

## Greater Sage-Grouse Range-Wide Mitigation Framework

*Advancing Mitigation to Address Threats and Communicate Options*

We might want a glossary: Mitigation framework = FWS guidance on mitigation. Mitigation program = the accounting system that states or non-profits develop.

Formatted: Left

Formatted: Font: Not Italic

- I. **USFWS Foundations/Principles for a Mitigation Framework**<sup>1</sup> (Is this our opening? Do we want an intro of some sort)?

### **Background**

**Conservation Setting** (summary of and reference to COT Report / PAC strategy). On March 23, 2010, the U. S. Fish and Wildlife Service (FWS) determined that the greater sage-grouse (*Centrocercus urophasianus*; sage-grouse) warranted the protections of the Endangered Species Act of 1973, as amended, 1531 et seq. (ESA), but that adding it to the List of Endangered and Threatened Wildlife under the ESA was precluded due to other higher priority actions. The 2010 Finding determined that the sage-grouse was warranted for listing under the ESA based on two primary factors - the present or threatened destruction, modification, or curtailment of habitat or range, and the inadequacy of existing regulatory mechanisms.

Formatted: Font: Bold

Species found to be warranted for listing but precluded by higher priority listing actions ("warranted but precluded") are placed on the federal list of candidate species under the ESA. Shortly after the sage-grouse became a candidate species, the FWS entered into a court-approved settlement agreement with environmental groups which formalized a schedule for making listing determinations on over 200 candidate species nationwide, including the sage-grouse and its Distinct Population Segments (DPSs). The court-approved schedule indicates that a decision on whether to proceed with listing the Columbia Basin sage-grouse DPS, or withdrawing the "warranted but precluded" finding, is due by September 30<sup>th</sup>, 2015.

Formatted: Superscript

Given the broad implications of potentially listing the sage-grouse under the ESA, in December 2011, Wyoming Governor Matt Mead and Secretary of the Interior Ken Salazar co-hosted a meeting to address coordinated conservation of the sage-grouse across its range. The primary outcome of the meeting was the creation of a Sage-Grouse Task Force directed to develop recommendations on how to best advance a coordinated, multi-state, range-wide effort to conserve the sage-grouse, including the identification of conservation objectives to ensure the long-term viability of the species. With the backing of the Task Force, the FWS Director tasked staff with the development of range-wide conservation objectives for the sage-grouse to define the degree to which threats need to be reduced or ameliorated to conserve sage-grouse so that it is no longer in danger of extinction or likely to become in danger of extinction in the foreseeable future. Recognizing that state wildlife agencies have management expertise and management authority for sage-grouse, the FWS created a Conservation Objectives Team (COT) of state and FWS representatives to accomplish this task. The February 2013 Greater Sage-grouse (*Centrocercus urophasianus*) Conservation Objectives: Final Report (COT Report) was the outcome of the COT's efforts.

The COT Report urges an avoidance first strategy for Priority Areas for Conservation (PACs). When avoidance is not possible, meaningful minimization and mitigation of impacts is

<sup>1</sup> See Oregon example on SharePoint

recommended. This ~~mitigation~~ framework is intended to provide guidance for the development of sage-grouse mitigation programs ~~development guidance~~ that is consistent with the information and conservation objectives provided in the COT Report. Recognizing that state wildlife agencies have management expertise and management authority for the sage-grouse and given the variability in ecological conditions across the range of the sage-grouse, the framework outlines the Service's conceptual recommendations for mitigation. The framework recommendations are intended to optimize the conservation value and confidence that the Service can provide when evaluating mitigation programs. The Service will also use the framework as a basis to compare the relative value of different mitigation programs.

**Mitigation Context** (brief reference to / discussion of FWS mitigation policy & how this current framework relates to that policy; plus clear discussion of what constitutes "mitigation" in the context of this framework [e.g., avoidance, minimization, compensation, etc.]. We also need to clearly communicate the mitigation hierarchy – avoid first, minimize, compensate...)

Formatted: Font: Bold

Formatted: Font: Not Bold

**Framework Goals and Standards** (see document on Sharepoint and edit at will. It or language from it will be put here).

- a. Goals *-for successful mitigation programs that contribute to sage-grouse conservation*
- b. Principles/Standards *-for planning, additionality, durability, etc. of mitigation actions*

## II. Structural Components "Nuts and Bolts"

### a. Accounting

A mitigation program provides an accounting system whereby credits and debits can be exchanged. Credits are generated by conservation actions that benefit sage-grouse while debits result from actions that negatively impact sage-grouse. The value of credits and debits is based on the type, scope, and location of actions and their relative value to the sage-grouse.

Formatted: Indent: Left: 0.75", First line: 0.5", No bullets or numbering

### a-b. Sources of Demand

A mitigation program may be developed to meet regulatory, risk, or philanthropic drivers. State or local regulatory policy may require mitigation for proposed or existing disturbances. Industry may also be interested in buying pre-compliance mitigation today that will cover future incidental take for to-be-determined activities. Philanthropic interests may also invest in a mitigation program for purely conservation reasons.

Need for mitigation is driven by proposed and sometimes existing disturbance, specifically development related activities, and the regulation or potential for threat of regulation on that disturbance. Environmental ethic or Green PR are other potential sources. PECE and 5-factor language...

The COT Report and 2010 Finding provide detailed discussion regarding how sagebrush habitat loss and fragmentation is a primary cause of sage-grouse population decline. Habitat fragmentation, largely a result of human activities, can result in reductions in lek

persistence, lek attendance, population recruitment, yearling and adult annual survival, female nest site selection, nest initiation, and complete loss of leks and winter habitat. Functional habitat loss also contributes to habitat fragmentation, as sage-grouse avoid areas due to human activities, including noise, even though sagebrush remains intact. Habitat loss and fragmentation contribute to the population's isolation and increased risk of extirpation.

- i. Development Sectors –*type and scope of impacts from development, e.g. energy*

A mitigation framework should assign value to the potential impacts or disturbances from an industrial sector if the sector's activities are to be eligible for compensatory mitigation. What types of impacts or disturbances warrant avoidance, minimization and offsets? Which ones are currently regulated or could be regulated in the future by local or state authorities?

Recommendations: Using the COT Report to identify widespread and local Based on major threats to sage-grouse in your state, identify types of disturbance, including natural and human-footprint. Identify development that may impact the species - Frequency, scope, future. AVOID FIRST – ALWAYS...

**Comment [UF&WS1]:** I'm still a bit foggy on the overall purpose of the framework. Is the intent to provide recommendations regarding avoidance, minimization, and compensation measures and techniques, or more to provide general guidance for others (like states) to develop their own specific suite of measures?

- ii. Spectrum of Federal/State/Tribal/Local regulatory mechanisms –*types of regulatory mechanisms that create mitigation requirements, e.g. state laws, local ordinances*

Regulatory mechanisms are the strongest and most consistent drivers of supply for mitigation programs, as they are mandatory and not voluntary. The mechanisms that regulate these disturbances are the primary driver for mitigation. (5-factor analysis language on inadequacy of regulatory mechanisms). The Service recognizes that federal, state and local laws vary across the landscape. However, when determining the adequacy of regulatory mechanisms, those that alleviate threats and can show certainty in doing so for the long term are better. (rank the strength of these mechanisms, i.e. state law is stronger than an executive order, etc.)

Recommendation: based on the major threats to greater sage-grouse in your (?)each state as identified in the COT Report, identify existing authorities and processes currently used by agencies to permit major project types. Note where there is overlap and where efficiencies can be realizedmade in a short timeframe.

- iii. Regulatory Predictability –*regulatory certainty from the Service for pre-listing voluntary actions that contribute to precluding the need to list and/or advanced mitigation credits for potential post-listing needs*

Regulatory predictability may be sought by parties who buy mitigation credits and by those who provide them. The conservation standard for each is different.

Another driver for candidate species in particular is the idea of receiving elements of having regulatory certainty from the Service for pre-listing voluntary actions that are as consistent as possible with the conservation needs of a species that has not yet been listed under ESA and may contribute to precluding the need to list. The 2010 Conference Report for the Natural Resources Conservation Service (NRCS) Sage-grouse Initiative (SGI) is exemplifies this concept (talk about PECE). Related, the Service can enter into agreements that show how to treat advanced mitigation credits in a post listing scenario. Incentivizing early actions can help preclude the need to list, if the PECE standard is met. The Service prefers CCAAs, CBAs or agreements with similar standards (others?). We do not have a clear tool for this. But NCB also preferred over NNL (expand).

Comment [DD2]: From the mitigation supplier side yes, but not from the demand side.

Comment [UF&WS3]: ?

Comment [UF&WS4]: ?

b-c. Sources of Supply — Where impact avoidance and minimization have been applied to their fullest extent and if compensatory offsets are needed, then where, how and how long is key to a successful mitigation program.

i. Scope — *service areas, jurisdictional & biological boundaries, planning*

Identifying clear geographic priority areas for mitigation where avoid and compensatory offsets can and should be focused happen will be necessary (siting, planning language here). Typically, large areas make for economies of scale but must be relevant to sage-grouse. For developers, this helps in planning. Jurisdictional issues may be relevant and for large service areas, you must address these (e.g. county permits may not allow for mitigation outside the county).

In general, effective conservation strategies are predicated on identifying key areas across the landscape that are necessary to maintain redundant, representative, and resilient populations. Most of the individual states within the range of sage-grouse have already undertaken considerable efforts to identify and map key habitats necessary for sage-grouse conservation in the development of their state management plans for this species. The COT Report used these existing maps to identify the most important areas needed for maintaining sage-grouse representation, redundancy, and resilience across the landscape. These areas were named Priority Areas for Conservation (PACs). PACs do not represent individual populations, but rather key areas that states have identified as crucial to ensure adequate representation, redundancy, and resilience for conservation of its associated population or populations. Additional finer scale planning efforts by states may determine that additional areas outside of PACs are also essential.

Compensatory sage-grouse mitigation efforts should be targeted in PACs and other essential habitats (such as winter habitats) to the extent possible, followed by general sage-grouse habitats; particularly those adjacent to PACs and/or with high potential to facilitate connectivity. Local sage-grouse population considerations should factor strongly into mitigation siting decisions. However, we recommend that compensatory mitigation be completed and demonstrably functional prior to unavoidable impacts taking place; particularly where such unavoidable impacts are proposed in PACs or other essential habitats.

Typically, large areas make for economies of scales but have to be relevant to the bird. From developers, this helps in planning. Jurisdictional issues may be relevant and for large service areas, you must address these (e.g. county permits may not allow for mitigation outside the county).

## ii. Project Types

Eligible project types should address select conservation objectives identified in the COT Report (e.g. I don't foresee fire suppression being eligible but certain fire prevention approaches might be). However, to be eligible project types must still meet the additionality test. We should list the select conservation objectives (and assign weighted values in the absence of scope?).

Formatted: Indent: Left: 1", No bullets or numbering

Formatted: Font color: Gray-50%

## iii. Land Ownership/Management –public, private, split estate

Mitigation can occur on public, private, and split estate lands as long as the mitigation passes an additionality test. Mitigation world has historical preference for private land because of malleability of federal land use (see paper addressing this more – we can pull from this language; for this section I'm not sure we should have recommendations for one over the other, but maybe spell out pros and cons...) The COT Report designated PACs across public and private lands throughout the 11-state sage-grouse range...

## iv. Additionality test

Only the amount of sage-grouse conservation benefit that occurs beyond what would have happened without the mitigation project counts, or is additional. The value of a mitigation project is determined by the delta, or change that occurs due to the project.

Formatted: Indent: Left: 1.25", First line: 0.25", No bullets or numbering

## v. Baseline

A process needs to be developed to establish a baseline for each project type so that the delta can be measured.

Formatted: Indent: Left: 1.38", No bullets or numbering

Formatted: Indent: Left: 1.25", No bullets or numbering

## vi. Agreement Type –in lieu, MOUs, easements, credit exchange, banks

Agreements can demonstrate durability of a mitigation program. (see principles) There are many options (see "c").

Recommendations: (do we want to rank the strength of agreements? CBAs v MOUs v CCAAs, etc?) Key concepts: perpetual conservation; clear performance standards; monitoring; adaptive management; financial assurances;

## vii. Compensatory Conservation Measures –e.g. preservation, restoration, enhancement, research

Compensatory Conservation measures relate to additionality. For compensatory mitigation, measures must be above what would already occur under normal management (legally and ecologically). The types of conservation measures that are acceptable depend on the species needs. For sage-grouse, preservation of suitable habitat within PACs or other essential habitats may be the highest priority in some populations. Nearly all mitigation programs will have to address

restoration, including development of appropriate functional objectives, detailed implementation plans, performance standards, monitoring plans, and adaptive management plans. Out of kind compensatory mitigation may be appropriate in some cases ~~sufficient~~ if rationalized through quantitative analysis ~~you can make the accounting work~~ (e.g. offset of population impacts from direct habitat loss using problem fence marking / removal, transmission line burying (pole removal), etc. fire restoration for wind). Research, also controversial, may play a role if it can be shown ~~you can show~~ how research ties into clear net conservation benefit to sage-grouse populations ~~mitigation~~.

#### viii. Reversals

The conservation value of a mitigation project may be lost due to natural disturbance (e.g. wildfire) or economic development. A mitigation program should have a system to ensure that unintentional and intentional reversals are mitigated so that conservation value is not lost. If a premium is added to the cost of each mitigation project, the premium could be used as an insurance pool for all projects to replace projects lost due to reversals.

Formatted: Numbered + Level: 3 +  
Numbering Style: i, ii, iii, ... + Start at: 1 +  
Alignment: Right + Aligned at: 1.38" + Indent  
at: 1.5"

#### e.d. Transactional Infrastructure “the Exchange”

- i. Governance/Administration – *who runs the program; agreement types and signatories, trades, verification, monitoring, reporting, compliance, etc.*

Related to the regulatory mechanism issue, who runs the mitigation program, what authority they have, their ability to deal with funds and long term management, etc. is important to show the Service durability. (really this points back to the principles again...I feel like we can pull some of those in this section and do a pros and cons instead of making a recommendation).

- ii. Currency/Metrics and Equivalence – *e.g. measurement system for impacts & offsets, relationship to other program metrics (e.g. CCAAs, SGI)*

Ultimately, metrics must tie back to populations. Must have ways to deal with change of science, etc. Must be relatively simple and clear. Answer questions such as how to deal across states and blm? Mitigation ratios should be defined, and may be determined based on several factors including temporal considerations (impact verses mitigation timing), functional quality / importance of proposed impacted areas, projected functional quality of proposed mitigation areas, chances of restoration project success, degree of threat to proposed preservation areas, etc. Coordination is key.

Suggestions (see “Measuring Up” document).

### III. Communicating Options - Applicability to States

(I'm wondering if this section is necessary if we embed the recommendations under each section above? We could still provide examples...)

- a. Regulatory Mechanisms Menu – *options related to II.a.ii, Service preferences*
- b. Menu of Options for Transactional Infrastructure/Programs – *options related to II.c.i*
- c. Current Examples – *that may illustrate pros and cons, from sage-grouse or other species*