - Construct spillway with steep sides and line it with crushed rock.
    - Treat waters with larvicides to reduce mosquito production where water occurs on the surface.
- Require sage-grouse-safe fences around sumps and include fence marking.
- Clean up refuse (Bui et al. 2010).
- Locate worker camps outside of OHMA.

B.4.2.3. Reclamation

- Include short and long-term restoration objectives and monitoring to meet sage-grouse habitat needs in reclamation practices/sites.
- Address post reclamation management in reclamation plans such that goals and objectives are to protect and improve sage-grouse habitat needs.
- Maximize the area of interim reclamation on long-term access roads and well pads including reshaping, topsoiling and revegetating cut and fill slopes.
- Restore disturbed areas at final reclamation to pre-disturbance landform and desired plant community.
- Utilize mulching techniques to expedite reclamation.

B.5. FLUID MINERALS

B.5.1. Required Design Features (OHMA and UHMA)

B.5.1.1. Roads

- Design roads to an appropriate standard no higher than necessary to accommodate their intended purpose.

- Do not issue rights-of-way or special use authorizations to counties on newly constructed energy development roads, unless for a temporary use consistent with all other terms and conditions included in this document.
- Establish speed limits on BLM system roads to reduce vehicle/wildlife collisions or design roads to be driven at slower speeds.
- Coordinate road construction and use among right-of-way or special use authorization holders.
- Construct road crossings at right angles to ephemeral drainages and stream crossings.
- Use dust abatement practices on roads and pads.
- Close and rehabilitate duplicate roads.
- Locate roads to avoid important areas and habitats (important habitats include seasonal habitats (i.e., winter, nesting, breeding, and brooding habitats) within OHMA).
- Restrict vehicle traffic to only authorized users on newly constructed routes using signage, gates, etc.
- Develop a plan to reduce vehicular traffic frequency or vehicle use through establishing trip restrictions (Lyon and Anderson 2003) or minimization through use of telemetry and remote well control (e.g., Supervisory Control and Data Acquisition), unless required for safety purposes.

B.5.1.2. Operations

- Cluster disturbances, operations (e.g., fracture stimulation and liquids gathering), and facilities.
- Use directional and horizontal drilling to reduce surface disturbance.
- Place infrastructure in already disturbed locations where the habitat has not been fully restored.
- Apply a phased development approach with concurrent reclamation.
- Place liquid gathering facilities outside of OHMA. Have no tanks at well locations within OHMA to minimize truck traffic and perching and nesting sites for ravens and raptors. Pipelines must be under or immediately adjacent to the road (Bui et al. 2010).
- Restrict the construction of tall facilities and fences to the minimum number and amount needed.
- Clean up refuse.
- Cover (with fine mesh netting or other effective techniques) all drilling and production pits and tanks regardless of size to reduce GUSG mortality.
- Equip tanks and other above-ground facilities with structures or devices that discourage nesting of raptors and corvids.
- Control the spread and effects of non-native plant species by washing vehicles and equipment (Evangelista et al. 2011).
- Restrict pit and impoundment construction to reduce or eliminate augmenting threats from West Nile virus (Doherty 2007).
- Site and/or minimize linear rights-of-way or special use authorizations to reduce disturbance to sagebrush habitats.
- Design or site permanent structures which create movement (e.g. pump jack) to minimize impacts on Greater Sage-Grouse.

- Remove or re-inject produced water to reduce habitat for mosquitoes that vector West Nile virus. If surface disposal of produced water continues, use the following steps for reservoir design to limit favorable mosquito habitat:
    - Overbuild size of ponds for muddy and non-vegetated shorelines.
    - Build steep shorelines to decrease vegetation and increase wave actions.
    - Avoid flooding terrestrial vegetation in flat terrain or low lying areas.
    - Construct dams or impoundments that restrict down slope seepage or overflow.
    - Line the channel where discharge water flows into the pond with crushed rock.
    - Construct spillway with steep sides and line it with crushed rock.
    - Treat waters with larvicides to reduce mosquito production where water occurs on the surface.
- Use only closed-loop systems for drilling operations and no reserve pits.
- Require noise shields when drilling during the lek, nesting, brood-rearing, or wintering season.
- Fit transmission towers with anti-perch devices (Lammers and Collopy 2007).
- Locate worker camps outside of OHMA.
- Locate new compressor stations outside OHMA and design them to reduce noise that may be directed towards OHMA.
- Limit noise to less than 10 decibels above ambient measures (20-24 dBA) at sunrise at the perimeter of a lek during active lek season (Patricelli et al. 2010; Blickley et al. 2012).
- Where appropriate, incorporate BLM Technical Note 457, Night Sky and Dark Environments: Best Management Practices for Artificial Light at Night on BLM-Managed Lands.

B.5.1.3. Reclamation

- Include objectives for ensuring habitat restoration meets GUSG habitat needs in reclamation practices/sites (Pyke 2011). Address post reclamation management in reclamation plan such that goals and objectives are to improve or restore GUSG habitat needs.
- Maximize the area of interim reclamation on long-term access roads and well pads including reshaping, top soiling, and revegetating cut and fill slopes.
- Irrigate interim reclamation if necessary for establishing seedlings more quickly.
- Utilize mulching techniques to expedite reclamation and to protect soils.
- All disturbed areas will be contoured to the original contours or at least to blend with the natural topography. Blending is defined as reducing form, line, shape, and color contrast with the disturbing activity. In visually sensitive area, all disturbed areas shall be contoured to match the original topography. Matching is defined as reproducing the original topography and eliminating form, line, shape, and color caused by the disturbance as much as possible.

B.6. WEST NILE VIRUS

B.6.1. Best Management Practices (OHMA and UHMA)

- Maintain the water level below that of rooted vegetation for a muddy shoreline that is unfavorable habitat for mosquito larvae. Rooted vegetation includes both aquatic and upland vegetative types. Avoid flooding terrestrial vegetation in flat terrain or low lying areas. Aquatic habitats with a vegetated inflow and outflow separated by open water produce 5- to 10-fold

fewer Culex mosquitoes than completely vegetated wetlands (Walton and Workman 1998). Wetlands with open water also had significantly fewer stage III and IV instars which may be attributed to increased predator abundances in open water habitats (Walton and Workman 1998).

- Construct dams or impoundments that restrict down slope seepage or overflow by digging ponds in flat areas rather than damming natural draws for effluent water storage, or lining constructed ponds in areas where seepage is anticipated (Knight et al. 2003).

B.6.2. Required Design Features (OHMA and UHMA)

- Increase the size of fresh-water ponds to accommodate a greater volume of water than is discharged. This will result in un-vegetated and muddy shorelines that breeding *Cx. tarsalis* avoid (De Szalay and Resh 2000). This modification may reduce *Cx. tarsalis* habitat but could create larval habitat for *Culicoides sonorensis*, a vector of blue tongue disease, and should be used sparingly (Schmidtmann et al. 2000). Steep shorelines should be used in combination with this technique whenever possible (Knight et al. 2003).
- Build steep shorelines to reduce shallow water (more than 60 centimeters) and aquatic vegetation around the perimeter of impoundments (Knight et al. 2003). Construction of steep shorelines also will create more permanent ponds that are a deterrent to colonizing mosquito species like *Cx. tarsalis*, which prefer newly flooded sites with high primary productivity (Knight et al. 2003).
- Line the channel where discharge water flows into the pond with crushed rock, or use a horizontal pipe to discharge inflow directly into existing open water, thus precluding shallow surface inflow and accumulation of sediment that promotes aquatic vegetation.
- Line the overflow spillway with crushed rock, and construct the spillway with steep sides to preclude the accumulation of shallow water and vegetation.
- Fence pond site to restrict access by livestock and other wild ungulates that trample and disturb shorelines, enrich sediments with manure and create hoof print pockets of water that are attractive to breeding mosquitoes.

B.7. LANDS AND REALTY

B.7.1. Best Management Practices (OHMA and UHMA)

- Where technically and financially feasible, bury distribution powerlines and communication lines within existing disturbance.
- Where applicable with this RMP and technically and financially feasible, consider the BMP recommendations in the most recent guidance from the Avian Power Line Interaction Committee (2015) for electric utilities in sage-grouse habitat.
- Design roads to an appropriate standard no higher than necessary to accommodate their intended purpose.
- Locate staging areas outside GUSG habitat to the extent possible.
- Consider placing pipelines under or immediately adjacent to a road or adjacent to other pipelines first, before considering co-locating with other ROW.
- Where existing leases or ROWs have had some level of development (road, fence, well, etc.) and are no longer in use, reclaim the site by removing these features and restoring the habitat.

- Where appropriate, incorporate BLM Technical Note 457, Night Sky and Dark Environments: Best Management Practices for Artificial Light at Night on BLM-Managed Lands.

B.7.2. Required Design Features (OHMA and UHMA)

- Place infrastructure in already disturbed locations where the habitat has not been fully restored.
- Cluster disturbances, operations, and facilities.
- Micro-site linear facilities to reduce impacts to GUSG habitats.
- Coordinate road construction and use among ROW holders.
- Restrict vehicle traffic to only authorized users on newly constructed routes using signage, gates, etc.
- Construct road crossings at right angles to ephemeral drainages and stream crossings.
- Monitor and control the spread and effects of non-native plant species.
- New ROW structures will be constructed with perch deterrents or other anti-perching devices, where needed.

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APPENDIX C. GUNNISON SAGE-GROUSE MITIGATION STRATEGY

TABLE OF CONTENTS

APPENDIX C. GUNNISON SAGE-GROUSE MITIGATION STRATEGY..... C-1
C.1 Introduction C-3
C.2 Mitigation Strategy C-3
C.2.1 Avoidance C-4
C.2.2 Minimization C-4
C.2.3 Compensation C-4
C.3 Incorporating the Mitigation Strategy into NEPA Analysis C-6
C.4 Implementing a Compensatory Mitigation Program C-6

C.1 INTRODUCTION

In undertaking Bureau of Land Management (BLM) management actions, and consistent with valid existing rights and applicable law, in authorizing third-party actions that result in habitat loss and degradation, the BLM will require and assure compensatory mitigation meets the conservation goals for and accounts for any uncertainty associated with the effectiveness of such mitigation. This will be achieved by compensating for direct and indirect impacts and applying beneficial mitigation actions. Mitigation will follow the regulations from the Council on Environmental Quality (40 CFR 1508.20; e.g., avoid, minimize, and compensate), hereafter referred to as the mitigation hierarchy. If impacts from BLM management actions and authorized third-party actions that result in habitat loss, degradation, or effects on the species population remain after applying avoidance and minimization measures (i.e., residual impacts), then compensatory mitigation projects will be used to provide conservation benefit to the species. Any compensatory mitigation will be durable, timely, and in addition to that which would have resulted without the compensatory mitigation (see ARMPA Section II.6, *Glossary*).

The Mitigation Strategy will inform the National Environmental Policy Act (NEPA) decision-making process, including the application of the mitigation hierarchy for BLM management actions and third-party actions that result in habitat loss and degradation. A robust and transparent Mitigation Strategy will contribute to Gunnison sage-grouse (GUSG) habitat conservation by reducing, eliminating, or minimizing threats and compensating for residual impacts on GUSG and its habitat. The mitigation strategy outlined herein is a high-level framework which may be expanded on during implementation of the Gunnison Approved Resource Management Plan Amendment (ARMPA) in coordination with State, Federal, or other partnerships.

The BLM's Regional Mitigation Manual, MS-1794 and BLM Mitigation Handbook 1794-1, serve as a framework for developing and implementing a Mitigation Strategy. The following sections provide additional guidance specific to the development of a Mitigation Strategy.

C.2 MITIGATION STRATEGY

When identifying and analyzing compensatory mitigation, the BLM will first seek to avoid reasonably foreseeable impacts, followed by minimization, rectification, reduction or elimination over time of the impacts; if reasonably foreseeable impacts remain after the application of the first four steps of the mitigation hierarchy (i.e., residual effects), then the BLM may seek compensation for some or all of the residual effects.

Some components of a mitigation strategy require land use plan allocations or decisions. These are addressed within the management actions and allocation level decisions of the GUSG ARMPA. The ARMPA addresses portions of the mitigation strategy by identifying avoidance and minimization criteria and solidifying those actions through land use planning decisions.

Development and documentation of compensatory mitigation strategies will include:

- documenting avoidance and minimization measures
- quantifying the direct and indirect impacts
- addressing additionality or conservation benefits
- timeliness (see ARMPA Section II.6, *Glossary*)
- durability (see ARMPA Section II.6, *Glossary*)

See BLM Regional Mitigation Manual, MS-1794 and BLM Mitigation Handbook 1794-1 for additional guidance.

C.2.1 Avoidance

The mitigation hierarchy for the BLM states the BLM will first try to avoid impacts. The GUSG ARMPA focuses on avoidance of impacts followed by minimization measures. The intent of the mitigation strategy is to provide compensatory mitigation to benefit GUSG conservation and recovery. To do so, in undertaking BLM management actions, and, consistent with valid existing rights and applicable law, in authorizing third party actions that result in habitat loss and degradation, the BLM will require and ensure compensatory mitigation that provides a conservation benefit to the species including accounting for any uncertainty associated with the effectiveness of such mitigation. This will be achieved by avoiding, minimizing, and compensating for impacts by applying beneficial mitigation actions. Actions that result in habitat loss and degradation include those identified as threats that contribute to GUSG disturbance as identified by the U.S. Fish and Wildlife Service (USFWS) in its listing decision (USFWS 2014) and as shown in Appendix E, *Methodology for Calculating Net Surface Disturbance*, Table E.1.

Avoidance is defined in the BLM Mitigation Handbook as avoiding the impact altogether by not taking a certain action or parts of an action. Avoidance is the first priority in the BLM mitigation hierarchy and provided for in the GUSG RMP Amendment. The ARMPA allocates multiple areas as resource exclusion and avoidance depending on the resource use or activity. All areas require evaluation of minimization measures and depending on activity, No Surface Occupancy (NSO). The avoidance portion of the mitigation hierarchy is built into the plan amendment.

C.2.2 Minimization

Minimization occurs through limiting the degree or magnitude of the action during project implementation. Minimization actions are identified at different stages, first in the planning stage and then on a site-specific project phase. The ARMPA identifies multiple minimization options for a variety of projects (see MA-SSS-15 for Minimization Measures as an example). The ARMPA requires adherence to seasonal timing restrictions for the various life stages of GUSG. The ARMPA also identifies multiple Required Design Features (RDFs) and Best Management Practices (Appendix B) that can be applied to various projects, as appropriate. Minimization includes, but is not limited to, placement of facility or authorized use, timing of activities, project design, and interim reclamation. During site-specific project analysis some sites may be able to minimize the footprint, take actions to protect sagebrush in the area, or install noise shields or perch deterrents, to minimize long-term project impacts, to name a few.

C.2.3 Compensation

Include discussion of impact and project valuation, compensatory mitigation options, siting, compensatory project types and costs, monitoring, reporting, and funds administration. Each of these topics is discussed in more detail below.

- Residual Impact and Compensatory Mitigation Project Valuation Guidance
    - A method should be identified for estimating residual impacts and valuing compensatory mitigation projects.
    - This method should consider the quality of habitat, scarcity of the habitat, and the size of the impact/project.
    - For compensatory mitigation projects, consideration of **durability** (see ARMPA Section II.6, *Glossary*) and **timeliness** (see ARMPA Section II.6, *Glossary*) may require adjustment of the valuation.
- Compensatory Mitigation Options
    - Options for implementing compensatory mitigation should be identified, such as:
        - Utilizing certified mitigation/conservation bank or credit exchanges
        - Contributing to an existing mitigation or conservation fund
        - Authorized-user conducted mitigation or restoration projects
        - Acquisitions or conservation easements
- Compensatory Mitigation Siting
    - Sites should be in areas that have the potential to yield the greatest conservation benefit to GUSG, regardless of land ownership.
    - Sites should be sufficiently durable (see ARMPA Section II.6, *Glossary*).
    - Sites identified by existing plans and strategies (e.g., fire restoration plans, invasive species strategies, healthy land focal areas, or designated areas such as Areas of Critical Environmental Concern [ACECs] and backcountry conservation areas [BCAs]) should be considered, if those sites have the potential to yield the greatest benefit to GUSG and are durable.
- Compensatory Mitigation Project Types and Costs
    - Project types should be identified that help reduce threats to GUSG (e.g., protection, conservation, and restoration projects).
    - Each project type should have a goal and measurable objectives.
    - Expected costs for these project types, within the population area, should be identified, including the costs to monitor and maintain the project for the duration of the impact.
- Compensatory Mitigation Reporting
    - Standardized, transparent, scalable, and scientifically defensible reporting requirements should be identified for mitigation projects.
    - Reports should be compiled, summarized, and reviewed by the GUSG Mitigation team or Conservation Team in order to determine if GUSG conservation has been achieved or to support adaptive management recommendations.
- Compensatory Mitigation Program Implementation Guidelines
    - Guidelines for implementing the state-level compensatory mitigation program should include holding and applying compensatory mitigation funds, operating a transparent and credible accounting system, certifying mitigation credits, and managing reporting requirements.

C.3 INCORPORATING THE MITIGATION STRATEGY INTO NEPA ANALYSIS

During project-scale NEPA the BLM will include the avoidance, minimization, and compensatory mitigation recommendations in one or more of the NEPA analysis alternatives for the BLM management actions and third party actions that result in habitat loss and degradation and the appropriate mitigation actions will be carried forward into the decision.

C.4 IMPLEMENTING A COMPENSATORY MITIGATION PROGRAM

The BLM needs to ensure that compensatory mitigation is strategically implemented to provide conservation benefits to the species, as identified in the Regional Mitigation Strategy (Mitigation Manual MS-1794). In order to align with existing compensatory mitigation efforts, this compensatory mitigation strategy will be managed at a state level, in collaboration with our partners (e.g., Federal, Tribal, and State agencies).

If a mitigation bank or habitat exchange is developed, then in order to ensure transparent and effective management of the funds, the BLM will enter into a contract or agreement with a third party to help manage the state-level compensatory mitigation funds. The selection of the third- party compensatory mitigation administrator will conform to all relevant laws, regulations, and policies. The BLM will remain responsible for making decisions that affect Federal lands.

APPENDIX D. GUNNISON SAGE-GROUSE MONITORING FRAMEWORK

TABLE OF CONTENTS

APPENDIX D. GUNNISON SAGE-GROUSE MONITORING FRAMEWORK..... D-1
D.1. Introduction D-3
D.2. Reporting D-3
D.3. Annual Report Components D-3
D.3.1. Surface-Disturbing Activities D-4
D.3.2. Reauthorized and Amended Rights-of-Way D-4
D.3.3. Travel Management: Trail and Road Closures D-4
D.3.4. Compensatory Mitigation D-5
D.3.5. Livestock Grazing D-5
D.3.6. Linkage-Connectivity Area Actions D-7
D.3.7. Waivers, Exceptions, and Modifications D-7
D.3.8. Restoration Activities and Treatments D-7
D.3.9. Conservation Actions D-8
D.4. Report Template D-8

D.1. INTRODUCTION

This appendix describes the methods to monitor and evaluate the implementation and effectiveness of the Gunnison Sage-Grouse Approved Resource Management Plan Amendment (ARMPA). The regulations for the Bureau of Land Management (BLM) (43 CFR 1610.4-9) require that land use plans establish intervals and standards, as appropriate, for monitoring and evaluations, based on the sensitivity of the resource to the decisions involved. The BLM will track and compile the components described herein to evaluate implementation and effectiveness of the Gunnison sage-grouse (GUSG) planning strategy and the conservation measures within the land use plan amendments. The tracking and monitoring data will be collected and reported annually by Field Offices that manage mapped GUSG occupied or unoccupied habitat management areas (OHMA or UHMA). Final monitoring reports will be prepared annually by each reporting Field Office and provided to the BLM Colorado and Utah State Office each calendar year. Monitoring reports should be reviewed by Field Managers and State Office specialists to help inform decision-making, plan effectiveness, and implementation of conservation measures. Current and past monitoring reports may also help inform coordination with partners and cooperators, such as the U.S. Fish and Wildlife Service (USFWS) or State wildlife agencies, when implementing the USFWS Recovery Implementation Strategy (RIS) for GUSG.

D.2. REPORTING

At the end of each calendar year, Field Offices with OHMA or UHMA will prepare a final activity monitoring report which documents authorized actions in OHMA and UHMA, progress toward objectives, issues encountered, and plan effectiveness of conservation actions. Annual reports will be reviewed and signed by the Field Manager prior to providing the complete report to the BLM Colorado and Utah State Office. Reporting is due by March 1 of every calendar year beginning with the signing of the record of decision for this plan amendment. A reporting template has been provided within this appendix and should minimally include all elements outlined; however, additional supporting information can be provided at the discretion of the Field Office.

As part of the annual reporting efforts, BLM Field Offices should work with local partners and cooperators to update applicable conservation efforts, activities, and projects within the U.S. Geological Survey Conservation Efforts Database (CED) Gunnison Sage-Grouse Recovery Module: https://conservationefforts.org/. Updating local BLM efforts and data in the CED Recovery Module on an annual basis, is an important effort to support landscape level conservation planning for GUSG as referenced in the USFWS RIS Priority 3 activity 10.03. In addition, BLM treatments and activities should be reported each reporting year to the BLM Vegetation Management Action Portal (VMAP): https://vmap.blm.doi.net/.

D.3. ANNUAL REPORT COMPONENTS

The following sections and components will be monitored, compiled, and reported every calendar year within OHMA and UHMA (see provided report template in Section D.4 of this appendix). The provided template may be modified as needed to meet specific needs or future objectives for reporting. If there are items that had no elements to report, then it should be indicated within the reporting period as "Not Applicable" or "Nothing to Report." A supplemental map may be included showing point locations, polygons, or lines for newly authorized actions or conservation measures at the discretion of the Field Office.

D.3.1. Surface-Disturbing Activities

This section includes reporting of any new surface-disturbing activities within OHMA and UHMA. Activities related to restoration or vegetation treatments are not considered a reporting component in this section and would be included within the *Restoration Activities and Treatment Activities* section. Each authorization or action is tracked as a single entry in the report with total acres of OHMA or UHMA disturbed, total miles (when applicable) in OHMA or UHMA, category or type of authorization (see below), and acres of compensatory mitigation applied (see report template).

- Amended, upgraded, or reauthorized rights-of-way (ROWs) (report new disturbance acres as applicable)
- Buried pipeline or utility line
- Aboveground pipeline or utility line
- New roads or trails (acres and miles)
- New fences (miles)
- Communication sites or weather stations
- Other miscellaneous infrastructure
- Fluid mineral development (e.g., well pads, related infrastructure)
- Solid mineral development (e.g., gravel pits, mining activities)
- Other surface disturbances

The following information will be included for each activity:

- Category or type of authorization
- Action/project name and National Environmental Policy Act (NEPA) number if applicable
- Mileage or acres of ground disturbance or infrastructure
- Location of action (i.e., uplands or riparian)
- Acres compensatory mitigation

D.3.2. Reauthorized and Amended Rights-of-Way

This section includes reporting on amended or reauthorized ROWs that did not lead to additional ground disturbance beyond the permitted area. The following will be reported:

- Individual reauthorization or amendment
- Type of associated infrastructure
- Relevant minimization measures incorporated (i.e., yes/no and why)

D.3.3. Travel Management: Trail and Road Closures

This section includes reporting on any road or trail decommissioning or closures. This does not include or account for seasonal closures, since those routes are still periodically available for travel. The following will be included within this section:

- Map clearly identifying amount, if any, of trail/road closures or realignments in OHMA and UHMA.
- Route or section ID
- Closures accompanied by a realignment (new ground disturbance; yes or no)

- Length of each section in miles
- Type of route (e.g., 2-track, trail, route, single-track, user created)
- Level of Restoration
    - Level 1: routes that are accessed by routes closed by greater levels of decommissioning and were allowed to naturally revegetate in order to minimize ground disturbance and reduce spread of invasive weeds.
    - Level 2: routes were closed by installing signs.
    - Level 3: routes were closed using worm fence/barricades.
    - Level 4: routes were closed by placing boulders with heavy equipment.
    - Level 5: routes were closed by ripping the road surface with heavy equipment and/or constructing water bars and seeding.

D.3.4. Compensatory Mitigation

This section includes reporting on any compensatory mitigation activities or treatments that have occurred. The following will be reported:

- Associated disturbance for mitigation activities (e.g., road, utility line, weather station, other infrastructure)
- Acres or miles of compensatory mitigation
- Compensatory mitigation dollars
- Upland or riparian locations
- Year of authorization
- Year of completion of mitigation activity or treatment (may report future year or on-going)
- Mitigation activity or treatment type (e.g., vegetation planting, easement, riparian structures)

D.3.5. Livestock Grazing

This section includes reporting on the Field Office allotment prioritization ranking, strategy, and associated timelines as referenced in Appendix H, *Livestock Grazing Management Implementation Guidelines*, in addition to completed grazing permit renewals and in-progress grazing permit renewals in OHMA and UHMA.

D.3.5.1. Livestock Grazing Permit Prioritization by Allotment

This section provides the information for the allotment prioritization and timeline for assessing land health and addressing grazing permit applications as described in Appendix H, *Livestock Grazing Management Implementation Guidelines*. The following information will be included within this section of the report for allotments that contain OHMA or UHMA:

- Allotment name
- Allotment Number
- Total allotment acres
- Allotment OHMA acres
- Allotment UHMA acres
- Permit status
- Permit expiration date

- Anticipated renewal year
- Prioritization rank (low, med, high)
- Comments/notes

D.3.5.2. Permit Renewals

This section provides a summary of any permit renewals (e.g., fully processed, categorical exclusion [CX], determination of NEPA adequacy [DNA], Federal Land Policy and Management Act [FLPMA] 402 (C)(2)), that have been completed in OHMA or UHMA in addition to any that are in-progress. The following information will be included within this section of the report:

- Allotment name
- Allotment number
- Total allotment acres
- Allotment OHMA acres
- Allotment UHMA acres
- NEPA Name and number
- Permit renewal status (i.e., in-progress or completed); use this column to report on any permit renewals staff are currently working on processing for completion
- Permit expiration date
- Year permit issued or anticipated to be issued
- Date of last Land Health Determination
    - Meeting land health standards (yes/no); all standards must be meeting to indicate yes
    - Meeting GUSG habitat guidelines (yes/no); (see land health standard for special status species)
- Comments/notes (e.g., causal factor determination, other monitoring notes)

D.3.5.3. Range Short-term Monitoring

This section provides a summary of any short-term monitoring completed related to livestock grazing and GUSG habitat guidelines. The following should be reported for all plots monitored:

- Allotment name
- Pasture name, if applicable
- Location of monitoring (i.e., upland or riparian)
- Monitoring technique (e.g., photo point; utilization; Assessment, Inventory, and Monitoring [AIM])
- Date of monitoring
- Year monitoring plan developed
- Allotment in compliance with monitoring plan (yes/no)
- If applicable, report on whether the monitoring was meeting or not meeting the objectives.
- If applicable, report on whether the monitoring components (e.g., thresholds and responses, adaptive management plan, drought monitoring and response) were meeting the GUSG habitat guidelines and suitability.

D.3.5.4. Range Long-term Monitoring

This section provides a summary of any long-term monitoring completed related to livestock grazing and GUSG habitat guidelines. This could include reporting on AIM sample plots and indicators collected within an allotment. The following should be reported for all plots monitored:

- Allotment name
- Pasture name, if applicable
- Monitoring technique (e.g., photo point, , utilization, AIM)
- Date of monitoring
- Location of monitoring (i.e., upland or riparian)
- If applicable, report on whether the monitoring was meeting or not meeting the objectives.
- If applicable, report on whether the monitoring components (e.g., thresholds and responses, adaptive management plan, drought monitoring and response) were meeting the GUSG habitat guidelines and suitability.
- AIM plot monitoring data for GUSG habitat guidelines

D.3.6. Linkage-Connectivity Area Actions

This section should provide a brief description and summary of any activities that have occurred within linkage-connectivity areas (LCMA) (Appendix A, Map A.2). Please include pertinent information per the associated sections depending on whether the activity was a restoration, vegetation treatment, or surface-disturbing activity.

D.3.7. Waivers, Exceptions, and Modifications

This section includes reporting any waivers, exceptions, and modifications (WEMs) that were granted by the Authorized Officer in OHMA and UHMA. In addition, any authorizations or actions that were excepted through the *Habitat Exception Criteria* (MA-SSS-2) will be reported. The following will be included for each action:

- Year of authorization
- Acres of OHMA or UHMA
- Type of activity or infrastructure (e.g., road, utility line, treatment); what was excepted?
- NEPA name and number
- Type of WEM or habitat exception
- Comments regarding WEM or habitat exception

D.3.8. Restoration Activities and Treatments

This section includes reporting on any restoration or treatment activities that have occurred within the population for OHMA and UHMA. These summaries can include a short description of the project, objectives, and photos. This section should include the following for each project:

- Year
- Treatment type (e.g., weed spraying, vegetation planting, vegetation manipulation, rock structures)
- Project name and description

- Acres/miles treated or restored
- Upland or riparian
- Additional information
- Monitoring (yes/no)

D.3.9. Conservation Actions

This section includes reporting on any additional conservation actions or activities that have occurred within the population for OHMA and UHMA. This section may provide brief summaries to support actions taken in support of the USFWS Recovery Implementation Strategy (RIS) or other conservation successes that have occurred for the population, which may include Federal, State, Tribal, or private land partnerships. Some examples of items that may be reported on include decommissioning of user-created trails, partnership projects, local working group meeting attendance, or research projects. This section may include additional write-ups or photographs to highlight efforts.

D.4. REPORT TEMPLATE

United States Department of the Interior

Bureau of Land Management

Gunnison Sage-Grouse Monitoring Framework Report for the Gunnison Population

March 1, 20XX

Gunnison Field Office
2500 E New York Ave
Gunnison, CO 81230
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Table of Contents

Introduction 2
Surface Disturbing Activities 2
Reauthorized and Amended Rights-of-Way/Easements 4
Travel Management: Trail and Road Closures 5
Compensatory Mitigation 6
Livestock Grazing 7
Short-term Monitoring of Grazing Allotments 7
Long-term Monitoring 7
Linkage-Connectivity Area Actions 8
Waivers, Exceptions, and Modifications 8
Restoration Activities and Treatments 9
Project Summaries and Photos 10
Conservation Actions 10
Summary 10
Signatures 10

Introduction

At the end of each calendar year, by March 1, Field Offices with Occupied Habitat Management Areas (OHMA) or Unoccupied Habitat Management Areas (UHMA) will prepare a final monitoring report which documents authorized actions, progress toward objectives, issues encountered, and plan effectiveness of conservation actions. These reports are part of the Monitoring Framework as provided by the GUSG RMP Amendment and may be used for future plan evaluations. Please refer to Appendix D, *Monitoring Framework*, for all reporting measures and requirements. This annual report has been reviewed and signed by the Field Manager prior to providing a copy to the BLM Colorado and Utah State Office.

As part of this annual reporting process, the local Field Office has updated applicable conservation efforts, activities, and projects within the USGS Conservation Efforts Database (CED) Gunnison Sage-Grouse Recovery Module: https://conservationefforts.org/ as well as the BLM Vegetation Management Action Portal (VMAP): https://vmap.blm.doi.net/.

Provide a brief introduction and summary description of the actions, activities, or conservation measures covered in the report. Highlighted sections in this template are example only and need to be removed/updated.

Surface Disturbing Activities

The following tables include reporting of any new surface-disturbing activities within OHMA and UHMA. Activities related to restoration or vegetation treatments are not considered a reporting component in this section and would be included within the Restoration Activities and Treatment Activities section. Each authorization or action is tracked as a single entry in the report with total acres of OHMA or UHMA disturbed.

Table XX. OHMA Surface Disturbing Activities

Year	Disturbance Category	Project Title	NEPA #	Miles	Acres	Location (Uplands or Riparian)	Offsite Mitigation Required?	Acres of Compensatory Mitigation	Comments
2024	Trail construction	Signal Peak Trail Construction, Sunny D and South Rim	DOI-BLM-CO-XXXX-2024-0001-EA	4.4	NA	Uplands	No	NA	Finished construction of South Rim and Sunny D trails. Trails are single track mechanized. Mitigation included decommissioning 5 miles of existing trails.
2024	ROW - Pad construction for weather station	Weather Station	DOI-BLM-CO-XXXX-2024-0003-CX	NA	2.0	Uplands	Yes	10	Weather station was co-located near an existing disturbance with a utility line.

Table XX. UHMA Surface Disturbing Activities

Year	Disturbance Category	Project Title	NEPA #	Miles	Acres	Location (Uplands or Riparian)	Offsite Mitigation Required?	Acres of Compensatory Mitigation	Comments

Reauthorized and Amended Rights-of-Way/Easements

This section reports on amended, new, or reauthorized ROWs that did not lead to additional ground disturbance beyond the permitted area.

Table XX. OHMA Reauthorized and Amended Rights-of-Way/Easements

Year	Project Title	New, Renewal, Amendment	NEPA #	Updated with applicable Conservation Measures? (e.g., seasonal timing limitations)	Comments
2024	Driveway for access to property on existing road	New	EA-XXXXX	No	Granted a ROW for access to private property on an existing road.
2024	ROW Renewal on Utility Line	Amendment	CX-XXXX	Yes	Renewal of a utility ROW. Grant was updated with seasonal timing limitations for maintenance activities.

Table XX. Reauthorized and Amended Rights-of-Way/Easements

Year	Project Title	New, Renewal, Amendment	NEPA #	Updated with applicable Conservation Measures? (e.g., seasonal timing limitations)	Comments

Travel Management: Trail and Road Closures

This section reports on any road or trail decommissioning or closures. This does not include or account for seasonal closures, since those routes are still periodically available for travel. The first table provides a summary of the miles of route closures by the level of restoration in the HMA and is followed by a table with details of each route closed.

Level of Restoration:

- Level 1: routes that are accessed by routes closed by greater levels of decommissioning and were allowed to naturally revegetate in order to minimize ground disturbance and reduce spread of invasive weeds.
- Level 2: routes were closed by installing signs
- Level 3: routes were closed using worm fence/barricades
- Level 4: routes were closed by placing boulders with heavy equipment
- Level 5: routes were closed by ripping the road surface with heavy equipment and/or constructing water bars and seeding.

Table XX. Miles of Route Closures by Level of Restoration

Level of Restoration	Miles of Closure in OHMA	Miles of Closure in UHMA	Grand Total
Level 1	0	0	0
Level 2	0	0	0
Level 3	7.1	3.5	10.6
Level 4	0	0	0
Level 5	2.1	0.1	2.2
Grand Total	9.2	3.6	12.8

Table XX. Route Closures by Habitat Management Area (HMA)

Year Closed	Route/ Section ID	Route Type	Level of Restoration	OHMA Miles Closed	UHMA Miles Closed	Total Miles Closed
2024	Z4-1877	2-track	3	0.009	0.283	0.291
2024	Z4-2031	Single-track	5	0.919	0.000	0.919

Compensatory Mitigation

This section reports on any compensatory mitigation activities or treatments that have occurred.

Table XX. Compensatory Mitigation Activities

Year of Disturbance	Associated Disturbance Category	Mitigation Activity	Year of Mitigation	Mitigation Funds	Mitigation Acres or Miles	Comments
2024	Trail construction	Trail decommissioning	2025	NA	5 miles	Mitigation was decommissioning 5 miles of existing trails.
2024	ROW - Pad construction for weather station	Easement/acquisition	2024	$5,000	10	Mitigation funds put toward easement acquisition

Livestock Grazing

This section includes reporting on the Field Office allotment prioritization ranking, strategy, and associated timelines as referenced in the Livestock Grazing Implementation Guidelines (Appendix H) in addition to completed grazing permit renewals and in-progress grazing permit renewals.

Table XX. Livestock Grazing Permit Prioritization by Allotment

Allotment Name	Allotment Number	Total Allotment Acres	Allotment OHMA Acres	Allotment UHMA Acres	Permit Status (e.g., Fully Processed, FLPMA 402 (C)(2))	Permit Expire Date	Anticipated Renewal Year	Prioritization Rank (low, med, high)	Comments/Notes
Muddy Gap	088888	1,000	500	100	FLPMA 402(C)(2)	2024	2026	Med	

Table XX. Livestock Grazing Permits Renewed and In-Progress

Allotment Name	Allotment Number	Total Allotment Acres	Allotment OHMA Acres	Allotment UHMA Acres	NEPA Name and Number	Permit Renewal Status	Permit Expiration	Year Permit Issued or Anticipated for Issue	Date of last Land Health Determination or Report	Meeting Land Health Standards	Meeting GUSG Habitat Guidelines	Comments/Notes (e.g., causal factor determination, other monitoring notes)
Muddy Gap	088888	1,000	500	100	DOI-BLM-CO-XXXX-2024-0005-EA	Completed	05/15/2034	2024	2024	Yes	Yes	
Rock Dome	055555	2,000	2,000	0	DOI-BLM-CO-XXXX-2024-0015-EA	In-Progress	05/01/2028	2028	2023	Yes	Yes	

Short-term Monitoring of Grazing Allotments

This section provides a summary of any short-term monitoring completed related to livestock grazing and GUSG habitat guidelines.

Table XX. Short-term Monitoring

Allotment Name	Pasture Name	Location (Upland or Riparian)	Monitoring Technique (e.g., photo point, transect, utilization,)	Date of Monitoring	Year Monitoring Plan Developed	Allotment in Compliance with Monitoring Plan (yes/no)	Monitoring Objectives (Meeting or Not Meeting)	GUSG Habitat Guidelines	Comments/Notes
Antelope Creek	Antelope Creek	Upland	Photo point	05/29/22			Meeting	Meeting	
				7/11/2022			Not Meeting	Not Meeting	
Cabin Alder Creek	Alder Creek, Flick	Upland	Transect	05/12/22			Making Progress	Meeting	
				7/8/2022			Meeting	Not Meeting	
	Alder Creek, East Alder	Riparian	Utilization	05/12/22			Meeting	Meeting	
				7/8/2022			Meeting	Meeting	
				9/8/2022			Meeting	Meeting	

Long-term Monitoring

This section provides a summary of any long-term monitoring completed related to livestock grazing and GUSG habitat guidelines.

Table XX. Long-term Monitoring

Allotment Name	Pasture Name	Location (Upland or Riparian)	Monitoring Technique (e.g., photo point, transect, utilization, AIM)	Date of Monitoring	Year Monitoring Plan Developed	Allotment in Compliance with Monitoring Plan (yes/no)	Monitoring Objectives (Meeting or Not Meeting)	GUSG Habitat Guidelines	Comments/Notes
Antelope Creek	Antelope Creek	Upland	06216-01	05/29/22			Meeting	Meeting	
				7/11/2022			Not Meeting	Meeting	
Cabin Alder Creek	Alder Creek, Flick	Upland	16301-01	05/12/22			Making Progress	Not Meeting	
				7/8/2022			Meeting	Meeting	
	Alder Creek, East Alder	Riparian	16301-02	05/12/22			Meeting	Not Meeting	
				7/8/2022			Meeting	Meeting	
				9/8/2022			Meeting	Meeting	

Table XX. AIM Monitoring Plots

Allotment Name	Plot ID	OHMA or UHMA	Sagebrush Cover %	Non-sagebrush Shrub Cover %	Total Shrub Cover %	Average Sagebrush Height (cm)	Perennial Grass Cover %	Forb Cover %	Perennial Grass & Forb Height (cm)	Year Sampled
Iola	Oak-2092	OHMA	16	1	16	35	13	2	17	2024
Camp Kettle Gulch	MtnSage-1336	UHMA	26	5	26	13	15	2	19	2022

AIM protocol can be found in the Monitoring Manual for Grassland, Shrubland, and Savanna Ecosystems, SECOND EDITION, Volume I. Department of Interior users may access all data via the internal data portal found here: https://blm-egis.maps.arcgis.com/apps/webappviewer/index.html?id=ce9ca46b8cac4682b3dc7c156b6c42f8. External users may access the same data with lesser functionality here: https://landscape.blm.gov/geoportal/catalog/AIM/AIM.page

Linkage-Connectivity Area Actions

This section should provide a brief description and summary of any activities that have occurred within linkage-connectivity areas (LCMA). Please include pertinent information per the associated sections depending on whether the activity was a restoration, vegetation treatment, or surface-disturbing activity.

Waivers, Exceptions, and Modifications

This section includes reporting any waivers, exceptions, and modifications (WEMs) that were granted by the Authorized Officer in OHMA and UHMA. In addition, any authorizations or actions that were excepted through the *Habitat Exception Criteria* will be reported.

Table XX. Waivers, Exceptions, and Modifications in OHMA

Year	Activity or Type of Infrastructure	NEPA #	Miles	Acres	Type of WEM or Habitat exception	Comments
2024	Trail construction	DOI-BLM-CO-XXXX-2024-0001-CX	4.4	3.0	Habitat exception criteria	Trail was developed within a wooded area inside the OHMA boundary. Not adjacent to sagebrush.

Table XX. Waivers, Exceptions, and Modifications in UHMA

Year	Activity or Type of Infrastructure	NEPA #	Miles	Acres	Type of WEM or Habitat exception	Comments
2024	Well pad construction	DOI-BLM-CO-XXXX-2024-0013-EA	NA	5	Waiver	Waiver granted by Authorized Office to allow for well pad in a non-habitat area per the WEMs on the fluid mineral stipulation.

Restoration Activities and Treatments

This section includes reporting on any restoration or treatment activities that have occurred within the population for OHMA and UHMA.

Year	Treatment Type	Project Name/Description	Miles	Acres	Location Type (Upland or Riparian)	Monitoring? (Yes or No)	Additional Information
2024	Weed spraying	Weed spraying along recreational trails in SRMA	NA	50	Upland	No	
2024	Rock Structure	Flower Gulch rock structures	1	3	Riparian	Yes	

Project Summaries and Photos

A project summary may be provided to highlight restoration and treatment activities. These summaries can include a short description of the project, objectives, and photos.

Conservation Actions

This section includes reporting on any additional conservation actions or activities that have occurred within the population for OHMA and UHMA. This section may provide brief summaries to support actions taken in support of the USFWS Recovery Implementation Strategy (RIS) or other conservation successes that have occurred for the population, which may include federal, state, or private land partnerships. Some examples of items that may be reported on include decommissioning of user-created trails, partnership projects, local working group meeting attendance, or research projects. This section may include additional write-ups or photographs to highlight efforts.

Summary

Provide a brief summary and highlights of items in the report.

Signatures

As an Authorized Officer for the XXXX Field Office, I have reviewed the prepared GUSG Monitoring Framework for the XXXX population and certify it is complete and accurate to the best of my knowledge.

_____

(Printed name and position)

_____

Signature

APPENDIX E. METHODOLOGY FOR CALCULATING NET SURFACE DISTURBANCE

TABLE OF CONTENTS

APPENDIX E. METHODOLOGY FOR CALCULATING NET SURFACE DISTURBANCE E-1
E.1. Introduction E-3
E.2. Net Surface Disturbance E-3
E.3. References E-7

LIST OF TABLES

Table E.1. Anthropogenic Disturbance Types for Net Disturbance Calculations (Data Sources are Described for the West-Wide Habitat Degradation Estimates) E-3
Table E.2. Gunnison Sage-Grouse Population Net Disturbance E-6

E.1. INTRODUCTION

In the U.S. Fish and Wildlife Service (USFWS) Species Status Assessment Report for the Gunnison Sage-Grouse (2019), a draft result of a threat ranking matrix, is provided which was compiled through the Collaborative Action Plan (CAP) team. The intention was to prioritize current and future threats to Gunnison sage-grouse (GUSG) through a broad coalition of partners. The team ranked 30 identified threats, including anthropogenic disturbances, drought, and population size and structure, from high to low based on various factors including scope, severity, permanence, and immediacy. Under the Summary of Factors Affecting the Species, in the 2014 listing decision (USFWS, 79 FR 69191) for GUSG the USFWS identified habitat loss and fragmentation as the primary causes of decline in abundance and distribution of sage-grouse across the range, further citing that, "habitat fragmentation resulting from human development patterns is especially detrimental to GUSG because of their dependence on large expanses of sagebrush." Specific anthropogenic threats discussed in the USFWS listing decision include, but are not limited to, residential developments (including those associated with human population growth), roads, powerlines, mineral development, including oil and gas, and renewable energy. Additional threats, such as disease and predation, are also identified as having direct and indirect impacts to GUSG and can be associated with an increase in relation to anthropogenic disturbances.

Habitat degradation and fragmentation will be evaluated under the net surface disturbance management action (MA-SSS-5) for special status species, as described in this appendix.

E.2. NET SURFACE DISTURBANCE

The objective in occupied habitat management areas (OHMA) and unoccupied habitat management Areas (UHMA), for all populations, is to manage for no increase in net surface disturbance, to reduce existing net fragmentation, and avoid additional new disturbance in GUSG habitat, while increasing available habitat. For example, construction of new roads or trails should be offset at a greater or equal amount of reclaimed roads or trails.

The west-wide habitat degradation (disturbance) data layers (Table E.1) and associated areas of direct influence identified will be used to calculate the estimated amount of surface disturbance within OHMA and UHMA for each of the eight GUSG populations. Locally collected disturbance data may identify the actual areas of disturbance to the extent possible and are not required to rely on the "Direct Area of Influence" estimates in Table E.1.

Table E.1. Anthropogenic Disturbance Types for Net Disturbance Calculations (Data Sources are Described for the West-Wide Habitat Degradation Estimates)

Degradation Type	Subcategory[1]	Potential Data Source	Direct Area of Influence[1]	Area Source
Energy (oil and gas)	Wells	IHS; BLM (AFMSS)	5.0 acres (2.0 hectares)	BLM WO-300
	Power Plants	Platts (power plants)	5.0 acres (2.0 hectares)	BLM WO-300

Degradation Type	Subcategory[1]	Potential Data Source	Direct Area of Influence[1]	Area Source
Energy (coal)	Mines	BLM; USFS; Office of Surface Mining Reclamation and Enforcement; USGS Mineral Resources Data System	Polygon area (digitized)	Esri/Google Imagery
	Power Plants	Platts (power plants)	Polygon area (digitized)	Esri Imagery
Energy (wind)	Wind Turbines	Federal Aviation Administration	3.0 acres (1.2 hectares)	BLM WO-300
	Power Plants	Platts (power plants)	3.0 acres (1.2 hectares)	BLM WO-300
Energy (solar)	Fields/Power Plants	Platts (power plants)	7.3 acres (3.0 hectares)/MW	National Renewable Energy Laboratory
Energy (geothermal)	Wells	IHS	3.0 acres (1.2 hectares)	BLM WO-300
	Power Plants	Platts (power plants)	Polygon area (digitized)	Esri Imagery
Mining	Locatable Developments	InfoMine	Polygon area (digitized)	Esri Imagery
Infrastructure (roads and trails)	Surface Streets (Minor Roads)	Esri StreetMap Premium	40.7 feet (12.4 meters)	USGS
	Major Roads	Esri StreetMap Premium	84.0 feet (25.6 meters)	USGS
	Interstate Highways	Esri StreetMap Premium	240.2 feet (73.2 meters)	USGS
	Primitive Roads*	Esri StreetMap Premium and BLM Travel Management Planning and Inventories	15 feet (4.5 meters)	BLM H-9115-1
	Recreational Trails*	BLM Travel Management Planning and Inventories	6 feet (1.8 meters)	BLM
Infrastructure (railroads)	Active Lines	Federal Railroad Administration	30.8 feet (9.4 meters)	USGS
Infrastructure (power lines)	1-199 kV Lines	Platts (transmission lines)	100 feet (30.5 meters)	BLM WO-300
	200-399 kV Lines	Platts (transmission lines)	150 feet (45.7 meters)	BLM WO-300
	400-699 kV Lines	Platts (transmission lines)	200 feet (61.0 meters)	BLM WO-300
	700+ kV Lines	Platts (transmission lines)	250 feet (76.2 meters)	BLM WO-300
Infrastructure (communication)	Towers	Federal Communications Commission	2.5 acres (1.0 hectares)	BLM WO-300

[1] kV=kilovolts; ac=acre; ha=hectare; ft=feet; m=meters; MW=megawatts

*These anthropogenic disturbances will be incorporated into the net surface disturbance calculation once Travel Management Plans (TMPs) and subsequent route designation decisions have been completed for the Field Office.

During implementation of the ARMPA an inventory and digitization of anthropogenic disturbances will be completed to create a refined disturbance data set that will be used to calculate disturbances at a finer scale during the authorization process and evaluate trends in net surface disturbance across the population area. During annual reporting under the Monitoring Framework (Appendix D), the below table (E.2) and net disturbance acres will be provided for the current year, in addition to past years, to allow decision-makers to evaluate net disturbance trends. These net disturbance calculations will be incorporated into the cumulative impact analysis during project-scale National Environmental Policy Act (NEPA) processes to inform decision-makers.

Net disturbance reporting will be updated and calculated annually for any authorizations where there is a Federal action or nexus, for each population by OHMA and UHMA as shown in Table E.2.

Formulas for calculations of the amount of disturbance in OHMA and UHMA are as follows:

- Percent OHMA disturbance = (combined acres of anthropogenic disturbance[1]) ÷ (acres of all lands within the OHMA polygons for a GUSG population area) x 100.
- Percent UHMA disturbance = (combined acres of the anthropogenic degradation threats[1]) ÷ (acres of all lands within the UHMA polygons for a GUSG population area) x 100.

The denominator in the disturbance calculation formula consists of all acres of lands classified as OHMA or UHMA, regardless of ownership, within the population area. It should be noted that some populations (e.g., San Miguel) have multiple polygons of OHMA and UHMA. Therefore, per the above calculations, the total acres of all OHMA polygons for the population would be combined as the denominator in the equation and similarly for UHMA. Areas within OHMA and UHMA, that are not GUSG seasonal habitats, or are not currently supporting sagebrush cover (e.g., due to wildfire, agriculture, forested), are not excluded from the acres of OHMA and UHMA in the denominator of the formula.

For an area to no longer be considered disturbed under the net calculation, the disturbances need to be reclaimed and restored, where technically and legally feasible (e.g., valid existing rights, split-estate lands). The objective of long-term restoration is to make areas with disturbance usable by GUSG. For long-term restoration of OHMA or UHMA with discrete surface disturbances to be considered successful, establishment of desired forbs and sagebrush would be present and GUSG habitat guidelines would be expected to make progress toward meeting habitat suitability.

[1] See Table E.1.

Table E.2. Gunnison Sage-Grouse Population Net Disturbance

Surface Management Agency Category	OHMA Acres Disturbed	UHMA Acres Disturbed	Total Acres Disturbed (OHMA + UHMA)	OHMA Acres Undisturbed	UHMA Acres Undisturbed	Total Acres Undisturbed (OHMA + UHMA)	Total Acres OHMA	Total Acres UHMA
Bureau of Land Management (BLM)								
U.S. Forest Service								
Other Federal/BIA								
State								
Private								
Other								
Grand Total Acres								
Percent Disturbed								

E.3. REFERENCES

U.S. Fish and Wildlife Service (USFWS). 2014. Endangered and Threatened Wildlife and Plants: Threatened Status for Gunnison Sage-Grouse. Federal Register 79:69191-69310.

USFWS. 2019. Species Status Assessment Report for the Gunnison Sage-Grouse (*Centrocercus minimus*). Version: April 20, 2019. Lakewood, CO.

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APPENDIX F. HABITAT MONITORING AND REPORTING

TABLE OF CONTENTS

APPENDIX F. HABITAT MONITORING AND REPORTING F-1
F.1. Incorporating the Habitat Assessment Framework F-3
F.2. Habitat Indicators and Guidelines F-3
F.3. Using the Habitat Indicators Table F-6
F.4. References F-7

LIST OF TABLES

Table F.1. GUSG Habitat Indicators and Guidelines F-4

F.1. INCORPORATING THE HABITAT ASSESSMENT FRAMEWORK

The Habitat Assessment Framework (HAF/BLM TR 6710-1) provides a standardized, scientifically based methodology to assess sage-grouse habitat suitability at multiple scales. Complete descriptions of the scales of habitat and the associated indicators for habitat assessment at each scale are available in the HAF (BLM TR 6710-1). The HAF is available on the BLM's website (https://www.blm.gov/noc/blm-library/technical-reference/sage-grouse-habitat-assessment-framework-multiscale-assessment).

The scales and types of indicators for habitat assessments are:

- Broad-scale – Habitat availability, configuration, connectivity
- Mid-scale – Habitat availability, configuration, connectivity, and anthropogenic disturbance
- Fine-scale – Seasonal habitat availability and connectivity, conifer cover, noxious/annual grass cover, and anthropogenic disturbance
- Site-scale (seasonal habitats) – Vegetation composition, structure and other site characteristics and anthropogenic disturbance.

For each scale, there are three habitat suitability ratings (suitable, marginal, and unsuitable). Habitat suitability occurs along a continuum or gradient ranging from unsuitable to suitable and is rarely uniform across the scales (i.e., mid-scale, fine scale, and site-scale). Using multi-scale evaluations are important for assessing Gunnison sage-grouse (GUSG) habitat by considering the entire suite of conditions that contribute to high quality habitat, the success of past conservation actions, and prioritizing future land uses and conservation actions

F.2. HABITAT INDICATORS AND GUIDELINES

In all GUSG Habitat Management Areas (HMAs) (occupied habitat management areas [OHMA] and unoccupied habitat management areas [UHMA]), where sagebrush is the current or potential dominant vegetation type or is a primary species within the various states of the ecological site description, maintain or restore vegetation to provide habitat for lekking, nesting, brood-rearing, and winter habitats.

The habitat guidelines for GUSG (Table F.1, Habitat Indicators and Guidelines) are a list of indicators, characteristics, and guidelines, derived from local research on GUSG habitat selection, that collectively are used to inform habitat suitability for GUSG seasonal habitat areas. BLM offices will use the indicators and guidelines in Table F.1 to assess each monitoring location within seasonal habitats for site-scale suitability, with data collected during the appropriate corresponding seasonal use period, as applicable. Indicators are assessed following the methods described in the Sage-Grouse Habitat Assessment Framework (HAF/BLM TR 6710-1). The BLM will leverage the terrestrial Assessment, Inventory, and Monitoring (AIM) methods (Herrick et al. 2017), additional monitoring approaches for wetland and riparian habitats, partner data as available, and supplemental guidelines developed by the BLM to collect data on site-scale habitat condition. Not all areas within a given habitat management area will be capable of meeting the identified seasonal habitat values in Table F.1 due to inherent variation in vegetation communities and ecological potential. The intent is not to meet all habitat indicators and guidelines at every monitoring location, but rather to provide seasonal habitat requirements across the landscape. Marginal or unsuitable ratings may still provide, or have the capacity to provide, one or more of the desired habitat components.

When completing site-scale habitat suitability assessments, it is inappropriate to use a single indicator from Table F.1 or the HAF habitat suitability form to determine overall habitat suitability of the plot (i.e., suitable, marginal, or unsuitable) unless sagebrush is absent or limiting. Instead, BLM specialists must consider all indicators using multiple lines of evidence, as described in the HAF and in the BLM Sage-Grouse HAF Implementation Guidelines, to determine the plot's overall habitat suitability. The measured habitat indicator values will vary across GUSG populations and time, driven largely by uses and environmental conditions (e.g., ecological site potential of the monitoring plot), including factors such as annual rainfall and natural disturbances, especially wildfire. In addition, a site may not meet the suitable rating if many indicators are impacted by annual climate variability (e.g., drought conditions). Thus, it is critical to document environmental factors when completing the habitat suitability forms. While the habitat indicators and guidelines are not attainable on every acre within GUSG HMAs (OHMA and UHMA), the values reflect a range of habitat conditions where GUSG are known to persist. When permitting land use activities or implementation of projects, BLM should consider the ecological site potential within designated HMAs to validate whether the habitat indicators and associated guidelines are achievable for a specific site. Where ecological site descriptions do not exist, use best available data and references, such as rangeland trends, to inform site potential.

As research advances, new data could refine, or clarify for certain populations, GUSG selection for vegetation structure and composition in seasonal habitats. Because of this, the Habitat Indicators and Guidelines Table (Table F.1) will be periodically reviewed to incorporate the best available science in coordination with applicable Federal, State, and Tribal agencies.

Table F.1. GUSG Habitat Indicators and Guidelines

Attribute	Indicators	Suitable	Marginal	Unsuitable
BREEDING AND NESTING (Seasonal Use Period March 1 – June 30)[1,2,3] Apply 4 miles from all leks (active, inactive, unknown, historic)				
Lek Security	Proximity of trees[4]	Conifer trees or other tall structures are not within line of sight of a lek and are none to uncommon within 1.86 miles of leks [2,5]		
	Proximity of sagebrush to leks[5]	Adjacent protective sagebrush cover within 328 feet of lek		
Cover and Food	**Sagebrush canopy cover[2,12]**			
	Arid sites[7,8]	15 to 40%	5 to 15% or > 40%	< 5%
	Mesic sites[7,9]	10 to 35%	5 to 10% or > 35%	< 5%
	Total shrub canopy cover[2,6,12]			
	Arid sites[7,8]	20 to 40%	5 to 20% or > 40%	< 5%
	Mesic sites[7,9]	15 to 35%	5 to 15% or > 35%	< 5%
	Sagebrush height[2,12]			
	Arid sites[7,8]	25 to 50 cm	20 to < 25 cm or > 50 cm	< 20
	Mesic sites[7,9]	30 to 50 cm	20 to < 30 cm or > 50 cm	< 20
	Predominant sagebrush shape[5,10]			

Attribute	Indicators	Suitable	Marginal	Unsuitable
	All sites	Majority spreading	Mix of spreading and columnar	Majority columnar
	Perennial grass canopy cover[2,12]			
	Arid sites[7,8]	≥ 10%	5 to < 10%	< 5%
	Mesic sites[7,9]	≥ 20%	5 to < 20%	< 5%
	Perennial forb canopy cover[2,12]			
	Arid sites[7,8]	≥ 5%	3 to < 5%	< 3%
	Mesic sites[7,9]	≥ 20%	5 to < 20%	< 5%
	Perennial grass and forb height[2,11,12]			
	All sites	≥ 10 cm	5 to < 10 cm	< 5 cm
	Preferred forb availability[5]			
	All sites	Common, > 5 species	Rare, < 5 species	Scarce
	Conifer Tree Cover[4,12]			
	All sites	1% to 3%	3% to 4%	> 4%
BROOD-REARING/SUMMER (Seasonal Use Period July 1 – October 31)[1,2,3]				
Cover and Food	**Sagebrush canopy cover[2,12]**			
	Arid sites[7,8]	5 to 30%	> 30%	< 5%
	Mesic sites[7,9]	5 to 35%	> 35%	< 5%
	Total shrub canopy cover[2,6,12]			
	Arid sites[7,8]	10 to 30%	5 to 10% or > 30%	< 5%
	Mesic sites[7,9]	10 to 35%	5 to 10% or > 35%	< 5%
	Sagebrush height[2,12]			
	Arid sites[7,8]	20 to 40 cm	> 40 cm	< 20 cm
	Mesic sites[7,9]	25 to 50 cm	20 to < 25 cm	< 20 cm
	Perennial grass and forb height[2,11,12]			
	All sites	≥ 10 cm	5 to < 10 cm	< 5 cm
	Perennial grass canopy cover[2,12]			
	All sites	≥ 10%	5 to < 10%	< 5%
	Perennial forb canopy cover[2,12]			
	Arid sites[7,8]	≥ 5%	N/A	< 5%
	Mesic sites[7,9]	≥ 15%	5 to < 15%	< 5%
	Preferred forb availability[5]			
	All sites	Common, > 5 species	Rare, < 5 species	Scarce
WINTER (Seasonal Use Period November 1 – February 28)[1,2,3]				
Cover and Food	**Sagebrush canopy cover[2,12]**			
	All sites	≥ 30 to ≤ 40%	5 to < 30% or > 40%	< 5%
	Sagebrush height[2,12]			
	All sites	≥ 40 cm	> 20 cm to < 40 cm	≤ 20 cm

[1] Specific dates for seasonal habitat may be adjusted based on site-specific conditions. Modifications to dates can be made due to documented local variations (e.g., higher/lower elevations) or annual climatic fluctuations (e.g., early/late spring, and/or long/extreme winter) in coordination with the appropriate State of Colorado/Utah agency.

[2] Connelly et al. 2000

[3] Gunnison Sage-Grouse Rangewide Steering Committee 2005. Derived from various local studies as described in Appendix H of the GUSG Rangewide Conservation Plan (RCP).

[4] Baruch-Mordo et al. 2013

[5] Stiver et al. 2015

[6] Includes shrubs such as horsebrush (*Tetradymia spp.*), rabbitbrush (*Chrysothamnus spp.*), bitterbrush (*Purshia spp.*), snakeweed (*Gutierrezia sarothrae*), greasewood (*Sarcobatus spp.*), winterfat (*Eurotia lanata*), Gambel's oak (*Quercus gambelii*), snowberry (*Symphoricarpos oreophilus*), serviceberry (*Amelanchier spp.*), and chokecherry (*Prunus virginiana*).

[7] Mesic and arid sites should be defined on a local basis; annual precipitation, herbaceous understory, and soils should be considered (Connelly et al. 2000). Arid sites tend to align with aridic soil moisture regimes, whereas mesic sites align with xeric, ustic, and udic soil moisture regimes (Chambers et al. 2016).

[8] 7-11 inch precipitation zone; Wyoming big sagebrush (*Artemisia tridentata wyomingensis)* (Winward 2004).

[9] > 14 inch precipitation zone; Mountain big sagebrush (*Artemisia tridentata vaseyana*) (Winward 2004).

[10] Sagebrush plants with a spreading shape provide more protective cover than sagebrush plants that are more tree/trunk-like or columnar shaped (Stiver et al. 2015).

[11] Measured as "droop height"; the highest naturally growing portion of the plant.

[12] Vegetation measurements collected using the protocol outlined in the Monitoring Manual for Grassland, Shrubland, and Savanna Ecosystems, Volume 1: Core Methods (Herrick et al. 2017).

F.3. USING THE HABITAT INDICATORS TABLE

The GUSG Habitat Indicators and Guidelines Table is to be used as follows:

- To inform habitat suitability at one point in time, as defined by the processes described in the Habitat Assessment Framework and BLM HAF Implementation Guidelines.
- To inform agency decision-makers regarding consideration of whether a project or proposal should be approved, denied, or modified based on whether it would contribute to an area's existing habitat suitability status.
- To inform measurable project objectives during implementation-level planning for BLM-permitted and BLM-initiated actions in HMAs, as applicable.

Additional guidance on the use of the Habitat Indicators and Guidelines Table and the associated products is available in the Habitat Assessment Framework (Stiver et al. 2015, BLM TR 6710-1, as revised) and BLM Sage-Grouse HAF Implementation Guidelines.

When assessing seasonal habitat suitability, the BLM will summarize and report the number of monitoring locations, or amount of seasonal habitat in the analysis area that are suitable, marginal, or unsuitable. Based on the monitoring locations rated as suitable, marginal, or unsuitable and the documentation of conditions across the entire analysis area (e.g., ecological site potential, climate factors, land ownership patterns) the BLM will determine if a given seasonal habitat is a limiting factor for GUSG in coordination with the State wildlife management agency. Rationale for ratings will be documented in a HAF summary report.

The habitat indicators and guidelines are not land health standards and do not replace land health assessments. Rather, the indicators and guidelines in Table F.1 are meant to inform the wildlife and/or sensitive species component of the land health standards evaluation process (LHS, 43 CFR 4180.2). Results from the land health standards evaluation should be used to support the BLM in land use

authorization processes and during development of appropriate objectives for management actions such as vegetation treatments.

F.4. REFERENCES

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APPENDIX G. BUFFER DISTANCES AND EVALUATION OF IMPACTS ON LEKS

Evaluate impacts on all leks during the National Environmental Policy Act (NEPA) analysis process, in addition to any other relevant information determined to be appropriate (e.g., State wildlife agency plans), and consistent with valid existing rights. All leks are defined as all lek statuses including occupied, unoccupied, active, inactive, historic, and unknown. Through project-specific analysis for NEPA documentation, the Bureau of Land Management (BLM) will assess and address impacts from the following activities using the lek buffer distances as identified in the United States Geological Survey's (USGS) report, *Conservation buffer distance estimates for Greater Sage-Grouse—A review* (Open File Report 2014-1239) (Manier et al. 2014) in addition to local-based science. The BLM will assess and address impacts within the lek buffer-distances specified unless *justifiable departures* are determined to be appropriate (see below). The starting point for lek buffer distances is as follows:

- At a minimum, no new above ground development, infrastructure (e.g., pipelines, utility lines), or roads within 1 mile of all leks. See MA-SSS-11 on buffer distances.
- Linear features (roads) within 3.1 miles of leks
- Infrastructure related to energy development within 3.1 miles of leks
- Tall structures (e.g., communication or transmission towers and transmission lines) within 2 miles of leks
- Low structures (e.g., fences and rangeland structures) within 1.2 miles of leks
- Surface disturbance (continued human activities that alter or remove the natural vegetation (see Table E.1 in Appendix E, *Methodology for Calculating Net Surface Disturbance*) within 3.1 miles of leks
- Noise and related disruptive activities, including those that do not result in habitat loss (e.g., motorized recreational events), at least 0.25 mile from leks

Justifiable departures will be considered to decrease or increase these distances from the lek where variability is anticipated, based on local data, best available science, landscape features, and other existing protections (e.g., land use allocations and state regulations). The USGS report recognized "that because of variation in populations, habitats, development patterns, social context, and other factors, for a particular disturbance type, there is no single distance that is an appropriate buffer for all populations and habitat across the sage-grouse range." The distances noted above are starting points, from which local information should be applied to determine if local variations in distances are necessary to address lek persistence. The USGS report also states that "various protection measures have been developed and implemented…[which have] the ability (alone or in concert with others) to protect important habitats, sustain populations, and support multiple-use demands for public lands." All variations in lek buffer-distances will require appropriate analysis and disclosure as part of activity authorization. The BLM will use the most recent lek data available from the State wildlife agency to assess and address project-specific impacts on leks.

G.1. ACTIONS IN OHMA AND UHMA

In undertaking BLM management actions, in occupied habitat management areas (OHMA) and unoccupied habitat management areas (UHMA), and consistent with valid and existing rights and applicable law in authorizing third-party actions, the BLM, through NEPA analysis will assess and address impacts within the lek buffer-distances identified above to document that conservation measures address the impacts on leks (e.g., land use allocations, minimization measures, state regulations, and site-specific conditions of approval) to the degree that the activity will not directly or indirectly threaten the continued use of the lek location by Gunnison sage-grouse (GUSG) (i.e., lek persistence). The BLM may approve actions in OHMA within the applicable lek buffer-distance identified above if:

- The BLM, with input from the State wildlife agency and U.S. Fish and Wildlife Service (USFWS), determines, based on best available science, landscape features, and other existing protections, that a lek buffer-distance other than the applicable distance identified above offers equivalent protection to the GUSG lek and its adjacent nesting habitat; or
- The BLM determines that impacts on leks and associated nesting habitats are minimized such that the project will cause minimal or no new loss of habitat; or
- Other mitigation measures have been developed and implemented that will, alone or in concert with other minimization measures, maintain lek persistence and the use of adjacent nesting habitat.

If analysis, in coordination with the appropriate State agency and the USFWS, determines impacts could affect lek persistence (i.e., result in a lek no longer being occupied or active) after application of the above, additional conservation measures should be addressed and applied to address impacts (e.g., locating the action outside of the applicable lek buffer-distance(s) identified above).

Range improvements, for livestock grazing management, that do not affect GUSG or range improvements that provide a conservation benefit to GUSG, such as fences for protecting important seasonal habitats, are exempt from the lek buffer requirement.

G.2. REFERENCES

Manier, D. J., Z. H. Bowen, M. L. Brooks, M. L. Casazza, P. S. Coates, P. A. Deibert, S. E. Hanser, and D. H. Johnson. 2014. *Conservation buffer distance estimates for Greater Sage-Grouse—A review.* U.S. Geological Survey Open-File Report 2014–1239, 14 p. http://dx.doi.org/10.3133/ofr20141239.

APPENDIX H. LIVESTOCK GRAZING MANAGEMENT IMPLEMENTATION GUIDELINES

TABLE OF CONTENTS

APPENDIX H. LIVESTOCK GRAZING MANAGEMENT IMPLEMENTATION GUIDELINES H-1
H.1. Introduction H-3
H.2. Adaptive Management Components H-3
H.3. Prioritization Strategy H-7
H.4. Examples & Resources H-8
H.4.1. Adaptive Management H-8
H.4.2. Monitoring H-8
H.4.3. Thresholds and Responses H-11
H.5. References H-15

LIST OF FIGURES

Figure H-1. Diagram of Adaptive Management Process H-4

H.1. INTRODUCTION

This appendix is intended to highlight general concepts and guidelines related to implementation of adaptive management for livestock grazing in occupied habitat management areas (OHMA) and unoccupied habitat management areas (UHMA). There are many resources and published literature related to adaptive management for livestock grazing, including outcome-based grazing systems (https://www.partnersinthesage.com/outcome-based-grazing). This appendix is not a comprehensive synthesis of available resources; however, it can serve as a starting point for building an adaptive management strategy for livestock grazing.

Well-managed livestock grazing operations can be compatible with maintaining Gunnison sage-grouse (GUSG) habitat suitability and achieving GUSG habitat guidelines when considering a suite of ecological factors, site-specific conditions, monitoring data, land health assessments, and implementation of adaptive management. Adaptive management has many iterations and definitions but can simply be explained as a "systematic approach for improving resource management by learning from management outcomes" (Figure H-1, Williams et al. 2009). Adaptive management for livestock grazing can involve outlining a strategic plan, setting goals for desired outcomes, followed by resource monitoring, and evaluation of management success based on monitoring data (Derner et al. 2022). Furthermore, adaptive management plans should engage stakeholders, prioritize outcomes, incorporate monitoring, and ensure for timely decision-making or management modifications (Derner et al. 2022).

Within the Gunnison Sage-Grouse Approved Resource Management Plan Amendment (ARMPA), several management actions in the *Livestock Grazing Management* section outline the need for development of adaptive management plans, with monitoring objectives linked to specific thresholds and responses (i.e., objectives) to adapt to changing conditions and drought. This appendix highlights a strategy for adaptive management and key-components that can be outlined when developing a plan.

H.2. ADAPTIVE MANAGEMENT COMPONENTS

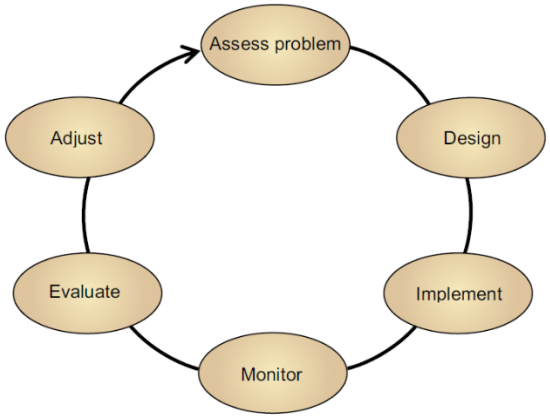
This section outlines a strategy for adaptive management and key-components that can be included when developing a plan. Fischman and Ruhl analyzed U.S. Federal court opinions where agencies were found to be most deficient in adaptive management practices (2015). They summarized that, "shortcomings included lack of clear objectives and processes, monitoring thresholds, and defined actions triggered by thresholds." Incorporation of these elements are key considerations when developing an adaptive management plan.

Adaptive management is one of the tools available for structured decision making for management of natural resources. The development of an adaptive management plan includes consideration of the following elements (Williams et al. 2009):

- Engaging the relevant stakeholders in the decision-making process
- Identifying the problem to be addressed
- Specifying objectives and tradeoffs that capture the values of stakeholders
- Identifying the range of decision alternatives from which actions are to be selected
- Specifying assumptions about resource structures and functions
- Projecting the consequences of alternative actions
- Identifying key uncertainties

- Measuring risk tolerance for potential consequences of decisions
- Accounting for future impacts of present decisions
- Accounting for legal guidelines and constraints

Figure H-1. Diagram of Adaptive Management Process



Derner and others outline five key components to address during the development of an adaptive management plan in their paper, "*Adaptive grazing management in semiarid rangelands: An outcome-driven focus*" and provide a schematic for the interactions and feed-back loop amongst the components (2022). These components are highlighted below but can be found in more detail in the referenced resource. Each of the components can assist the interdisciplinary team in developing thresholds (see item 1) and responses (see item 5). Incorporation of thresholds and responses for GUSG is outlined in MA-LG-1 under the *Livestock Grazing Management* section of the ARMPA.

1. **Identify and Prioritize Outcomes**

   Coordinate with stakeholders, permittees, and the interdisciplinary team to compile a list of potential outcomes or objectives. These can be driven by resource issues, economic goals for the operation, ecological conditions (e.g., drought), desired vegetation composition, or other factors. Prioritize the list of outcomes from highest to lowest. Objectives should be clear and measurable with quantitative thresholds identified if possible. This allows objectives to be monitored to ensure progress is being made or determine if a threshold has been crossed and triggers a response or change in management. Some examples for outcomes or objectives are provided below, however these are based on site-scale conditions:

   - *Increase native bunchgrass cover by 10% above existing conditions.*
   - *In riparian areas, bank alteration will not exceed 35 percent.*
   - *In riparian and wetland areas, a minimum 4-inch stubble height will be maintained on all key herbaceous species.*
   - *Maintain GUSG habitat to continue to achieve GUSG habitat guidelines and "suitable" ratings when evaluated once every 3 years using site-scale HAF.*

2. **Understand Rangeland Dynamics**

   Adaptive decision making begins with building alternative hypotheses about resource dynamics, which can then be tested and evaluated with monitoring data (Williams and Brown 2012).

Understanding rangeland conditions and resource dynamics can start with a land health assessment, however there are a variety of other sources of information that can build on the understanding of site-specific conditions and ecological processes. Derner et al. (2022) provides several sources that can be considered when developing a list of ecological processes that could affect rangeland dynamics including:

- Historic records
- Photos
- Stakeholder input/interviews
- Experiential knowledge
- Existing monitoring data
- Scientific research
- Professional experience and judgment

3. Consider Logistical, Labor, Institutional, and Economic Constraints

Economic and financial risks should be considered with stakeholders to determine whether these may prevent meeting outcomes or whether they can be overcome (Derner et al. 2022). Logistical and cost considerations should also include consideration of the time and effort required to get to monitoring sites, workload to implement monitoring or management changes, and commitment by stakeholders and specialists to carry out the monitoring and management over the life of the adaptive management plan (Williams et al. 2009; Williams and Brown 2012). Photo points may be a cost-effective strategy for monitoring in some scenarios.

4. Monitor Relevant Metrics to Gauge Progress Toward Outcomes

Monitoring plans should incorporate GUSG habitat guidelines and consider the land health assessment (LHA) or determination with the associated Habitat Assessment Framework (HAF) report. When developing a monitoring plan, it is also important to consider cooperative monitoring with permittees, ecological site potential, rangeland trends, livestock use patterns, and selection of representative sites (e.g., identify key use areas). The monitoring plan should be developed to specifically address or evaluate the thresholds, with a frequency of monitoring identified that provides for meaningful and timely management responses. Adaptive management and monitoring for specific thresholds or benchmarks can be based on short-term or long-term monitoring (Derner et al. 2022).

"Short-term monitoring procedures should be simple, quick, and based on consistent methods that are focused on locations where meaningful change is expected or uncertainty is high."

Examples of short-term monitoring may include:

- Photo points
- Stubble height
- Utilization

"Long-term monitoring procedures should emphasize consistent methodology across years that provides broader ecosystem context for multiple ecosystem services (e.g., watershed protection and grassland bird habitat)."

Examples of long-term monitoring may include:

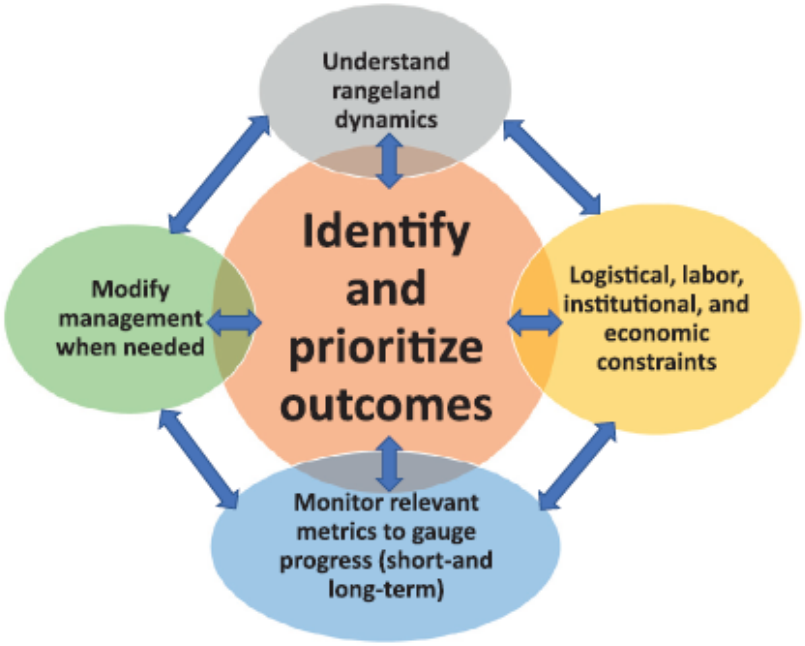
- Assessment, Inventory, Monitoring (AIM) (https://www.blm.gov/aim/resources)
- Plant functional groups (e.g., cool season grasses (C3) vs. warm season grasses (C4))
- Riparian plant composition or bank stabilization

5. Modify Management When Needed

Coordinate with stakeholders, permittees, and the interdisciplinary team to compile a list of potential management responses that relate to the thresholds identified. Evaluation and analysis of monitoring data should inform whether desired benchmarks are making progress or if thresholds have been crossed (Derner et al. 2022). Management responses should be clear and transparent with potential to achieve specific objectives (Williams et al. 2009). The cycle of monitoring, assessment, and decision-making can lead to a better understanding of resource dynamics, which in turn can feed into adjusted management strategies based on outcomes and what was learned (Williams and Brown 2012). Examples of potential modifications include, but are not limited to, changes in:

- Season or timing of use (including rotation)
- Numbers of livestock (include temporary non-use or livestock removal)
- Distributions of livestock use
- Grazing schedules (including rest or deferment)
- Duration and/or level of use (e.g., utilization, stubble height, height-weight measurement curves, etc.)

The below figure is from Derner et al. (2022) and provides a "schematic presentation of an outcome-driven focus to adaptive grazing management in semiarid rangelands. Interactions and feedback loops among components are illustrated with bidirectional arrows."



H.3. PRIORITIZATION STRATEGY

Prioritizing grazing permit renewals and monitoring locations using the criteria listed below does not indicate that livestock grazing is more of a management concern than other uses of the public lands. Nor does it suggest that livestock grazing is an incompatible use in any given area, but rather reflects a strategy to prioritize limited resources and ensure livestock grazing is properly managed for achievement of land health standards (LHS). The BLM recognizes that livestock grazing is an important component of its multiple use mission and that grazing can be sustainable and compatible with conserving wildlife habitat.

The USFWS Recovery Implementation Strategy (RIS) has several priority activities related to livestock grazing and rangeland health to benefit GUSG conservation and habitat guidelines. The RIS Priority 2 Activity 6.01 states, "Meet with Federal land management agency biologists, rangeland personnel, and permittees to map allotments, allotment health, monitoring schedules and protocols, and AUMs in GUSG habitat. If allotments are not meeting GUSG habitat structural guidelines and livestock are a causal or contributing factor, assess alternatives for improved rotation, resting pastures, alternate grazing locations, or AUM reduction. If allotments are meeting GUSG habitat structural guidelines, evaluate opportunities for improving habitat quality and rangeland health."

Field Offices will evaluate and prepare a permit renewal and prioritization ranking and associated timelines/strategy for allotments that contain OHMA or UHMA through coordination with the wildlife biologist and range specialist. Allotment priorities and permit renewal strategies may include allotments outside of OHMA or UHMA, especially when there are competing resource concerns or areas where land health is not being met. However, at a minimum a timeline and strategy must be prepared for allotments with OHMA or UHMA. The prioritization will be updated annually and should reflect allotment monitoring and permit renewal priorities over a short-term (e.g., 5-year period) and long-term (e.g., 10-year or more) period. Field Offices must give the highest priority to the work necessary to meet applicable legal requirements (e.g., court orders). Field Offices should consider the criteria listed below to inform their priority-setting process and classify allotments as low, medium, or high. These criteria are not listed in order of importance, nor are they all-inclusive and the BLM may use additional criteria when setting priorities, such as prioritizing other resource concerns: (not listed in order of importance)

- Allotments where Endangered Species Act Section 7 consultation for GUSG has not been completed
- Allotments with active GUSG leks are present, regardless of landownership
- Allotments where GUSG habitat guidelines (i.e., HAF) are not meeting/suitable and causal factors are unrelated to ecological site potential
- Allotments where LHS have not been evaluated or formally documented in an evaluation report
- Allotments where LHS are not meeting for one or more standards in GUSG habitat
- Allotments with OHMA, regardless of landownership (consider percent of allotment or total OHMA acres within allotment)
- Allotments where BLM managed public land is the predominant surface ownership (consider percent of allotment with BLM managed land)

- Allotments where preliminary information indicates resource damage (e.g., riparian or wet meadows) may be occurring or GUSG habitat may not be suitable, but factors have not yet been formally evaluated

Allotments ranked as high would be considered the highest priority for completing a fully processed permit renewal or indicate an allotment that needs more frequent monitoring. Field Offices may have multiple allotments ranked as high priority and therefore would need to evaluate if a particular allotment(s) is of higher priority. Field Offices will update their prioritization ranking and associated timelines annually based on completion, resource changes, monitoring data, or other pertinent information. The prioritization ranking and strategy will be included within the annual monitoring report (due annually by March 1) for each reporting Field Office (see Appendix D, *GUSG Monitoring Framework and Evaluation*) and will include a list of allotments where permits have been fully processed under the ARMPA. Anticipated timelines could change based on capacity, workloads, other resource issues, or other Field Office/State Office priorities.

H.4. EXAMPLES & RESOURCES

The following section provides a short list of supplemental resources related to adaptive management and monitoring. This is not a comprehensive list and there are many additional resources and publications available on adaptive management and monitoring that can be referenced. There are several examples that have been provided for monitoring and thresholds and responses. Each example was pulled from an environmental assessment and the language has not been changed. These are only intended to serve as examples to help communicate how others have incorporated monitoring strategies with thresholds and responses for sage-grouse. There are many additional resources and examples available, and these are not intended to fit site-specific conditions within a given allotment.

H.4.1. Adaptive Management

- Adaptive Management: The U.S. Department of the Interior Technical Guide (Williams B. K., R. C. Szaro, and C. D. Shapiro, 2009)
- Adaptive Management: The U.S. Department of the Interior Applications Guide (Williams, B. K., and E. D. Brown, 2012)
- Adaptive Grazing Management in Semiarid Rangelands: An Outcome-Driven Focus, research article from Rangelands on behalf of The Society for Range Management (Derner et al. 2022)

H.4.2. Monitoring

The following resources may be helpful in developing an allotment monitoring plan (not a comprehensive list):

- BLM Technical Reference 1734-8 Monitoring Manual for Grassland, Shrubland and Savanna Ecosystems Volume I & II
- BLM Technical Reference 1734-4 Sampling Vegetation Attributes
- BLM Technical Reference 1734-3 Utilization Studies and Residual Measurements
- BLM Technical Note 455 Applying and Interpreting Assessment, Inventory, and Monitoring (AIM) Data at the Field Office Level: An Example
- BLM Technical Note 453 Guide to Using AIM and LMF Data in Land Health Evaluations and Authorizations of Permitted Uses

Example 1: Winecup

The below example is from the Winecup Gamble Complex Grazing Permit Renewal Environmental Assessment (EA). This is only a portion of the thresholds and responses. The full example can be found on ePlanning within Appendix 6 of the Winecup Gamble Complex Grazing Permit Renewal EA.

Monitoring and Adaptive Management is essential to the success of this outcome-based grazing proposal. This section outlines the monitoring plan, including monitoring techniques and protocols to assess implementation and effectiveness, key thresholds and responses, and the adaptive management process for integrating the above-mentioned components. This monitoring plan does not include BLM-required monitoring for other initiatives, such as AIM, which is expected to occur in parallel to this effort, but is designed to answer the question: Is the grazing management achieving the desired objectives?

Implementation Monitoring

Implementation monitoring is done to ensure that the grazing plan is being implemented as planned or the needed adjustments made are accounted for. It informs short-term decision making within the adaptive management framework. Key questions that implementation monitoring seeks to address include:

- *Did you implement the grazing plan and strategies by Grazing Planning Group and Grazing Management Condition as designed – if not, what were the changes and why?*
- *Did the amount of forage exceed or run short of expectations, resulting in defoliation levels different than expected?*
- *Did precipitation vary from expectations at the planning phase?*

To answer these questions, the following data will be compiled and discussed on an annual basis: Table of agreed-to annual target grazing response index (GRI) scores and residual dry matter (RDM) targets (when applicable) by use area:

- *Grazing plan with on/off dates and non-grazing periods by use area to determine if recovery periods were met and whether the timing of grazing differed from year to year.*
- *Actual precipitation report along with brief description of weather, fire, and other disturbance patterns that affected the landscape and operations.*
- *Table of actual GRI scores and RDM (when applicable) achieved and explanation of any variance from original planning including individual scores for frequency, intensity, opportunity, and precipitation.*
- *Annual actual BLM billing records.*
- *Permittee log of days feeding hay to mature cow herd.*
- *Record of fuel break maintenance activities and any other stewardship activities.*
- *Implementation records for each vegetation management treatment such as biological, chemical, mechanical, or fire treatments.*

Example 2: Edwards

The below example is from the Edwards Creek, Carson and Porter Canyon Allotments Grazing Permit Renewal EA. This is only a small portion of the adaptive management monitoring plan. The full example can be found on ePlanning in Appendix F of the Edwards Creek, Carson and Porter Canyon Allotments Grazing Permit Renewal EA.

The objective of this monitoring plan is to outline the protocols to be used for monitoring riparian-wetland and terrestrial resources in the Edwards-Porter Complex. These data will be used to determine whether objectives (associated with RAC standards) outlined in Section 2.1.3 are being met.

Special Status Species (SSS) Monitoring:

In addition to monitoring the general annual indicators, and short-term and long-term objectives listed above, additional indicators and objectives would be monitored for special status species which utilize or rely upon terrestrial habitat.

i. *Utilization (Annual):*

   a. *Methods used would include utilization of key herbaceous and woody species method and use pattern mapping to ensure maintenance of levels less than 35 percent to improve GRSG habitat (ARMPA, 2015).*

   b. *This would be accomplished by monitoring key species based on DRG and site potential on all key terrestrial monitoring areas within GRSG PHMA/GHMA. Utilization measurements would occur prior to turnout and after removal from pastures to better estimate utilization levels from livestock.*

ii. *Pinyon Pine-Utah Juniper (PJ) Monitoring (Short-Term and Long-Term):*

   a. *Methods used would include ocular cover estimates to qualitatively evaluate the effectiveness of PJ treatments within GRSG PHMA/GHMA and determine appropriate re-treatment, as necessary, to maintain less than 3 percent phase I (>0 to 50%) tree cover within a 0.6-mile radius of GRSG leks (ARMPA, 2015).*

   b. *This would be accomplished by monitoring all leks within GRSG habitat in the allotments.*

iii. *Perennial Grass, Forb and Sagebrush Cover (Short-Term and Long-Term):*

   a. *Methods used would include LPI transect monitoring to ensure cover maintenance of greater than 15 percent for key perennial grass and forb species, and greater than 10 to 25 percent sagebrush species, to improve GRSG PHMA/GHMA (based on ecological site potential) (ARMPA, 2015).*

   b. *This would be accomplished by monitoring all key terrestrial monitoring areas within GRSG PHMA/GHMA.*

iv. *SSS Plant Monitoring: This would include data collected on the targeted SSS plant and non-target SSS plants of interest and also include habitat condition data collection. The data would be collected to ensure protection of SSS plant populations and habitat.*

   a. *Methods used would include subplots within a larger microplot. Data collected would include demographic data and habitat condition following protocol specified in "Measuring and Monitoring Plant Populations https://www.ntc.blm.gov/krc/uploads/265/technical%20reference.pdf Long term photo plots would be establish and recorded. Detailed monitoring would include data collection within the microplot and photo plots in the first year to establish baseline data and habitat conditions. Ocular methods and photo plot recordation would be used on an annual basis with detailed*

monitoring occurring every five years unless extraordinary conditions or impacts warrant immediate detailed monitoring.

b. This would be accomplished by monitoring in all known and yet to be discovered SSS populations.

H.4.3. Thresholds and Responses

This section provides examples of thresholds and responses that have been developed for adaptive management of livestock grazing. These are by no means a comprehensive list and would not be applicable for all environments. The development of thresholds and responses will vary based on a multitude of factors, including but not limited to ecological site potential, livestock type, habitat objectives or guidelines, land health assessment results, presence of riparian areas, vegetation composition, or management objectives.

Example 1: Argenta

The below example is from the Argenta Allotment Grazing Permit Renewal EA.

To help make progress toward the goals and objectives prior to long-term monitoring, the following annual thresholds would be monitored during, and at the end of, each grazing season. Thresholds and responses would also meet the requirements for sage-grouse habitat management as directed in Instruction Memorandum (IM) 2018-23.

If thresholds are exceeded, appropriate responses would be implemented to mitigate resource impacts, and to ensure progress continues to be made toward the stated goals and objectives. However, exceedances of annual thresholds should never be the sole basis for changes in long-term allotment management, including stocking rates or seasons of use. Changes of this type would be based on more detailed monitoring and analysis of the effects of livestock management and would require a grazing decision.

Season of use in the pastures and use areas is based on either critical growing season deferment (May 1 to July 15), or hot season deferment (July 1 to September 15). Flexibility in the on and off dates of the use areas could be approved by the authorized officer in accordance with IM 2018-109, if the change in the period of use remains outside of the season being deferred, and annual thresholds have not been met or exceeded.

<u>Annual Thresholds</u>

The following annual thresholds would be monitored at Designated Monitoring Areas (DMAs) during, and at the end of, each grazing season according to table 1 (Table 1 shows where each of the below indicators would be measured within the allotment. Could also just insert a map here).

- *In riparian and wetland areas, a minimum 4-inch stubble height will be maintained on all key herbaceous species.*
- *In riparian and wetland areas, the allowable utilization is 35 percent for key woody browse species.*
- *In riparian areas, the allowable bank alteration would be 35 percent.*
- *In uplands, the allowable utilization is 40 percent for herbaceous key species and 40 percent for key shrub species.*

Responses

The following responses would be implemented when an annual threshold is reached in an area due to livestock grazing.

- *Promptly move livestock within five days to a part of the allotment that has not yet been grazed, and where livestock will not drift back to the area where the threshold was reached. This could occur within the same use area if feasible, or to another use area if at least one threshold has been met for the entire use area. If at least one threshold has been reached for all use areas available to the permittee, all livestock would be removed from the allotment within 10 days.*
- *In pastures, in occupied habitat, where post livestock removal use monitoring results in utilization levels that exceed allowable use levels and livestock are identified as a causal factor, reduce animal unit months (AUMs) grazed the following year accordingly. AUMs cannot be applied to another pasture that is already being used by livestock or is being purposefully rested.*

Adaptive Management

The following changes could be implemented as part of the analyzed thresholds and responses Alternative if it is determined that insufficient progress is being made toward the goals and objectives.

- *Allow use of an area, but restrict riparian use with temporary fencing, water hauling, or herding.*
- *For riparian and wetland areas, amend the minimum stubble height on all key herbaceous species to 6 inches.*
- *For riparian and wetland areas, amend the allowable utilization of key woody browse species to 30 percent.*
- *For riparian and wetland areas, amend the allowable bank alteration to 25 percent.*
- *Change the season of use for affected areas when warranted, and where feasible given a permittee's overall operation.*
- *In pastures where post livestock removal use monitoring results in utilization levels that exceed allowable use levels and livestock are identified as a causal factor, reduce animal unit months (AUMs) grazed the following year accordingly. AUMs cannot be applied to another pasture that is already being used by livestock or is being purposefully rested.*
- *Reductions to exchange-of-use would occur prior to reductions of BLM active AUMs, if applicable.*
- *After three or more years of utilization data has been collected, reevaluate stocking rates to identify opportunities to redistribute AUMs by use area consistent with making progress with rangeland health standards.*

Example 2: Winecup

The below example is from the Winecup Gamble Complex Grazing Permit Renewal EA. This is only a portion of the thresholds and responses. The full example can be found on ePlanning within Appendix 6 of the Winecup Gamble Complex Grazing Permit Renewal EA.

Despite the best efforts of the permittee and the BLM to plan and adjust within a season, there may be situations when target Grazing Response Index (GRI) scores are not achieved due to extreme/unplanned conditions such as large-scale fire events which inhibit livestock movement, failures in fencing caused by external stressors, drought conditions leading to less-than-expected forage production, or above average and well-timed precipitation leading to abundant fuel-loads, among others. Table 17 describes specific within-year thresholds and

responses and Table 18 outlines specific GRI-based thresholds and responses. These should be followed according to the adaptive management process as required.

Table 17. Within-year grazing management thresholds and responses

Grazing Management Conditions	Threshold	Response
All	3-year GRI average achieved	move to new Use Area
All	inadequate feed/water (snow/drought)	movement to area with available feed/water (including private ground, when necessary)

Table 18. Grazing Management Condition Implementation Thresholds and Responses

Grazing Management Condition	"1-year threshold"		"3-year threshold"		"3-year critical threshold"	
	Threshold	Response	Threshold	Response	Threshold	Response
upland shrubs and native grasses are dominant	grazing year end GRI is below -1	mandatory full growing season rest in following year	rolling 3-year average drops below +2	mandatory full growing season rest in following year	rolling 3-year average drops below +1	mandatory full growing season rest in two subsequent years with at least one year being complete rest
upland shrubs with little understory	grazing year end GRI is below -1	mandatory full growing season rest in following year	rolling 3-year average drops below +2	mandatory full growing season rest in following year	rolling 3-year average drops below +1	mandatory full growing season rest in two subsequent years with at least one year being complete rest
winterfat plant community is present	Grazing year end GRI is below +3	mandatory full growing season rest in two subsequent years with at least one year being	n/a	n/a	Rolling 3-year average drops to +3 or below	mandatory full growing season rest in two subsequent years with at least one year
all conditions	heavy defoliation in dormant season grazing	mandatory complete growing season rest	n/a	n/a	n/a	n/a

As effectiveness monitoring data become available, thresholds and responses that can be utilized to adjust the management of the landscape as needed. These are described in Table 19. All responses below are contingent on a review of other factors that occurred over the period of consideration in addition to the livestock grazing management that may have affected the plant communities such as drought, aroga moth, fire, etc.

Table 19. Grazing Management Condition Effectiveness Monitoring Thresholds and Responses

Grazing Management Condition	5-year effectiveness monitoring threshold	Response
upland shrubs with dominant native grasses	On-the-ground monitoring reveals a negative trend in DRPB cover in a Grazing Planning Group.	Adjust target GRI average +0.5 at the use area/all use areas under the same condition/Grazing Planning Group.
	RDM exceeds 780 lbs/acre 3 years running	adjust target GRI average -0.5 at the use area/all use areas under the same condition
upland shrubs with little understory	5% of area from 2020 converts to less desirable state (not explained by fire or aroga moth)	adjust target GRI average +0.5 at the use area/ all use areas under the same condition
winterfat plant community is present	5% of area from 2020 converts to less desirable state (not explained by fire)	adjust target GRI average +0.5 at the use area/all use areas under the same condition
riparian/wet meadow obligates are/should be present	Riparian monitoring shows no improvement toward objectives	Re-evaluate all strategies and tools being used and formulate new riparian management plan with BLM

Example 3: Edwards

The below example is from the Edwards Creek, Carson and Porter Canyon Allotments Grazing Permit Renewal EA. This is only a portion of the thresholds and responses. The full example can be found on ePlanning. Within the full EA, the objectives for adaptive management are found in Appendix O with responses highlighted in Section 2.2.1.3 of the EA.

The following is a list of actions that the permittee may use to manage livestock as appropriate to meet the annual livestock indicator/thresholds and monitoring objectives (Section 2.1.3 & Appendix O) and responses the permittee may use if a wildfire were to occur on the allotments.

If monitoring determines that the indicators/thresholds are exceeded within a pasture/use area during the current season of use then either AUMS, and/or duration of grazing within the pasture/use area will be reduced the following grazing season or seasons until the pasture/use areas shows improvement of the impacts defined by the monitoring. This reduction and/or implementation of actions as found under this section would occur and be discussed during the meeting for which the annual operating plan would be completed. The reduction would be based on compliance and monitoring results and the amount exceeded over the thresholds from the prior year.

1) *Herding – Actively moving livestock to keep them in an area or move them away from an area.*
2) *Salt/Supplement – Using salt/supplement to concentrate cattle use in a specific area, encouraging livestock away from other areas within pastures.*

3) *Temporary Fencing – Placing temporary fencing around either treatment areas and areas that need to be rested (e.g. winterfat areas).*

4) *Controlling water – Turning on and off wells/pipelines, temporarily fencing water.*

5) *Stocking rate – Increase/decrease the number of livestock in a pasture and/or area.*

6) *Timing – Grazing would be based on plant phenology within permit dates.*

7) *Intensity – Depending on the objective, the intensity (utilization levels) may be specified or livestock may be moved based on the condition of the animals.*

8) *Duration – The amount of time livestock are grazing within a pasture or area.*

9) *Rest – Resting a pasture/area, providing alternative feed (pasture or hay) to livestock on private land in place of those pastures being rested.*

H.5. REFERENCES

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APPENDIX I. RECREATION MANAGEMENT AREAS

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I.1. RECREATION SETTING CHARACTERISTICS MATRIX

	Primitive Classification	Back Country Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Physical Component – Qualities of the Landscape						
Remoteness (approx. distance from routes)	More than 0.5 mile from either mechanized or motorized routes	Within 0.5 mile of mechanized routes	Within 0.5 mile of four-wheel drive vehicle, all-terrain-vehicle (ATV), and motorcycle routes	Within 0.5 mile of low-clearance or passenger vehicle routes (including unpaved county roads and private land routes)	Within 0.5 mile of paved/primary roads and highways	Within 0.5 mile of streets and roads in municipalities and along highways
Naturalness (landscape texture, form, line, color)	Undisturbed natural landscape	Natural landscape with any modifications in harmony with surrounds and not visually obvious or evident (e.g., stock ponds and trails)	Character of the natural landscape retained; a few modifications contrast with character of the landscape (e.g., fences and primitive roads)	Character of the natural landscape partially modified, but none overpower natural landscape (e.g., roads, structures, and utilities)	Character of the natural landscape considerably modified (e.g., agriculture, residential, or industrial)	Urbanized developments dominate landscape
Facilities	No structures; foot/horse and water trails only	Developed trails made mostly of native materials, such as log bridges; structures are rare and isolated	Maintained and marked trails, simple trailhead developments, and basic toilets	Rustic facilities such as campsites, restrooms, trailheads, and interpretive displays	Modern facilities such as campgrounds, group shelters, boat launches, and occasional exhibits	Elaborate full-service facilities such as laundries, restaurants, and grocery stores
Social Component – Qualities Associated with Use						
Contacts (avg. with any other group)	Fewer than 3 encounters per day at campsites and fewer than 6 encounters per day on travel routes	3 to 6 encounters per day off travel routes (e.g., campsites) and 7 to 15 encounters per day on travel routes	7 to 14 encounters per day off travel routes (e.g., staging areas) and 15 to 29 encounters per day on travel routes	15 to 29 encounters per day off travel routes (e.g., campgrounds) and 30 or more encounters per day on travel routes	People seem to be generally everywhere	Busy place with other people constantly in view
Group Size (average, other than your own)	Fewer than or equal to 3 people per group	4 to 6 people per group	7 to 12 people per group	13 to 25 people per group	26 to 50 people per group	Greater than 50 people per group
Evidence of Use	No alterations of the natural terrain; footprints only observed; sounds of people rare	Areas of alteration uncommon; little surface vegetation wear observed; sounds of people infrequent	Small areas of alteration; surface vegetation showing wear, with some bare soils; sounds of people occasionally heard	Small areas of alteration prevalent; surface vegetation gone, with compacted soils observed; sounds of people regularly heard	A few large areas of alteration; surface vegetation absent, with hardened soils; sounds of people frequently heard	Large areas of alteration prevalent; some erosion; constantly hear people
Operational Component – Conditions Created by Management and Controls over Recreation Use						
Access (type of travel allowed)	Foot, horse, and nonmotorized float boat travel	Mountain bikes and perhaps other mechanized use, but all are nonmotorized	Four-wheel drives, all-terrain vehicles, dirt bikes, or snowmobiles, in addition to nonmotorized mechanized use	Two-wheel drive vehicles predominant, but also four-wheel drives and nonmotorized, mechanized use	Ordinary highway auto and truck traffic is characteristic	Wide variety of street vehicles, and highway traffic is ever-present
Visitor Services (and information)	No maps or brochures available onsite; staff rarely present to provide onsite assistance	Basic maps, staff infrequently present (e.g., seasonally and high use periods) to provide onsite assistance	Area brochures and maps, staff occasionally present (e.g., most weekends) to provide onsite assistance	Information materials describe recreation areas and activities, staff periodically present (e.g., weekdays and weekends)	Information described to the left, plus experience and benefit descriptions; staff regularly present (e.g., almost daily)	Information described to the left, plus regularly scheduled on-site outdoor demonstrations and clinics
Management Controls	No onsite posting and signing of visitor regulations, interpretive information, or ethics; few use restrictions	Basic user regulations at key access points; minimum use restrictions	Some regulatory and ethics signing; moderate use restrictions (e.g., camping and human waste)	Rules, regulations, and ethics clearly posted; use restrictions, limitation, and closures	Regulations strict and ethics prominent; use may be limited by permits and reservations	Enforcement, in addition to rules to reduce conflicts, hazards, and resource damage

Source: IM No. 2011-004, Revised Recreation and Visitor Services Land Use Planning Guidance, Updated Checklist, and Three Land Use Planning Templates. Attachment 5, Recreation Settings Characteristics Matrix. BLM, Washington DC. October 14, 2010.

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I.2. GUNNISON EXTENSIVE RECREATION MANAGEMENT AREA

Objective: Manage the Gunnison Extensive Recreation Management Area (ERMA) as a semi-primitive motorized environment for visitors to provide dispersed and unstructured recreation opportunities with an emphasis on providing environmental benefits for Gunnison sage-grouse where recreation is a commensurate use to other resource uses.

	Gunnison Extensive Recreation Management Area (ERMA)
Targeted Activities	• Motorized and Mechanized Touring on designated routes in conformance with Gunnison Approved Travel Management Plan (2010). • Dispersed foot and horse travel in conformance with Gunnison Approved travel Management Plan (2010). • Dispersed Camping • Fishing on BLM waters • Shed Antler Collection • Legal hunting (big game, small game, and avian) • Wildlife Viewing • Rock and Ice Climbing
Targeted Experiences	
Targeted Benefits	
Management Actions and Allowable Use Decisions	
Visual Resource Management (VRM Class)	Manage as VRM Class IV
Rights-of-Way (ROWs)	See the GUSG Approved RMP Amendment (ARMPA) for allocations and associated management actions.
Locatable Minerals	See the GUSG ARMPA for allocations and associated management actions.
Leasable Minerals: Fluids and Solids	See the GUSG ARMPA for allocations and associated management actions.
Mineral Materials	See the GUSG ARMPA for allocations and associated management actions
Special Recreation Permits (SRPs)	See the GUSG ARMPA for allocations and associated management actions.
Travel Management	• See the GUSG ARMPA for allocations and associated management actions. • Closed to motorized use March 15 – May 15 for to limit disturbance to Gunnison sage-grouse during the lekking season. • Designate winter motorized and mechanized travel as limited to designated routes including Over Snow Vehicles (OSV).
Fire/Forestry	See the GUSG ARMPA for allocations and associated management actions.
Livestock Grazing	See the GUSG ARMPA for allocations and associated management actions.

	Gunnison Extensive Recreation Management Area (ERMA)
Implementation Actions	
Management	• These areas will receive minimal maintenance at dispersed recreation sites. • New facilities would be considered if necessary for the protection of Gunnison sage-grouse habitat and to provide for public health and safety. • Allow for herbicide application to maintain and restore native vegetation. • Manage for projects to restore riparian and stream functions. • Consider installing water developments that benefit wildlife if they would have no effect on GUSG or their habitat.
Administration	• Manage issues that impact public safety. • Pursue developing collaborative partnerships.
Information and Education	• Work with partners to share accurate information across multiple platforms. • Install and maintain directional kiosks and signage at key access points.
Monitoring	Supported by BLM field staff, in conjunction with collaborating partners and agencies.
Facility Development	• Provide for dispersed and unstructured recreation.
Travel Management	• Manage for motorized and nonmotorized activities in accordance with Gunnison Approved Travel Management Plan (2010). • New trail development would be considered for low density (i.e., point to point) trails as opposed to high density stacked loop trail systems. Seasonal closures and off-site mitigation as well as the management decisions within the GUSG ARMPA would apply, as appropriate.

I.3. SIGNAL PEAK SRMA - WESTERN RECREATION MANAGEMENT ZONE (RMZ1)

Objective: Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcome stated in the following table (4.0, on a probability scale, where 1=not at all realized to 5=totally realized) (see Figure L.1 Signal Peak SRMA and Figure L.2 Signal Peak SRMA – Recreation Management Zones).

		Signal Peak Western Zone
Targeted Activities		Non-motorized trail recreation (Motorized Limited to Class 1 E-bikes): hiking, walking, running, mountain biking, Class 1 E-bikes
Targeted Experiences		Developing skills and abilities, enjoying access to close-to-home amenities, releasing or reducing stress, enjoying time with friends and family, challenging one's own limits.
Targeted Benefits		***Personal***: Greater sense of self-reliance and independence; Appreciation of vast landscapes and views; Improving physical and mental well-being in a natural setting. Accessing community-based recreation opportunities that are close to home. ***Societal***: Lifestyle improvement or maintenance; Encouragement of visitors to help safeguard our lifestyle and quality of life; Increased desirability as a place to live or retire; Reduced health maintenance costs; Increased sense of community relationship with public lands; Promotion of stewardship for healthy wildlife populations. ***Environmental***: Protection of off-site Gunnison sage-grouse habitat; Improved soil, water, and air quality; Improvement and protection of wildlife habitat from growth.
Recreation Setting Characteristics *(refer to Section L.1 for descriptions)*		
Physical	*Remoteness*	Front Country
	Naturalness	Front Country
	Facilities	Middle Country
Social	*Contacts*	Middle Country
	Group Size	Backcountry
	Evidence of Use	Middle Country
Operational	*Access*	Back Country
	Visitor Services	Back Country
	Management Controls	Front Country
Management Actions and Allowable Use Decisions		
Visual Resource Management (VRM Class)		Manage as VRM Class III
Rights-of-Way (ROWs)		See the GUSG ARMPA for allocations and associated management actions.
Locatable Minerals		Recommend to the Secretary of the Interior for withdrawal from locatable mineral entry.
Leasable Minerals: Fluids and Solids		Close to nonenergy solid mineral leasing. No fluid mineral leasing within the SRMA.
Mineral Materials		Close to nonenergy solid mineral leasing.
Special Recreation Permits (SRPs)		All SRPs must be beneficial or neutral. No commercial use would be permitted during established seasonal closure periods. To limit staging impacts, competitive events would be considered only if they do not originate (start or finish) on BLM lands.

	Signal Peak Western Zone
Recreation and Travel Management	In OHMA, no new development of recreational trails within 1-mile of all leks. Within designated SRMAs a justifiable departure of 0.6-mile lek buffer may be applied provided topology and seasonal timing limitations. Justifiable departures to decrease from this distance based on local data, best available science, landscape features, and other existing protections (e.g., seasonal timing limitations, land use allocations, State regulations) may be appropriate given activity impacts at a site-scale. Variations in the recreational lek buffer-distance will require appropriate analysis and disclosure, in addition to coordination and consultation with the appropriate Federal and State agencies (e.g., USFWS and State wildlife agency) during site-specific authorizations. In determining lek locations, the BLM will use the most recent lek data in coordination and consultation with the appropriate Federal and State agencies (e.g., USFWS and State wildlife agency). In OHMA and UHMA apply minimization criteria (MA-SSS-15) for development of trails and small scale recreation-related infrastructure. Net surface disturbance will be analyzed during project scale NEPA (see MA-SSS-5). Continue to limit mechanized, and limit motorized (including Class 1 E-bikes) travel to designated routes. Close the RMZ to motorized and mechanized use January 1 to March 15. Close the RMZ to *all human use during lekking season* (March 15 to May 15) with exceptions for administrative and emergency access. Discourage foot and horse use on closed routes. Close to all dispersed camping. Allow trail/road realignment if found to be beneficial for the relevant and important values. Prioritize restoration and re-vegetation of decommissioned or closed routes.
Fire/Forestry	Vegetation management activities including approved herbicide application may be undertaken to accomplish resource objectives, while maintaining the character of the area. Allow prescribed fire and mechanical manipulation, such as chainsaws and helicopters, while maintaining the character of the area. Allow the suppression of wildfires using mechanized equipment. Allow vegetation treatments and wildlife habitat improvements for the benefit of the identified relevant and important values.
Livestock Grazing	Continue to allow livestock grazing within the SRMA as outlined under the GUSG ARMPA. When a qualified permittee or lessee voluntarily relinquishes a grazing permit or lease on an allotment within the SRMA, the BLM will consider the management outlined under the GUSG ARMPA.

	Signal Peak Western Zone
Implementation Actions	
Management	• Continue to work with partners to plan for, manage, and maintain high quality trail opportunities and community access. • Work with partners to emphasize accessible off-site recreation opportunities during seasonal closure periods. • Work with Western Colorado University to provide trail access up to Limited Motorized (Class 1 E-bikes). • Manage for motorized and nonmotorized activities in accordance with Gunnison Approved Travel Management Plan (2010). • Allow prescribed burning to mimic natural processes. • Manage for short range (i.e., pistol, shotgun, and archery) target shooting at the Powerline Ponds area. • Allow for herbicide application to maintain and restore native vegetation. • Manage for projects to restore riparian and stream functions.
Administration	• Manage issues that impact public safety. • Pursue developing collaborative partnerships.
Information and Education	• Work with partners to share accurate seasonal closure, stewardship, and trail information across multiple platforms. • Install and maintain directional signs and signage at key access points. Consider interpretive sites to increase understanding of wildlife values.
Monitoring	Recreation and resource monitoring supported by BLM field staff, in conjunction with collaborating partners and agencies.
Facility Development	Provide facilities as needed for recreation activities.
Camping Restrictions	• Manage the RMZ as Day Use Only with no overnight camping or camping infrastructure.
Travel Management	Provide nonmotorized access to designated routes outside of lekking closure periods.

Figure I.1. Signal Peak SRMA

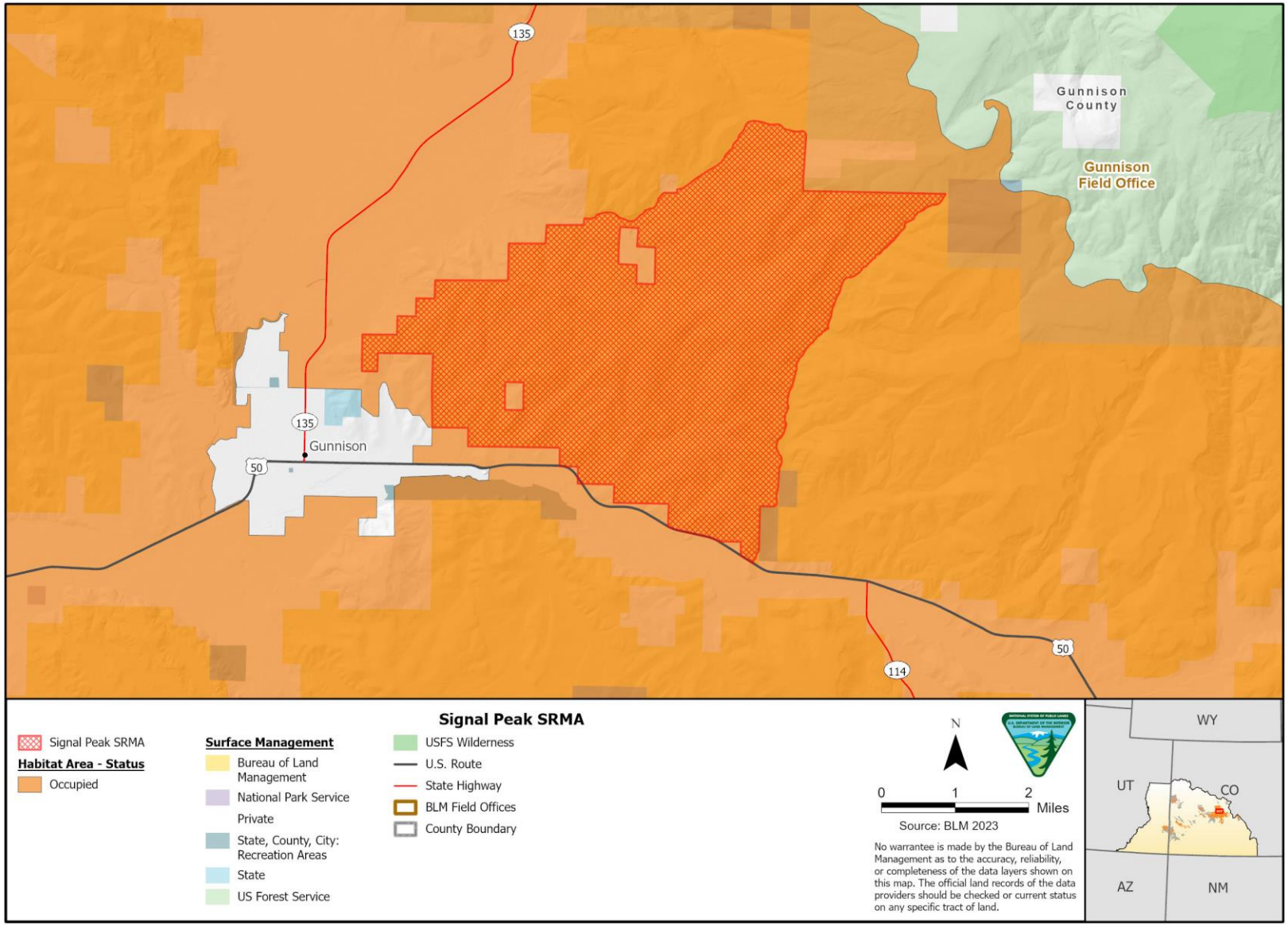
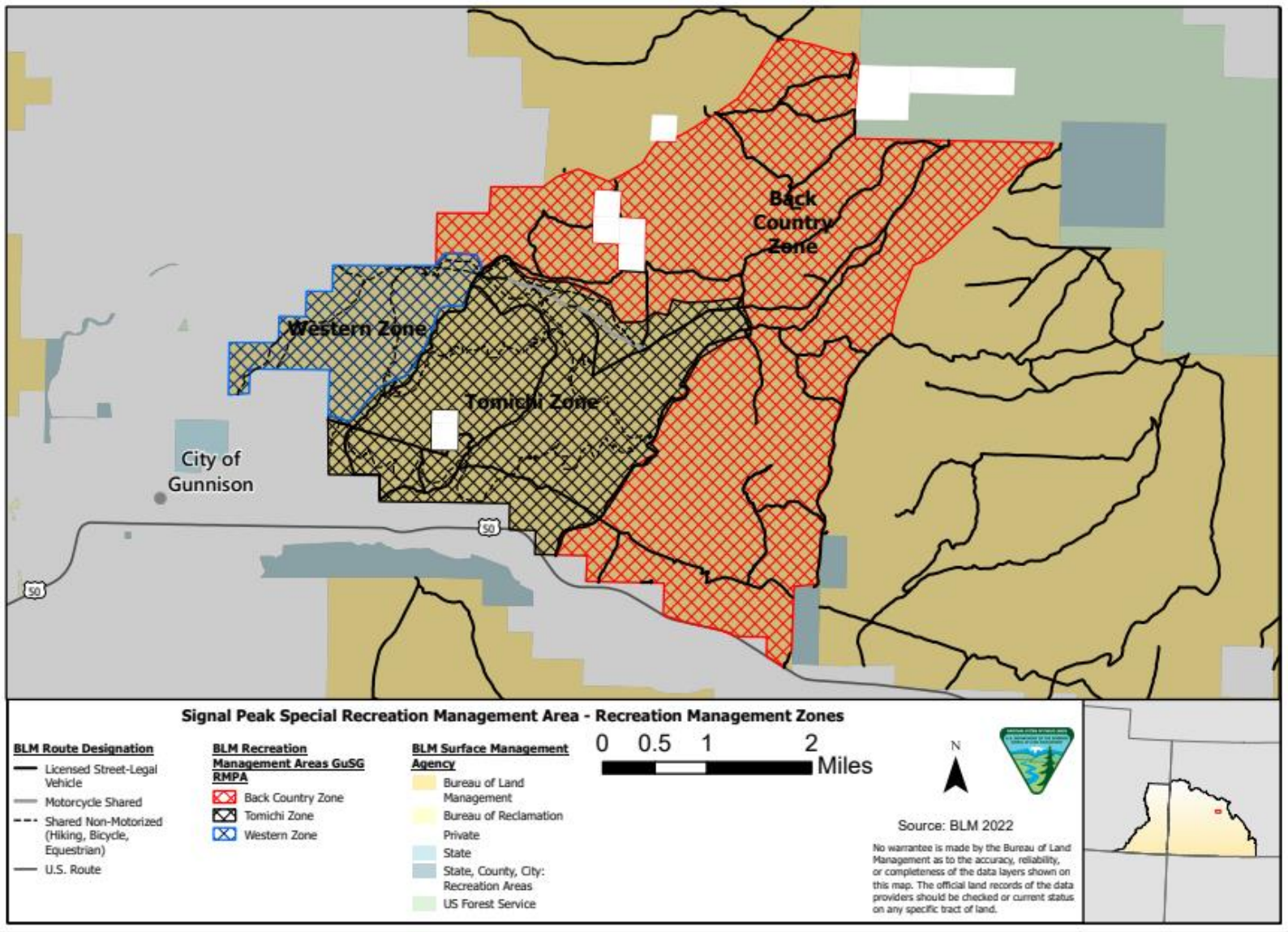


Figure I.2 Signal Peak SRMA – Recreation Management Zones



I.4. SIGNAL PEAK SRMA - TOMICHI RECREATION MANAGEMENT ZONE (RMZ2)

Objective: Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes stated in the following table (4.0, on a probability scale, where 1=not at all realized to 5=totally realized) (see Figure L.1 Signal Peak SRMA and Figure L.2 Signal Peak SRMA – Recreation Management Zones).

		Signal Peak Tomichi Zone (RMZ2)
Targeted Activities		Non-motorized trail recreation (Motorized Limited to Class 1 E-bikes): hiking, walking, running, equestrian use, mountain biking, Class 1 E-bikes, and motorized touring on system routes. Short range (shotgun, pistol, and archery) target shooting.
Targeted Experiences		Developing skills and abilities, enjoying access to close-to-home amenities, releasing or reducing stress, enjoying time with friends and family, challenging one's own limits.
Targeted Benefits		***Personal***: Greater sense of self-reliance and independence; Appreciation of vast landscapes and views; Improving physical and mental well-being in a natural setting. Increasing awareness, respect, and appreciation for natural values. Accessing community-based recreation opportunities that are close to home. ***Societal***: Lifestyle improvement or maintenance; Encouragement of visitors to help safeguard our lifestyle and quality of life; Increased desirability as a place to live or retire; Reduced health maintenance costs; Increased sense of community relationship with public lands; Promotion of stewardship for healthy wildlife populations. ***Environmental***: Protection of off-site Gunnison sage-grouse habitat; Improved soil, water and air quality; Improvement and protection of wildlife habitat from growth.
Recreation Setting Characteristics *(refer to Section L.1 for descriptions)*		
Physical	*Remoteness*	Middle Country
	Naturalness	Front Country
	Facilities	Middle Country
Social	*Contacts*	Middle Country
	Group Size	Backcountry
	Evidence of Use	Middle Country
Operational	*Access*	Middle Country
	Visitor Services	Back Country
	Management Controls	Front Country
Management Actions and Allowable Use Decisions		
Visual Resource Management (VRM Class)		Manage as VRM Class III
Rights-of-Way (ROWs)		See the GUSG ARMPA for allocations and associated management actions.
Locatable Minerals		Recommend to the Secretary of the Interior for withdrawal from locatable mineral entry.
Leasable Minerals: Fluids and Solids		Close to nonenergy solid mineral leasing. No fluid mineral leasing within the SRMA.
Mineral Materials		Close to nonenergy solid mineral leasing.
Special Recreation Permits (SRPs)		All SRPs must be beneficial or neutral. No commercial use would be permitted during established seasonal closure periods. Competitive events would be considered only if they do not originate (start or finish) on BLM lands.

	Signal Peak Tomichi Zone (RMZ2)
Recreation and Travel Management	• In OHMA, no new development of recreational trails within 1-mile of all leks. Within designated SRMAs a justifiable departure of 0.6-mile lek buffer may be applied provided topology and seasonal timing limitations. • Justifiable departures to decrease from this distance based on local data, best available science, landscape features, and other existing protections (e.g., seasonal timing limitations, land use allocations, State regulations) may be appropriate given activity impacts at a site-scale. • Variations in the recreational lek buffer-distance will require appropriate analysis and disclosure, in addition to coordination and consultation with the appropriate Federal and State agencies (e.g., USFWS and State wildlife agency) during site-specific authorizations. In determining lek locations, the BLM will use the most recent lek data in coordination and consultation with the appropriate Federal and State agencies (e.g., USFWS and State wildlife agency). • In OHMA and UHMA apply minimization criteria (MA-SSS-15) for development of trails and small scale recreation-related infrastructure. Net surface disturbance will be analyzed during project scale NEPA (see MA-SSS-5). Close to motorized use January 1 – May 15 for wintering big game and Gunnison sage-grouse conservation. Continue to limit mechanized, and limit motorized travel including Class 1 E-bikes to designated routes. Close the RMZ to mechanized and human use, with seasonal and daily time closures, to mirror the shed hunting restrictions (established by Colorado Parks and Wildlife Commission) up until May 15. Close to all dispersed camping. Allow trail/road realignment if found to be beneficial for the relevant and important values. Prioritize restoration and re-vegetation of decommissioned or closed routes.
Fire/Forestry	Vegetation management activities including approved herbicide application may be undertaken to accomplish resource objectives, while maintaining the character of the area. Allow prescribed fire and mechanical manipulation, such as chainsaws and helicopters, while maintaining the character of the area. Allow the suppression of wildfires using mechanized equipment. Allow vegetation treatments and wildlife habitat improvements for the benefit of the identified relevant and important values.
Livestock Grazing	Continue to allow livestock grazing within the SRMA as outlined under the GUSG ARMPA. When a qualified permittee or lessee voluntarily relinquishes a grazing permit or lease on an allotment within the SRMA, the BLM will consider the management outlined under the GUSG ARMPA.

	Signal Peak Tomichi Zone (RMZ2)
Implementation Actions	
Management	• Continue to work with partners to plan for, manage, and maintain high quality trail opportunities and community access. • Work with partners to emphasize accessible off-site recreation opportunities during seasonal closure periods. • Manage for motorized and nonmotorized activities in accordance with Gunnison Approved Travel Management Plan (2010). • Allow prescribed burning to mimic natural processes. • Manage for short range (i.e., pistol, shotgun, and archery) target shooting at the Powerline Ponds area. • Allow for herbicide application to maintain and restore native vegetation. • Manage for projects to restore riparian and stream functions.
Administration	• Manage issues that impact public safety. • Pursue developing collaborative partnerships.
Information and Education	• Work with partners to share accurate seasonal closure, stewardship, and trail information across multiple platforms. • Install and maintain directional signs and signage at key access points. Consider interpretive sites to increase understanding of wildlife, cultural, and natural history.
Monitoring	Recreation and resource monitoring supported by BLM field staff, in conjunction with collaborating partners and agencies.
Facility Development	Provide facilities as needed for recreation activities.
Camping Restrictions	• Manage the RMZ as Day Use Only with no overnight camping within the RMZ.
Travel Management	• Improve Powerline Intersection Parking to allow for day use trail parking as well as equestrian and ohv trailering.

I.5 SIGNAL PEAK SRMA - BACKCOUNTRY RECREATION MANAGEMENT ZONE (RMZ3)

Objective: Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes stated in the following table (4.0, on a probability scale, where 1=not at all realized to 5=totally realized) (see Figure L.1 Signal Peak SRMA and Figure L.2 Signal Peak SRMA – Recreation Management Zones).

		Signal Peak Backcountry Management Zone (RMZ3)
Targeted Activities		• Day-use primitive recreation in support of hikers, equestrians, wildlife watchers, and hunters. • Motorized and mechanized touring on designated routes. • Legal hunting (big game, small game, avian, mountain lion) and shed antler collection.
Targeted Experiences		Developing skills and abilities, experiencing solitude, connecting with wildlife and wild places, enjoying primitive and unconfined recreation.
Targeted Benefits		***Personal***: Greater sense of self-reliance and independence; Appreciation of vast landscapes and views; Improving physical and mental well-being in a natural setting; Cultivating the ability to harvest natural products. Accessing community-based recreation opportunities that are close to home. ***Societal***: Lifestyle improvement or maintenance; Encouragement of visitors to help safeguard our lifestyle and quality of life; Increased desirability as a place to live or retire; Reduced health maintenance costs; Increased sense of community relationship with public lands; Promotion of stewardship for healthy wildlife populations. ***Environmental***: Improved soil, water and air quality; Improvement and protection of wildlife habitat from growth.
Recreation Setting Characteristics *(refer to Section L.1 for descriptions)*		
Physical	*Remoteness*	Back country
	Naturalness	Back country
	Facilities	Primitive
Social	*Contacts*	Primitive
	Group Size	Primitive
	Evidence of Use	Back country
Operational	*Access*	Middle country
	Visitor Services	Primitive
	Management Controls	Primitive
Management Actions and Allowable Use Decisions		
Visual Resource Management (VRM Class)		Manage as VRM Class II
Rights-of-Way (ROWs)		See the GUSG ARMPA for allocations and associated management actions.
Locatable Minerals		Recommend to the Secretary of the Interior for withdrawal from locatable mineral entry.
Leasable Minerals: Fluids and Solids		Close to nonenergy solid mineral leasing. No fluid mineral leasing within the BCA.
Mineral Materials		Close to nonenergy solid mineral leasing.
Special Recreation Permits (SRPs)		All SRPs must be beneficial or neutral. No commercial use would be permitted during established seasonal closure periods.

	Signal Peak Backcountry Management Zone (RMZ3)
Recreation and Travel Management	In OHMA, no new development of recreational trails within 1-mile of all leks. Within designated SRMAs a justifiable departure of 0.6-mile lek buffer may be applied provided topology and seasonal timing limitations. Justifiable departures to decrease from this distance based on local data, best available science, landscape features, and other existing protections (e.g., seasonal timing limitations, land use allocations, State regulations) may be appropriate given activity impacts at a site-scale. Variations in the recreational lek buffer-distance will require appropriate analysis and disclosure, in addition to coordination and consultation with the appropriate Federal and State agencies (e.g., USFWS and State wildlife agency) during site-specific authorizations. In determining lek locations, the BLM will use the most recent lek data in coordination and consultation with the appropriate Federal and State agencies (e.g., USFWS and State wildlife agency). In OHMA and UHMA apply minimization criteria (MA-SSS-15) for development of trails and small scale recreation-related infrastructure. Net surface disturbance will be analyzed during project scale NEPA (see MA-SSS-5). Closed to motorized travel including Over Snow Vehicles (OSV) from January 1 – May 15 to protect wintering big game and Gunnison sage-grouse habitat. Close the RMZ to mechanized and human use, with seasonal and daily time closures, to mirror the shed hunting restrictions (established by Colorado Parks and Wildlife Commission) up until May 15. Allow trail/road realignment only if found to be beneficial for the relevant and important values. Prioritize restoration and re-vegetation of decommissioned or closed routes.
Fire/Forestry	Vegetation management activities including approved herbicide application may be undertaken to accomplish resource objectives, while maintaining the character of the area. Allow prescribed fire and mechanical manipulation, such as chainsaws and helicopters, while maintaining the character of the area. Allow the suppression of wildfires using mechanized equipment. Allow vegetation treatments and wildlife habitat improvements for the benefit of the identified relevant and important values.
Livestock Grazing	Continue to allow livestock grazing within the SRMA as outlined under the GUSG ARMPA. When a qualified permittee or lessee voluntarily relinquishes a grazing permit or lease on an allotment within the BCA, the BLM will consider the management outlined under the GUSG ARMPA.

	Signal Peak Backcountry Management Zone (RMZ3)
Implementation Actions	
Management	• These areas will receive minimal maintenance at dispersed recreation sites. • Any additional facilities will take into consideration recreation experiences and benefits. • Manage for motorized and nonmotorized activities in accordance with Gunnison Approved Travel Management Plan (2010). • Allow prescribed burning to mimic natural processes. • Allow for herbicide application to maintain and restore native vegetation. • Manage for projects to restore riparian and stream functions. • Consider installing water developments that benefit wildlife.
Administration	• Manage issues that impact public safety. • Pursue developing collaborative partnerships.
Information and Education	• Work with partners to share accurate information across multiple platforms. • Install and maintain directional signs and signage at key access points.
Monitoring	Supported by BLM field staff, in conjunction with collaborating partners and agencies.
Facility Development	Provide facilities as needed for dispersed and unstructured recreation activities.
Camping Restrictions	• Dispersed Camping is allowed during hunting seasons.
Travel Management	• Work with landowners to allow public access to Sheep Gulch Road.

I.6 SUGAR CREEK BACKCOUNTRY CONSERVATION AREA

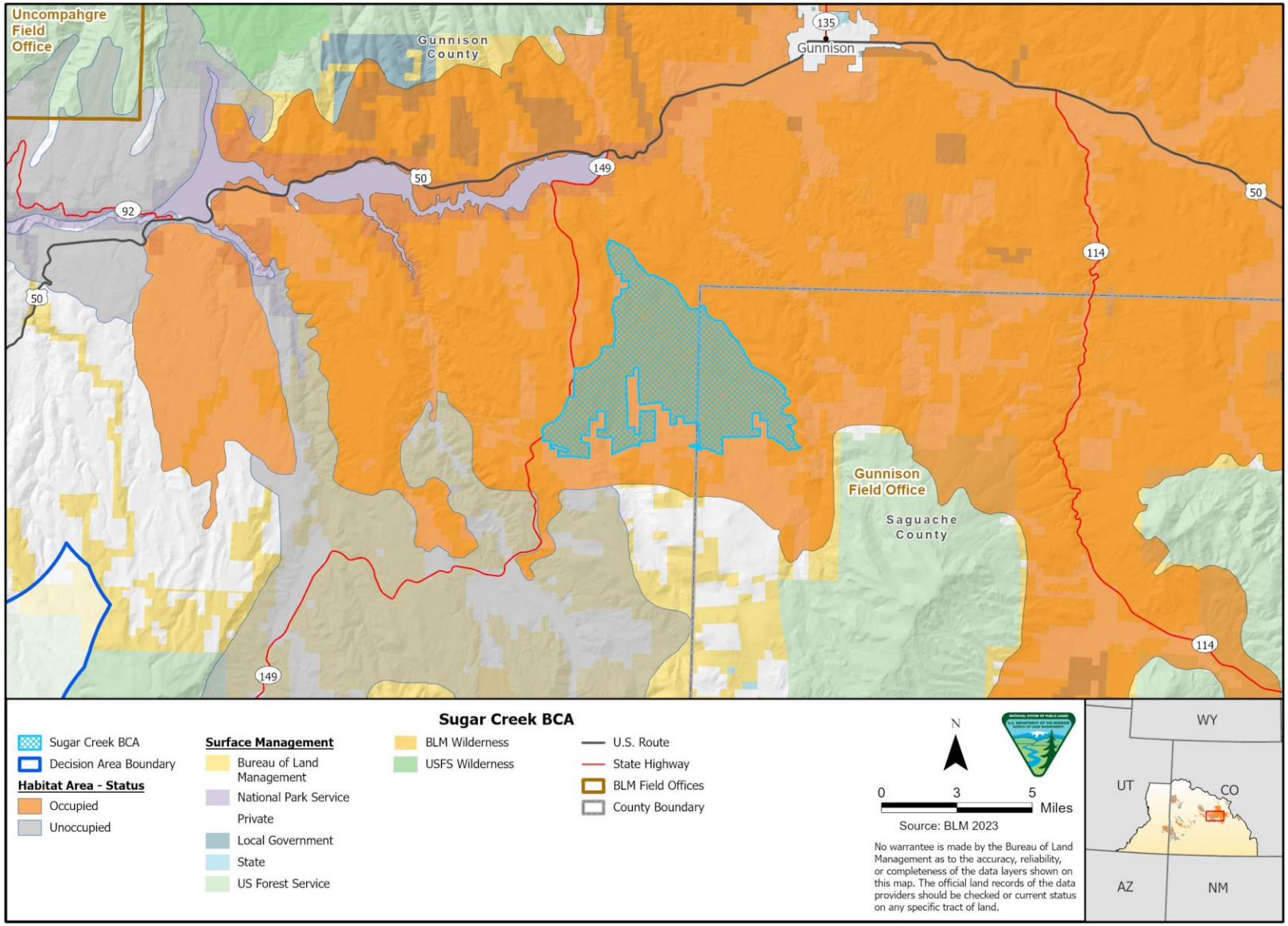
Objective: Manage the Sugar Creek Backcountry Conservation Area (BCA) as an intact landscape to facilitate long-term maintenance of Gunnison sage-grouse and big game wildlife populations and habitat and access to support primitive recreation, wildlife observation, and hunting opportunities (see Figure L.3 Sugar Creek Backcountry Conservation Area).

		Sugar Creek Backcountry Conservation Area
Targeted Activities		Manage for primitive recreation in support of hikers, wildlife watchers, and hunters.
Targeted Experiences		Developing Skills and Abilities, Experiencing Solitude, Connecting with Wildlife and Wild Places, Enjoying Primitive and Unconfined Recreation.
Targeted Benefits		***Personal***: Greater sense of self-reliance and independence; Appreciation of vast landscapes and views; Improving physical and mental well-being in a natural setting; Cultivating the ability to harvest natural products. ***Societal***: Lifestyle improvement or maintenance; Increased desirability as a place to live or retire; Encouragement of visitors to help safeguard our lifestyle and quality of life; Increased sense of community relationship with public lands; Promotion of stewardship for healthy wildlife populations. ***Environmental***: Improved soil, water and air quality; Improvement and protection of wildlife habitat from growth.
Recreation Setting Characteristics *(refer to Section L.1 for descriptions)*		
Physical	*Remoteness*	Back country
	Naturalness	Back country
	Facilities	Primitive
Social	*Contacts*	Primitive
	Group Size	Primitive
	Evidence of Use	Back country
Operational	*Access*	Back country
	Visitor Services	Primitive
	Management Controls	Primitive
Management Actions and Allowable Use Decisions		
Visual Resource Management (VRM Class)		Manage as VRM Class II
Rights-of-Way (ROWs)		• Manage as ROW exclusion, subject to valid existing rights, with the following exceptions (does not except authorizations from the applicable timing limitations, minimization measures, and compensatory mitigation): ○ West-Wide Energy Corridors. ○ Designated utility corridors. ○ 100-foot buffer from center line of county roads and highways (200-foot total) (these areas would be managed as ROW avoidance). ○ Allow ROWs for private inholdings or edge holdings for reasonable access and utilities in locations that minimize, to the extent feasible, impacts to leks (these areas would be managed as ROW avoidance).

	Sugar Creek Backcountry Conservation Area
	○ Recognize the valid existing rights of grant holders to continue to use, operate, and maintain. In addition, upgrades, amendments, and renewals of existing facilities may be considered with application of latest terms and conditions. ○ Exceptions to seasonal timing limitations may be considered and evaluated on a case-by-case basis to conduct maintenance on utilities, especially those that may cause significant risk, safety concern, or fire danger.
Locatable Minerals	Recommend to the Secretary of the Interior for withdrawal from locatable mineral entry.
Leasable Minerals: Fluids and Solids	Subject to valid existing rights, close Sugar Creek BCA to mineral exploration, leasing, and development. No new fluid mineral leasing within the BCA.
Mineral Materials	Close to nonenergy solid mineral leasing.
Special Recreation Permits (SRPs)	All SRPs must be beneficial or neutral. No commercial use would be permitted during established seasonal closure periods.
Recreation and Travel Management	• Close to motorized (including e-bikes) travel during lekking and nesting, season (March 15 to July 15) to prevent disturbance to breeding sage-grouse with exceptions for administrative access and emergency maintenance. • Maintain current, designated route system limiting both motorized and mechanized travel and to include over-snow vehicle travel. Any route subsequently approved by the BLM will be incorporated into the designated route system. • Prohibit new trail development. • Allow trail/road realignment only if found to be beneficial for the relevant and important values. • Close to all human use during lekking season (March 15 to May 15) with exceptions for administrative access and emergency maintenance. • Pets must remain on leash within the BCA at trailheads and trails designated by a BLM sign or map. In all other areas, pets must be controlled by physical or audible means. • Close to all dispersed camping during lekking and nesting season (March 15 – July 15).
Fire/Forestry	Vegetation management activities including approved herbicide application may be undertaken to accomplish resource objectives, while maintaining the character of the area. Allow prescribed fire and mechanical manipulation, such as chainsaws and helicopters, while maintaining the character of the area. Allow the suppression of wildfires using mechanized equipment. Allow vegetation treatments and wildlife habitat improvements for the benefit of the identified relevant and important values.
Livestock Grazing and Vegetation	• Prioritize restoration and re-vegetation of decommissioned or closed routes. • Continue to allow livestock grazing within the BCA as outlined under the ARMPA in the Livestock Grazing Management section. • Allow vegetation treatments and wildlife habitat improvements for the benefit of the identified relevant and important values.

	Sugar Creek Backcountry Conservation Area
Implementation Actions	
Management	• These areas will receive minimal maintenance at dispersed recreation sites. • Any additional facilities, such as tables, fire pits, and toilets, will take into consideration recreation experiences and benefits. • Manage for camping opportunities outside of established seasonal closures. • Manage for motorized and nonmotorized activities in accordance with Gunnison Approved Travel Management Plan (2010). • Allow prescribed burning to mimic natural processes. • Allow for herbicide application to maintain and restore native vegetation. • Manage for projects to restore riparian and stream functions. • Consider installing water developments that benefit wildlife. • Install gates and provide visitor information & parking at motorized/mechanized seasonal closure points.
Administration	• Manage issues that impact public safety. • Pursue developing collaborative partnerships.
Information and Education	• Work with partners to share accurate information across multiple platforms. • Install and maintain directional signs and signage at key access points.
Monitoring	Supported by BLM field staff, in conjunction with collaborating partners and agencies.
Facility Development	Provide facilities as needed for dispersed and unstructured recreation activities.
Camping Restrictions	• Camping is limited to established sites. No camping during lekking and nesting closure periods.
Travel Management	Provide motorized and nonmotorized access to designated routes outside of lekking and nesting closure periods.

Figure I.3. Sugar Creek Backcountry Conservation Area



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APPENDIX J. STIPULATIONS APPLICABLE TO FLUID MINERAL LEASING AND LAND USE AUTHORIZATIONS

TABLE OF CONTENTS

APPENDIX J. STIPULATIONS APPLICABLE TO FLUID MINERAL LEASING AND LAND USE AUTHORIZATIONS J-1

J.1. Introduction J-3
J.2. Description of Stipulations J-3
J.3. Exceptions, Modifications, and Waivers J-4
J.3.1. Exception, Modification, or Waiver Process J-4
J.4. Stipulations Applicable to Fluid Mineral Leasing J-4

J.1. INTRODUCTION

This appendix lists the stipulations for fluid mineral leasing (e.g., oil, gas, and geothermal) referred to throughout the Gunnison Sage-Grouse (GUSG) Approved Resource Management Plan Amendment (ARMPA). The Bureau of Land Management (BLM) will apply these stipulations to fluid mineral leasing on Federal mineral estate, including split-estate.

Surface-disturbing activities are those that normally result in more than negligible (i.e., immeasurable, not readily noticeable) disturbance to vegetation and soils on public lands and accelerate the natural erosive process. Surface disturbances could require reclamation and normally involve use and/or occupancy of the surface, causing disturbance to soils and vegetation. They include, but are not limited to: the use of mechanized earth-moving equipment; construction of facilities such as oil and gas wells and/or pads; truck-mounted drilling equipment; geophysical exploration; off-road vehicle travel in areas designated as limited or closed to off-highway use; placement of surface facilities such as utilities, pipelines, and structures. Surface-disturbing activities would not include, but are not limited to : livestock grazing, cross-country hiking, minimum impact filming, and travel on designated routes. Even where stipulations prohibit surface-disturbing activities, some surface-disturbing activities may be allowed under exceptions, modifications, or waivers from stipulations.

This list of stipulations included in the ARMPA supersede the relevant stipulations attached to the existing land use plans for GUSG. The program areas/stipulations that were not considered in the ARMPA (not directly relevant only to GUSG and GUSG habitat) would continue in full force and effect where they apply (within individual BLM field offices).

J.2. DESCRIPTION OF STIPULATIONS

Three types of stipulations could be applied to leasing authorizations: (1) No Surface Occupancy (NSO); (2) Controlled Surface Use (CSU); and (3) Timing Limitations (TL).

No Surface Occupancy (NSO)

Use or occupancy of the land surface for fluid mineral exploration or development is prohibited to protect GUSG and GUSG habitat. In areas open to fluid mineral leasing with NSO stipulations, fluid mineral leasing activities are permitted, but surface-disturbing activities cannot be conducted on the surface of the land unless an exception, modification, or waiver is granted. Access to fluid mineral deposits would require drilling from outside the boundaries of the NSO stipulation. A NSO stipulation does not apply to existing facilities and the maintenance of existing facilities.

Controlled Surface Use (CSU)

A CSU stipulation is a category of moderate constraint that allows some use and occupancy of surface land while protecting identified resources or values. A CSU stipulation allows the BLM to require additional conditions be met to protect a specified resource or value in addition to standard lease terms and conditions.

Timing Limitations (TL)

Areas identified for TL stipulation, a moderate constraint, are closed to fluid mineral exploration and development during identified timeframes. This stipulation also prohibits anthropogenic disturbances, surface disturbance, or activities disruptive to GUSG populations and habitat (including intensive

scheduled maintenance activities) during seasonal life cycle periods. Construction, drilling, completions, and other operations considered to be intensive in nature are not allowed. Intensive maintenance, such as workovers on wells, is not permitted. Administrative activities are allowed at the discretion of the BLM Authorized Officer.

J.3. EXCEPTIONS, MODIFICATIONS, AND WAIVERS

An exception exempts the holder of the lease from the stipulation on a one-time basis. A modification changes the language or provisions of a stipulation due to changed conditions or new information either temporarily or for the term of the lease. A modification may or may not apply to all other sites within the leasehold. A waiver permanently exempts the surface stipulation for a specific lease, planning area, or resource based on absence of need, such as a determination that protection of winter use is unnecessary for maintenance or recovery of a species.

J.3.1. Exception, Modification, or Waiver Process

An exception, modification, or waiver may be granted at the discretion of the BLM Authorized Officer if the specific criteria described below are met. In order to implement an action that would not normally be allowed because of a stipulation, the proponent must submit a written request for an exception, modification, or waiver and provide the data necessary to demonstrate that specific criteria have been met. Any such requests would be subject to appropriate consultation and/or coordination with the applicable State and/or Federal wildlife agency(ies). Prior to any modification or waiver of a lease stipulation, a 30-day public notice and comment period could also be required.

J.4. STIPULATIONS APPLICABLE TO FLUID MINERAL LEASING

GUNNISON SAGE-GROUSE OHMA NO SURFACE OCCUPANCY (NSO) [ARMPA]

Stipulation: Fluid Minerals MA-FM-2

For areas with medium or higher potential, apply NSO stipulation in OHMA without waivers, exceptions, and modifications (WEMs).

On the following lands:

OHMA

Purpose: To protect Gunnison sage-grouse and its habitat from activity and fragmentation.

Exception: None

Modification: None

Waiver: None

GUNNISON SAGE-GROUSE UHMA NO SURFACE OCCUPANCY (NSO) [ARMPA]

Stipulation: Fluid Minerals MA-FM-2

For areas with medium or higher potential, apply NSO stipulation in UHMA. If a waiver, exception, or modification is granted on a lease stipulation, then apply CSU and TL for mitigation standards, and timing limitations.

On the following lands:

UHMA

Purpose: To protect Gunnison sage-grouse and its habitat from activity and fragmentation.

Exception:

The BLM Authorized Officer may consider and approve exceptions to this lease stipulation, with the concurrence of the BLM State Director, after documenting the review of available information associated with the site proposed for exception – both internally compiled and as provided by State, county and other local agencies, Tribal governments, project proponents, other Federal agencies, or interested stakeholders – if the following criteria apply and are fully documented:

1. It can be documented that the proposed development and surface occupancy would not impair the function or use of the site, for current or subsequent, use by GUSG as seasonal habitat based on documenting the following, as applicable:
    - The RMP GUSG goal and habitat objectives would be met.
    - The location of the proposed authorization is determined to be non-habitat/unsuitable (as determined by a biologist with GUSG experience using methods such as the Habitat Assessment Framework) and lacks the ecological site potential to become marginal or suitable habitat.
    - Does not provide important connectivity between habitat areas, and the project includes design features to prevent indirect disturbance to or disruption of adjacent seasonal habitats that would impair their biological function or attract predators.
    - Topography, geographic features, and/or areas of non-habitat create an effective barrier to impacts.
    - By co-locating the proposed authorization with existing disturbance, no additional impacts would be realized above those already associated with the existing major infrastructure, including indirect disturbance to or disruption of adjacent seasonal habitats that would impair their biological function.
    - The proposed location would be undertaken as an alternative to a similar action occurring on a nearby parcel (for example, due to landownership patterns), and development on the parcel in question would have less of an impact on GUSG or its habitat than on the nearby parcel; this exception must also include measures sufficient to allow the BLM to conclude that such benefits will endure for the duration of the proposed action's impacts.

To approve this exception, the Authorized Officer must document and coordinate with the USFWS and the appropriate State wildlife agency, that the proposed action satisfies the criteria listed above. If an exception is granted, the Authorized Officer will apply all CSU and TL stipulations to the existing lease. Prior to granting an exception to a NSO stipulation the potential exception shall be subject to public review for at least a 30-day period.

Modification:

The BLM Authorized Officer may consider and approve modifications to this lease stipulation, with the concurrence of the BLM State Director, *where an exception is granted*, as described above, for the primary disturbance (e.g., well pad, compressor station), then a modification providing for surface occupancy of potential associated infrastructure related to the development that are not individually precluded by other GUSG management actions (e.g., roads, pipelines, power lines). While the NSO stipulation could be modified for these additional developments, they must still comply with other GUSG management actions (e.g., mitigation, minimization measures, seasonal restrictions, required design features, etc.) if an exception to the NSO is granted. If a modification is granted, the Authorized Officer will apply all CSU and TL stipulations to the existing lease. Prior to modifying the area subject to the NSO stipulation, the potential modification shall be subject to public review for at least a 30-day period.

Waiver:

The BLM Authorized Officer may consider and approve a waiver to this lease stipulation, with the concurrence of the BLM State Director, to the area mapped as possessing the attributes protected by the stipulation after documenting the review of available information (as documented by a biologist with GUSG experience), in coordination with the USFWS and the State wildlife agency, that the area lacks those attributes to provide suitable or marginal seasonal habitat for GUSG or is within an area determined to be non-habitat or unsuitable to be habitat based on ecological site potential. If a waiver is granted, the Authorized Officer will apply all CSU and TL stipulations to the existing lease. Prior to waiving the NSO stipulation for a given area, the potential waiver shall be subject to public review for at least a 30-day period.

GUNNISON SAGE-GROUSE LEKS NO SURFACE OCCUPANCY (NSO) [ARMPA]

Stipulation: Fluid Minerals MA-FM-3

Apply NSO stipulation in Adjacent Non-habitat areas within a 1-mile buffer of all leks without WEMs.

On the following lands:

Adjacent Non-habitat

Purpose: To protect Gunnison sage-grouse and its habitat from activity and fragmentation.

Exception: None

Modification: None

Waiver: None

GUNNISON SAGE-GROUSE UHMA TIMING LIMITATION (TL)

[ARMPA]

Stipulation: MA-SSS-14

In UHMA, prohibit surface disturbance during seasonal life cycle periods as follows:

- In breeding/lekking areas from March 1 – May 15
- In nesting habitat from April 15 – June 30
- In brood-rearing habitat from July 1 – September 30
- In known winter habitat concentration areas from December 1 – March 15

On the following lands:

UHMA

Purpose: To seasonally protect Gunnison sage-grouse within OHMA and UHMA from disruptive activity during breeding, nesting, brood-rearing and winter seasonal use periods. This would only be applicable to new fluid minerals leases if the exception criteria identified for the NSO stipulation were granted.

Exception: None

Modification:

Specific time and distance determinations would be based on site-specific conditions and may be modified, in coordination with the appropriate State wildlife agency and USFWS, due to documentation of the following:

- local variations (e.g., higher/lower elevations)
- annual climactic fluctuations (e.g., early/late spring and long and/or heavy winter)
- located within an area of non-habitat (e.g., forest, sandflat)

Waiver: None

GUNNISON SAGE-GROUSE NET SURFACE DISTURBANCE CONTROLLED SURFACE USE (CSU)

[ARMPA]

Stipulation: Special Status Species MA-SSS-5

In OHMA and UHMA, net surface disturbance will be inventoried and calculated across all landownerships to provide a baseline net surface disturbance by HMA for each population. Net surface disturbance calculations will be updated and calculated annually for any authorizations where there is a federal action or nexus per the methodology outlined in Appendix E, *Methodology for Calculating Net Surface Disturbance*. Net disturbance acres will be provided for the current year, in addition to past years, to allow decision-makers to evaluate net disturbance trends. These net disturbance calculations will be incorporated into the cumulative impact analysis during project-scale NEPA.

In OHMA and UHMA, the following will apply to evaluation and analysis of new anthropogenic surface disturbances:

- Minimization Criteria (MA-SSS-15)
- Compensatory Mitigation (MA-SSS-6)
- Analysis of net surface disturbance for OHMA and UHMA within NEPA cumulative impacts
- Habitat Exception Criteria (MA-SSS-2)
- Exceptions for surface-use activities, listed under the applicable resource program (e.g., Lands and Realty, Solid Minerals)
- Annual reporting under the Monitoring Framework (see Appendix D, *Gunnison Sage-Grouse Monitoring Framework*)

On the following lands:

OHMA and UHMA

Purpose: To protect OHMA and UHMA and the life-history needs of Gunnison sage-grouse from habitat loss and limit fragmentation. This would only be applicable to new fluid minerals leases if the exception criteria identified for the NSO stipulation in UHMA were granted.

Exception: None

Modification: None

Waiver: None

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