FINDING OF NO SIGNIFICANT IMPACT FOR ISSUANCE OF AN ENHANCEMENT OF SURVIVAL PERMIT

FOR THE

Greater Sage-Grouse Programmatic Candidate Conservation Agreements with Assurances for Private Rangelands in Baker, Crook, Deschutes, Grant, Lake, Malheur, and Union Counties, Oregon

Prepared by
U.S. Fish and Wildlife Service

Introduction

Pursuant to the National Environmental Policy Act of 1969, as amended (NEPA), the U.S. Fish and Wildlife Service (Service) has completed an Environmental Assessment (EA) for the proposed issuance of Enhancement of Survival Permits (EOS permits) to the Baker Valley Soil and Water Conservation District (SWCD), Crook SWCD, Grant SWCD, Lakeview SWCD, and Malheur County SWCD for the incidental take of the Greater sage-grouse associated with implementation of the Greater Sage-Grouse Programmatic Candidate Conservation Agreements with Assurances (CCAAs) for Private Rangelands in Baker, Crook, Deschutes, Grant, Lake, Malheur, and Union counties, Oregon (hereafter referred to as the "Counties"). Issuance of the EOS permits would be done under the authority of section 10(a)(1)(A) of the Endangered Species Act of 1973, as amended (ESA) (16 U.S.C. 1531 et seq.), and would be conditioned upon full and complete compliance with and implementation of the CCAAs. The proposed permits would authorize the collective incidental take of up to 224 greater sage-grouse (hereafter referred to as "sage-grouse") per year, based on a 5-year average, if 100% of the lands in the covered area are enrolled under the CCAAs. The covered area encompasses approximately 2.3 million acres of privately-owned lands within the range of the sage-grouse in the Counties. Interested private landowners would be able to apply for a "certificate of inclusion" under the SWCD-specific CCAA and be covered by the EOS permit if they work with the SWCD(s) to develop a site-specific plan (SSP) and agree to implement relevant conservation measures in the CCAA that address threats to sage-grouse on their enrolled lands.

In the EA, the Service evaluated the potential effects on the human environment associated with the Proposed Action described above and two additional alternatives: (1) a No Action Alternative; and (2) a Landowner-Specific Alternative. Under the No Action Alternative, the Service would not enter into any CCAAs for the sage-grouse in the Counties, nor issue any associated ESA section 10(a)(1)(A) EOS permits. Thus, 0% of the covered area would be enrolled under the CCAAs, however, existing protections for the sage-grouse would remain in effect. Under the Landowner-Specific Alternative, the Service would enter into individual CCAAs on a case-by-case basis with interested landowners and issue an EOS permit directly to the landowner. It is estimated that 25-30% of the covered area would become enrolled under the Landowner-Specific Alternative compared to 40-60% under the Proposed Action due to the efficiencies associated with a programmatic CCAA.

Decision and Rationale

Based on a detailed review of the CCAAs and the analyses in the EA, we selected the Proposed Action because it:

- meets the Service's CCAA standard by providing an effective long-term conservation strategy for the sage-grouse by reducing or removing threats to the species on private lands through proactive ranch and land management that emphasizes protection and enhancement of sage-grouse habitat.
- provides a well-defined adaptive management process informed by habitat quality and effectiveness monitoring conducted on enrolled lands.

- provides programmatic CCAAs that are a more cost-effective and efficient process for conservation of the sage-grouse compared to individual landowner CCAAs under the Landowner-Specific Alternative.
- is expected to encourage the highest level of County landowner participation in sage-grouse CCAAs due to the simplified and streamlined enrollment process of the programmatic CCAAs. Higher landowner participation would result in more sage-grouse habitat being enrolled in CCAAs and larger scale conservation benefits to the species.

Finding of No Significant Impact

Based on the information contained in the EA and the CCAAs, and consideration of public comments received during the public review, we find that the proposed issuance of ESA section 10(a)(1)(A) EOS permits to the above referenced County SWCDs for incidental take of the sage-grouse in association with implementation of the Greater Sage-Grouse Programmatic Candidate Conservation Agreements with Assurances for Private Rangelands in Baker, Crook/Deschutes, Grant, Lake, Malheur, and (southern) Union Counties, Oregon, will not significantly affect the quality of the human environment for the following reasons:

1. Regulatory assurances conferred to enrollees in these CCAAs will provide an incentive for landowners to work proactively with the SWCDs and the Service to address the threats to the sage-grouse found on their properties. This would benefit sage-grouse populations by maintaining or enhancing habitat quantity and quality, and by limiting habitat fragmentation on 40-60% of private lands in the covered area. These benefits to the sage-grouse, while substantial, are not expected to rise to the level of significance when considered in the context of the eleven-state range of the species.
2. The actions taken under these CCAAs are not expected to have any significant effects to public health and safety because covered activities, if carried out as prescribed, have a low probability of impacting human health and safety and would occur on private lands where public access is restricted.
3. Implementation of the CCAAs is not expected to significantly impact unique characteristics of the geography, including but not limited to: parklands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas. We reached this conclusion because the preferred alternative will result in the maintenance and enhancement of sage-grouse habitat with little to no new ground disturbance.
4. The majority of public comments received were supportive of the intent of the CCAAs to improve habitat conditions for the sage-grouse. The public comments also included recommendations for modifications to the CCAAs and EA, but overall these recommendations do not result in controversy.
5. Implementation of the CCAAs is not highly uncertain nor does it involve unique or unknown risks on the human environment because the proposed action provides conservation measures (CMs) to maintain and enhance sage-grouse habitat while maintaining the agricultural way of life in the Counties.
6. The Service has concluded that the anticipated minor negative effects of the proposed action in the area likely to be affected within the Counties are unlikely

to result in an appreciable reduction in the likelihood of the survival and recovery of the sage-grouse across its entire range (Service 2015g).

7. Although the CMs developed for the CCAAs considered herein may be applied in Oregon and elsewhere under different CCAAs, the CCAAs considered herein do not establish a precedent. However, just as in this case, we expect the effects on the human environment related to the application of these CMs under similar CCAAs would not rise to the level of significance. It should also be noted that all future ESA EOS permits issued for other sage-grouse CCAAs will have their own decision process.
8. The short-term economic costs to an enrolled landowner from implementing CMs would be off-set by the long-term benefits of regulatory certainty. Overall, implementation of the CCAAs is likely to result in long-term, minor socioeconomic benefits associated with improved range conditions and assurances that ranching operations can continue without additional restrictions should the sage-grouse be listed. Additionally, implementation of the Proposed Action will not impact minority or low-income populations.
9. No impacts to cultural or historic properties are likely to be caused by implementation of the Proposed Action. However, if these resources are found on private lands enrolled under the CCAAs, the landowner would be responsible for adhering to all laws regarding protection of cultural and historic properties.
10. The CMs implemented under the CCAAs that address riverine, riparian, and wetland habitats are anticipated to provide benefits to the following federally listed or candidate species that will not rise to the level of significance: the bull trout, gray wolf, Foskett speckled dace, Warner sucker, Hutton tui chub, Lahontan cuttthroat trout, Columbia spotted frog, and the yellow-billed cuckoo. We reached this conclusion because there are minimal acres within the covered area where these species are likely to occur and no adverse impacts are anticipated to any of these species.
11. Issuance of the EOS permits is conditioned upon adherence to all local, State, tribal, and Federal laws and regulations; therefore, the Proposed Action is not likely to violate such laws and regulations.

Public Involvement and Comments Received

The CCAAs were developed with considerable input from, and collaboration with, local private landowners, Federal, State and local government and other non-governmental organizations. The Steering Committee that worked closely with the Service to develop the CCAAs includes representatives from: local private landowners; the Baker, Crook/Deschutes, Grant, Lake, Malheur and Union County SWCDs and Commissioners; Natural Resources Conservation Service, Oregon Department of Fish and Wildlife, Bureau of Land Management, Oregon State University Extension, The Nature Conservancy, Department of State Lands, and the Eastern Oregon Agricultural Research Center. On December 2, 2014, we issued a Notice of Availability (NOA) in the *Federal Register* (79 FR 71444) of the draft programmatic CCAAs and the draft EA for public review. A 30-day public review and comment period was open until January 2,

2015. The draft EA and draft CCAAs were available for review at the Service's Oregon Fish and Wildlife Office in Portland, Oregon and on the Office's website.

We received seven comment letters from the following entities in response to the NOA: Two SWCDs, two non-governmental organizations, and three members of the general public. The majority of public comments supported the proposal. However, some commenters provided recommendations regarding incidental take, CMs, cumulative impacts, responsibilities of the parties, and other aspects of the CCAAs and the EA. None of these comments identified any significant new environmental impacts that had not already been addressed in the draft EA. For a detailed description of substantive public comments and the Service's responses, see Appendix A.

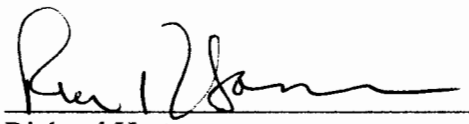
Changes Made Between Draft and Final CCAAs and EA

A number of changes were made to the draft CCAAs and the draft EA in response to public comments. These changes included minor changes to CMs; an expanded discussion of cumulative effects in the EA, and clarification of the responsibilities of the parties to the CCAAs. For a detailed description of the changes made in response to comments see Appendix A of this document.

Conclusion

Based on my review and evaluation of the information contained in the final EA, final CCAAs and other supporting documents, I have determined that the issuance of the ESA EOS permits and implementation of the CCAAs, as proposed, is not a major Federal action that will significantly affect the quality of the human environment within the meaning of Section 102(2)(c) of the National Environmental Policy Act of 1969. Accordingly, preparation of an environmental impact statement on the Proposed Action is not required.

Documents used in preparation of this finding of no significant impact include the EA (Service 2015a), CCAAs (Service 2015b-f), and the Intra-Service Section 7 Conference Opinion and Findings (Service 2015g) on the Proposed Action. All of these documents are incorporated herein by reference, as described in 40 CFR 1508.13. All supporting documents are on file and available for public inspection, by appointment, at: U.S. Fish and Wildlife Service, Oregon Fish and Wildlife Office, 2600 SE 98th Ave, Suite 100, Portland, OR 97266; tel: 503-231-4000.



MAR 13 2015

Richard Hannan
Deputy Regional Director
U.S. Fish and Wildlife Service
Pacific Region

Date

Supporting References

U.S. Fish and Wildlife Service (Service). 2015a. Final Environmental Assessment for the Greater Sage-Grouse Programmatic Candidate Conservation Agreement with Assurances for Private Rangelands in Baker, Crook, Deschutes, Grant, Lake, Malheur and Union Counties, Oregon

Service. 2015b. Greater Sage-Grouse Programmatic Candidate Conservation Agreement with Assurances for Private Rangelands in Crook and Deschutes Counties, Oregon

Service. 2015c. Greater Sage-Grouse Programmatic Candidate Conservation Agreement with Assurances for Private Rangelands in Lake County, Oregon

Service. 2015d. Greater Sage-grouse Programmatic Candidate Conservation Agreement with Assurances for Private Rangelands in Baker and Union Counties, Oregon

Service. 2015e. Greater Sage-grouse Programmatic Candidate Conservation Agreement with Assurances for Private Rangelands in Grant County, Oregon

Service. 2015f. Greater Sage-grouse Programmatic Candidate Conservation Agreement with Assurances for Private Rangelands in Malheur County, Oregon

Service. 2015g. Conference Opinion Regarding the Effects of the Proposed Programmatic Candidate Conservation Agreements with Assurances for Private Rangelands on the Greater Sage-Grouse in Baker, Crook, Deschutes, Grant, Lake, Malheur, and southern Union Counties, Oregon

Appendix A – Public Comments and Service Responses

Comments Related to Regulatory Authority/Certainty, CCAA Standard, and the Service's Policy for Evaluation of Conservation Efforts (PECE):

1. Commenter 1: It is unclear that the CCAA as written will 1) provide an effective means for reducing or removing threats to sagebrush steppe ecosystems or 2) implement effective regulatory mechanisms to protect sage-grouse. This is because the agreement is primarily aimed at preserving status quo land uses that have contributed to the current plight of the sage-grouse through direct impacts and degradation of its habitat, and because the conservation measures that the agreement would rely upon lack certainty both with respect to implementation and enforcement. Thus, the current CCAA is not convincing as specific support for avoiding the listing of sage-grouse under the PECE.

Many of the conservation measures listed perpetuate practices that have contributed to fragmentation, degradation, and loss of sagebrush habitat. It is unlikely that these practices would be any more likely to protect sage-grouse in the future than they have been in the past. Instead, FWS should require more from landowners in return for the substantial benefits that inclusion under an EOS permit would provide them.

FWS Response: The CCAAs for Private Rangelands in Baker, Crook/Deschutes, Grant, Lake, Malheur and Union Counties provide significant conservation beyond the "status quo" by providing 66 Conservation Measures (CMs) and Changed Circumstance Conservation Measures (CCCM) that private landowners will implement to address applicable impacts on their enrolled property, ranging from landscape level impacts of fragmentation to specific measures to reduce direct mortality such as fence strikes (see Appendix A and Section 15 of the CCAAs).

Language in *Section 13 Expected Benefits* of the CCAAs clarifies how these agreements (1) help to address the subset of threats found in each specific County and (2) meet the CCAA standard which states:

The standard for issuing an enhancement of survival (EOS) permit is: *"When evaluating a potential CCAA, the FWS must determine that the benefits of conservation measures to be implemented by a property owner under a CCAA, when combined with those benefits that would be achieved if the conservation measures were also to be implemented on other necessary properties, would preclude or remove any need to list the covered species."(50 CFR 13 & 17)*

The Service will evaluate all other conservation efforts in place including these CCAAs in accordance with PECE during the listing determination as stated in Section 7 of the CCAAs.

See also the response to comments 9 and 10 below.

2. Commenter 1: Who will pay for the extensive ongoing monitoring (which is required annually), compliance evaluations, and general upkeep of the program? Is there secured funding or guaranteed appropriations? If not, can the FWS issue an EOS in light of §10's requirement that "the signatories have shown **capability for and commitment to** implementing all of the terms of the programmatic CCAA"?

FWS Response: The County SWCDs are responsible for collecting and evaluating monitoring data (see Section 9, Responsibilities of the Parties) and many have already secured funding to begin implementation of the CCAA and will continue to pursue additional funding sources. They have already hired personnel to conduct baseline inventory and develop site specific plans. The Oregon Association of Conservation Districts (OACD) has hired three full time biologists to work directly for the SWCDs and with the private landowners enrolling in the program. The FWS established a multi-year cooperative funding agreement with the OACD in FY2014 and dedicated nearly $100,000 to support CCAA development and implementation across the entire project area. The FWS participated in the selection of each of these three positions per our funding agreement with the OACD, and have determined that the selected personnel are qualified to carry out the duties described in part in Section 9. OACD secured additional funding through the NRCS of more than $250,000 for the same purpose. Most recently, in January 2015 the OACD was awarded a national NRCS Regional Conservation Partnership Program grant of approximately $9 Million over the next 5 years, again in direct support of the three OACD positions as well as the implementation of CMs across the entire project area. The Oregon Watershed Enhancement Board has provided technical assistance and education and outreach funds to the multi-county CCAA effort. They also provide funds for sage-grouse habitat improvement projects, which will likely be a source of funding for implementing CMs through their Focused Investment Program, of which sage-brush habitat is a top priority. The Service believes that the signatories have shown the capability for and commitment to implementing the CCAA. If the SWCD fails to fulfill its monitoring responsibilities, the Service has the authority to suspend or revoke the permit.

3. Commenter 1: Further, the CCAA relies heavily on adaptive management. How does the ability to modify conservation measures in the context of changed circumstances and grazing management, for example, contribute certainty to this conservation effort?

FWS Response: "Adaptive management" is a method for examining alternative strategies for meeting measurable biological goals and objectives, and then, if necessary, adjusting future conservation management actions according to what is learned. *Section 6 of the CCAA Inventory and Monitoring, Use of Adaptive Management in the CCAA Process*, describes the adaptive outcome approach to address the need to incorporate new information, monitoring outcomes and changing conditions. Sagebrush rangelands take many years to respond to treatments and in arid systems adaptive management is a necessary part of this effort. Including language in the SSP that allows for a mutually agreed upon approach to address Changed Circumstances provides flexibility to use new information and methods to address threats that are not presently identified consistent with Section N of Appendix B. The CCAA provides a framework for making objective decisions in the face of uncertainty.

4. **Commenter 1:** What qualifications and special expertise would be required of SWCD staff conducting an initial assessment of ecological state, or a baseline inventory/collection/summary of ecological data?

FWS Response: The necessary qualifications include, but are not limited to, knowledge, expertise, and experience in interpreting ecological site data; data collection and associated evaluation for rangeland ecosystems; and are well qualified to collect the baseline data, develop site specific plans and complete ongoing monitoring for the SSPs. Several SWCDs, in partnership with the OACD and the FWS, have already hired staff with this expertise; see also the response to comment 2 above.

5. **Commenter 1:** How involved will FWS be? What will its review/approval process entail? It is crucial to properly establish the ecological baseline, because it will be used to measure habitat quantity and quality as well as changes in both.

FWS Response: The FWS concurs that establishing the ecological baseline for an enrolled site is essential. The Service will be directly involved with the SWCD and landowners with the development of the first 5 SSP's. We will have direct involvement in site visits, completion of baseline inventory, selection of CMs, setting objectives and all other phases of SSP development. This will help to ensure that SWCD staff and FWS have a common understanding of the development of the SSP and that they meet the CCAA standard. Once the first five have been completed, FWS will review every SSP as outlined in FWS Response 7 below, and as outlined in the Section 9 of the CCAA "Responsibilities of the Parties", and ensure it is consistent with the CCAA prior to our written approval.

6. **Commenter 1**: By what objective standards will FWS approve an SSP?

FWS Response: The FWS will review each SSP to ensure that:

- **all threats found on enrolled lands will be addressed with one or more appropriate CM;**
- **acceptable quantitative and qualitative objectives have been set;**
- **there is a timeline for implementation of each action;**
- **the SSP is in compliance with the CCAA, and**
- **the prescribed CM's are adequate by comparing the baseline monitoring information (both photo points and qualitative/quantitative data collected) to the actions (CM's) to be implemented on the ground.**

7. **Commenter 1:** How do these concerns (*referring to who will pay, enforceability, adaptive management, measurable standards.)* play into FWS's evaluation of the conservation measures for their adequacy as regulatory mechanisms?

FWS Response: See the response to comment 2 above for who will pay; to comment 1 for enforceability; comment 3 for adaptive management; and comment 6 for measureable standards. We believe that these issues adequately address the CCAA regulatory requirements for issuance of an EOS permit.

Comments Related to Assessment of Incidental Take:

8. **Commenter 1:** The take calculation should have looked at the specific subpopulations present in each of the counties rather than using the estimated sage-grouse population from the entire state. The impacts of take consider only the allowed take under the CCAAs and through hunting. This calculation does not include take from livestock grazing operations on public land, which would be assumed to be a much larger value than take on private lands given the proportions of PPH and PGH on public lands and private lands respectively. Therefore, FWS's conclusion that total annual losses will not have an important influence on local population dynamics fails to account for a major source of annual take.

FWS Response: Insufficient data exists to determine population estimates for sage-grouse subpopulations in Oregon. This is due to a wide variety of factors, including the fact that not all leks are counted in a given year; the same leks are not counted in consecutive years; not all leks in a complex are counted on the same day; there are incomplete counts (birds flush before all are counted); not all leks are counted within protocol, etc. The overall statewide population is the best index available for overall population trends, and the availability and quality of sage-grouse population data at finer scales is not sufficient to conduct take calculations.

Our calculations do not include take from livestock grazing operations on public land, since more than 10 million acres of public lands administered by the BLM and managed as grazing allotments have the same opportunity to enroll in a Candidate Conservation Agreement with the Oregon Cattlemen's Association. Currently, more than 1 million acres are voluntarily enrolled with dozens of site-specific plans in development. More allotments are enrolled in the programmatic agreement each month, and livestock management CMs are being implemented throughout these enrolled lands. Concurrently, the BLM is amending their Resource Management Plans (RMPs) to address conservation concerns for the sage-grouse, and according to the Draft Environmental Impact Statement for the RMP revisions, widespread changes in grazing, vegetation, and resource management are taking place. The RMP revisions and subsequent changes in resource management on public ground, in combination with the widespread implementation of CMs through the CCA, would render any attempt to quantify the amount of take from livestock grazing on public lands meaningless.

***Section 10, Covered Activities, Section 11, Anticipated Incidental Take,* and *Section 12, Authorized Take* as well as *Appendix F, Information Used to Calculate Take* of the CCAAs all describe and clarify how take might occur from covered activities and/or implementation of conservation in the form of Injury or Death, Harm or Harass. Additionally, in anticipation of the creation of other CCAA's for sage-grouse in Oregon we wanted to remain consistent in our calculations and to be consistent from agreement to agreement, using the statewide average bird density based on PPH and PGH.**

Comments related to Conservation Measures:

9. Commenter 1: How many conservation measures is each landowner required to adopt in an SSP?

FWS Response: All enrolled landowners must adopt CM 1 and additional CMs to address every threat to the sage-grouse on enrolled lands within their control.

10. Commenter 1: How many threats must each landowner address?

FWS Response: All threats within their control.

11. Commenter 1: CM 2: This conservation measure still allows new developments (roads, buildings, power lines). CM 3, 4, and 5: There is no certainty associated with these conservation measures. They only require an enrollee to "consider" doing something, or to do so when "economically feasible" or "where possible." What are the standards for determining what's possible and economically feasible? How does language like this ensure real changes on the ground that decrease threats to sage-grouse?

FWS Response: For CM 2, all development actions that are covered under the CCAAs must conform to the stipulations for Development, presented in *Section 10: Covered Activities, Development sub-section.* For CM 3, conservation easements are one tool available to landowners, that we would like landowners to "consider". However, it is not the only way to avoid fragmentation and is therefore not required. For CM 5, during SSP development, each SWCD will identify potential vertical structures for removal, some may be moved or re-located by the landowner, others may be outside the landowners' direct control (powerlines) or require further clearances. The standards for "what's possible and economically feasible" will vary on a case-by-case basis and the degree of threat to the sage-grouse. For example, if there is a single pole line going to a water trough in nesting habitat it would be a much higher priority for removal/burial than powerlines servicing a residence not located in sage-grouse nesting habitat.

12. Commenter 1: CM 6: Landowners would be required to "consider" a host of "proactive prevention measures" with respect to fire. Again, the entirety of this CM is unenforceable. A landowner does not have to do anything beyond considering these measures.

FWS Response: The FWS acknowledges that measures available to private landowners to address the adverse impacts of wildfire are limited. CM 6 provides proactive measures that depending upon the site-specific conditions of enrolled lands may or may not be effective or desirable. Therefore, it is not required that these be included in the SSP. CM 6 reads as follows: *"The following proactive prevention measures may apply"* the use of the word "may" is intended to provide for flexibility. The SWCD with the landowner may develop other measures (with FWS approval as specified in the opening paragraph of *Appendix A Conservation Measures)* if the "proactive prevention measures" listed are not adequate.

13. Commenter 1: Similarly, some "juniper-encroached rangeland" is certain to have been historic woodland. Removing junipers from the landscape will not magically turn land into sage-grouse habitat, where habitat never was.

CMs 9–17: The EA states that "because the CCAA takes an ecological approach, ecological sites that historically supported juniper woodlands will not be targeted and impacts to associated species will be limited to areas that were not historically occupied by juniper."
How does FWS define "historic"? What methods will be used to determine whether areas were woodlands at the time of settlement or first disturbance?

FWS Response: The Service agrees that not all juniper woodlands are capable of being restored or should be treated at all. By "woodland" we specifically mean juniper expression equal to that described for phase 3 woodlands in Miller et al. (2007). It is critical to determine the vegetation potential for the site in question. Not all ecological sites capable of supporting juniper woodlands are capable of supporting the strong perennial herbaceous and shrub plant communities needed to provide sage-grouse habitat. Such sites are often on rocky soils and topographically may occur near the top of a hill slope. These sites often support what are termed "historic" juniper woodland plant communities. Characteristics used to define historic juniper woodlands have been developed by Miller (Miller et al. 2005) and include age of trees and presence of shrub skeletons (i.e. shrubs killed due to competitive interactions with juniper) that suggest previous abundance of alternate understory vegetation species. These characteristics, along with Ecological Site guidelines will be used in determining historic status of woodlands, and if a juniper woodland is capable of supporting understory plant conditions necessary for sage-grouse habitat. If the juniper woodland is not deemed to be "historic", then treatments must be carefully thought out because removal of phase 3 juniper , particularly at large scales, can lead to erosion and loss of site potential; particularly if sufficient desired understory plant propagules are not present (Pierson et al. 2007; Miller et al. 2013). Juniper removal within as a CM in the SSP's will focus on non-historic sites with strong understory potential that are in the early phases of juniper encroachment; post-removal restoration practices are not likely to be needed on such sites and the potential to provide post-removal sage-grouse habitat is high (Baruch-Mordo et al. 2013).

14. Commenter 1: A major goal for ecological trends should be to move out of crested wheatgrass states where seedings are present. As noted, these areas are unlikely to provide habitat for sage-grouse during the life of SSPs, and thus should not be used to offset loss of sagebrush habitat, but should nonetheless be a focus of restoration as a benefit to the ecosystem as a whole.

FWS Response: Restoration of crested wheatgrass (CWG)-dominated areas to native vegetation communities that lack CWG is difficult, and not desirable in all cases. Recent research suggests that restoring native herbaceous species within existing CWG communities has a low probability of success (Rafferty & Young 2002; Monaco et al. 2005). CWG is both difficult to kill, and residual plants are highly competitive with native plant seedlings. Additionally, desired native herbaceous species may be very

difficult to establish from seed on lower elevation sites. For these reasons, the Multi-County CCAA does not emphasize CWG removal followed by herbaceous restoration. Alternatively, restoring sage-brush in CWG communities by planting plugs (juvenile bare root transplants) does show promise as a technique to restore sagebrush (Davies et al. 2013; McAdoo et al. 2013), and, in the process, habitat structure needed by sage-grouse and other shrub associated avian species (McAdoo et al. 1989). For this reason, we have included CM 44 under *Vegetation Treatments in Appendix A* within the Multi-County CCAA specifically addressing planting of sagebrush within stands of introduced perennial grasses. A second consideration is that large, deep-rooted perennial bunchgrasses (native or not) play a key role in helping to prevent invasion by exotic annual grasses on low elevation sites (Chambers et al. 2007; Young & Mangold 2008). Thus, removal of CWG can put plant communities at risk to annual grass invasion if re-establishment of native herbaceous species is not successful.

15. Commenter 1: Direct impacts from grazing should be minimized by avoiding activities and development in the vicinity of sage-grouse leks. The buffer of 0.6 miles recommended by CMs 19, 20, and 28 is not enough. The NTT report recommends a buffer of 4 miles and Knick and Connelly 2011 recognize a correlation between disturbance within 3.1 miles of a lek and decreased lek attendance. These direct impacts to breeding areas should be avoided, not just reduced.

FWS Response: The NTT report recommends buffers around mineral, energy and other developments, similar to the following: *"If the lease is entirely within priority habitats, apply a 4-mile NSO around the lek, and limit permitted disturbances to 1 per section with no more than 3% surface disturbance in that section."* **Actions such as these are not covered activities under the CCAAs. The NTT does not recommend the same buffers around livestock developments. FWS followed recommendations in the ODFW Conservation Strategy to reduce physical disturbance to sage-grouse leks from livestock through managing locations of salt or mineral supplements by placing them greater than 1 km (0.6 mi) from lek locations. (ODFW 2011)**

16. Commenter 1: In developing grazing plans, landowners should manage for large livestock-free areas of land during sage-grouse breeding season and minimal winter disturbance. Grazing in PPH should be restricted between March 1 and June 20. See Braun 2006.

Grazing plans should implement measurable utilization standards rather than adaptive management. These include residual height standards of at least 7 inches for understory vegetation required by nesting sage-grouse.

Rather than promoting more livestock developments, grazing plans should adjust grazing levels or seasons in order to strive to reduce livestock developments in the uplands. Reduction of pressure on riparian areas should be used to meet conservation goals rather than fencing riparian areas so that water developments in the uplands become necessary.

Grazing conservation measures should include sufficient long term or permanent rest in order to recover vegetation (Anderson and Holte 1981; Belsky and Gelbard 2000).

16. Commenter 2: Best management practices for sage-grouse should include management goals for grass height and forb density in each SSP.

FWS Response: CMs 21 – 26 and 28 contain the necessary information to implement changes to grazing management when the threat of "improperly managed grazing" is identified during SSP development. See the opening paragraph in Appendix A of the CCAAs, "Threat: Unmanaged and/or Improper Grazing", for additional modifications to the CCAA that addresses these comments.

17. Commenter 1: Dense sagebrush was a natural part of pre-settlement conditions (Bukowski and Baker 2013). It should not be considered an aberrant state. Connelly et al 2000 and other studies used sage canopy standards averaged from many areas. Sagebrush landscapes are often complexly interspersed with big sage and low sage. To set the appropriate baseline, SWCD needs to look at the sagebrush present in an area as a whole, including a hard look at the entire past disturbance history of the site and its surroundings.

18. Commenter 1: As an example, conservation objectives for Ecological State D (site dominated by "decadent" sagebrush) include "reestablishment of deep rooted perennial vegetation and experimentation with various methods for reestablishment that might be necessary to cause desirable shift in vegetation." In other words, based on the CCAA's vegetation models, landowners may destroy climax sagebrush to bring back grasses, which benefits cows.

FWS Response: When SSP's are developed the Conservation Objectives for each "State" will be incorporated, for example State D in the Low elevation model the objective states: *Maintain a dominant over-story layer of sagebrush and reestablish deep-rooted perennial vegetation.* **Habitat disturbance history will be addressed as part of the SSP development (Appendix C).**

19. Commenter 1: Whatever method is chosen to measure habitat quality should be explicit with respect to meeting specific seasonal habitat needs for sage-grouse such as sufficient vegetation height for nesting and providing foraging habitat for early and late-brood rearing, riparian areas and meadows, or habitat associated with sage-grouse wintering grounds. The CCAA as written does not include these measurable standards.

FWS Response: This CCAA focuses on the ecological health of the plant community, see Appendix C: "*Ecological States and their relationship to sage-grouse habitat*". Trend monitoring will be used to assess the effectiveness of treatments over time and transition from state to state.

20. Commenter 1: CM 54 and 55: WWP strongly opposes lethal predator control. Rather, landowners should be required to maintain good practices with respect to potential attractants such as carrion, boneyards, livestock waste, afterbirth, water sources and other

subsidies in general, not just in the vicinity or a lek or breeding season. Habitat improvement that provides ample cover for nesting should be a primary means of predator control.

FWS Response: CM 54 reads: "Minimize attractants for corvids, raptors, and coyotes (i.e., dump sites, bone piles, etc.)." The Service concurs that habitat improvement that provides cover for nesting is the primary approach to minimize the impacts of predation on sage-grouse, their nests, and broods. CM 55 states that: "poor habitat conditions" will be addressed prior to or jointly after lethal predator control. Additionally, one of the three goals of the CCCA is to "Provide an ecological approach to maintain current sage-grouse habitat and to improve habitat that is not meeting conservation objectives, as identified in enrolled landowners' site specific plans." By working towards meeting this goal on enrolled lands, cover for concealing sage-grouse and their nests will increase.

21. Commenter 1: For CCCM 2, where shrubs or sagebrush burn, there should be a minimum rest period of several growing seasons in order to make this provision meaningful to promote recovery of sage-grouse habitat. After that, timing could depend on objectives set by SWCD and the landowner. CM 18: See comments for CCCM 2. Following treatments, there should be mandatory minimum livestock grazing rest periods.

FWS Response: Due to the programmatic nature of this agreement and the variety of ecological sites to be enrolled, setting a minimum rest period is not practical. However, timing of livestock grazing following wildfire will depend on response of desirable vegetation. The SWCD and the landowner will identify and set quantifiable objectives for post-fire vegetation recovery based on pre-fire monitoring data, returning livestock grazing once objectives have been met. Additionally, CM 42 states "allow adequate rest, generally a minimum of two growing seasons." The FWS will approve all CCCM's that are prescribed to respond to wildfire or other disturbance.

22. Commenter 1: For CCCM 3, and any other time seeding is to be used, landowners should reseed with only local native ecotypes if the area is expected to provide quality habitat for sage-grouse. Favor passive restoration over seeding.

FWS Response: Baseline monitoring that is conducted as part of the CCAA will be available to inform restoration (passive or active) post-fire and the FWS will consider all available information when reviewing proposals from the SWCD to respond to changed circumstances.

23. Commenter 1: CCCM 7: there is no certainty for this measure. Adaptive management that could be used to adjust grazing levels *may* include those listed. There should be definitive decreases in livestock numbers required during drought conditions. Drought situations place extra pressure on wildlife including sage-grouse just as drought affects livestock and grazing should yield if the conservation measure is to be meaningful as sage- grouse protection.

FWS Response: Due to the programmatic nature of this agreement it is not feasible to predict the CM or CCCM that will apply in every scenario. The CMs and CCCMs were developed to provide a list for the SWCD and landowners (with FWS approval) to select

the most appropriate measure to address threats. The use of the word "may" is intended to provide for flexibility for SWCD and the landowner to develop other measures because new CMs or CCCMs may be developed that better address threats and can be added with FWS approval. (See Section 5 of the CCAAs for details on how a new CM may be added).

24. Commenter 1: CCCM 8 and 9: West Nile Virus outbreaks have occurred in sage-grouse habitat in Oregon and will occur again. They are foreseeable and should not be considered a changed circumstance. Conservation measures intended to respond to outbreaks, such as minimizing standing water in stock tanks, should be implemented proactively.

FWS Response: West Nile Virus is addressed as both a changed circumstance (See CCCM 8 and 9) and is also covered proactively in CM 56. CM 56 states: *"Minimize unnecessary standing water that could be used as mosquito breeding grounds within sage-grouse habitat. Where new pond construction or water developments are proposed for rangeland management or habitat enhancement purposes, use innovative designs, when possible, to minimize the amount of mosquito habitat that could be created. Work with agency biologists on optimal locations for new water developments."* Since water facilities (ponds, standing water, etc.) exist as part of normal ranching activities it is anticipated that this CM will be a part of most, if not all SSPs.

25. Commenter 1: CCCM 12 and 13 allow a landowner who is enrolled under the CCAA to develop lands the landowner chose not to enroll in the program, and subsequently adjust CMs for enrolled lands that are affected by the new development. This kind of adaptive management outcome is antithetical to sage-grouse recovery or certainty.

FWS Response: It also allows that if agreement is not reached on the necessary conservation measures the SWCD may terminate the SSP if the CCAA standard is no longer being met. These agreements are voluntary in nature.

26. Commenter 1: Conservation measures should focus on protecting microbiotic crusts from trampling damage, and limiting disturbance to sagebrush understories, as well as simplification of sagebrush structure (Reisner et al. 2013, Reisner 2010).

FWS Response: Many of the CMs in the CCAAs can be utilized alone or in conjunction with others to protect crusts from trampling damage by controlling timing, duration and intensity of utilization, as well as limiting disturbance to sagebrush understories and avoiding simplification of sagebrush structure. Implementing these CMs to achieve a desired ecological state, which includes responsible grazing management, is the intent of the CCAAs.

Comments on the Environmental Assessment:

27. Commenter 1: The EA fails to discuss populations of sage-grouse in neighboring Nevada, which may be very close or contiguous with populations in SE Oregon counties. It also fails to consider the cumulative effects on sage-grouse from FWS entering into a CCA with Oregon livestock interests on public lands in the state.

FWS Response: Unfortunately, the methods used by each state to calculate population numbers of sage-grouse differ and it is not feasible with the available information to correlate population data across state lines. However, we do expect benefits from the implementation of the CM's to the local populations that cross state-lines to result in an overall benefit to the species.
We added the following language to the cumulative effects section of the EA:

"Federal lands may also be enrolled in the Oregon Cattleman's Association CCA for rangelands which will allow CMs to reach across property types, regardless of ownership and allow enrolled landowners to address all the threats within their control on not only there private rangelands but their permitted federal grazing allotments as well. The Oregon Cattleman's Association CCA covers more than 10 million acres of grazing allotments on federal land throughout the eight counties of southeastern Oregon, with more than 1 million acres of these allotments voluntarily enrolled as of January 2015. Significant additional enrollments are expected."

28. **Commenter 1:** The EA did not analyze a reasonable range of alternatives. The only two action alternatives looked at the difference between implementing CCAAs individually with landowners, or programmatically through SWCD.

The EA lacked alternatives that considered more restrictive conservation measures that were more certain to protect sage-grouse. For example, the EA should have at least analyzed alternatives that required enrolled landowners to exclude livestock grazing from 25% and 50% of the PPH on their property for the life of the SSP and CI, or to reduce the amount of forage consumed by cattle in sage-grouse habitat on their property by 50%.

Alternatives such as these would have created mechanisms that are more likely to protect sage-grouse, while still meeting the purpose of the CCAA, which is to preserve rural agricultural ways of life.

FWS Response: We included alternatives that would satisfy the purpose and need of the CCAA standard and the Enhancement of Survival Permit issuance criteria, while providing an approach that would maximize the level of participation in the CCAA by private landowners. We did not include an alternative like your example because excluding livestock grazing arbitrarily at 25% and 50% of the PPH on any property fails to consider the site-specific conditions and long-term site potential. Additionally, a rigid approach such as this would likely result in a significant reduction in landowner participation, resulting in less conservation of sage-grouse. We believe

that implementation of the CMs will achieve conservation objectives because enrolled landowners will implement multiple measures including grazing at levels and seasons of use that do not negatively impact sage-grouse. Further, the purpose of the CCAAs is "...to maintain and/or improve greater sage-grouse habitat while contributing to the economic sustainability of landowners and maintaining the ranching culture and agricultural way of life in the [Counties]."

Other Comments:

28. Commenter 1: The CCAAs are based on an incorrect premise – that livestock are beneficial for sage-grouse. According to this line of reasoning, if these open spaces are not maintained by working ranches, they will immediately be developed into ranchettes and housing developments. Instead of justifying livestock grazing in sagebrush steppe, FWS here should openly acknowledge that livestock grazing is one of the major causes of sage-grouse decline in Oregon and throughout its range. Consequently, even "properly managed" or mitigated grazing constitutes a significant threat to the continued viability of sage-grouse, which the FWS must acknowledge.

FWS Response: The FWS has identified improper livestock management as a threat to sage-grouse in the Conservation Objectives Team Report (commonly known as the COT report, 2013), along with many other threats. In the FWS 2010 listing decision, the FWS determined the act of gazing was not the specific threat affecting the species, but that some aspects of livestock management have the potential to influence habitat loss, fragmentation, and degradation. Improper livestock grazing is inherently interconnected with other threats to sage-grouse, including invasive plant species and fire cycles, predation, disease, and the loss of biological soil crusts. The COT report also emphasizes that *"the occurrence and importance of each of the above threats to sage-grouse varies cross the species range"* (COT Report, page 11). Therefore, it is incorrect and inappropriate to characterize livestock grazing as a significant threat to the sage-grouse across the range of the species.

Agricultural production including but not limited to livestock grazing is the primary land use for the entire covered area. *Section 4.5, Socioeconomics and Environmental Justice* of the EA (pp 24 – 27) summarize the current human population trends, employment rates, and median incomes. *Section 4.4, Land Use and Ownership* of the EA references the Central and Eastern Oregon Land Use Planning Assessment for Sage-Grouse Habitat (Harney County 2013), which contains extensive information on why conversion of open spaces not maintained by working ranches to ranchettes and housing developments is not a reasonably foreseeable future scenario.

The purpose of the CCAAs is to maintain and/or improve greater sage-grouse habitat while contributing to the economic sustainability of landowners and maintaining the ranching culture and agricultural way of life in the Counties.

29. Commenter 1: Can the adjustments to grazing levels and seasons that are anticipated as part of this plan substitute for specific measurable standards that would better demonstrate

whether grazing levels are appropriate for a given site?

FWS Response: We believe that the approach described in the CCAA, developing SSPs to determine appropriate grazing regimes will be effective for the following reasons: this determination will include an assessment of ecological site descriptions, site potential, disturbance regime, degree of invasion by annuals, juniper cover, drought and other weather variables, and grazing levels will be adjusted as needed under CM 22. When site specific plans are created measurable objectives (See Section K, Appendix B) will be developed and monitored. See also the "Conservation Objectives" associated with the models found in Section 6 of the CCAA.

30. Commenter 1: It is important to remember that some lands will never be rehabilitated into usable sage-grouse habitat and especially not within the life of the CCAA (30 years). It is critical that areas that have little or no potential to become habitat are identified as such in the initial baseline inventories rather than being classified as habitat that is capable of restoration. Otherwise, nominal improvements to the quality of such an area over the life of the permit, which would still leave it wholly unsuitable for the sage-grouse, could be used to offset degradation or loss of currently viable habitat. Only improvement in lands that have true potential to provide benefits to the sage-grouse should be allowed as offsets.

While the agreement does recognize a category of lands as "persistently unsuitable," the only lands listed in that category are developed lands. Exotic plant-invaded rangeland is listed in the deficient habitat category—meaning the agreement would categorically recognize it as potentially suitable habitat. However, depending on the degree of infestation, these lands may not be capable of ever becoming habitat. This is probably true for many of the lands associated with large scale crested wheatgrass conversion projects in recent decades.

This is **not** to say that restoration of persistently unsuitable lands should not be undertaken based on potential to provide other ecological services and habitat for other species and prevent degraded lands from negatively affecting nearby sage-grouse habitat.

FWS Response: The Service agrees that some lands have little or no potential to become suitable habitat for the sage-grouse and that any proposed restoration efforts must carefully consider the likelihood of achieving desired outcomes. However, there may be value in the treatment of persistently unsuitable lands to prevent degraded lands from negatively affecting nearby sage-grouse habitat (e.g., treatment and control of invasive plant species such as cheatgrass or medusahead). Areas with little or no potential to become suitable habitat for the sage-grouse will be identified in the baseline surveys prepared for a SSP and will not be used to offset impacts.

31. Commenter 1: It is difficult to understand why these conservation measures' response to the threat of vegetative treatments is more treatments. The COT Report stated:

"The intentional removal or treatment of sagebrush (using prescribed fire, or any mechanical and chemical tools to remove or alter the successional status of the sagebrush ecosystem) contributes to habitat loss and fragmentation, a primary factor in the decline of

sage-grouse populations. Removal and manipulation of sagebrush may also increase the opportunities for the incursion of invasive annual grasses, particularly if the soil crust is disturbed (Beck *et al.* 2012). Although many treatments are often presented as improving sage-grouse habitats, data supporting the positive impacts of sagebrush manipulation on sage-grouse populations is limited (Beck *et al.* 2012)."

FWS Response: CM 43 prescribes specific parameters to how vegetation treatments can be conducted while still maintaining sage-grouse habitat. CMs 45-48 provide further parameters to lessen impacts to sage-grouse and their habitats. If these types of activities will occur on enrolled lands, they must be identified in SSPs. The FWS will be required to assess the effects of vegetation treatments when approving SSPs.

32. Commenter 1: Strangely, the new CCAAs include a subcategory of Riparian habitat – "high gradient" that is deemed unsuitable habitat, without further explanation. Why is "high gradient" habitat categorically unsuitable for sage-grouse habitat?

FWS Response: Generally, "high-gradient" riparian habitat characterizes steep, higher-elevation stream channels and habitats typically found at the top of a watershed and are not typically considered sage-grouse habitat. They are generally not characteristic of sage-grouse habitat, defined by vegetation and soils not consistent with sage-grouse habitat. They were included into the habitat characterization so that they could be accurately described in the inventory and monitoring sections of the SSPs on enrolled properties, but not intended as an additional habitat class for sage-grouse.

33. Commenter 1: The CCAAs state that an end of the year annual report will be submitted to FWS each year, providing a summary of all trend monitoring. This information should be available to the public for review.

34. Commenter 2: Which species does the Service consider "desired grasses"? Are these native grasses or non-natives? We recommend that the CCAAs should stipulate native species as the first choice for all planting and only after their failure should non-natives be utilized. Greenstrips should consist of native species. [We] are opposed to using forage kochia or crested/Siberian wheatgrass in creating greenstrips or other plantings in sage-grouse habitat. Native shrubs and native plants should be utilized in those situations.

FWS Response: Desired grasses are those grasses that are part of the vegetation community at the highest level of sage-brush habitat in the state and transition model: states A and B. These conditions generally reflect all native grasses, but may differ from site to site depending on the composition of the native vegetation community, elevation, soils, precipitation, fire history, and many other factors. Figures 2, 3, and 4 of the CCAAs indicate how the progression from the less desirable states of D and C towards the more stable and desirable states of B and A contain a decreasing amount of exotic and invasives species, along with a decrease in fire risk and increase in fire resilience. See also the CMs 31 – 48 dealing with exotic and invasive species as well as vegetation treatments, as well as *Appendix F Herbicides and Best Management Practices*, for more information on combating invasives.

35. Commenter 3: I would like to propose an idea for increasing the Sage Grouse population without effecting land use in any way, captive breeding. Artificial insemination has come a long way and is a viable option. There are already private facilities in Oregon for breeding game Pheasants that could easily handle rearing the birds, and it would be a very cost effective solution. It's no different than a fish hatchery. Raise them and turn them loose where you feel they are needed.

FWS Response: Captive breeding of a species to supplement wild population is a technique more often applied to recovery of a listed species and preservation of genetics, rather than candidate conservation. Simply releasing captive-bred birds on to the landscape will most likely not result in the long-term sustainable population objectives set by the states, and will do nothing to address the habitat related threats to the species. Further, captive breeding success varies widely across species, and Oesterlie et al. (2005) found high mortality rates (>16%) for wild-caught greater-sage grouse. The CMs described in the CCAAs are for actions that can be implemented by private landowners on privately-owned land; a captive breeding program managed at such a scale is beyond the scope of this action.

36. Commenter 2: Strong standard should be set for development of new water sources in sage-grouse habitat since the result of many water source developments has been further degradation.

FWS Response: We believe that "plant diversity" includes "annual native herbs and grasses"; however, we have added this language to CM 50 for clarification.

37. Commenter 2: We urge the Service include a quantitative measurement of plant material utilization in addition to a quantitative "ocular estimation." The Modified Pace and Step-Point method could include quantitative measures of utilization beyond the qualitative "ocular estimation." This could be readily added to the Step-Point method. Residual grass height in one option, but there should be flexibility to use whatever measure provides the best indication of potential degradation of habitat.

FWS Response: We believe that the CCAAs provide the flexibility to include additional inventory and monitoring protocols as necessary. *Appendix B – Site Specific Plan/Certificate of Inclusion* template, *Section J2 Annual Monitoring*, states: "In addition to the information in the "Annual Grazing and Habitat Summary", other potentially import annual records would include pasture-level grazing utilization and distribution, actual use, sage-grouse observations, or any other factors that could have affected the growing conditions for vegetation not identified in the form." Further, *Appendix D – Inventory and Monitoring*, states that "the basic method of upland trend monitoring used in this CCAA is a modified Pace 180 with step-point and density measurements with plot photos and landscape photos in cardinal directions, as described below. However, the CCAA provided the SWCD with the flexibility to employ (with the concurrence of the landowner) the most efficient, generally accepted rangeland monitoring methodologies to measure change in ecological state as related to specific objectives in the SSP."

Additionally, *Section 6.5, Use of Adaptive Management in the CCAA Process* of the CCAA specifically allows flexibility to adjust and expand "...monitoring, assessment, and decision making to clarify the relationships among the CMs and the response of habitat and ultimately, sage-grouse abundance."

CM 1, which is mandatory for each enrolled property and site-specific plan, requires maintaining contiguous habitat by avoiding further fragmentation. Further fragmentation may include additional water developments, depending on the specific characteristics of the site, and when combined with CMs 25 – 28 which outline the requirements for water developments, would minimize any impacts resulting from new water sources. Every effort will be made to protect wetlands on enrolled property as these habitats are very important for brood rearing; see also *Section 4.2.1.4, Late Brood-Rearing Habitat from mid-July to mid-September*, as well as *Section 4.3.2, Wetlands*, of the EA.

38. Commenter 2: More research is needed regarding sage-grouse biology and the CCAA should encourage landowners to participate in ongoing studies to improve adaptive management decisions.

FWS Response: We agree that more research is needed regarding sage-grouse biology. *Section 6.3, Scientific Studies and Species Monitoring* of the CCAAs recognizes this and sets the foundation for encouraging landowners to participate in ongoing studies. The FWS will continue to support these efforts on private lands when and where appropriate.

39. Commenter 2: Drought: The draft CCAA plan allows owners to "Adjust livestock use (season of use, timing, intensity, and/or duration) to reduce the impact on perennial herbaceous cover, plant diversity, and plant vigor to enable enrolled lands to meet the seasonal habitat needs for sage-grouse identified for the site." This statement should be expanded to include "annual native herbs and grasses." These other native species are also important for sage-grouse.

FWS Response: We believe that "plant diversity" includes "annual native herbs and grasses"; however we have added this language to CM 50 for clarification.