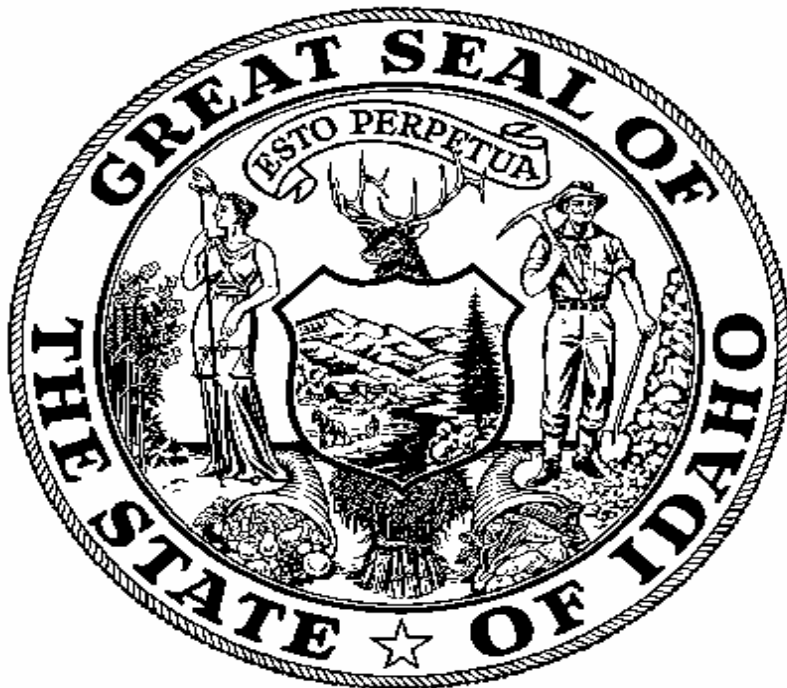


Attachment 1

IDAHO 2021 PLAN



POLICY FOR GREATER SAGE-GROUSE MANAGEMENT IN IDAHO

October 22, 2021 Version

TABLE OF CONTENTS

Contents

TABLE OF CONTENTS.....	2
BACKGROUND	4
OVERVIEW OF THE 2021 IDAHO PLAN.....	6
I. GUIDING PRINCIPLES.....	8
A. Task Force and Stakeholder Recommendations.....	8
B. ESA Considerations.....	8
C. Management Objectives.....	9
D. Existing State Sage-Grouse Plan	16
E. Valid Existing Rights.....	16
F. Maps.....	16
G. Infrastructure.....	17
H. Mitigation.....	18
I. Technical and Policy Teams	18
J. Livestock Grazing Management.....	19
II. IDAHO’S CONSERVATION AREAS.....	22
III. IDAHO’S HABITAT MANAGEMENT AREAS.....	24
A. PHMA.....	26
B. IHMA.....	28
C. GHMA	29
D. Outside SGMA.....	31
IV. LANGUAGE FOR LANDS MANAGED BY FEDERAL GOVERNMENT.....	32
A. Purpose.....	32
B. SGMA.....	32
C. PHMA.....	33
1. Wildfire	33
2. Invasive Species	35

3. Habitat Restoration.....	35
4. Infrastructure	36
5. Secondary Threats	38
D. IHMA.....	40
1. Wildfire	40
2. Invasive Species	42
3. Habitat Restoration.....	43
4. Infrastructure	43
5. Secondary Threats	45
E. GHMA.	46
1. Wildfire	46
2. Invasive Species	46
3. Habitat Restoration.....	47
4. Infrastructure	47
5. Secondary Threats	48
G. Infrastructure—Required Design Features.	48
H. Scope and Applicability.....	50
I. Adaptive Management Measures for Livestock Grazing.	51
REFERENCES CITED	53

Appendices Attached:

Idaho Sage-Steppe Mitigation Principles

BACKGROUND: 2010-2021

In 2010 the U.S. Fish and Wildlife Service (USFWS) made a Warranted but Precluded determination, concluding that greater sage-grouse (*Centrocercus urophasianus*; hereafter, sage-grouse) warranted protection based on Endangered Species Act (ESA) listing factors A (habitat fragmentation) and D (lack of adequate regulatory mechanisms). (USFWS 2010). This action designated sage-grouse as a candidate species for listing under the ESA.

In 2012, the then-Secretary of Interior Ken Salazar requested that states develop management plans to conserve sage-grouse and preclude the need to list sage-grouse under the ESA. Accordingly, the then-Idaho Governor Butch Otter issued Executive Order 2012-02 establishing Idaho's Sage-Grouse Task Force. The Task Force consisted of a variety of stakeholders, with the purpose of developing a set of recommendations for an Idaho-specific sage-grouse plan to be submitted and incorporated as an alternative in the environmental impacts statements (EIS) for the Bureau of Land Management (BLM) and US Forest Service (USFS) land-use plan amendment process.

In June 2012, with the biological and technical expertise of the Idaho Department of Fish and Game (IDFG) and other State and federal agency experts, the Task Force provided its recommendations to Governor Otter. Based on those recommendations, Governor Otter released a draft of Idaho's sage-grouse conservation plan and requested public input. On September 5, 2012, following the close of public comment and a positive response from the USFWS, Idaho submitted the Federal Alternative of Governor C.L. "Butch" Otter for Greater Sage-Grouse Management in Idaho (Idaho's Alternative) to the BLM and USFS.

In February 2013, the USFWS published the Greater Sage-Grouse Conservation Objectives Team Final Report (COT Report). The purpose of the COT Report, which was developed in conjunction with state wildlife agencies, was to establish the ESA recovery goals by identifying the threats to the species throughout its range and developing conservation measures addressing those threats based on the best available science. Governor Otter requested the USFWS evaluate Idaho's Alternative for consistency under the COT Report. In April 2013, the USFWS concluded that the foundational elements, and some individual components, within Idaho Alternative's were consistent with the COT Report. For example, the Priority Areas for Conservation (PAC) identified in the COT Report are fully encompassed by the State's sage-grouse Priority Habitat Management Areas (PHMA) and Important Habitat Management Areas (IHMA) and in some cases the HMAs extend beyond the PAC boundaries providing additional protection.

Idaho's Alternative, later adopted as the 2015 Idaho Plan, provided an innovative strategy for addressing the primary threats to the sage-grouse in Idaho (i.e., wildfire, invasive species, and, to a lesser extent, habitat fragmentation from large-scale infrastructure development) while maintaining predictable levels of land use. Idaho's Alternative adopted a three-tiered habitat zoning strategy across approximately 15 million acres of sage-grouse habitat in Idaho. The three habitat zones (Core, Important, and General) represented a management continuum that includes,

on one end, a restrictive management approach aimed at providing a high level of conservation benefit (Core Habitat, later known as PHMA), and on the other end, a less stringent management approach providing greater flexibility for multiple-use activities (General Habitat). The three tiered zoning strategy did not incorporate all sage-grouse habitat because the State (with the help of the Sage Grouse Task Force) decided that sage-grouse management would be deemphasized in some areas (e.g. outlier habitats and areas where sage-grouse have been extirpated).

However, the collaborative sage-grouse management effort was disrupted in late January 2015 when the BLM informed the State of a new National Direction adopted after the draft EISs were published. This National Direction unilaterally required additional land management restrictions within the newly proposed Sagebrush Focal Areas (SFAs), which were established on federally managed lands throughout the range of sage-grouse. In Idaho, SFAs consisted of approximately 3.8 million acres and included a new map, new conservation measures, and a re-ordering and elevation of threats. The SFAs also created a fourth habitat tier that was inconsistent with Idaho's Alternative and local agreements among the State, BLM, other agencies and stakeholders. These un-vetted additional management restrictions would have placed an undue economic burden on the Idaho. SFA management prescriptions were not aligned with the actual threats in Idaho and undermined the progress from the years-long collaborative process in Idaho.

Despite the National Direction, the State continued to coordinate with the Department of the Interior officials in an effort to revive the collaborative process toward mutually agreeable solutions for sage-grouse conservation. Irrespective, unwanted aspects of the National Direction were adopted in the 2015 Record of Decision and Resource Management Plan Amendments (2015 Sage-Grouse Amendments)

Idaho Alternative's was incorporated into law by Governor Otter through Executive Order 2015-04 to become the 2015 Idaho Plan. The State has continued refining individual components of the 2015 Idaho Plan, including but not limited to: (1) adoption of Idaho Code § 38-104B establishing Rangeland Fire Protection Associations; (2) adoption of the Idaho State Board of Land Commissioner's Greater Sage-grouse Conservation Plan (Land Board Plan) for State endowment lands complementary to Idaho's Alternative; (3) annual state fund appropriations for enhanced lek monitoring, habitat restoration projects, and wildfire suppression; and (4) continued development and refinements of the sage-grouse mitigation framework.

Following a court order to review the status of all Candidate species, the USFWS concluded in October 2015 that an ESA listing sage-grouse was not warranted which removed sage-grouse from the ESA Candidate list. Then, in June 2017, then-Secretary of the Interior Ryan Zinke, authorized Secretarial Order 3353 to enhance cooperation and support partnerships between the Department of the Interior and the eleven western states for sage-grouse management and conservation on federal lands. The Department of the Interior and BLM worked collaboratively with western governors to revise the 2015 Sage-Grouse Amendments to better align with existing state plans and policy.

This renewed collaborative effort to conserve sage-grouse leveraged the dedication of Idaho stakeholders including the the Governor’s Office of Species Conservation (OSC), the Governor’s Office of Energy and Mineral Resources, the Idaho Department of Fish and Game, the Idaho Department of Lands, the Idaho State Department of Agriculture, federal partners, and key stakeholders from industry groups representing agriculture, mining, utilities, as well as conservation organizations, the foundational elements of the 2015 Idaho Plan were used to craft the 2019 BLM and USFS Final Environmental Impact Statements. These foundational elements were incorporated into BLM’s Idaho Greater Sage-Grouse Record of Decision and Approved Resource Management Plan (BLM 2019). These foundational elements were also incorporated into the USFS’s draft Greater Sage-Grouse Land Management Plan Amendments, but as of the date of this plan these amendments have not been finalized. This plan (hereinafter known as the 2021 Idaho Plan) is the result of this collaborative work and is aimed at meeting the needs of the sage-grouse while respecting Idaho’s economic vitality and its people’s way of life.

OVERVIEW OF THE 2021 IDAHO PLAN

The purpose of the 2021 Idaho Plan is to provide, in the context of multiple-use management, Idaho specific policy direction and recommendations for sage-grouse conservation and management on lands administered by the BLM and USFS, and for other actions with a federal nexus in Idaho’s Sage-grouse Management Area (SGMA, Figure 1). The State, through the auspices of OSC and IDFG, will apply the 2021 Idaho Plan to guide sage-grouse conservation and provide management recommendations in Idaho. The Idaho Board of Land Commissioners will consider how the 2021 Idaho Plan may be applied to State Endowment Lands through IDL management. Although not binding, willing local jurisdictions, industries, and private landowners are also encouraged to conserve sage-grouse consistent with the 2021 Idaho Plan.

Idaho’s sage-grouse population is on the northern edge of the Great Basin and is estimated to make up 14 percent of the range wide breeding population. The Idaho population has genetic connectivity between the eastern and western portion of the species’ range (Cross et al. 2018).

Consistent with recommendations of the 2012 Task Force and key stakeholders, the State is maintaining the framework of a larger statewide SGMA consisting of four Conservation Areas: Desert, Mountain Valleys, Southern and West Owyhee that are then separated into three distinct Habitat Management areas (HMA); Priority Habitat Management Area (PHMA), Important Habitat Management Area (IHMA) and General Habitat Management Area (GHMA) (Figure 1).

HMA represents a management continuum strategy for sage-grouse conservation (Figure 2).

PHMA is the most restrictive management approach that provides a high level of conservation.

GHMA is least restrictive and therefore provides greater flexibility for multiple-use activities.

IHMA provides intermediate management flexibility, and areas outside of HMAs will be managed based on the appropriate local, state or federal land management plans.

The successful accomplishment of policy objectives set herein depends on effective collaboration among State and Federal agencies (e.g. USFWS, BLM and USFS). In particular, BLM and USFS should prioritize federal funding for wildfire suppression in rangelands, treatment of invasive annual grasses, and fire rehabilitation, especially in the PHMA.

Furthermore, it is important to note that Federal agencies in considering this plan as part of environmental analyses, planning updates, and ESA listing determinations, should recognize that Federal actions on these lands can have direct and indirect impacts on State endowment trust lands managed by the Idaho Department of Lands and private lands. Thus, it is important to evaluate sage-grouse conservation and management in a comprehensive and holistic manner.

2021 IDAHO PLAN

The following section explains the “guiding principles” used to develop the 2021 Idaho Plan.

I. GUIDING PRINCIPLES

A. Task Force and Stakeholder Recommendations

The State has made a concerted effort to incorporate the 2012 Task Force recommendation and the 2018-2021 key stakeholder recommendations in the 2021 Idaho Plan. In areas where the Task Force provided alternative recommendations in 2012 and stakeholders provided recommendations between 2018 and 2021, or actions were left to the discretion of the State, we have endeavored to capture the intent of the Task Force and stakeholders consistent with the parameters set out in this plan.

B. ESA Considerations

On March 23, 2010, the USFWS determined greater sage-grouse warranted listing over all of its range, including Idaho, but was precluded by higher listing actions. (USFWS 2010). Specifically, the USFWS found Federal resource management plans lacked sufficient regulatory mechanisms to address the primary threats to the sage-grouse in the Great Basin—namely, habitat loss and fragmentation due to wildfire, invasive species, and, to a lesser extent, infrastructure development. *Id.*

Following the USFWS’s decision, the United States District Court for the District of Idaho ruled that pursuant to a D.C. District Court settlement, the agency must reevaluate the status of the species under the ESA by September 30, 2015. *Western Watersheds Project v. United States Fish and Wildlife Service*, No. 4:10-CV-229, at 33 (D. Idaho Feb. 2, 2012). In response to this deadline, the Secretary of the Interior in December 2011 invited the eleven western states impacted by a potential listing of the species to develop state-specific regulatory mechanisms to address these cited deficiencies in an effort to preclude a listing under the ESA. Accordingly, one of the State’s primary objectives in creating the 2012 Idaho Plan was to develop a management framework that passes muster under the ESA.

On October 2, 2015, the USFWS published their 12-month finding in the Federal Register regarding the petition to list the greater sage-grouse. (USFWS 2015) The USFWS concluded that listing of the greater sage-grouse was not warranted at that time. The Federal Register states, “The primary threats to greater sage-grouse have been ameliorated by conservation efforts implemented by Federal, State, and private landowners” *Id.*

The 2021 Idaho Plan is built upon the 2015 Idaho plan with State, valuable contributions from the Task Force in 2012 and key stakeholders between 2018 and 2021. Like the 2015 Plan, the 2021 Plan contains a suite of policy and management measures to address primary threats and

some secondary threats (i.e. recreation, improper livestock grazing and West Nile Virus) identified in the USFWS's 2010 ESA listing decision (USFWS 2010.) The State believes that implementation of the policy and management measures herein provides significant conservation benefits to sage-grouse, other sage-steppe obligate species, and are adequate to preclude an ESA listing in Idaho.

The 2021 Idaho Plan applies a policy approach that includes: (1) implementation of mechanisms to support the overall sage-grouse conservation and management objectives; (2) stabilization, recovery and restoration of habitats and populations, including a systematic review of habitat and population status; and (3) utilization of adaptive regulatory triggers. This approach addresses key decision points outlined in the USFWS's 2010 determination and to help maintain the 2015 not warranted finding. As mentioned above, the 2010 decision cited lack of regulatory mechanisms and habitat loss as the primary factors for a warranted but precluded decision. Importantly, both of these factors affect the population status of the species. Idaho's approach is also designed to be clear and measurable for implementation over varying spatial and temporal scales.

Notwithstanding the 2021 Idaho Plan, unexpected and catastrophic events (e.g., major wildfire events, West Nile virus) may result in a substantial loss of habitat and concomitant declines in sage-grouse populations that could necessitate changes to Idaho's policy approach. Hence, the 2021 Idaho Plan implements adaptive management triggers to help ensure that populations and habitats within the PHMA and IHMA are maintained and enhanced. These adaptive triggers are intended to provide flexibility for unanticipated and deleterious impacts to sage-grouse.

If measures associated with adaptive triggers prove necessary, the State is well prepared to address emerging sage-grouse conservation issues in a manner that would simultaneously consider existing land uses. It is important to note that the development and implementation of policy triggers, primarily to deal with the loss of habitat due to wildfire, is a new approach for managing sage-grouse. With that recognition, the State anticipates continuing to work with its partners through the below-described Technical Team and Policy Team for adaptive management to refine this feature of the plan to ensure the triggers are properly attuned to both the needs of the State and sage-grouse.

C. Management Objectives

Objective 1: Implement Policy Mechanisms – The State's first objective is to implement the policy mechanisms (See Section IV herein) to conserve and manage sage-grouse habitats, populations, and connectivity by addressing primary and secondary threats in PHMA, strengthened by strategic areas in IHMA dominated by sagebrush. Application of the State's policy mechanisms will conserve at least 86.8% of Idaho's 2011 baseline of known occupied leks, 61% of which occur in the PHMA and 25.8% occur in the IHMA. Recognizing the risk and difficulty of controlling wildfire, invasive species, and providing the opportunity to

consider limited high-value infrastructure development, the IHMA provides an area of additional sage-grouse protections beyond PHMA.

Objective 2: Monitor Habitat and Population Trends – The second management objective examines the effectiveness of Objective 1 to offset primary and secondary sage-grouse threats by monitoring sage-grouse habitat and population trends over time. The State recognizes the need to regularly analyze the effectiveness of the policy measures and discern if active conservation and habitat management actions (e.g., conifer control, wildfire suppression, wildfire rehabilitation, fuel breaks, etc.) are effective strategies to conserve sage-grouse populations. Areas within PHMA, and to a lesser extent IHMA, will be used for baseline comparisons to evaluate progress in achieving the following objectives. (1) maintain and/or increase the abundance distribution, and connectivity of resilient sage-grouse populations; and (2) conserve, enhance, and restore large intact sagebrush-steppe communities in PHMA and IHMA with vegetation characteristics consistent with their ecological potential such that sage-grouse can select suitable seasonal habitats for breeding, nesting, rearing young, and wintering, (Table 3). Because sage-grouse management is under state jurisdiction, OSC and IDFG will lead the Objective 2 habitat and population monitoring in coordination with Federal partners.

In order to meet these goals and objectives, the 2021 Idaho Plan will use hard and soft population and habitat triggers to determine an appropriate management response if the population or habitat decreases by a predetermined amount as compared to the established baseline (see Objective 3 below). The baseline for the 2021 Idaho Plan will be based off the 2011 sage-grouse population and habitat numbers (Table 1 and Table 2). As a comparison, Table 5 outlines the sage-grouse numbers in 2021. Based on evaluation, if there is the need to modify or remove the evaluation tool if its application would lead to the regulatory triggers being unnecessarily sensitive or, conversely, not being sensitive enough to changes on the landscape, the State will engage the federal land management agencies through the Technical Team in Objective 3 to work towards a solution.

Table 1. Acreage of the PHMA and IHMA by Conservation Area in 2011.

Area	Priority	% Priority	Important	% Important
North of the Snake River	2,994,000	34	2,480,000	28
Desert	1,045,000	33	751,000	24
Mountain Valleys	1,949,000	36	1,729,000	32
South of the Snake River	2,686,000	41	1,609,000	24
Southern	948,000	25	975,000	26
West Owyhee	1,738,000	61	634,000	22
Grand Total	5,680,000	37	4,089,000	27

Table 2. Male sage-grouse counted at leks and the number of leks in 2011 by HMA.

HMA	# of leks	% of total leks	2011 total males ^a	% of total males in 2011
PHMA	1,286	61%	7,431	72.5%
IHMA	543	25.8%	2,271	22.2%
GHMA	180	8.5%	261	2.5%
Outside HMA ^b	100	4.7%	285	2.8%
Grand Total	2,109		10,248	

^a These data only represent the number of males counted on leks visited in 2011. It is not a population estimate and it does not include all leks in Idaho.

^b There are several leks that are technically outside of an HMA, but these birds most likely use the nearest HMA for seasonal habitat needs.

Table 3. General characteristics of sage-grouse habitat.

ATTRIBUTE	INDICATORS	DESIRED CONDITION
BREEDING, NESTING, and Early Brood Rearing^{1,2,3} (Seasonal Use Period March 1-June 30⁵)		
Lek Security	Proximity of sagebrush to leks ⁶	Adjacent protective sagebrush cover within 328 feet of lek ⁶
Cover	Seasonal habitat extent ⁷ (Percent of seasonal habitat meeting desired conditions.)	>80% of the breeding and nesting habitat within a fine scale habitat meets the recommended vegetation characteristics, where appropriate and relative to ecological site potential
	Sagebrush canopy cover ^{6,7,8}	15 to 25%
	Sagebrush height ⁷ Arid sites ^{6,7,9} Mesic sites ^{6,7,10}	12 to 32 inches 16 to 32 inches
	Predominant sagebrush shape ⁶	>50% in spreading ¹¹
	Perennial grass canopy cover ^{6,7} Arid sites ^{7,9} Mesic sites ^{7,10}	≥10% ≥15%
	Perennial grass height	Adequate nesting cover ^{14,15,16,17}
	Perennial forb canopy cover ^{6,7,8} Arid sites ⁹ Mesic sites ¹⁰	≥5% ^{6,7} ≥10% ^{6,7}
Late Brood Rearing/Summer¹ (Seasonal Use Period July 1-October 31)		
Cover	Seasonal habitat extent ⁷ (Percent of seasonal habitat meeting desired conditions.)	>40% of the brood-rearing/summer habitat within a fine scale habitat meets the recommended vegetation characteristics, where appropriate and relative to ecological site potential
	Sagebrush canopy cover ^{6,7,8}	10 to 25%
	Sagebrush height ^{7,8}	16 to 32 inches
	Perennial grass and forb canopy cover ^{6,7}	≥15%
	Riparian areas/mesic meadows	Proper Functioning Condition ^{12, 17}
	Upland and riparian perennial forb availability ^{6,7}	Preferred forbs are common with several preferred species present ¹³
	Sagebrush cover adjacent to riparian areas/mesic meadows ⁶	Within 328 feet
WINTER¹ (Seasonal Use Period November 1 - February 28)		
Cover and Food	Seasonal habitat extent ^{6,7,8} (Percent of seasonal habitat meeting desired conditions.)	>80% of the winter habitat within a fine scale habitat meets the recommended vegetation characteristics, where appropriate and relative to ecological site
	Sagebrush canopy cover above snow ^{6,7,8}	>10%
	Sagebrush height above snow ^{6,7,8}	>10 inches ¹³

Footnote and Citations for Table 3

1 Seasonal dates can be adjusted; that is, start and end dates may be shifted either earlier or later, but the amount of days cannot be shortened or lengthened by the local field office or unit.

2 Doherty 2008

3 Holloran and Anderson 2005

4 Idaho Sage-grouse Advisory Committee 2006.

5 Stiver et al. 2015

6 Connelly et al. 2000.

7 Connelly et al. 2003

8 10–12 inch precipitation zone; *Artemisia tridentata wyomingensis* is a common big sagebrush sub-species for this type site (Stiver et al. 2015).

9 >12 inch precipitation zone; *Artemisia tridentata vaseyana* is a common big sagebrush sub-species for this type site (Stiver et al. 2015).

10 Sagebrush plants with spreading shape provide more protective cover than sagebrush that are more tree/columnar shaped (Stiver et al. 2015).

11 Existing land management plan 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.

12 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.

13 The height of sagebrush remaining above snow depends upon snow depth/particular year. Intent is to manage for tall, healthy, big sagebrush stands and healthy dwarf sagebrush stands on wind-swept ridges.

14 Hausleitner 2005

15 Gibson et al. 2016

16 Smith et al. 2017a

17 Smith et al. 2017b

18 Dickard et al. 2015

Objective 3: Adaptive Policy Triggers – Sage-grouse adaptive regulatory triggers were developed to provide a policy mechanism to prevent further loss and stabilize habitats and populations in the PHMA and IHMA where a demonstrated significant loss has either occurred over time or unexpectedly. These adaptive triggers are used when dramatic shifts in population or habitat occurs.

Adaptive habitat triggers will be individually calculated across all ownerships within the Biologically Significant Units (BSUs). The BSU is defined as the IDFG modeled nesting and wintering habitat (IDFG 2013, unpublished data) within PHMA and IHMA within a Conservation Area. The sagebrush component of the BSU is represented by the Key Habitat within the BSU present during the 2011 baseline and as mapped during subsequent annual Key Habitat map updates. Key Habitat is defined as areas of generally intact sagebrush that provide sage-grouse habitat during some portion of the year (ISAC 2006).

Habitat Hard Triggers are defined as:

- A 20 percent loss of Key Habitat within the BSU of the PHMA of a Conservation Area when compared to the 2011 baseline, or
- A 20 percent loss of Key Habitat within the BSU of the IHMA of a Conservation Area when compared to the 2011 baseline.

Habitat Soft Triggers are defined as:

- A 10 percent loss of Key Habitat within the BSU of the PHMA of a Conservation Area when compared to the 2011 baseline, or
- A 10 percent loss of Key Habitat within the BSU of the IHMA of a Conservation Area when compared to the 2011 baseline.

Population Hard Triggers are defined as:

- A 20 percent decline in the current 3-year average of total maximum number of males counted compared to the 2011 maximum male baseline and a finite rate of change (λ) significantly below 1.0 within PHMA within a Conservation Area over the same 3-year period; or
- A 20 percent decline in the current 3-year average of total maximum number of males counted compared to the 2011 maximum male baseline and a finite rate of change (λ) significantly below 1.0 within IHMA within a Conservation Area over the same 3-year period.
- Significance is defined by the 90 percent confidence interval around the current 3-year finite rate of change. If the 90 percent confidence interval is less than, and does not include 1.0, then the finite rate of change is considered significant. The finite rate of change and variance will be calculated following Garton et al. (2011).

Population Soft Triggers are defined as:

- A 10 percent decline in the current 3-year average of total maximum number of males counted, compared to the 2011 maximum male baseline and a finite rate of change (λ) below 1.0 within PHMA within a conservation area over the same 3-year period; or
- A 10 percent decline in the current 3-year average of total maximum number of males counted, compared to the 2011 maximum male baseline and a finite rate of change (λ) below 1.0 within IHMA within a conservation area over the same 3-year period.
- Significance for soft triggers is defined by the 80 percent confidence interval around the current 3-year finite rate of change. If the 80 percent confidence interval is less than and does not include 1.0, then the finite rate of change is considered significant. The finite rate of change and variance will be calculated following Garton et al. (2011).

When any of the criteria for Soft Triggers have been met the Technical Team will evaluate causal factors and recommend additional potential implementation level activities to the Policy Team to avoid tripping a Hard Trigger. (see Section I-I for description of Technical and Policy Teams).

When any of the criteria for Hard Triggers have been met, all PHMA management actions specified in Section IV will be applied to the IHMA within that Conservation Area and the Technical Team will evaluate causal factors and recommend potential additional implementation level activities to the Policy Team and deciding official for the appropriate land management agency(s).

When a hard trigger is tripped in areas adjacent to sage-grouse populations in other states, the State of Idaho and federal land management agencies will coordinate with those states, as appropriate.

Removing a Trigger

The Hard Trigger adaptive management response will be automatically removed when the habitat or maximum male population count (i.e., 3-year average) returns to or exceeds the 2011 baseline levels within the associated Conservation Area, in accordance with the adaptive management strategy (Objective 3). In such a case, changes in management actions resulting from a tripped trigger will automatically revert to the original allocation.

Current Status of Triggers

The IDFG 2021 Sage-grouse Population Triggers Analysis Report indicates:

No new population triggers were tripped in 2021. Population triggers remain operational in Desert PHMA, Desert IHMA, Mountain Valleys PHMA, Southern IHMA, West Owyhee PHMA, and West Owyhee IHMA. Mountain Valleys IHMA tripped a soft trigger in 2019, but not in 2020 or 2021. Southern PHMA has never tripped a population trigger, likely due to the fact that the 2011 baseline was 4 years after the Murphy Complex Fire; this fire significantly impacted a large portion of Southern PHMA. The history of tripped population triggers, 2015–2020, is shown in Table 4.

West Owyhee IHMA is operating under an adaptive regulatory habitat trigger because >20% of the key habitat in West Owyhee IHMA was lost in the 2015 Soda Fire.

Table 4. History of tripped population triggers in Idaho, 2015–2021. Hard triggers remain operational^a until the maximum male counts on lek routes return to the 2011 baseline.

Conservation Area/HMA	2015	2016	2017	2018	2019	2020	2021
Desert PHMA	None	None	None	Soft	Hard	Operational	Operational
Desert IHMA	None	None	None	Hard	Operational	Operational	Operational
Mountain Valleys PHMA	None	None	None	Hard	Operational	Operational	Operational
Mountain Valleys IHMA	None	None	None	None	<i>Soft</i>	None	None
Southern PHMA	None	None	None	None	None	None	None
Southern IHMA	None	None	None	None	Hard	Operational	Operational
West Owyhee PHMA	None	None	None	None	None	Hard	Operational
West Owyhee IHMA	None	None	None	None	Hard	Operational	Operational

^a Operational management actions include temporary application of all PHMA management actions to IHMA within a Conservation Area where the criteria for hard triggers have been met.

D. Existing State Sage-Grouse Plan

The 2021 Idaho Plan builds upon the 2015 Idaho Plan and incorporates concepts in the 2006 Idaho sage-grouse conservation plan (ISAC 2006) and Local Working Group plans. Concepts incorporate include the following: habitat management areas, adaptive regulatory triggers, required design features and best management practices for primary and some secondary threats as identified by the USFWS necessary to preclude a listing (USFWS 2010). For threats and activities not addressed herein, (e.g. predation), the 2006 State Plan (or any future revision thereof) and Local Working Group plans will continue to provide guidance for issues and threats. For completeness, the ISAC (2006) plan is incorporated herein by reference.

E. Valid Existing Rights

All management areas and recommendations are intended to be subject to and protect all valid existing rights. It is critical that existing valid land uses and landowner activities continue to occur, particularly agricultural activities on all land ownerships.

The State of Idaho recognizes that it has limited authority to impose conditions on certain uses related to locatable and leasable mineral activities on federal lands conducted pursuant to the general mining laws. Accordingly, the state will recommend sage-grouse management measures only to the extent that they are consistent with the general mining laws.

F. Maps

Maps of sage-grouse HMAs must, by necessity, be at a broad, programmatic scale. Mapped boundaries presented herein (i.e., Figure 1) are therefore not verified boundary locations or on-the-ground habitat types from which the public can determine with certainty the quality of sage-grouse habitat in a particular location within a habitat management area.

Rather, sage-grouse maps are intended to give governmental entities, land managers, project proponents, and the public a general idea of where certain types of habitat and conservation priorities are spatially located as of the date of the map. The State also recognizes that this maps depicting sage-grouse habitat is not static, and any map must be verified through site-specific environmental analysis. Moreover, the HMA maps do not alleviate the duty of State and Federal agencies to determine the actual quality and trends of the habitat at any specific location (e.g. proposed project site, or grazing allotment).

The cumulative effects of projects that are located outside of the mapped boundary will be analyzed and addressed through the planning process of the appropriate land management agency (i.e. a project with a federal nexus will analyze the project in its entirety to understand and address the direct and indirect effects on sage-grouse within the SGMA).

Updates of HMA and other boundaries included in the maps (Figure 1) may occur under the following circumstances:

- Administrative corrections may include, but are not limited to, adjustments that remedy clerical errors, typographical errors, mapping errors, or improvements in mapping technology.

Routine HMA map reevaluation and updating by the Technical Team approximately every 5 years. The next reevaluation is scheduled to occur in 2022 in coordination with the anticipated BLM Sage-grouse Planning Process and then reevaluated again in 2027. This reevaluation could indicate the need to adjust CA, PHMA, IHMA, or GHMA boundaries, or the habitat or population baselines, when justified by new scientific data or analyses. These adjustments can occur more frequently if needed based on completion of the appropriate analysis and process (e.g., plan maintenance in coordination with the Technical and Policy Teams) to review the designations and ruleset based on the map.

G. Infrastructure

When the 2021 Idaho Plan refers to measures regarding infrastructure, it is referring to discrete, large-scale anthropogenic features or anthropogenic disturbance.

Anthropogenic disturbance excludes habitat disturbance from wildfire and fuels management and includes, but is not limited to, the following developments:

- Oil and gas wells and development facilities
- Coal mines
- Wind towers
- Solar fields
- Geothermal development facilities
- Mining (active locatable, non-energy leasable and salable developments)
- Roads
- Railroads
- Power lines and electric substations
- Communication towers
- Coal bed methane ponds
- Meteorological towers (e.g., wind energy testing)
- Nuclear energy facilities
- Airport facilities and infrastructure
- Military range facilities and infrastructure
- Hydroelectric plants
- Recreation areas facilities and infrastructure

Some utilities are obligated by regulation to serve customers with safe and reliable service. In order to avoid impacting operational abilities and routine maintenance of these companies, agencies, and landowners, certain practices are excluded from this definition. However, utilities must comply with required design features for sage-grouse (Section IV-F: Infrastructure Required Design Features).

Infrastructure related to small-scale ranch, home, and farm businesses (e.g., stock ponds, fences, range improvements) do not fall within this definition and are addressed in other sections of this Plan.

H. Mitigation

The 2021 Idaho Plan adopts compensatory mitigation guidelines contained within the attached Idaho Sage-Steppe Mitigation Principles document (attached to and incorporated herein by reference) that would guide mitigation, where applicable, to achieve a defined mitigation goal and objective in sage-grouse HMAs in Idaho. The Idaho Sage-Steppe Mitigation Principles document and all its future revision are incorporated herein by reference.

The overall strategy of the Mitigation Framework is to primarily avoid impacts to sage-grouse and their habitat, secondarily to minimize these impacts, and lastly to mitigate for unavoidable impacts based on the Idaho Sage-Steppe Mitigation Principles document, if needed. Mitigation efforts will focus on increasing the resiliency and productivity of sage-grouse populations and habitats, especially within the PHMA and IHMA. The State will help guide the placement of sage-grouse habitat restoration projects that development projects would utilize to fulfill the debits incurred through any compensatory mitigation requirements.

The State of Idaho will work with the applicable federal land management agency and project proponent to use the Idaho Habitat Quantification Tool (HQT) to measure the impact of infrastructure development on sage-grouse habitat and, if needed, provide mitigation recommendations to address unavoidable impacts. Sage-grouse habitat is measured in terms of functional acres. Habitat function refers to the quality and amount of habitat available for meeting life history requirements. The State completed Version 1 of the (HQT) in June 2019. Version 1.1 is expected to be released spring 2022. The HQT is being updated to incorporate new information for habitat mapping, sage-grouse use locations, disturbance types, etc. As the HQT is applied to project there will be aspects that may need adjustment. There will be opportunities for conservation and industry stakeholders to work with the Technical Team on refining the HQT.

I. Technical and Policy Teams

The 2021 Idaho Plan utilizes a two-team approach to ensure collaborative implementation of sage-grouse conservation in Idaho.

The following state and federal agencies and, when appropriate, the project proponent are expected to participate in the Technical and Policy Team and collaborate to implement sage-grouse conservation in Idaho: Bureau of Land Management (BLM), U.S. Fish and Wildlife Service (USFWS), U.S. Forest Service (USFS), Natural Resource Conservation Service (NRCS), Idaho Governor's Office of Species Conservation (OSC), Idaho Department of Fish and Game (IDFG), Idaho Governor's Office of Energy and Mineral Resources (OEMR), Idaho State Department of Agriculture (ISDA), and Idaho Department of Lands (IDL).

If deemed appropriate these teams may solicit input from conservation, industry and other stakeholders that have specialized knowledge in a particular subject for technical advice.

Idaho Technical Team: Technical experts from the above-mentioned state and federal agencies comprise the Technical Team. This team's primary responsibilities include: reviewing proposed infrastructure developments, exceptions, variances, adaptive regulatory triggers and responses (Section I-B, Objective 3), habitat management area adjustments, mitigation in sage-grouse habitat, making recommendations to the Policy Team, and performing other duties as the Policy Team may direct.

The State of Idaho will direct the Technical Team to start the analysis that will result in an annual report summarizing the status of the population and habitat adaptive regulatory triggers (Objective 3) by the end of each calendar year. A summary or status of associated causal factor analyses will be included. This report will be available to stakeholders on the Office of Species Conservation and Idaho Fish and Game websites.

Idaho Policy Team: Decision-makers from the above-mentioned state and federal agencies comprise the Policy Team. This team's primary responsibilities include: reviewing and discussing recommendations from the Technical Team, authorizing changes to the adaptive management program, providing recommendations to the primary decision-maker (BLM State Director or USFS Regional Forester for actions occurring on federal public land or the Idaho Director of the IDL or IDFG for state lands). The Policy Team can also make changes to the duties of the Technical Team by consensus of the Policy Team.

This collaborative two-team approach provides the foundation for flexibility in sage-grouse habitat management in Idaho. The interagency Technical Team will review and summarize technical data and provide summaries and recommendations to the interagency group of decision-makers on the Policy Team. The Policy Team needs to include the primary decision-maker for specific proposals that come to that team. The remainder of the team will act as policy advisors to aid the primary decision-maker in considering the recommendations of the technical team. This process will ensure that both the technical- and the policy-related issues for each agency are considered as part of sage-grouse management in Idaho. Meetings and coordination of the policy team will be led by the primary decision-maker of the proposal being discussed. Only proposals for new large-scale anthropogenic disturbances within PHMA and IHMA need to be submitted for review.

J. Livestock Grazing Management

To date, only one experimental study has been completed that investigated the relationship between livestock grazing systems and sage-grouse productivity (Smith et al. 2017a). Most concerns about the effects of improper grazing on sage-grouse are localized in nature, whereas the species is demonstrated to be more responsive to stressors at a larger landscape (Aldridge et al. 2008, Knick et al. 2013). Furthermore, the USFWS determined that improper grazing

management was only a secondary threat to sage-grouse. Therefore, improper grazing should be viewed as a localized stressor on the landscape with monitoring and management actions tailored accordingly.

Approach: While grazing management options should be considered at a landscape scale, livestock grazing is typically considered in a site-specific context over time where vegetative condition can be influenced by the potential of the site in combination with the timing, duration and intensity of grazing. The Key Habitat map, which is maintained by BLM and annually updated, should be one of the first steps towards categorizing sage-grouse habitat when conducting assessments based on the prioritization structure. This map portrays key habitat (greater than 10% sagebrush cover with an understory of perennial grasses) as well as annual grasslands, perennial grasslands, conifer encroachment and recent burns. In addition, other concerns about the effects of grazing on sage-grouse depend on the current vegetation status of the area (i.e. allotment), and the ecological site potential of the area. Therefore, changes to grazing should consider what vegetation currently exists and what the ecological site potential is. Resource and management objectives must be consistent with what is present and what is capable, absent mechanical manipulation. Currently on federal lands, this is being done by designating allotments and scheduling grazing systems based on factors such as elevation, weather and plant growth. The unintended consequences of altering grazing use, such as a possible increased risk of wildfire, must be carefully considered in any management proposal.

Guidelines for managing sage-grouse habitats and populations have been published and are often included in various management plans. These guidelines describe general characteristics of productive sage-grouse habitats based on a large number of studies conducted throughout the species' range, while also recognizing that local conditions may vary for a specific population (Connelly et al. 2000, Connelly et al. 2011, Stiver et. al. 2015). Thus, this information should not be considered as providing standards by which to judge effects of livestock grazing on the ultimate quality of sage-grouse seasonal habitats. After conducting the assessment, if the current grazing system achieves or is making significant progress in achieving applicable BLM Idaho Rangeland Health Standards/USFS regulations and policies, or if the current grazing system is not a significant factor in not achieving applicable rangeland health standards or regulations/policies, no further grazing management changes are necessary to achieve desired conditions for sage-grouse habitat. This approach is supported by Smith et al. 2017a.

Proper grazing management greatly benefits from flexibility and the opportunity to schedule and adjust intensity, timing, duration, and frequency of grazing use over time in a manner that maintains and can improve rangeland health and habitat quality. In addition, habitat quality of sage-grouse seasonal ranges will vary spatially and temporally due to a wide variety of other influences (e.g., drought, wildfire, habitat restoration). Therefore, the sage-grouse habitat characteristics in Table 3 should be viewed as a tool for assessing habitats and guiding management actions but not as a means of dictating grazing strategies or stocking rates. On-the-ground management actions and strategies to manage toward these habitat characteristics should

be informed by local resource knowledge and conditions.

Management Framework: Grazing within the PHMA and IHMA will be managed according to the process outlined in the text below. The first step, and perhaps the most important, is to inform and educate permittees who graze in sage-grouse habitat regarding sage-grouse habitat needs and conservation measures. These habitat needs or characteristics outlined in Table 3 are the desired conditions for sage-grouse with the understanding that these desired conditions may not be achievable: (a) due to the existing ecological condition, ecological potential or the existing vegetation; or (b) due to causal events or factors unrelated to existing livestock grazing.

Based on these habitat characteristics, federal management agencies in coordination with the permittee and the ISDA should conduct rangeland health assessments to help inform grazing management. Where necessary, an assessment of factors that are limiting the attainment of the habitat characteristics (Table 3) will be conducted at a resolution sufficient to document the habitat condition, based on existing BLM and Forest Service land health standards. This assessment will include consideration of local, spatial and inter-annual variability. Based on these assessments, a determination of issues attributable to livestock grazing management should not result from one year of data at a single location within an allotment.

The rangeland health assessment process will be completed in conjunction with scheduled term grazing permit renewals (i.e., every ten years). Given limited agency resources, prioritization will be given to areas that have the potential to provide the greatest benefit to sage-grouse. Allocation of resources should be concentrated on allotments within the PHMA that have declining sage-grouse populations, as defined by a hard or soft population adaptive management trigger being engaged (see Objective 3). Following those permits within the PHMA, resources will be further prioritized to allotments within the IHMA where population triggers have been tripped. Sage-grouse populations that are stable or trending upward will be a lower priority for the assessment process and permit renewal.

The assessment/determination process must rely on published characteristics of sage-grouse habitat and the ecological potential of the associated NRCS Ecological Site Descriptions, existing vegetation, habitat inventories or assessments and where available, state and transition models (Stringham et al. 2003) that describe vegetation and other physical attributes for sage-grouse. The related characteristics within the categories shown below will also be included. These characteristics indicate the ability of a given area to provide sage-grouse habitat.

- **Category 1:** The grazing allotment (or any pasture/significant area therein) has the existing vegetation and/or existing ecological condition (seral state) to provide sage-grouse seasonal habitat (breeding, late brood rearing, winter).
- **Category 2:** The grazing allotment (or any pasture/significant area therein) has the ecological potential to provide sage-grouse seasonal habitat (breeding, late brood rearing, winter).

If the process and conditions outlined above demonstrate that improper livestock grazing is a causal factor limiting achievement of the habitat characteristics (Table 3), renewed permits will include measures, including but not limited to the actions outlined in (Section IV-H), to make progress toward or achieve desired habitat conditions. These measures must be tailored to address the specific management issues.

Additionally, adaptive management changes related to existing grazing permits should only be undertaken if improper grazing is determined to be the causal factor in not meeting habitat characteristics, specific to site capability, based upon monitoring over time with appropriate site variability.

Based on this information, opportunities exist for livestock permittees, federal and state agencies, and university researchers to collaborate in an effort to fine-tune knowledge of current conditions and needed management actions in sage-grouse habitats throughout southern Idaho. This work would provide needed insight into current conditions within sage-grouse habitat and guide specific management actions necessary for ensuring healthy rangelands that support stable sage-grouse populations. An example of such a collaborative effort is the University of Idaho's Grouse and Grazing Project that was initiated in 2012. This study is designed as a ten-year replicated research project in southern Idaho focusing on providing empirical information to inform the needs of sage-grouse in the context of grazing.

II. IDAHO'S CONSERVATION AREAS

Idaho's SGMA is divided into four individual Conservation Areas (CA) across the State: two north (Mountain Valleys, Desert) and two south (West Owyhee, Southern) of the Snake River (Figure 1). Each CA is divided into Priority, Important, and General habitat management areas (HMAs) based on modeling of sage-grouse breeding bird density, habitat connectivity and persistence, scientific knowledge based on surveys and radio-telemetry studies, and the recommendations of the 2012 Task Force. This tiered HMA structure facilitates the prioritization of conservation, management, and restoration efforts in areas with greatest opportunities to benefit sage-grouse habitats and populations while maintaining predictable levels of land use (see Section III herein).

Although wildfire, invasive species, and to a lesser extent large-scale infrastructure pose threats for sage-grouse in all CAs, wildfire and invasive species tend to be greater issues in the Desert and West Owyhee CAs than in the Mountain Valleys or Southern CAs. Additionally, sage-grouse habitats in the Desert and West Owyhee CAs are relatively contiguous, while habitats in the Mountain Valleys and Southern CAs tend to be more fragmented. Based on the 2011 baseline, PHMA North of the Snake River is approximately three million acres and PHMA South of the Snake River is approximately 2.7 million acres. Acreage for the PHMA and IHMA in the four CAs is presented in Table 1. These four CAs are further described below:

North of the Snake River:

- Mountain Valleys CA— Starting at Rexburg and extending west, sage-grouse habitat north and west of Highway 33 to Howe, Highway 33/22 to Arco, Highway 26/20/93 to Carey, Highway 20 west to Mountain Home, south from Mountain Home on Highway 51 to the Snake River. The West-Central population is included in this area.
- Desert CA—South of the above CA.

South of the Snake River:

- West Owyhee CA—West of the Bruneau River.
- Southern CA—East of the Bruneau River, including East Idaho uplands and Bear Lake Plateau.

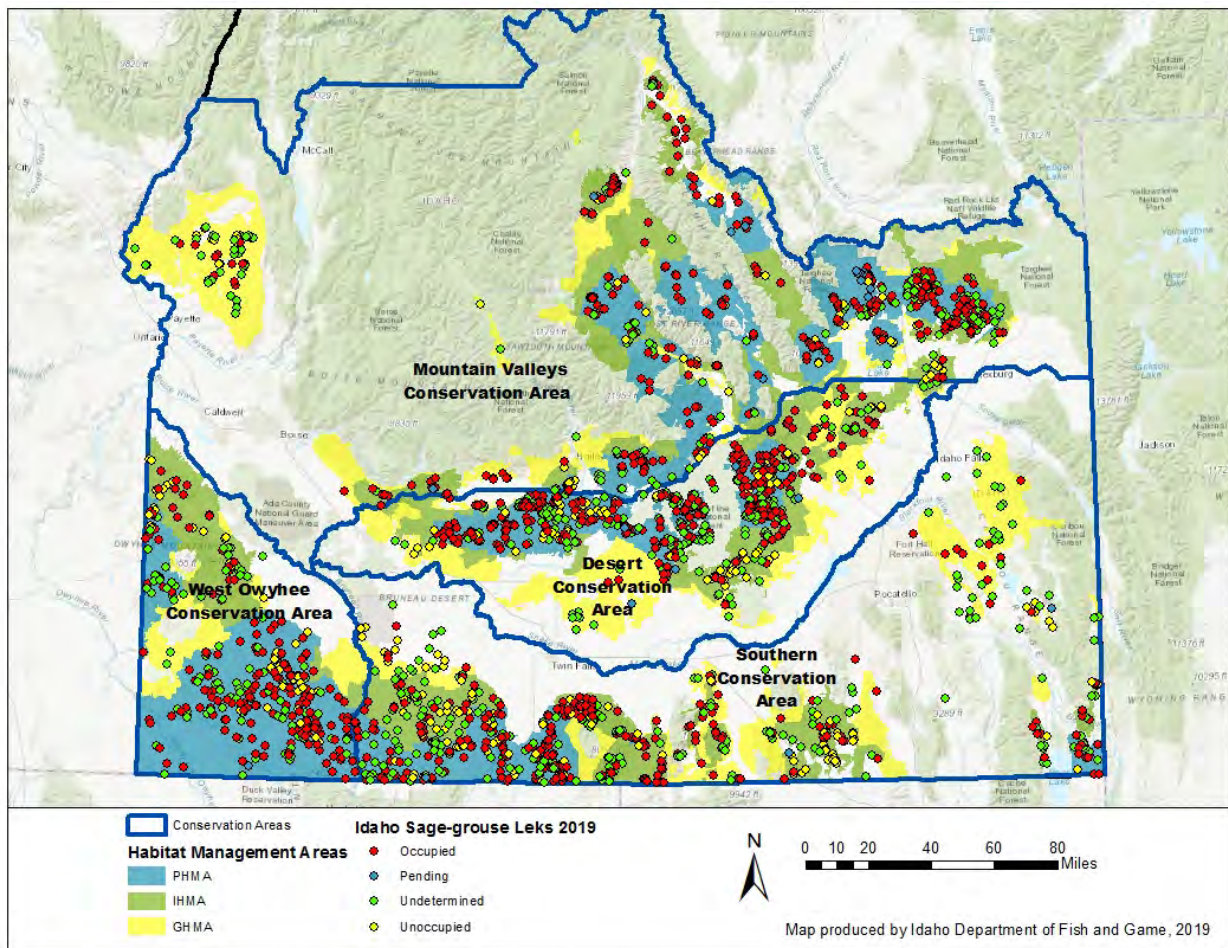


Figure 1. Idaho's Sage-Grouse Management Area

III. IDAHO'S HABITAT MANAGEMENT AREAS

Generally, these HMAs outline a suite of basic management activities that may, under certain conditions, or may not occur within a given area. In other words, the three HMAs within the Conservation Areas represent a management continuum that includes at one end, a relatively restrictive approach aimed at providing a high level of protection to the species within the PHMA, and on the other end, a relatively flexible approach for the GHMA allowing for more multiple-use activities. While the IHMA provides greater flexibility for multiple use than in the PHMA, the overall quality and ecological importance of the habitat within this area and the accompanying conservation measures are more closely aligned with the approach in PHMA than in the GHMA. (Figure 2)

PHMA focuses on conserving some of the areas with the highest conservation value to sage-grouse, based on the presence of larger leks, habitat extent, important movement and connectivity corridors and winter habitat. PHMA encompasses a large enough area to conserve key sage-grouse strongholds and accommodate continuation of existing land uses and landowner activities. PHMA in Idaho is within the PACs outlined by USFWS in the COT Report.

IHMA contains additional habitat and populations that provide a management buffer for the PHMA and to connect patches of PHMA. IHMA encompasses areas of generally moderate to high conservation value habitat and/or populations and, in some Conservation Areas, includes areas beyond those identified by the USFWS COT Report as necessary to maintain redundant, representative and resilient populations (USFWS 2013). IHMAs reflect somewhat lower sage-grouse population status and/or reduced habitat value compared to PHMA due to disturbance, habitat fragmentation or other factors.

GHMA encompasses habitat that is outside of PHMA or IHMA and is generally characterized by lower quality, disturbed, or patchy habitat with low lek connectivity. Almost all of the GHMA is outside of the USFWS PACs which were recognized as areas that were important for the long-term conservation of sage-grouse. GHMA in Idaho offers additional protection outside of the PACs.

In sum, the PHMA and IHMA totals approximately 9.77 million acres (Figure 3) and in 2021 accounted for approximately eighty six percent (86%) of the known leks or breeding display areas in Idaho (Figure 2) and harbor the majority of the State's sage-grouse populations (Table 5). IDFG survey data indicates that approximately ninety-six percent (96%) of the male sage-grouse counted at leks are in PHMA and IHMA (Table 5, IDFG 2021 unpublished data). The GHMA encompasses approximately 5.45 million acres, and in 2021 accounted for nine percent (9%) of the known occupied leks and three percent (3%) of the male sage-grouse attending leks. (Figure 2 and 3). There are sage-grouse outside of the Habitat Management Areas. In 2021 there was approximately five percent (5%) of the known occupied leks and one percent (1%) of the male sage grouse attending leks outside of the Sage-grouse Management Area. The habitat outside of the Sage-grouse Habitat Management Areas will not be managed for sage-grouse.

Table 5. Sage-grouse leks and total males by Habitat Management Area in 2021.

HMA	# of leks by HMA in 2021	% of total leks in 2021	2021 total males ^a	% of total males in 2011
Priority	1210	62%	6431	75%
Important	465	24%	1788	21%
General	173	9%	258	3%
Nonhabitat ^b	91	5%	73	1%
Grand Total	1939		8560	

^a These data only represent the number of males counted on leks visited in 2021. It is not a population estimate and it does not include all leks in Idaho.

^b There are several leks that are technically outside of an HMA, but these birds most likely use the nearest HMA for seasonal habitat needs.

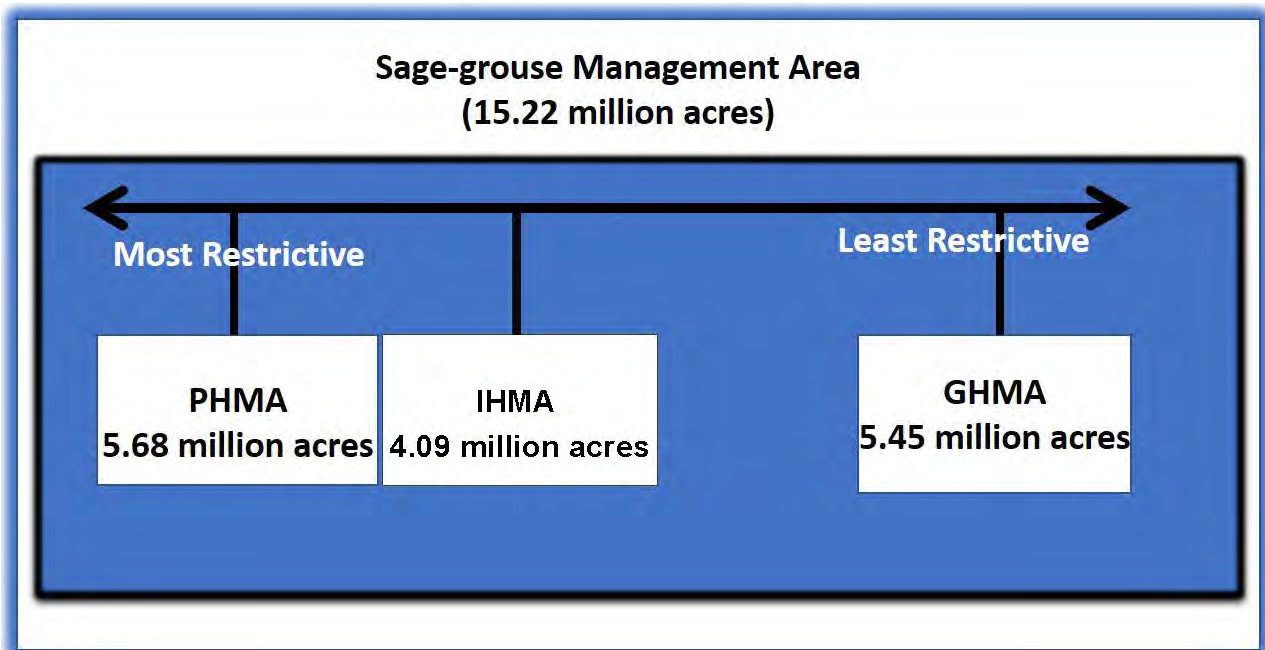


Figure 2. Idaho's Sage-grouse Habitat Management Areas (acreages displayed are approximate values).

A. PHMA

2011 Baseline Condition: The PHMA encompasses approximately 5.68 million acres and supports the highest breeding densities of sage-grouse in Idaho (Table 1). In 2011 these areas included approximately sixty-one percent (61%) of the known occupied leks and were occupied by an estimated seventy-three percent (73%) of male sage-grouse counted at leks throughout the SGMA (Table 2).

The PHMA represents strongholds for sage-grouse populations in Idaho and supports the largest populations. Thus, the PHMA should represent the highest priority for conservation efforts and policies to address the primary threats to the species, such as wildfire and invasive annual grasses, as described in the USFWS's 2010 ESA listing determination (USFWS 2010).

Areas designated within the PHMA were mapped based on the following key data sets: Twenty-five percent (25%) and fifty percent (50%) breeding bird density classes, which represent the top fifty percent (50%) of all leks in terms of male attendance, buffered at times by portions of the seventy-five percent (75%) class, depending on location, and the top two categories of the BLM's connectivity and persistence model (Doherty et al. 2010, BLM unpublished data). The lek connectivity model estimates the likelihood that those leks or population will persist through time (Knick and Hanser 2011).

Depending on location, additional lands beyond the 25% and 50% thresholds were included in the PHMA to: consolidate key breeding areas, include wilderness areas and lands within national monuments, and to foster population connectivity with neighboring states. The State recognizes that these are fluid boundaries because the habitat is not static. As new information regarding the species becomes available, it may be necessary to adjust HMA boundaries as described in Section I.

Desired Future Condition: Maintaining or improving the status of sage-grouse within PHMA requires Federal agencies, in conjunction with the State and local partners, to work collaboratively to increase the resiliency of sage-grouse habitat to disturbances, such as wildfire, and limit habitat fragmentation and loss from development only to projects pursuant to valid existing rights or incremental upgrades and/or that demonstrate, among other things, a significant high value benefit to the State of Idaho as well as provide compensatory mitigation consistent with the guiding principles above.

Management Focus: Management by Federal agencies should focus on the maintenance and enhancement of sage-grouse habitats, population, and connectivity areas identified in this management area.

Federal agencies need to coordinate with the State of Idaho regarding resources and complementary funding options to marshal existing—and target future Federal resources—to reduce the number and size of wildfires in and adjacent to PHMA.

The State of Idaho, private landowners and sage-grouse local working groups have already

invested significant efforts in the PHMA and should continue to be informed and involved as these recommendations are refined and implemented. The State encourages local landowners to continue practices that aid in meeting conservation objectives for the PHMA.

Table 6. Table of generally suitable uses and activities in PHMA.

Use/Activity	Yes	No	Conservation Measures
Fire Management	X		Only human safety and structure protection shall take precedence.
Invasive Species	X		Actively manage exotic undesirable species sufficiently to prevent invasion.
Infrastructure		X	Limited exceptions are permissible.
Recreation	X		Prioritize the completion of comprehensive travel planning. In the interim, restrict non administrative motorized use by to existing roads and trails.
Livestock Grazing	X		Prioritize allotments for assessment process and permit renewal for allotments with declining sage-grouse populations.

As illustrated in Table 6 above, prospective infrastructure development authorized by a federal permitting agency’s deciding official is presumptively prohibited in PHMA unless conducted pursuant to valid existing rights, as part of an incremental upgrade, or meets the criteria for an exemption. The 2012 Task Force recommended, and the key stakeholders between 2018 and 2021 agreed that a limited exemption process should be available to facilitate limited situations

where a project proponent can satisfy stringent criteria and provide compensatory mitigation. It is important to note that a proponent would have to meet the criteria outlined in the regulatory language for each habitat management area. Table 6, above, along with the successive tables for each management area, is for general illustrative purposes only. See Sections IV–C, D, and E for a complete understanding of the prohibitions and permissions for each habitat management area. One of the key criteria for obtaining an exemption is a project proponent’s demonstration that the project would provide a high-value benefit to meet critical existing needs and/or important societal objectives to the State of Idaho based on evaluation by the Technical and Policy Team.

The State intends as part of this Plan and associated Executive Order, that as part of its responsibility to provide the Deciding Official for the appropriate land management agency recommendations on site-specific projects developed through this Plan, the Technical and Policy Teams will evaluate whether projects meet the exemption criteria

Recognizing that maintaining and improving sage-grouse populations within the PHMA is important to the State’s overall population objectives, the balance between the economic value of future infrastructure projects and conserving the species to prevent an ESA listing clearly tilts in favor of the species within the PHMA. That said, it is impossible to predict projects that could be important to the economic vitality of the State in the future. Thus, the “high value” evaluation by the Technical and Policy Teams will be critical in balancing these interests.

B. IHMA

2011 Baseline Condition: The IHMA encompasses approximately 4.09 million acres (Table 1). In 2011, the IHMA included approximately twenty-six percent (26%) of the known occupied leks and were occupied by an estimated twenty-two percent (22%) of sage-grouse males counted throughout the SGMA (Table 2). The IHMA generally captures high-quality sage-grouse habitat and populations necessary for providing a management buffer for the PHMA, connecting patches of the PHMA, and supporting important populations and habitat independent of the PHMA.

The IHMA was primarily defined by the seventy-five percent (75%) breeding bird density areas. Given the migratory life history of many sage-grouse populations, a portion of birds breeding in PHMA may make seasonal use of areas within the IHMA (and vice versa). The IHMA also includes areas of value for migration corridors, connectivity among breeding areas, and long-term persistence of each of the two key meta-populations of sage-grouse in Idaho, north and south of the Snake River.

Desired Future Condition: Maintaining or improving the status of sage-grouse within the IHMA requires federal agencies, in conjunction with State and local partners, to work collaboratively to increase the resiliency of the habitat to disturbances, such as wildfire, and limit unnecessary and undue habitat fragmentation to projects that demonstrate, among other things, a

high value benefit to the State of Idaho.

Management Focus: Management by Federal agencies should focus strategically on areas within the PHMA that have the best opportunities for conserving, enhancing, or restoring habitat for sage-grouse. Management by Federal agencies should employ more aggressive wildfire and invasive species management practices to prevent further encroachment of these two primary threats into the PHMA (Table 7). The IHMA should also afford project proponents greater flexibility than in the PHMA with the understanding that projects still must demonstrate, among other things, a high value benefit to the State.

Table 7. Table of generally suitable uses and activities in IHMA.

Use/ Activity	Yes	No	Conservation Measures
Fire Management	X		Where appropriate, develop more aggressive strategies to reduce fuel loads.
Invasive Species	X		Actively manage exotic undesirable species to prevent invasion in the PHMA without impairing sage-grouse populations.
Infrastructure	X		Permissible subject to certain criteria. Mitigate unavoidable impacts.
Recreation	X		Same as PHMA.
Livestock Grazing	X		Same as PHMA.

C. GHMA

2011 Baseline Condition: The GHMA encompasses approximately 5.45 million acres (Table 1). The GHMA generally includes few occupied leks and fragmented or marginal habitat. In 2011, approximately eight percent (8%) of the known occupied leks were occupied by an estimated two percent (2%) of sage-grouse males counted throughout the SGMA (Table 2). The GHMA includes habitat for two isolated populations of sage-grouse in the East Idaho Uplands and West Central Idaho. While these two areas generally represent better habitat than most of the GHMA, the isolated nature of these populations make it unlikely that they will contribute to the long-term persistence of the two key meta-populations of sage-grouse in the State of Idaho.

Desired Future Condition: The State will work with federal land management agencies, local work groups, other partner organizations and key stakeholders to conserve populations, where possible given multiple land uses and the GHMA management focus.

Management Focus: Management by Federal agencies should focus, to the extent practicable, on facilitating multiple-use activities in GHMA to avoid siting conflicts in PHMA and IHMA (Table 8). Management by Federal agencies should employ a more aggressive wildfire and invasive species management practices to prevent further encroachment of these two primary threats into the PHMA and IHMA. This area will not receive the same prioritization for restoration and rehabilitation at the state level as PHMA and IHMA.

Table 8. Table of generally suitable uses and activities in GHMA.

Use/Activity	YES	NO	Conservation Measures
Fire Management	X		Aggressive fire suppression techniques should be utilized.
Invasive Species	X		Employ aggressive invasive species measures in conjunction with Cooperative Weed Management Areas (CWMA)s.
Infrastructure	X		Permissible with appropriate best management practices, mitigate unavoidable impacts.
Recreation	X		No special application for sage-grouse.
Livestock Grazing	X		No special application for sage-grouse.

D. Outside SGMA.

There are lands outside of the SGMA (PHMA, IHMA, and GHMA) where sage-grouse are considered an outlier and the habitat was consciously not mapped by the Sage Grouse Task Force. In 2011, approximately five (5%) of the known occupied leks were occupied by an estimated three (3%) of sage-grouse males (Table 2). While the focus of this document is on management within the SGMA, successful implementation will entail some changes and increased flexibility outside the SGMA. Management by Federal agencies should focus on multiple-use management and not have a sage-grouse focus, remaining consistent with local resource management plans.

IV. IDAHO'S POLICY LANGUAGE FOR LANDS MANAGED BY THE FEDERAL GOVERNMENT

V. Purpose.

The purpose of Idaho's 2021 Plan is to provide, in the context of multiple-use management, Idaho specific direction for the conservation and management of the sage-grouse in lands administered by the Bureau of Land Management and the U.S. Forest Service. All lands are included in the Sage-grouse Management Area (Figure 1). Actions that contain a federal nexus will adhere to this plan. Nothing in this plan is binding for private lands. The Idaho Board of Land Commissioners will decide whether this plan will be applied to State Endowment Lands. The State through the auspices of OSC and IDFG will use this as a policy document to guide management of sage-grouse and provide recommendations across other ownerships.

B. SGMA.

Designations: All relevant BLM lands and National Forest System lands as designated in Figure 1 are hereby designated as within the SGMA. State and private lands within the SGMA will have the corresponding designation, although the restrictions/decisions in this plan will not apply to those lands except for State lands if accepted by the State Land Board. Notwithstanding the need to make technical corrections, absent substantial and compelling evidence, these designations pursuant to Figure 1 should be evaluated approximately every five (5) years.

Conservation Areas: In order to achieve the State's Management Approach, the following Conservation Areas are established: West Owyhee Conservation Area; Southern Conservation Area; Desert Conservation Area; and Mountain Valleys Conservation Area.

Management Classifications: Management classifications for the SGMA express a management continuum. The following classifications are established: Priority Habitat Management Area (PHMA), Important Habitat Management Area (IHMA) and General Habitat Management Area (GHMA). Lands outside of the SGMA that have sage-grouse or suitable habitat will not be managed as such unless the designation changes so that it is encompassed by an HMA.

Maps: The BLM State Director, USFS Regional Forester, the Director of the Idaho Department of Fish and Game and the Administrator of the Office of Species Conservation shall maintain and make available to the public a map of the SGMA, including records regarding any corrections or modifications of such maps pursuant to this Plan. Notwithstanding the need to make technical corrections, absent substantial and compelling evidence, these maps pursuant to Figure 1 should be evaluated approximately every five (5) years. The next reevaluation will occur in 2022.

C. PHMA.

Management should focus on the maintenance and enhancement of habitats, populations, and connectivity in areas within this management area.

1. Wildfire

- i. Incorporate best management practices for fire operations to reduce the number and size of wildfires in sage-grouse habitat.
- ii. Only human safety and structure protection shall take precedence over the protection of sage-grouse habitat.
- iii. The full range of suppression techniques should be used to protect unburned islands, doglegs, and other sage-grouse habitat features that may exist within the perimeter of wildfires to retain as much sage-grouse habitat as possible and minimize sagebrush loss.
- iv. A sage-grouse resource advisor should be assigned to all extended attack fires.
- v. Evaluate and decrease wildfire response time. In order to achieve this objective:
 - a) Prioritize, maintain and improve a high initial attack success rate in suppression response and staging decisions;
 - b) Enhance predictive services and fire intelligence capabilities to anticipate, plan for, and utilize firefighting resources and assets;
 - c) Utilize available and spatial data depicting sage-grouse habitats within each Conservation Area, Figure 1;
 - d) Redeploy firefighting resources not being fully utilized outside the SGMA to the extent such redeployment will not cause harm to human safety and structure protection;
 - e) During high fire danger conditions, stage initial attack and secure additional resources closer to priority areas, based on anticipated fires and weather conditions, to ensure quicker response times in or near sage-grouse habitat after considerations and placement of resources to protect human life and property.
 - f) Support efforts to identify responsibility for protecting all lands.
 - g) Coordinate with the respective Rangeland Fire Protection Association, Rural Fire District, other local firefighting resources as well as public utilities for help with initial attack, relevant water sources, fastest travel routes, etc.
 - h) Request the necessary federal appropriations to achieve this objective.

- vi. Develop a plan to evaluate the current fire suppression baseline in conjunction with the measures below.
- a) Federal firefighters will ensure close coordination with State firefighters, Rangeland Fire Protection Associations (RFPAs), Rural Fire Districts, local fire departments, public utilities and local expertise to create the best possible network of strategic fuel breaks and road access to minimize and reduce the size of a wildfire following ignition;
 - b) To the extent practicable, the close coordination described in (a) should result in consistent fire response plans and mutual aid agreements necessary to achieve the management objective in (iv);
 - c) Identify fuels management priorities and develop fuels treatment plans within each Conservation Area and coordinate with the State of Idaho for land management agencies to expedite planning and implementation;
 - d) Request and place additional firefighting resources and establish new Incident Attack Centers;
 - e) To enhance the wildland firefighting capabilities of local fire departments and RFPAs, provide items such as fire engines, water tenders, radios, pumps, hose, chainsaws, hand tools, personal protective equipment, fire shelters and other items that the federal agency has available.
 - f) Reduce human-caused ignitions by coordinating with Federal, State and local jurisdiction on fire and litter prevention programs.
 - g) Prescribe at a pasture/allotment level or target livestock grazing where demonstrated to be appropriate as a tool for reducing fuel loads, reducing invasive species populations and maintaining functional fuel breaks.
 - h) Create and maintain effective fuel breaks in strategic locations that will modify fire behavior and increase fire suppression effectiveness according to the following criteria:
 - Target establishment of fuel breaks along existing roads or other disturbances.
 - Identify and target higher-risk roads for fuel break construction and maintenance based on fire history maps.
 - Implement a strategic approach to using these roads for rapid fire response.
 - Analyze the benefits of the fuel break against the additional loss of sagebrush cover and risk on annual grasses and invasive weeds, based on a site-specific analysis.
 - Work with utilities to prioritize Right of Ways (ROW) and develop/implement

methods to minimize wildfire risk along ROWs, fuels reduction, hazard tree removal, encouragement of fire resilient plants within ROW.

- Ensure fuel breaks are properly maintained, including regularly monitoring and controlling noxious weeds and invasive plant species.

i) Request the necessary federal appropriations to achieve this objective.

2. Invasive Species

- i. Actively manage exotic undesirable species especially invasive annual grasses to limit presence.
- ii. Monitor and control invasive vegetation post-wildfire treatment for at least three years.
- iii. Conduct integrated weed management actions for noxious and invasive annual grasses that are impacting or threatening sage-grouse habitat quality using a variety of eradication and control techniques including chemical, mechanical, and other appropriate means.
- iv. Reduce invasive annual grass and other fine fuels to diminish fire risk in priority sage-grouse areas to meet sage-grouse habitat goals by developing scalable and adaptive livestock grazing management plans and using targeted livestock grazing methods.
- v. Emphasize the use of native seeds for fuels management treatment based on availability, adaptation (site potential), and probability of success. If the use of non-native seeds
 - a) Reallocate native plant seeds for Emergency Stabilization and Rehabilitation (ES&R) from outside the SGMA and the GHMA to PHMA if necessary.
 - b) Where the probability of obtaining sufficient native seed is low, non-native seeds may be used provided sage-grouse habitat objectives are met.

3. Habitat Restoration

- i. Prioritize the removal of conifers through methods appropriate for the terrain and most likely to facilitate expeditious sage-grouse population and habitat recovery. To the extent possible, utilize removal methods creating the least amount of disturbance.
 - a) Efforts should focus on areas with highest restoration potential typically evidenced by low (less than 10%) conifer canopy cover (phase 1-<5% or phase 2 -5-10%) (Bunting et al. 2007), existing sagebrush understory, and adjacent current sage-grouse populations.
 - b) Focus efforts on areas that would complement or are adjacent to planned or completed projects on private and state lands.
 - c) Efforts should also focus on increasing the connectivity for safer passage of sage-grouse broods from nesting areas to areas used for late brood rearing (mesic meadows, riparian areas and springs).
 - d) Refrain from using prescribed fire and conducting whole scale removal projects in

juniper woodlands older than one hundred fifty years that is dominantly old-growth, pre-settlement communities (Miller et al.2005).

- e) Maximize the use of Natural Resource Conservation Service funding through permittee grants under the Sage-grouse Initiative (SGI) and other programs such as the Environmental Quality Incentives Program (EQIP).
- ii. In perennial grasslands, actively restore sagebrush canopy cover and the ecological functions of the site. To the extent practicable, utilize native understory.
 - a) Prioritize areas for restoration with lower risks of wildfire and exotic species invasion.
 - b) In meadows, riparian areas and springs improve habitat conditions by implementing habitat restoration tactics such as low-tech structures (i.e. Beaver Dam Analogs (BDAs)).

4. Infrastructure

- i. The development of infrastructure authorized in areas designated as PHMA is prohibited, except if developed pursuant to valid existing rights, renewals of valid existing rights, incremental upgrade and/or capacity increase of existing development (authorized prior to approval of this plan) subject to Required Design Features in (Section IV-F). The development of new infrastructure must first be deemed a significant high value benefit to meet critical needs for the State of Idaho, then if so, it must be developed pursuant to the exemption criteria below (Section IV.C.4-ii).
- ii. In order to avoid surface-disturbing activities in PHMA, priority will be given to development of rights-of-way (ROWs), fluid minerals, and other mineral resources subject to applicable stipulations outside of PHMA. When authorizing development in PHMA, priority will be given to development in non-habitat areas first and then in the least suitable habitat for sage-grouse. In addition to other criteria found in subsections iii-v of this section, the federal permitting agency will ensure an applicant has worked with the State of Idaho to submit a proposal that addresses the proposed project's direct and indirect effects for each of the following criteria:
 - a) The population trend for sage-grouse in the associated Conservation Area is stable or increasing over a 3-year period and the population levels are not currently engaging the adaptive management triggers (this applies strictly to new authorizations; renewals and amendments of existing authorizations will not be subject to this criterion when it can be shown that long-term impacts from those renewals or amendments will be substantially the same as the existing development).
 - b) The State of Idaho determines in coordination with the applicable federal land management agency that the direct and indirect disturbance from development with associated design features, avoidance, minimization, and mitigation actions will not result in a net loss of sage-grouse functional acres of the respective PHMA. After avoidance and minimization measures have been incorporated into the design, and if there will still

be an impact, an appropriate compensatory mitigation plan must be created to address the unavoidable impacts and outline how the project will reach a no net loss in functional acres for sage-grouse habitat according to the Idaho Mitigation Principles document.

- c) The project, its design features, avoidance and minimization actions, and associated direct and indirect impacts must demonstrate that the individual and cumulative exceptions under this provision must best reduce habitat fragmentation or other impacts causing a decline in the sage-grouse populations in the relevant Conservation Area.
 - d) The development cannot be reasonably accomplished outside of the PHMA or can be either developed pursuant to a valid existing authorization or collocated within the footprint of existing infrastructure. Proposed collocated actions will not increase the 2011 authorized footprint and associated impacts more than 50 percent, depending on industry practice.
 - e) Development will adhere to the Required Design Features (RDFs) described in (Section IV-F).
 - f) Large-scale anthropogenic disturbances in PHMA will be reviewed by the Technical and Policy teams, as described in (Section I-I).
- iii. Designate and manage as avoidance areas for utility scale (20 megawatts) wind and solar testing and development. This measure will be evaluated in the future as research on interactions of wind/solar and sage-grouse is conducted.
 - iv. Notwithstanding the limited prohibition in 4(i), the State Director/Regional Forester may authorize oil and gas development only under the following circumstances:
 - a) Exploration activities utilizing temporary roads are permissible provided site disturbance is minimized.
 - b) In PHMA, any new oil and gas leases must include a No Surface Occupancy stipulation. There will be no waivers or modifications. An exception, after review by the Technical Team and Policy Team, could be granted by the authorized officer if the proposal meets the following criteria:
 - There would be no direct, indirect, or cumulative effects to the sage-grouse or its habitat; or
 - Granting the exception provides an alternative to a similar action occurring on a nearby parcel, based on the determination that the action would not result in a net loss of sage-grouse habitat; and
 - Includes appropriate controlled surface use and timing limitation measures (Section IV-F); and
 - Is consistent with 4 (ii).

- v. In PHMA, project that have passed the screening criteria (4ii) will maintain a minimum buffer distance from the perimeter of occupied leks, unless justifiable departures, based on the best available science or a site-specific analysis, are determined to be appropriate.
- **Major Linear Features** (e.g. major haul roads, highways, etc.): 3.1 miles (Blickely 2012, Manier et al. 2014)
 - **Minor Linear Features** (e.g. minor roads, distribution poles): 1.2 miles (Coates et al. 2014, Patricelli et al. 2013)
 - **Infrastructure related to energy development** (e.g. oil, gas, geothermal, wind, solar): 3.1 miles (Kirol et al. 2015, Manier et al. 2014)
 - **Tall structures** (e.g., communication or transmission towers and lines): 2 miles (Coates et al. 2014, Kohl et al. 2019, LeBeau et al. 2019, Manier et al. 2014)
 - **All Other Anthropogenic Disturbance** (from Section G): 3.1 miles
- vi. **Secondary Threats**
- i. **Recreation**
- a) Prioritize the completion of Comprehensive Transportation Management Travel Plans (CTMTPs) to minimize disturbance to sage-grouse populations and reduce the risk of wildfire and other habitat disturbances associated with cross-country travel.
 - b) Limit off-highway vehicle travel within Idaho to existing roads, primitive roads, and trails in areas where travel management planning has not been completed or is in progress. Adopt a “restricted to designated routes” approach where appropriate to the extent such designation does not interfere with administrative use.
 - c) The emphasis of the comprehensive travel and transportation planning within PHMA will be placed on having a neutral or positive effect on sage-grouse habitat. Individual route designations will occur during subsequent travel management planning efforts.
 - d) Discourage the creation of new roads and trails in PHMA. Re-route existing routes where appropriate.
 - e) Identify and reduce activities demonstrating repeated displacement of lekking or nesting birds. Where existing routes are demonstrated to affect occupied leks, apply seasonal and time-based use-restrictions tailored to address the site-specific conditions of the area (e.g., Section IV-F(1)(i))
 - f) When authorizing new recreation special-use authorizations, terms and conditions that protect and/or restore sage-grouse habitat within the permit area should be included (e.g., limited temporary disturbance within 0.6 miles of leks during the lekking season).
- ii. **West Nile Virus**

- a) Reduce the risk of transmission of West Nile Virus to sage-grouse by minimizing the creation of breeding habitat for mosquitoes.
- b) Consider the potential impacts of West Nile Virus transmission prior to permitting new ponds or reservoirs.
- c) Non-pond/reservoir watering facilities, such as troughs and bottomless tanks, should be developed and maintained to provide high quality water that minimizes the development of habitat for mosquitoes.
- d) Functioning float valves and properly functioning water return features (overflow) should be constructed and maintained to prohibit water from being spilled on the ground surrounding the trough and/or tank, to the extent practicable.
- e) To the extent practicable, water should be returned to the original water source to reduce suitable habitat for mosquitoes.

iii. Livestock Grazing Management

- a) In setting workload priorities, precedence will be given to existing permits/leases in areas not meeting land health standards and that have declining sage-grouse populations, defined by a soft or hard population adaptive management trigger being engaged. Sage-grouse populations that are stable or trending upward will be a lower priority the assessment process and permit renewal.
- b) Incorporate the sage-grouse desired conditions in Table 3 and management considerations as desired conditions, and manage livestock grazing, recognizing that these conditions are not intended to be prescriptive at the allotment level and may not be achievable: (1) due to the existing ecological condition, ecological potential, or existing vegetation; or (2) due to causal events or factors unrelated to existing livestock grazing;
- c) Conduct habitat assessments using appropriate monitoring methods. Where appropriate, identify the factors causing any failure to achieve the desired conditions in Table 3. The assessment will be conducted at a resolution and scale sufficient to document the habitat condition and will include local, spatial, and interannual variability. Any results of these assessments relative to the habitat characteristics (Table 3) will be based on existing ecological condition, ecological potential, and existing vegetation information. This is to ensure the assessment recognizes whether these habitat characteristics are achievable.
- d) The assessment will rely on published characteristics of sage-grouse habitat (as summarized in Table 3), and the ecological site descriptions, and where available and applicable, rangeland health determinations made in accordance with federal agencies' standards for rangeland health.
- e) After conducting the assessment in (b), above, if the current grazing system achieves or is making significant progress in achieving applicable BLM Idaho Rangeland Health

Standards/USFS regulations and policies, or if the current grazing system is not a significant factor in not achieving applicable rangeland health standards or regulations/policies, no further grazing management changes are necessary to achieve desired conditions for sage-grouse habitat.

- f) If the process and conditions outlined in (b), above demonstrate that livestock grazing is the causal factor limiting achievement of the desired conditions in Table 3, renewed permits will include measures, including but not limited to the actions outlined in (Section IV-H) to achieve desired habitat conditions. These measures must be tailored to address the specific management issues.
- g) Adaptive management changes related to existing grazing permits should be undertaken only where improper grazing is determined to be the causal factor in not meeting habitat characteristics or where changes are agreed to by the permittee, specific to site capability, based on monitoring, with appropriate spatial variability. See (Section IV-H).
- h) Where management changes are needed and necessary pursuant to (g), above, implement management actions that are narrowly tailored to address the specific habitat objective applied at the allotment or activity plan level, including the actions outlined in (Section IV-I), Adaptive Management Measures for Livestock Grazing.
- i) **Livestock Grazing Infrastructure**
 - a) To the extent practicable, reduce the impacts of fences and livestock management facilities on sage-grouse.
 - b) Placement of new fences and livestock management facilities, including corrals, loading facilities, water storage tanks and windmills, should consider their effect on sage-grouse.
 - c) Fence construction should be avoided in areas of high and moderate collision risk (Stevens et al. 2012a, b), or as latest science indicates. If this is not feasible, collision risk should be mitigated through design features (e.g. marking, laydown fences, etc.) in those areas determined to be of high or moderate collision risk only.
 - d) To the extent practicable, to prevent predation from perching raptors and raven nest sites place new, permanent taller structures, (i.e. corrals, loading facilities, water storage tanks/ cisterns, windmills), at least 1.2 miles from the perimeter of occupied leks.

D. IHMA.

Management is to be guided by a set of policies aimed at ensuring that Important Habitat is maintained and where appropriate, enhanced in strategic areas. Management should also provide the necessary flexibility to permit high-value infrastructure projects.

1. Wildfire

- i. Incorporate best management practices for fire operations to reduce the number and size of wildfires in sage-grouse habitat.

- ii. Only human safety and structure protection shall take precedence over the protection of sage-grouse habitat.
- iii. The full range of suppression techniques should be used to protect unburned islands, doglegs, and other sage-grouse habitat features that may exist within the perimeter of wildfires to retain as much sage-grouse habitat as possible and minimize sagebrush loss.
- iv. A sage-grouse resource advisor should be assigned to all extended attack fires.
- v. Evaluate and decrease wildfire response time. In order to achieve this objective:
 - a) Prioritize, maintain and improve a high initial attack success rate in suppression response and staging decisions;
 - b) Coordinate with the respective Rangeland Fire Protection Association, Rural Fire District, other local firefighting resources and public utilities for help with initial attack, relevant water sources, fastest travel routes, etc.
 - c) Utilize available maps under Section IV-(B) and spatial data depicting sage-grouse habitats within this area;
 - d) Redeploy firefighting resources not being fully utilized outside the SGMA to the extent such redeployment will not cause harm to human safety and structure protection; and
 - e) Request the necessary federal appropriations to achieve this objective.
- vi. Develop a management plan to evaluate the current fire suppression baseline in conjunction with the measures below:
 - a) Federal firefighters shall ensure close coordination with State firefighters, local fire departments, RFPAs, public utilities and local expertise (i.e., livestock grazing permittees and road maintenance personnel) to create the best possible network of strategic fuel breaks and road access to minimize and reduce the size of a wildfire following ignition;
 - b) To the extent practicable, the close coordination described in (a) shall result in consistent fire response plans and mutual aid agreements necessary to achieve the objective in (1)(v);
 - c) To enhance the wildland firefighting capabilities of local fire departments and RFPAs, provide items such as fire engines, water tenders, radios, pumps, hose, chainsaws, hand tools, personal protective equipment, fire shelters and other items that the federal agency has available.
 - d) Prescribe at a pasture/allotment level or target livestock grazing where demonstrated to be appropriate as a tool for reducing fuel loads, reducing invasive species populations and maintaining functional fuel breaks.

- e) Reduce human-caused ignitions by coordinating with Federal, State and local jurisdiction on fire and litter prevention programs.
- f) Request the necessary federal appropriations to achieve this objective.
- g) Create and maintain effective fuel breaks in strategic locations that will modify fire behavior and increase fire suppression effectiveness according to the following criteria:
 - Target establishment of fuel breaks along existing roads or other disturbances.
 - Identify and target higher-risk roads for fuel break construction and maintenance based on fire history maps.
 - Implement a strategic approach to using these roads for rapid fire response.
 - Closely evaluate the benefits of the fuel break against the additional loss of sagebrush cover and risk of invasive weeds, based on a site-specific analysis.\
 - Work with utilities to prioritize Right of Ways (ROW) and Develop/implement methods to minimize wildfire risk along ROWs, fuels reduction, hazard tree removal, encouragement of fire resilient plants within ROW.
 - Ensure fuel breaks are properly maintained, including monitoring and control of noxious weeds and invasive plant species.

2. Invasive Species

- i. Actively manage exotic undesirable species especially invasive annual grasses to limit presence in the IHMA.
- ii. Monitor and control invasive vegetation post-wildfire treatment for at least three years.
- iii. Emphasize the use of native seeds for fuels management treatment based on availability, adaptation (site potential), and probability of success.
 - a) Reallocate native plant seeds for Emergency Stabilization and Rehabilitation (ES&R) from outside the SGMA and the GHMA to IHMA.
 - b) Where the probability of success or native seed availability is low, non-native seeds may be used provided sage-grouse habitat objectives are met.
- iv. Required design features will be adhered to for infrastructure construction projects to prevent invasion.
- v. Actively pursue eradication or control of noxious weeds and/or invasive annual grass species posing a risk to sage-grouse habitats using a variety of chemical, mechanical, and other appropriate means in coordination with the local Cooperative Weed Management Area (CWMA).
- vi. Establish an effective monitoring program to evaluate the success of noxious weed and

annual grass control efforts in conjunction with the CWMAs.

3. Habitat Restoration

- i. Prioritize the removal of conifers through methods appropriate for the terrain and most likely to facilitate expeditious sage-grouse habitat recovery. Especially prioritize and target removal treatments adjacent to the PHMA. To the extent possible, utilize methods creating the least amount of disturbance.
 - a) Areas with highest restoration potential typically evidenced by low (less than 10%) conifer canopy cover (phase 1-<5% or phase 2 -5-10%) (Bunting et al. 2007), existing sagebrush understory, and adjacent current populations.
 - b) Areas that would complement or are adjacent to planned or completed private and state lands conifer removal projects.
 - c) Refrain from using prescribed fire and conducting whole sale removal projects in juniper woodlands that are older than one hundred fifty years that are dominantly old-growth, pre-settlement communities (Miller et al.2005).
 - d) Maximize the use of Natural Resource Conservation Service funding through permittee grants under the Sage-grouse Initiative (SGI) and other programs such as the Environmental Quality Incentives Program (EQIP).
- ii. In perennial grasslands, actively restore sagebrush canopy cover and the ecological functions of the site. To the extent practicable, utilize native understory.
 - a) Prioritize areas for restoration with lower risks of wildfire and exotic species invasion, especially in areas adjacent to the PHMA.

4. Infrastructure

- i. The State Director or Regional Forester may authorize new infrastructure development where in their judgment the circumstances set out below exist.
 - a) Through coordination with the State of Idaho, it is determined that the project cannot be achieved, technically or economically, outside of this management area
 - b) The project siting and/or design should best reduce cumulative impacts and/or direct and indirect impacts on sage-grouse and other high value natural, cultural, or societal resources; this should include collocation with existing infrastructure, to the extent practicable
 - c) The State of Idaho determines in coordination with the applicable federal land management agency that the development with associated design features, avoidance, minimization, or mitigation actions will not result in a net loss of sage-grouse functional acres of the respective IHMA. An appropriate compensatory mitigation plan will address unavoidable impacts and outline how the project will reach a no net loss in functional

- acres for sage-grouse habitat according to the Idaho Mitigation Principles document.
- d) Development will adhere to the required design features described in (Section IV-F)
 - e) Large-scale anthropogenic disturbances in IHMA will be reviewed by the Technical and Policy Teams, as described in (Section I-I)
- ii. Designate and manage as avoidance areas for utility scale (20 megawatts) wind and solar testing and development.
 - iii. For oil and gas leases, exploration activities utilizing temporary roads shall be exempt, provided site disturbance is minimized through required design features or seasonal restrictions. Surface use or occupancy is permissible if projects can demonstrate, based on site-specific analysis, that such activities will not cause declines in sage-grouse populations through implementation of the required design features in (Section IV-F). Projects authorized under (ii) should mitigate unavoidable impacts through an appropriate compensatory mitigation plan.
 - iv. In IHMA, projects will maintain a minimum buffer distance from the perimeter of occupied leks unless justifiable departures, based on the best available science or a site-specific analysis, are determined to be appropriate.
 - **Major Linear Features** (e.g. major haul roads, highways, etc.): 2 miles (Manier et al. 2014)
 - **Minor Linear Features**
 - Minor roads: 0.8 miles (Patricelli et al. 2013)
 - Distribution poles: 0.6 miles (Manier et al. 2014)
 - **Infrastructure related to energy development** (e.g. oil, gas, wind, solar, geothermal): 2 miles (Manier et al. 2014)
 - **Tall structures**
 - Transmission towers/lines, Communication and meteorological towers): 1.7 miles (Kohl et al. 2019)
 - **All Other Anthropogenic Disturbance** (from Section G): 2 miles buffer distance from perimeter of occupied leks
 - v. Buffer Exception Criteria for IHMA—An exemption may be granted if it is impracticable, technically or economically, to locate the project outside of the buffer area. In such circumstances, impacts will be avoided and/or minimized through project siting and design to the extent reasonable and if needed mitigated using the mitigation framework. Projects will still adhere to the IHMA language in 4i-iii;

5. Secondary Threats

i. Recreation

- a) Prioritize the completion of Comprehensive Transportation Management Travel Plans (CTMTPs) to minimize disturbance to sage-grouse and reduce the risk of wildfire and other habitat disturbances associated with cross-country travel.
- b) Prior to the completion of CTMTPs, restrict vehicles to existing routes.
- c) Adopt a “restricted to designated routes” approach where appropriate to the extent such designation does not interfere with administrative use.
- d) To the extent practicable, discourage the creation of new roads and trails. Re-route existing routes where appropriate.
- e) Identify and reduce activities demonstrating repeated displacement of nesting birds. Where existing routes are demonstrated to affect occupied leks, apply seasonal and time-based use-restrictions tailored to the site-specific conditions of the area.

ii. West Nile Virus

- a) Reduce the risk of the transmission of West Nile Virus to sage-grouse by minimizing the creation of breeding habitat for mosquitoes.
- b) Consider the potential impacts of West Nile Virus transmission prior to permitting new ponds or reservoirs.
- c) Non-pond/reservoir watering facilities, such as troughs and bottomless tanks, should be developed and maintained to provide high quality water that suppresses development of habitat for mosquitoes.
- d) Functioning float valves and water return features (overflows) should be constructed and maintained to prohibit water from being spilled on the ground surrounding the trough and/or tank, to the extent practicable.
- e) To the extent practicable, water should be returned to the original water source to reduce suitable habitat for mosquitoes.

iii. Livestock Grazing Management

See IV-C(5)(iii), same as in PHMA

iv. Livestock Grazing Infrastructure

- a) To the extent practicable, reduce the impacts of new and existing fences and livestock management facilities on sage-grouse.
- b) Fence construction should be avoided in areas of high and moderate collision risk (Stevens et al. 2012 a, b), or as latest science indicates. If this is not feasible, collision risk should be mitigated through design features (e.g. marking, laydown fences, etc.) in

those areas determined to be of high or moderate collision risk only.

- c) Identify and remove unnecessary fences.
- d) To the extent practicable, to prevent predation from perching raptors and raven nest sites, place new, permanent taller structures, (i.e. corrals, loading facilities, water storage tanks, windmills), at least 0.6 miles from occupied leks.

E. GHMA.

Management by Federal agencies should focus on multiple-use management consistent with local resource management plans.

1. Wildfire

- i. Incorporate best management practices for fire operations to reduce the number and size of wildfires in sage-grouse habitat.
- ii. Fire suppression efforts should be emphasized, recognizing that other local, regional, and national fire suppression priorities may take precedent.
- iii. Aggressively create and maintain effective fuel breaks in strategic locations that will modify fire behavior and increase fire suppression effectiveness. The fuel breaks should target areas necessary to provide a buffer between non habitat and the GHMA or GHMA and the other management areas. Priorities will be between non-sage-grouse habitat and the SGMA or between GHMA and the other management areas. Fuel breaks should be implemented according to the following criteria:
 - Target establishment of fuel breaks along existing roads or other disturbances.
 - Identify and target higher-risk roads for fuel break construction and maintenance based on fire history maps.
 - Implement a strategic approach for using these roads to enable rapid fire response.
 - Ensure fuel breaks are properly maintained and sited with consideration of occupied leks and risk of invasive annual grasses and noxious weeds.
 - Closely evaluate the benefits of the fuel break against the additional loss of sagebrush cover and risk of invasive weeds, based on a site-specific analysis.
 - Actively employ prescribed or targeted grazing as a primary tool for reducing fuel loads, reducing invasive species populations and maintaining functional fuel breaks.

2. Invasive Species

- i. Aggressively manage exotic undesirable species especially invasive annual grasses to prevent invasion into other management areas (PHMA, IHMA).

- ii. Aggressively pursue eradication or control of noxious weeds and/or invasive annual grass species posing a risk to sage-grouse habitats using a variety of chemical, mechanical and other appropriate means in coordination with the local Cooperative Weed Management Area (CWMA).
- iii. Establish an effective monitoring program to evaluate the success of annual grass and noxious weed control efforts in conjunction with the CWMA.

3. Habitat Restoration

- i. The priority of this Plan is not focused on GHMA. If restoration is focused in this HMA, it should be to increase the quality of the habitat adjacent to PHMA and IHMA.

4. Infrastructure

- i. A responsible official may authorize infrastructure construction and should consider the applicable required design features described in Section IV-F as best management practices.
- ii. The State of Idaho determines in coordination with the applicable federal land management agency that the development with associated best management practices, avoidance, minimization, or mitigation actions will not result in a net loss of sage-grouse functional acres. An appropriate compensatory mitigation plan will address unavoidable impacts and outline how the project will reach a no net loss in functional acres for sage-grouse habitat according to the Idaho Mitigation Principles document.
- iii. Designate and manage as open for utility scale (20 megawatts) wind and solar testing and development.
- iv. Actions and authorizations should include best management practices to limit the spread and effect of exotic undesirable species especially invasive annual grasses.
- v. In GHMA infrastructure projects should follow these best management practices unless it is impracticable, technically or economically, to locate the project outside of the buffer area and impacts are avoided through project siting and design to the extent reasonable; or impacts are minor or nonexistent and impacts are avoided through project siting and design to the extent reasonable.
 - **Linear features** (e.g. roads) should have a 0.25-mile buffer distance from the perimeter of occupied leks. (Manier et al. 2014)
 - **Infrastructure related to energy development** (e.g. oil, gas, wind and solar), electrical and communication structures should have a 0.6-mile buffer distance from the perimeter of occupied leks. (Manier et al. 2014)
 - **All Other Anthropogenic Disturbance** (from Section G): 0.6-mile buffer distance from perimeter of occupied leks

5. Secondary Threats

i. Recreation

- a) Nothing in this Plan shall be construed as affecting the use of motorized equipment and mechanical transport in this management area.

ii. West Nile Virus

- a) Minimize the creation of breeding habitat for mosquitoes in sage-grouse habitat.
- b) Prior to permitting new ponds or reservoirs, consider the impacts of West Nile Virus transmission.
- c) Non-pond/reservoir watering facilities, such as troughs and bottomless tanks should be developed and maintained to provide high quality water that suppresses the development of habitat for mosquitoes.

iii. Livestock Grazing Management

- a) Nothing in this Plan shall be construed as affecting existing grazing permits in this management area. Grazing permits are still subject to the federal grazing regulations.

iv. Livestock Grazing Infrastructure

- a) Identify and remove unnecessary fences.

F. Infrastructure—Required Design Features.

- i. For proposed actions authorized in the PHMA and IHMA, the following design features are required. For proposed actions authorized in GHMA the following design features are considered best management practices but are not required:
 - a) No repeated or sustained behavioral disturbance from large scale infrastructure or facilities (e.g., visual, noise over 10 dbA at perimeter of lek above ambient) to lekking birds from 6:00 pm to 9:00 am within 2 miles of occupied leks during the lekking season (as determined locally approximately March 15–May 1 in lower elevations and March 25–May 15 in higher elevations). (Blickley et al. 2012, Patricelli et al 2013). Ambient noise level should be determined by measurements taken at the perimeter of a lek at sunrise.
 - b) Utilize existing roads, or realignments of existing routes to the extent possible.
 - c) Construct new roads to minimum design standards needed for production activities.
 - d) Seed above ground disturbance areas with perennial vegetation to meet the needs of sage-grouse, monitor to assess restoration success or annual invasive grass establishment, and

respond accordingly.

- e) To the extent possible, place infrastructure in already disturbed locations where the habitat has not been fully restored and micro-site linear facilities to reduce impacts to sage-grouse habitats.
- f) Control the spread and effects of nonnative plant species, for example by washing vehicles and equipment (Gelbard and Belnap 2003; Bergquist et al. 2007; Evangelista et al. 2011)
- g) For electric power lines, in addition to the features in this Section (F), evaluate BMPs that may be appropriate, applicable, and feasible to minimize or mitigate project impacts (see APLIC 2015).
- h) Locate staging areas outside the PHMA to the extent possible. If staging areas are necessary, utilize non-habitat areas first and then the least suitable habitat for sage-grouse. Co-locating new infrastructure within existing ROWs and maintaining and upgrading ROWs is preferred over the creation of new ROWs or the construction of new facilities in all management areas. Colocation for various activities is defined as:
 - Communication Sites: Installation of new equipment/facilities on or within or adjacent to existing authorized equipment/facilities or within a communication site boundary as designated in the Communication Site Plan.
 - Electrical Lines: Installation of new ROWs adjacent to current ROWs boundaries, not necessarily placed on the same power poles. To the extent possible, co-locate linear facilities within one kilometer of existing linear facilities.
 - Other Rights-of-Way: Installation of new ROWs within the existing footprint of an approved ROW boundary or adjacent to an approved ROW boundary.
 - Designated Corridors: Installation of new rights-of-way within the existing corridor or adjacent to the existing corridor.
- ii. For oil and gas leases issued after the effective date the 2021 Idaho Plan and associated Executive Order, the following best management practices as well as the relevant practices in the general infrastructure category above are required in PHMA and IHMA and recommended as best management practices in GHMA:
 - a) There shall be no surface occupancy (NSO) within the buffer distance of the associated HMA based on the perimeter of occupied sage-grouse leks; provided this distance is supported by the best available science at the time the development undergoes site-specific environmental analysis.
 - b) Use directional drilling or multiple well pads to reduce surface disturbance.
 - c) Apply a phased development approach, with concurrent reclamation.

- d) Use remote monitoring techniques for production facilities and develop a plan to reduce the frequency of vehicle use (Lyon and Anderson 2003)
- e) Site or minimize linear ROWs or SUAs (Surface Use Agreements) to reduce disturbance to sagebrush habitats
- f) Design or site permanent structures that create movement (e.g., pump jack) to minimize impacts on sage-grouse
- g) Require noise shields when drilling during the lek, nesting, brood-rearing, or wintering season
- h) Locate new compressor stations outside PHMA and design them to reduce noise that may be directed toward PHMA
- i) Locate main roads used to transport production and/or waste products other roads used to provide facility site access and maintenance outside of the associated HMA buffer which is measured from the perimeter of occupied sage-grouse leks, Construct roads to minimum design standards needed for production activities.
- j) New noise levels, at the perimeter of a lek, should not exceed 10 dBA above ambient noise (existing activity included) from 6:00 PM to 9:00 AM during the lekking season (as determined locally approximately March 15–May 1 in lower elevations and March 25–May 15 in higher elevations). (Patricelli et al 2013). Ambient noise level should be determined by measurements taken at the perimeter of a lek at sunrise.

G. Scope and Applicability.

- i. This Plan does not revoke, suspend, or modify any permit, contract, or other legal instrument authorizing the occupancy and use of the applicable Federal lands.
- ii. This Plan does not revoke, suspend, or modify any project or activity decision made prior to the effective date.
- iii. Nothing in this Plan shall be construed as restricting mineral leases, contracts, permits, and associated activities prior to the effective date.
- iv. Nothing in this Plan shall affect mining activities conducted pursuant to the General Mining Law of 1872.
- v. For the purposes of sage-grouse management, the provisions set forth in this Plan shall take precedence over any inconsistent land management plan component unless prescribed by statute or regulation. Land management components that are not inconsistent with this Plan will continue to provide guidance for projects and activities within the SGMA.
- vi. The required design features/best management practices in (Section IV-F) and other protective stipulations in this Plan should be evaluated on a continuous basis and at a

minimum, as new science, information and data emerge regarding the habitats and behaviors of the species.

H. Adaptive Management Measures for Livestock Grazing.

Based upon the assessment process, the ecological conditions, the ecological potential and the status of sage-grouse populations, the following measures could be employed singly, or in combination where appropriate to achieve the rangeland health standards if the standards are not currently being met and improper livestock grazing is identified as a causal limiting factor or if requested by the permittee. Flexibility in administering grazing programs and providing grazing options over relatively large landscapes will help successfully implement these measures.

- i. Employ grazing management systems that provide flexibility in scheduling the intensity, timing, duration, and frequency of livestock grazing use over time to best promote management objectives (e.g. adequate nesting and early brood-rearing habitat in the breeding landscape)
- ii. When use-pattern mapping or monitoring demonstrates an opportunity to adjust livestock distribution to benefit occupied sage-grouse breeding habitat, include herding, salting, and water-source management (e.g., turning troughs/pipelines on/off and extending pipelines/moving troughs) in grazing programs
- iii. If available and feasible, use alternative locations such as introduced perennial grass seedings (i.e. crested wheatgrass) or annual grasslands to meet desired conditions or outcomes across the landscape of use of occupied sage-grouse habitat
- iv. Ensure that permittees are informed of management and movement requirements related to avoiding recent burns, habitat rehabilitation, or other restoration sites
- v. Manage livestock grazing of riparian areas, meadows, springs, and seeps in a manner that promotes vegetation structure and composition appropriate to the site. In some cases, enclosure fencing may be an option; however, recognize that the availability and quality of desired herbaceous species may be improved by periodic grazing use of the enclosure
- vi. During drought periods, prioritize evaluating effects of drought in the PHMA relative to grouse needs for food and cover; ensure that post-drought management allows for vegetation recovery, based on ecological potential, that meets sage-grouse needs in priority sage-grouse habitat areas
- vii. During periods of higher-than-average precipitation, prioritize management considering the increase in available forage and fuels.
- viii. When using salt or mineral supplements, place them in existing disturbed sites, areas with reduced sagebrush cover, such as seedings or cheatgrass sites, to reduce impacts on sage-grouse breeding habitat, where feasible use salts or mineral supplements to improve management of livestock for the benefit of sage-grouse habitat

- ix. In general, avoid constructing new fences in high and moderate risk areas (Stevens et al. 2012 a, b); if this is not feasible, ensure that high and moderate-risk segments are marked with collision diverter devices or as latest science indicates; where feasible, place new permanent, taller structures, such as corrals, loading facilities, water-storage tanks, and windmills, at least as far as the corresponding buffer set back from occupied leks for the corresponding HMA to reduce opportunities for avian predators; carefully consider, based on local conditions, such as topography, the placement of new fences or rangeland infrastructure near other important seasonal habitats, such a winter-use areas and movement corridors, to reduce potential impacts
- x. Design new spring developments in sage-grouse habitat to maintain or enhance the free-flowing characteristics of springs and wet meadows; analyze developed springs, seeps, and associated pipelines to determine if modifications are necessary to maintain the continuity of the predevelopment riparian area in sage-grouse habitat; make modifications where necessary, considering impacts on other water users when such considerations are neutral or beneficial to sage-grouse
- xi. Ensure that new and existing livestock troughs and open water storage tanks are fitted with ramps to facilitate the use of and escape from troughs by sage-grouse and other wildlife; do not use floating boards or similar objects, as these are too unstable and are ineffective
- xii. In consideration of sagebrush availability and local-scale impacts to sage-grouse, consider initiating vegetation management projects where sagebrush canopy cover exceeds desired conditions to promote a perennial grass and forb understory

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