USFWS Greater Sage-Grouse CCAA for Wyoming Ranch Management Individual CCAA Conservation Monitoring Plan

Landowner/Ranch Name:

Date:

Private landowners enrolled in Greater Sage-Grouse Candidate Conservation Agreements with Assurances (CCAAs) for Wyoming Ranch Management are responsible for annual compliance and biological monitoring. Compliance monitoring is based on implementation of the conservation measures (CMs) agreed upon in the CCAA, and involves annual self-reporting by the enrolled landowner. Biological monitoring involves (1) completion of the Annual Biological Monitoring Report and Annual Pasture Use Record, and (2) periodic trend monitoring and reporting of sage-grouse habitat conditions. An initial baseline assessment of existing sage-grouse baseline habitat conditions on the property will be completed as part of the Individual CCAA Conservation Plan. The requirements for the Initial Baseline Assessment, Compliance Monitoring, and Biological Monitoring are outlined in more detail in this Individual CCAA Conservation Monitoring Plan (Monitoring Plan). The enrolled landowner will be responsible for annual reporting to the U.S. Fish and Wildlife Service (FWS) by February 1 of the following year, and this will be accomplished by completing and submitting the forms included in this Monitoring Plan:

- 1. Compliance Monitoring Report submitted annually (pp 2-7)
- 2. Biological Monitoring consisting of (page 8):
 - Initial Baseline Assessment (as completed for Conservation Plan);
 - Periodic Biological Monitoring to evaluate change in habitat over time

Compliance Monitoring

Specific Conservation Measures (CMs) for individual properties were selected based on the threats to sage-grouse identified for the enrolled property. Each selected threat within the control of the landowner was addressed in the Individual CCAA, and CMs were identified to remove or reduce each threat. The purpose of compliance monitoring is to demonstrate implementation of the CMs agreed upon in the CCAA, and involves annual self-reporting by the enrolled landowner. The Compliance Monitoring Report is found on pages 2-7 of this plan. It must be submitted annually by the enrolled landowner.

Compliance Monitoring Report

Answer the following questions for each of the CM categories below (see Appendix C in your Individual CCAA for more information on threats identified on your property). For each section, where CMs were not agreed to in your individual CCAA, or where the measures don't apply to your operations, please write "n/a", and/or provide a written explanation.

Threat: Fragmentation of the Landscape

Fragmentation of the landscape causes sage-grouse to leave leks or abandon nests or important habitats resulting in decreased reproductive success.

Did you maintain contiguous sage-grouse habitat by avoiding fragmentation? Yes No

- Did you subdivide your property? Yes No
- Did you enter into conservation easements? Yes No • No
- Did you consolidate new roads, buildings, or power lines? Yes

Describe any measures you took to avoid fragmentation of sage-grouse habitat:

Threat: Infrastructure

Infrastructure (e.g., power lines, roads, fences) can fragment sage-grouse habitat, decreasing sage-grouse use and habitat quality.

Which if the following apply this year? (circle all that apply)

- Converted pumps and windmills to solar
- Buried power lines •
- Avoided new infrastructure within 0.6 mi of leks •
- None •

Provide a short description of work completed for circled items:

Threat: Restoring Disturbed Habitats

Disturbed, degraded, or fragmented sage-grouse habitat not restored or reclaimed results in permanent loss of sagegrouse habitat quality and quantity.

No

Did you restore disturbed sage-grouse habitat this year? Yes

- Did you implement restoration projects in areas with known issues? • Yes No
- Did you rest newly seeded rangeland from livestock use? Yes No
- Did you work with agencies to develop a restoration plan? Yes No

If you restored disturbed habitat, please provide brief description of work completed:

Threat: Establishment of Non-Native Monocultures Establishment of plant communities that do not provide suitable habitat reduces sage-grouse habitat quality and quantity.

Did you introduce non-natives (e.g., crested wheatgrass)? Yes No

Describe any monitoring you conducted to detect non-natives and list any non-native plant species identified this year:

Provided a brief description of actions taken to remove invasive species:

Threat: Management of Invasives and Non-Native Plant Species Establishment of invasive plant species reduces sage-grouse habitat quality and quantity.

Did you participate in any weed control programs? Yes No

Provide a brief description of your weed control activities this year. Include the method of treatment, number of acres treated, weed-free seed mixes used, or monitoring results:

Threat: 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). Did you treat mosquito larvae in ponds? Yes No Did you construct new ponds? Yes No Did you discover any dead or sick sage-grouse? Yes No

Provide a brief description of when and where mosquito larvae were treated, where and how new ponds were constructed, or where and when dead sage-grouse were found:

Threat: Sagebrush Management Sagebrush management can result in a reduction of sage-grouse habitat quality and quantity.

Did you conduct any sagebrush treatments or convert rangeland to cropland? Yes No

Describe any treatments applied or management actions taken to avoid reducing sagebrush:

Threat: Livestock Management and Rangeland Health

Some grazing management practices alter shrub cover and/or grass and forb composition, reducing sage-grouse habitat quality and quantity. 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.

Describe how and when your Initial Baseline Assessment of existing sage-grouse habitat conditions was conducted:

Do you have a written grazing management plan to maintain or enhance the existing plant community as suitable sage-grouse habitat? (Note: If you revised your grazing management plan since you developed your Individual CCAA Conservation Plan, please attach the revised plan, and note any changes below.)

Yes No

Did you avoid (or rotationally utilize) known sage-grouse nesting or brood-rearing habitat as a location for activities that concentrate livestock such as stock tank placement, branding, and roundup?

Yes No

Did you place salt or mineral supplements in sites to minimize impacts to sage-grouse habitat?

Yes	No		
Did you avoid pl	acing salt or supplements within 0.25-mile of riparian habitats?	Yes	No
Did you fence (a	nd mark) riparian habitat to protect habitat from trampling?	Yes	No

Provide a brief description how you avoided sage-grouse habitat (e.g., livestock management, trailing of livestock, salt block locations, etc.):

Threat: 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.

Did you treat or remove any undesirable woodland species (e.g., juniper, conifers, Russian olive, salt cedar) encroaching into sage-grouse habitats? Yes No

Provide a brief description of any treatments, and the approximate size and location:

Threat: Livestock Management in Important Sage-Grouse Habitats

Livestock, humans, and vehicles can physically disturb sage-grouse and cause them to leave leks or abandon nests, resulting in decreased reproductive success.

Did you avoid new surface disturbing activities (e.g., roads, pipelines, corrals for branding) within 0.6-mile of the perimeter of occupied leks from March 1 through May 15?

Yes No

Did you avoid disruptive activities between 6 p.m. and 8 a.m. within 0.6-mile of the perimeter of occupied leks from March 1 through May 15?

Yes No

Did you avoid concentrating livestock in nesting habitat from March 15 through June 30?

Yes No

Did you avoid off-trail vehicular travel in nesting habitat from March 15 through June 30?

Yes No

Where important sage-grouse habitat could not be avoided, provide a description of any surface disturbing or disruptive activities you conducted in those habitats:

Threat: Design and Placement of Water Developments (including ponds and springs) Livestock watering tanks and troughs can cause sage-grouse mortality by entrapment and drowning. Water diversions and spring developments can dry up meadow and riparian areas, reducing sage-grouse habitat quality and quantity.

Are all existing and new water troughs fitted with wildlife escape ramps? Yes No

Did you develop any springs? Yes No

If springs were developed, please provide a description how you protected sage-grouse habitat:

Threat: Predation

Some farm and ranch operations can increase opportunities for avian and mammalian predation of sage-grouse and their nests.

Did you avoid locating garbage and dead piles in close proximity to or within sage-grouse habitat?

Yes No

Did you install any raptor perch deterrents? Yes No

Threat: Insecticide Use

Application of insecticides can remove insects important to sage-grouse, reducing sage-grouse habitat quality.

Did you apply insecticides in important sage-grouse habitat? Yes No

• If you did apply insecticides, did you work with a PA (or other agreed upon technical specialist familiar with the property) to plan to avoid harm to non-target species?

Yes No

• Provide a description of how and where you applied insecticides:

Threat: Drought Prolonged drought can harm plants important to sage-grouse, reducing sage-grouse habitat quality and quantity.

Were there drought conditions present this year? Yes No

• Describe how grazing management was adjusted as a result of these drought conditions.

Threat: Big Game Populations

Concentrated or overabundant big game populations can harm plant communities important to sage-grouse, reducing habitat quality and quantity.

Describe if lands were open to hunting within sage-grouse habitat on your property, and provide any observations you made about the habitat that may have occurred as a result of big game populations:

Threat: Placement of Fences

Sage-grouse can collide with fences resulting in serious injury or death.

Did you construct new fences within 0.6-mile of occupied leks or riparian areas where broods are known to concentrate? Yes No

If yes, please circle all that apply:

- Fencing needed for livestock management
- Fences marked

If you construct new fences, please provide a brief description of the activities:

Within 0.6-mile of a lek, did you relocate, redesign, or mark existing fences, especially where previous collisions have been observed?

Yes No

Provide a brief description of any new fences, or any existing fences that were relocated or redesigned, within 0.6-mile of a lek:

I certify that I have followed the CMs outlined in my CCAA to the best of my knowledge, and I have submitted accurate monitoring data.

Landowner

Date

Biological Monitoring

The purpose of the Biological Monitoring is to collect vegetation data within major sage-grouse habitat types known to occur on the participant's property based on the Initial Baseline Assessment. These data will be used to monitor changes in these habitats over time: that is, the extent to which they may be generally improving, being maintained, or declining. While these data provide important information regarding changes in habitat over time—and will reveal trends over time indicating conservation value of implementing Conservation Measures (CMs)—the data collected are not of the type or intensity necessary to understand factors causing these changes. A number of factors are affecting quality and use of sage-grouse habitat over time that are outside of control of any grazing or ranch management practice (e.g., climate change, temperature and precipitation patterns, development on adjacent lands and across the range of the sage-grouse), and there is no way to account for these factors. Thus, while it is anticipated that implementation of the CMs will contribute to conservation of sage-grouse and their habitat on the enrolled property—most notably through implementation of an approved grazing management plan submitted as part of the CCAA Conservation Plan—it is unlikely that detectable, cause-effect, relationships between specific vegetation trends and CMs will be revealed through Biological Monitoring.

Consequently, it should be clearly understood that trends in sage-grouse habitat over time revealed through Biological Monitoring are not used in any way to evaluate "success" or "failure" of the CCAA— that determination is made primarily through an evaluation of compliance with agreed-upon implementation of CMs. Annual reporting and periodic Biological Monitoring will provide data and information that will be used to better understand the relationship between management of the operation and the resulting utility of the habitat to sage-grouse. Management may impact (either positively or negatively) sage-grouse habitat, so as our understanding of the relationship between operation management and habitat conservation increases over time, there may be opportunities to adaptively manage operations for sage-grouse habitat conservation through implementation of voluntary CMs. Grazing management CM's will have as a goal those rangeland conditions suitable for sage-grouse. Progress toward objectives will be evaluated based on changes, or maintenance, of major sage-grouse habitat types over time revealed through Compliance and Biological Monitoring.

I. INITIAL BASELINE ASSESSMENT

The CCAA Individual Conservation Plan requires that landowners identify existing sage-grouse baseline habitat conditions on their properties. Participating Agency (PA) specialists (or other agreed upon technical specialists familiar with the properties) will help landowners to identify these habitat conditions on their properties during the initial baseline assessment. Specifically, Conservation Plan Component 1(c) refers to: Existing Sage-Grouse Habitat Baseline Conditions including Core Habitat, Connectivity Habitat, and other known habitats such as *leks, nesting, brood-rearing or winter habitat*. The latter four types of sage-grouse habitat will be the starting point and basis for Periodic Monitoring, and *will be recorded within each CCAA Conservation Plan*.

II. PERIODIC BIOLOGICAL MONITORING

Once the CCAA Individual Conservation Plan has been developed, and the Initial Baseline Assessment conducted, landowners will know where sage-grouse habitat occurs on their property. The PA specialists (or other agreed upon technical specialists familiar with the properties) will have determined if the property contains *leks, nesting, brood-rearing or winter habitat*. In order to provide data used to understand how these habitats change or are maintained over time, the following data should be collected

periodically: how frequently data are collected will be determined and agreed to by participant and FWS on a case by case basis, but no less than once every 5 years.

Lek Habitat- Evaluate potential threat of conifer or sage brush encroachment

<u>Nesting Habitat</u>- Sage brush canopy cover; sage brush height

<u>Brood-rearing Habitat</u>-Perennial forb and grass canopy cover; riparian and wet meadow plant Community (dominant species)

Winter Habitat- Sage brush canopy cover; sage brush height