

Idaho Governor's Sage-Grouse Task Force

Recommendations

June 15, 2012*

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EXECUTIVE SUMMARY

The Governor's Sage-Grouse Task Force ("Task Force") is pleased to provide Governor Otter with the following recommendations and policies to aid the State of Idaho in developing a conservation plan specifically adapted to Idaho sage-grouse populations with the objective of precluding the need to list the species under the Endangered Species Act ("ESA").

In March through May 2012, the Task Force met eight times in various locations in the State of Idaho. Each meeting was open to members of the public and provided an opportunity for people to comment on sage-grouse conservation and its potential effects. Additionally, the Idaho Department of Fish and Game ("IDFG") provided a Web page displaying times and locations of Task Force meetings, agenda, meeting notes, and presentations made during the meetings (*see* IDFG 2012b). Thus, the Task Force conducted an open and transparent information-gathering and decision-making process.

The Task Force is unanimously proposing the designation of a Sage-Grouse Management Area ("SGMA") with three distinct management zones: Core Habitat ("CHZ"), Important Habitat ("IHZ") and General Habitat ("GHZ"). The three proposed habitat zones represent a management continuum that includes at one end, a relatively restrictive approach aimed at providing a high level of protection to the most important CHZ, and on the other end, a relatively flexible approach for GHZ allowing for more multiple-use activities. While the IHZ contemplates greater management flexibility than in the CHZ, the overall quality and ecological importance of the habitat within this theme is more closely aligned with the habitat in the CHZ than in the GHZ. This framework aided the Task Force in addressing the various threats to the species.

Specifically, the Task Force addressed the primary threats of wildfire, invasive species and large infrastructure projects. For the secondary threats, the Task Force dealt with issues regarding livestock grazing management, West Nile virus, grazing infrastructure and recreation. The following provides a brief summary of the recommendations for each threat.

The Executive Summary is for illustrative purposes only. Please see the below text for greater detail.

INFRASTRUCTURE

CHZ:

- Restrict development to valid existing rights or incremental upgrade/capacity increase of existing essential developments subject to best management practices ("BMP").
- Provide an opportunity for exceptions to the above restriction through a "change clause." Proposed actions attempting to invoke this exception must demonstrate that the project

will accomplish the following: provide a high-value benefit to the State of Idaho, the individual and cumulative exceptions will not result in fragmentation or other impacts causing the species to decline within the CHZ, cannot reasonably be accomplished elsewhere, and will provide compensatory mitigation for the impacts to the species' habitat.

- Due primarily to the threat of wildfire, an adaptive management trigger should be developed extending the conservation benefits of the CHZ to the IHZ based on the status of the species.
- These projects will undergo a review by a collaborative Task Force similar to this one or the Governor's Roadless Commission.

IHZ:

- Provides more flexibility than in the CHZ, but encourages proponents to develop outside of this zone where economically and technically feasible.
- For a newly proposed development, the project must provide a demonstrated high-value benefit to the State of Idaho and must collocate to the extent practicable—otherwise, the siting must best reduce cumulative impacts and/or avoid other high value natural, cultural, societal resources; must not threaten connectivity of the CHZ; must not result in undue habitat fragmentation; and must mitigate unavoidable impacts.

GHZ:

- Generally permits infrastructure consistent with land-use plans and subject to BMPs.
- Projects will have to undergo appropriate and site-specific environmental analyses.

FIRE/INVASIVE SPECIES

- Reduce the number and size of wildfires by incorporating the Bureau of Land Management's ("BLM") Instruction Memorandum (WO IM 2011-138) for wildfire into relevant land management plans.
- Prioritize, especially in the CHZ and IHZ, the importance of wildfire suppression and prevention. In these zones, only human safety and structure protection should take precedence over the protection of sage-grouse habitat.
- Create effective fuel breaks in strategic locations that will modify fire behavior and increase fire suppression effectiveness, and thus better protect sage-grouse habitat (*see* BLM 2011c) provided the breaks are properly maintained.
- Evaluate and decrease wildfire response time. Achieve response time in CHZ and IHZ sufficient to protect sage-grouse habitat under given conditions.
- Prescribe or target grazing where it is demonstrated to be appropriate as a tool for reducing fuel loads, reducing invasive species populations and maintaining functional fire breaks.
- Manage exotic undesirable species sufficiently to prevent invasion into the CHZ and to reduce weed abundance in the IHZ and GHZ.

- Counties are strongly encouraged to take advantage of the opportunity to participate in the National Environmental Policy Act (“NEPA”) process.

SECONDARY THREATS

Livestock Grazing Management Issues:

- Grazing within CHZ and IHZ will be managed according to the process described in the text below. The Task Force recognizes the need for a flow chart to outline the process to facilitate proper understanding of the recommendations.
- Fine and site scale-habitat assessments and, where necessary, a determination of factors causing any failure to achieve habitat characteristics will be conducted at a resolution sufficient to document the habitat condition and local spatial and inter-annual variability, prior to implementing grazing management changes within an allotment. In other words, assessment of issues related to livestock grazing management does not necessarily result from one year of data at a specific location within an allotment.
- Habitat assessments will be completed in conjunction with scheduled term grazing permit renewals (i.e., every 10 years). Assessments will initially focus on allotments located within the CHZ followed by allotments located within IHZ that have the best opportunities for conserving, enhancing or restoring sage-grouse habitat.
- One of the objectives outlined in the Executive Order is to, “[r]ecognize, encourage and incentivize land use practices that are actively maintaining or improving sage-grouse habitat as evidenced by improvements in habitat quality, active lek routes or stable/increasing populations of the species.” The Task Force discussed many alternatives for accomplishing this objective.
 - One of the alternatives to address this topic was to forego the habitat assessment—until the best information demonstrated otherwise—for areas where the population of the species was stable or trending upward. Due to time constraints, the Task Force was not able to fully resolve this issue. That said, the group did come to a consensus on using the stability of the population as a means for prioritizing the assessment process.
- Adaptive management changes related to existing grazing permits should be undertaken only if improper grazing is determined to be a causal factor in not meeting habitat guidelines, specific to site capability, for three out of five years. This timeframe is generally acceptable; however, due to time constraints the Task Force requests an opportunity to further discuss the issue in order to reach consensus on the timing of monitoring and associated adaptive management response.
- Following the assessments and determination, conservation measures where necessary and appropriate—based on local working group recommendations, Idaho Sage-Grouse

Conservation Plan (ISAC 2009) and those shown below—will be applied at the allotment/activity plan level in accordance with applicable law and with the framework described in the text below.

West Nile virus, Grazing Infrastructure and Recreation:

- The Task Force has proposed several BMPs for addressing the impact to sage-grouse and its habitat.

In conclusion, the Task Force appreciates the opportunity to forward these recommendations to Governor Otter for his consideration.

INTRODUCTION

On March 9, 2012, the Governor of Idaho, C.L. “Butch” Otter, signed Executive Order 12-02 creating the Governor’s Sage-Grouse Task Force, hereafter the “Task Force” (*see* Task Force Website, available at: <http://fishandgame.idaho.gov/public/wildlife/?getPage=310>). The Task Force is pleased to provide Governor Otter with the following recommendations and policies to aid the State of Idaho in developing a conservation plan specifically adapted to Idaho sage-grouse populations with the objective of precluding the need to list the species under the Endangered Species Act (“ESA”).

These recommendations are intended to be incorporated into the National Greater Sage-Grouse Land Use Planning Strategy (“Strategy”) of the U.S. Bureau of Land Management (“BLM”) and U.S. Forest Service (“USFS”) (*see* BLM/USFS 2012). The BLM/USFS Strategy is to incorporate objectives, desired habitat conditions, and management actions into land use plans for federal lands—for the BLM, the Resource Management Plans (“RMPs”) required by the Federal Land Policy and Management Act (“FLPMA”) and for the USFS, the land-management plans (“LMPs”) required by the National Forest Management Act (“NFMA”)—by September 30, 2014. The objective of the BLM/USFS Strategy is to conserve sage-grouse and its habitat and potentially avoid an ESA listing (*see* BLM 2011a).

Because of the accelerated timeframe for developing an Idaho alternative for inclusion in the BLM/USFS Strategy, the Task Force focused primarily on management of sage-grouse habitat on federal lands. Most of the Task Force recommendations are intended to form the basis for “adequate regulatory mechanisms” that can be incorporated into federal land-use plans and considered by the U.S. Fish and Wildlife Service (“FWS”) in any future listing decision.

The Task Force recognizes that these recommendations are not comprehensive. Specifically, while the Task Force was able to address and resolve by consensus a vast majority of the objectives outlined in the Governor’s Executive Order, the compressed time schedule did not permit full ventilation of some of these issues. In the text below, the Task Force attempted to describe these areas and provide the Governor with options to resolve these outstanding issues.

Another limitation of this document is that it does not put forward specific funding recommendations for priority measures—including fire suppression, fuel breaks, invasive-weed treatment, habitat and population monitoring, and permit processing. Again, that shortcoming is simply the result of a lack of time. The measures set forth below are essential to sage-grouse conservation in Idaho and should receive priority consideration in shaping future agency budgets.

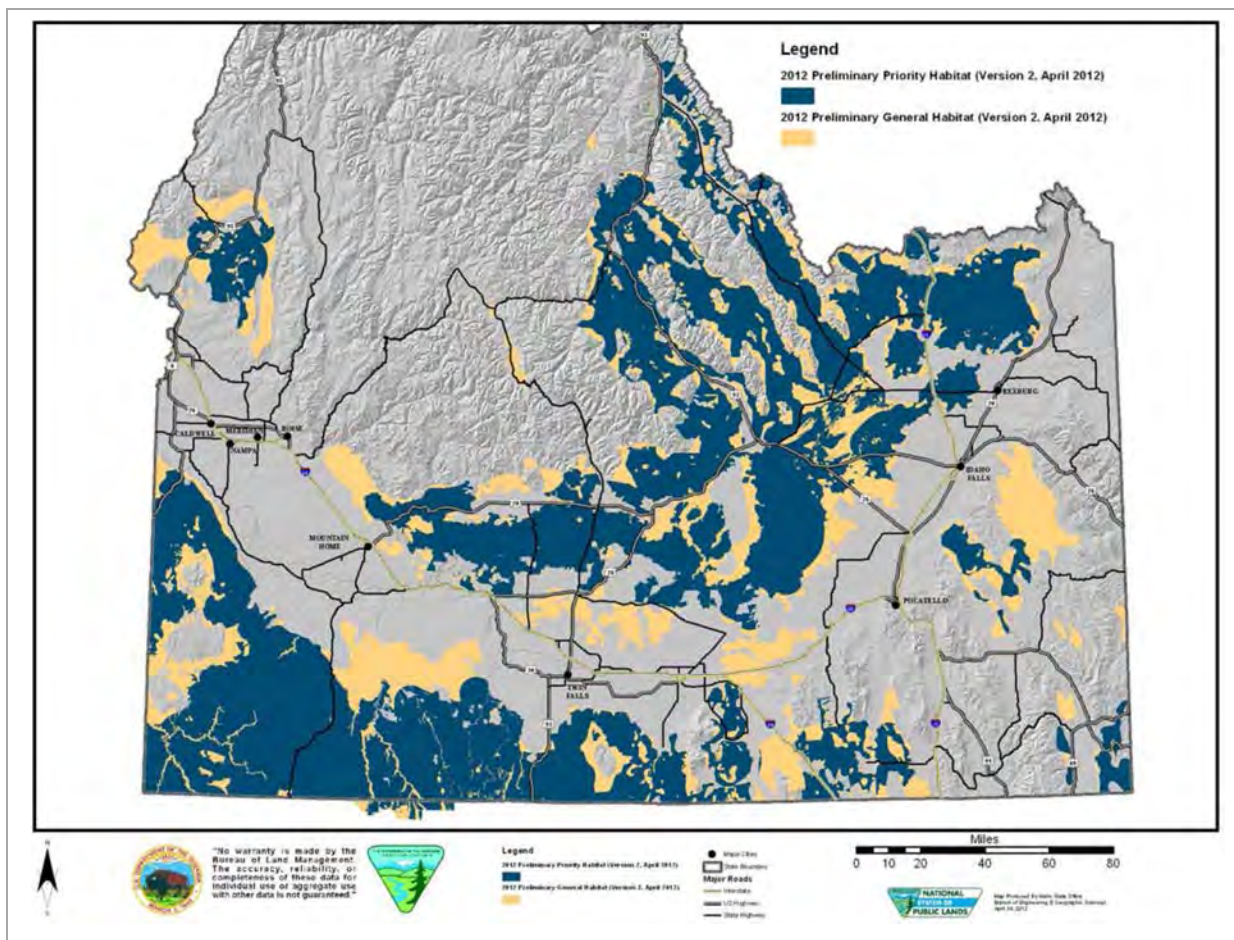
This document also does not attempt to present a complete list of actions by willing private parties, local governments, and the State of Idaho that may be needed to complement the Task Force’s recommendations. The Conservation Plan for Greater Sage-Grouse in Idaho (ISAC 2009) and plans developed by sage-grouse local working groups (*see* IDFG 2102a) offer a broader set of recommendations and should continue to guide sage-grouse management in Idaho. The Task Force is fully committed to helping the State of Idaho engage interested parties and all levels of government in developing effective and workable solutions for sage-grouse conservation issues.

RECOMMENDATIONS

I. PROPOSED SAGE-GROUSE MANAGEMENT AREA (SGMA)

The Task Force is unanimously proposing the designation of the SGMA three distinct zones: Core Habitat (“CHZ”), Important Habitat (“IHZ”) and General Habitat (“GHZ”). The Task Force believes that recognizing and identifying distinct habitat management zones within the SGMA enables the State of Idaho and its federal partners to prioritize conservation efforts to those areas that provide the most effective opportunities to benefit sage-grouse populations and their habitats while maintaining predictable levels of land use. The proposed SGMA is based on **Map 1**, depicting the two habitat areas developed by the BLM in cooperation with the Idaho Department of Fish and Game (“IDFG”).

Map 1. Idaho sage-grouse “priority” and “general” habitat areas

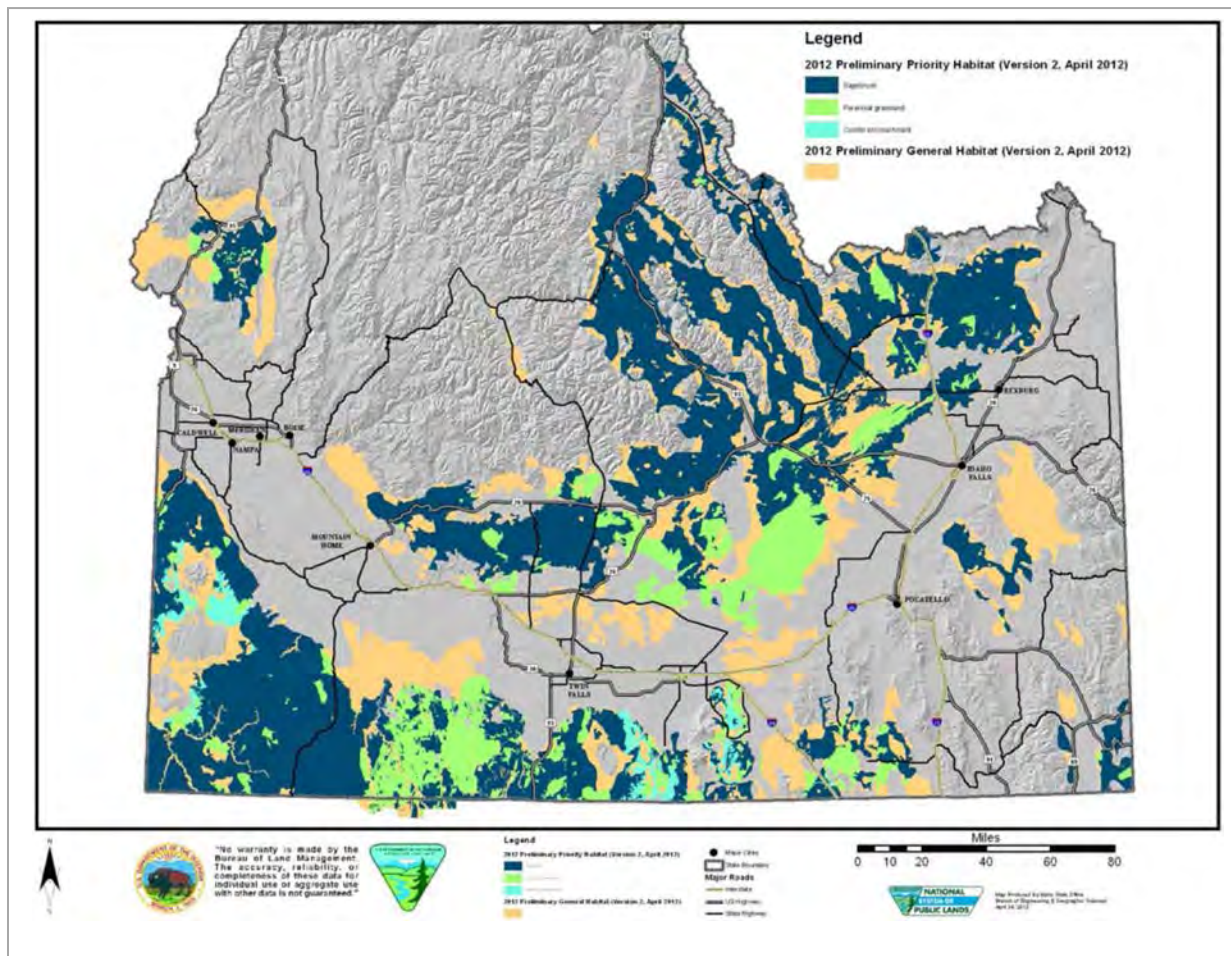


To be consistent with the BLM’s west-wide effort (*see* BLM 2012), BLM calls the two habitat areas in **Map 1** preliminary “priority” habitat (“PPH”) and preliminary “general” habitat (“PGH”). PPH is defined as areas that have been identified as having the highest conservation value to maintaining greater sage-grouse populations; PGH is defined as areas of occupied seasonal or year-round habitat outside of “priority” habitat (Makela and Major 2012).

The Task Force determined that the **Map 1** division of sage-grouse habitat into just two categories (PPH and PGH) did not adequately take advantage of the opportunity to provide more precise management direction based on the quality and location of sage-grouse habitat in Idaho.

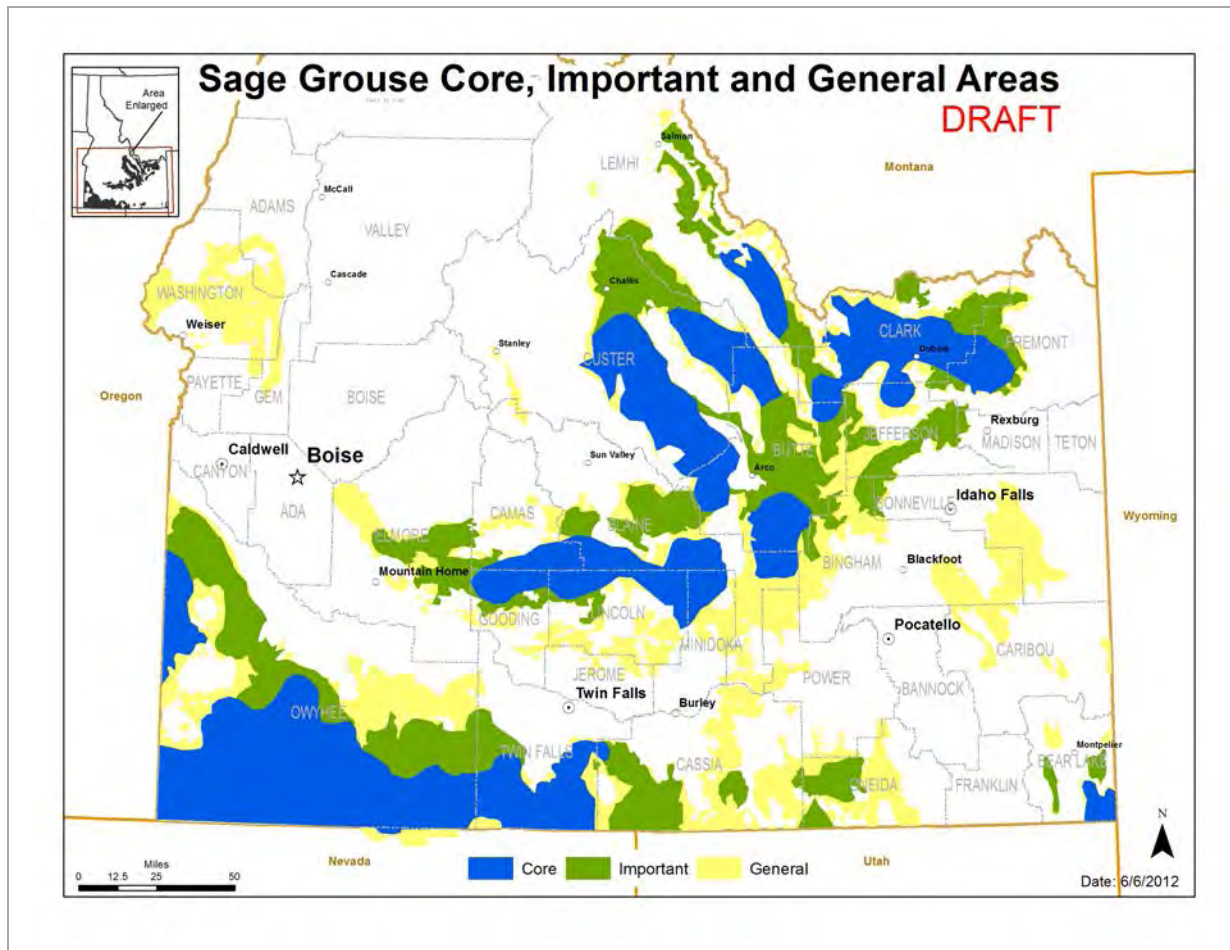
The need to refine habitat areas for management purposes led BLM to develop **Map 2**. It improves on **Map 1** by differentiating three vegetation types within the “priority” habitat areas: sagebrush, perennial grasses, and conifer encroachment. The latter two types offer opportunities for restoration of sagebrush habitat for sage-grouse.

Map2. Idaho sage-grouse habitat areas, with 3 vegetation types in “priority” habitat (Makela and Major 2012, Figure 9)



For the development of SGMA “themes” or “management zones,” the Task Force developed its own terminology for three habitat zones in the SGMA: CHZ, IHZ and GHZ. These are depicted on **Map 3**.

Map 3. Idaho SGMA Habitat Zones (as identified by the Task Force).



[NOTE: At this writing **Map 3** is a preliminary **DRAFT** for illustrative purposes only. IDFG is currently applying the criteria used to develop the three habitat zones to ensure that this map can be replicated and adapted as conditions change.]

In summary, the CHZ and IHZ on **Map 3** total approximately 9.9 million acres, account for 89 percent (89%) of the known leks or breeding display areas in Idaho, and are believed to harbor the majority of the State of Idaho’s remaining populations. Evidence for this includes census data that 95 percent (95%) of the male sage-grouse counted at leks are in these two zones. The GHZ encompasses approximately 5.4 million acres, on which are found 11 percent (11%) of the known leks and 5 percent (5%) of the male sage-grouse attending leks. Because the species can move across large areas during the year, IDFG is unable to precisely calibrate Idaho’s sage-grouse population or the minimum viable population.¹

¹ These data were presented during the Task Force meeting of May 23–24 in Idaho Falls and may need to be adjusted following verification by the IDFG.

The three proposed habitat zones within the SGMA take into account the distribution of sage-grouse populations in Idaho. Specifically, the CHZ and IHZ focus on protecting each of the two key metapopulations in the state. These metapopulations consist of a large aggregation of interconnected breeding subpopulations of sage-grouse that have the highest likelihood of long-term persistence. One metapopulation is located north of the Snake River and includes the North Magic Valley, Big Desert, and Basin and Range areas; the other is located south of the Snake River and includes south central Idaho, the upper Bruneau-Jarbridge Plateau, and the Owyhee Uplands.

The three habitat zones within the SGMA on **Map 3** generally outline areas where a suite of policies will be used to prioritize conservation efforts, and identified as management “themes.” The three proposed habitat zones represent a management continuum that includes at one end, a relatively restrictive approach aimed at providing a high level of protection to the most desirable CHZ, and on the other end, a relatively flexible approach for GHZ allowing for more multiple-use activities. While the IHZ contemplates greater management flexibility than in the CHZ, the overall quality and ecological importance of the habitat within this theme is more closely aligned with the habitat in the CHZ than in the GHZ.

Approximately 65 percent (65%) of the SGMA is administered by the BLM, and another 7 percent (7%) by the USFS. Any proposed actions on these federal lands, regardless of the habitat zone such projects may fall in, will require appropriate site-specific environmental analyses under the National Environmental Policy Act (“NEPA”) prior to approving proposed management actions.

Descriptive statistics and discussion of management themes within each of the three SGMA habitat zones follow.

A. CHZ

The CHZ encompasses approximately 5.7 million acres and supports the highest breeding densities of sage-grouse in Idaho. These areas include approximately 67 percent (67%) of the known active leks and are occupied by approximately 75 percent (75%) of male sage-grouse counted at leks throughout the SGMA. The intent of the management theme within CHZ is aimed at conserving these areas in order to maintain or improve sage-grouse populations.

CHZ represents strongholds for sage-grouse populations in Idaho and is expected to support the largest populations. Thus, CHZ is proposed to have the highest priority for conservation efforts and policies to address the primary threats to the species, as described in the FWS’s listing decision (*see* FWS 2010).

Idaho landowners and sage-grouse local working groups have already invested significant efforts in the CHZ and should continue to be informed and involved as these recommendations are refined and implemented. The Task Force encourages local landowners to continue practices that aid in meeting conservation objectives for CHZ.

Areas designated within the CHZ were mapped based on the following key data sets:

- 25 and 50 percent breeding bird density classes, which represent the top 50 percent of all leks in terms of male attendance, buffered at times by portions of the 75 percent class, depending on location, and the top two categories of the BLM’s connectivity and persistence model (Makela and Major).² The lek connectivity model estimates the likelihood that those leks or population are likely to persist through time (Knick and Hanser 2011).

Depending on location, additional lands have been included in the CHZ to consolidate key breeding areas, to include wilderness areas and lands within national monuments, and to foster population connectivity with neighboring states. The Task Force recognizes that these are fluid boundaries because the habitat is not static, and as new information regarding the species becomes available, it may be necessary to adjust the boundaries for the three zones.

B. IHZ

The IHZ encompasses approximately 4.1 million acres. These areas include approximately 27 percent (27%) of the known active leks and are occupied by an estimated 20 percent (20%) of sage-grouse males. The zone captures high-quality habitat and populations that provide a management buffer for the CHZ, connect patches of CHZ, and support important populations and habitat independent of CHZ.

IHZ is defined by the 75 percent (75%) breeding bird density areas. Given the migratory life history of many sage-grouse populations, a portion of the birds breeding in CHZ will make seasonal use of IHZ. IHZ also includes areas of value for migration corridors, connectivity among breeding areas, and long-term persistence of each of the two key metapopulations of sage-grouse in Idaho.

Management within the IHZ permits a greater degree of flexibility to develop new infrastructure projects than does the CHZ. Management is to be guided by a set of policies aimed at ensuring that IHZ is maintained and, where appropriate, enhanced.

C. GHZ

The GHZ encompasses approximately 5.4 million acres. GHZs generally include few active leks, and fragmented or marginal habitat. GHZ also includes habitat for two isolated populations of sage-grouse in the East Idaho Uplands and West Central Idaho. These areas were designated

² In 2010, the BLM entered into an agreement with the Service to model sage-grouse “breeding bird density” (“BBD”) at three scales: across the range of the species; by WAFWA sage-grouse zones; and by State (Doherty et al. 2011). The BBD analyses involve ranking leks by attendance (i.e., highest to lowest number of males counted on leks) and summing the number of males until a desired percent-population threshold is met, hence the categories used—top 25%, 50%, 75% and 100% of the population.

General Habitat because these isolated populations are unlikely to contribute to the long-term persistence of the two key metapopulations in the State of Idaho.

The GHZ provides a greater flexibility for multiple-use activities than either CHZ or IHZs. Management direction should be consistent with local resource management plans and sage-grouse local working group plans.

D. Adaptive Management

It is generally understood that a significant portion of Idaho's historic sage-grouse habitat has been degraded due to wildfire and other disturbances, and significant losses may occur in the future. The Task Force's proposal attempts to take these anticipated losses into account by applying the management direction for the CHZ and IHZ to strategic, connected areas for restoration habitats (i.e., perennial grassland and conifer encroachment areas) with the aim of restoring these areas to functional sage-grouse habitat.

Recognizing that despite the best efforts to prevent habitat losses resulting from wildfire, the Task Force recommends that an adaptive management approach is needed. Triggers or thresholds that adjust zone criteria should be implemented. What those criteria may be needs to be determined by the State of Idaho as part of the overall conservation objective, but the Task Force suggests such specific thresholds be developed to trigger a general review of this strategy in the event that male lek counts change substantially up or down, or habitat is gained or lost within one of the metapopulations.

E. Caveat Regarding Maps

The Task Force recognizes any attempt to map sage-grouse habitat must by necessity be at a broad, programmatic scale. The mapping of boundaries presented above is not intended to equate to verified boundary locations or habitat types on-the-ground from which the public can determine with certainty whether any particular site is inside or outside a particular management zone. Instead, the mapping exercise is intended to give governmental entities and land managers a general idea of where certain types of habitat and conservation priorities are spatially located as of the date of the map. The Task Force recognizes habitat is not static, any map must be verified or "ground truthed," and the map does not alleviate the duty to determine the actual quality and trends of the habitat at a site specific location of a given development proposal.

II. INFRASTRUCTURE RECOMMENDATIONS

With regard to infrastructure, the Task Force recommends sage-grouse conservation measures to be implemented over the next 10-year period to accomplish the following:

- Conserve existing sage-grouse habitat;
- Increase the resiliency of the habitat to disturbances, such as fire, and reduce existing habitat fragmentation; and

- Provide sage-grouse the opportunity to increase and expand its population in Idaho
- Allow for a limited amount of high-value infrastructure development consistent with the overall goal of the subcommittee's recommendations.

The Task Force defines infrastructure as discrete, large-scale anthropogenic features, including highways, high-voltage transmission lines, commercial wind projects, energy development (e.g., oil and gas development, geothermal wells), airports, mines, cell phone towers, landfills, residential and commercial subdivisions, etc. Infrastructure related to small-scale ranch, home and farm businesses (e.g., stock ponds, fences, range improvements) do not meet this definition, and thus are not subject to this set of conservation measures (refer to section **F. BMPs** for these local issues).

A. Actions Applicable to All Sage-Grouse Management Area Habitat Zones

The Task Force recommends that the maintenance of existing, permitted facilities is acceptable regardless of location or habitat. Best management practices (“BMPs”) will govern when and how maintenance will be conducted to protect sage-grouse during critical life stages (*see* section **F. BMPs**).

Essential public or utility services can be provided to residents and agricultural facilities, including distribution lines, water lines, gas lines, communication lines, etc. Construction of such facilities will follow BMPs to protect sage-grouse during critical life stages, and sited, to the extent practicable, to avoid key sage-grouse use areas (e.g., leks, key winter habitat).

Exemptions from restrictions in all three zones were not specifically considered by the Task Force. However, the Task Force agreed a process for considering exemptions should be designed and overseen by a newly created Governor’s Sage-Grouse Conservation Commission.

- Exemptions for various types of major infrastructure with significant high value to the State of Idaho needed to meet critical existing needs and/or important societal objectives may be considered under a “change clause.”
- The Task Force recommends that such projects would be reviewed by the Governor’s Sage-Grouse Conservation Commission (“Commission”) on at least an annual basis, but not more frequently than quarterly.
 - The Task Force recommends the Commission be comprised of no more than 15 and no fewer than 5 members representing diverse stakeholders, similar to the Governor’s Sage-Grouse Task Force or the Idaho Roadless Rule Commission. It may be desirable to include one or two technical experts on the Commission.
 - As an alternative, the Commission would be comprised of 5 members: one technical expert for the IDFG, a representative from the Governor’s Office of Species Conservation, and three at-large members appointed by the Governor who have demonstrated experience with sage-grouse conservation or a closely related field.

- The Commission will determine the method for reviewing projects exemptions, but the Task Force strongly recommends the following considerations:
 - The proposed project should demonstrate high value benefits to the State of Idaho, with high value to be defined by the state;
 - Consideration of whether IDFG indicates that population trends for the species are improving or stable over a five-year period;
 - The individual and cumulative exceptions must not result in fragmentation or other impacts causing the species to decline within the CHZ; and
 - Collocate the project with existing infrastructure to the extent practicable.
- Development of an adaptive management trigger extending the conservation benefits of the CHZ to the IHZ where it is warranted by the status of the species.
- An effects analysis precedes project approval (e.g., NEPA analysis on federal lands and/or Wind Energy Guidelines [FWS 2012] tiered analysis on federal, state, and private lands)
- Mitigate unavoidable impacts through an appropriate compensatory mitigation plan implemented through the Idaho sage-grouse mitigation framework

When deciding the criteria for project approval, the Task Force recommends that the Commission give strong consideration to a structured, scientific process for addressing wildlife conservation at all stages of infrastructure development similar to those proposed for the wind energy industry (FWS 2012).

Although the FWS (2012) guidelines are voluntary and focused on wind energy infrastructure, the Task Force recommends that the Governor and State of Idaho consider making the guidelines mandatory and be expanded to address all proposed infrastructure in the SGMA.

B. CHZ

Limit the consideration of infrastructure development to only those projects with valid existing rights or incremental upgrade/capacity increase of existing essential developments (e.g., projects for increasing the capacity of an existing transmission line).

- Impacts of such projects would be limited to an existing footprint with only an incremental expansion (approximately a 50 percent or less increase in footprint or size for existing confined development appropriate for the particular industry) and associated impacts.
- Limiting development to these types of projects will substantially constrain the level of new disturbance by limiting impacts to previously disturbed or affected areas, minimize proliferation of roads and decrease opportunities for invasive weeds to colonize, while providing significant public benefit.

- Timing of construction would be designed to minimize impacts to sage-grouse during critical times of their life cycle (e.g., breeding, wintering). Other BMPs would be required to minimize impacts.

As stated above, the change clause would allow the newly created Commission to consider exceptions for infrastructure development in the CHZ. The newly created Commission proposed above will determine the method for reviewing project exemptions in CHZ using the change clause criteria listed above, but the Task Force strongly recommends the following considerations in addition to those articulated above.

- An assessment to determine the proposed action's impact on the State of Idaho's ability to achieve the conservation objective; and
- The project cannot otherwise be accomplished technically or economically outside of CHZ.

New development, either based on existing rights or allowed through the "change clause" defined above, would be subject to the conservation measures identified for the IHZ below.

- Projects rebuilt in place or with only incremental increase in footprint would only be subject to compensatory mitigation if new significant, unavoidable impacts would be associated with the project.

C. IHZ

Limit infrastructure development in the IHZ to projects that either meets the requirements of the CHZ for incremental upgrades of existing infrastructure, or new development is permitted if the proposed project meets the following criteria:

- Provide a demonstrated high-value benefit to the State of Idaho;
- Collocate the project with existing infrastructure to the extent practicable. Otherwise, the siting of a facility must best reduce cumulative impacts and/or avoid other high value natural, cultural, or societal resources;
- Cannot reasonably be achieved, technically or economically, outside of IHZ;
- Does not threaten the connectivity or persistence of CHZs; and
- Must not result in undue fragmentation or other impacts that cause future declines in the population within this zone.
- An effects analysis precedes project approval (e.g., NEPA analysis on federal lands and/or Wind Energy Guidelines (FWS 2012) tiered analysis on federal, state, and private lands)
- Mitigate unavoidable impacts through an appropriate compensatory mitigation plan implemented through the Idaho sage-grouse mitigation framework (*see* ISAC 2011)

Appropriate site-specific BMPs would also be required to minimize impacts (e.g., project siting, site restoration, avoidance of leks, timing and/or spatial buffers, etc.). Compensatory mitigation should be directed to projects that enhance and benefit CHZ or IHZ.

D. GHZ

These areas are lower priority habitats within the SGMA that may provide quality habitat to productive populations of sage-grouse but may be isolated or poorly connected to larger, more continuous populations (e.g., west central or eastern Idaho uplands populations) or provide a buffer to CHZ or IHZs. The objective for managing these areas is to recognize their value to sage-grouse, but not prioritize their protection or restoration over CHZ or IHZs. Therefore, the Task Force recommends management be based on local BLM or USFS land-use plans on federal lands and sage-grouse local working group plans on state and private lands. Although development in areas that are not in the SGMA is preferred to development in GHZ, development in GHZ is preferable to development in CHZ or IHZs. Infrastructure development in GHZ is allowable under the following circumstances:

- An effects analysis precedes project approval (e.g., NEPA analysis on federal lands and/or Wind Energy Guidelines (FWS 2012) tiered analysis on federal, state, and private lands)
- Apply sage-grouse habitat management BMPs (*see F. BMPs* below)
- Impacts must be minimized as much as practicable
- Collocate the project with existing infrastructure of similar type or degree of disturbance to the maximum extent practicable
- Project must be micro-sited to minimize impacts
- If compensatory mitigation is deemed necessary by the permitting entity or project developer, use the Idaho sage-grouse mitigation framework (*see ISAC 2011 and E. Mitigation Framework*)

E. Mitigation Framework

The Task Force recommends that if compensatory mitigation is required to off-set impacts to sage-grouse or their habitats, the Idaho sage-grouse mitigation framework (see ISAC 2011) be the mechanism to plan, select, implement, and monitor these types of projects. The Task Force recommends mitigation efforts place a high priority on restoration efforts in perennial grasses and conifer encroachment areas within CHZs, and secondly on perennial grasses and conifer encroachment areas within IHZs. Mitigation efforts will focus on increasing the resiliency and productivity of CHZs. The Task Force also recommends that the State of Idaho consider funding projects to create a mitigation bank of sage-grouse habitation restoration projects that future development projects would repay through compensatory mitigation requirements.

F. BMPs

The Task Force recognizes that effective and appropriate BMPs are critical to the success of developing infrastructure compatibly with sage-grouse anywhere within the SGMA. The list below is not comprehensive, but the Task Force does agree on these. The Task Force also agrees that other BMPs will need to be part of the plan, in particular for developing oil and gas resources.

- Use existing roads, or realignments of existing routes. Build new roads to minimum standards necessary. Locate roads to avoid IHZs as best as possible.
- Micro-site linear facilities to reduce impacts to sagebrush habitats when possible. Encourage development to occur in areas of existing development, or locations outside of SGMA.
- Locate staging areas outside of the CHZ to the greatest extent possible.
- Co-locate linear facilities in the IHZ within 1 kilometer (“km”) of existing linear facilities when possible.
- New transmission lines constructed within IHZs will be considered collocated and/or allowable if they are constructed between July 1 and March 14 (or between July 1 and November 30 in winter concentration areas) and within a ½ mile either side of existing 115-kilovolt (kV) or larger transmission lines to create a corridor no wider than 1 mile. New transmission lines outside this 1 mile wide corridor within IHZs should be authorized or conducted only when it can be demonstrated that the activity will not cause declines in sage-grouse populations or if it reduces cumulative impacts and/or avoids other high value natural, cultural, or societal resources.
- Locate essential public services (distribution lines, domestic water lines, gas lines) at least 1 km from active leks. If not possible, construct lines outside of March 15 to June 30.
 - To the extent practicable, avoid building power lines and other tall structures that provide perch sites for raptors within 3 km of seasonal habitats. If these structures must be built, or presently exist, the lines should be buried or poles modified to prevent their use as raptor perch sites (Connelly et al. 2000).
 - Based on industry experience, and within nesting habitat, encourage power line structure designs that limit nesting substrate for predators.

G. Actions Left to the Discretion of the Governor

- Where feasible, consider recommending administrative withdrawal of new oil and gas leasing and hardrock mining claims for a 10-year period. Impacts from existing valid oil and gas and mining rights should be developed in such a manner so as to minimize impacts. Consider instituting mandatory BMPs, such as those implemented by the State

of Wyoming or those presented in the BLM (2011b) National Technical Team recommendations.

- Refrain from applying a similar withdrawal for geothermal development, rather suggest proposal be evaluated through the change exemption process if in the CHZ.
- Evaluate the options for adaptive management criteria (or upper/lower population metric thresholds or triggers) that would result in a plan adjustment. The IDFG is currently developing these thresholds or triggers.
- Impacts from some types of infrastructure are not well understood, especially indirect effects, such as behavioral avoidance to anthropogenic development. Encourage further research of these impacts. Such research will provide future clarity on compatible development within the sage-grouse management zone.

III. FIRE AND INVASIVE SPECIES RECOMMENDATIONS

This section presents Task Force recommendations for meeting the objective of addressing the primary and combined threat of wildfire and invasive plant species on sage-grouse and its habitat within the SGMA. Four habitat-oriented objectives below will help maintain and enhance populations and distribution of sage-grouse in the face of these threats. Recommendations for each are organized by federal, state, and private entity implementation.

A. Reduce Wildfire Threats

This objective involves managing the SGMA to reduce the risks wildfire poses to sage-grouse habitat. The highest priority is protection of the CHZ, followed by the IHZ. However, considering that under hot and dry conditions wildfire can spread alarmingly fast, IHZs adjacent to the CHZ can be high-priority protection areas.

Management Actions

The general principle for wildfire management in the SGMA is to reduce the number and size of fires.

- The Task Force recommends that BLM and the USFS incorporate into land-management plans the wildfire measures contained in BLM's instruction memorandum.
- Reducing the number of fires can be accomplished by reducing human-caused ignitions, as approximately half of wildfire starts in the SGMA are human-caused.
 - Coordinate with federal, state, and local jurisdictions on fire and litter prevention programs with special attention to proper cigarette disposal.
 - When fuel and weather conditions warrant, steps to consider include a ban on fireworks, campfires, warming fires, cross-country travel, or even vehicular access in extreme situations.

- Reducing the size of fires is a function of response time following a fire start, and the fuel load on the landscape.
- CHZ and IHZs should be the top of the list of priorities for resource protection and firefighting resource deployment by fire management agencies and entities, following the higher priorities of human safety and structure protection. Where firefighting resources are not being fully utilized in GHZ or outside of the SGMA, and will not cause harm to human safety and structure protection, consider re-allocating those resources to CHZ and IHZs.
- The general approach recommended by the Task Force is that federal and state firefighters should coordinate closely with local fire departments, and use local expertise (i.e., ranchers, road maintenance personnel) to create the best possible network of fuel breaks and road access to minimize response time after a wildfire has started.

All Land Ownerships within the SGMA

- Create and maintain effective fuel breaks in strategic locations that will modify fire behavior and increase fire-suppression effectiveness and thus better protect sage-grouse habitat (*see* BLM 2011c).
 - Construct fuel breaks in strategic areas along existing roads or other disturbances.
 - Keep fuel breaks from fragmenting large areas of intact sagebrush where it may impact the species' habitat.
 - Identify higher-risk roads (i.e., those where human-caused ignitions are frequent) from fire history maps and make them high priorities for fuel break construction and maintenance.
 - Implement a strategic approach to using these roads for rapid fire response as well as fuel breaks using a variety of vegetation management methods and techniques.
 - Actively maintain roads located in or adjacent to CHZ as fuel breaks and also as priority areas for weed control.
- Within perennial grasslands, identify areas at highest risk for wildfire and most likely to benefit from fuel break construction. Areas most likely to benefit include newly planted restoration projects and areas with a history of human-caused ignitions.
- Evaluate and decrease wildfire response time. Achieve response time in CHZ sufficient to protect sage-grouse habitat under given conditions.
 - Identify existing roads and infrastructure in IHZs and GHZ that will prevent fires from moving into CHZ and create fuel breaks as described above.
 - To decrease response time after a wildfire start, create mutual aid agreements between federal and state firefighting agencies and entities and local fire departments.

Lands Managed by the Federal Government

- Place additional firefighting resources (engines, bulldozers, etc.) and establish new Incident Attack Centers to reflect the location of wildfire risks with an emphasis and prioritization of CHZs. Areas within the IHZ should be next in priority.
- Retain retired BLM fire engines that are still in reasonable operating condition and make them available for use by State of Idaho and local fire protection forces.
- Establish air resources sufficient to control fire in inaccessible CHZs.
- Identify and prioritize for maintenance roads necessary for fire response to protect CHZs.
- Use targeted grazing where appropriate (*see* Pellant et al. 2010).
 - Test its effectiveness on a site-specific basis through stewardship contracting for fuel-break maintenance and fuels reduction and to control invasive species.
 - In GHZ, use timely targeted grazing to reduce invasive species and to maintain fuel breaks while ensuring that target grazing does not negatively impact quality of existing breeding habitat.
 - Monitor the results of targeted grazing and apply the adaptive management concept as needed.
- Involve counties and sage-grouse local working groups as cooperating agencies during the development and amendment of travel plans on federal lands in order to prioritize firefighting access and strategic fuel break planning.
- Create mutual aid agreements or expand existing associations to bring local expertise (see examples above) and response to areas of BLM lands not currently covered by a local agency.
- Gather input from local fire agencies to prioritize roads for fuel breaks.
- Share sage-grouse habitat maps with adjacent fire protection forces for coordinated planning.
- Coordinate fuel break construction with adjacent landowners.
- Assess increased wildfire risk for new infrastructure development, and expand fire suppression capabilities accordingly.

Lands Managed by the State of Idaho

- Establish rangeland protection associations through the Idaho Department of Lands to extend fire protection, especially rapid response following a fire start.

Private Lands

- Construct fuel breaks prioritized on existing disturbance and along roads. Actively maintain roads as fuel breaks and as priority areas for weed control.
- Use sage-grouse habitat maps to prioritize response and firefighting efforts.

B. Reduce Threats from Invasive Species

This objective involves management efforts to control throughout the SGMA the spread of and effects from exotic invasive weeds and species, such as cheatgrass and medusahead infestations in sage-grouse habitat.

Addressing conifer encroachment also involves invasive species management. These areas are also an opportunity to restore sagebrush vegetation in a relatively short period of time.

Management Actions

- Manage exotic undesirable species sufficiently to prevent invasion into CHZ and to reduce weed abundance in IHZs and GHZs.
- Manage to avoid weed invasion in IHZs and GHZs and facilitate restoration throughout the SGMA.
- A coordinated approach is desirable, and there are actions that are specific to land ownerships. Subheadings for these follow.

Coordinated Approach for Invasive Weeds

- Endorse the well-established hierarchy for integrated weed management that places first priority on prevention, early detection, and rapid response.
- Ensure that the priority actions of the State of Idaho's sage-grouse conservation plan (ISAC 2009) are understood and supported by private landowners, land and natural resources managers, local government, and cooperative weed-management area managers.
- Link strategies and actions for sage-grouse to the Idaho Invasive Species Strategic Plan 2012-2016.
- Use existing coordination mechanisms administered by the Idaho State Department of Agriculture (ISDA) to monitor actions and provide accountability for outcomes.

Lands Managed by the Federal Government

- All seeding project designs should include measures for invasive weed control and monitoring for at least three years following implementation. Weed-free seed should be used.
- Require BMPs (e.g., washing the gravel) for construction projects in the SGMA.
- Manage existing roads as an opportunity for fuel breaks while preventing weed encroachment.
- Coordinate all management actions with activities on adjacent state and private lands.
- The eradication or control of noxious weeds and/or invasive species posing a risk to sage-grouse habitats should be aggressively pursued using a variety of chemical, mechanical, biological, or other means as appropriate, in coordination with the local Cooperative Weed Management Area (CWMA).

- Create agreements with CWMA's to accomplish coordinated efforts to control invasive and noxious weeds.
- Establish an effective ongoing monitoring program to evaluate the success of weed control efforts. Coordinate with the local CWMA to evaluate the success of nonnative invasive control efforts.
- Based on the results of effectiveness studies, on a site-specific basis, use timely targeted grazing as a tool for nonnative invasive reduction (*see* Pellant et al. 2011).

Lands Managed by the State of Idaho

- Create a new category of ISDA noxious/invasive weed called "Special Emphasis" that specifically addresses the challenges of cheatgrass and medusahead. As a concept, an ISDA review team would establish priority areas, including sage-grouse habitat, where ISDA funding can be used to on a per-project basis. High priority will be given to collaborative projects with federal agencies that address controllable populations spanning state and federal lands.
- Weeds listed on the Special Emphasis list are established and widespread in the State of Idaho. The weed-control authority is authorized to manage these species by any approved weed methodology, to educate inter-jurisdictional landowners about controlling these invasive weeds, and to recommend BMPs to reduce spread or eradicate locally invading populations.
- CWMA's and the county weed-control authority are encouraged to identify locally invading populations and take action against them, particularly in CHZ and IHZs.
 1. Cheatgrass (*Bromus tectorum*)
 2. Medusahead (*Taeniatherum caput-medusae*)
 3. North Africa Grass (*Ventenata dubia*)
- Follow BMPs (e.g., washing the gravel) for construction projects in the SGMA.

C. Restore Sagebrush Vegetation

This objective involves managing conifer encroachment areas to increase CHZs as a priority. These new sagebrush habitats for sage-grouse would serve as a buffer for future sagebrush habitat losses from wildfire. Doing the same in IHZs is a lower priority, and in GHZs lower still. Restoration priority is to restore sagebrush habitats and ecological function focusing first on CHZs, then IHZs, especially areas within IHZ adjacent to CHZ.

Management Actions

All Ownerships within the SGMA

- In conifer encroachment areas, remove conifers by the method appropriate to the terrain in areas identified as most likely to create rapid sage-grouse habitat recovery. Use methods creating the least disturbance.

- Areas most likely to recover will have low conifer canopy cover, existing sagebrush understory, and sage-grouse use nearby. Do not use methods, such as prescribed fire that will destroy this understory.
- Do not conduct treatment in juniper stands older than 100 years.
- Prioritize conifer removal treatment areas within or adjacent to CHZs. Coordinate with sage-grouse local working groups to prioritize treatment areas.
- Within perennial grasslands, actively restore sagebrush canopy and native forb understory. Place highest priority for restoration on areas with lower wildfire and cheatgrass invasion risk and with the greatest likelihood of re-colonization by sage-grouse.
- Within perennial grasslands, actively restore sagebrush canopy and the ecological functions of the site. Use native understory species where available and feasible.
- Place highest priority for restoration within CHZs and especially those with lower risks of wildfire and exotic species invasion. IHZs should not be overlooked, especially areas adjacent to CHZ.
- Use sagebrush seeding in strips perpendicular to prevailing winds.

Federal

- To facilitate conifer removal on BLM lands, use Natural Resource Conservation Service (NRCS) funding through permittee grants under the EQIP (Environmental Quality Incentives Program) and WHIP (Wildlife Habitat Improvement Program) programs.

D. Local Issues

- A primary issue of concern for the Task Force is to involve local expertise and resources as well as BLM and USFS expertise and resources.
- Counties are encouraged to take advantage of the opportunity to participate in the NEPA process.
- The BLM and USFS must offer cooperating agency status to the local government for all NEPA actions involving lands in the SGMA or otherwise relevant to sage-grouse conservation.
- CHZ and IHZ should be retained in BLM ownership unless a proposed land sale or exchange would benefit for sage-grouse conservation or is contemplated by Subtitle F (Owyhee Public Land Management) of the *Omnibus Public Land Management Act of 2009*.

IV. SECONDARY THREATS RECOMMENDATIONS

The Task Force dealt with four secondary threats: issues with livestock grazing management, recreation, West Nile virus, and fences and livestock management facilities. The latter prompted the need to consider predation as a threat. Each threat is addressed in a separate section below.

A. Livestock Grazing Management Issues

Introduction:

No studies exist that directly relate livestock grazing systems or stocking rates to sage-grouse abundance or productivity. Most concerns about grazing effects on sage-grouse are focused on local conditions (e.g., riparian issues, heavy use at water troughs) but what sage-grouse respond to and are affected by are conditions at the larger landscape. Therefore, grazing should be viewed as a landscape stressor with monitoring and management actions conducted at appropriate scales. Accordingly, the FWS does not consider livestock grazing in general as a threat to the species. Only where management issues are documented over time does this activity rise to the level of a secondary threat.

Unfortunately, assessing effects of livestock grazing at relatively large spatial scales is very difficult due to a lack of adequate control sites and a lack of understanding of sagebrush systems prior to introduction of livestock (Knick et al 2011). Most research has been conducted in the presence of grazing. This lack of knowledge of grazing in a landscape context complicates efforts to develop meaningful recommendations for grazing practices in sage-grouse habitat. However, numerous studies have been published providing detailed information on characteristics of sage-grouse seasonal habitats (Knick and Connelly 2011). These studies provide insight on heights and cover of sagebrush and herbaceous plants needed for productive habitats (Connelly et al. 2000).

Approach:

Livestock grazing is typically considered in a site-specific context over time. Vegetation condition can be manipulated by the timing and intensity of grazing practices. Grazing options should be considered over a landscape. This is currently done by having allotments with different grazing schedules as most allotments are grazed according to elevation, productivity, and period of grass and forb growth (e.g., high elevations are grazed during summer months) as well as other objectives (e.g., fuels control).

However, using the three habitat zones and their associated management themes could provide different options for grazing flexibility and this should also be considered. As an example, altering grazing schemes in CHZs when necessary might be facilitated by enhanced grazing opportunities for introduced seedings in areas with lower value to sage-grouse (e.g., GHZ), thus providing flexibility, options and opportunities to livestock operators. However, lowering utilization or reducing spring grazing must be weighed against the increased risk of wildfire.

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 and stable sage-grouse populations. This current set of recommendations should be adapted as more data become available.

Guidelines for managing sage-grouse habitats and populations have been published (Connelly et al. 2000, Hagen et al. 2007) and are often included in various management plans. These guidelines describe characteristics of productive sage-grouse habitats based on a large number of studies conducted throughout the species' range. However, they do not reflect data collected in all parts of the range nor do they reflect data collected from randomly sampled locations. 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.

Proper grazing management requires flexibility and opportunity to schedule and adjust the intensity, timing, duration, and frequency of grazing use over time in a manner that maintains rangeland health and habitat quality. Vegetative characteristics of sage-grouse seasonal ranges can change spatially and temporally due to a variety of influences. Therefore, sage-grouse guidelines should be viewed as a tool for assessing habitats and guiding management actions but not used as a means of dictating grazing strategies or stocking rates.

Management Framework:

Grazing within the CHZ and IHZ will be managed according to the process outlined in the text below. Fine and site scale-habitat assessments and, where necessary, a determination of factors causing any failure to achieve habitat characteristics will be conducted at a resolution sufficient to document the habitat condition and local spatial and inter-annual variability, prior to implementing grazing management changes within an allotment. In other words, assessment of issues related to livestock grazing management does not necessarily result from one year of data at a specific location within an allotment.

The process will be completed in conjunction with scheduled term grazing permit renewals (i.e., every ten years). Assessments will initially focus on allotments located within CHZ followed by allotments located within IHZ that have the best opportunities for conserving, enhancing or restoring sage-grouse habitat. Sage-grouse populations that are stable or trending upward will be a lower priority for the habitat assessment process than areas where the population is declining or lacking information. Fine scale assessments will be conducted to determine whether habitat guidelines are being met and what the causal factor(s) may be. The prioritization of actions and the process to be followed is outlined in the text below.

One of the objectives outlined in the Executive Order is, “[r]ecognize, encourage and incentivize land use practices that are actively maintaining or improving sage-grouse habitat as evidenced by improvements in habitat quality, active lek routes or stable/increasing populations of the species.” The Task Force discussed many alternatives for accomplishing this objective. One of the alternatives to address this topic was to waive the habitat assessment, until the best information demonstrated otherwise, for areas where the population of the species was stable or trending upward. Due to time constraints, the Task Force was not able to fully resolve this issue. That said, the group did come to a consensus on using the stability of the population as a means for prioritizing the assessment process as described above.

Adaptive management changes related to existing grazing permits should only be undertaken if improper grazing is determined to be a causal factor in not meeting habitat guidelines, specific to site capability, for three out of five years. This timeframe is generally acceptable; however, due to time constraints the Task Force requests an opportunity to further discuss the issue in order to reach consensus on the timing of monitoring and associated adaptive management response. Following the assessments and determination, conservation measures where necessary and appropriate based on local working group recommendations, Idaho Sage-Grouse Conservation Plan (ISAC 2009) and those shown below will be applied at the allotment/activity plan level.

Given limited agency resources, monitoring and permit renewals will be focused on areas that have the potential to provide the greatest benefit to sage-grouse. As noted above, monitoring and permit renewal will be initially prioritized to CHZ. Within the CHZ, and as mentioned above, resources will be further prioritized to breeding habitats that have decreasing counts on lek counts.

The assessment/determination will rely on published characteristics of sage-grouse habitat and also consider Ecological Site Descriptions, existing vegetation, habitat inventories/assessments (Stiver et al. 2010), and, where available, state and transition models 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 habitat

Category 2: The grazing allotment (or any pasture/significant area therein) has the ecological potential to provide sage-grouse habitat.

Management Recommendations:

1. Insure that permittees are informed of sage-grouse habitat objectives needed to maintain viable sage-grouse populations. Include permittees in planning conservation measures.
2. Develop a collaborative project involving livestock permittees, federal and state agencies, and university researchers to fine-tune knowledge of current conditions and needed management actions in sage-grouse habitats that could be applied in the SGMA.
3. Summer habitat—Within CHZ and IHZs, manage summer habitats to provide conditions described in **Table 1**.

Table 1. General characteristics of late brood rearing habitat.

Habitat Features	Habitat Indicators	Habitat Characteristics	
		Upland Sagebrush Communities	Riparian/Wet Meadow Communities
Protective Cover	Sagebrush Canopy Cover	10-25%	N/A
	Sagebrush height	16-31"	N/A
	Sagebrush Proximity		Protective sagebrush cover (10-25%) is within 300 m of riparian/meadow feeding area
Protective cover and food	Grass/forb canopy cover	>15%	N/A
Food	Forb Availability	Succulent forbs are available during the summer. Generally applies to higher elevations, such as mountain big sage sites.	Riparian and wet meadow conditions are such that succulent forbs are available during the summer.

4. Winter habitat—Within CHZ and IHZs, manage winter habitats to provide conditions described in **Table 2**.

Table 2. General characteristics of winter habitat.

Habitat Features	Habitat Indicators	Habitat Characteristics
Protective cover and food	Sagebrush canopy cover	10-30% exposed above snow
	Sagebrush height	10-14" exposed above snow

5. Breeding (nesting and early brood rearing) habitat
 - a. Within CHZ and IHZs: Assess breeding habitats, considering ecological conditions (site potential and existing vegetation), using values provided in **Table 3**.
 - b. If monitoring indicates that poorly managed livestock grazing is limiting achievement of habitat characteristics (Tables 1 to 3), implement conservation measures designed to achieve desired habitat conditions. Conservation measures may be drawn from, but are not limited to: local working group plans, Idaho Sage-Grouse Conservation Plan (2006) to extent consistent with local working plans, and the list of measures set forth below. These measures should be tailored to address the specific management issue.

- c. Examine the relevant scientific information, including but not limited to Grazing Science Review Panel as described in the Owyhee Initiative.
- d. Monitor results over three years; if insufficient improvement is noted implement additional measures.

Table 3. General characteristics of productive breeding/nesting and early brood rearing habitat.

Habitat Features	Habitat Indicators	Habitat Characteristics	
		Arid Sites	Mesic Sites
Protective Cover	Sagebrush Canopy Cover	15-25%	15-25%
	Sagebrush Height	12-31"	16-31"
	Sagebrush Growth Form	Spreading	Spreading
	Perennial Grass/Forbs heights (post hatch)	Adequate residual nesting cover*	
	Perennial Grass Canopy cover	Not Specified	>15%
Protective Cover and food	Forb canopy cover	Not Specified	>10%
	Total grass/forb cover	>15%	>25%
Food	Forb Availability	Good abundance & availability relative to ecological site potential	

*As defined by Connelly et al. 2000, Hausleitner 2003, and Holloran et al. 2005.

Conservation Measures:

Based upon the ecological conditions and status of sage-grouse populations, the following list of management actions or strategies could be employed singly or in combination where appropriate, in the development and implementation of grazing management programs. Flexibility in administering grazing programs and providing offsetting grazing options over relatively large landscapes will help to successfully implement these actions.

1. Employ grazing management systems that ensure adequate nesting and early brood rearing habitat within the breeding landscape.
2. When use-pattern mapping or monitoring shows opportunity to adjust livestock distribution to benefit occupied sage-grouse breeding habitat, include as appropriate herding, salting, and water-source management (e.g., turning troughs/pipelines on/off, extending pipelines/moving troughs) in grazing programs.

3. When available and feasible, utilize exotic perennial grass seedings and/or annual grasslands to avoid breeding season use of occupied sage-grouse habitat.
4. Develop strategically located forage reserves (seedings) to shift early season livestock-use. (Note: the establishment of such forage reserves may be particularly relevant in areas that have minimal or no potential for sage-grouse habitat restoration.)
5. Where appropriate, maintain residual herbaceous vegetation at the end of the growing/grazing season to contribute to nesting and brood-rearing habitat during the coming nesting season.
6. Identify and reduce activities that repeatedly disturb displaying birds on active leks.
7. Insure that permittees are informed of management and movement requirements related to avoidance of recent burns, rehabilitation seedings or other restoration sites.
8. Manage grazing of riparian areas, meadows, springs, and seeps in a manner that promotes vegetative structure and composition appropriate to the site. In some cases enclosure fencing may be a viable option. However, recognize the availability and quality of desired herbaceous species may be improved by periodic grazing use of the enclosure.
9. Implement management actions (grazing decisions, allotment management plan/conservation plan development, or other agreements) to modify grazing management to meet seasonal sage-grouse habitat requirements. Employ proper grazing management by providing flexibility in scheduling the intensity, timing, duration and frequency of grazing use over time that best promotes management objectives. During drought periods, prioritize evaluating effects of drought in priority sage-grouse habitat areas relative to their needs for food and cover. Ensure that post-drought management allows for vegetation recovery that meets sage-grouse needs in priority sage-grouse habitat areas.
10. When using salt or mineral supplements: a) place them in existing disturbed sites, areas with reduced sagebrush cover—e.g., seedings or cheatgrass sites—to reduce impacts to sage-grouse breeding habitat, b) where feasible use salts or mineral supplements to improve management of livestock for the benefit of sage-grouse habitat.
11. In general, avoid constructing new fences within 2 km of occupied leks. Where feasible, place new, taller structures, such as corrals, loading facilities, water-storage tanks, windmills, etc., at least 2 km from occupied leks to reduce opportunities for perching raptors. Careful consideration, based on local conditions, should also be given to the placement of new fences or structures near other important seasonal habitats (winter-use areas, movement corridors etc.) to reduce potential impacts.
12. New spring developments in sage-grouse habitat should be designed 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 within priority sage-grouse habitat. Make modifications where necessary, considering impacts to other water users when such considerations are neutral or beneficial to sage-grouse.

13. 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. Use BMPs to mitigate potential impacts from West Nile virus.
14. When placing new water developments in sage-grouse breeding habitat, choose sites and designs that will provide the greatest enhancement for sage-grouse and sage-grouse habitat.
15. Avoid new water developments in higher quality native breeding/early brood habitats that have not had significant prior grazing use except in situations in which water developments may aid in better livestock distribution across the allotment and will not adversely impact the species.
16. Identify and when feasible, establish strategically located forage reserves focusing on areas unsuitable for sage-grouse habitat restoration or lower priority habitat restoration areas.
17. Monitor for, and treat invasive species associated with, existing range improvements.
18. Consider initiating vegetative manipulation projects where sagebrush canopy cover exceeds optimal characteristics to promote grass and forb understory growth. These projects should only be undertaken where it can be achieved without adversely impacting the species.

B. Recreation

Goal: Reduce or minimize human-related disturbance due to recreational activities to sage-grouse on important seasonal habitats.

Objective: Implement comprehensive travel planning for motorized, mechanized, and non-motorized recreation.

Action 1: In the SGMA complete Comprehensive Transportation Management Travel Plans (“CTMPs”) to minimize disturbance to sage-grouse and reduce the risk of wildfire and other habitat disturbances associated with cross-country travel. In the interim, before the CTMPs are complete, restrict vehicles to existing routes in CHZ and IHZs. Adopt a "restricted to designated routes" approach where appropriate. This action applies to recreation activities and does not extend to administrative use. For areas without CTMPs, priority should be given to the CHZ.

Action 2: Discourage the creation of new roads and trails in CHZ and IHZ. Re-route existing routes and locate new routes in a manner that minimizes disturbance where appropriate. Promote management and rehabilitation practices that discourage or limit fire lines (e.g., dozer lines or other routes created by equipment) from being converted to recreation routes.

Action 3: Identify and reduce activities that repeatedly disturb displaying birds on leks or displace nesting birds. Where existing routes affect occupied leks, apply seasonal, time based use-restrictions where needed and appropriate, to minimize nonessential activity between one and one half hour after sunset to 9:00 AM. In general this guideline should be applied from approximately March 15 through May 1 in lower elevation habitats and March 25 through May 15 in higher elevation habitats.

Action 4: Work collaboratively with the recreation community to increase awareness of the impacts of recreation on sage-grouse and other wildlife and to develop solutions to reduce conflict.

C. West Nile Virus

Goal: Reduce the risk of transmission of West Nile virus to sage-grouse.

Objective: Minimize the creation of breeding habitat for mosquitoes in sage-grouse habitat.

Action 1: Consider potential impacts of West Nile virus transmission prior to permitting new ponds or reservoirs that may create new mosquito habitat in CHZ and IHZs. Minimize construction of new ponds and reservoirs except as needed to meet important resource management and restoration objectives.

Action 2: For ponds and reservoirs that receive approval in accordance with Action 1, utilize the BMPs for building ponds and reservoirs outlined by Doherty (2007).

Action 3: 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. Maintenance of functioning float valves and water return features shall be conducted to prohibit water from being spilled on the ground surrounding the trough/tank and water shall be returned to the original water course to reduce suitable habitat for mosquitoes and biting midges that transmit West Nile virus.

D. Fences and Livestock Infrastructure

Goal: Reduce effects of fences and livestock management facilities on sage-grouse.

Objective: Mark or remove high priority fences.

Action 1: Mark fences with permanent flagging or other suitable device designed to reduce sage-grouse collisions on flat to gently rolling terrain in areas of moderate to high fence densities (i.e., more than one kilometer of fence per square kilometer) located within 2 kilometers of occupied leks.

Action 2: Identify and remove unnecessary fences.

Objective: Locate fences and livestock management facilities to minimize impacts to sage-grouse.

Action 1: Placement of new fences and livestock management facilities, such as corrals, loading facilities, water tanks, windmills, etc. should include consideration of their impact on sage-grouse

Action 2: In general, avoid constructing new fences within 1 km (0.6 mi) of occupied leks (adopted from Connelly et al. 2000).

Action 3: Where feasible, place new, taller structures, such as corrals, loading facilities, water storage tanks, windmills, etc., as far as possible (at least 2 km) from occupied leks. This will help reduce opportunities for perching raptors to prey on sage-grouse.

CONCLUSION

In conclusion, the Task Force has appreciated the opportunity to provide the above recommendations and policies to Governor Otter. The Task Force hopes these measures will prove useful in developing a comprehensive plan that conserves the species and its habitat while maintaining predictable levels of land use. In some instances, the Task Force did not have sufficient time or the site-specific information necessary to fully address a specific issue. To the extent it would be useful or necessary, the Task Force would encourage the Governor to consult or reconvene the Task Force to assist in resolving these issues.

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