Individual CCA for:
Allotment Name and Number:

Greater Sage-Grouse

Candidate Conservation Agreement
for
Range Management on
Bureau of Land Management Lands in Wyoming

Developed cooperatively by:

U.S. Bureau of Land Management
U.S. Fish and Wildlife Service

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EXECUTIVE SUMMARY

Greater sage-grouse (sage-grouse) have declined across their range for a variety of reasons and now occur in 11 states and two Canadian provinces. On March 23, 2010, the U.S. Fish and Wildlife Service (Service) released its finding that the sage-grouse warranted listing under the Endangered Species Act (ESA), but that listing was precluded by other higher priority actions (75 FR 13909). While improperly managed livestock grazing was identified as a threat, the Service noted: "There are data to support both beneficial and detrimental aspects of grazing (Klebenow 1981, Beck and Mitchell 2000), suggesting that the risk of livestock grazing to sage-grouse is dependent on site specific management" (75 FR 13998). Positive impacts of grazing could include the maintenance of large areas of contiguous sagebrush, increased brood use of lightly to moderately grazed areas (as opposed to ungrazed or heavily grazed areas), and the ability of ranchers and rangeland management specialists to detect and treat infestations of non-native and invasive species such as cheatgrass (*Bromus tectorum*), increasing the likelihood that control will be successful. Maintenance of perennial bunchgrasses with light to moderate levels of livestock use would benefit sage-grouse. Grazing could negatively affect sage-grouse by reducing residual perennial grass cover at nesting sites, resulting in diminished concealment of hens at their nests.

The purpose of this Candidate Conservation Agreement (CCA) is to support implementation of consistent conservation measures across public and private lands operations to further reduce or eliminate potential threats to sage-grouse from rangeland management practices and to maintain and support livestock grazing practices that are beneficial or neutral to sage-grouse on enrolled allotments administered by the Bureau of Land Management (BLM) in Wyoming. This CCA is an important component of a strategic, landscape-level approach to address the conservation needs of sage-grouse.

The CCA is a voluntary agreement between the Fish and Wildlife Service (Service), the BLM, and includes the voluntary participation of the authorized Permittee/Lessee. It provides a framework for the authorized Permittee/Lessee to voluntarily implement conservation measures for sage-grouse beyond those measures required as a condition of their grazing permit. Allotment-level CCAs are agreements **to implement, monitor, and report on the effectiveness** of the voluntary conservation measures as to their benefit for sage-grouse and their habitat on respective allotments. Allotment-level CCAs are intended to facilitate consistent implementation of conservation measures across public and private lands where a participating permittee also has enrolled their private lands in the *Greater Sage-Grouse Umbrella CCAA for Wyoming Ranch Management*.

The conservation measures voluntarily undertaken by the authorized Permittee/Lessee in their allotment-level CCAs are in addition to those measures required in existing BLM Resource Management Plans (Plans) or authorized grazing permits/leases. The BLM is amending its Resource Management Plans to incorporate explicit objectives, management actions, or land-use restrictions to conserve sage-grouse and their sagebrush habitats. This will provide greater certainty that adequate regulatory mechanisms are in place for consideration in the ESA listing decision by the Service. The Wyoming BLM has issued interim sage-grouse habitat management guidance to its field offices during the Resource Management Plan Amendment process (BLM

IM 2012-019). When the amendment process is completed, additional habitat management actions may affect terms and conditions of the grazing permit. The CCA will continue to be the vehicle to identify and incorporate any voluntary conservation actions beyond those required by regulation and the amended RMP(s). This agreement may be revised as a result of adaptive management, provided all parties agree to the changes, to continue providing enhanced conservation benefits for sage-grouse.

In the case of federal lands, neither the BLM nor the Service can provide a participating authorized Permittee/Lessee with absolute assurance that additional requirements resulting from the RMP amendments or result of a decision to federally list the sage-grouse would not apply. However, this CCA provides the best mechanism to ensure the continuation of the grazing Permittee/Lessee's existing operations on federal lands in the event that the Greater sage-grouse is listed as threatened or endangered under the ESA. The selected conservation measures are specifically designed to address threats to the sage-grouse previously identified by the Service (75 FR 13909) that may already be present, or may be avoided in the future. These conservation measures represent the synthesis of the best available science for sage-grouse management in Wyoming and are consistent with Western Association of Fish and Wildlife Agencies guidelines (Connelly et al. 2000) as well as current BLM direction for management of sage-grouse habitats on BLM-administered lands:

- BLM National Sage-Grouse Habitat Conservation Strategy (2004)
- Guidance for Addressing Sagebrush Habitat Conservation in BLM Land Use Plans (2004)
- Guidance for Management of Sagebrush Plant Communities for Sage-Grouse Conservation (2004)
- Western Association of Fish and Wildlife Agencies Greater Sage-Grouse Comprehensive Conservation Strategy (2006)
- Sagebrush Memorandum of Understanding among Federal Agencies and the Western Association of Fish and Wildlife Agencies (2008)
- Sage-Grouse Management Considerations for Energy Development (Instruction Memorandum No. 2010-071)
- Interagency Greater Sage-Grouse Memorandum of Understanding (2011)
- Greater Sage-Grouse Interim Management Policies and Procedures (Instruction Memorandum No. 2012-043)
- BLM National Greater Sage-Grouse Land Use Planning Strategy (Instruction Memorandum No. 2012-044)
- National Technical Team Report http://www.blm.gov/pgdata/etc/medialib/blm/co/programs/wildlife.Par.73607.File.dat/GrSG%20Tech%20Team%20Report.pdf)
- Conservation Objectives Team Report (http://www.fws.gov/mountain-prairie/species/birds/sagegrouse/COT/COT-Report-with-Dear-Interested-Reader-Letter.pdf)

This CCA includes:

- Description of the responsibilities of the Cooperators and Participants
- Area to be covered under the CCA
- Habitat requirements, status, and general threats to sage-grouse

- Conservation measures designed to remove or reduce identified threats
- Expected benefits of the conservation measures

I. BACKGROUND

INTRODUCTION

Listing a species as threatened or endangered under the ESA triggers regulatory and conservation responsibilities for federal land managers. These responsibilities stem in part from section 9 of the ESA, which prohibits "take" (i.e., harass, harm, pursue, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct) of federally listed species. Federal agencies must also ensure that federal actions will not jeopardize the continued existence of listed species and are also required to implement programs for the conservation of listed species under section 7(a)(1) of the ESA.

Many candidate species occur on both federal and non-federal lands. Non-federal property owners can enter into a separate Candidate Conservation Agreement with Assurances (CCAA) in order to implement voluntary conservation measures aimed at reducing and/or eliminating threats to candidates or other species to ensure that their land operations can continue unaffected if the species is federally listed in the future. However, property owners whose operations rely on using a combination of land ownership types (i.e., federal and non-federal) are concerned because assurances provided to them under a CCAA do not apply to federal lands. Private property owners and authorized federal Permittees/Lessees are seeking greater certainty that, if they implement conservation measures to enhance the habitat of the sage-grouse, they could continue their operations without interruption or the risk of additional regulatory burden should the sage-grouse be listed under the ESA.

The goals of this CCA are to:

- Support and encourage voluntary livestock grazing management practices that are beneficial to sage-grouse and are above and beyond those required by the RMP on enrolled allotments;
- Provide increased certainty regarding continuity of livestock grazing operations on BLM-administered lands in the event of a listing; and
- Streamline the process of landowner enrollment in a companion CCAA and facilitate a complementary strategy for livestock management to benefit sage-grouse habitats.

The Service and the BLM anticipate that permittees seeking to enroll individual allotments in allotment-level CCAs will already have considered enrollment of their private lands through participation in the ***Greater Sage-Grouse Umbrella CCAA for Wyoming Ranch Management***. These two conservation agreements are intended to achieve consistent conservation benefit across landownerships while addressing the interests of both federal and private land managers.

In the Service's threats analysis in their 2010 "warranted but precluded" finding for sage-grouse, habitat fragmentation and lack of adequate existing regulatory mechanisms were identified as the primary factors negatively impacting sage-grouse across their range (75 FR 13909). Efforts to

address the adequacy of regulatory mechanisms include those undertaken by the State of Wyoming as the resource trustee (e.g., the Governor's Greater sage-grouse Core Area Protection, Executive Order 2011-5); and the BLM and USDA Forest Service, per plan revisions and/or amendments.

State of Wyoming

The State of Wyoming has developed a Core Area strategy for sage-grouse by delineating important Core Area habitats. The State designated these Core Areas to protect the most important sage-grouse habitats, including their lek sites. Wyoming Governor Matthew Mead issued Greater sage-grouse Core Area Protection, Executive Order 2011-5, which outlines development restrictions within those core areas. Specifically, the Order directs that "[State] agencies should, to the greatest extent possible, focus on the maintenance and enhancement of those Greater Sage-Grouse habitats and populations within the Core Population Areas identified by the Sage Grouse Implementation Team." The order addresses new development within "Core Population Areas," which "should be authorized or conducted only when it can be demonstrated by the State agency that the activity will not cause declines in Greater Sage-Grouse populations." Other recommendations include working with the Service to develop CCAAs and CCAs to address threats, implementing proactive activities to combat wildland fire, and creating incentives to enhance reclamation sites within Core Areas.

The BLM

The Service identified the principal regulatory mechanisms for the BLM as conservation measures in Resource Management Plan(s) (RMP). The RMPs establish goals and objectives for resource management and the measures needed to achieve those goals and objectives. The RMPs are the basis for the on-the-ground actions the BLM commonly undertakes. Where changing conditions require updates to the information or analysis contained in the RMP, the BLM may amend the RMP to address the changing conditions. The BLM is currently amending its RMPs to incorporate conservation measures, management actions, and land use restrictions. The BLM's objective is to conserve sage-grouse habitats that support Core Area Populations and to potentially preclude the need to list the species under ESA. During the RMP Amendment process, the BLM is implementing interim sage-grouse habitat management guidance (BLM 2004, BLM 2011, BLM WY IM 2012-019).

Regardless of whether a permittee participates in a CCA, the management actions selected in the sage-grouse RMP Amendments or revisions will be applied to all activities requiring federal authorization within the planning area. This includes livestock grazing practices on BLM-administered lands. The CCA provides a level of improved certainty for BLM and our authorized Permittees/Lessees by providing a mechanism to provide greater certainty of continuity of grazing operations on BLM-administered lands. That increased certainty is based on the early implementation of voluntary conservation measures that go beyond current requirements. The Service is unlikely to impose new measures or restrictions as a result of section 7 Consultation where those agreed upon measures are implemented as a part of this CCA. The conservation measures identified in the CCA are specifically designed to ameliorate threats to the species that the Service has previously identified. Moreover, the conservation measures are consistent with Western Association of Fish and Wildlife Agencies guidelines (Connelly et

al. 2000) and current BLM direction for management of sage-grouse habitat on BLM-administered lands.

Relationship of the CCA to Section 7 of the ESA

The BLM will request that the Service provide a technical review of the proposed CCA following the procedures for "conferencing" (50 CFR §402.10). While conference procedures are not required for a candidate species, the procedures may be used to assist a federal agency in planning a proposed action to be as consistent as possible with the conservation needs of a species that has not yet been listed under the ESA. Furthermore, BLM Policy 6840 for Special Status Species Management encourages the BLM to seek technical assistance from the Service when it is determined to be advantageous to a species' conservation or BLM management options.

A decision to list the sage-grouse must be based on the five factor threats analysis required under the ESA. The Service will consider the overall effects of the CCAA and allotment-level CCAs in its listing decision. One goal of this CCA is to ensure adequate conservation measures, sufficient adaptive management, and monitoring obligations to allow the conference opinion to be quickly adopted as a biological opinion following the effective date of any decision to list the sage-grouse, if it remains warranted. If sage-grouse do become listed, the Service will review the conference report or opinion in coordination with the BLM to determine if there have been any significant changes to the CCA or the information used during the conference (e.g., a substantial adverse change to the status of sage-grouse as might result from a new pathogen that affects sagebrush, or the spread of West Nile Virus). If there have been no significant changes in the action or the availability of substantial new information (e.g., a new invasive species that would impair sage-grouse habitats), the Service would confirm the conference opinion as a biological opinion and include an incidental take statement. This streamlining of the section 7 consultation process, where in-place conservation measures support the confirmation of a conference opinion as a biological opinion, is a means by which the BLM and the Service may help provide continuity of existing livestock operations for the users of public lands.

Relationship of the CCA to the BLM RMP Planning and Grazing Permit Renewal Processes

The BLM is amending or revising its RMPs in order to incorporate explicit objectives and desired habitat conditions for sage-grouse. While the CCA must be in compliance with RMP amendments, these RMP amendments are independent of the CCA. Regardless of whether a Permittee/Lessee enrolls in the CCA program, the guidance in the final RMP amendment(s) or revision(s) will apply to all activities requiring federal authorization within the RMP planning area including livestock grazing practices on BLM-administered lands. Where livestock grazing is consistent with, or in compliance with, guidance or regulation (RMPs, AMPs, grazing permits or leases, BLM Land Health Standards and Guidelines, etc.), and these instruments adequately address the needs of sage-grouse, then no changes to grazing management are anticipated (BLM 2000, 2011).

PURPOSE OF THE CCA

The primary purpose of the CCA is to promote grazing practices that reduce or eliminate potential threats to sage-grouse and their habitats on enrolled allotments and to ensure that existing neutral or beneficial grazing practices are likely to continue uninterrupted if the species is listed in the future. The allotment-level CCA cannot be used as an instrument to bring an allotment into compliance with BLM regulations and policies (e.g., BLM Land Health Standards). Furthermore, a permittee or lessee's participation in a CCA does not by itself change or otherwise modify their existing grazing permit or Allotment Management Plan. The CCA provides a framework for authorized Permittees/Lessees to voluntarily implement, or continue to implement, grazing practices and associated conservation measures that benefit sage-grouse on their BLM-administered allotments. The conservation measures of the CCA are intended to describe the voluntary measures that go beyond those already required by permit, lease, or regulation. More specifically, the CCA will accomplish the following:

- Develop, coordinate, and facilitate conservation measures and actions to reduce and/or eliminate known threats to sage-grouse;
- Support implementation of the Wyoming Governor's Executive Order (2011-5 as updated), mandating conservation of sagebrush habitats within the State of Wyoming.
- Serve as an important component of a larger, landscape-level approach to address the conservation needs of sage-grouse in Wyoming by providing more seamless management across private and public lands;
- Identify conservation measures for rangeland management activities in Wyoming that are beneficial for sage-grouse, based on best available science;
- Support the continuation of livestock operations on public lands while protecting and improving habitat conditions for sage-grouse; and
- Recognize the interrelated nature of public and private land and the contribution to sage-grouse conservation made by working ranches.

AUTHORITY

Sections 2 and 7 of the ESA allow the Service to enter into a CCA with other cooperating partners. Section 2 of the ESA states that encouraging interested parties, through federal financial assistance and a system of incentives, to develop and maintain conservation programs is a key to safeguarding the Nation's heritage in fish, wildlife, and plants. Section 7(a)(1) of the ESA requires the Service to review programs that it administers and to utilize such programs in furtherance of the purposes of the ESA. By entering into this CCA, the Service is utilizing its Candidate Conservation Programs to further the conservation of the Nation's fish and wildlife.

The Federal Land Policy and Management Act (FLPMA; Section 307, 43 USC 1737), which provides the overall direction to the BLM for conservation and management of public lands, allows the BLM to participate in cooperative agreements. Subject to the provisions of applicable law, the Secretary of the Interior may enter into contracts and cooperative agreements involving the management, protection, development, and sale of public lands. The BLM manual 6840 - Special Status Species Management, provides overall policy direction to BLM managers for

establishing procedures to manage species designated as BLM Sensitive. The 6840 Policy Manual states that it is in the best interest of the BLM to undertake conservation actions for BLM Sensitive species before listing is warranted and that it is also in the best interest of the agency to undertake conservation actions that improve the status of such species so that their designation as BLM sensitive is no longer necessary or warranted. The Wyoming BLM State Director has identified the Greater sage-grouse as a sensitive species in the State since September of 2002.

ALLOTMENT-LEVEL CCA

This CCA serves as documentation of specified voluntary conservation measures agreed to by a Permittee/Lessee and implemented to address, resolve, or continue to avoid, the possible identified threats to sage-grouse. It should be recognized that as a result of BLM plan amendments or revisions, non-discretionary terms and conditions may be required of authorized grazing Permittees/Lessees on BLM-administered lands through BLM grazing permit renewals, but these are separate from the CCA agreement process and are not a consequence or result of this CCA process. The Service, the BLM, and the participating authorized Permittee/Lessee have cooperatively developed this CCA including voluntary selection of conservation measures which are taken directly from the Umbrella CCAA (Table 1 – see attached). Through mutual agreement, the participating authorized Permittee/Lessee may elect to include additional measures in their allotment CCA in the future that further support or enhance healthy sage-grouse habitats. When the BLM signs the allotment-level CCA in coordination with the participating authorized Permittee/Lessee, the authorized Permittee/Lessee agrees to the following on the BLM lands within the enrolled allotment:

- To implement and monitor (compliance) voluntary conservation measures that are to be implemented by the authorized permittee/lessee and identified within the allotment-level CCA;
- To avoid negatively affecting sage-grouse on enrolled allotments;
- To cooperate and assist with monitoring (rangeland) activities pertaining to the conservation measures voluntarily agreed to as part of development of the allotment-level CCA; and
- To provide assistance to BLM in developing the annual implementation report to the Service by providing self-reported rangeland and sage-grouse use monitoring and compliance monitoring for all implemented voluntary conservation measures.

Prioritization of Allotments

In the event that more applications for enrollment are received than the BLM and the Service can process simultaneously, the following considerations will be used to help prioritize the applications:

- Permittee has developed, or has pending application, for a CCAA for private lands associated with their federal allotment.
- Allotment occurs within occupied sage-grouse Core Area habitat.
- Allotment has a significant component of sage-grouse Core Area habitat.
- Allotment provides connectivity among core area habitats or other occupied habitat.

- Allotment has an approved Allotment Management Plan (AMP).
- Allotment meets or exceeds all land health standards (this may include allotments that are making progress toward meeting land health standards where grazing was not a factor in failing to achieve standards).

The conservation measures for the CCA, communicated within the *Greater Sage-Grouse Umbrella CCAA for Wyoming Ranch Management*, are intended to require no additional National Environmental Policy Act (NEPA) analysis to implement. The Service's Wyoming Ecological Services Field Office will assist the BLM to prioritize allotments for enrollment, but the BLM has full discretion to prioritize any Allotment-level CCA application it receives and to determine if it is in the best interest of the BLM to proceed with developing an allotment-level CCA.

DESCRIPTION OF COVERED LANDS

The Statewide umbrella CCAA potentially encompasses approximately 7,011,569 ha (17,312,515 ac) of privately owned lands within the current range of the sage-grouse in Wyoming. Acreage estimates were derived from Wyoming Geographic Information Science Center (WYGISC) land cover analyses, which are based on satellite images and digital elevation models (these estimates could change as new landscape information becomes available). Connelly et al. (2004) estimated the total area of sagebrush habitat in Wyoming was nearly 10 million ha (24 million ac), of which approximately 38 percent is privately-owned, 7 percent state-owned, 47 percent BLM-administered, 4 percent USDA Forest Service-administered, and 4 percent BIA-administered, with other federal agencies owning lesser amounts. Wyoming BLM-administered lands encompass approximately 10,209,692 acres of sage-grouse habitat, including 4,547,043 acres of Core Area habitat and approximately 5,662,649 acres of general habitat.

SPECIES BIOLOGY

Sage-grouse in western North America were once abundant and widespread but have declined throughout their range. Sage-grouse populations are closely associated with sagebrush (*Artemisia* spp.) habitats. Sage-grouse are known for their elaborate mating ritual where males congregate and perform a courtship dance on a specific strutting ground called a lek. Lek sites are typically open areas within sagebrush stands that have good visibility for predator detection and acoustical qualities so the sounds of display activity can be heard by other sage-grouse. Male sage-grouse display on leks in early morning and late evening to attract females. The timing of lek attendance varies considerably depending on snow depth, elevation, weather, and geographic region, with first attendance ranging from the end of February to early April and ending in late May or early June (Hagen 2011). Females exhibit strong fidelity to breeding areas (Fischer et al. 1993); habitats used by females prior to nesting are also part of the general breeding habitat. Breeding activities occur from March to early June; however, the lek is considered to be the center of year-round activity for resident grouse populations (Eng and Schladweiler 1972, Wallestad and Pyrah 1974, Wallestad and Schladweiler 1974). Dominant males will breed with more than one female. Females leave the lek and begin their nesting effort after mating; males provide no paternal care or resources.

Optimum sage-grouse nesting habitat consists of a healthy sagebrush ecosystem complete with sagebrush plants (primarily *A. tridentata* ssp. *tridentata*, *A. t.* ssp. *vaseyana*, *A. t.* ssp. *wyomingensis*, *A. arbuscula* in Oregon) and a strong native herbaceous understory composed of grasses and forbs (Hagen et al. 2007). Nests are typically shallow bowls lined with leaves, feathers, and small twigs placed on the ground at the base of live sagebrush; however, nests have been found under other plant species (Connelly et al. 1991, Gregg 1991). Sage-grouse females that nest under sagebrush tend to have higher nest success rates (53 percent) than those females nesting under other species (22 percent; Connelly et al. 1991). In addition, female sage-grouse tend to select nest sites under sagebrush plants that have large canopies (Hagen et al. 2007). On average, 80 percent of nests are within 6.2 km (4 mi) of the lek, but some females have been shown to nest 20 km (12 mi) from a lek (Hagen 2011). Sagebrush canopies provide overhead cover and are often associated with an herbaceous understory that provides lateral cover for the birds and allows them to hide from predators (Patterson 1952, Klebenow 1969, Wallestad and Pyrah 1974, Gregg 1991, Gregg et al. 1994, Holloran et al. 2005). Female sage-grouse nesting in cover conditions that provide both overhead and lateral cover have higher nest success rates than those nesting under lesser cover conditions (Wallestad and Pyrah 1974, Delong et al. 1995, Holloran et al. 2005).

Despite the extensive amount of research on habitat use by sage-grouse and the design of management guidelines (Connelly et al. 2000), there is still controversy regarding some of the basic information on habitat use (Schultz 2004, Hagen et al. 2007). One reason for this controversy appears to be misinterpretation of the data used to design the original management guidelines (Connelly et al. 2000), as well as a lack of understanding of the role that variance and scale play in observations of grouse at specific use sites (Stiver et al. 2006). These issues point to the need for additional research and monitoring that can inform habitat assessments and land management decisions potentially affecting sage-grouse and land use practices. The BLM generally uses the *Sage-Grouse Habitat Assessment Framework: Multi-scale Habitat Assessment Tool* (Stiver et al. 2010) to assess and monitor sage-grouse habitats throughout the species range on BLM-administered lands (BLM IM 2012-043). The habitat indicators and associated values in Stiver et al. (2010) are based on the best available science.

THREATS TO SAGE-GROUSE

Detailed descriptions of range-wide threats are available in the 12-month warranted but precluded Greater sage-grouse finding (75 FR 13909).

RESPONSIBILITIES OF THE COOPERATORS

The BLM will:

- Lead the assisted preparation of any allotment-level CCA(s).
- Ensure actions proposed in an allotment-level CCA(s) are consistent with RMP and appropriate authorizations.
- Provide technical assistance to authorized Permittees/Lessees to implement the voluntary conservation measures.
- Collect and interpret monitoring data, as agreed to in the allotment-level CCA and associated monitoring plan.

- Work with participating authorized Permittees/Lessees and partner agencies (e.g., agriculture extension agents) to facilitate rangeland monitoring required for maintaining the allotment-level CCA.
- Prepare annual reports for the CCA while maintaining discussions with the participating authorized Permittees/Lessees. Work with the authorized Permittees/Lessees, where compliance monitoring results will be presented in the annual report.
- Compile a report, including compliance monitoring information received from the authorized permittee/lessee in development of an annual CCA report.
- Conduct outreach and public education to promote the conservation of sage-grouse through implementation of the CCA.

The U.S. Fish and Wildlife Service will:

- Assist with preparation of allotment-level CCAs.
- Assist BLM and Permittee/Lessee to ensure adequate baseline habitat assessment.
- Advise the BLM on whether conservation measures and the allotment-level CCA adequately address the identified threats.
- Provide technical assistance to aid participating authorized Permittees/Lessees in implementing the conservation measures.
- Review monitoring data for consistency with CCA objectives to determine if conservation measures are providing the desired benefit to sage-grouse.
- Assist participating authorized Permittees/Lessees with preparing voluntary compliance monitoring information for inclusion in annual reports as needed.
- Assist the BLM with preparing its annual report as needed.
- Conduct outreach and public education to promote the conservation of sage-grouse through implementation of the Umbrella CCAA and allotment-level CCAs.

The Permittee/Lessee will:

- Assist with initial assessment and preparation of allotment-level CCA.
- Work with participating agencies to facilitate any rangeland (biological) monitoring as required to maintain the allotment-level CCA.
- Work with BLM and FWS to collect or provide information for preparation of annual reports (e.g., observation information and compliance monitoring for measures agreed to in the CCA).
- Work with BLM to compile compliance and monitoring information received through the allotment-level CCA(s) for the annual report

The BLM, Service, and participating authorized Permittees/Lessees agree to seek technical expertise from the Wyoming Game and Fish Department (WGFD) in the development and implementation of allotment-level CCAs, as needed and appropriate.

II. ELEMENTS OF THE CONSERVATION AGREEMENT

CONSERVATION MEASURES

This section describes conservation measures designed to reduce threats to sage-grouse on BLM-administered grazing allotments in Wyoming. Conservation measures described in Table 1

(taken from the statewide umbrella CCAA) are derived from existing conservation recommendations for managing sage-grouse populations, and their habitats issued by the BLM (2004, 2011), Western Association of Fish and Wildlife Agencies (Connelly et al. 2000), and an interagency team of managers, fire ecologists, range conservations, and wildlife biologists from the BLM, Service, and Forest Service (BLM et al. 2000). These guidance documents encourage the application of the best available scientific information while incorporating the professional judgment of local BLM personnel, state wildlife agency biologists and local sage-grouse working groups. It is anticipated that local information and expertise concerning the condition and distribution of sage-grouse and their habitats will be necessary to select the most appropriate conservation measures for specific allotments. The conservation measures for a particular allotment will be tailored to the specific allotment.

The process for selecting specific voluntary conservation measures in an Allotment-level CCA will be based on the specific threats that are identified for the covered allotment and voluntarily agreed to by the participating authorized Permittee/Lessee. Each threat identified in Table 1 has one or more corresponding conservation measures that may be chosen. The Service and BLM recognize that each allotment is unique and the appropriate conservation measures used will be site-dependent. The Service and BLM will work with each participating authorized Permittee/Lessee to identify the specific threats to sage-grouse on their allotments and select conservation measures that remove or reduce the threats. Some conservation measures may be implemented independently by participating authorized Permittee/Lessee, while others may require substantive coordination with the agencies. *There is no minimum number of conservation measures that must be implemented to qualify for a CCA, and not all threats have to be fully addressed. However, the allotment must have appropriate conservation measures that address threats in such a way that an overall conservation benefit to sage-grouse is achieved*. If the BLM and the Service cannot reach this conclusion for any specific allotment-level CCA, then the agencies will not execute the allotment-level CCA in question.

While the conservation measures should be readily applicable across the landscape, there may be circumstances where site-specific conditions warrant change or modification to the standard conservation measures (appendix C). The BLM and the Service will work with participating authorized Permittees/Lessees to modify conservation measures where necessary and as appropriate. The Service will note these modifications on the allotment-level CCA, including the rationale or justification for any modification(s).

MONITORING

This section outlines the minimum monitoring requirements for an allotment-level CCA. Monitoring will include both compliance and biological monitoring. Individual allotment-level CCAs will describe the specific monitoring strategy for the allotments, including identifying conditions and general livestock grazing operations which have the potential to influence (either positively or negatively) greater sage-grouse or their habitats. General operational information includes, type of livestock grazing, forage management strategies used on the allotment(s), major vegetation communities across the enrolled allotments, and general information concerning sage-grouse and their habitat on the enrolled allotment(s). Monitoring will typically be completed by the BLM and/or authorized Permittees/Lessees with and, if available, staff from other partner

agencies, such as the WGFD, where applicable and/or agreed upon, or interagency local sage-grouse working groups, as agreed upon. Monitoring may also be completed by mutually agreed upon third parties (e.g., contracted organization or individual). The BLM will coordinate any necessary site visits with the participating authorized Permittee/Lessee, the Service, and where appropriate and available, WGFD or other entities, to determine compliance with the allotment-level CCA or to conduct rangeland (or *biological*) monitoring.

BLM will follow and implement current monitoring strategies within existing and enrolled allotments. A portion of monitoring results that are used to assess land health for any given allotment will be used to complete the annual reporting requirements for the CCA. Monitoring for the CCA itself can be thought of as consisting of three essential components: (1) Initial Site Assessment, (2) Compliance Monitoring, and (3) Biological Monitoring. A land health assessment and the subsequent evaluation of achievement of land health standards, which are identified in the agency RMP, could provide the information for the baseline or initial site assessment of sage-grouse habitat condition. On allotments where land health assessments have not been conducted, an initial assessment of the enrolled property will be conducted by the BLM based on information provided by the permittee/lessee, and/or through information gathered during an on-site visit to determine which of two conditions applies: (1) Property contains suitable habitat currently being maintained, or (2) Property contains potentially suitable habitat not currently being maintained, but for which there exists substantial opportunity to restore, improve, and enhance through the implementation of CMs included in this CCA or which conditions apply to specific portions of the enrolled lands. Compliance monitoring consists of verification of conservation measures agreed upon at the time the CCA was implemented. Biological monitoring consists of documenting pasture use information, major plant community types, management actions, and sage-grouse use of in the area.

Initial Sage-Grouse Habitat Assessment

When an allotment is enrolled, existing information, provided by agency specialist, or through an onsite assessment as necessary, will establish baseline habitat conditions. Agency specialists will determine suitable sage-grouse habitats that are currently being maintained as well as any areas of the allotment where opportunities to restore, improve or enhance habitats may exist.

Compliance Monitoring

In signing the allotment-level CCA, the BLM and the participating Permittee/Lessee commit to annual reporting on the implementation of the selected voluntary conservation measures. To simplify the reporting process, a list of compliance monitoring derived from the *comprehensive list will be reviewed by BLM and the applicant to determine appropriate measures and commitments based on voluntary implementation. (Not all measures in Appendix C of this CCA are applicable to federal lands*). While the participating Permittee/Lessee is the primary party responsible for completing the compliance monitoring form, the BLM will provide assistance as/when requested or appropriate. Additionally, the BLM will organize an annual field review of enrolled allotments to evaluate the CCA's progress toward maintaining and enhancing sage-grouse habitats in order to provide an opportunity for adaptive management to correct problems

and learn from successes. The number of site visits completed will depend on the number of allotments enrolled and the resources and staff available to conduct reviews.

Rangeland (Biological) Monitoring

Rangeland monitoring will include the following: (1) an assessment of sage-grouse habitat condition when an allotment is enrolled (this will include existing information as available), (2) annual self-reporting by participating authorized Permittees/Lessees and reviewed by the agency for compliance; and (3) where identified in the CCA, sage-grouse population trend assessment based largely on lek monitoring with the ability to include other types of population monitoring data (e.g., scat surveys in winter habitat, winter aerial surveys, etc.).

(1) Annual Observational Rangeland Monitoring: Annual observational monitoring, primarily conducted by participating authorized Permittee/Lessee and BLM will consist of three components: 1) Monitoring of rangeland and reporting for noxious weeds and non-native or invasive species (e.g., cheatgrass) identified in the course of operations; 2) A record of any sage-grouse (number, male or female, etc.) observed on the allotment; and 3) A record of recorded sage-grouse mortalities on the enrolled allotment (s). This information may be essential to determining the efficacy of conservation measures, or where conservation efforts should be prioritized within the allotment.

(2) Periodic Quantitative Assessment: Sage-grouse habitat conditions will be assessed according to scheduled monitoring intervals since sagebrush and its associated vegetation take years to respond to changes in management. We expect that desired changes in plant community response, where achievable using the selected conservation measures, will be captured within the typical monitoring timeframes established for monitoring range health standards. This schedule may be shifted if there is a wildfire in the allotment (an assessment should be made after the fire) or if there is an unusually dry or wet season (an assessment may wait until the next year). The monitoring locations and methods can be the same as those used to assess habitat suitability at the time of enrollment. Alternatively, the authorized Permittee/Lessee, through mutual agreement of the agencies and as identified in their allotment-level CCA, can modify the methods or adopt entirely new methods to monitor habitat indicators for sage-grouse. The specific protocol, location of periodic monitoring, or need for new or additional transects will be described in the allotment-level CCA and will be based on established monitoring requirements and schedules already employed by the BLM for the allotments under consideration. The assessment will be conducted by the BLM and/or Service, or mutually agreed upon third party, in cooperation with the participating authorized Permittee/Lessee.

(3) Population Trend Assessment: Sage-grouse Population Monitoring

(a) Lek counts will be the primary basis for monitoring populations. Lek monitoring will follow current monitoring protocols established by the WGFD (Christiansen, 2012) who typically coordinates the monitoring. While population monitoring will not necessarily be required in the allotment-level

CCA, cooperators that have been trained in lek data collection protocols are encouraged to collect data annually.

(b) If used for population trend assessment, scat surveys may be used to monitor the status of wintering sage-grouse.

REPORTING REQUIREMENTS

The BLM will provide an annual report to the Service that summarizes monitoring compliance and effectiveness recorded for the enrolled allotments. Participating permittees will report their compliance monitoring information to BLM by December 31 each year. The BLM will submit a copy of all reports and associated documentation to the Service by February 1 of each year. Annual reports will include information such as:

- Any new allotments enrolled during the reporting period, including copies of the allotment-level CCA.
- Summary of the monitoring program; results and findings for the current year, including the degree of compliance with the CCA; effectiveness of habitat management activities at meeting the intended conservation benefits; and any population and vegetation information gathered over the past year.
- Any mortality or injury of sage-grouse observed over the previous year.

Monitoring reports or forms shall be delivered to:

State Director
Bureau of Land Management
WY State Office
P.O. Box 1828
Cheyenne, WY 82003-1828
Phone number: 307-775-6256

Any reports of sage-grouse injury or mortality, and the BLM's annual report, required by this Agreement shall be delivered to:

Field Supervisor
U.S. Fish and Wildlife Service
Wyoming Ecological Services Field Office
5353 Yellowstone Road, Suite 308A
Cheyenne, WY 82009

ADAPTIVE MANAGEMENT

The Service and BLM recognize that implementation of the conservation measures must be consistent with the concepts and principles of adaptive management. The effectiveness of the voluntary conservation measures, monitoring methods/results, and new technologies will be reviewed by the Service and BLM with the authorized Permittee/Lessee on an as-needed basis. Upon evaluation, appropriate modifications to the conservation measures or removal of measures

taken from Table 1 of this CCA may be necessary to enhance the goals of the effort or the results from the effectiveness monitoring as appropriate. There are provisions in the CCA and allotment-level CCA documentation to revise or amend these agreements, if necessary.

DURATION OF CCA

This umbrella CCA will remain in effect for 40 years, following its approval and signing by the Service and the BLM. Individual CCAs will be in effect for 20 years, with an option of renewal for an additional 20 years, or, until the BLM, the participating authorized Permittee/Lessee, or the Service (the signatories) terminates it. Any signatory may withdraw from this agreement at any time by providing 30 days written notice to all other signatories. Any signatory may propose changes to the CCA. Such changes will be in the form of an amendment and may be considered at any time after a 30-day notice to the signatories. No amendment shall be valid unless executed by all signatories to the agreement. The signatories will meet at agreed upon intervals to review the effectiveness of the CCA. Where any deficiencies are identified, signatories will meet to make adjustments as early as practicable.

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SIGNATURES

IN WITNESS WHEREOF, THE COOPERATORS HERETO, agree to execute this CCA, effective as of the date of the last signature, and hereby commit to carry out the responsibilities identified in the "Responsibilities of the Cooperators" section of this agreement.

Date 9/22/14

State Director
Bureau of Land Management

Date 8-11-14

Field Supervisor
U.S. Fish and Wildlife Service
Wyoming Ecological Services Field Office

Table 1. Sage-Grouse Conservation Measures -This table describes threats to sage-grouse addressed in the CCA. It provides a list of conservation measures to address the identified threats, and it describes the conservation benefits anticipated from implementing the conservation measures. Monitoring, described in this CCA will be used to evaluate the implementation and effectiveness of the selected conservation measures. Conservation measures are derived from existing guidelines for managing sage-grouse populations and their habitats issued by the BLM (2004, 2011); Western Association of Fish and Wildlife Agencies (Connelly et al., 2000); and an interagency team of managers, fire ecologists, range conservationists, and wildlife biologists (BLM et al. 2000).

THREAT	CONSERVATION MEASURES	CONSERVATION BENEFITS	COMPLIANCE MONITORING
Fragmentation of the Landscape			
Fragmentation of the landscape causes birds to leave leks or abandon nests or important habitats (i.e., direct impact to nests and brooding hens), resulting in decreased reproductive success.	Maintain contiguous habitat by avoiding fragmentation (e.g., do not subdivide property; enter into conservation easements; consolidate new roads, buildings, power lines).	Reduces disruptions to sage-grouse activities, maintains habitat quality & quantity, maintains population connectivity and recruitment, and reduces vulnerability to predation	Describe measures taken to avoid fragmentation of the habitat (e.g., consolidating new and existing roads, buildings, power lines). If conservation easements are implemented, describe any signed and acres enrolled.
Infrastructure			
Infrastructure (e.g., power lines, roads, fences) can fragment sage-grouse habitat, decreasing sage-grouse use and habitat quality.	Convert electrically (AC) powered pumps or wind mills to solar.	Removes or reduces amount of habitat fragmentation and mortality due to infrastructure across the landscape	Describe specific actions taken to avoid new infrastructure or consolidate or otherwise minimize existing infrastructure to comply with these conservation measures.
	Avoid building new infrastructure (e.g., roads, buildings, fences) within 0.6-mile of occupied leks and within sage-grouse habitats. In core areas, use the DDCT method as outlined in the Governor's Executive Order 2011-5.		
	Consolidate existing roads, buildings, etc. within 0.6 mile of occupied leks or within sage-grouse habitats.		
	If feasible, bury new and existing power lines.		
Restoring Disturbed Habitats			
Disturbed, degraded, or fragmented sage-grouse habitat not restored or reclaimed results in permanent loss of sage-grouse habitat quality and quantity.	Implement restoration projects in areas with known issues/concerns.	Enhances degraded habitats and reduces potential for spread of noxious weeds Increases success and reduces time necessary	Describe any restoration projects and status of same in annual monitoring reports.
	Rest newly seeded/planted rangeland from livestock use. Consult agency specialist for the amount of time to rest.		Describe management plan, actions taken to implement the plan, and monitoring to measure success.

	Work with agencies to include provisions for successful interim reclamation and complete restoration of habitats that have experienced development and/or surface disturbing activities.	for successful establishment of new plantings	Describe restoration or reclamation plan, actions taken to implement the plan, and monitoring to measure success.
Establishment of Non-native Monocultures			
Establishment of plant communities that do not provide suitable habitat (e.g., monocultures of non-natives such as crested wheatgrass) reduces sage-grouse habitat quality and quantity.	Do not introduce non-natives (e.g., crested wheatgrass) tending toward monocultures on enrolled lands, except non-persistent annual grasses used for soil protection until perennial native vegetation can be established (e.g., sterile Triticale) or non-invasive beneficial forbs.	Reduces impacts to sage-grouse habitat quality and quantity	Describe specific action taken to avoid introduction of invasive non-native vegetation. Describe monitoring to detect potential presence of non-natives.
	Work to remove the invasive, non-native vegetative component; inter-seed range with native/beneficial seed mixes.		Describe which non-natives detrimental to sage-grouse habitat quality were present. Describe actions to remove any detrimental non-native vegetation.
Management of Invasives and Non-native Plant Species			
Establishment of invasive plant species (including post wildland fire) reduces sage-grouse habitat quality and quantity.	Participate in weed-control groups/processes such as Cooperative Weed Management Areas (CWMAs) or a Coordinated Resource Management (CRM).	Reduces impacts to sage-grouse habitat quality and quantity	Describe your activity in these programs.
	Work with management agencies (e.g., BLM, USFS) or Weed and Pest Districts to identify areas of invasives and work to control them.		Describe the method of treatment and number of acres treated. Monitor and report treatment results.
	Work with PA to ensure suitable reclamation of weed treated areas for sage-grouse (e.g., seed mixes in sage-grouse habitat with appropriate shrub, forb, and grass components). Rest newly seeded/planted rangeland from livestock use. Consult agency specialist for amount of time to rest.		Describe actions to reclaim these areas.
	Use state-certified weed-free seed mixes and mulches.		Describe any weed-free seed mixes and mulches used.
	Work with PA specialists to address post-wildland fire issues.	Reduces impacts from wildfires or minimizes likelihood of wildfires	Describe management before and/or after wildland fire.
	Work with PA specialists to address and prevent wildland fire, especially if rangelands have a cheatgrass component. This is most relevant for areas adjacent to railroads, interstates, and in the Powder River Basin.		
Surface Water Developments/Disease			

Surface water developments such as ponds may increase mosquito habitat, resulting in increased sage-grouse mortality from disease (e.g., WNv). This is most relevant in northeast Wyoming, where WNv is prevalent.	Treat mosquito larvae present in ponds using *Bacillus thuringiensis* or appropriate chemicals.	Reduces potential for direct mortality and/or disease transmission	Describe if and when larvae were treated.
	Where new pond construction is proposed (e.g., for livestock or waterfowl), use innovative design for ponds (e.g., pipe water to trough offsite from a pond with steep sides to prevent establishment of aquatic vegetation); include wildlife escape ramp as needed.		Describe if and where new ponds were constructed, including pond design.
	Report to either WGFD or FWS within 24 hours any dead or sick sage-grouse found.		Describe when and where any dead or sick sage-grouse were found.
Sagebrush Management			
Sagebrush management (e.g., prescribed fire, chemical, mechanical) can result in a reduction of sage-grouse habitat quality and quantity.	Avoid eradicating sagebrush. Undertake no new conversion of rangeland to cropland.	Maintains or enhances sagebrush communities	Describe actions taken (or not taken) to avoid reducing sagebrush.
	Work with agency specialists to plan sagebrush treatments, avoiding areas currently providing sage-grouse habitat. Agency specialists will determine if sagebrush treatments are part of an appropriate landscape plan. After a plan is developed with agency specialists and if sagebrush treatment is warranted, utilize a mosaic pattern of treatment rather than a large uniform block. Avoid fire for sagebrush treatments in areas with less than 12 in annual precipitation. Work with agency specialists to develop prescribed fire management plans to address timing (e.g., spring burn versus fall), as well as the importance of treatment of the potential habitat to sage-grouse.		Describe sagebrush management.
Livestock Management and Land Health			
Some grazing management practices alter shrub cover and/or grass and forb composition, reducing sage-grouse habitat quality and quantity.	Work with agency specialists to inventory vegetation and compare with the Ecological Site Description.	Maintains or enhances sage-grouse habitat, reproduction, and survival Minimizes potential for adverse impacts caused by grazing	Describe how a vegetative inventory was conducted.
	Within 12 months, work with PAs to develop and implement a written conservation management plan.		Provide the conservation management plan to the FWS.
	Within 24 months, develop and implement a written grazing management plan (a key component of any conservation management plan) to maintain or enhance the existing plant community as suitable sage-grouse habitat. This may be accomplished by site-specific modifications to grazing season of use, location, duration, frequency, number of animals, and/or types of livestock (see Cagney et al. 2010).		Provide the grazing management plan to the FWS.

Concentration of livestock caused by activities such as stock tank placement, branding, and roundup may impact vegetation and soil structure, resulting in a reduction of sage-grouse habitat quality and quantity. Intensity and duration of livestock present will affect the extent of impacts.	Avoid (or rotationally utilize) known nesting and brood-rearing habitat as a location for activities that concentrate livestock such as stock tank placement, branding, and roundup.	Maintains or enhances sage-grouse habitat, reproduction and survival Minimizes potential for adverse impacts caused by grazing	Describe how these habitat types were avoided.
	Place salt or mineral supplements in sites minimizing impacts to sage-grouse habitat.		Describe locations of salt or mineral supplements in relation to sage-grouse habitat.
	Avoid placing salt or supplements within 0.25-mile of riparian habitats.		Describe locations of salt or mineral supplements in relation to riparian habitat.
	If necessary, fence riparian habitat with markers (consult agency specialist), to protect habitat from trampling; or implement a grazing strategy.		Describe fencing of riparian habitats.
Woodland Encroachment			
Encroachment of woodland species (e.g., juniper, conifers, Russian olive, and salt cedar) into sage-grouse habitat can lead to a reduction in the amount of sage-grouse habitat, a reduction in its use, or abandonment.	Treat/remove undesirable woodland species encroaching into sage-grouse habitats. Work with agency specialists to determine if treatment is needed and an appropriate treatment method. Any treatment should include measures to control invasive species, particularly south-facing slopes which are conducive to cheat grass and thistle establishment.	Maintains important existing sagebrush communities	Describe any treatment in areas with encroachment and the number of acres treated.
Livestock Management in Important Sage-grouse Habitats			
Livestock, humans, and vehicles can physically disturb birds and cause them to leave leks or abandon nests (i.e., direct impact to nests and brooding hens), resulting in decreased reproductive success.	From March 1 through May 15, avoid new surface disturbing activities (e.g., roads, pipelines, corrals for branding) within 0.6-mile of the perimeter of occupied leks.	Reduces disruptions to lek and nesting activity , thereby reducing abandonment and predation risk	Describe any surface disturbing activities from March 1 – May 15.
	From March 1 through May 15, avoid disruptive activities between 6 p.m. and 8 a.m. within 0.6-mile of the perimeter of occupied leks.		Describe any disruptive activities from March 1 – May 15.
	From March 15 through June 30, avoid concentrating livestock in nesting habitat.		Describe if livestock were concentrated in potential nesting habitat from March 15 – June 30.
	From March 15 through June 30, avoid off-trail vehicular travel in nesting habitat, unless it is essential for routine ranch management (including but not limited to: repairing fence, “doctoring” livestock, finding lost livestock).		Describe if there was off-trail vehicular traffic from March 15 – June 30.
Design and Placement of Water Developments (including ponds and springs)			
Livestock watering tanks and troughs can cause sage-grouse mortality by entrapment and	Fit existing and new water troughs with escape ramps.	Reduces potential for direct mortality	Describe where and how many ramps were installed.

drowning.			
Water diversions and spring developments can dry up meadow and riparian areas, reducing sage-grouse habitat quality and quantity.	Allow springs to be free-flowing (do not capture all of the water) at the point of diversion or source of the spring in order to maintain or enhance a wet riparian area. If necessary, fence riparian habitat with markers to protect habitat from trampling (consult agency specialist).	Maintains or enhances availability of nesting/early brood-rearing habitats	Describe if springs were developed and where habitat was protected.
Predation			
Some farm and ranch operations can increase opportunities for avian and mammalian predation of sage-grouse and their nests.	Avoid locating new garbage and dead piles closer than 0.6-mile from occupied leks, or within nesting or brood-rearing habitat. Relocate existing garbage and dead piles within 0.6-mile of occupied leks, nesting, or brood-rearing habitat. Limit access to leks, nesting, or brood-rearing habitat by domestic pets.	Reduces direct mortality to individuals and broods	Describe any measures taken to avoid predation.
	Install raptor perch deterrents on existing structures (e.g., power poles).		
Insecticide Use			
Application of insecticides can remove insects important to sage-grouse, reducing sage-grouse habitat quality.	Implement the Reduced Area & Application Treatment (RAAT) approach. Avoid carbaryl/malathion.	Maintains insects as a seasonally important food item	Describe any spraying that occurred on the property and if RAAT was implemented.
	Work with agency specialists to plan and design control efforts that avoid harming non-target species.		Describe your plan to avoid harm to non-target species and actions taken to implement plan.
Drought			
Prolonged drought can harm plants important to sage-grouse, reducing sage-grouse habitat quality and quantity.	Work with agency specialists to incorporate a drought management component into grazing plan, considering the needs of sage-grouse (e.g., stocking conservatively, destocking when necessary to reduce impacts on land health, applying grazing regimes protective of sage-grouse habitats to the greatest extent practicable).	Maintains or reduces potential loss of sage-grouse habitat, reproduction, and/or survival	Describe if Animal Unit Months or season of use changed as a result of drought.
	Adjust livestock use (season of use, intensity, and/or duration) to reduce the impact on perennial herbaceous cover, plant species diversity, and plant vigor.		
Big Game Populations			
Concentrated or overabundant big game populations can harm plant communities important to sage-grouse, reducing habitat quality and quantity.	Utilize public hunting access opportunities to manage big game numbers and associated habitat conditions. Enroll properties in hunter management areas or walk-in area programs through WGFD's Private Lands Public Wildlife program. Cooperatively work with WGFD setting the big game season	Reduces impacts to sage-grouse habitats Maintains or enhances sage-grouse reproduction	Describe if lands were opened to hunting.

	and/or objective.	and survival	
	Cooperatively work with WGFD to implement habitat treatments to distribute big game.		Describe response of habitat to treatment.
Placement of Fences			
Sage-grouse can collide with fences resulting in serious injury or death.	Avoid construction of new fences within 0.6-mile of occupied leks or riparian areas where broods are known to concentrate. If fencing is needed for livestock management, mark fence.	Reduces mortalities from collisions	Describe the location of new fences.
	Consult with agency specialist to relocate, redesign (e.g., wood posts, buck and pole fences), or mark existing fences (e.g., wire markers) that occur within 0.6-mile of a lek, especially where previous collisions have been observed.		Describe if existing fences within 0.6-mile of occupied leks were relocated, redesigned or marked.

APPENDIX A.

BASIC STEPS TO APPLY FOR AN INDIVIDUAL CCA

This is a 5-step process with a simple screen to fill out first, prior to applying for a CCA. Once the screen is completed, the FWS will review the information submitted. In conjunction with the BLM, the FWS will gather the needed information. The BLM will help the Permittee/Lessee complete the application.

STEP 1: Complete the Information Screen (Appendix B)

STEP 2: BLM will collect the following information to help characterize the quality and quantity of sage-grouse habitat and opportunities for conservation:

- Information on land status/ownership and mineral ownership
- Aerial photos of property
- Create map of the allotment boundary
- Determine if the property is in or adjacent to core area
- Pull data on sage-grouse. Are there leks on the property or nearby?
- Oil and gas conservation commission data on wells active and/or plugged and abandoned
- Data on wind farms or other large-scale projects in the area, FAA data, Industrial Siting Council, Transmission/pipelines (pipeline authority)
- Other information
- Map locations of spring development, stock tank, salt/mineral for the property

This is important information needed to process and prioritize the application and to develop individual needs of applicants.

STEP 3: BLM will review grazing lease and help the Permittee/Lessee complete individual CCA application (Appendix C).

STEP 4: FWS prioritizes applications (if necessary) received by batch date.

STEP 5: FWS reviews application and approves individual CCA.

APPENDIX B.

BUREAU OF LAND MANAGEMENT (BLM) WYOMING RANGELAND MANAGEMENT SAGE-GROUSE CCA INFORMATION SCREEN

Grazing Permittee/Lessee Information Date of Submittal:

Name:

Address:

Phone Number:

E-mail:

Do you already have a CCAA for your private lands or have you applied for a CCAA?

☐ Yes ☐ No

Grazing Allotment Information

BLM Field Office:

Grazing Permit/Lease Authorization Number:

Allotment Name(s) and Number(s):

Do sage-grouse core area habitats occur within the permitted allotment(s)?

☐ Yes ☐ No List approximate proportions of core and non-core sagebrush habitats

BLM Field Office

Do all areas in the allotment(s) achieve BLM WY Standards for Healthy Rangelands?

☐ Yes ☐ No ☐ To be determined

If the allotment(s) is failing to achieve the land health standards, what was determined to be the significant causal factor(s)?:

If existing grazing management practices or levels of grazing use on public lands are significant factors in failing to achieve the standards and conform with the guidelines, what appropriate actions have been taken (see 43 CFR 4180.2 (c))?:

Documentation:

Please attach a map of the allotment(s) to be covered by the CCA. Please note pertinent habitat features (e.g., sage-grouse core area boundaries, active, inactive or historic leks, spring developments, stock tanks, salt/mineral locations, etc.).

If available, attach the most current BLM land health assessment, evaluation, and determination for the areas in the allotment(s).

APPENDIX C.

WYOMING BLM INDIVIDUAL SAGE-GROUSE CCA APPLICATION

Grazing Permittee/Lessee:
Address:
Phone Number:
E-mail:

Description of Allotment Conditions:

IN WITNESS WHEREOF, THE COOPERATORS HERETO have, as of the last signature date below, executed this Candidate Conservation Agreement to be in effect.

_____	_____
Grazing Permittee/Lessee(s)	Date
_____	_____
Field Manager, Bureau of Land Management	Date
_____	_____
Field Supervisor, Wyoming Ecological Services Office U.S. Fish and Wildlife Service Region 6	Date

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The enrolled grazing permittee must adhere to all terms and conditions of the umbrella CCA. According to the 2010 listing finding, the primary threat to sage-grouse is habitat fragmentation. Therefore, in order for this CCA to address the conservation needs of the sage-grouse, the following CM must be implemented by all enrolled permittees on the enrolled grazing lease:

> *Maintain contiguous habitat by avoiding fragmentation (e.g., do not subdivide property, consider conservation easements).*

In addition, all enrolled permittees will agree to undertake the following measures:

(1) Avoid impacts to populations and individual sage-grouse present on their enrolled grazing lease to the maximum extent practicable.
(2) Continue current practices identified as conserving sage-grouse.
(3) Implement all agreed upon CMs in site-specific plans within the agreed upon timeframe.
(4) Implement a conservation management plan within 12 months following approval of their individual CCA.
(5) Provide the FWS or their agreed upon representatives access to the enrolled property at mutually agreeable times to identify or monitor sage-grouse and their habitat, implement

CMs, and monitor effectiveness and compliance with individual CCAs.

(6) When requested, allow the BLM to share with the FWS, habitat and other planning or monitoring information related to the enrolled properties.

(7) Cooperate and assist with monitoring activities and other reporting requirements identified in site-specific plans.

The process for selecting specific CMs applicable to individual grazing leases will be based on the threats identified for the covered property from the following table. Each identified threat will be addressed and will have one or more corresponding CM(s). The FWS and BLM recognize each grazing lease is unique and the CMs will be site-dependent. The FWS recognizes not every potential CM listed for a threat will be appropriate for a given property.

Conservation Measures and Monitoring Requirements

The following threats, conservation measures, current or future practices, and comments are identified for this property:

Threat(s)	Conservation Measure(s)	Current Practice	Future Practice	Comments
Fragmentation of the landscape physically disturbs and causes them to leave leks or abandon nests or important habitats, (i.e., direct impact to nests and brooding hens), resulting in decreased reproductive success.	Maintain contiguous habitat by avoiding fragmentation *See Table 1 for more information Pg21*	☐ Yes ☐ No ☐ n/a	☐ Yes ☐ No ☐ n/a	
Infrastructure (e.g., power lines, roads, fences) can fragment sage-grouse habitat, decreasing sage- grouse use and habitat quality.	Convert electrically (AC) powered pumps solar. Avoid building new infrastructure Consolidate existing roads, buildings, etc. If feasible, bury new and existing power lines. *See Table 1 for more information Pg21*	☐ Yes ☐ No ☐ n/a	☐ Yes ☐ No ☐ n/a	
Disturbed, degraded, or fragmented sage-grouse habitat that is not restored or reclaimed results in a loss of sage-grouse habitat quality and quantity.	Implement restoration projects … Rest newly seeded/planted… Work with agencies to include provisions… *See Table 1 for more information Pg21*	☐ **Yes** ☐ No ☐ n/a	☐ Yes ☐ No ☐ n/a	

Threat(s)	Conservation Measure(s)	Current Practice	Future Practice	Comments
Establishment of plant communities that do not provide suitable habitat (e.g., monocultures of non-natives such as crested wheatgrass) reduces sage-grouse habitat quality and quantity.	Do not introduce non-natives Work to remove the invasive, non-native vegetative component *See Table 1 for more information Pg22*	☐ Yes ☐ No ☐ n/a	☐ Yes ☐ No ☐ n/a	
Establishment of invasive plant species (including post wildland fire) reduces sage-grouse habitat quality and quantity.	Participate in weed-control groups/processes … Work with management agencies…to identify areas of invasives… Work with PA to ensure suitable reclamation… Use state-certified weed-free seed mixes and mulches. Work with PA specialists to address post-wildland fire issues Work with PA specialists to address and prevent wildland fire… *See Table 1 for more information Pg22*	☐ Yes ☐ No ☐ n/a	☐ Yes ☐ No ☐ n/a	
Surface water developments such as ponds may increase mosquito habitat, resulting in increased sage- grouse mortality from disease (e.g., WNv). This is most relevant in northeast Wyoming, where WNv is prevalent.	Treat mosquito larvae… …use innovative design for ponds… Report to either WYGD or FWS within 24 hours any dead or sick sage-grouse found *See Table 1 for more information Pg23*	☐ Yes ☐ No ☐ n/a	☐ Yes ☐ No ☐ n/a	

Threat(s)	Conservation Measure(s)	Current Practice	Future Practice	Comments
Sagebrush management (e.g., prescribed fire, chemical, mechanical) can result in a reduction of sage-grouse habitat quality and quantity.	Avoid eradicating sagebrush… Work with agency specialists to plan sagebrush treatments… *See Table 1 for more information Pg23*	☐ Yes ☐ No ☐ n/a	☐ Yes ☐ No ☐ n/a	
Some grazing management practices alter shrub cover and/or grass and forb composition, reducing sage- grouse habitat quality and quantity.	Work with agency specialists to inventory vegetation… Within 12 months, work with PAs… conservation management plan Within 24 months, develop and implement a written grazing management plan… *See Table 1 for more information Pg23*	☐ Yes ☐ No ☐ n/a	☐ Yes ☐ No ☐ n/a	
Concentration of livestock caused by activities such as stock tank placement, branding, and roundup may impact vegetation and soil structure, resulting in a reduction of sage- grouse habitat quality and quantity. Intensity and duration of livestock present will affect the extent of impacts.	Avoid (or rotationally utilize) known nesting… Place salt or mineral supplements in sites… Avoid placing salt or supplements within 0.25-mile of riparian Habitats If necessary, fence riparian habitat with markers… *See Table 1 for more information Pg24*	☐ Yes ☐ No ☐ n/a	☐ Yes ☐ No ☐ n/a	

Threat(s)	Conservation Measure(s)	Current Practice	Future Practice	Comments
Encroachment of woodland species (e.g., juniper, conifers, Russian olive, and salt cedar) into sage-grouse habitat can lead to a reduction in the amount of sage-grouse habitat, a reduction in its use, or abandonment	Treat/remove undesirable woodland species encroaching into… *See Table 1 for more information Pg24*	☐ Yes ☐ No ☐ n/a	☐ Yes ☐ No ☐ n/a	
Livestock, humans, and vehicles can physically disturb birds and cause them to leave leks or abandon nests (i.e., direct impact to nests and brooding hens), resulting in decreased reproductive success.	From March 1 through May 15, avoid new surface disturbing… From March 1 through May 15, avoid disruptive activities… From March 15 through June 30, avoid concentrating livestock… From March 15 through June 30, avoid off-trail vehicular… *See Table 1 for more information Pg24*	☐ Yes ☐ No ☐ n/a	☐ Yes ☐ No ☐ n/a	
Livestock watering tanks and troughs can cause sage-grouse mortality by entrapment and drowning	Fit existing and new water troughs with escape ramps *See Table 1 for more information Pg25*	☐ Yes ☐ No ☐ n/a	☐ Yes ☐ No ☐ n/a	

Threat(s)	Conservation Measure(s)	Current Practice	Future Practice	Comments
Water diversions and spring developments can dry up meadow and riparian areas, reducing sage-grouse habitat quality and quantity.	Allow springs to be free-flowing… *See Table 1 for more information Pg25*	☐ Yes ☐ No ☐ n/a	☐ Yes ☐ No ☐ n/a	
Some farm and ranch operations can increase opportunities for avian and mammalian predation of sage- grouse and their nests.	Avoid locating new garbage and dead piles… Install raptor perch deterrents… *See Table 1 for more information Pg25*	☐ Yes ☐ No ☐ n/a	☐ Yes ☐ No ☐ n/a	
Application of insecticides can remove insects important to sage- grouse, reducing sage-grouse habitat quality.	Implement the Reduced Area & Application Treatment… Work with agency specialists to plan and design… *See Table 1 for more information Pg25*	☐ Yes ☐ No ☐ n/a	☐ Yes ☐ No ☐ n/a	
Prolonged drought can harm plants important to sage-grouse, reducing sage-grouse habitat quality and quantity.	Work with agency specialists to incorporate a drought management… Adjust livestock use… *See Table 1 for more information Pg25*	☐ Yes ☐ No ☐ n/a	☐ Yes ☐ No ☐ n/a	

Threat(s)	Conservation Measure(s)	Current Practice	Future Practice	Comments
Concentrated and/or overabundant wildlife populations can harm plant communities important to sage-grouse, reducing habitat quality and quantity.	Utilize public hunting access opportunities… Cooperatively work with WGFD to… *See Table 1 for more information Pg26*	☐ Yes ☐ No ☐ n/a	☐ Yes ☐ No ☐ n/a	
Sage-grouse can collide with fences, resulting in serious injury or death	Avoid construction of new fences within 0.6-mile of… Consult with agency specialist to relocate, redesign… *See Table 1 for more information Pg26*	☐ Yes ☐ No ☐ n/a	☐ Yes ☐ No ☐ n/a	

APPENDIX D.

SAMPLE ANNUAL CCA OBSERVATIONAL RANGELAND MONITORING REPORT -
Referred to as "biological monitoring" in the CCAA

Landowner Name:

Address:

Phone Number:

E-mail:

CCA Tracking No.: **Allotment:**

Observational Biological Monitoring:

1. Monitoring rangelands for noxious weeds: This is especially relevant in areas of disturbed soils. The goal here is to enable early detection and control of non-native and invasive species. This is intended to be ongoing effort to identify and facilitate early treatment of noxious weeds and non-native or invasive species, before they become firmly established. Repeat the following text block as necessary.

   Date(s) infestations noted:

   Location of infestation(s):

   Species noted:

2. Observational record of sage-grouse observed on enrolled allotment**.** Repeat the following text block as necessary.

   Date(s):

   Number of sage-grouse / sage-grouse broods observed:

   Location observation(s):

3. Observational record of sage-grouse mortalities on the enrolled allotment (e.g., road kill, fence collision, predation, etc.). Repeat the following text block as necessary.

   Date(s):

   Number of sage-grouse mortalities observed:

   Location and circumstance(s):