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**Forest Service** 

Intermountain and Rocky Mountain Regions

August 2019



# Greater Sage-grouse Draft Record of Decision and Land Management Plan Amendment for National Forest System Land in Wyoming

Ashley, Bridger-Teton, Uinta-Wasatch-Cache, and Medicine Bow-Routt National Forests and Thunder Basin National Grassland



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# **FOREWORD**

The landscape and culture of the Interior West are characterized by the iconic sagebrush steppe ecosystems that are valued and used by people with a long and deep connection to the land. The United States Department of Agriculture, Forest Service has identified a need and desire to create a new balance between the use and protection of this landscape to conserve its important attributes, including greater sage-grouse.

In 2010, the Forest Service began a journey that involved a multi-faceted effort that included both programmatic planning and on-the-ground projects across multiple states. The Forest Service has come together through working groups, task forces, councils, and meetings with the public, Tribes, state and federal agencies, counties, and associations. This landscape includes multiple jurisdictions with a diversity of authorities, responsibilities, geography, resources and needs that lead to similar but different plans and actions. Our efforts have not and could not be expected to result in one overall plan agreed to by everyone across the entire landscape. However, we've achieved an unprecedented level of collaboration to achieve a significant set of accomplishments that will benefit greater sage-grouse and the sagebrush steppe ecosystem across the landscape.

On September 16, 2015, the Forest Service signed two decisions the *Greater Sage-grouse Record of Decision and Land Management Plan Amendments for Idaho, Southwest Montana, Nevada, and Utah* and the *Greater Sage-grouse Record of Decision and Land Management Plan Amendments for Northwest Colorado and Wyoming*. On October 2, 2015, the U.S. Fish and Wildlife Service (USFWS) found that listing the greater sage-grouse under the Endangered Species Act (ESA) of 1973 was not warranted (80 FR 59858). The USFWS based its finding on regulatory certainty from the conservation measures in the Forest Service and Bureau of Land Management (BLM) greater sage-grouse land management plan amendments (LMPAs) and revisions, as well as on other private, state, and federal conservation efforts.

In 2017, the Secretary of the Interior issued Secretarial Order (SO) 3353 with a purpose of enhancing cooperation among 11 western states and the BLM in managing and conserving greater sage-grouse. It also directed an Interior Review Team, consisting of the BLM, the USFWS, and the US Geological Survey (USGS), to coordinate with the Sage-Grouse Task Force. A June 14, 2017 letter from the Forest Service Chief directed the Forest Service in Regions 1, 2, and 4 to cooperate in the review. On August 4, 2017, the Interior Review Team submitted its Report which recommended modifying the greater sage-grouse plans and associated policies to better align with individual state plans. On August 4, 2017, the Secretary of the Interior issued a memo to the Deputy Secretary directing the BLM to implement the recommendations found in the report and the BLM initiated their environmental analysis process.

After two years of implementation and monitoring, the Forest Service believed new information could be incorporated to improve the clarity, efficiency, and implementation of the 2015 Greater Sage-Grouse Plan Amendments, including better alignment with BLM and state plans, in order to benefit greater sage-grouse conservation at the landscape scale. In November 2017, the Forest Service initiated the environmental analysis process with the publication of a Notice of Intent to Prepare an Environmental Impact Statement (EIS) in the Federal Register. On June 20, 2018 a Supplemental NOI was published to continue the scoping effort by seeking comments for a proposed action to make amendments to the plans. Comments from both NOIs were considered and on October 5, 2018, the Forest Service published a Draft EIS (DEIS) for public comment. The Forest Service considered input from cooperating agencies, as well as comments and meetings with the public, Tribes, state and federal agencies, counties, and associations.

This Record of Decision (ROD) represents our contribution and commitment to the conservation of greater sage-grouse and the sagebrush steppe ecosystem that is vital to the survival of greater sage-grouse. Our decision was made after carefully listening and considering concerns raised by the state and federal agencies, Tribes, cooperating agencies (including the BLM), grazing permittees, industry, counties, groups, and public. The states involved in this effort have taken approaches appropriate to their situation towards this common goal; and the Forest Service has developed plans that provide a level of consistency across the federal lands that they manage, while incorporating aspects of each state's plan. The Forest Service worked closely with state partners to develop direction that will provide the habitat necessary to maintain a viable population of greater sage-grouse on the plan area while taking state plan direction into consideration.

The LMPA, as outlined in this decision, provides overall direction and guidance for land management activities on National Forest System lands. The actual changes on the ground, however, will occur as project-level environmental analysis and decisions occur and the resulting actions are implemented.

The Forest Service fully recognizes that this decision will result in changes to how National Forest System lands and uses are managed and, as actions are being implemented, they will have impacts on some users. It is incumbent upon us to continue working at the local level to find ways to achieve the goals outlined in this ROD and associated LMPA. The Forest Service understands that to be successful implementation must proceed in a thoughtful way that is collaborative and transparent with our federal, state, and local partners.

The LMPA establishes a solid foundation to work from that provides a level of certainty about management of National Forest System lands. Through our experiences implementing the plan amendments, completing additional project analysis, conducting monitoring and additional research, the Forest Service will continue to learn more about these landscapes, and the wildlife and uses they support. It will be incumbent upon us to embrace an attitude of continual learning and adaptation.

The large landscape that the Forest Service is working on, and the associated diverse group of stakeholders affected and interested in this effort, provides an opportunity to take advantage of each other's knowledge and capacity and, using our varied strengths, work in partnership to conserve greater sage-grouse while continuing the important uses on our National Forest System lands.

To date through this effort, we've established new ways of working together that have resulted in significant accomplishments. We're committed to building on these successes and exploring additional ways to strengthen our efforts to work together.

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# **INTRODUCTION**

This Record of Decision (ROD) documents our decision and rationale for approving the land management plan amendment (LMPA) and final environmental impact statement (FEIS) for National Forest System (NFS) land located in the state of Wyoming. This LMPA will provide guidance for future project and activity decisionmaking on the Bridger-Teton and Medicine Bow-Routt National Forests (NFs) and Thunder Basin National Grassland (NG).

The Forest Service has developed a targeted, multi-tiered, collaborative landscape-level conservation strategy. This strategy is based on the best available scientific information that offers the highest level of protection for greater sage-grouse (GRSG) in the most important habitat areas to address the specific threats identified in the 2010 U.S. Fish and Wildlife Service (USFWS) "warranted but precluded" decision, and the USFWS 2013 Conservation Objectives Team (COT) report, and the 2017 in Response to SO 3353 written by the Interior Review Team.

The conservation measures presented in this ROD and the attached LMPA protect greater sage-grouse and its habitat, and more than 350 other wildlife species associated with the sagebrush steppe ecosystem, which is widely recognized as one of the most endangered ecosystems in North America. Reversing the slow degradation of this valuable ecosystem will also benefit local economies and a variety of rangeland uses including sustainable livestock grazing, recreation, and continued sustainable economic development in a manner that safeguards the long-term sustainability, diversity, and productivity of these important and iconic landscapes and the Western culture.

The management direction in the LMPA comprises forest plan components that limit or eliminate new surface disturbance in Priority Habitat Management Areas (PHMAs). The LMPA also includes a suite of other management direction, such as the establishment of disturbance limits, greater sage-grouse habitat objectives, lek buffers, mitigation requirements, monitoring protocols, adaptive management triggers and responses, and targeted restoration and habitat improvements. The cumulative effect of these measures is to conserve, enhance, and restore greater sage-grouse habitat across the remaining range of the species in the Intermountain Region and provide greater certainty that Forest Service land management plan decisions will lead to conservation of greater sage-grouse and other species associated with the sagebrush steppe ecosystem.

The greater sage-grouse conservation measures approved by this decision, in addition to other state, federal, and local partners' greater sage-grouse conservation actions, represent a collaborative, landscape-level conservation effort. Through past and future partnerships and cooperation, the Forest Service intends to manage the sagebrush steppe ecosystem to achieve our common goal to conserve greater sage-grouse and its habitat.

# **BACKGROUND**

Greater sage-grouse is a species dependent on sagebrush steppe ecosystems. These ecosystems are managed in partnership across the range of the greater sage-grouse by federal, state, tribal and local authorities. Efforts to conserve the species and its habitat date back to the 1950s. Over the past two decades, state wildlife agencies, federal agencies, and many others in the range of the species have been collaborating to conserve greater sage-grouse and its habitats. The United States Department of Agriculture (USDA) Forest Service (FS) and the United States Department of the Interior (USDI) Bureau of

Land Management (BLM) have broad responsibilities to manage federal lands and resources for the public benefit.

The greater sage-grouse, an iconic species of the sagebrush steppe ecosystem, currently occupies only 56% of its historic range and populations have continued to decline for the past 40 years. The Forest Service manages approximately 8% of the remaining greater sage-grouse habitat. The National Forest Management Act of 1976 (NFMA) directs the FS to develop, maintain, and, as appropriate, revise land management plans (LMPs) which guide management of NFS lands (16 USC 1604(a)). The conservation measures in the LMPA fulfills this responsibility as well as our commitment to the Forest Service mission to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations.

In March 2010, the USDI Fish and Wildlife Service (USFWS) issued a 12 Month Finding for Petitions to List the greater sage-grouse (*Centrocercus urophasianus*) as Threatened or Endangered (75 Federal Register 13910, March 23, 2010). In that 12-Month Finding, the USFWS concluded that listing the greater sage-grouse as a threatened or endangered species was "warranted, but precluded by higher priority listing actions." The USFWS reviewed the status and threats to the greater sage-grouse in relation to the five Listing Factors provided in Section 4(a)(1) of the ESA (16 USC 1533(a)(1)). Of the five Listing Factors reviewed, the USFWS determined that Factor A, "the present or threatened destruction, modification, or curtailment of the habitat or range," (p. 13924) and Factor D, "inadequacy of existing regulatory mechanisms" (p. 13973) posed "a significant threat to the greater sage-grouse now and in the foreseeable future" (pp. 13962 and 13982) (75 FR 13910, March 23, 2010). The USFWS identified the land and resource management plans for the FS and BLM as mechanisms through which adequate protections for greater sage-grouse could be implemented.

The 2010 USFWS listing decision prompted a joint FS and BLM planning effort to amend FS LMPs and BLM equivalents to incorporate conservation measures to support the continued existence of the greater sage-grouse. This effort culminated in the Forest Service Greater Sage-grouse Records of Decisions (2015 RODs) that were signed on September 16, 2015. On October 2, 2015, the USFWS found that listing the greater sage-grouse under the ESA was not warranted (80 FR 59858). The USFWS based its finding on regulatory certainty from the conservation measures in the FS and BLM greater sage-grouse LMPAs and revisions, as well as on other private, state, tribal, and federal conservation efforts.

On March 29, 2017, the Secretary of the Interior issued Secretarial Order (SO) 3349. It ordered agencies to reexamine practices to better balance conservation strategies and policies with the need of creating jobs. On June 7, 2017, the Secretary issued SO 3353 with a purpose of enhancing cooperation among eleven western states and the BLM in managing and conserving greater sage-grouse. SO 3353 directed an Interior Review Team, consisting of the BLM, the USFWS, and the US Geological Survey (USGS), to coordinate with the Sage-Grouse Task Force. A June 14, 2017 letter from the Forest Service Chief directed Forest Service Regions 1, 2, and 4 to cooperate in the review. On August 4, 2017, the Interior Review Team submitted its *Report in Response to SO 3353*. In this report the team recommended modifying the greater sage-grouse plans and associated policies to better align with the individual state plans. On August 4, 2017, the Secretary issued a memo to the Deputy Secretary directing the BLM to implement the recommendations found in the report. On October 11, 2017, the BLM published the Notice of Intent to Amend Land Use Plans Regarding Greater Sage-Grouse Conservation and Prepare Associated Environment Impact Statements or Environmental Assessments (82 FR 47248).

To solicit public comment on greater sage-grouse management issues that could warrant LMPAs, the FS

published a Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) (82 FR 55346, November 21, 2017). The FS provided the public with an opportunity to identify the preliminary need for change to the 2015 amendments and encouraged the public to help identify any issues, management questions, or concerns that should be addressed. A March 2018 Executive Summary of comments can be found here: <a href="https://www.fs.usda.gov/Internet/FSE\_DOCUMENTS/fseprd576258.pdf">https://www.fs.usda.gov/Internet/FSE\_DOCUMENTS/fseprd576258.pdf</a>. On June 20, 2018 a Supplemental NOI was published to continue the scoping effort by seeking comments for a proposed action to make amendments to the plans (83 FR 28608). This Supplemental NOI identified the provisions in the regulations that guide the development, amendment, and revision of land management plans for all units of the NFS (36 CFR 219, referred to as the "planning rule") likely to be directly related, and so applicable, to proposed plan amendments. On July 2, 2018, a corrected Supplemental NOI was published to clarify that the FS is not proposing to amend land management plans for NFS lands in Montana (83 FR 30909). On August 1, 2018 the comment period was extended for two weeks in response to public concerns regarding the BLM Draft Environmental Impact Statement (DEIS) comment period closing the same day as the FS (83 FR 37460). A September 2018 Executive Summary of comments is located on the project page at:

https://www.fs.usda.gov/Internet/FSE\_DOCUMENTS/fseprd595810.pdf

On October 5, 2018 a Notice of Availability (NOA) for the Greater Sage-grouse Proposed LMPAs and DEIS for the Intermountain and Rocky Mountain Regions was published in the Federal Register (83 FR 50362 and 83 FR 50331, October 5, 2018). The 90-day comment period per the 2018 NOA drew 33,192 comment letters, of which 622 contained unique and substantially different comments. The Forest Service received letters, emails, form letters, and public comment forms from Tribes, individuals, organizations, agencies, businesses, and groups. The Forests analyzed 2,935 comments from the 622 comment letters to identify the significant issues driving the alternatives. A February 2019 Executive Summary of comments is located on the Intermountain Region webpage at:

https://www.fs.usda.gov/Internet/FSE\_DOCUMENTS/fseprd610376.pdf. . . A summary of the responses to comments is included in Appendix I – Response to Comments in the FEIS. A spreadsheet containing all unique comments and response to comments is available at:

https://data.ecosystem-management.org/nepaweb/nepa\_project exp.php?project=52904.

The FS prepared this FEIS to analyze changing conservation measures for greater sage-grouse as well as to incorporate new information to improve the clarity, efficiency, and implementation of the conservation measures of the 2015 Greater Sage-Grouse Plan Amendments. The FS was also a cooperating agency with the BLM as they undertook a similar action.

# **PLANNING AREA**

The planning area comprises NFS lands in greater sage-grouse habitat management areas (HMAs) located in National Forests and Grasslands in the Intermountain and Rocky Mountain Regions. The NFS lands located in the planning area are managed under 19 land management plans, shown in Table 1-1. One DEIS and one FEIS were developed for the entire planning area, however, a separate ROD has been prepared for each state. See "Decision Area" and Table 1-3 below for a list of those land management plans amended in this ROD.

Table 1-1. Forest Service LMPs proposed to be amended by GRSG planning strategy in the entire planning area.

Managing Forest or Grassland	LMP and Year Approved <sup>1</sup>	State	
Intermountain Region, Region 4			
Ashley National Forest	Ashley National Forest Land and Resource	Utah,	
	Management Plan (1986)	Wyoming	
Boise National Forest	Boise National Forest Land and Resource	Idaho	
	Management Plan (2003)	idano	
Bridger-Teton National Forest	Bridger-Teton Land and Resource Management Plan (1990)	Wyoming	
Caribou-Targhee National Forest	Curlew National Grassland Plan (2002)	Idaho	
Caribou-Targhee National Forest	Revised Forest Plan for the Caribou National Forest (2003)	Idaho	
Caribou-Targhee National Forest	1997 Revised Forest Plan, Targhee National Forest (1997)	Idaho	
Dixie National Forest	Land and Resource Management Plan for the Dixie National Forest (1986)	Utah	
Fishlake National Forest	Fishlake National Forest Land and Resource Management Plan (1986)	Utah	
Humboldt-Toiyabe National Forest	Humboldt National Forest Land and Resource Management Plan (1986)	Nevada	
Humboldt-Toiyabe National Forest	Land and Resource Management Plan, Toiyabe National Forest (1986)	Nevada	
Manti-La Sal National Forest	Land and Resource Management Plan, Manti-La Sal (1986)	Utah	
Salmon-Challis National Forest	Challis National Forest Land and Resource Management Plan (1987)	Idaho	
Salmon-Challis National Forest	Salmon National Forest Land and Resource Management Plan (1988)	Idaho	
Sawtooth National Forest	Sawtooth National Forest Land and Resource Management Plan (2003)	Idaho, Utah	
Uinta-Wasatch-Cache National	2003 Land and Resource Management Plan, Uinta	Utah,	
Forest	National Forest (2003)	Wyoming	
Uinta-Wasatch-Cache National	Revised Forest Plan, Wasatch-Cache National Forest	Utah,	
Forest	(2003)	Wyoming	
Rocky Mountain Region, Region 2		T	
Medicine Bow-Routt National Forest	Routt National Forest Revised Land and Resource Management Plan (1997)	Colorado	
Medicine Bow-Routt National Forest	Medicine Bow National Forest Revised Land and Resource Management Plan (2003)	Wyoming	
Thunder Basin National Grassland	Land and Resource Management Plan for the Thunder Basin National Grassland (2001)	Wyoming	

<sup>&</sup>lt;sup>1</sup>As amended

# **DECISION AREA**

The NFS lands included in this decision are greater sage-grouse habitat management areas and lek buffers as specified in the LMPA located on NFS lands in Wyoming. All lands included in this decision are in the Intermountain and Rocky Mountain Regions. Maps of the decision area are included in Attachment B.

#### HABITAT MANAGEMENT AREAS

The planning area comprises numerous areas with greater sage-grouse habitat across the local ranges of one or more greater sage-grouse populations. These habitat areas are non-contiguous, meaning they are often separated by natural geographic features/barriers or human development. In this ROD, the planning area is further divided into HMAs. Habitat management areas are broadly mapped at a large scale and may encompass tracts of non-habitat; plan components only apply to greater sage-grouse habitat within the broad bounds of the HMAs. The HMAs are defined as follows:

- Priority Habitat Management Areas (PHMA): Areas that have been identified as having the
  highest conservation value to maintaining sustainable greater sage-grouse populations. These
  areas are occupied seasonally or year-round and include breeding, late brood-rearing, and
  winter concentration areas. The FS and BLM have identified these areas in coordination with
  respective state wildlife agencies.
- General Habitat Management Area (GHMA): Areas that are likely to be occupied seasonally or
  year-round outside of PHMAs and where special management would apply to sustain the
  greater sage-grouse population. GHMA may include active leks, seasonal habitats, and
  fragmented or marginal habitat. These areas have been identified by the FS and BLM in
  coordination with respective state wildlife agencies.
- **Connectivity Habitat Management Area (CHMA):** HMAs that are known migration corridors that connect populations or population segments. CHMA is only designated in Wyoming.
- Winter Concentration Areas: Winter concentration areas are a habitat type that are exclusively mapped by the Wyoming Game and Fish Department (WGFD) if observed. The criteria is a habitat feature where a biologically significant core area population persistently congregates in an area December 1 to March 14. No winter concentration areas are currently mapped on NFS lands in Wyoming. If Winter Concentration Areas are identified and mapped by WGFD, the appropriate plan components would be applied. Winter Concentration Areas are only in Wyoming.

As new information about greater sage-grouse habitat becomes available, including seasonal habitats, in coordination with the State wildlife agency and USFWS, and based on best available scientific information, the Forest Service may revise the greater sage-grouse habitat management area maps and associated management decisions through LMPA or plan revision, as appropriate.

Table 1-2. Comparative summary of acres of greater sage-grouse habitat in the entire planning area by alternative.

Alternatives	Colorado	Acreage Change	Idaho	Acreage Change	Nevada	Acreage Change	Utah	Acreage Change	Wyoming	Acreage Change	Total Acreage Change
No Action Alternat	ive	T									
РНМА	1,400	-	342,000	-	994,800	-	782,100	-	419,600	-	-
IHMA	-	-	416,300	ı	ı	-	-	-	ı	-	1
GHMA	11,000	-	347,500	-	797,800	-	28,100	-	609,800	-	-
ОНМА	-	-	-	ı	625,600	-	-	-	ı	-	-
Anthro Mountain	-	-	-	-	-	-	42,100	-	1	-	-
SFA	-	-	248,000	-	566,800	-	47,300	-	2,800	-	-
Total	12,400	-	1,105,800	-	2,418,100	-	852,300	-	1,029,400	-	-
Proposed Action A	Iternative										
РНМА	1,400	-	342,000	-	889,600	-105,200	824,200	42,200	319,400	-100,300	-163,300
IHMA	-	-	416,300	-	-	-	-	-	-	-	-
GHMA	11,000	-	347,500	-	1,096,000	298,300	28,100	-	514,300	-94,600	203,700
ОНМА	-	-	-	-	426,800	-198,800	-	-	-	-	-198,800
СНМА	-	-	-	-	-	-	-	-	6,400	-	-
Anthro Mountain	-	-	-	-	-	-	-	-42,100	-	-	-42,100
Total	12,400	-	1,105,800	-	2,412,400	-5,700	852,400	100	840,100	-194,900	-200,400
State of Utah Alter	native										
PHMA	1,400	-	342,000	-	889,600	-	782,100	-42,200	319,400	-	-42,200
IHMA	-	-	416,300	-	-	-	-	-	-	-	-
GHMA	11,000	-	347,500	-	1,096,000	-	-	-28,100	514,300	-	-28,100
ОНМА	-	-	-	-	426,800	-	-	-	-	-	-
СНМА	-	-	-	-	-	-	-	-	6,400	-	-
Total	12,400	-	1,105,800	-	2,412,400	-	782,100	-70,300	840,100	-	-70,300

Acres rounded to the nearest hundredth.

No Action Alternative - Source: FS GIS 2015; Proposed Action - Source: FS GIS 2018; State of Utah Alternative - Source: FS GIS 2018

# **DECISION**<sup>1</sup>

Our decision is to approve Alternative 2, the Proposed Action Alternative from the FEIS. Our decision approves the LMPA to amend the LMPs for NFS lands in Wyoming (see Table 1-3). The Medicine Bow-Routt NF and Thunder Basin National Grasslands are located in Colorado and Wyoming. This decision and LMPA only applies to the portion of NFS lands located in Wyoming. The portions of NFS lands in Colorado will be considered in the "Greater Sage-grouse Draft ROD and LMPA for NFS Land in Colorado". The Ashley and Uinta-Wasatch-Cache NFs are located in Utah and Wyoming. The decision for the portion of NFS lands located in Utah will be considered in the "Greater Sage-grouse Draft ROD and LMPA for NFS Land in Utah".

Table 1-3. Land management plans in Wyoming amended by this decision.

Managing Forest or Grassland	LMP and Year Approved <sup>1</sup>	State	
Intermountain Region, Region 4			
Ashley National Forest	Ashley National Forest Land and Resource	Utah²,	
	Management Plan (1986)	Wyoming	
Bridger-Teton National Forest	Bridger-Teton Land and Resource Management Plan (1990)	Wyoming	
Uinta-Wasatch-Cache National	2003 Land and Resource Management Plan, Uinta	Utah²,	
Forest	National Forest (2003)	Wyoming	
Uinta-Wasatch-Cache National	Revised Forest Plan, Wasatch-Cache National Forest	Utah²,	
Forest	(2003)	Wyoming	
Rocky Mountain Region, Region 2			
Medicine Bow-Routt National	Routt National Forest Revised Land and Resource	Colorado <sup>2</sup>	
Forest (Region 2)	Management Plan (1997)	Colorado	
Medicine Bow-Routt National	Medicine Bow National Forest Revised Land and		
Forest (Region 2)	Resource Management Plan (2003)	Wyoming	
Thunder Basin National Grassland	Land and Resource Management Plan for the	Wyoming	
(Region 2)	Thunder Basin National Grassland (2001)		

<sup>&</sup>lt;sup>1</sup>As amended

In the DEIS and FEIS, the Forest Service analyzed effects of two action alternatives and a No Action Alternative (see FEIS, Chapter 2, Sections 2.2 and 2.3 regarding alternatives). The action alternatives are Alternative 2 - Proposed Action Alternative and Alternative 3 – State of Utah Alternative. Alternative 2 is the preferred alternative and has modifications from the DEIS. This decision selects Alternative 2 the Proposed Action Alternative from the FEIS. Table 1-4 shows a summary of acres of HMA in the Proposed Action Alternative.

<sup>&</sup>lt;sup>2</sup>A separate ROD and proposed LMPA have been published for the NFS lands in Colorado (Medicine Bow-Routt NF) and Utah (Ashley and Uinta-Wasatch-Cache NFs) and will be considered in those draft RODs and LMPAs.

<sup>&</sup>lt;sup>1</sup> If any inconsistencies exist between the language contained in this ROD and the attached LMPA, the language as written in the LMPA will prevail.

Table 1-4. Summary of habitat management areas in acres on NFS lands located in Wyoming in the Proposed Action Alternative.

National Forest by State	GHMA	СНМА	PHMA	Total
Ashley NF (WY)	61,400	-	34,700	96,100
Bridger-Teton NF (WY)	115,700	-	53,900	169,600
Medicine Bow NF and Thunder Basin NG (WY)	335,800	6,400	230,300	572,500
Uinta-Wasatch-Cache NF (WY)	1,400	-	500	1,900
Total	514,300	6,400	319,400	840,100

The proposed LMPAs in the FEIS became the LMPA located in Attachment A. The LMPA provides conservation measures to conserve, enhance, and restore greater sage-grouse and its habitat by reducing, eliminating, or minimizing threats to greater sage-grouse and its habitat. Land management plan direction is expressed as desired conditions, objectives, standards, and guidelines. These plan components are designed to provide conservation protection for greater sage-grouse and habitat sufficient for a viable population on each planning unit.

In developing the proposed LMPA for the FEIS and ROD, modifications were made to the Proposed Action Alternative in the DEIS. The clarifications and edits made between the DEIS and FEIS are shown in the FEIS, Chapter 2, Table 2-9 Wyoming. The modifications were based on public comments, internal review, new information, best available scientific information, the need for clarification in the plans, and ongoing coordination with States and other stakeholders across the range of the greater sage-grouse.

The suite of desired conditions, objectives, standards, and guidelines in the LMPA have been developed to provide direction for the potential activities that can occur in greater sage-grouse habitat. In addition, management approaches, which are identified as optional content in the plan, are also included. Optional Content in the Plan is discussed at 36 CFR 219.7(f)(2): "A plan may include additional content, such as potential management approaches or strategies and partnership opportunities or coordination activities." Optional content in the plan is also described in Forest Service Handbook 1909.12, Sec. 22.4 "If used, management approaches would describe the principal strategies and program priorities the Responsible Official intends to employ to carry out projects and activities developed under the plan. The management approaches can convey a sense of priority and focus among objectives and the likely management emphasis. Management approaches should relate to desired conditions and may indicate the future course or direction of change, recognizing budget trends, program demands and accomplishments. Management approaches may discuss potential processes such as analysis, assessment, inventory, project planning, or monitoring."

Management approaches are intended as guidance of how to meet the purpose of the amendment for situations that are outside of the decisionmaking process. Several plan components were identified as management approaches in the DEIS Proposed Action when it was determined that they did not meet the definition of a standard or guideline. In the FEIS, many remained as management approaches, but some were changed back to guidelines, when it was determined that they did more closely meet the definition of a guideline; "a constraint on project and activity decisionmaking that allows for departure from its terms, so long as the purpose of the guideline is met. Guidelines are established to help achieve or maintain a desired condition or conditions, to avoid or mitigate undesirable effects, or to meet

applicable legal requirements." The Forest Service intends to employ management approaches in the FEIS to meet the purpose of the amendment. There was no effect and no reduction in protection to greater sage-grouse or its habitat as a result of identifying a plan component that had been mislabeled and was a management approach. The Forest Service is making use of all the tools the Planning Rule provides to conserve greater sage-grouse and its habitat.

Implementation of the LMPA direction within the designated greater sage-grouse habitat management areas will be consistently and systematically monitored. Management decisions will be adjusted through an adaptive management process consistent and in accordance with applicable law. Monitoring, Mitigation, and adaptive management details are provided below in this ROD (refer to ROD, Attachments F, G, and H for additional details).

The LMPA does not commit the Forest Service to on-the-ground, site-specific projects or actions. The LMPA provides a broad, programmatic framework that guides project-level decisions, but does not authorize, fund, or carry out any site-specific activities. Instead, the land management plan establishes limitations on what actions may be authorized and what conditions must be met during project-level decisionmaking. Upon the effective date of the LMPA, the Forests will carry out on-the-ground projects and activities designed to accomplish management objectives and move the project area toward desired conditions described in the LMPA. Projects and activities may require additional environmental analysis at the time of project- and activity-specific proposals and will be subject to the National Environmental Policy Act (NEPA) and other applicable laws and regulations. Project-level decisions must be consistent with the land management plan.

#### **DECISION RATIONALE**

#### HOW THE SELECTED ALTERNATIVE RESPONDS TO THE PURPOSE AND NEED

The LMPA that we approve by this decision meets the purpose and need to incorporate new information to improve the clarity, efficiency, and implementation of the 2015 Greater Sage-Grouse Plan Amendments, including better alignment with BLM and state plans, to benefit greater sage-grouse conservation at the landscape scale. The FS gained new information and understanding from comments received, within-agency scoping, new science and research, and coordination with cooperating agencies and the Sage Grouse Task Force. The LMPA provides management direction through desired conditions, standards, and guidelines regarding what activities the Forest Service can and cannot approve in greater sage-grouse habitat on NFS lands in Wyoming. The LMPA emphasizes moving toward desired conditions and these standards and guidelines are intended to reduce the disturbances occurring in the habitat and for the disturbances that do occur, to limit the duration, timing, and location of activities to best protect greater sage-grouse during all of its life stages. The LMPA provides for a comprehensive and effective conservation strategy to address the threats identified by the USFWS and preclude the need for additional protections under the ESA.

We base our decision on a careful and reasoned comparison of the environmental consequences of and responses to issues and concerns for each alternative. The LMPA provides the best opportunity for a balance of management activities to respond to the purpose and need and is responsive to the diverse needs, issues, concerns, and opportunities expressed by tribes, local governments, State and Federal agencies, organizations, and the public. This decision balances interests of the public at large and those with special interests in the resources located in the planning area while providing for sagebrush and

associated habitats for the long-term viability of the greater sage-grouse. These interests include managing future forest and grassland activities to provide sustainable habitat conditions, while continuing to provide for recreation and access opportunities, livestock grazing, access to locatable mineral resources, development of renewable energy resources, and active habitat restoration efforts on NFS lands in accordance with the Multiple-Use Sustained-Yield Act of 1960, the NFMA, and the existing land management plans. While meeting these interests, our decision provides methods to achieve resilient and resistant ecosystems, and to improve greater sage-grouse habitat through providing plan components that will conserve, enhance, or restore sagebrush and associated habitats for the long-term viability of the greater sage-grouse.

The review of comments and internal scoping identified issue topics in the 2018 DEIS and 2019 FEIS including: Habitat Management Area (HMA) Designation; Elimination of Sagebrush Focal Area (SFA) Designations/Withdrawals; Changing Net Conservation Gain and Adjustment of Compensatory Mitigation Frameworks; Including Waivers, Exceptions, and Modifications on No Surface Occupancy (NSO) Stipulations; Modifying Desired Conditions; Changing Livestock Grazing Guidelines; Adaptive Management Review Process; Treatment of Invasive Species; Consistency with the 2012 Planning Rule; and Noise Standards. Rationale for issues raised are discussed in the section below.

#### HOW ISSUES WERE ADDRESSED AND CONSIDERED

Some preliminary issues were identified as a result of implementation of the 2015 ROD and LMPA, new scientific information, and working with other agencies. The interdisciplinary team evaluated comments received from scoping, the DEIS and proposed LMPA comment period and from cooperating agencies to determine if they identified issues relevant to this planning process. Planning issues can drive the development of an alternative, may involve resources that are adversely affected by the proposed action, or may concern conflicts about alternative uses of available resources. These planning issues inform modifications or alternatives to the proposed action, provide focus for the analysis, or are the basis for comparing the environmental effects of the alternatives in the EIS, all of which informed our decision.

This section addresses how the issues that were carried forward for additional analysis in the DEIS and FEIS were addressed and considered. Modifying lek buffers and modifying disturbance caps are two issue topics discussed in the EIS; however, they are not discussed in this ROD because they are not applicable to NFS lands located in Wyoming.

#### **Habitat Management Areas Designation**

- Issue: The process for evaluating and updating HMA boundaries is unclear.
- Response: Alternatives 2 and 3 include the addition of an objective to clarify the process.

The 2015 Rocky Mountain ROD (Northwest Colorado and Wyoming) addressed updating of HMA boundaries: "As new information about greater sage-grouse habitat becomes available, including seasonal habitats, in coordination with the State wildlife agency and USFWS, and based on best available scientific information, the Forest Service may revise the greater sage-grouse habitat management area maps and associated management decisions through LMPA or forest plan revision, as appropriate" (page 21). Maps of the alternatives can be found in the FEIS, Appendix A and ROD, Attachment B. Many public and cooperating agency comments are concerned that changing an HMA boundary requires a new forest plan amendment and could be an onerous process. Other commenters are concerned and want a process to change HMAs that is open and transparent and provides an opportunity for public comment.

We consider the need for clarity to be important. HMAs, or in some instances, lek buffers, are used to identify where plan components apply. Alternatives 2 and 3 include an objective that identifies the process for evaluating and updating HMA boundary maps, and the appropriate planning process would be applied if a change is needed.

- Issue: The protections of the HMAs appeared similar, making the separate designations unnecessary.
- Response: Alternatives 2 was modified to make distinguishable the protections under the different designations and focusing protection in PHMA.

Many of the LMPAs in both the 2015 Rocky Mountain ROD and the 2015 Great Basin ROD, provided the same protections to PHMAs as GHMA and other HMA designations.

After reviewing comments, we determined that clarity to the level of protection could be provided and more focus placed on PHMA. Alternatives 2 and 3 were developed to clarify the differences between the HMAs and to focus protection in PHMAs. This focus on PHMAs will ensure that restrictions are applied in the appropriate areas, while allowing development to occur in areas that would result in few or no impacts to greater sage-grouse.

- Issue: Concern about 2015 HMA boundaries.
- Response: Correction of HMA boundaries.

The boundaries of the habitat management areas in Wyoming have been adjusted to correct administrative mapping errors that occurred when habitat management areas were designated in 2015, and to use the best available scientific information regarding greater sage-grouse habitat. An administrative boundary mapping layer was used to determine the number of acres of HMA and create the maps in Table B in the 2015 Rocky Mountain ROD/LMPA (see 2015 ROD/LMPA, page 18). Habitat management area boundary changes also include removing some areas of non-habitat that were included in the 2015 ROD/LMPA. The State of Wyoming Version 4 Core Area maps are the most up to date science in Wyoming, regarding greater sage-grouse occupancy, and were used to delineate PHMA, GHMA, and CHMA boundaries for this amendment.

In the 2015 EIS, PHMA, PHMA-Core, and PHMA-Connectivity designations were identified. In the 2019 FEIS, PHMA totaled 319,400 acres, GHMA totaled 514,300 acres, and CHMA was added totaling 6,400 acres. CHMA was previously referred to as PHMA-Connectivity in 2015 and made up part of the PHMA acreages. The PHMA-Core designation was eliminated (See FEIS Chapter 2, Tables 2-1 and 2-2) because it was a subcategory of PHMA.

In the 2015 EIS, 53,000 acres on the Bridger-Teton NF was incorrectly designated as PHMA-Connectivity and did not align with the State of Wyoming mapping effort. Decreases in acreage in both GHMA and PHMA are a result of boundaries being better aligned with the Wyoming Version 4 map; acres removed from HMA designation were not consistent with the Wyoming Version 4 map because of being non-habitat or not within FS-ownership. The PHMA-Core, which was included in the 2015 EIS, was mapped by the State of Wyoming and overlaid PHMA. The PHMA-Core designation is being eliminated because it overlaid PHMA (therefore was not additive in acreage) and created confusion.

When the maps were created for the 2019 FEIS, the ownership boundary mapping layer was used. This resulted in a reduction of acres, and a more accurate reflection of the number of acres of HMA on the

ground. We consider it important to have maps with the best available precision and accuracy to facilitate implementation. No impact to greater sage-grouse is anticipated from the HMA boundary adjustment.

The FEIS, Appendix A and the ROD, Attachment B illustrate maps of Alternative 2. Differences in mapping layers between the 2015 and 2019 amendments can also be examined using a mapping web-tool located at the following link:

 $\frac{https://usfs.maps.arcgis.com/apps/PublicInformation/index.html?appid=9f1cf6d8425e49949d0006a0ae574b84\ .$ 

#### **Elimination of Sagebrush Focal Area Designations/Withdrawals**

- Issue: Sagebrush Focal Areas (SFAs) duplicate many protections that are already in place through the designation of PHMA in the absence of mineral withdrawals.
- Response: Alternatives 2 and 3 eliminate SFAs.

In the 2015 ROD/LMPA, SFAs were shown as a subset of PHMA (with few exceptions) and are managed as PHMA with some additional management. Both SFA and PHMA are managed as no surface occupancy (NSO) for fluid mineral leasing, the only difference is that PHMA allows for a limited exception and the exceptions must meet a stringent series of criteria to be approved. Alternatives 2 and 3 eliminated the SFA designation to add flexibility for responsible development with stringent requirements including mitigation to achieve a no net loss to greater sage-grouse habitat in PHMA. There is virtually no overlap of active oil and gas well development with the 2015 SFA designated areas, which indicates that the potential for development of oil and gas in the areas previously designated as SFAs is very low (Chambers et al. 2017). We considered that the removal of SFA designations would have no measurable effect on the conservation of greater sage-grouse because the management direction proposed for PHMA would remain in place and continue to protect greater sage-grouse habitat, but the clarity and efficiency of implementation of the plans would increase by consolidating management area designations.

- Issue: Concern about not pursuing Sagebrush Focal Area Mineral Withdrawal.
- Response: FEIS tiers to previous analysis of not moving forward with withdrawal.

The proposed mineral withdrawal was canceled with a Notice of Cancellation published in the Federal Register on October 11, 2017, which canceled the BLM's application to withdraw SFA from locatable mineral entry (82 FR 47248, October 11, 2017). The impacts associated with not pursuing withdrawal were analyzed in the 2016 Sagebrush Focal Area DEIS which analyzed the impacts of not moving forward with a withdrawal in the No Action Alternative. Applicable analyses from the 2015 FEIS and 2016 DEIS explain the impacts from these actions, and are incorporated by reference (See FEIS, Chapter 4, Table 4-1). Withdrawal decisions are made by the BLM and outside of Forest Service decisionmaking authority. Withdrawing SFA from locatable mineral entry was determined to have a nominal benefit to greater sagegrouse, and didn't have the effect intended. We considered the prior analyses to be sufficient.

# Changing Net Conservation Gain and Adjustment of Compensatory Mitigation Frameworks

- Issue: Need to align mitigation with state mitigation strategies.
- Response: Alternative 2 aligns with the State of Wyoming's Greater Sage-Grouse Compensatory Mitigation Framework; prioritizes protection of PHMA by emphasizing compensatory mitigation in PHMA; and provides an updated mitigation framework.

The decision incorporates changes to the Mitigation Strategy to align with the State of Wyoming's Greater

Sage-Grouse Compensatory Mitigation Framework by changing "net conservation gain" to "no net habitat loss". Net conservation gain was analyzed in the No Action Alternative (Alternative E in the 2015 FEIS) and changed to no net loss of habitat in the 2018 DEIS and 2019 FEIS. This change to no net loss of habitat will promote landscape-scale effectiveness by aligning the FS framework with the state-based compensatory mitigation systems. Biologically, there is no measurable effect on the conservation of greater sage-grouse in changing from net conservation gain to no net habitat loss, in part because of the wide definition of net conservation gain in the 2015 decision. For desired condition, mitigation strategy, and adaptive management see FEIS, Appendix F or ROD, Attachments E, F, G, and H.

Conceptually, "no net loss" would result in fewer acres being restored, improved, or protected as compared with "net conservation gain". However, if the proponent is not willing to provide mitigation that exceeds the minimal net gain standard, the resulting acreage would be similar. Applicable analyses from the 2015 FEIS explain the impacts from these actions, and are incorporated by reference. No additional analysis is needed, we consider the prior analyses to be sufficient. For desired condition, mitigation strategy, and adaptive management can be found in the FEIS, Appendix F and ROD, Attachments E, F, G, and H.

We considered that biologically there is no measurable effect on the conservation of greater sage-grouse in changing from net conservation gain to no net habitat loss, in part because of the wide definition of net conservation gain in the 2015 decision. Specifically, the definition of net conservation gain was, "the actual benefit or gain above baseline conditions," which translated to an uncertain degree of improvement, which could be a minimal number of acres, but is not necessarily tied to habitat. The use of no net habitat loss, defined as, "retaining an equivalent amount of sage-grouse habitat after a proposed action that is equal to or above baseline conditions that existed before the proposed action," is consistent with the purpose and need in that it provides a clearer link to acres and equivalency or uplift for the species than the previous net conservation gain definition.

The impacts associated with the removal of the compensatory mitigation standard of "net conservation gain" would have minimal impacts across the range of greater sage-grouse in Wyoming. This is because the WY Mitigation Strategy provides assurances and durability through identification of additional replacement habitat, to account for potential indirect effects, or unanticipated losses (such as fire) over the life of the impact. However, there is the potential for local adverse impacts on greater sage-grouse as a result of modifying the decisions associated with compensatory mitigation and net conservation gain. Site-specific impacts would be identified at the time of site-specific environmental review or analysis.

The mitigation strategy for Alternative 2 can be found in the FEIS, Appendix F or ROD, Attachment G.

#### **Including Waivers, Exceptions, and Modifications on NSO Stipulations**

- Issue: Changing the unanimous finding requirement from other agencies to the proper level of decisionmaking authority (i.e., authorized officer) on NFS lands.
- Response: Alternative 2 includes the following:
  - the no surface occupancy (NSO) exception includes appropriate surface use and timing stipulations.
  - there is a change in requirements for the USFWS to approve waivers, exceptions, or modifications.

We considered the need for the Forest plan direction to apply only to the Forest Service. Forest Service decision authority cannot be delegated to other agencies or the state. The removal of the requirement

for a unanimous finding between FS, FWS, and the State of Wyoming to grant an exception for NSO in fluid minerals development would be replaced by the authorization being granted by the authorized officer (i.e., responsible official). The responsible official must disclose effects of and rationale for the decision.

The no surface occupancy (NSO) exception includes appropriate surface use and timing stipulations.

Appendix G in the FEIS identified Fluid Minerals: Stipulations for Wyoming. The following stipulations are included in Attachment D:

- STIPULATON WY1: NO SURFACE OCCUPANCY STIPULATION, Greater Sage-Grouse Priority and Connectivity Habitat Management Areas Where Density of Activities Exceeds One Pad per 640 Acres (GRSG-TDDD-ST-014)
- STIPULATION WY2: NO SURFACE OCCUPANCY STIPULATION, Greater Sage-Grouse Occupied Leks in Priority and Connectivity Habitat Management Areas (GRSG-TDDD-GL-016)
- STIPULATION WY3: NO SURFACE OCCUPANCY STIPULATION, Greater Sage-Grouse Occupied Leks in General Habitat Management Areas (GRSG-TDDD-GL-017)
- STIPULATION WY4: TIMING LIMITATION STIPULATION, Greater Sage-Grouse Priority Habitat Management Areas (GRSG-TDDD-GL-018)
- STIPLUATION WY5: TIMING LIMITATION STIPULATION, Greater Sage-Grouse Leks within Connectivity Habitat Management Areas (GRSG-TDDD-GL-019)
- STIPULATON WY6: TIMING LIMITATION STIPULATION, Greater Sage-Grouse Occupied Lek or Lek Perimeter in General Habitat Management Areas (GRSG-TDDD-GL-020)
- STIPULATON WY7: TIMING LIMITATION STIPULATION, Greater Sage-Grouse Winter Concentration Areas (GRSG-TDDD-GL-025)
- STIPULATON WY8: TIMING LIMITATION STIPULATION, Greater Sage-Grouse Noise Limitation (GRSG-GEN-GL-021)

#### **Modifying Desired Conditions**

- Issue: Desired condition tables do not have the flexibility to reflect the latest scientific information
- Response: Alternatives 2 and 3 update desired condition table values.

We consider it important for the desired conditions to reflect the latest scientific information. Desired condition statements were modified and clarified in the FEIS (see FEIS, Chapter 2, Table 2-9 or ROD Attachment E). Table E-1 identifies seasonal habitat desired conditions for the greater sage-grouse at the landscape scale (see FEIS, Appendix F, Table F-1 and ROD, Attachment E, Table E-1).

The values for greater sage-grouse habitat attributes table is identified as a management approach and is included in the FEIS, Appendix F and ROD, Attachment E. This will allow the table to be revised to incorporate best available scientific information in coordination with partners. The best available scientific information would be reviewed and incorporated and recommend adjustments would be based on regionally and locally derived data. Modifying habitat attributes would better align with state conservation plans and management strategies resulting in improved management of the greater sagegrouse.

#### **Changing Livestock Grazing Guidelines**

- Issue: The livestock grazing desired condition statement is circular.
- Response: Alternatives 2 and 3 remove the desired condition statement.

We consider it important to eliminate the circular desired condition statement. The 2015 Greater Sage-Grouse Plan Amendments listed a Desired Condition for livestock grazing being "managed to maintain or move towards desired conditions". This desired condition is being modified or removed because it does not provide any specific direction and is a circular statement; a desired condition cannot be to maintain or move toward a desired condition. The desired conditions for breeding, nesting, upland summer, and winter habitats are defined for each state (see FEIS, Chapter 2, Table 2-9 and ROD, Attachment A and Attachment E).

- Issue: Livestock management guidelines do not allow for reflecting the latest scientific information or adjusting for local habitat conditions.
- Response: Alternatives 2 and 3 replace stringent requirements with standardized evaluation methods for livestock management.

We consider it important that plan components have the flexibility to reflect the latest scientific information and adjust to adjust livestock management as needed if livestock grazing is limiting achievement of greater sage-grouse habitat conditions. Alternatives 2 and 3 revise livestock management guidelines to replace specific grass-height requirements with standardized evaluation methods (e.g., the habitat assessment framework) to better reflect current research and to align local management with local habitat conditions. Based on new research into habitat characteristics, the biological foundation for the development of the 2015 Greater Sage-Grouse Plan Amendments grazing guidelines has changed and this changed condition warrants this change to grazing guidelines, which are not necessary as conservation measures for greater sage-grouse. (see FEIS, Appendix F, Table F-1 and Chapter 2, Table 2-9 and ROD, Attachment E, Table E-1).

#### **Adaptive Management Review Process**

- Issue: The adaptive management review process needs to be clarified to address reversal of management once causal factors are identified and resolved.
- Response: Alternatives 2 and 3 provide a process for reviewing or reverting to an adaptive management response when causal factor is resolved.

The identification of causal factors and the identification of a reversal process if habitat or populations improve allows for more flexibility and applicability of the adaptive management process. The Forest Service, with partners, would review the scientific information, complete causal factor analysis, and identify corrective strategy. This may include changing management on the ground or changing the forest plans through the appropriate processes. More information regarding the adaptive management strategy can be found in the FEIS, Appendix F or ROD, Attachment H.

We considered that no appreciable additive impacts are anticipated from updating the adaptive management process as described in Alternatives 2 and 3. This update would ensure that the FS is utilizing the best available scientific information and decision support tools to guide management at the appropriate spatial scale, thus improving the FS's assessment and response to changing conditions that could impact greater sage-grouse populations and/or habitat.

#### **Treatment of Invasive Plant Species**

- Issue: Adverse effects of invasive plant species on greater sage-grouse habitat needs to be better addressed.
- Response: Alternatives 2 and 3 add desired conditions and management approaches to address invasive plant species in PHMA.

We consider the need to address invasive plant species to be highly important. Alternatives 2 and 3 include the addition of desired conditions and management approaches that emphasize invasive plant treatments, with a focus on annual grasses. The impact of invasive species and the effect of treatments on sage-grouse habitat were analyzed in each state 2015 FEIS and the analysis is incorporated by reference. Impacts are similar to those disclosed in the 2015 analysis; however, the addition of direction to emphasize mapping and treatment of invasive species would improve efficiency for removal of this threat.

#### **Consistency with the 2012 Planning Rule**

- Issue: Consistency with the 2012 Planning Rule.
- Response: Alternatives 2 and 3 identify management approaches to be consistent with the 2012
   Planning Rule.

The FS is required to amend plans consistent with the 2012 Planning Rule. The previous amendment was approved in 2015 and was completed using the 1982 Planning Rule as allowed by 36 CFR 219.17(b). Some procedural and substantive requirements have changed with the 2012 Planning Rule, including the definitions of plan components. Standards and guidelines must now apply as "constraint[s] on project and activity decisionmaking." (36 CFR 219.7(e)(1)) The DEIS identifies several plan components that were changed to management approaches when it was determined that they did not meet the definition of a standard or guideline under the 2012 Planning Rule. In the FEIS, some of these plan components remain management approaches, but some were changed back to a standard or guideline and reworded, if needed, to more closely meet the current definitions. Keeping some of these plan components management approaches so they are correctly labeled will have no reduction in protection to greater sage-grouse or its habitat and no effect on other resources. The definition of management approaches in this amendment as "optional content" means that it was optional for the FS to include them in the plan, but we intend for management approaches to be followed when practicable.

# **Noise Standards**

- Issue: In 2015 analysis was done that specified HMA designations for applying noise standards, but that was not carried forward into the 2015 ROD/LMPA.
- Response: Alternatives 2 and 3 clarify HMA designations when applying noise standards.

I consider the need for clarification or where noise standards apply to be important. In 2015, analysis was done specifying HMAs designations for applying the noise standard, for Wyoming it was PHMA. The specification of HMAs was not included in the 2015 FS ROD/LMPA; they are being included in this amendment to improve implementation of the plan components.

The impacts associated with clarifying that the noise measurement and monitoring would apply only to leks within greater sage-grouse PHMA would have similar impacts as those described under the No Action Alternative for the 2015 LMPA (Location of analysis is found in Chapter 4, Table 4-1, Noise/Soundscape). Project-level noise measurement and monitoring would be done at the time of site-specific

environmental review. Impacts of noise on greater sage-grouse have been shown to include temporary displacement of the birds from breeding and nesting habitat, increased stress, and reduced reproductive success. In addition, adverse effects on communication abilities of strutting males and reduced lek attendance may be a result of noise. PHMA are areas that were identified as having the highest conservation values for maintaining sustainable greater sage-grouse populations. Therefore, standards to limit noise in PHMA would reduce displacement of birds from nesting and breeding areas and provide the greatest benefit to greater sage-grouse. The removal of standards to limit noise in GHMA may result in localized, adverse impacts on greater sage-grouse but would not affect greater sage-grouse conservation in Wyoming.

# OTHER ELEMENTS OF OUR DECISION

This section highlights other elements of our decision that are presented in the LMPA that were developed to maintain, restore, or enhance greater sage-grouse and its habitat.

#### **MONITORING** (See Attachment F)

The Forest Service will monitor the implementation of the LMPA direction within the designated greater sage-grouse habitat management areas (i.e., PHMA, CHMA, and GHMA) consistent with the planning rule (36 CFR 219.12). This monitoring will be based on The Greater Sage-Grouse Monitoring Framework developed by the Interagency Greater Sage-Grouse Disturbance and Monitoring Sub-team, May 30, 2014 and monitored elements described in the framework have been inserted in the Monitoring Attachment F of this decision.

Attachment F - Monitoring is a simplified version derived directly from the Monitoring Framework. It describes how the Forest Service expects to conduct implementation monitoring (i.e., if actions taken are consistent with the plan decisions) and effectiveness monitoring (effectiveness monitoring includes monitoring disturbance in habitats, as well as landscape habitat attributes at the landscape scale).

Monitoring, Attachment F to the LMPA, describes the expected management approach to implement monitoring. An annual Implementation Monitoring Report will describe the number and types of authorized actions in each of the sage-grouse management areas and will document whether the authorized actions are in conformance with the applicable land management plan.

# **MITIGATION** (See Attachment G)

The Forest Service will require mitigation that provides habitat equivalency (i.e., no net habitat loss), aligned with state-based compensatory mitigation programs and strategies, for the greater sage-grouse when undertaking Forest Service management actions, and consistent with existing rights and applicable law, in authorizing third party actions that result in greater sage-grouse habitat loss and degradation. This will be achieved by avoiding, minimizing, and compensating for impacts by applying beneficial mitigation actions. Mitigation will follow the regulations from the White House Council on Environmental Quality (CEQ) (40 CFR 1508.20) and the steps of avoid, minimize, and compensate, hereafter referred to as the mitigation hierarchy. If impacts from Forest Service management actions and authorized third party actions, which result in habitat loss and degradation that would otherwise not be allowed, remain after applying avoidance and minimization measures (i.e., residual impacts), then compensatory mitigation will be used to provide a no net habitat loss to the greater sage-grouse. Mitigation actions should account for

any uncertainty associated with the effectiveness of such mitigation. Any compensatory mitigation will be durable, timely, and in addition to that which would have resulted without the compensatory mitigation. Forest Service mitigation policy and CEQ regulations will serve as a framework for developing and implementing the compensatory mitigation. The Mitigation Strategy, Attachment G to the LMPA describes the expected management approach to implement these standards.

# ADAPTIVE MANAGEMENT (See Attachment H)

Adaptive management triggers are used for identifying when potential management changes are needed to continue meeting greater sage-grouse conservation objectives. The Forest Service may adjust management decisions through an adaptive management process consistent and in accordance with applicable law. The adaptive management strategy includes soft and hard triggers and responses. These triggers are not specific to any particular project, but identify habitat and population thresholds outside of natural fluctuations or variations. Triggers are based on the key metrics that are being monitored, which habitat loss and population declines on biological scales Adaptive management with specific triggers provide additional certainty that the regulatory mechanisms included in the LMPA are robust and able to respond to a variety of conditions and circumstances quickly and effectively to conserve greater sage-grouse habitat.

Soft triggers represent an intermediate threshold indicating that management changes are needed at the implementation level to address habitat or population losses. If a condition of a soft trigger is reached, the Forest Service response aims for reprioritization or activities and measures to mitigate for the causal factors identified in the decline of any of the key metrics, with consideration of local knowledge and conditions. During implementation of the LMPA, an interagency team lead by state agencies in Wyoming may evaluate the key metrics for populations and habitat on an annual basis. These evaluations are intended to be used to assess the need for adjustments in management activities and provide recommendations for change to Forest Service line officers. Working groups would recommend to the appropriate Forest Service line officer any adjustment to management activities actions as a result of tripping a soft trigger. These adjustments will be made to preclude reaching a "hard" trigger, which signals more severe habitat loss or population declines.

A national forest in Wyoming would coordinate with the interagency group where the triggers are situated and follow the adaptive management team approach as described in the ROD, Attachment H. Some national forests would work with more than one interagency group, with the location of the NFS lands determining which group would evaluate the key metrics. For example, for those NFS lands on the Medicine Bow-Routt NF that extend into the State of Colorado, the working group in Colorado would evaluate the key metrics on an annual basis; whereas, for those NFS lands of those Forests that are in the State of Wyoming, the working group in Wyoming would evaluate the key metrics. A similar process would take place for the Ashley and Uinta-Wasatch-Cache NFs which are located in Utah and Wyoming.

Hard triggers represent a threshold indicating that immediate action is necessary to stop a severe deviation from greater sage-grouse conservation objectives set forth in the LMPA. Hard triggers and responses to hard triggers are discussed in the adaptive management ROD, Attachment H. In the event that new scientific information becomes available demonstrating that the hard trigger response would be insufficient to stop a severe deviation from greater sage-grouse conservation objectives as set forth in the LMPA, the Forest Service may determine that further actions may be needed to protect greater sage-grouse and its habitat and ensure that conservation options are not foreclosed.

# **ALTERNATIVES CONSIDERED**

Three alternatives were analyzed in detail in the DEIS and FEIS. The alternatives were developed to incorporate new information to improve the clarity, efficiency, and implementation of the 2015 Greater Sage-Grouse Plan Amendments and to align better with BLM and state plans, to benefit greater sage-grouse conservation at the landscape scale. All alternatives comply with Federal laws, rules, regulations, and policies.

Each action alternative, Alternatives 2 and 3, emphasized an altered combination of resource uses, allocations, and restoration measures to address issues and resolve conflicts among uses so that greater sage-grouse desired conditions and objectives would be met in varying degrees across the alternatives. The action alternatives offered a range of possible approaches for responding to planning issues and concerns identified through public scoping to maintain or increase greater sage-grouse abundance and distribution in the planning area. While the purpose and need was the same across the action alternatives, each contained a discrete set of plan content. The purpose and need were met in varying degrees, with the potential for different long-range outcomes and conditions for greater sage-grouse and its habitat.

The relative emphasis given to particular resources and resource uses differed as well, including allowable uses, restoration measures, and specific direction pertaining to individual resource programs. When resources or resource uses are mandated by law or are not tied to planning issues, there are typically few or no distinctions between alternatives.

#### ALTERNATIVE 1 – NO ACTION ALTERNATIVE

Alternative 1 meets the Council on Environmental Quality requirement that a No Action Alternative be considered. This alternative continues current management direction and is derived from the existing land management plans, as amended. Desired condition and objectives for resources and resource uses are based on the most recent land management plan decisions, along with associated amendments and other management decision documents. Laws, regulations, and Forest Service policies that supersede land management plan decisions would apply.

Under the No Action Alternative, the Forest Service would not amend land management plans (for a complete list see ROD Table 1-1 and FEIS, Chapter 1, Table 1-1). Greater sage-grouse habitat would continue to be managed under current land management plan direction, including the 2015 *LMPA*.

Desired conditions and objectives for Forest Service administered lands and federal mineral estate would not change. Allowable uses and restrictions would also remain the same, as they pertain to such activities as mineral leasing and development, recreation, lands and realty, and livestock grazing. This alternative also maintains the designation of sagebrush focal areas (SFAs), although the BLM has cancelled the proposal withdrawal of SFAs from locatable mineral entry (Notice of Cancellation, 82 Federal Register 195, October 11, 2017, p. 47248). See FEIS, Section 2.3.3 for a complete description of the No Action Alternative.

Because the purpose of the proposed action is to "incorporate new information to improve the clarity, efficiency, and implementation of the 2015 Greater Sage-Grouse Plan Amendments," the No Action Alternative was not chosen. It would not incorporate new information for clarity and efficiency of

implementation. It would not incorporate additional collaboration efforts between the Forest Service, BLM, and State Agencies that has been done since the 2015 decision.

#### ALTERNATIVE 2 - PROPOSED ACTION ALTERNATIVE

This Proposed Action Alternative changes the No Action Alternative to improve the clarity, efficiency, and implementation of greater sage-grouse plans, including better alignment with BLM and state plans, to benefit greater sage-grouse conservation on the landscape scale.

This alternative was developed to promote continued collaboration with the BLM, states, and stakeholders to improve management, compatibility, and consistency between federal management plans and other plans and programs at the state level, and to continue to provide protection of greater sage-grouse habitat. This enhanced collaboration is expected to improve management and coordination with states and thus improve greater sage-grouse habitat across the range of greater sage-grouse.

The changes made under this alternative include updating and making adjustments to habitat management area boundaries; removing SFA designations; removing the Anthro Mountain habitat designation and replacing it with PHMA designation in Utah; incorporating causal factor review and response processes into the adaptive management strategies; changing net conservation gain to no net loss of habitat and aligning better with states' mitigation strategies; revising livestock management guidelines to replace grass height requirements with standardized evaluation methods; clarifying the restriction on water developments within habitat management areas; emphasizing treatment of invasive plants in PHMAs; providing consistency with the 2012 Planning Rule; and adjusting noise standards. These modifications are shown in the FEIS Section 2.5, which describes the Proposed Action in detail. The issues identified in the FEIS in column four of Table 2-9 correspond with issues identified in FEIS Chapter 1, Table 1-2.

Under this alternative, the habitat management areas would be identified as "management areas," as defined in 36 CFR 219.19. A footnote in the 2015 RODs explained that the habitat management areas were treated as "overlays" instead of replacing existing management areas, because each amended plan had management areas that did not overlap and which would have required extensive adjustments of management area allocations with no meaning for greater sage-grouse habitat or conservation (page 17 of the 2015 ROD). This amendment is being developed under the current planning rule, which allows management areas to overlap existing ones. The identification of habitat management areas as "management areas" under the current planning rule definition will facilitate implementation while not changing boundaries of other management areas that are identified in the land management plans.

Consistent with the <u>Notice of Cancellation</u> of the BLM's application to withdraw SFAs from locatable mineral entry (82 *Federal Register* 195, October 11, 2017, p. 47248), this alternative would also remove the recommendation for withdrawal. The effects of such action are included in FEIS, Chapter 4.

To be consistent with the planning rule, those plan components of the 2015 Greater Sage-Grouse Plan Amendments that do not meet the definitions for plan components in 36 CFR 219.7(e)(1) were changed to management approaches.

The planning rule also states that "Plans should not repeat laws, regulations, or program management policies, practices, and procedures that are in the Forest Service Directive System." 36 CFR 219.2(b)(2). To be consistent with the planning rule, redundant plan components of the 2015 Greater Sage-Grouse

Plan Amendments would be removed.

Alternative 2 is the selected alternative – rationale has been provided under Decision Rationale.

#### **ALTERNATIVE 3 – STATE OF UTAH ALTERNATIVE**

This alternative incorporates all aspects of Alternative 2, except for two differences, specifically removal of the GHMA designation from NFS lands in Utah, including no designation of the Anthro Mountain management area on the Ashley National Forest. See FEIS, Section 2.5, Table 2-8a, which describes the State of Utah alternative in detail.

#### **ENVIRONMENTALLY PREFERRED ALTERNATIVE**

Alternative 2 the Proposed Action Alternative is the environmentally preferred alternative, as defined in 36 CFR 220.3. Question 6A of CEQ's 40 most-asked questions regarding CEQ's National Environmental Policy Act (NEPA) regulations defines that term to ordinarily mean the alternative which best protects, preserves, and enhances historic, cultural, and natural resources. Alternative 2 the Proposed Action Alternative, as presented in the FEIS and LMPA is the most environmentally preferable because this alternative emphasizes improvement and protection of habitat for greater sage-grouse and was applied to all occupied greater sage-grouse habitat.

Since the 2015 ROD was signed, the Forest Service has continued to work with the State of Wyoming and other agencies to look at local actions and conditions on the ground. New scientific information and research has been reviewed and incorporated into Alternative 2. Monitoring data and site-specific information has been gathered from implementation of projects on the ground. By reclassifying Anthro Mountain Management Area as PHMA, it assures continued protection for that area. Research and data gathered helped the Forest Service develop Alternative 2 the Proposed Action Alternative to benefit greater sage-grouse conservation on the landscape scale. Finally, clarifications of plan component and other plan content will likely increase efficiency of implementation, making the chosen alternative the environmentally preferred alternative. NEPA expresses a continuing policy of the Federal government to "use all practicable means and measures . . . to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans" (Section 101 of NEPA).

#### ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

Federal agencies are required by NEPA to rigorously explore and objectively evaluate all reasonable alternatives and to briefly discuss the reasons for eliminating any alternatives that were not developed in detail (40 CFR 1502.14). Public comments received in response to the proposed action provided suggestions for alternative methods for achieving the purpose and need.

Alternatives not analyzed in detail, may have been dismissed from detailed consideration for some of the following reasons:

- They did not meet the purpose and need.
- They were outside the scope to conserve, enhance, and/or restore habitat for greater sagegrouse.
- They would not meet the requirements of NFMA or other existing laws and regulations.

- They were duplicative of the alternatives considered in detail or already captured within the range of alternatives analyzed in the FEISs.
- They were determined to be components that would cause unnecessary environmental harm.
- They were already part of an existing plan, policy, or administrative function.
- They did not fall within the limits of the planning criteria.

During scoping, some commenters asked the Forest Service to consider additional constraints on land uses and ground-disturbing development activities to protect greater sage-grouse habitat. Such constraints would be beyond those in the current land management plans. Other commenters, in contrast, asked the Forest Service to consider eliminating or reducing constraints on land uses, or incorporating other flexibilities into the land management plan components. Some commenters wanted the Forest Service to change the land management plans back to how they were prior to the 2015 ROD/LMPA (In 2015, this was Alternative A in each state, see FEIS, Section 2.2.1). Other commenters wanted the provisions of the 2015 RODs left in place. The Forest Service considered public scoping comments, including comments from States and cooperating agencies, in developing the Alternatives.

As the responsible officials, we set the scope of the amendment based on the purpose and need, as described above. As such, this planning process does not revisit every issue that the Forest Service and the BLM evaluated in the 2015 planning process. The FEIS has its foundation in the comprehensive 2015 FEIS and ROD/LMPA and incorporates those documents in the administrative record by reference, including the entire range of alternatives evaluated through the 2015 planning process. An alternative to remove the 2015 amendment would be equivalent to the No Action alternative in the 2015 FEIS. A description of those alternatives by state can be found in the FEIS in Section 2.2.1.

#### PUBLIC INVOLVEMENT

On June 7, 2017, the Secretary of the Interior issued Secretarial Order 3353 with a purpose of enhancing cooperation among eleven western states and the BLM in managing and conserving GRSG. It also directed an Interior Review Team, consisting of the BLM, the USFWS, and the US Geological Survey (USGS), to coordinate with the Sage-Grouse Task Force. A June 14, 2017 letter from the Forest Service Chief directed Forest Service Regions 1, 2, and 4 to cooperate in the review. On August 4, 2017, the Interior Review Team submitted its Report in Response to SO 3353. In this report the team recommended modifying the GRSG plans and associated policies to better align with the individual state plans. The Forest Service identified preliminary issues and the need to change the plan. (See FEIS, Chapter 1, Section 1.1 for additional background information).

To solicit public comment on greater sage-grouse management issues that could warrant LMPAs, the FS published a Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) (82 FR 55346, (November 21, 2017) and 83 FR 654 (January 5, 2018)). The notice initiated a scoping process that provided the public with an opportunity to provide feedback on the preliminary issues and need for change to the 2015 amendments, and encouraged the public to help identify any issues, management questions, or concerns that should be addressed. The Forest Service received 55,000 comments as a result of the 2017 NOI. A March 2018, Executive Summary of comments can be found here: https://www.fs.usda.gov/Internet/FSE DOCUMENTS/fseprd576258.pdf.

As the proposed action was further refined, the Forest Service issued a Supplemental Notice of Intent inviting further comment for a proposed action to make amendments to the plans (83 FR 28608 (June

20, 2018)). This Supplemental NOI identified the planning rule provisions of 36 CFR 219.8 through 219.11 likely to be directly related, and so applicable, within the scope and scale of the approved plan amendments. On July 2, 2018, a corrected Supplemental NOI was published to clarify that the FS is not proposing to amend land management plans for NFS lands in Montana (83 FR 30909 (July 2, 2018)). On August 1, 2018 the comment period was extended for two weeks in response to public concerns and cooperating agencies regarding the ability to provide comments on the BLM Draft Environmental Impact Statement (DEIS) and Forest Service comment period, which ended the same day (83 FR 37460 (August 2, 2018)). The Forest Service received 7,300 comments. A September 2018, Executive Summary of comments is located on the project page at:

https://www.fs.usda.gov/Internet/FSE DOCUMENTS/fseprd595810.pdf.

In addition to soliciting input from the public through scoping, the Forest Service also has been heavily engaged with the states with NFS lands with land management plans amended by the 2015 greater sage-grouse amendments. Government-to-government consultation between the Forest Service with interested or affected federally recognized Indian Tribes is occurring. Indian Tribes were invited to consult on the proposed changes. Gaining and acknowledging Tribal expertise and perspective is important to the success of the EIS planning effort. A Tribe's participation as a cooperating agency does not replace our Federal agency obligation to consult on a government-to-government basis. Therefore, regardless of the Tribe's decision to participate or not as a cooperating agency, government-to-government consultation will continue throughout the process.

On October 5, 2018 a Notice of Availability (NOA) for the Greater Sage-grouse Proposed LMPAs and DEIS for the Intermountain and Rocky Mountain Regions was published in the Federal Register (83 FR 50362 and 83 FR 50331 (October 5, 2018)). In addition, a news release was published in the Newspapers of Record for the Intermountain Region and Rocky Mountain Regions.

During the 90-day public comment period, a series of open house meetings were held to provide an opportunity for the public to learn more about the proposed amendments and to ask questions and provide comments on the actions being considered. Public Open Houses were held in Wyoming on the following dates (see Table 1-5 below for additional meetings):

- October 22, 2018, Cheyenne, Laramie County Community College
- October 23, 2018, Pinedale, Pinedale Public Library

The 90-day comment period for the proposed amendment and DEIS drew 33,192 comment letters. The Forest Service received letters, emails, form letters, and public comment forms from individuals, organizations, agencies, businesses, and groups. The Forest Service analyzed 2,935 comments of which 622 contained unique and substantially different comments. Additional comments came from: within-agency scoping, 11 public open-house meetings, monitoring activities, cooperating agencies, and from coordination with the Western Governors' Association Sage Grouse Task Force (with members from state agencies, BLM, USFWS, and the Natural Resources Conservation Service). The comments provided new information that could improve the clarity, efficiency, and implementation of GRSG plans, including better alignment with BLM and state plans. The comment letters were used to identify the significant issues driving the alternatives. Public comments resulted in the addition of clarifying text, but did not significantly change the proposed LMPAs. A February 2019 Executive Summary of comments is located on the Intermountain Region webpage at:

https://www.fs.usda.gov/Internet/FSE\_DOCUMENTS/fseprd610376.pdf. A summary of the responses to comments is included in Appendix I — Response to Comments in the FEIS. A spreadsheet containing all unique comments and response to comments is available at:

# INTERAGENCY COORDINATION

During development of the DEIS, FEIS, and the LMPAs, the Forest Service coordinated with the BLM and the USFWS and collaborated with the States in the analysis of particular resources and in establishing direction to protect and/or restore greater sage-grouse habitat. In the NOI announcing the development of the DEIS, the FS invited agencies and tribes with interests within the planning area to request Cooperating Agency status. A list of cooperating agencies can be found in the FEIS, Chapter 1, Section 1.8.

Table 1-5. Public open houses and interagency and cooperating agency meetings held.

			Summary of Attendees
Date	Meeting Location	Meeting Type and Purpose	*Sign in sheet in Record
June 6, 2018	WGFD -	Cooperator Meeting to solicit	USFWS, BLM, WCCA, WDA, WGFD,
Julie 0, 2018	Cheyenne, WY	feedback on proposed action in	Governor's Office, USFS*
	Cheyenne, Wi	advance of June 21 NOI	dovernor's office, osrs
July 12, 2018	WGFD –	Cooperating Agency Meeting to	USFWS, BLM, WCCA, WDA, WGFD,
July 12, 2018	Cheyenne, WY	review proposed actions and	Governor's Office, USFS,
	Cheyenne, wi	provide updates on NOI and NEPA	Conservation Districts*
		timelines	Conservation Districts
September 6,	Salt Lake City, UT	Shivik, UT Sage-grouse plan for	Led by John Shivik
2018		Plan Implementation Committee,	
		Salt Lake City	
Sept 11, 2018	Tampa, FL	Shivik, Harper, FS Update to the	
		WAFWA Sagebrush Executive	
		Oversight Committee	
Sept 11, 2018	WGFD –	Cooperator Meeting to review	USFWS, BLM, WCCA, WDA, WGFD,
	Cheyenne, WY	proposed actions prior to release	Governor's Office, USFS,
		of DEIS	Conservation Districts*
September	Denver, CO	Buchannan and Shivik, WGA FS	
12-13, 2018		update for Sage-grouse Task	
		Force, Denver	
September	Carson City, NV	Nelson, Shivik, Sage-grouse plan	
14, 2018		for Nevada Counties and	
		Cooperating Agencies/Carson City	
September	OSC – Boise, ID	Rob Mickelsen and Andy Brunelle,	Office of Species Conservation
14, 2018		Cooperator Meeting to solicit	(OSC), Idaho Fish and Game, Idaho
		feedback on proposed action in	Dept of Agriculture, Governor's
		advance of DEIS	office of Minerals and Energy
			Resources, USFWS, BLM
September	Virtual Webinar	Shivik webinar, Sage-grouse plan	
20, 2018		for Utah Counties and Cooperating	
		Agencies, Webinar	
October 22, 2018	Cheyenne, WY	Open House	Public, various agencies
	Pinedale, WY	Open House	Public various agencies
October 23, 2018	rinedale, WY	Open House	Public, various agencies
2010	1		

Date	Meeting Location	Meeting Type and Purpose	Summary of Attendees *Sign in sheet in Record
November 7, 2018	Sparks, NV	Open House	Public, various agencies
November 8, 2018	Elko, NV	Open House	Public, various agencies
November 15, 2018	St. George, UT	Annual Convention – Shivik presentation to UT Association of Counties	UT Association of Counties
November 26, 2018	Boise, ID	Shivik/Mickelsen briefing for ID Task Force, OSC, Fish and Game, Cattleman	ID Task Force, OSC, Fish and Game, Cattleman
November 26, 2018	Boise, ID	Open House	Public, various agencies
November 29, 2018	Jerome, ID	Open House	Public, various agencies
December 6, 2018	WGFD – Cheyenne, WY	Cooperator Meeting to review proposed actions prior to end of 90-day comment period	USFWS, BLM, WCCA, WDA, WGFD, Governor's Office, USFS, Conservation Districts*
December 11, 2018	Cedar City, UT	Open House	Public, various agencies
December 12, 2018	Vernal, UT	Open House	Public, various agencies
December 13, 2018	Tooele, UT	Open House	Public, various agencies
December 17, 2018	Challis, ID	Open House	Public, various agencies
December 18, 2018	Idaho Falls, ID	Open House	Public, various agencies
April 3, 2019 (Scheduled)	WGFD Cheyenne, WY	Cooperating Agency Meeting for final review of Draft ROD/FEIS in advance of April publication	USFWS, BLM, WCCA, WDA, WGFD, Governor's Office, USFS, Conservation Districts*

# **BUREAU OF LAND MANAGEMENT**

In 2017, the BLM began their environmental analysis process that culminated with decisions in March 2019. The Forest Service worked in partnership with the BLM to align with their plans in order to provide a landscape-level greater sage-grouse conservation strategy and to incorporate conservation measures to protect, restore, and enhance greater sage-grouse and its habitat.

#### **STATE GOVERNMENTS**

Representatives from the Forest Service met frequently with the States and cooperating agencies throughout the planning process. State conservation plans were reviewed to see how the components could better align with those plans. Components of these State conservation plans and comments from the States were used to develop the LMPA, where applicable.

In addition, the Western Governors Association Sage Grouse Task Force was established in 2011 to identify and implement high priority conservation actions and integrate ongoing actions necessary to

preclude the need for the greater sage-grouse to be listed under the ESA. This group, which includes designees from the 11 Western States where greater sage-grouse is found as well as representatives from USFWS, BLM, Natural Resources Conservation Service, Forest Service, US Geological Survey, and the Department of the Interior, played an integral role throughout this land use planning process.

#### **CONSULTATION WITH AMERICAN INDIAN TRIBES**

In accordance with the National Historic Preservation Act and several other legal authorities and in recognition of the government-to-government relationship between individual tribes and the Federal government, the Forest Service conducted tribal consultation when preparing the DEIS and FEIS and proposed LMPAs. Coordination with tribes occurred throughout the planning process. In June 2018, Regional Foresters in the Intermountain, Rocky Mountain, and Northern Regions sent letters of contact and information for 67 tribal governments, providing initial notification of the planning effort, background information on the project, an invitation to be a cooperating agency, and notification of subsequent consultation efforts related to the planning process. The FS welcomes comments and coordination with tribal governments.

#### **ENDANGERED SPECIES ACT SECTION 7 CONSULTATION**

Consultation with USFWS is required under Section 7 (a)(2) of the ESA before the start of any Forest Service action that may affect any federally listed, threatened, or endangered species or its designated critical habitat. For this planning process, the Forest Service built on its close work with the USFWS during the 2015 amendment process.

In 2015, before the release of the Proposed LMPAs/FEISs, the Forest Service submitted the biological assessments to the USFWS. With this submission, the Forest Service requested concurrence for the 13 species that may be affected by the action, but were not likely to be adversely affected and formal consultation for the one species (Utah prairie dog) that may be affected and was likely to be adversely affected by the action. The 13 species included Canada lynx, Utah prairie dog, California condor, Mexican spotted owl, autumn buttercup, clay phacelia, clay reed-mustard, last chance townsendia, shrubby reed-mustard, Uinta Basin hookless cactus, and Ute ladies'-tresses for the Utah FEIS; grizzly bear and Ute ladies'-tresses for the Idaho/SW Montana FEIS, and Webber's ivesia for the Nevada/California FEIS.

Across the three planning sub-regions the USFWS concurred with our "not likely to adversely affect" determination for the 13 species listed above and provided a biological opinion for the Utah prairie dog. In the biological opinion, conservation measures for Utah prairie dog were outlined to ensure the protection of this species. In consideration of a potential vegetation/habitat management conflict, the Forest Service developed an LMPA standard for the areas that greater sage-grouse priority habitat and identified Utah prairie dog habitat overlapped. Specifically, GRSG-GRSGH-ST-025-Standard, "On the Dixie and Fishlake National Forests, where greater sage-grouse priority habitat management areas overlap with identified Utah prairie dog habitat, the most current version of conservation measures developed by the U.S. Fish and Wildlife Service will be used during implementation of recovery actions," has been retained, unaltered, within this decision.

The FS has concluded that no additional effects beyond the 2015 decision are anticipated to occur. The Forest Service contacted the USFWS regarding Section 7 consultation in letters sent the week of April 15, 2019 requesting concurrence on the species which would require consideration during consultation. The USFWS offices in Wyoming and Nevada acknowledged the FS conclusion that this LMPA will not trigger

the requirement to reinitiate ESA consultation on May 15, 2019 and May 15, 2019, respectively. The USFWS offices in Idaho and Utah on May 31, 2019, and July 8, 2019, respectively, acknowledged and agreed with the FS conclusion that reinitiation is not needed.

# FINDINGS REQUIRED BY LAWS AND REGULATIONS

The Forest Service manages the National Forests and Grasslands in conformance with many laws and regulations. This decision is consistent with national laws and regulations: specifically, NEPA, NFMA, ESA, the Clean Air Act of 1970 (CAA), the Clean Water Act of 1972 (CWA), and the National Historic Preservation Act (NHPA). It would not affect civil rights or environmental justice. The LMPA is strategic and programmatic in nature, providing guidance and direction to future site-specific projects and activities. Following are summaries of how the LMPA addresses compliance with some of the more prominent applicable laws and regulations.

Our decision is consistent with all laws, regulations, and agency policy. We considered the potential direct, indirect, and cumulative effects and reasonably foreseeable activities. We also considered the potential impacts identified in the FEIS and the potential for irreversible and irretrievable commitment of resources in the project area. Our decision is based on the documentation in the FEIS and the associated project record, public comments, and the DEIS.

#### NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

NEPA requires public involvement and consideration of potential environmental effects of new projects and programs. The environmental analysis and public involvement process complies with the major elements of the requirements set forth by the Council on Environmental Quality's (CEQs) regulations for implementing NEPA (40 CFR 1500-1508). These include: 1) considering a broad range of reasonable alternatives; 2) disclosing cumulative effects; 3) using high quality and accurate scientific information; 4) consideration of long-term and short-term effects; and 5) disclosure of unavoidable adverse effects.

CEQ's implementing regulations for NEPA were followed in preparing the FEIS. The range of alternatives was adequate to understand and analyze issues. This decision adopts all practical means to avoid or minimize environmental harm. These means include provisions for providing the ecological conditions needed to support biological diversity and standards and guidelines to mitigate adverse environmental effects that may result from implementing various management practices.

This planning process did not revisit every issue that the Forest Service and the BLM evaluated in the 2015 planning process. Instead, the Forest Service included changes and clarifications to the 2015 Greater Sage-Grouse Plan Amendments, consistent with the purpose and need for action. Accordingly, this FEIS has its foundation in the comprehensive 2015 GRSG FEIS and ROD/LMPA and incorporates those documents in the administrative record by reference, including the entire range of alternatives evaluated through the 2015 planning process. Thus, the LMPA does not represent an irreversible or irretrievable commitment of resources (see FEIS, Chapter 4, Section 4.8). The LMPA is a programmatic level planning effort and does not directly authorize any ground disturbing activities or projects. Future ground disturbing activities and projects will be made consistent with the LMPA and will be subject to additional site-specific environmental analysis. Because none of the proposed changes identified in the 2019 FEIS identify additional irreversible or irretrievable commitments of resources, there is no expectation that impacts additional to or different from those identified in the 2015 FEISs would occur.

#### CIVIL RIGHTS AND ENVIRONMENTAL JUSTICE

The Forest Service considered information on the presence of minority and low-income populations to assess the potential for disproportionately high and adverse impacts on minority or low-income populations. Consideration of impacts includes existence of high and adverse human health and environmental effects and the degree to which low-income populations are more likely to be exposed or vulnerable to those effects.

Conservation measures to protect, restore, and enhance and other requirements under this action would be implemented consistently across all identified habitat, with no discrimination over particular populations.

Several counties in some of the states have minority presence, and/or concentrations of low income populations considerably above that of State averages, and the Forest Service considered the possibility that potential adverse impacts resulting from the action could be concentrated in a few counties of minority or low-income concern. However, based on available information about the nature and geographic incidence of impacts, specific minority populations, tribal populations, or low-income populations are not expected to be exposed to disproportionately high and adverse impacts under any of the alternatives considered. See *2015 The Wyoming Greater Sage-Grouse Proposed Land Use Plan Amendment and FEIS*, Chapter 4, Section 4.11 which has been incorporated by reference.

#### NATIONAL HISTORIC PRESERVATION ACT

The National Historic Preservation Act and subsequent amendments require Federal agencies to consider the effects of their undertakings on historic properties. As required under the Act, site-specific project areas are subject to requirements for survey, identification of resources, determination of eligibility, evaluation of effect, consultation and resolution of adverse effects, if any. This decision is programmatic and does not authorize site-specific activities. Projects will comply fully with the laws and regulations that ensure protection of cultural resources. This decision complies with the Act and other statues that pertain to the protection of cultural resources.

#### NATIONAL FOREST MANAGEMENT ACT (NFMA) AND THE PLANNING RULE

Consistency with the NFMA is based on consistency with the planning rule. The planning rule provides requirements for amending and revising plans (36 CFR 219; 16 USC 1600 et seq.).

Because this amendment was analyzed in an environmental impact statement, it is considered a significant change in the plan for the purposes of the NFMA; therefore, a 90-day public comment period was required and provided for the proposed plan amendment and draft environmental impact statement (§36 CFR 219.16(a)(2), 36 CFR 219.13(b)(3)), as described under "Public Involvement."

# COMPLIANCE WITH THE PROCEDURAL REQUIREMENTS OF THE PLANNING RULE

As explained below, this amendment complies with the procedural provisions of the planning rule (36 CFR Part 219.13(b)).

#### Using the best available scientific information to inform the planning process (§ 219.3)

The planning rule requires the responsible official to use the best available scientific information to inform the planning process for developing, amending, or revising a forest plan, including plan components (36 CFR 219.3 and 219.14(a)(3)). The LMPA was based on the best available scientific information and analyses therein. The determination and use of best available scientific information is discussed in the FEIS, Chapter 4, Section 4.2.

#### Amend the plan consistent with NEPA procedures (§219.13 (b)(3))

The planning rule requires the Forest Service to amend plans consistent with Forest Service NEPA procedures. The DEIS and FEIS were prepared to disclose the reasonably foreseeable effects of the proposed amendment and alternatives. Consistency with the NEPA is described above in Findings Required by Laws and Regulations, National Environmental Policy Act.

#### Applying the planning rule's format requirements for plan components (§ 219.13 (b)(4))

In order to comply with the requirement that plan components must be written in accordance with the definitions set out in 219.7(e), 2015 amendment plan components that were retained or modified were reworded or recategorized. The plan content now meets the format required by the planning rule.

#### Base the amendment on the preliminary identification of the need to change the plan (§219.13 (b)(1))

The section "How the Selected Alternative Responds to the Purpose and Need" of our Decision Rationale, above, explains how the amendment responds to the identified need to change the plan.

# Providing opportunities for public participation (§ 219.4) and providing public notice (§ 219.16; § 219.13(b)(2))

The requirements for providing opportunities for public participation and providing public notice were met through the actions described above in the Public Involvement section. See Chapter 1 in the FEIS for extensive discussion of the Forest Service's efforts to engage with the public, states, and Tribes.

#### COMPLIANCE WITH THE PLANNING RULE'S APPLICABLE SUBSTANTIVE PROVISIONS

The planning rule requires that those substantive rule provisions within 36 CFR 219.8 through 219.11 that are directly related to the amendment are applicable to this amendment. The applicable substantive provisions apply only within the scope and scale of the amendment (36 CFR 219.13(b)(5)).

As explained in the discussion that follows, both the purpose and the effects of the amendment are such that provisions in § 219.9 - diversity of plant and animal species; § 219.8(b) - social and economic sustainability; § 219.10(a) - integrated resource management; § 219.10(a)(4), specifically, opportunities to coordinate with neighboring landowners are directly related to the amendment (see rationale and Table 1-6 below). We have applied those provisions within the scope and scale of the amendment.

#### Scope and Scale of the Amendment

The scope and scale of the amendment is based on the need to change the plan. As described above, the

need to change the plan is to include new information to improve the clarity, efficiency, and implementation of the 2015 amendment, including better alignment with BLM and state plans, to benefit GRSG conservation on the landscape scale.

For each land management plan, we are setting the scope of the amendment based on the need is the greater sage-grouse habitat and greater sage grouse. We also include in the scope the uses or activities specified in the amendment.

The scale of the amendment for each land management plan is the occupied habitat of the designated greater sage-grouse habitat management areas of each plan area. Although conservation at the landscape scale is part of the need, the plan amendment would not apply beyond the plan area.

#### Planning rule provisions that are directly related to the amendment

The planning rule requires that substantive rule provisions (§ 219.8 through 219.11) that are directly related to the amendment must be applied to the amendment, within the scope and scale of the amendment. A determination that a planning rule provision is directly related to the amendment is based on any one or more of the following criteria:

- 1. The purpose of the amendment (§ 219.13(b)(5)(i));
- 2. Beneficial effects of the amendment (§ 219.13(b)(5)(i));
- 3. Substantial adverse effects associated with a rule requirement (§ 219.13(b)(5)(ii)(A));
- 4. Substantial lessening of protections for a specific resource or use (§ 219.13(b)(5)(ii)(A));
- 5. Substantial impacts to a species or substantially lessening protections for a species (36 CFR 219.13(b)(6).

Because the FEIS, Chapter 4, identifies no significant adverse effects from the selected LMPA to any resource or use, no substantial adverse effect or lessening of protections for a specific resource is expected; therefore, criteria 3, 4, and 5 do not apply to the selected LMPA. Criteria 1 and 2 apply, as described below.

<u>Provisions directly related to the purpose of the amendment:</u> The purpose of the LMPA is to include new information to improve the clarity, efficiency, and implementation of greater sage-grouse plans, including better alignment with the BLM and state plans, in order to benefit greater sage-grouse conservation on the landscape scale. In determining which provisions are directly related to the purpose of the amendment, we considered the purposes of improving greater sage-grouse conservation, aligning better with the BLM and States, and needing to change plan components for specific resources and uses.

<u>Purpose relating to greater sage-grouse conservation</u>: The plan components provide the ecological conditions for greater sage-grouse. As such, the directly related provisions are 219.9 – diversity of plant and animal species as they pertain to greater sage-grouse and greater sage-grouse habitat within greater sage-grouse habitat management areas. See Viable Population Determination below in ROD.

The LMPA emphasizes moving toward desired conditions, and these standards and guidelines are intended to reduce the disturbances occurring in the habitat and, for the disturbances that do occur, to limit the duration, timing, and location of activities to best protect GRSG during all of its life stages. To do this, the LMPA also needed to change plan components for resources and uses, identified and categorized in Table 2-9 of the FEIS. The directly related provisions are 219.8(b), social and economic sustainability, and 219.10(a), integrated resource management. Of those provisions, we applied the

specific subsections of each pertaining to the amended plan components to the extent of the scope and scale of the amendment.

Having applied those rule provisions to the scope and scale of the amendment, as described above, we find that the amendment would meet those requirements. Refer to Decision Rationale.

<u>Purpose as it relates to aligning with BLM and State management</u>: Part of the purpose and need was to align with neighboring public land owners. (See FEIS, Chapter 2, Comparison of Alternatives Table 2-9 which identifies these plan components). As such, the directly related rule provision is 219.10(4), specifically, opportunities to coordinate with neighboring landowners . . . and take into account joint management objectives where feasible and appropriate.

Having applied the rule provision to the scope and scale of the amendment, as described above, we find that the amendment would meet the requirement. While the LMPA applies only to NFS lands, it was developed in conjunction with the BLM and States to facilitate coordinated management across the agencies, including for the overall management objective of improving greater sage-grouse habitat across the species range. See Public Involvement section, also refer to the FEIS, Chapter 1, Section 1.8.

<u>Purpose as it relates to the need to change plan components for specific resources and uses</u>: The topics and associated specific subsections of 219.8(b) and 219.10(a) that are directly related provisions are listed in Table 1-6. For recreation, the table also includes the applicable subsection of 219.10(b), because it is the multiple use complement to the identified subsection of 219.8(b).

Table 1-6. Topics and associated specific subsections of 219.8(b) and 219.10(a) that are directly related provisions.

	Subsection of Directly Related	
Resource or Use	Planning Rule Provision 219.10(a)	
Lands and realty – special use	219.10(a)(3) Appropriate placement and sustainable	
authorizations	management of infrastructure, such as utility corridors	
	219.10(a)(6) use	
Lands and realty - land ownership	219.10(a)(6) Land status and ownership	
adjustments		
Land withdrawal	219.10(a)(6) Land status and ownership	
Wind and solar	219.10(a)(2) Renewable energy	
Livestock grazing	219.10(a)(1) grazing and rangelands	
Fire management	219.10(a)(8) System drivers, [specifically] wildland fire	
Recreation	219.8(b)(2) sustainable recreation [specifically	
	opportunities, and access	
	219.10(a)(1) recreational opportunities	
	219.10(b)(1) sustainable recreation [specifically]	
	opportunities and access	
Roads/transportation	219.10(a)(1) trails	
	219.10(a)(3) Appropriate placement and sustainable	
	management of infrastructure, such as [specifically]	
	transportation	
Fluid - unleased	219.10(a)(2) nonrenewable mineral resources	
Fluid - leased	219.10(a)(2) nonrenewable mineral resources	

	Subsection of Directly Related	
Resource or Use	Planning Rule Provision 219.10(a)	
Fluid operations	219.10(a)(2) nonrenewable mineral resources	
Coal mines – unleased	219.10(a)(2) nonrenewable mineral resources	
Coal mines - leased	219.10(a)(2) nonrenewable mineral resources	
Locatable minerals	219.10(a)(2) nonrenewable mineral resources	
Non-energy leasable minerals	219.10(a)(2) nonrenewable mineral resources	
Mineral materials	219.10(a)(2) nonrenewable mineral resources	

In that all of the above resources and uses provide human benefit, provision 219.10(a)(1) ecosystem services also applies.

Having applied those rule provisions to the scope and scale of the amendment, as described above, we find that the amendment would meet those requirements. The listed resources and uses were analyzed in the 2015 FEIS. The LMPA would not substantially alter management direction or result in different outcomes for the resources or uses. Because of this, no additional analysis was completed; therefore, no new information on affected environment is provided. The 2015 analysis was incorporated by reference and references to the page numbers can be found in Chapter 4, Tables 4-1 and 4-12 Environmental consequences and Cumulative effects analysis for the No Action Alternative incorporated by reference. Refer to Chapter 3, Section 3.3 Resources Not Carried Forward for Analysis and Table 3-11 Resources and resource uses not carried forward for analysis. Based on the FEIS, including analysis in the incorporated 2015 FEIS, the LMPA does not eliminate any of the identified resources or uses from NFS lands to which the LMPA applies. It provides for the continuation of those resources and uses while also managing for greater sage-grouse conservation.

<u>Provisions directly related to beneficial effects of the amendment</u>: The FEIS, through incorporation of the 2015 2015 The Wyoming Greater Sage-Grouse Proposed Land Use Plan Amendment and FEIS, identifies beneficial effects for resources and uses that are in addition to those identified under criterion 1. These additional resources and uses and their directly related provisions are in Table 1-7.

Table 1-7. Resources and uses with beneficial effects from the amendment and the associated directly related rule provision.

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Resource or Use	2015 FEIS for WY*	Substantive Provision	
Air quality	Chapter 4, Section 4.2	219.8(a)(2)(i)	
Paleontological	Chapter 4, Section 4.9	219.10(a)(1) other relevant	
		resources and uses	
Special status species	Chapter 4, Section 4.14	219.9	
Wild Horse and Burro	Chapter 4, Section 4.18	219.10(a)(1)forage	
Wildlife and Fish	4.21	219.9	

<sup>\*2015</sup> The Wyoming Greater Sage-Grouse Proposed Land Use Plan Amendment and FEIS.

Our finding for rule provisions related to the purpose and need include those relating to resources or uses beneficially affected by the LMPA.

Having applied those rule provisions to the scope and scale of the amendment, as described above, we

find that the amendment would meet those requirements. The FEIS, in the sections identified in Table 1-7, indicate beneficial effects; therefore, the amendment would provide for the identified rule provisions within the scope and scale of the amendment.

<u>Provisions directly related because of substantial adverse effects</u>: The analysis in the FEIS indicated that the changes proposed in the action alternative would not substantially alter management direction or result in different outcomes for any resource or use. Based on this and the incorporated 2015 FEIS and the 2016 DEIS by the BLM that found mineral withdrawals on SFAs would be of little to no effect, no significant negative impacts on any resources or uses would be expected from managing under the LMPA either directly or through lessening of protections. See 2019 FEIS, Chapter 4, Environmental Consequences, including Tables 4-1, 4-2, and 4-13. As such, the LMPA would have neither substantial adverse effect on resources or uses nor result in substantial lessening of protections for any resource or use. Criteria 3, 4, and 5 do not apply.

In applying 36 CFR 219.8(a)(1), the Forest Service took into account the relevant aspects of the list at 36 CFR 219.8(a)(1):

- (i) Interdependence of terrestrial and aquatic ecosystems in the plan area.
- (ii) Contributions of the plan area to ecological conditions within the broader landscape influenced by the plan area.

How relevant aspects of 219.8(a)(i)(ii) were taken into account: Monitoring data, Biological Assessments (BAs), and the Biological Evaluations (BEs) for each state were reviewed and new information was updated in the DEIS and FEIS. Population data from the State was incorporated in Chapter 3, Table 3-2. Greater sage-grouse counts by state. As the FEIS's discussion of effects shows, the amendments' effects will be minor, and far from substantially adverse (see FEIS, Chapter 4 for effects and Chapter 3, Section 3.2.3 Riparian Areas and Wetlands and Water Resources). Monitoring reports, 2015 BAs, and BEs are located in the project record.

- (iii) Conditions in the broader landscape that may influence the sustainability of resources and ecosystems within the plan area.
- (iv) System drivers, including dominant ecological processes, disturbance regimes, and stressors, such as natural succession, wildland fire, invasive species, and climate change; and the ability of terrestrial and aquatic ecosystems on the plan area to adapt to change.
- (v) Wildland fire and opportunities to restore fire adapted ecosystems.

How relevant aspects of 219.8(a)(iii)(iv)(v) were taken into account: The FEIS discussed plan components and analysis for Fire Management and Invasive Species (See FEIS, Tables 2-5 through 2-9, 3.2.7 Wildland Fire, 4.5.9 Treatment of Invasive Species, 4.7.4 Cumulative Effects - Wildland Fire, 4.7.13 Cumulative Effects - Treatment of Invasive Species). Climate Change was analyzed in the 2015 FEIS and analysis reviewed to determine if it could have potentially significant effects based on the actions considered in Chapter 2. The changes proposed in the action alternative would not substantially alter management direction or result in different outcomes for the resource. Because of this, no additional analysis was completed; therefore, no new information on affected environment is provided. The 2015 analysis was incorporated by reference and references to the page numbers can be found in the FEIS, Chapter 4, Tables 4-1 and 4-12 Environmental consequences and cumulative effects analysis for the No Action Alternative incorporated by reference.

In applying 36 CFR 219.8(b), the Forest Service took into account the relevant aspects of the list at 36 CFR 219.8(b):

#### (1) Social, cultural, and economic conditions relevant to the area influenced by the plan;

How relevant aspects of 219.8(b)(1) were taken into account: Social and Economic Conditions and Environmental Justice was analyzed in the 2015 FEIS. The analysis was reviewed to determine if the actions considered in Chapter 2 could have potentially significant effects. The scope of the amendments is narrow, and the changes proposed in the action alternatives would not substantially alter management direction or result in different outcomes to social, cultural, or economic conditions. Because of this, no additional analysis was completed and no new information on affected environment is provided. The 2015 analysis was incorporated by reference and references to the page numbers can be found in the FEIS, Chapter 4, Tables 4-1 and 4-12 Environmental consequences and cumulative effects analysis for the No Action Alternative incorporated by reference.

It is noted in the FEIS, Chapter 4, Section 4.7.3 Past, Present, and Reasonably Foreseeable Actions that State GRSG plans establish the management actions necessary for the States to continue to enhance and conserve the GRSG while still allowing for economic opportunities. Closely aligning with state plans, including using their mitigation and adaptive management strategies where applicable, will provide an opportunity for economic development to occur while offsetting the impacts to GRSG and its habitat. (See FEIS, Appendices B-F and ROD, Attachments F, G, and H).

The increased flexibility in these amendments is not expected to result in a large increase in development proposals on public land. Similarly, the increased protections from the 2015 FEISs have not resulted in a large decrease in ROW applications or an increase in rejected applications; therefore, the changes proposed under the Proposed Action and the State of Utah Alternative are not expected to result in large changes to the rate of development in the five states or in their economy.

## (2) Sustainable recreation; including recreation settings, opportunities, and access; and scenic character;

How relevant aspects of 219.8(b)(2) were taken into account: See FEIS Chapter 3, Section 3.2.8 Recreation for additional information. The existing condition of recreation in the planning area and the program's impacts on greater sage-grouse remains as described in the 2015 FEISs. Within the planning area authorized recreation uses included outfitter and guide permits, recreation site infrastructure, and special recreation use permits (such as races). Since 2015, authorized recreation uses were consistent with the state-specific 2015 ROD direction (USDA FS 2017b and USDA FS 2018d). The FS continues to manage the recreation programs following the management direction in the 2015 RODs. The 2015 analysis was incorporated by reference and references to the page numbers can be found in the FEIS, Chapter 4, Tables 4-1 and 4-12 Environmental consequences and cumulative effects analysis for the No Action Alternative incorporated by reference.

### (3) Multiple uses that contribute to local, regional, and national economies in a sustainable manner:

How relevant aspects of 219.8(b)(3) were taken into account: All alternatives represent, to varying degrees, the principles of multiple-use, and ecological and economic sustainability. The alternatives provide protection of greater sage-grouse and its habitat and comply fully with applicable laws, regulations, and policies. See response to 219.8(b)(1).

#### (4) Ecosystem services;

How relevant aspects of 219.8(b)(4) were taken into account: See response to 219.8(a)(i)(ii) and 219.8(b)(1). To address social and economic sustainability, the amendments and effects to reasonably foreseeable projects will continue to provide people and communities with a range of social and economic benefits for present and future generations (See FEIS, Chapter 4, Section 4.7.3 Past, Present, And Reasonably Foreseeable Actions). The benefit to people (i.e., the goods and services provided) are the "ecosystem services" from the ecosystem.

#### (5) Cultural and historic resources and uses; and

How relevant aspects of 219.8(b)(5) were taken into account: Cultural and historic resources were analyzed in the 2015 FEIS and analysis reviewed to determine if it could have potentially significant effects based on the actions considered in Chapter 2. The changes proposed in the action alternative would not substantially alter management direction or result in different outcomes for the resource. Because of this, no additional analysis was completed; therefore, no new information on affected environment is provided. The 2015 analysis was incorporated by reference and references to the page numbers can be found in the FEIS, Chapter 4, Tables 4-1 and 4-12 Environmental consequences and cumulative effects analysis for the No Action Alternative incorporated by reference.

(6) Opportunities to connect people with nature. 219.8(b)(6) is not relevant to the amendments.

#### 36 CFR 219.9

The relevant provision in 36 CFR 219.9 is the requirement for sustainability and diversity of plant and animal communities within the scope and scale of the amendment. With respect to the requirements of the rule at 219.9, regarding the diversity of plan and animal communities, the rule requires that we consider whether an amendment would have substantial adverse effects to, or substantially lessen protections for, a species. If so, there must be further analysis, to determine whether the species is a potential species of conservation concern, and apply the rule as if the species were in fact a species of conservation concern. 36 CFR 219.13 (b)(6). The analysis in the FEIS does not show substantial adverse effects to or substantial lessoning of protections for greater sage-grouse or any other species; therefore, the Forest Service does not have to apply the requirement of 219.9. Nevertheless, the Forest Service took the very conservative approach of applying the requirements of 219.9 to the greater sage-grouse as if it were a species of conservation concern (SCC) in the plan areas for all the land management plans. On the Ashley and Salmon-Challis National Forests, where revision of the land management plans is underway, the greater sage-grouse has been identified as SCC. The analysis in the FEIS shows that the amendments meet the requirements of 219.9; they maintain ecological conditions necessary for a viable population of greater sage-grouse in all the plan areas to which the amendments would apply. See the FEIS at Chapter 4, and the BAs and BEs located in the project record.

#### 36 CFR 219.10

The relevant provision in section 219.10 is the requirement to include plan components for integrated resource management to provide for ecosystem services and multiple uses in the plan area, 36 CFR 219.10 (a)(1). With respect to the requirement of the rule at 219.10, the analysis in the FEIS shows that the minor adjustments that loosen some of the restrictions in the 2015 amendments should improve the capability of the plan areas to provide for ecosystem services and multiple uses.

In applying 36 CFR 219.10, the Forest Service took into account the relevant aspects of the list at 36 CFR 219.10:

(1) Aesthetic values, air quality, cultural and heritage resources, ecosystem services, fish and wildlife species, forage, geologic features, grazing and rangelands, habitat and habitat connectivity, recreation settings and opportunities, riparian areas, scenery, soil, surface and subsurface water quality, timber, trails, vegetation, viewsheds, wilderness, and other relevant resources and uses.

How relevant aspects of 219.10(a)(1) were taken into account: Many of the resources listed were analyzed in the 2015 FEIS. The analysis was reviewed to determine if it could have potentially significant effects based on the actions considered in the FEIS, Chapter 2. The changes proposed in the action alternative would not substantially alter management direction or result in different outcomes for the resource. Because of this, no additional analysis was completed; therefore, no new information on affected environment is provided. The 2015 analysis was incorporated by reference and references to the page numbers can be found in Chapter 4, Tables 4-1 and 4-12 Environmental consequences and Cumulative effects analysis for the No Action Alternative incorporated by reference. Refer to the FEIS, Chapter 3, Section 3.3 Resources Not Carried Forward for Analysis and Table 3-11 Resources and resource uses not carried forward for analysis.

Relevant resources and uses from 219.10(a)(1) considered in the plan components and anlyzed include: GRSG General, GRSG Habitat, Livestock Grazing, and Wild Horse and Burro. In addition, the Biological Evaluation and Biological Assessments evaluated the effects to wildlife and plant species. (See FEIS, Chapter 2, Comparison of Alternatives Tables 2-5 through 2-9 which identify plan components by state, see Biological Evaluation by State).

(2) Renewable and nonrenewable energy and mineral resources.

<u>How relevant aspects of 219.10(a)(2) were taken into account</u>: Depending on availability of the energy and mineral resources in the planning area, plan components were considered for Wind and Solar, Fluid Minerals (Unleased, Leased, Operations), Coal Mines (Unleased and Leased), Locatable Minerals, Non-energy Leasable Minerals, Mineral Materials (See FEIS, Chapter 2, Comparison of Alternatives Tables 2-5 through 2-9 which identify these plan components by state; Appendix G identified Fluid Mineral Stipulations).

(3) Appropriate placement and sustainable management of infrastructure, such as recreational facilities and transportation and utility corridors.

How relevant aspects of 219.10(a)(3) were taken into account: Plan components were considered for the appropriate placement and sustainable management of infrastructure in Lands and Realty - Special-use Authorizations (non-recreation), Recreation, and Roads/Transportation sections (See FEIS, Chapter 2, Comparison of Alternatives Tables 2-5 through 2-9 which identify these plan components by state).

(4) Opportunities to coordinate with neighboring landowners to link open spaces and take into account joint management objectives where feasible and appropriate.

<u>How relevant aspects of 219.10(a)(4) were taken into account</u>: There are some plan components for Land Ownership Adjustments. While this decision only applies to NFS lands within the planning area, it was developed in conjunction with the BLM and States. Part of the purpose and need was to align with neighboring public land owners. (See FEIS, Chapter 2, Comparison of Alternatives Tables 2-5 through 2-9 which identify these plan components by state).

(5) Habitat conditions, subject to the requirements of §219.9, for wildlife, fish, and plants commonly enjoyed and used by the public; for hunting, fishing, trapping, gathering, observing, subsistence, and other activities (in collaboration with federally recognized Tribes, Alaska Native Corporations, other Federal agencies, and State and local governments).

<u>How relevant aspects of 219.10(a)(5) were taken into account</u>: The FS previously evaluated hunting, but did not include it in the 2015 FEIS. Hunting is not carried forward for detailed analysis in the 2019 FEIS for the same reasons they were dismissed in the 2015 FEIS.

(6) Land status and ownership, use, and access patterns relevant to the plan area.

<u>How relevant aspects of 219.10(a)(6) were taken into account</u>: Some forest plan components address Land Ownership Adjustments. (See FEIS, Chapter 2, Comparison of Alternatives Tables 2-5 through 2-9 which identify these plan components by state).

(7) Reasonably foreseeable risks to ecological, social, and economic sustainability.

How relevant aspects of 219.10(a)(7) were taken into account: Social and Economic Conditions and Environmental Justice was analyzed in the 2015 FEIS and reviewed to determine if they could have potentially significant effects based on the actions considered in Chapter 2. The changes proposed in the action alternative would not substantially alter management direction or result in different outcomes for the resource. Because of this, no additional analysis was completed, below; therefore, no new information on affected environment is provided. The 2015 analysis was incorporated by reference and references to the page numbers can be found in Chapter 4, Tables 4-1 and 4-12 Environmental consequences and Cumulative effects analysis for the No Action Alternative incorporated by reference.

(8) System drivers, including dominant ecological processes, disturbance regimes, and stressors, such as natural succession, wildland fire, invasive species, and climate change; and the ability of the terrestrial and aquatic ecosystems on the plan area to adapt to change (§219.10(a)(8));

See response to 219.8(a)(iii)(iv)(v).

(9) Public water supplies and associated water quality.

How relevant aspects of 219.10(a)(9) were taken into account: Riparian Areas, Wetlands, and Water Resources were analyzed in the 2015 FEIS and reviewed to determine if they could have potentially significant effects based on the actions considered in Chapter 2. The changes proposed in the action alternative would not substantially alter management direction or result in different outcomes for the resource. Because of this, no additional analysis was completed, below; therefore, no new information on affected environment is provided. The 2015 analysis was incorporated by reference and references to the page numbers can be found in Chapter 4, Tables 4-1 and 4-12 Environmental consequences and Cumulative effects analysis for the No Action Alternative incorporated by reference.

(10) Opportunities to connect people with nature. §219.10(a)(10)

See response to 219.8(b)(6).

#### **VIABLE POPULATION DETERMINATION**

The 2012 Planning Rule requires the responsible official to determine whether ecosystem plan components "provide the ecological conditions necessary to . . . maintain a viable population of a species

of conservation concern within the plan area" and if that is not the case, "then additional, species-specific plan components, including standards or guidelines, must be included in the plan to provide such ecological conditions in the plan area" (36 CFR, § 219.9(b)(1)). Greater sage-grouse are potential species of conservation concern in the plan area, so we are treating them as a species of conservation concern for purposes of this decision. Therefore, we included species-specific plan components that will help maintain a viable population of greater sage-grouse in the plan area.

Each plan component and other plan content in the amendments are specifically designed to provide conservation protection for greater sage-grouse and habitat sufficient for a viable population on each planning unit. We developed plan components based on the best available scientific information, including new research published since the 2015 RODs. The impacts associated with these new changes, such as elimination of Sagebrush Focal Areas, modifications to lek buffers, and new grazing guidelines would have minimal impacts across the range of greater sage-grouse. Biological Evaluations prepared for the FEIS identified and evaluated the contribution of habitat within the plan area to the maintenance of greater sage-grouse and concluded that implementation of these amendments will provide habitat to support viable populations on each involved planning unit.

Collaborative land management is essential to effectively conserve a species or habitat; therefore, the Forest Service works in partnership with States when developing NFS LMPs. However, Forest Service LMPs may differ from State plans to meet our viable population requirement within each national forest. When this is the case, the Forest Service works with our State partners to develop direction that meets our viable population requirement, while considering State plan direction.

#### **ENDANGERED SPECIES ACT**

The purpose of the Endangered Species Act of 1973 (ESA) is for the conservation of threatened and endangered plants and animals and their habitats. By its very nature, the LMPA seeks to conserve wildlife and plant habitats. In 2015, the Forest Service, BLM, and USFWS coordinated closely on potential impacts to threatened, endangered, and proposed species through the ESA section 7 consultation process. Throughout the process, in conjunction with the USFWS, the Forest Service has ensured compliance with the ESA. A summary of the results of ESA, section 7 consultation is found above under the section titled Endangered Species Act Section 7 Consultation. Therefore, this decision is compliant with this Act.

#### **CLEAN AIR ACT**

The Forest Service is tasked through the Federal Clean Air Act of 1970 to provide particular protection to Air Quality Related Values. This decision is consistent with the Clean Air Act. The LMPA does not create, authorize, or execute any activities with the potential to alter air quality. There are no emissions related to implementation of this decision. This decision will result in additional restrictions on activities that emit air pollutants; none of the direction in the LMPA will produce adverse impacts to air quality. Implementation of the LMPA direction will not result in exceedance of the Wyoming Air Quality Division standards. Therefore, this decision is compliant with this Act.

#### **CLEAN WATER ACT**

The Federal Water Pollution Control Act of 1948, expanded and reorganized in 1972 (Federal Water Pollution Control Amendments of 1972), is commonly known as the Clean Water Act (CWA). The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's

waters. Nothing in this decision will change or modify standards, guidelines, and direction contained in the LMPA, best management practices, applicable Forest Service manual and handbook direction, or the existing land management plans. Ongoing and future site-specific projects will adhere to these standards, guidelines, and direction, and by doing so will continue to be consistent with the Clean Water Act and amendments. Therefore, this decision is compliant with this Act.

#### TRANSITION TO AMENDED PLAN DIRECTION

Application to future projects and authorizations: Projects with decisions made on or after the effective date of the LMPA must be consistent with the forest plan as amended at the time of such decision. Projects with decisions made before the effective date of the LMPA may proceed unchanged; however, any related authorization for such a project that was not made with the project decision would need to be consistent with the forest plan as amended at the time of the authorization.

#### Application to existing authorizations and approved projects or activities

The FEIS and LMPA were developed with the understanding that when a plan is amended, existing permits must be made consistent with the LMPA "as soon as practicable" (16 USC 1604(i)). It is our decision that the direction in the LMPA will be implemented over several years. This will allow time for close, careful, and considered consultation, cooperation, and coordination with all involved parties. Making existing permits consistent with the LMPA will be subject to valid existing rights.

How existing permits will be made consistent the LMPA is described below.

#### LANDS AND REALTY TRANSITION

During renewal, amendment, or reissuance of existing authorizations, the authorization must be consistent with the forest plan at the time of the authorization. Consistency with the LMPA, for example, plan components relating to noise, tall structures, guy wire removal, and perch deterrent installation would be required for authorizations renewed, amended, or reissued authorizations after the effective date of the LMPA.

#### GREATER SAGE-GROUSE PLAN AMENDMENT DIRECTION

This LMPA replaces the 2015 greater sage-grouse ROD/LMPA. This supersedes other greater sage-grouse direction in existing land management plans inside HMAs. The applicable components (e.g., restrictions based on lek buffers) supersede greater sage-grouse direction outside HMAs, unless existing direction provide equal or greater protection for greater sage-grouse or its habitat.

#### **EFFECTIVE DATE OF THE AMENDMENT**

The effective date of the LMPA will be 30 days after the notice of its approval.

#### PRE-DECISIONAL ADMINISTRATIVE REVIEW PROCESS (OBJECTION PROCESS)

This decision is subject to objection pursuant to the 36 CFR Part 219. Objections must be filed by way of regular mail, fax, e-mail, hand-delivery, or express delivery with the Objection Reviewing Officer, USDA Forest Service.

- 1. Electronic objections must be submitted to the Objection Reviewing Officer- Chris French via the Comment and Analysis Response Application (CARA) objection web form <a href="https://cara.ecosystem-management.org/Public/CommentInput?project=52904">https://cara.ecosystem-management.org/Public/CommentInput?project=52904</a>, with a subject line stating: "Objection regarding the Greater Sage-grouse Draft ROD and LMPA for NFS Land in Wyoming." Electronic submissions must be submitted in a format (Word, PDF, or Rich Text) that is readable and searchable with optical character recognition software.
- 2. Faxed objections must be sent and addressed to "Objection Reviewing Officer- Chris French" and must include a subject line stating: "Objection regarding the Greater Sage-grouse Draft ROD and LMPA for NFS Land in Wyoming." The fax coversheet should specify the number of pages being submitted. The fax number is 801-625-5277.
- 3. Hardcopy objections must include a subject line on page one stating: "Objection regarding the Greater Sage-grouse Draft ROD and LMPA for NFS Land in Wyoming." Hardcopy objections may be submitted by regular mail to the following address:

USDA Forest Service Attn: Objection Reviewing Officer- Chris French 1400 Independence Ave., SW, EMC-PEEARS, Mailstop 1104

Washington, DC 20250.

4. Hardcopy objections also may be submitted by carrier (UPS, FedEx, etc.) or hand deliveries to the following address:

**USDA Forest Service** 

Attn: Objection Reviewing Officer- Chris French

210 14<sup>th</sup> Street, SW

EMC-PEEARS, Mailstop 1104

Washington, DC 20250.

Office hours are Monday through Friday, 8:00am to 5:00pm, excluding Federal holidays. Carrier deliveries may call 202-791-8488 during regular business days and hours, above, to coordinate delivery of objections. Hardcopy submissions must include a subject line on page one stating: "Objection regarding the Greater Sage-grouse Draft ROD and LMPA for NFS Land in Wyoming."

5. Individuals who need to use telecommunication devices for the deaf (TDD) to transmit objections may call the Federal Information Relay Service (FIRS) at 1-800-877-8339 between 8:00 a.m. and 8:00 p.m., Eastern Standard Time, Monday through Friday.

Objections, including attachments, must be filed within 60 days following the day after publication of the notice of the opportunity to object in the *Salt Lake Tribune* and the *Denver Post*, the newspapers of record. The objection period begins the first day after the publication date of the notice. Objections or attachments received after the 60-day objection period will not be considered. The publication date in the newspaper of record is the exclusive means for calculating the time to file an objection. Those wishing to object to this land management plan revision should not rely upon dates or timeframe information provided by any other source.

Individuals and entities who have submitted substantive formal comments related to land management plan revision during the opportunities for public comment (as provided in subpart A of 36 CFR part 219) during the planning process for that decision may file an objection. Objections must be based on

previously submitted substantive formal comments attributed to the objector unless the objection concerns an issue that arose after the opportunities for formal comment. Objections received in response to the notice, including names and addresses of those who object, will be considered part of the public record and will be available for public inspection.

Prior to the issuance of the reviewing officer's written response, either the reviewing officer or the objector may request to meet to discuss issues raised in the objection and their potential resolution. Interested persons who wish to participate in meetings to discuss issues raised by objectors must have previously submitted substantive formal comments related to the objection issues. Interested persons must file a request to participate as an interested person within 10 days after a legal notice of objections received has been published. Requests must be sent to the same email or address identified for filing objections, above, and the interested person must identify the specific issues they have interest in discussing. During the objection meeting, interested persons will be able to participate in discussions related to issues on the agenda that they have listed in their request to be an interested person.

#### **CONTACT PERSON**

For additional information concerning this decision, contact:

John Shivik, National Sage-grouse Coordinator USDA Forest Service, Intermountain Region, Federal Building, 324 25<sup>th</sup> Street, Ogden, UT 84401 801-625-5667

# ATTACHMENT A – LAND MANAGEMENT PLAN AMENDMENT FOR NFS LANDS IN WYOMING ON THE ASHLEY, BRIDGER-TETON, UINTA-WASATCH-CACHE, AND MEDICINE BOW-ROUTT NATIONAL FORESTS AND THUNDER BASIN NATIONAL GRASSLAND

# ATTACHMENT A – LAND MANAGEMENT PLAN AMENDMENT FOR NFS LANDS IN WYOMING ON THE ASHLEY, BRIDGER-TETON, UINTA-WASATCH-CACHE, AND MEDICINE BOW-ROUTT NATIONAL FORESTS AND THUNDER BASIN NATIONAL GRASSLAND

#### FOREST SERVICE PLAN COMPONENTS AND OPTIONAL CONTENT IN THE PLAN

On National Forest System (NFS) lands, land management plans (LMP) guide management activities and contain desired conditions and objectives as well as standards and guidelines that provide direction for project planning and design. Forest Service plan component definitions are in the planning rule at 36 CFR 219.7(e)(1). The following terms and definitions are used throughout this LMPA:

- Desired Condition (DC) A description of specific social, economic, and/or ecological characteristics of
  the plan area, or a portion of the plan area, toward which management of the land and resources should
  be directed. Desired conditions must be described in terms that are specific enough to allow progress
  toward their achievement to be determined, but do not include completion dates.
- **Objective (O)** A concise, measurable, and time-specific statement of a desired rate of progress toward a desired condition or conditions. Objectives should be based on reasonably foreseeable budgets.
- **Standard (ST)** A mandatory constraint on project and activity decisionmaking, established to help achieve or maintain the desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements.
- Guideline (GL) A constraint on project and activity decisionmaking that allows for departure from its
  terms, so long as the purpose of the guideline is met. Guidelines are established to help achieve or
  maintain a desired condition or conditions, to avoid or mitigate undesirable effects, or to meet
  applicable legal requirements.

The planning rule also provides for inclusion of optional content in the plan, such as potential management approaches or strategies and partnership opportunities or coordination activities (36 CFR 219.7(f)(2)). The planning rule does not require project consistency with optional content in the plan (36 CFR 219.15(d)). Optional content in the plan can be changed after public notification under the planning rule provision for administrative changes (36 CFR 219.13(c)). This plan amendment includes the optional content of "management approaches":

• Management Approach (MA) - A management approach is a statement of the principal strategies and program priorities the Responsible Official intends to employ to carry out projects and activities in the plan area. A management approach is optional content in a land management plan, is not a plan component, and can be changed, or added to or removed from a land management plan, following notice to the public. 36 CFR §219.7(e)(2), and 219.13(c).

Optional content in the plan could facilitate transparency and give the public and governmental entities a clear understanding of the plan and how outcomes would likely be delivered. The definition of management approaches in this amendment as "optional content" means that it was optional for the FS to include them in the plan, but management approaches should be followed when practicable.

If used, management approaches would describe the principal strategies and program priorities the Responsible Official intends to employ to carry out projects and activities developed under the plan. The management approaches can convey a sense of priority and focus among objectives and the likely management emphasis. Management approaches should relate to desired conditions and may indicate the future course or direction of change, recognizing budget trends, program demands and accomplishments. Management approaches may discuss potential processes such as analysis, assessment, inventory, project planning, or monitoring. (FSH 1909.20 section 22.4).

#### LAND MANAGEMENT PLAN AMENDMENT FOR NFS LANDS IN WYOMING

Priority, connectivity, and general habitat management areas may contain non-habitat. Management direction would not apply to those areas of non-habitat if the proposed activity in non-habitat does not preclude effective sage-grouse use of adjacent habitats. For a comparison of alternatives and description of what changed between the DEIS and FEIS, see FEIS, Chapter 2, Table 2-9.

#### **Greater Sage-grouse General**

**GRSG-GEN-DC-001-Desired Condition** - The landscape for the greater sage-grouse encompasses large contiguous areas of native vegetation to provide for multiple aspects of species life requirements (e.g. breeding, nesting, brood rearing, etc.). Within these landscapes, a variety of sagebrush-community compositions exist without invasive species, which have variations in subspecies composition, codominant vegetation, shrub cover, herbaceous cover, and stand structure to provide for food, cover, and nesting habitat for the greater sage-grouse.

**GRSG-GEN-DC-002-Desired Condition** - In greater sage-grouse HMAs, habitats are adequately distributed to support greater sage-grouse populations. 70% or more of lands capable of producing sagebrush have from 5 to 25% sagebrush canopy cover and less than 4% conifer cover. Areas managed for breeding and nesting provide for lek security and nest hiding cover through sufficient sagebrush canopy, sagebrush height, and perennial grass cover to deliver overhead and lateral concealment from March 15 through June 30. Areas managed for summer/brood rearing habitat July 1 through November 30 maintain wet meadows and riparian areas in proper functioning condition, sustain diverse perennial grass and forb communities, and maintain sagebrush cover adjacent to riparian/mesic meadows. Within Winter Concentration Areas (as mapped by the State of Wyoming) sufficient sagebrush height and density provides food and cover during this seasonal period.

**GRSG- GEN -MA-003-Management Approach -** The values for greater sage-grouse desired conditions in Appendix F are initial references based on range-wide habitat selection by greater sage-grouse. These initial references should be refined collaboratively to fit local habitats used by greater sage-grouse, ecological site capability, and limitations of habitat distribution. Not all areas will be capable of achieving the indicator values, due to inherent variation in vegetation communities and ecological site potential.

**GRSG-GEN-ST-004-Standard** - If a hard or soft trigger is identified based on either population monitoring or habitat monitoring, identify and implement appropriate management responses for the specific casual factor in the decline of populations and/or habitats. In cooperation with the Adaptive Management Working Group, implement an appropriate response strategy to address causal factors.

If a hard trigger is hit, the Forest Service will immediately defer issuance of discretionary authorizations for new actions for a period of 90 days. The Forest Service will cooperate with the Adaptive Management Working Group to initiate development of an interim response strategy within 14 days and initiate a causal factor assessment. The interim response strategy will be implemented within 90 days for the appropriate Biologically Significant Unit.

Adaptive management actions shall include reverting back to prior management once the identified causal factor is resolved.

GRSG-GEN-MA-005-Management Approach - A soft trigger is hit when there is any deviation from normal trends in habitat or population in any given year. Normal population trends are calculated as the five-year running mean of annual population counts. Metrics include but are not limited to annual lek counts, wing counts, aerial surveys, habitat monitoring, and Density and Disturbance Calculation Tool evaluations. The Forest Service, with the assistance of the BLM, local Wyoming Game and Fish Department offices, and local sage-grouse working groups, will evaluate the metrics with the Adaptive Management Working Group on an annual basis. The purpose of these strategies is to address the localized greater sage-grouse population and habitat changes by providing the framework in which project management will change if monitoring identifies negative population and habitat anomalies to avoid crossing a hard trigger threshold. This strategy may include curtailment of activities that may adversely affect the greater sage-grouse population or habitat.

**GRSG-GEN-MA-006-Management Approach** - Hard triggers are considered a catastrophic indicator that the species is not responding to conservation actions or that a larger-scale impact or set of impacts is having a negative effect. Metrics include but are not limited to number of active leks, acres of available habitat, and population trends based upon lek counts. Within the range of normal population variables (five-year running mean of annual population counts), hard triggers shall be determined to take effect when two of the three metrics exceed 60 percent of normal variability for the area under management in a single year or when any of the three metrics exceed 40% of normal variability for a 3-year time period within a 5-year range of analysis. A minimum of 3 consecutive years in a 5-year period is used to determine trends (i.e., Y1-2-3, Y2-3-4, Y3-4-5).

Once the causal factor assessment has been completed, the interim strategy will be modified to adequately address the causal factors. The Adaptive Management Working Group will establish a process to review and reverse adaptive management actions once the identified causal factor is resolved (e.g., returning to previous management once objectives of interim management strategy have been met).

**GRSG-GEN-GL-007-Guideline** - Within PHMA in northeast Wyoming, to maintain adequate nesting and wintering habitat, vegetation treatments that would reduce sagebrush canopy to less than 15% should be restricted.

**GRSG-GEN-GL-008-Guideline -** When removing conifers that are encroaching into greater sage-grouse habitat, avoid persistent woodlands (i.e., old growth relative to the site or more than 100 years old).

**GRSG-GEN-GL-009-Guideline** - In greater sage-grouse HMAs, actions and authorizations should not be approved unless the spread of invasive annual and noxious plant species is designed to be prevented.

**GRSG-GEN-GL-010-Guideline** - To facilitate safe and effective fire management actions, in greater sage grouse HMAs, fuel treatments in high- risk areas (i.e., areas likely to experience wildfire at an intensity level that might result in movement away from the greater sage-grouse desired conditions) should be designed to reduce the spread and/or intensity of wildfire or the susceptibility of greater sage-grouse attributes to move away from desired conditions.

**GRSG-GEN-GL-011-Guideline -** In greater sage-grouse HMAs native plant species should be used, when possible, to maintain, restore, or enhance desired conditions.

**GRSG-GEN-O-012-Objective** - Every 5 years or in conjunction with State of Wyoming and the Sage-grouse Implementation Team, evaluate the Habitat Management Area (HMA) Map when a demonstrated need for change exists. These evaluations will ensure that the latest version of the Wyoming Core Area maps are considered, and promote consistency across administrative boundaries. If the Sage-grouse Implementation Team adopts a new version of Wyoming Core Area maps (which include connectivity and winter concentration areas) during the interim period before the HMAs can be amended (Plan Amendment), if projects occur in newly established Core Areas, the Forest Service would consider project level adjustments/decisions/alternatives that align with the State of Wyoming's Core Area designation and protections.

**GRSG-GEN-MA-013-Management Approach** - Within the broader context of Early Detection and Rapid Response strategies for invasive species management, prioritize treatments for invasive and noxious plant populations that have the potential to impact sage-grouse habitat in PHMA.

#### Timing, Distance, Density, and Disturbance<sup>1</sup>

<sup>1</sup> Standards, guidelines and management approaches 014 through 025 should all be reviewed together and sequentially regarding a given proposed activity. These items have been formatted to align as close as practicable to the Wyoming's Sage-grouse Executive order and promote consistent management of resources across agency boundaries and jurisdictions.

**GRSG-TDDD-GL-014-Guideline** - In PHMA, limit the density of activities related to development to no more than an average of one activity per 640 acres, using the current Density Disturbance Calculation Tool process or its replacement.

**GRSG-TDDD-GL-015-Guideline** - In PHMA, do not authorize surface disturbing activities unless all existing discrete anthropogenic disturbances, (including wildfire after 2011), cover less than 5% of the suitable habitat in the surrounding area using the current Density Disturbance Calculation Tool process or its replacement and the new use will not cause exceedance of the 5% threshold. In connectivity habitat management areas the threshold not to be exceeded is an average of 5% per 640 acres of suitable habitat within the corridor.

**GRSG-TDDD-GL-016-Guideline** - To support breeding opportunities in PHMA and CHMA, do not authorize new surface occupancy or surface disturbing activities on or within a 0.6 mile radius of the perimeter of occupied leks.

**GRSG-TDDD-GL-017-Guideline** - To support breeding opportunities in GHMA, do not authorize new surface occupancy or surface disturbing activities on or within a 0.25 mile radius of the perimeter of occupied leks.

**GRSG-TDDD-GL-018-Guideline** - To support breeding and nesting in PHMA, do not authorize new surface disturbing or disruptive activities from March 15 through June 30. Where data based upon field analysis support different seasonal restriction timeframes, dates may be shifted by up to 14 days before or subsequent to the above dates, but not both.

**GRSG-TDDD-GL-019-Guideline** - To support breeding and nesting within CHMA, do not authorize new surface disturbing or disruptive activities from March 15 through June 30 within 4 miles of a lek perimeter. Where data based upon field analysis, support different seasonal restriction timeframes, dates may be shifted by up to 14 days before or after the above dates, but not both.

**GRSG-TDDD-GL-020-Guideline** - To support breeding and nesting in GHMA, do not authorize new surface disturbing or new disruptive activities from March 15 to June 30 within 2 miles of the lek or lek perimeter of any occupied lek located inside general areas. Where data based upon field analysis, support different seasonal restriction timeframes, dates may be shifted by up to 14 days before or subsequent to the above dates, but not both.

**GRSG-TDDD-GL-021-Guideline** - In PHMA, do not authorize new projects that create noise levels, either individual or cumulative, that exceed 10 dBA (as measured by L50) above baseline noise at the perimeter of the lek (or lek center if no perimeter is yet mapped) from 6 p.m. to 8 a.m. during the breeding season (March 1 to May 15).

**GRSG-GEN-MA-022-Management Approach** - When implementing GRSG-TDDD-GL-021-Guideline, in coordination with the State of Wyoming, specific noise protocols for measurement and implementation will be developed as additional research and information emerges. These measures would be considered at the site-specific project level where and when appropriate.

**GRSG-TDDD-ST-023-Standard** - In PHMA, when authorizing new anthropogenic disturbances, only allow exceptions if, after avoiding and minimizing impacts, any remaining residual impacts to the greater sagegrouse or its habitat are fully offset by mitigation that provide no net habitat loss to the species, measured at the statewide scale, subject to existing rights.

**GRSG-TDDD-GL-024-Guideline** - To reduce impacts to sage-grouse in GHMA, new land use authorizations that may create anthropogenic disturbances may be issued, but should be collocated, as practicable, within existing designated corridors, rights-of-way, disturbances, or non-habitat areas. The authorization should consider design criteria to avoid and minimize impacts to the greater sage-grouse and its habitat.

**GRSG-TDDD-MA-025-Management Approach** - If, after avoidance and minimization, a proposed project still exceeds timing, density, disturbance, distance or noise requirements (from most up to date WY Executive Order), include an alternative using the Wyoming Compensatory Mitigation Framework as the primary means to evaluate and quantify debits, and calculate the number of credits required for compensatory mitigation. Refer to Appendix F for the Mitigation Framework and work collaboratively with the State point of contact (Wyoming Game and Fish Department's Habitat Protection Program) when applying the Wyoming Mitigation Framework.

**GRSG-TDDD-GL-026-Guideline** - Use Forest Orders to restrict surface disturbing or disruptive activities from December 1 through March 14 in mapped Winter Concentration Areas. As new data become available regarding Winter Concentration Areas, update seasonal use maps and apply stipulations.

#### Infrastructure

**GRSG-INFRA-GL-027-Guideline** - In PHMA, when authorizing the construction of new infrastructure and maintenance, replacement, and upgrades to existing infrastructure, impacts to the greater sage-grouse and its habitat should be mitigated.

- Existing guy wires should be appropriately marked with bird flight diverters to make them more visible to the greater sage-grouse in flight. Authorization of new infrastructure with guy wires should be restricted.
- Power lines (distribution and transmission) should be designed to minimize wildlife-related impacts and constructed to the latest APLIC standards.
- Permanent structures should be designed or sited to minimize impacts to the greater sage-grouse, with emphasis on locating and operating facilities that create movement (e.g., pump jacks) or attract frequent human use and vehicular traffic (e.g., fluid storage tanks) in a manner that will minimize disturbance of the greater sage-grouse or interference with habitat use.
- Liquid gathering facilities in priority and connectivity habitat management areas and winter concentration areas should be buried and reclaimed to limit or eliminate human disturbance and physical habitat disturbance. To reduce truck traffic and perching and nesting of ravens and raptors, tanks should not be placed at well locations.

#### **Lands and Realty**

Special-use Authorizations (Non-recreation)

**GRSG-LR-SUA-ST-028-Standard** - In PHMA and CHMA habitat management areas and winter concentration areas, do not authorize new special-use permits for infrastructure, such as high-voltage transmission lines, major pipelines distribution lines, and communication towers unless exceptions apply. Exceptions may include co-location and must be limited (e.g., safety needs) and based on rationale (e.g., monitoring, modeling, or best available science) that explicitly demonstrates that adverse impacts to the greater sage-grouse will be avoided with the exception. If co-location of new infrastructure cannot be accomplished, locate it adjacent to existing infrastructure, roads, or already disturbed areas and limit disturbance to the smallest footprint or where it best limits impacts to the greater sage-grouse or its habitat and refer to GRSG-TDDD-MA-026-Management Approach (compensatory mitigation). Existing authorized uses will continue to be recognized.

**GRSG-LR-SUA-ST-029-Standard** - In PHMA and CHMA and winter concentration areas, do not authorize temporary lands special-use permits (i.e., facilities or activities) that result in loss of habitat or would have long-term (i.e., greater than 5 years) negative impact on the greater sage-grouse or its habitat.

**GRSG-LR-SUA-ST-030-Standard** - In greater sage-grouse HMA, when a lands special-use authorization is revoked or terminated and no future use is contemplated, require the authorization holder to remove overhead lines and other infrastructure in compliance with 36 CFR 251.60(i).

**GRSG-LR-SUA-GL-031-Guideline** - In PHMA, new power transmission projects must be located within the 2-mile wide transmission line route in south-central and southwestern Wyoming or as close as technically feasible (i.e., within 0.5 mile) on either side of existing 115 kV or larger transmission lines or corridors creating a route no wider than 1 mile. These projects are exempt from the 5% disturbance threshold.

**GRSG-LR-SUA-ST-032-Standard** - In PHMA, CHMA, and winter concentration areas, locate upgrades to existing transmission lines within the existing designated corridors or rights-of-way unless an alternate route would not have negative impacts on or benefit greater sage-grouse or their habitats.

**GRSG-LR-SUA-GL-033-Guideline** - Authorization of new temporary meteorological towers should not be allowed in PHMA within 2 miles of occupied greater sage-grouse leks, unless they are out of direct line of sight of an occupied lek to reduce disturbance to breeding GRSG.

#### **Land Ownership Adjustments**

**GRSG-LR-LOA-ST-034-Standard** - In PHMA, do not approve landownership adjustments, including land exchanges, unless the action results in no net habitat loss to the greater sage-grouse or it will not directly or indirectly adversely affect greater sage-grouse conservation.

**GRSG-LR-LOA-ST-035-Standard** - In PHMA and CHMA, do not issue new discretionary written authorizations unless all existing discrete anthropogenic disturbances cover less than 5% of the total greater sage-grouse habitat within the proposed project area, regardless of ownership, and the new use will not cause exceedance of the 5% threshold. Discretionary activities that might result in disturbance above 5% at the proposed project area would be prohibited unless approved by the forest supervisor with concurrence from the regional forester after review of new or site-specific information that indicates the project would result in no net habitat loss at the State-wide scale. Within existing designated utility corridors, the 5% disturbance threshold may be exceeded at the project area scale if the site specific NEPA analysis indicates that no net habitat loss to the species will be achieved. This exception is limited to projects that fulfill the use for which the corridors were designated (e.g., transmission lines, pipelines) and the designated width of a corridor will not be exceeded as a result of any project co-location.

#### **Wind Energy Development**

**GRSG-WS-ST-036-Guideline** - In PHMA, restrict authorization of wind utility-scale and/or commercial energy development except for on-site power generation associated with existing industrial infrastructure (e.g., mine site) to contribute GRSG conservation.

#### **Livestock Grazing**

**GRSG-LG-MA-037-Management Approach -** In greater sage-grouse HMA, livestock grazing may be used as a tool to maintain or move towards desired habitat conditions.

**GRSG-LG-GL-038-Guideline** - In greater sage-grouse HMA, if livestock grazing is determined to be a causal factor limiting achievement of desired conditions for seasonal habitats on capable sites, adjust livestock management, as appropriate, to address species life requirements (e.g., cover, food, shelter).

**GRSG-LG-MA-039-Management Approach** - In areas where domestic livestock grazing is authorized within greater sage-grouse HMA, managers may use the Habitat Assessment Framework in conjunction with rangeland monitoring information, site capability, and greater sage-grouse biological use data to assess habitat conditions at the appropriate times and locations relative to the greater sage-grouse habitat attributes of interest. Ecological Site Descriptions, site potential, and historic data will be used to determine whether or not the site is capable of producing the desired greater sage-grouse habitat. If

greater sage-grouse habitat condition is deteriorated or trending away from desired conditions, then assess causal factors before prescribing changes to livestock grazing management. Refer to Cagney et al. (2010) when considering adjustments to livestock grazing management.

**GRSG-LG-GL-040-Guideline** - Bedding sheep and placing camps within 0.62 miles (1 km) from the perimeter of a lek during lekking (from March 1 to April 30) should be restricted to prevent disturbance of breeding GRSG.

**GRSG-LG-GL-041-Guideline** - From March 15 through June 30, trailing livestock should be limited to existing trails. Specific routes and timeframes should be identified; existing trails should be used; and stopovers on occupied leks should be avoided. New trailing activities should be assessed to determine a route that will minimize impacts to the greater sage-grouse and its habitats. Where credible data based upon field analysis support different timeframes for the seasonal restriction, dates may be shifted by either 14 days before or subsequent to the above dates, but not both.

**GRSG-LG-GL-042-Guideline** - To reduce collision risk in PHMA, existing fences within 0.6 miles of occupied leks should be modified through removal, marking, laydown, or other design features. New fencing within 0.6 miles of a lek would not be constructed March 15 through June 30, or on the lek itself; new stretches of fence with high potential for collisions should be marked.

**GRSG-LG-GL-043-Guideline** - To prevent predation from perching raptors in PHMA and CHMA, new permanent livestock facilities, should not be constructed within 0.6 miles from the perimeter of occupied leks. In general habitat management areas, new permanent livestock facilities should not be constructed within 0.25 miles of occupied leks.

**GRSG-LG-GL-044-Guideline** - On the Thunder Basin National Grassland, where GHMA overlaps with Management Area 8.4 (Mineral Production), Management Area 3.63 (Black-footed Ferret Reintroduction Habitat), or other designated areas for short-grass species, livestock grazing should be managed to meet the objectives for that Management Area.

#### **Fire Management**

**GRSG-FM-DC-045-Desired Condition** - In greater sage-grouse HMA, sagebrush habitat is protected from loss due to unwanted wildfires or damages resulting from management related activities while using agency risk management protocols to manage for firefighter and public safety and other high priority values. In all fire response, first priority is the management of risk to firefighters and the public. Greater sage-grouse habitat is prioritized as a high value resource along with other high value resources and assets.

**GRSG-FM-GL-046-Guideline** - To maintain or improve existing habitat in greater sage-grouse HMA, when prescribed fire is used for fuels management or vegetation treatments, design the burn to move towards desired habitat conditions. Avoid prescribed fire in areas where Wyoming big sagebrush, other xeric sagebrush species, cheatgrass or other fire-invasive species occur, unless beneficial to greater sagegrouse habitat consistent with desired conditions.

**GRSG-FM-MA-047-Management Approach** - In greater sage-grouse HMA, if it is necessary to use prescribed fire for restoration of greater sage-grouse habitat consistent with desired conditions, the associated National Environmental Policy Act analysis must identify how the project would move

towards greater sage-grouse desired conditions; why alternative techniques were not selected; and how potential threats to greater sage-grouse habitat would be minimized.

**GRSG-FM-ST-048-Standard** - On the Thunder Basin National Grassland, where GHMA overlaps with Management Area 3.63 (Black-footed Ferret Reintroduction Habitat) or other designated areas for short-grass species, allow prescribed fire to meet objectives for that Management Area.

**GRSG-FM-GL-049-Guideline** - In greater sage-grouse HMA, when reseeding in fuel breaks, fire-resistant native plant species should be used if available or use fire-resistant non-native plants only if they would not degrade greater sage-grouse habitat in the long-term.

**GRSG-FM-GL-050-Guideline** - Temporary wildfire suppression facilities (e.g., incident command posts, spike camps, helibases, mobile retardant plants) in greater sage-grouse HMA should be located in existing disturbance or unsuitable habitat. When needed to best provide for firefighter or public safety or to minimize fire size in greater sage-grouse habitat, impacts to the greater sage-grouse should be considered and removal of sagebrush should be limited.

**GRSG-FM-GL-051-Guideline** - In greater sage-grouse HMA, cross-country vehicle travel during fire operations should be restricted. When needed to best provide for firefighter or public safety or to minimize fire size in greater sage-grouse habitat, impacts to the greater sage-grouse should be considered and removal of sagebrush should be limited to the extent practicable to achieve suppression objectives.

**GRSG-FM-GL-052-Guideline** - In greater sage-grouse HMA, use fire management tactics and strategies that seek to minimize loss of existing sagebrush habitat. The safest and most practical means to do so will be determined by fireline leadership and incident commanders.

**GRSG-FM-GL-053-Guideline** - In greater sage-grouse HMA, do not approve prescribed fire prescriptions that result undesirable effects on vegetation and/or soils (e.g., minimize mortality of desirable perennial plant species and reduce risk of hydrophobicity).

**GRSG-FM-GL-054-Guideline** - In greater sage-grouse HMA, planned fuel-breaks should incorporate roads and natural fuel breaks to improve effectiveness and minimize loss of existing sagebrush habitat.

**GRSG-FM-ST-055-Standard** - In greater sage-grouse HMA, all fire-associated vehicles and equipment are to be inspected and cleaned using standardized protocols and procedures and approved vehicle/equipment decontamination systems before entering and exiting the area beyond initial attack activities to minimize the introduction of invasive and noxious plant species.

**GRSG-FM-MA-056-Management Approach** - Include unit-specific greater sage-grouse fire management related information should be added to wildland fire decision support systems (currently, the Wildland Fire Decision Support System, WFDSS); use local operating plans and resource advisor plans during fire situation to inform management decisions and aid in development of strategies and tactics for resource prioritization.

**GRSG-FM-MA-057-Management Approach -** Localized maps of greater sage-grouse HMA should be made available to fireline, dispatch, and fire support personnel.

**GRSG-FM-MA-058-Management Approach -** In or near greater sage-grouse HMA, a greater sage-grouse resource advisor should be assigned to all extended attack fires.

**GRSG-FM-GL-059-Guideline** - On critical fire weather days, when allocation of resource positioning is being decided, protection of greater sage-grouse habitat should receive high consideration, along with other high values.

**GRSG-FM-MA-060-Management Approach** - Line officers should be involved in setting pre-season wildfire response priorities and prioritizing protection of greater sage-grouse HMA, along with other high values. During periods of multiple fires or limited resource availability, fire management organizational structure (local, regional, national) will prioritize fires and allocation of resources in which greater sage-grouse habitat is a consideration along with other high values.

**GRSG-FM-GL-061-Guideline** - In greater sage-grouse HMA, fire retardant and mechanized equipment should only be used if it is likely to result in minimizing burned acreage; preventing the loss of other high value resources; or increasing the effectiveness of other tactical strategies. Agency administrators, their designee, or fireline leadership should consider fire suppression effects while determining suppression strategy and tactics; the use of fire retardant and mechanized equipment may be approved by agency administrators, their designee, or fireline leadership.

**GRSG-FM-GL-062-Guideline** - In greater sage-grouse HMA, consider using the full range of suppression techniques to protect unburned islands, doglegs, and other sage grouse habitat features that may exist within the perimeter of wildfires and minimize sagebrush loss.

**GRSG-FM-GL-063-Guideline** - In PHMA and CHMA and winter concentration areas, do not approve sagebrush removal or manipulation, including prescribed fire, unless the removal strategically reduces the potential impacts from wildfire or supports the enhancement of habitat conditions for greater sagegrouse.

#### Recreation

**GRSG-R-GL-064-Guideline** - In PHMA, do not authorize temporary recreation uses that result in loss of habitat or would have long-term negative impact on the greater sage-grouse or its habitat.

**GRSG-R-GL-065-Guideline** - In greater sage-grouse HMA, when authorizing new recreation special-use authorizations, terms and conditions that protect and/or restore greater sage-grouse habitat within the permit area should be included. During renewal, amendment, or reauthorization, terms and conditions in existing permits and operating plans should be modified to protect and/or restore greater sage-grouse habitat.

**GRSG-R-GL-066-Guideline** - In PHMA and CHMA, new recreational facilities or expansion of existing recreational facilities (e.g., roads, trails, campgrounds), including special-use authorizations for facilities and activities, should not be approved unless the development results in no net loss of greater sagegrouse habitat or the development is required for safety.

#### **Roads/Transportation**

**GRSG-RT-DC-067-Desired Condition** - In PHMA, within the forest transportation system and on roads and trails authorized under a special-use authorization, the greater sage-grouse experience minimal disturbance from March 15 to June 30 within a 0.6 mile perimeter of an occupied lek where breeding, nesting, and early brood-rearing habitat is present. In Winter Concentration Areas as mapped by the State of Wyoming, there should be minimal disturbance from December 1 to March 15. Dates may be shifted by either 14 days before or after the above dates, but not both.

**GRSG-RT-ST-068-Standard** - Do not construct new maintenance level 4 and 5 roads within 1.9 miles of the perimeter of occupied greater sage-grouse leks within PHMA and CHMA unless construction allows decommissioning of an existing route that negatively affects the greater sage-grouse.

**GRSG-RT-ST-069-Standard** - Do not allow any category of road construction within 0.6 miles from the perimeter of occupied leks in PHMA and CHMA or 0.25 miles from the perimeter of occupied leks in general habitat management areas as described in GRSG-TDDD-ST-012 and 013-Standards.

**GRSG-RT-ST-070-Standard** - In PHMA and CHMA, do not allow improvements to existing routes that would change route category (level 1 through 5) or capacity unless the upgrading would have minimal impact on the greater sage-grouse; is necessary for motorist safety; or eliminates the need to construct a new road.

**GRSG-RT-ST-071-Standard** - If necessary to construct new roads and trails in PHMA and CHMA and winter concentration areas, to access existing rights, limit construction to the minimum standard, length, and number and avoid, minimize, and mitigate impacts.

**GRSG-RT-ST-072-Standard** - In greater sage-grouse HMA, do not allow public motor vehicle use on temporary energy development roads.

**GRSG-RT-GL-073-Guideline** - In greater sage-grouse HMA, do not authorize new roads and road realignments unless designed and administered to reduce collisions with the greater sage-grouse.

**GRSG-RT-GL-074-Guideline** - In PHMA, CHMA, and GHMA, do not authorize road construction within riparian areas and mesic meadows. If not possible to restrict construction within riparian areas and mesic meadows, roads should be designed and constructed perpendicular to ephemeral drainages and stream crossings, unless topography prevents doing so.

**GRSG-RT-GL-075-Guideline -** In greater sage-grouse HMA, dust abatement terms and conditions should be included in road-use authorizations when dust has the potential to affect the greater sage-grouse.

**GRSG-RT-GL-076-Guideline** - In greater sage-grouse HMA, road and road-way maintenance activities should not increase the risk of vehicle- or human-caused wildfires and the spread of invasive plants.

#### **Minerals**

#### Fluid Minerals - Unleased

**GRSG-M-FMUL-ST-077-Standard** - In PHMA and CHMA and winter concentration areas, new oil and gas leases that may be offered must be consistent with and include leasing stipulations for direction in the Timing, Distance, Density, and Disturbance section.

**GRSG-M-FMUL-ST-078-Standard -** In PHMA and CHMA, do not approve geophysical exploration projects unless designed to minimize impacts to greater sage-grouse to the extent possible.

**GRSG-M-FMUL-MA-079-Management Approach -** Appendix G has stipulations developed for when standards and guidelines call for specific restrictions on fluid minerals activities.

#### Fluid Minerals - Leased

**GRSG-M-FML-ST-080-Standard** - In PHMA and CHMA and winter concentration areas, the Surface Use Plan of Operation portion of the Application for Permit to Drill on existing leases will require avoidance and minimization of surface disturbing and disruptive activities consistent with the rights granted in the lease.

**GRSG-M-FML-ST-081-Standard** - In PHMA and CHMA and winter concentration areas, when facilities are no longer needed or leases are relinquished, reclamation plans must include terms and conditions to restore habitat towards desired conditions.

**GRSG-M-FML-GL-082-Guideline** - Compressor stations should be located on portions of a lease that are non-habitat and are not used by the greater sage-grouse and if there would be no direct, indirect, or cumulative effects on the greater sage-grouse or its habitat.

**GRSG-M-FML-MA-083-Management Approach** - If locating compressor stations in non-habitat or areas that would have no impact on greater sage-grouse is not possible, work with the operator to use mufflers, sound insulation, or other features to reduce noise consistent with GRSG-TDDD-GL-022-Guideline.

**GRSG-M-FML-MA-084-Management Approach** - In greater sage-grouse HMA when authorizing development of fluid mineral resources, work with the operator to avoid and minimize impacts to the greater sage-grouse and its habitat, such as locating facilities in non-habitat areas first and then in the least suitable habitat.

**GRSG-M-FML-MA-085-Management Approach** - In PHMA and GHMA on existing leases, operators should be encouraged to reduce disturbance to greater sage-grouse habitat. At the time of approval of the Surface Use Plan of Operation portion of the Application for Permit to Drill, terms and conditions should be included to reduce disturbance to greater sage-grouse habitat, where appropriate and feasible and consistent with the rights granted to the lessee.

**GRSG-M-FML-GL-086-Guideline** - On existing federal leases in PHMA and CHMA and winter concentration areas, when surface occupancy is requested due to existing rights or development requirements, disturbance and surface occupancy should be restricted to areas that will minimize the impact to GRSG and its habitat grouse based on vegetation, topography, or other habitat features.

**GRSG-M-FML-MA-087-Management Approach** - In greater sage-grouse HMA, where the federal government owns the surface and the mineral estate is in non-federal ownership, coordinate with the mineral estate owner/lessee to apply appropriate conservation measures, and design features to the appropriate surface management instruments to the maximum extent permissible under existing authorities.

#### Fluid Minerals – Operations

**GRSG-M-FMO-ST-088-Standard** - In PHMA, CHMA, and winter concentration areas, do not authorize new employee camps.

**GRSG-M-FMO-GL-089-Guideline** - In PHMA and CHMA and winter concentration areas, closed-loop systems should be used for drilling operations with no reserve pits where practicable.

**GRSG-M-FMO-GL-090-Guideline** - In greater sage-grouse habitat management areas, during drilling operations, soil compaction should be minimized and soil structure should be maintained using the best available techniques to improve vegetation reestablishment.

**GRSG-M-FMO-GL-091-Guideline** - In greater sage-grouse HMA, dams, impoundments, and ponds for mineral development should be constructed to reduce potential for West Nile virus.

**GRSG-M-FMO-MA-092-Management Approach** - Utilize the following methods as appropriate to reduce to potential for West Nile virus:

- Increase the depth of ponds to accommodate a greater volume of water than is discharged.
- Build steep shorelines (greater than 2 feet) to reduce shallow water and aquatic vegetation around the perimeter of impoundments to reduce breeding habitat for mosquitoes.
- Maintain the water level below that of rooted aquatic and upland vegetation. Avoid flooding terrestrial vegetation in flat terrain or low-lying areas.
- 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.
- 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.
- Line the overflow spillway with crushed rock and construct the spillway with steep sides.
- Fence pond sites to restrict access by livestock and other wild ungulates.
- Remove or re-inject produced water.
- Treat waters with larvicides to reduce mosquito production where water occurs on the surface.

**GRSG-M-FMO-GL-093-Guideline** - In greater sage-grouse HMA, to keep habitat disturbance at a minimum, a phased development approach should be applied to fluid mineral operations, wherever practicable, consistent with the rights granted under the lease. Disturbed areas should be reclaimed as soon as they are no longer needed for mineral operations.

#### **Coal Mines**

**GRSG-M-CM-ST-094-Standard** - For coal exploration licenses, in PHMA, prescribe conditions as applicable for surface use and occupancy, and timing prohibitions and restrictions from GRSG-TDDD-GL-15 through 24. Prescribe operating conditions for exploration plans to reduce invasive and noxious species, prevent fire, limit permanent tall structures and new permanent roads, and design reclamation of surface disturbance to restore applicable greater sage-grouse habitat.

**GRSG-M-CM-ST-095-Standard** - PHMA and CHMA and winter concentration areas are essential habitat for maintaining the greater sage-grouse for purposes of the unsuitability criteria set forth at 43 CFR 3461.5(o)(1). When consultation with the State occurs according to this criterion, apply GRSG-TDDD-GL-015 using the portion of the proposed lease that overlaps PHMA, when calculating disturbance, to determine if all or certain stipulated methods of coal mining would have long term impacts on GRSG.

**GRSG-M-CM-GL-096-Guideline** - When responding to the state regulatory authority regarding coal mine permitting actions that cause surface disturbance other than mining, in PHMA, forward applicable conditions for surface use and occupancy, and timing prohibitions and restrictions from GRSG-TDDD-ST-15 through 27. During permitting actions and/or 5-year permit reviews involving lands that contain priority habitat management areas, for reclamation requirements, advise the state regulatory authority that the post-mining land use is wildlife habitat involving greater sage-grouse.

#### **Locatable Minerals**

**GRSG-M-LM-ST-097-Standard** - In PHMA and CHMA and winter concentration areas, approve Plans of Operation with appropriate mitigation (avoidance and minimization) to protect the greater sage-grouse and its habitat, consistent with the rights granted by the Mining Law of 1872, as amended.

**GRSG-M-LM-ST-098-Standard** - The disturbance thresholds described in GRSG-TDDD-GL-016-Guideline will not be applied to restrict access to locatable minerals on unpatented claims located under the General Mining Law of 1872, as amended; the disturbance from locatable activities will be accounted for when determining the percent disturbance and whether the threshold has been exceeded.

#### **Non-energy Leasable Minerals**

**GRSG-M-NEL-GL-099-Guideline** - In PHMA and CHMA, include measures to restrict surface use, occupancy and seasonal activities for exploration with either recommendations or consent (as applicable) to the BLM regarding issuance of prospecting permits and exploration licenses.

In PHMA and CHMA, where development would be by surface mining methods, consider potential impacts to sage-grouse habitat and appropriate stipulations (see standards and guidelines 15-27), and/or applying appropriate compensatory mitigation (as described in the Mitigation Framework) when assessing whether or not to consent to, or recommend leasing.

In PHMA and CHMA where development would be by underground mining methods, include stipulations that restrict surface use, occupancy and seasonal activities with either recommendations or consent (where applicable) to the BLM regarding issuance of new leases and lease modifications.

At lease readjustment or lease renewal, evaluate recommendations/stipulations to provide to the BLM to restrict surface use, occupancy and seasonal activities in PHMA and CHMA. Where existing leases either are, or will be, developed by surface mining methods, include recommendations/stipulations to reclaim disturbed lands to applicable greater sage-grouse habitat.

**GRSG-M-NEL-GL-100-Guideline** - In PHMA and GHMA, include in recommendations to the BLM regarding exploration plan or mining plans conditions to reduce invasive and noxious species, prevent fire, limit permanent tall structures and new permanent roads, and to design reclamation of surface disturbance to restore affected greater sage-grouse habitat.

#### **Mineral Materials**

**GRSG-M-MM-ST-101-Standard** - Apply all restrictions listed in the Timing, Distance, Density and Disturbance section to authorizations for mineral material sales and free use.

**GRSG-M-MM-ST-102-Standard** - Permits for mineral material operations in PHMA and GHMA must include appropriate requirements for reclamation of the site to maintain, restore, or enhance desired habitat conditions.

#### **Predators**

**GRSG-PR-MA-103-Management Approach** - Efforts by other agencies to minimize impacts from predators on the greater sage-grouse should be supported and encouraged where needs have been documented.

# ATTACHMENT B – HMA MAPS OF ALTERNATIVE 2

#### **ATTACHMENT B – HMA MAPS OF ALTERNATIVE 2**

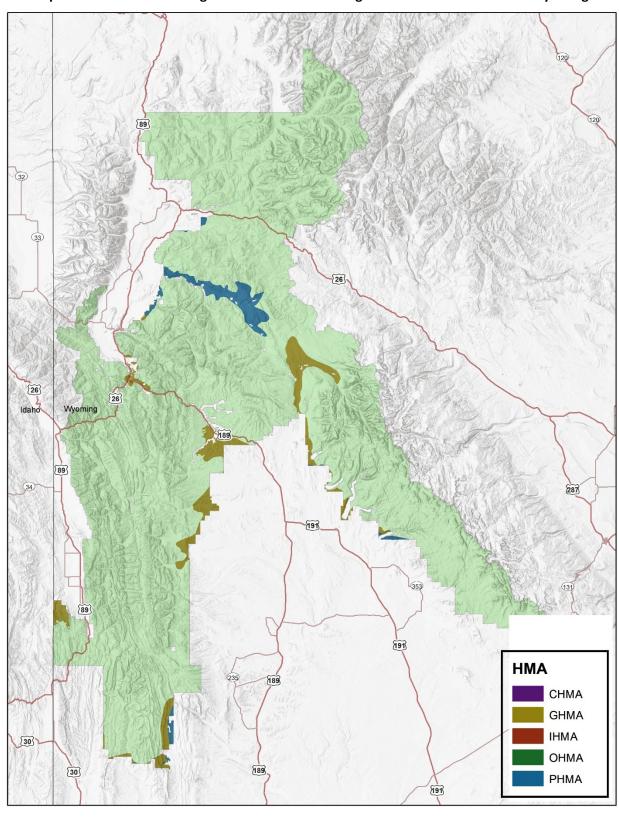
Attachment B contains maps of Alternative 2. Differences in mapping layers between the 2015 and 2019 amendments can also be examined using a map web-tool at the following link:

 $\frac{https://usfs.maps.arcgis.com/apps/PublicInformation/index.html?appid=9f1cf6d8425e49949d0006a0ae}{574b84}$ 

80 189 Wyoming **HMA** СНМА **GHMA** IHMA ОНМА РНМА

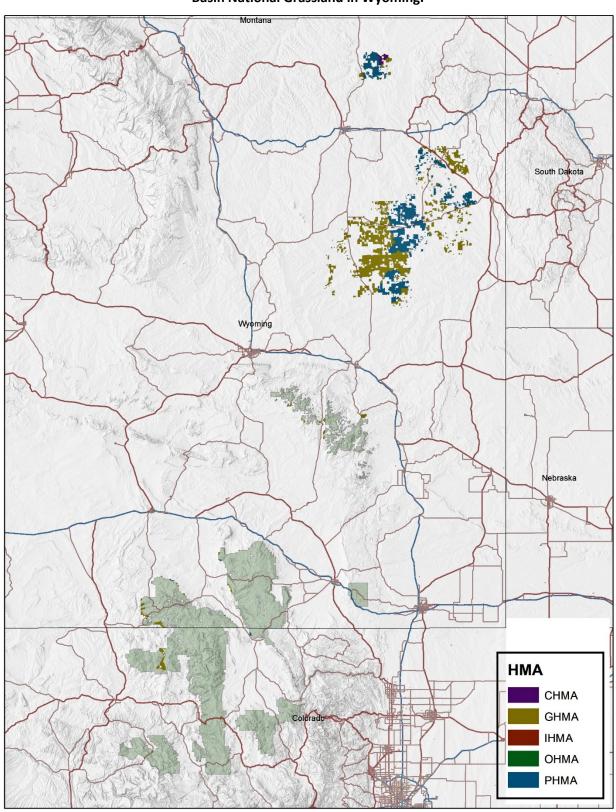
Map 1 - GRSG Habitat Management Areas on the Ashley National Forest in Wyoming.

Refer to the Greater Sage-grouse Draft ROD and LMPA for NFS land in Utah for portions of the Ashley NF located in Utah.

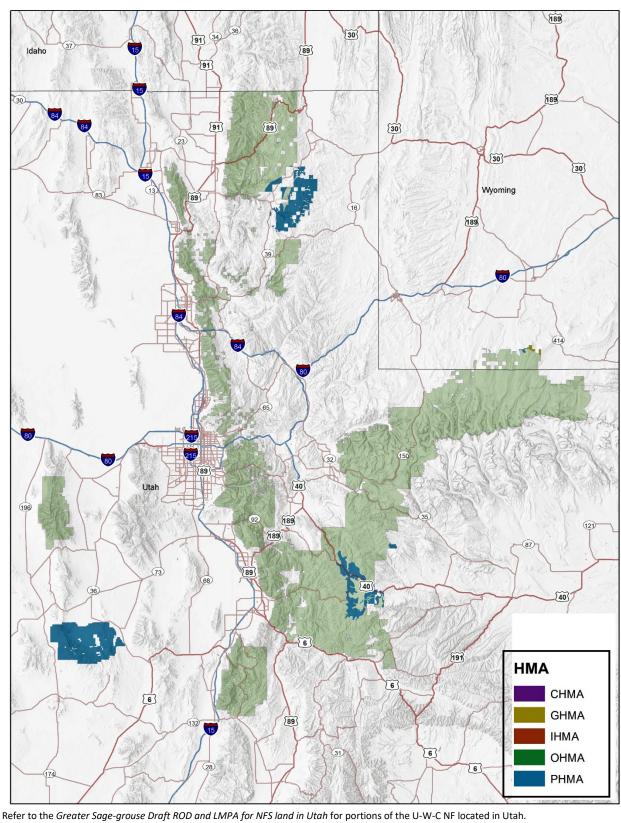


Map 2 - GRSG Habitat Management Areas on the Bridger-Teton National Forest in Wyoming.

Map 3 - GRSG Habitat Management Areas on the Medicine Bow-Routt National Forest and Thunder Basin National Grassland in Wyoming.



Refer to the *Greater Sage-grouse Draft ROD and LMPA for NFS land in Colorado* for portions of the MB-R NF located in Colorado.



Map 4 - GRSG Habitat Management Areas on the Uinta-Wasatch-Cache National Forest in Wyoming.

# ATTACHMENT C – GLOSSARY OF TERMS USED IN THE FEIS, ROD, AND LMPA

#### ATTACHMENT C - GLOSSARY OF TERMS USED IN THE FEIS, ROD, AND LMPA

Active lek – Any lek that has had two or more males observed at least twice in the last five years.

**Additionality (Additive)** – In the context of compensatory mitigation, the conservation benefits of compensatory mitigation are a demonstrably new replacement for a loss of habitat that would not have resulted without the compensatory mitigation project.

**Adjacent** – Installation of a project or improvement parallel, near, or next to existing projects or improvements.

**Administrative access** – Access for resource management and administrative purposes such as wildfire suppression, cadastral surveys, permit compliance, law enforcement, and military in the performance of their official duty, or other access needed to manage National Forest System lands or uses.

**Allotment** – A designated area of land in which one or more livestock operators graze their livestock. An allotment may include one or more separate pastures. Livestock numbers and periods of use are specified for each allotment.

**Ambient (noise level)** – Sometimes called background noise level, reference sound level, or room noise level; the background sound pressure level at a given location, normally specified as a reference level to study a new intrusive sound source.

**Anthropogenic disturbances** – Human-created features including but not limited to paved highways, graded gravel roads, transmission lines, substations, wind turbines, oil and gas wells and associated facilities, geothermal wells and associated facilities, pipelines, landfills, agricultural conversion, homes, and mines.

**Appurtenant (minerals)** – A piece of equipment (e.g., pump jack, separator, storage tank, compressor station, metering equipment, etc.) necessary for production.

**Authorized (Forest) officer** – The Forest Service employee delegated the authority to perform a duty described in 36 CFR §228.104. Generally, a Regional Forester, Forest Supervisor, District Ranger, or Minerals Staff Officer, depending on the scope and level of the duty to be performed.

**Authorized use** – An activity (i.e., resource use) occurring on public lands that is either explicitly or implicitly recognized or legalized by law or regulation. The term may refer to activities occurring on public lands for which the Forest Service has issued a formal authorization document (e.g., livestock grazing permit, special-use authorization, approved plan of operation, etc.). Formal authorized uses can involve both commercial and non-commercial activity, facility placement, or event. These authorized uses are often spatially or temporally limited. Unless constrained or bounded by statute, regulation, or an approved forest plan decision, legal activities involving public enjoyment and use of the public lands (e.g., hiking, camping, hunting, etc.) require no formal Forest Service authorization.

**Avoidance mitigation** — Avoiding the impact altogether by not taking a certain action or parts of an action. (40 CFR §1508.20(a)) (e.g., may also include avoiding the impact by moving the proposed action to a different time or location.)

**Baseline condition** – The pre-existing condition of a defined area and/or resource that can be quantified by an appropriate metric(s). During environmental reviews, the baseline is considered the affected environment that exists at the time of the review's initiation and is used to compare predictions of the effects of the proposed action or a reasonable range of alternatives.

**Biologically Significant Unit** – A geographical/spatial area within greater sage-grouse habitat that contains relevant and important habitat that is used as the basis for comparative calculations to support evaluation of changes to habitat. A Biologically Significant Unit or subset of the unit is used in the calculation of the anthropogenic disturbance threshold and in the adaptive management habitat trigger. Specifically:

- NW Colorado- A geographical/spatial area within greater sage-grouse habitat that contains
  relevant and important habitat that is used as the basis for comparative calculations to support
  evaluation of changes to habitat. A Biologically Significant Unit or subset of the unit is used in the
  calculation of the anthropogenic disturbance threshold and in the adaptive management habitat
  trigger.
- *Idaho* All of the modeled nesting and delineated winter habitat, based on 2011 data, within priority and/or important habitat management areas within a Conservation Area.
- *Utah* The total priority habitat management area associated with a greater sage-grouse population area.
- Nevada- Represents nested lek clusters with similar climate and vegetation conditions. A BSU boundary is defined by similar environmental conditions where GRSG population dynamics are likely driven by larger scale variations (e.g., climate). BSUs are defined by the USGS (Coates et al. 2017) and are also used for anthropogenic disturbance calculations.

**Causal factor** – A resource use or activity (e.g., livestock grazing or oil and gas development) or other factor (e.g., wildfire or drought) contributing to the decline of GRSG habitat and/or populations as identified under Adaptive Management, resulting in a soft or hard trigger being tripped. A causal factor can occur singly or in combination with one another.

**Co-location** – Installation of new projects or improvements (i.e., communication towers, electrical lines, other rights-of-way, or designated corridors) in, on, or adjacent to existing projects or improvements.

**Communication tower site** – Sites that include broadcast types of uses (e.g., television, AM/FM radio, cable television, broadcast translator) and non-broadcast uses (e.g., commercial or private mobile radio service, cellular telephone, microwave, local exchange network, or passive reflector).

**Compensatory mitigation** – Compensating for the residual impact of a certain action or parts of an action by replacing or providing substitute resources or environments(s). (40 CFR §1508.20)

**Compensatory mitigation projects** – The restoration, creation, enhancement, and/or preservation of impacted resources (adopted and modified from 33 CFR §332), such as on-the-ground actions to improve and/or protect habitat (e.g., chemical vegetation treatments, land acquisitions, conservation easements, etc.).

**Compensatory mitigation sites** – The durable areas where compensatory mitigation projects will occur.

**Connectivity Habitat Management Area (CHMA)** – Management areas whose boundaries match Wyoming State designated Connectivity areas. They are identified as important to maintain transmission

of genetic material between core area populations. CHMA may or may not include breeding, late brood-rearing, and winter habitats. Connectivity Habitat Management Areas are only in Wyoming.

Conservation Area (Idaho and Utah as administered by the Sawtooth NF) — Areas determined to be necessary to monitor population objectives to evaluate the disturbance density and adaptive regulatory triggers and engage adaptive management responses. Conservation Areas may contain priority, important, and general habitat management areas. Specifically, these areas are Mountain Valleys, Desert, and West Owyhee.

**Controlled surface use** – A category of moderate constraint stipulations that allows some use and occupancy of public land while protecting identified resources or values and is applicable to fluid mineral leasing and all activities associated with fluid mineral leasing (e.g., truck-mounted drilling and geophysical exploration equipment off designated routes, construction of wells and/or pads, etc.).

**Core Habitat** – Core habitats are areas designated in the State of Wyoming's Sage-grouse Executive Order as the most important for Greater Sage-Grouse and include breeding, late brood-rearing, and winter habitats. They do not include known migration or connectivity corridors or winter concentration areas. In Wyoming, PHMA boundaries match Core Habitat boundaries identified in the Wyoming Sage-grouse Executive Order, Version 4 maps.

**Corridor** – A tract of land varying in width forming passageway through which various commodities such as oil, gas, and electricity are transported.

**Desired Condition (DC)** – A description of specific social, economic, and/or ecological characteristics of the plan area, or a portion of the plan area, toward which management of the land and resources should be directed. Desired conditions must be described in terms that are specific enough to allow progress toward their achievement to be determined, but do not include completion dates.

**Disruptive activities** – Land resource uses/activities that are likely to alter the behavior, displace, or cause excessive stress to the greater sage-grouse population occurring at a specific location and/or time. 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.

**Distribution line** – An electrical utility line with a capacity of less than 100kV or a natural gas, hydrogen, or water pipeline less than 24" in diameter.

**Diversity (biological)** – The number and distribution of plant and animal species within a specified geographic area. For purpose of the National Forest Management Act, the geographic area is a national forest or grassland unit.

**Durable (protective and ecological)** – The administrative, legal, and financial assurances that secure and protect the conservation status of a compensatory mitigation site and the ecological benefits of a compensatory mitigation project, for at least as long as the associated impacts persist.

**Enhance** – The improvement of habitat by increasing missing or modifying unsatisfactory components and/or attributes of the habitat (e.g., road commissioning) to meet greater sage-grouse objectives.

**Exception (minerals)** – A case-by-case exemption from a lease stipulation. The stipulation continues to apply to all other sites within the leasehold to which the restrictive criteria apply. The authorized officer (any employee of the Forest Service to whom has been delegated the authority to perform the duties described in the applicable Forest Service manual or handbook) may grant an exception if an environmental record of review determines that the action, as proposed or conditioned, would not impair the function or utility of the site for the current or subsequent seasonal habitat, life-history, or behavioral needs of the greater sage-grouse.

**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 but are not limited to fee title ownership, mineral rights, and easements. Such rights may have been reserved, acquired, granted, permitted, or otherwise authorized under various statutes of law over time.

**Feasible** – See technically/economically feasible.

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

**Forage reserve** – Designation for allotments on which there is no current term permit obligation for some or all of the estimated livestock grazing capacity and where there has been a determination made to use the available forage on the allotment to enhance management flexibility for authorized livestock use (FSH id 2209.13-2007-1).

**Forest transportation system** — Roads, trails, and areas designated for motor vehicle use that provide access to National Forest System lands for both motorized and non-motorized uses in a manner that is socially, environmentally, and economically sustainable over the long-term; enhances public enjoyment of National Forest System roads; and maintains other important values and uses.

**General Habitat Management Area (GHMA)** — Management areas that are likely to be occupied seasonally or year-round outside of PHMAs or other defined management areas where GHMA management would apply to sustain the GRSG population. GHMA may include active leks, seasonal habitats, and fragmented or marginal habitat. These areas have been identified by the FS and BLM in coordination with respective state wildlife agencies. Idaho, Nevada, Utah, Wyoming, and Colorado have GHMA.

**Guideline (GL)** – A constraint on project and activity decisionmaking that allows for departure from its terms, so long as the purpose of the guideline is met. Guidelines are established to help achieve or maintain a desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements.

**Habitat** — An environment that meets a specific set of physical, biological, temporal, or spatial characteristics that satisfy the requirements of a plant or animal species or group of species for part or all of its life cycle.

**Hard trigger** – A threshold indicating that immediate action is necessary to stop a severe deviation from greater sage-grouse conservation objectives set forth in the land and RMP.

High-voltage transmission line – An electrical power line that is 100 kilovolts or larger.

**High elevation** – High elevation covers mid to high elevation areas comprised primarily of basin (midelevation) and mountain big sagebrush (high-elevation), as well as other mesic and higher elevation vegetation communities. (Previously the Mesic precipitation zone).

**Holder** – An individual or entity that holds a special-use authorization.

**Impact** – The effect, influence, alteration, or imprint caused by an action.

Important Habitat Management Areas (IHMA) — Areas that contain additional habitat and populations that provide a management buffer for PHMA and to connect patches of PHMA. IHMAs are typically adjacent to PHMAs but generally reflect somewhat lower GRSG population status and/or reduced habitat value due to disturbance, habitat fragmentation or other factors. IHMAs are only in Idaho.

**Indicators** – Factors that describe resource condition and change and can help the BLM and the Forest Service determine trends over time.

**Invasive species (invasive plant species, invasives)** – An alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health. The species must cause or be likely to cause harm and be exotic to the ecosystem it has infested before considered invasive.

**Isolated parcel** – An individual parcel of land that may share a corner but does not have a common border with another parcel.

**Key habitat** – Key habitat includes areas of generally intact sagebrush that provide sage-grouse habitat during some portion of the year. The Key Habitat Map in Idaho is intended to be updated annually and tracks effective habitat, effects to that habitat from fire, restoration efforts and use by GRSG.

**Landownership adjustment** – Land adjustments to National Forest System lands by purchase, exchange, interchange, or conveyance under authority delegated by law to the Secretary of Agriculture.

**Landscape** – A distinct association of land types that exhibit a unique combination of local climate, landform, topography, geomorphic process, surficial geology, soil, biota, and human influences. Landscapes are generally of a size that the eye can comprehend in a single view.

**Landscape scale** — At a scale that allows for bird dispersal and migration movements within the population and subpopulation area (Stiver et al 2015).

**Lease** – A contract granting use or occupation of property during a specified period in exchange for a specified rent or other form of payment; a type of special-use authorization (usually granted for uses other than linear rights-of-way) that is used when substantial capital investment is required and when conveyance of a conditional and transferable interest in National Forest System lands is necessary or desirable to serve or facilitate authorized long-term uses and that may be revocable and compensable according to the terms.

**Leasable minerals** – Those minerals or materials designated as leasable under the Mineral Leasing Act of 1920, as amended, and the Mineral Leasing Act for Acquired Lands of 1947. These include energy-related mineral resources such as oil, natural gas, coal, and geothermal and some non- energy minerals, such as phosphate, sodium, potassium, and sulfur. Geothermal resources are also leasable under the Geothermal

Steam Act of 1970.

**Lek** – A courtship display area attended by the male greater sage-grouse in or adjacent to sagebrush-dominated habitat.

**Lek Buffer** – An area, identified using state-based or disturbance-based distances from the center or perimeter of a lek, where restrictions on permitted activities may be implemented.

**Lek cluster** – A group of leks in the same vicinity, among which GRSG may interchange over time and representing a group of closely related individuals. A lek cluster boundary is defined by minimal GRSG movement between clusters, so demographic rates are influenced by birth/death rates rather than immigration/emigration. Lek clusters are defined by the USGS (Coates et al. 2017).

Lek Perimeter – The outer perimeter of a lek and associated satellite leks (if present). Perimeters of all leks should be mapped by experienced observers using accepted protocols, by state. Perimeters may vary over time as population levels or habitat and weather conditions fluctuate. However, mapped perimeters should not be adjusted unless grouse use consistently (2+ years) demonstrates the existing perimeter is inaccurate. The lek location must be identified and recorded as a specific point within the lek perimeter. This point may be the geographic center of the perimeter polygon calculated though a GIS exercise, or a GPS waypoint recorded in the field, which represents the center of breeding activity typically observed on the lek (WDFG 2012).

**Lessee** – A person or entity holding record title in a lease issued by the United States; a person or entity authorized to use and occupy National Forest System lands under a specific instrument identified as a lease.

**Livestock conversion** – To change the kind of livestock authorized to graze on National Forest System lands (e.g., a change from sheep to cows).

**Locatable minerals** – Mineral disposable under the General Mining Act of 1872, as amended, that was not excepted in later legislation. These include hardrock, placer, and industrial minerals and uncommon varieties of rock found on public domain lands.

**Low Elevation** – Low elevation areas in the state, comprised primarily of Wyoming big sagebrush communities, with some basin big sagebrush included. (Previously the Arid precipitation zone).

Major pipeline – A pipeline that is 24 inches or more in outside-pipe diameter (Mineral Leasing Act of 1920, as amended, 30 U.S.C. § 181; 36 CFR §251.54(f)(1)).

**Management Approach** – A management approach is a statement of the principal strategies and program priorities the Responsible Official intends to employ to carry out projects and activities in the plan area. A management approach is optional content in a land management plan, is not a plan component, and can be changed, or added to or removed from a land management plan, following notice to the public. 36 CFR §219.7(e)(2), and §219.13(c).

Marginal habitat – An area that supports the species but has generally lower survival rates and reproductive success by comparison and may or may not have the potential to become suitable in the future (Stiver et al. 2015).

**Mineral** – Any naturally formed inorganic material; solid or fluid inorganic substance that can be extracted from the earth; any of various naturally occurring homogeneous substances (e.g., stone, coal, salt, sulfur, sand, petroleum, water, or natural gas) obtained usually from the ground. Under federal laws, considered as locatable (subject to the general mining laws), leasable (subject to the Mineral Leasing Act of 1920, as amended), and salable (subject to the Materials Act of 1947).

**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.

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

**Mitigation**—Mitigation, as described in the White House Council on Environmental Quality's (CEQ's) NEPA regulations at 40 CFR 1508.20, is the hierarchy of avoiding environmental impacts, minimizing impacts, and/or compensating for residual impacts. Thus, 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, rehabilitating, 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 (oil and gas)** – A fundamental change to the provisions of a lease stipulation either temporarily or for the term of the lease. A modification may include an exemption from or alteration to a stipulated requirement. Depending on the specific modification, the stipulation may or may not apply to all other sites within the leasehold to which the restrictive criteria applied.

**Native plant species** – A plant species that occurs naturally in a particular region, state, ecosystem, and habitat without direct or indirect human actions.

**Net conservation gain** – The actual benefit or gain realized after compensating for a proposed action that degrades greater sage-grouse habitat; it may be shown by a net increase in sage-grouse habitat above the baseline conditions that existed before a proposed action.

No surface occupancy — 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 and/or pads) are prohibited to protect identified resource values. Areas identified as No Surface Occupancy 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 No Surface Occupancy area.

**No net habitat Loss** – Retaining an equivalent amount of sage-grouse habitat after a proposed action that is equal to or above baseline conditions that existed before the proposed action.

**Non-habitat** – An area within the historical distribution of sage-grouse that is unoccupied, does not currently provide habitat, and does not have the potential to provide habitat in the foreseeable future

(<100 years) (Stiver et al. 2015).

**Objective (O)** – A concise, measurable, and time-specific statement of a desired rate of progress toward a desired condition or conditions. Objectives should be based on reasonably foreseeable budgets.

Occupied lek – A lek that has been active during at least one strutting season within the prior 10 years.

Other Habitat Management Area (OHMA) – Areas determined to be moderate to low habitat suitability for greater sage-grouse in areas of estimated low space use. This habitat management class represents areas with appropriate environmental conditions for greater sage-grouse, but that are less frequently used by greater sage-grouse. OHMA is only designated in Nevada.

**Pending lek** – Any lek that has two or more males observed only once in the last five years.

**Permit** – A special-use authorization that provides permission, without conveying an interest in land, to occupy and use National Forest System lands or facilities for specified purposes and which is both revocable and terminable.

**Permit cancellation** – Action taken to permanently invalidate a term grazing permit in whole or part.

**Persistent woodlands** – Long-lived pinyon-juniper woodlands that typically have sparse understories and occur on poor substrates in the assessment area.

**Plan of operation** – A Plan of Operation is required for all mining activity conducted under the General Mining Act of 1872, as amended, if the proposed operations will likely cause significant disturbance of surface resources. The Plan of Operation 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 CR 228.4).

**Practicable** – Useful for the intended purpose and able to be done or put into practice successfully.

**Prescribed fire** – Any fire ignited by management actions to meet specific objectives. A written, approved prescribed fire plan must exist, and National Environmental Policy Act requirements, where applicable, must be met before ignition.

**Priority Habitat Management Areas (PHMA)** – Management areas that have been identified as having the highest conservation value to maintaining sustainable GRSG populations. These areas are occupied seasonally or year-round and include breeding, late brood-rearing, and winter habitat. The FS and BLM have identified these areas in coordination with respective state wildlife agencies. Idaho, Nevada, Utah, Wyoming, and Colorado have PHMA. In Wyoming, PHMA boundaries match Core Areas identified in the Wyoming Sage-grouse Executive Order, Version 4 maps.

**Prohibit** – To forbid (something) by law, rule, or other authority; no authorizations will be issued, meaning no authorization will be granted.

**Proper Functioning Condition** – Ecosystems at any temporal or spatial scale are in a properly functioning condition when they are dynamic and resilient to perturbations to structure, composition, and processes

of their biological or physical components. For riparian-wetlands: an area in which adequate vegetation or other structure components are present to dissipate energy, reduce erosion and improve water quality, filter sediment and aid in floodplain development, improve flood-water retention and ground-water recharge, stabilize streambanks and shorelines, develop diverse ponding and channel characteristics for fish and wildlife habitat among other things, and support greater biodiversity.

**Reclamation plans** – Plans that guide 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 pre-determined objectives and/or make it acceptable for certain defined resources (e.g., wildlife habitat, grazing, ecosystem function, etc.).

**Residual impacts** – Impacts from an implementation-level decision that remain after applying avoidance and minimization mitigation; also referred to as unavoidable impacts.

**Responsible official** – The Agency employee who has the authority to make and implement a decision on a proposed action (36 CFR 220.3).

**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 the greater sagegrouse. The short-term goal may be to restore the landform, soils, and hydrology and increase the percentage of preferred vegetation, seeding of desired species, or treatment of undesired species.

**Restriction/restrict** – A limitation or constraint, not a prohibition, on public land uses and operations. Restrictions can be of any kind but most commonly apply to certain types of vehicle use, temporal and/or spatial constraints, or certain authorizations.

**Right-of-way** – Land authorized to be used or occupied for the construction, operation, maintenance, and termination of a project or facility passing over, upon, under, or through such land.

**Road or trail** – A road or trail wholly or partly within or adjacent to and serving the National Forest System that the Forest Service determines is necessary for the protection, administration, and utilization of the National Forest System and the use and development of its resources.

**Sagebrush Focal Areas** – Areas identified by the U.S. Fish and Wildlife Service that represent recognized "strongholds" for the greater sage-grouse that have been noted and referenced as having the highest densities of greater sage-grouse and other criteria important for the persistence of the species.

**Satellite lek** – A relatively small lek (usually less than 15 males) within about 500 meters of a large lek often documented during years of relatively high grouse numbers. Locations of satellite leks should be encompassed within lek perimeter boundaries.

**Soft triggers** – An intermediate threshold indicating that management changes are needed at the implementation level to address habitat or population losses.

**Special-use authorization** – A written permit, term permit, lease, or easement that authorizes use or occupancy of National Forest System lands and specifies the terms and conditions under which the use

or occupancy may occur.

**Standard (ST)** – A mandatory constraint on project and activity decisionmaking, established to help achieve or maintain the desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements.

Stipulation (general) – A term or condition in an agreement, contract, or written authorization.

**Stipulation (oil and gas)** – A provision that modifies standard lease rights and is attached to and made a part of the lease. Lease stipulations include No Surface Occupancy, Timing Limitations, and Controlled Surface Use.

**Suitable habitat** – An area that provides environmental conditions necessary for successful survival and reproduction to sustain stable populations (Stiver et al. 2015).

**Surface disturbing activities** – Actions that alter the vegetation, surface/near surface soil resources, and/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; maintenance activities; and several types of vegetation treatments (e.g., prescribed fire, etc.). Surface disturbing activities may be restricted, not allowed, or not authorized.

**Surface occupancy** – Placement or construction on the land surface of semi-permanent or permanent facilities requiring continual service or maintenance. Casual use is not included.

**Surface use** – Activities that may be present on the surface or near-surface (e.g., pipelines) of public lands. When administered as a use restriction (e.g., No Surface Occupancy), 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, etc.) and/or administrative sites (e.g., government ware-yard, etc.) where only authorized agency personnel are admitted.

**Tall structures** – A wide array of infrastructures (e.g., poles that support lights, telephone, and electrical distribution; communication towers; meteorological towers; high-tension transmission towers; and wind turbines) that have the potential to disrupt lekking or nesting birds by creating new perching/nesting opportunities and/or decreasing the use of an area. A determination as to whether something is considered a tall structure would be based on local conditions such as vegetation or topography.

**Technically/economically feasible** — Actions that are practical or feasible from the technical and economic standpoint and using common sense rather than simply desirable from the standpoint of the applicant. It is the Forest Service's responsibility to determine what actions are technically and economically feasible based on a review of the applicant's rationale and the available best science. The Forest Service will consider whether implementation of the proposed action is likely given past and current practice and technology; this consideration does not necessarily require a cost-benefit analysis or speculation about an applicant's costs and profit.

**Temporary special-use permit** – A type of permit that terminates within 1 year or less after the approval date. All other provisions applicable to permits apply fully to temporary permits.

Temporary special-use permits are issued for seasonal or short-duration uses involving minimal improvement and investment.

**Term permit** – An authorization to occupy and use National Forest System lands other than rights- ofway for a specified period that is both revocable and compensable according to its terms.

**Timeliness** – The lack of a time lag between impacts and the achievement of compensatory mitigation goals and objectives.

**Timely** – The conservation benefits from compensatory mitigation accruing as early as possible or before impacts have begun.

Timing limitations – A moderate constraint, applicable to fluid mineral leasing, on all activities associated with fluid mineral leasing (e.g., truck-mounted drilling and geophysical exploration equipment off designated routes; construction of wells and/or pads); and other surface disturbing activities (i.e., those not related to fluid mineral leasing). Areas identified for Timing Limitations are closed to fluid mineral exploration and development; surface-disturbing activities; and intensive human activity during identified timeframes. 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 in nature are not allowed. Intensive maintenance, such as workovers on wells, is not permitted. Timing Limitations can overlap spatially with No Surface Occupancy and Controlled Surface Use, as well as with areas that have no other restrictions.

**Transmission line** – An electrical utility line with a capacity greater than or equal to 100kV or a natural gas, hydrogen, or water pipeline greater than or equal to 24" in diameter.

**Unsuitable habitat** – An area that does not currently provide one or more of the life requisites and therefore does not provide habitat, but it may provide habitat sometime in the foreseeable future (<100 years) through succession or restoration (Stiver et al. 2015).

**Utility-scale and/or commercial energy development** – A project that is capable of producing 20 or more megawatts of electricity for distribution to customers through the electricity-transmission- grid system.

**Vegetation treatments** – Management practices that are designed to maintain current vegetation structure or change the vegetation structure to a different stage of development. Vegetation treatment methods may include managed fire, prescribed fire, chemical, mechanical, and seeding.

**Waived without preference** – A permittee waives a term grazing permit to the United States without identifying a preferred applicant (i.e., a third party that has purchased either permitted livestock, base property, or both).

**Waiver (oil and gas)** – Permanent exemption from a lease stipulation. The stipulation no longer applies anywhere within the leasehold.

**West Nile virus** – A virus that is found in temperate and tropical regions of the world and most commonly transmitted by mosquitoes. West Nile virus can cause flu-like symptoms in humans and can be lethal to birds, including the greater sage-grouse.

**Wildfire suppression** – An appropriate management response to wildfire or prescribed fire that results in curtailment of fire spread and eliminates all identified threats from the particular fire.

Winter Concentration Areas — Areas that are a habitat feature exclusively designated by the State of Wyoming and mapped by the Wyoming Game and Fish Department (WGFD). Winter Concentration Areas are designated and mapped areas where biologically significant numbers of core habitat birds persistently congregate in an area outside of PHMA between December 1 to March 14. No Winter Concentration Areas are currently mapped on NFS lands in Wyoming. If Winter Concentration Areas are designated by the State of Wyoming and mapped by WGFD, the appropriate plan components would be applied. Winter Concentration Areas are only in Wyoming.

**Withdrawal (land)** – Withholding an area of federal land from settlement, sale, location, or entry under some or all of the general land laws, including the mining and mineral leasing laws, for the purpose of limiting activities under those laws to maintain other public values in the area or for reserving the area for a particular public purpose or program.

## ATTACHMENT D – MANAGEMENT APPROACH FOR FLUID MINERALS: STIPULATIONS

#### ATTACHMENT D – MANAGEMENT APPROACH FOR FLUID MINERALS: STIPULATIONS

Appendix G in the FEIS contains Fluid Minerals: Stipulations for all five states located in the planning area. Attachment D is a modified version of Appendix G and only contains stipulations that are applicable to National Forest System land in Wyoming. The stipulations have been developed as management strategies for when standards and guidelines call for specific restrictions on fluid minerals activities.

#### **Summary of Forest Plan Component Reference and Applicable Stipulation**

Stipulation	Component
WY1	GRSG-TDDD-GL-014
WY2	GRSG-TDDD-GL-016
WY3	GRSG-TDDD-GL-017
WY4	GRSG-TDDD-GL-018
WY5	GRSG-TDDD-GL-019
WY6	GRSG-TDDD-GL-020
WY7	GRSG-TDDD-GL-026
WY8	GRSG-TDDD-GL-21

## STIPULATON WY1: NO SURFACE OCCUPANCY STIPULATION Greater Sage-Grouse Priority and Connectivity Habitat Management Areas Where Density of Activities Exceeds One Pad per 640 Acres

GRSG-TDDD-GL-014

No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).

On lands located in priority habitat management areas or connectivity habitat management areas where oil and gas development exceed an average of one pad per 640 acres, using the current Density Disturbance Calculation Tool process or its replacement.

Insert applicable legal land description here.

#### For the purpose of:

Protecting greater sage-grouse (GRSG) habitat.

**Exceptions:** The authorized officer may grant an exception if a review determines that the action, as proposed or conditioned, would not impair the function or utility of the site for the current or subsequent seasonal habitat, life-history, or behavior needs of the GRSG. The FS can and does grant exceptions if the FS, in coordination with the state agency, determines that granting an exception would not adversely impact the population being protected. The FS will coordinate with the State wildlife agency to consider the Wyoming Compensatory Mitigation Framework as the primary mechanism to calculate credits and debits that adequately offset the effects of the disturbance.

**Modifications:** The authorized officer may modify the area subject to the stipulation or the criteria if an environmental record of review finds that a portion of the area is non-habitat and disturbance there does not preclude effective sage-grouse use of adjacent habitats, or if it is identified through scientific research or monitoring that the existing criteria are inadequate or overly protective for maintaining the function or utility of the site for habitat.

**Surface:** This stipulation may be waived over the entire lease if, in coordination with the State agency, it is determined that the described lands are incapable of serving the long-term requirements of GRSG habitat for which the stipulation applies.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

Attachment D - Fluid Minerals: Stipulations

## STIPULATION WY2: NO SURFACE OCCUPANCY STIPULATION Greater Sage-Grouse Occupied Leks in Priority and Connectivity Habitat Management Areas GRSG-TDDD-GL-016

No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).

On or within a 0.6 mile radius of the perimeter of occupied leks that are located in priority habitat management areas or connectivity habitat management areas.

Insert applicable legal land description here.

#### For the purpose of:

Protecting greater sage-grouse (GRSG) habitat.

**Exceptions:** The authorized officer may grant an exception if a review determines that the action, as proposed or conditioned, would not impair the function or utility of the site for the current or subsequent seasonal habitat, life-history, or behavior needs of the GRSG. The FS can and does grant exceptions, in coordination with the state agency, determines that granting an exception would not adversely impact the population being protected. The FS will coordinate with the State wildlife agency to consider the Wyoming Compensatory Mitigation Framework as the primary mechanism to calculate credits and debits that adequately offset the effects of the disturbance.

**Modifications:** The authorized officer may modify the area subject to the stipulation or the criteria if an environmental record of review finds that a portion of the area is non-habitat and disturbance there does not preclude effective sage-grouse use of adjacent habitats, or if it is identified through scientific research or monitoring that the existing criteria are inadequate or overly protective for maintaining the function or utility of the site for habitat.

**Waiver:** This stipulation may be waived over the entire lease if, in coordination with the State agency, it is determined that the described lands are incapable of serving the long-term requirements of GRSG seasonal habitat for which the stipulation applies.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

Attachment D - Fluid Minerals: Stipulations

### STIPULATION WY3: NO SURFACE OCCUPANCY STIPULATION Greater Sage-Grouse Occupied Leks in General Habitat Management Areas

GRSG-TDDD-GL-017

No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).

On or within a 0.25 mile radius of the perimeter of occupied leks that are located in general habitat management areas.

Insert applicable legal land description here.

#### For the purpose of:

Protecting greater sage-grouse (GRSG) habitat.

**Exceptions:** The authorized officer may grant an exception if a review determines that the action, as proposed or conditioned, would not impair the function or utility of the site for the current or subsequent seasonal habitat, life-history, or behavior needs of the GRSG. The FS can and does grant exceptions if the FS, in coordination with the state agency, determines that granting an exception would not adversely impact the population being protected. The FS will coordinate with the State wildlife agency to consider the Wyoming Compensatory Mitigation Framework as the primary mechanism to calculate credits and debits that adequately offset the effects of the disturbance.

**Modifications:** The authorized officer may modify the area subject to the stipulation or the criteria if an environmental record of review finds that a portion of the area is non-habitat and disturbance there does not preclude effective sage-grouse use of adjacent habitats, or if it is identified through scientific research or monitoring that the existing criteria are inadequate or overly protective for maintaining the function or utility of the site for habitat.

**Waiver:** This stipulation may be waived over the entire lease if, in coordination with the state agency, it is determined that the described lands are incapable of serving the long-term requirements of GRSG breeding, nesting, or brood-rearing habitat for which the stipulation applies.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

Attachment D - Fluid Minerals: Stipulations

## STIPULATION WY4: TIMING LIMITATION STIPULATION Greater Sage-Grouse Priority Habitat Management Areas

GRSG-TDDD-GL-018

No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.

No surface disturbing or disruptive activities from March 15 through June 30 in priority habitat management areas.

#### On the lands described below:

Insert applicable legal land description here.

#### For the purpose of:

Protecting greater sage-grouse (GRSG) priority habitat management areas (PHMA).

**Exceptions:** The authorized officer may grant an exception if an environmental record of review determines that the action, as proposed or conditioned, will not affect PHMA. Actions designed to enhance the long-term utility or availability of suitable GRSG habitat may be exempted from this timing limitation. The FS can and does grant exceptions to seasonal restrictions if the FS, in coordination with the state agency, determines that granting an exception would not adversely impact the population being protected. The FS will coordinate with the State wildlife agency to consider the Wyoming Compensatory Mitigation Framework as the primary mechanism to calculate credits and debits that adequately offset the effects of the disturbance. Where credible data, based upon field analysis, support different timeframes that better protect the bird and its use of habitat, dates may be shifted by either 14 days before or after the above dates, but not both.

**Modifications:** The authorized officer may modify the area subject to the stipulation or the criteria if an environmental record of review finds that a portion of the area is non-habitat and disturbance there does not preclude effective sage-grouse use of adjacent habitats, or if it is identified through scientific research or monitoring that the existing criteria are inadequate or overly protective for maintaining the function or utility of the site for habitat.

**Waiver**: This stipulation may be waived over the entire lease if, in coordination with the State agency, it is determined that the described lands are no longer considered in the land use plan to be within a GRSG designated PHMA or are incapable of serving the long-term requirements of GRSG seasonal habitat, and that these ranges no longer warrant consideration as components of GRSG habitat.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

Attachment D - Fluid Minerals: Stipulations

### STIPLUATION WY5: TIMING LIMITATION STIPULATION Greater Sage-Grouse Leks within Connectivity Habitat Management Areas

GRSG-TDDD-GL-019

No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.

No new surface disturbing or disruptive activities will be authorized from March 15 through June 30 within 4 miles of a lek perimeter within connectivity habitat management areas.

#### On the lands described below:

Insert applicable legal land description here.

#### For the purpose of:

Protecting greater sage-grouse (GRSG) leks within connectivity habitat management areas.

**Exceptions**: The authorized officer may grant an exception if an environmental record of review determines that the action, as proposed or conditioned, would not impair the function or utility of the site for the current or subsequent seasonal habitat, life-history, or behavioral needs of GRSG. Actions designed to enhance the long-term utility or availability of suitable GRSG habitat may be exempted. The FS can and does grant exceptions to seasonal restrictions if the FS, in coordination with the state agency, determines that granting an exception would not adversely impact the population being protected. The FS will coordinate with the State wildlife agency to consider the Wyoming Compensatory Mitigation Framework as the primary mechanism to calculate credits and debits that adequately offset the effects of the exception.

Where credible data, based upon field analysis, support different timeframes that better protect the bird and its use of habitat, dates may be shifted by either 14 days before or after the above dates, but not both.

**Modifications**: The authorized officer may modify the size and shape of the area or the criteria if an environmental record of review finds that a portion of the area is non-habitat and disturbance there does not preclude effective sage-grouse use of adjacent habitats, or if it is identified through scientific research or monitoring that the existing criteria are inadequate or overly protective for maintaining the function or utility of the site for habitat.

**Waiver:** This stipulation may be waived over the entire lease if, in coordination with the state agency, it is determined that the described lands are no longer considered capable of serving the long-term requirements of GRSG breeding habitat.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

Attachment D - Fluid Minerals: Stipulations

### STIPULATON WY6: TIMING LIMITATION STIPULATION Greater Sage-Grouse Occupied Lek or Lek Perimeter in General Habitat Management Areas

GRSG-TDDD-GL-020

No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.

No new surface disturbing or disruptive activities will be authorized from March 15 to June 30 within 2.0 miles of the lek or lek perimeter of any occupied lek in general habitat management areas (GHMA).

#### On the lands described below:

Insert applicable legal land description here.

#### For the purpose of:

Protecting GRSG breeding and nesting habitat associated with occupied leks.

**Exceptions:** The authorized officer may grant an exception if an environmental record of review determines that the action, as proposed or conditioned, would not impair the function or utility of the site for the current or subsequent seasonal habitat, life-history, or behavioral needs of GRSG. The FS can and does grant exceptions if the FS, in coordination with the state agency, determines that granting an exception would not adversely impact the population being protected. The FS will coordinate with the State wildlife agency to consider the Wyoming Compensatory Mitigation Framework as the primary mechanism to calculate credits and debits that adequately offset the effects of the disturbance. Where credible data, based upon field analysis, support different timeframes that better protect the bird and its' use of habitat, dates may be shifted by either 14 days before or after the above dates, but not both.

**Modifications:** The authorized officer may modify the area subject to the stipulation or the criteria if an environmental record of review finds that a portion of the area is non-habitat and disturbance there does not preclude effective sage-grouse use of adjacent habitats, or if it is identified through scientific research or monitoring that the existing criteria are inadequate or overly protective for maintaining the function or utility of the site for habitat.

**Waiver:** This stipulation may be waived over the entire lease if, in coordination with the state agency, it is determined that the described lands are incapable of serving the long-term requirements of GRSG breeding, nesting, or brood-rearing habitat.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

Attachment D - Fluid Minerals: Stipulations

#### STIPULATON WY7: TIMING LIMITATION STIPULATION

#### **Greater Sage-Grouse Winter Concentration Areas**

GRSG-TDDD-GL-026

No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.

No new surface disturbing or disruptive activities from December 1 through March 14 within winter concentration areas specifically mapped and designated by the Wyoming Game and Fish Department.

#### On the lands described below:

Insert applicable legal land description here.

#### For the purpose of:

Protecting Greater Sage-Grouse (GRSG) populations that reside in Priority Habitat Management Areas, but migrate to unique specified winter habitat areas.

**Exceptions:** The authorized officer may grant an exception if an environmental record of review determines that the action, as proposed or conditioned, will not impair the function and suitability of the winter concentration area, or it is determined that the winter concentration area is not occupied by concentrated populations of GRSG during the period of concern. Actions designed to enhance the long-term utility or availability of suitable GRSG habitat may be exempted from this timing limitation. The FS can and does grant exceptions to seasonal restrictions if the FS, in coordination with the state agency, determines that granting an exception would not adversely impact the population being protected. The FS will coordinate with the State wildlife agency to consider the Wyoming Compensatory Mitigation Framework as the primary mechanism to calculate credits and debits that adequately offset the effects of the disturbance.

**Modifications:** The authorized officer may modify the area subject to the stipulation or the criteria if an environmental record of review finds that a portion of the area is non-habitat and disturbance there does not preclude effective sage-grouse use of adjacent habitats, or if it is identified through scientific research or monitoring that the existing criteria are inadequate or overly protective for maintaining the function or utility of the site for habitat.

**Waiver:** This stipulation may be waived over the entire lease if, in coordination with the state agency, it is determined that the described lands are incapable of serving the long-term requirements of GRSG winter concentration areas.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

Attachment D - Fluid Minerals: Stipulations

### STIPULATON WY8: TIMING LIMITATION STIPULATION Greater Sage-Grouse – Noise Limitation

GRSG-GEN-GL-021

Surface occupancy or use is subject to the following special operating constraints.

New project noise levels (individual or cumulative), n priority habitat management areas either that exceed 10 dBA (as measured by L50) above baseline noise at the perimeter of the lek (or lek center if no perimeter is yet mapped) will not be authorized from March 1 to May 15 from 6 p.m. to 8 a.m.

#### On the lands described below:

Insert applicable legal land description here.

#### For the purpose of:

Limiting disturbances to greater sage-grouse (GRSG) during lekking.

**Exceptions:** The deciding official may grant an exception if an environmental record of review determines that the action, as proposed or conditioned, would not impair the function or utility of the site for the current or subsequent seasonal habitat, life-history, or behavioral needs of GRSG. Actions designed to enhance the long-term utility or availability of suitable GRSG habitat may be exempted from this timing limitation. The FS can and does grant exceptions to seasonal restrictions if the FS, in coordination with the state agency, determines that granting an exception would not adversely impact the population being protected.

**Modifications:** The deciding official may modify the size and shape of the area or the criteria if an environmental record of review finds that a portion of the area is non-habitat and disturbance there does not preclude effective sage-grouse use of adjacent habitats, or if it is identified through scientific research or monitoring that the existing criteria are inadequate or overly protective for maintaining the function or utility of the site for habitat, life-history, or behavioral needs of the GRSG, including (but not limited to) reproductive display, daytime loafing/staging activities, and nesting.

**Waiver:** This stipulation may be waived over the entire lease if, in coordination with the state wildlife agency, it is determined that the GRSG lek that would be disturbed by the noise has been classified as unoccupied (not active in the prior 10 years) as determined by the state wildlife agency.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.

Attachment D – Fluid Minerals: Stipulations

## ATTACHMENT E – DESIRED CONDITIONS FOR NFS LANDS IN WYOMING

#### ATTACHMENT E - DESIRED CONDITIONS FOR NFS LANDS IN WYOMING

Attachment E is Appendix F in the FEIS. The desired condition values identified in Table E-1 are initial references based on range-wide habitat selection by greater sage-grouse and should be refined collaboratively at a local level, if appropriate. Not all areas will be capable of achieving desired condition values due to factors such as variation of vegetation communities and ecological site potential.

Table E-1. Seasonal habitat desired conditions for greater sage-grouse.

ATTRIBUTE	Table E-1. Seasonal habitat desired co	DESIRED CONDITION		
AREAS MANAGED FOR BREEDING AND NESTING <sup>1,2,3</sup> (Seasonal Use Period from March 15 to June 30) Apply 5.3 miles from occupied leks. <sup>4</sup>				
Lek Security	Proximity of trees <sup>5</sup>	Trees or other tall structures are absent to uncommon		
	Proximity of sagebrush to leks <sup>6</sup>	Adjacent protective sagebrush cover within 328 feet of lek <sup>6</sup>		
Cover	Seasonal habitat extent <sup>7</sup> (Percent of seasonal habitat meeting desired conditions)	>80% of the breeding and nesting habitat		
	Sagebrush canopy cover <sup>6,7,8</sup>	5 to 25%.		
	Sagebrush height <sup>7</sup> Arid sites <sup>7,9</sup>	4 to 32 inches in black sage and 12 to 32 inches in all other areas		
	Mesic sites <sup>7,10</sup>	All Wyoming National Forests and National Grasslands: 16 to 32 inches		
	Predominant sagebrush shape <sup>6</sup>	>50% in spreading <sup>11</sup>		
	Perennial grass canopy cover <sup>6, 7</sup> Arid sites <sup>6,7,9</sup> Mesic sites <sup>6,7,10</sup>	≥10% ≥15%		
	Perennial grass height <sup>6,7,8</sup>	Provide overhead and lateral concealment from predators <sup>6,15</sup>		
	Perennial forb canopy cover <sup>6,7,8</sup> Arid sites <sup>9</sup> Mesic sites <sup>10</sup>	≥5% <sup>6,7</sup> ≥10% <sup>6,7</sup>		
	D FOR BROOD-REARING/SUMMER <sup>1</sup> riod from July 1-to November 30)			
Cover	Seasonal habitat extent <sup>7</sup> (Percent of seasonal habitat meeting desired conditions)	>40% of the brood-rearing/summer habitat.		
	Sagebrush canopy cover <sup>6,7,8</sup>	10 to 25%		
	Sagebrush height <sup>7,8</sup>	4 to 32 inches in black sage and 12 to 32 inches in all other areas		

ATTRIBUTE	INDICATORS	DESIRED CONDITION		
	Perennial grass canopy cover and forbs <sup>7,8</sup>	>15%		
	Riparian areas/mesic meadows	Proper functioning condition <sup>12, 16</sup>		
	Upland and riparian perennial forb availability <sup>6,7</sup>	Preferred forbs are common with several preferred species present <sup>13</sup>		
	Sagebrush cover adjacent to riparian areas/mesic meadows <sup>6</sup>	Within 328 feet		
WINTER¹ (Seasonal Use Period from December 1 to March 14)				
Cover and Food	Seasonal habitat extent <sup>6,7,8</sup> (Percent of seasonal habitat meeting desired conditions)	>80% of the winter habitat		
	Sagebrush canopy cover above snow <sup>6,7,8</sup>	>10%		
	Sagebrush height above snow <sup>6,7,8</sup>	>10 inches <sup>14</sup>		

#### **Footnotes Table E-1:**

<sup>&</sup>lt;sup>1</sup>Seasonal dates can be adjusted; that is, start and end dates may be shifted either earlier or later, but the local unit cannot shorten or lengthen the amount of days.

<sup>&</sup>lt;sup>2</sup> Doherty 2008

<sup>&</sup>lt;sup>3</sup> Holloran and Anderson 2005

<sup>&</sup>lt;sup>4</sup> Buffer distance may be changed only if 3 out of 5 years if peer-reviewed and published telemetry studies indicate the 5.3 miles is not appropriate.

<sup>&</sup>lt;sup>5</sup> Baruch-Mordo et al. 2013

<sup>&</sup>lt;sup>6</sup> Stiver et al. 2015

<sup>&</sup>lt;sup>7</sup>Connelly et al. 2000

<sup>&</sup>lt;sup>8</sup>Connelly et al. 2003

<sup>&</sup>lt;sup>9</sup> 10–12 inch precipitation zone; *Artemisia tridentata wyomingensis* is a common big sagebrush sub-species for this type site (Stiver et al. 2015).

<sup>&</sup>lt;sup>10</sup>≥12 inch precipitation zone; *Artemisia tridentata vaseyana* is a common big sagebrush sub-species for this type site (Stiver et al. 2015).

<sup>&</sup>lt;sup>11</sup> Sagebrush plants with a spreading shape provide more protective cover than sagebrush plants that are more tree- or columnar shaped (Stiver et al. 2015).

<sup>&</sup>lt;sup>12</sup> Existing LMP desired conditions for riparian areas/wet meadows (spring seeps) may be used in place of properly functioning conditions, if appropriate for meeting greater sage-grouse habitat requirements.

<sup>&</sup>lt;sup>13</sup> Preferred forbs are listed in Stiver et al. 2015 (Table B-1). Overall total forb cover may be greater than that of preferred forb cover since not all forb species are listed as preferred.

<sup>&</sup>lt;sup>14</sup> The height of sagebrush remaining above the snow depends upon snow depth in a particular year. Intent is to manage for tall, healthy sagebrush stands.

<sup>&</sup>lt;sup>15</sup>Coates et al. 2013

<sup>&</sup>lt;sup>16</sup>Prichard et al. 2003, Dickard et al. 2015

# ATTACHMENT F – MONITORING FRAMEWORK MANAGEMENT APPROACH FOR NFS LANDS IN WYOMING

#### ATTAHCMENT F - MONITORING FRAMEWORK MANAGEMENT APPROACH

Actions and authorizations and progress toward completing and implementing activity-level plans, ought to be monitored consistently across all planning units and will be reported to Forest Service headquarters annually, with a summary report every 5 years, for the planning area.

The report ought to be based on current databases and information available at the time of writing, and some figures may be revised in later years as more complete information is compiled.

#### Major items for monitoring during the implementation of the Amendment

A. Implementation (Decision) Monitoring.

Measure: Number of authorizations (NEPA decisions) and associated conditions or restrictions (e.g., efforts to avoid, minimize, or compensatory mitigation) in PHMA and GHMA.

- B. Habitat Monitoring.
  - Measure 1: Sagebrush Availability (percent of sagebrush per unit area)
  - Measure 2: Habitat Degradation (percent of human activity per unit area)
  - Measure 3: Energy and Mining Density (facilities and locations per unit area)
- C. Population (Demographics) Monitoring.
- D. Effectiveness Monitoring

Effectiveness Monitoring identifies various land agency contributions to habitat loss and calculates the trend of the above metrics over time by posing a series of additional questions:

- 1. Sagebrush Availability and Condition:
  - a. Measure: Amount of sagebrush availability (existing vegetation) and the change in the amount and condition of sagebrush
  - b. Measure: Existing amount of sagebrush on the landscape and the change in the amount relative to the pre-EuroAmerican historical, and potential, distribution of sagebrush (Biophysical potential).
  - c. Measure: Trend and condition of the indicators describing sagebrush characteristics important to sage-grouse
- 2. Habitat Degradation and Intensity of Activities:
  - a. Measure: Amount of habitat degradation and the change in that amount
  - b. Measure: The intensity of activities and the change in the intensity
  - c. Measure: the amount of reclaimed energy-related degradation and the change in the amount

- 3. Measure: the population estimation of sage-grouse and the change in the population estimation?
- 4. Measure: Forest Service contributions to changes in the amount of sagebrush
- 5. Measure: Forest Service contributions to habitat disturbance
- 6. Is the Amendment effective?
  - a. Measure: movement toward, away, or neutral to sage-grouse desired conditions
  - b. Measure: Disturbances within sage-grouse areas relative to objectives (e.g., caps)
  - c. Measure: Are sage-grouse populations within the plan boundary increasing, stable, or declining?

To satisfy these monitoring requirements, Region 4, in collaboration with Regions 2 and 1, ought to collect required information from various sources, with particularly close cooperation with the BLM and state wildlife agencies.

## ATTACHMENT G – MITIGATION STRATEGY MANAGEMENT APPROACH FOR NFS LANDS IN WYOMING

#### ATTACHMENT G - MITIGATION STRATEGY MANAGEMENT APPROACH

The Forest Service may require mitigation that provides no net loss to the greater sage-grouse, in alignment with state-based compensatory mitigation efforts, when undertaking Forest Service management actions authorizing third party actions that result in GRSG habitat loss and degradation, consistent with valid existing rights and applicable law.

The Forest Service will incorporate elements of The Planning Rule at 36 CFR 219.7(e)(1), which discusses required plan components, including: the intent of (iii) Standards "...to avoid or mitigate undesirable effects..." and (iv) Guidelines to "...to avoid or mitigate undesirable effects..." The greater sage-grouse is also a potential species of conservation concern, so the Forest Service will also follow the Forest Service Handbook FSH 1099.12, 23.13 (c) 5 (c) (2) and work "...towards an all-lands approach to species conservation with other land managers across the range of the species, including efforts to mitigate threats or stressors and to provide ecological conditions that would support the species." Mitigation will follow the *mitigation hierarchy* from the White House Council on Environmental Quality's (CEQ's) NEPA regulations at 40 CFR 1508.20 which explain that mitigation first involves avoiding environmental impacts when possible, then minimizing impacts, and then compensating for residual impacts by applying beneficial mitigation actions.

If Forest Service management actions and authorized third party actions result in habitat loss and degradation that would otherwise not be allowed, even after applying avoidance and minimization measures (i.e., residual impacts), then compensatory mitigation may be used to provide no net habitat loss to the greater sage-grouse. Mitigation actions ought to account for any uncertainty associated with the effectiveness of such mitigation, be durable, timely and in response to the residual impacts and in addition to other mitigation efforts.

When applying compensatory mitigation for activities that exceed timing, density, disturbance, distance or noise guidelines. the Forest Service may emphasize use of the State of Wyoming's Greater Sage-Grouse Compensatory Mitigation Framework to the extent consistent with federal law, regulations, and policy.

The deciding official may:

- 1. Work jointly with the WGFD to evaluate projects and recommend mitigation in the form of avoidance and minimization.
  - 1b. The WGFD will determine if the State requires or recommends any additional mitigation including compensatory mitigation under State regulations, policies, or programs related to the conservation of Greater Sage-Grouse.
- 2. Consider incorporating state required or recommended mitigation into the NEPA decisionmaking process.
- 3. Analyze whether the compensatory mitigation (using the appropriate State authority to quantify habitat offsets, durability, and other aspects used to determine the recommended compensatory mitigation action):

- 3a. achieves measurable outcomes for Greater Sage-Grouse habitat function on a landscape scale as determined by WGFD that are at least equal to the lost or degraded values in accordance with the Governor of Wyoming's Executive Order (latest version).
- 3b. provides benefits that are in place for at least the duration of the impacts.
- 3c. accounts for a level of risk that the mitigation action may fail or not persist for the full duration of the impact.
- 4. Ensure mitigation outcomes are consistent with the State of Wyoming's mitigation strategy and principles (in alignment with the Governor of Wyoming's Executive Order latest version).

## ATTACHMENT H – ADAPTIVE MANAGEMENT STRATEGY MANAGEMENT APPROACH FOR NFS LANDS IN WYOMING

#### ATTACHMENT H - ADAPTIVE MANAGEMENT STRATEGY MANAGEMENT APPROACH

GRSG-GEN-ST-004Standard, GRSG-GEN-MA-005-Management Approach, and GRSG-GEN-MA-006-Management Approach provide a means of addressing and responding to unintended negative impacts on greater sage-grouse and its habitat to be addressed before consequences become severe or irreversible. Deciding officials may develop adaptive management strategies for projects requiring an EIS, in support of the population management objectives for Greater Sage-Grouse set by the State of Wyoming.

Adaptive management triggers are essential for identifying when potential management changes are needed in order to continue meeting Greater Sage-Grouse conservation objectives. With respect to Greater Sage-Grouse, all regulatory entities in Wyoming, including the BLM, use soft and hard triggers. Soft and hard triggers are focused on three metrics: 1) number of active leks, 2) acres of available habitat, and 3) population trends based on annual lek counts. The FS may coordinate with other agencies to create a unified, landscape approach to an adaptive management strategy.

In accordance with applicable MOUs with the State, the Deciding Official may seek recommendations from an Adaptive Management Working Group (AMWG) to determine if triggers are tripped. The AMWG may also convene to develop an interim response strategy and initiate an assessment to determine the causal factors. The AMWG would define a process to review and reverse adaptive management actions once the identified causal factor is resolved (e.g., returning to previous management once objectives of interim management strategy have been met).