

Greater Sage-Grouse Range-Wide Compensatory Mitigation Framework

On March 23, 2010, the U. S. Fish and Wildlife Service (Service) 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). 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.

Currently, many states and conservation groups are working on developing conservation and mitigation programs to address inadequacies in local existing regulatory mechanisms to protect sage-grouse from potential impacts from development actions that threaten the bird and its habitat. The Service will evaluate the efficacy of mitigation programs through two different lenses: 1) when assessing the status of the sage-grouse and the overall conservation value of compensatory mitigation programs; and 2) with regard to the use of pre-listing conservation actions to serve as mitigation for future development in a post-listing scenario (**Advance Credit Acquisition**).

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, this document outlines the Service's conceptual recommendations to assist states in deciding how to implement their own **compensatory mitigation** program and in turn optimize conservation value to the species and improve confidence that the Service can provide when evaluating mitigation programs.

Background/Conservation Setting

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 Conservation Objectives: Final Report (COT Report) was the outcome of the COT's efforts.

(add in a paragraph about broader mitigation team and efforts leading to this document)

The recommendations in this document are consistent with the information and conservation objectives provided in the COT Report, which urges an avoidance first strategy for potential impacts to Priority Areas for Conservation (PACs) and other important habitat to sage-grouse. Appendix 1 provides overarching goals and standards for any mitigation program. When complete impact avoidance is not possible, meaningful minimization, rectification, and compensatory mitigation for remaining unavoidable impacts is recommended. The goals and standards in Appendix 1, and embedded in this framework, will also form the basis by which the Service evaluates the relative value of different mitigation programs across the range for the sage-grouse.

Compensatory Mitigation Program Elements

When avoidance and subsequent minimization of sage-grouse disturbance are not sufficient, project developers may offset their disturbance (a **debit** to be mitigated) through identified eligible conservation actions (**credits** that mitigate debits) that are consistent with the conservation objectives identified in the COT Report. The offset actions, which should be considered last in the mitigation sequence of impact avoidance, minimization, rectification, and compensation, are referred to as compensatory mitigation.

Demand for a compensatory mitigation program may originate from regulatory, risk management, market speculation, or philanthropic drivers. State or local regulatory policy may require mitigation for proposed or existing disturbances. Members of the energy industry, for example, have expressed interest in Advance Credit Acquisition, so that future incidental take for as yet to-be-determined activities will be covered by present conservation actions.

The following list provides more detail and recommendations for specific elements to consider, in addition to the goals and standards listed in Appendix 1, when developing a mitigation program with a compensatory mitigation section.

I. Development Sectors

A mitigation program should clearly assign weighted 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 offsets when avoidance and minimizing disturbance are not sufficient? Which ones are currently regulated or could be regulated in the future by local or state authorities?*

→ Develop a table that shows development sectors and activities by state that may impact sage-grouse, preferably ranked by degree of potential impact to the species.

II. Federal/State/Tribal/Local 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. Regulatory mechanisms are the strongest and most consistent drivers of supply for mitigation programs, as they are mandatory and not voluntary (*refer to 5-factor analysis language on inadequacy of regulatory mechanisms - Add in ranking of the strength of these mechanisms, i.e. state law is stronger than an executive order, etc.?*)

→ Based on the major threats to greater sage-grouse in your state as identified in the COT Report, identify existing authorities and processes currently used by agencies to permit major development project types. Note where there is overlap and where efficiencies can be realized in a short timeframe.

III. Regulatory Predictability with Respect to ESA

Both the purchasers and suppliers of mitigation may wish to receive regulatory predictability or assurances from the Service that their actions contribute to precluding the need to list sage-grouse and that, should listing occur, advanced credits have value in a post-listing scenario.

Private landowners who supply compensatory mitigation credits to offset impacts from their own projects / operations may seek to receive regulatory predictability from the Service through current tools such as CCAAs and HCPs or through other agreements. Private landowners may seek predictability that the management that they had agreed to in order to provide credits would not change and that incidental take would be provided for actions that might occur while following the conservation practices spelled out in their agreement with the Service.

Developers may seek regulatory certainty from the Service that mitigation they implement or purchase in the form of credits would provide them with incidental take coverage commensurate with the level of offset that they have purchased or developed. In this case, since they would be seeking future take of a threatened or endangered species, the conservation standard would be higher than the standard required of suppliers of mitigation credits (think HCP conservation standard). An Advanced Credit Acquisition would lock in the credit value at the time of acquisition; however the impact of debits would be calculated at the time impacts are planned and implemented.

IV. Scope

Identifying priority areas for mitigation where compensatory offsets can and should be focused will be necessary (*siting, planning language here*). For developers, this helps in planning. Jurisdictional issues may be relevant and for large service areas must be addressed (e.g. county permits may not allow for mitigation outside the county). Local policy may require that offsets occur locally and local opportunities may be limited. However, opportunities may also permit bundling of credits from multiple debit sources to provide more concentrated conservation benefits on the landscape.

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 PACS - the most important areas needed for maintaining sage-grouse representation, redundancy, and resilience across the landscape. 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.

→ Indicate where eligible conservation project types may occur by identifying mitigation service areas.

V. Eligible Project Types

Eligible project types should address select conservation objectives identified in the COT Report (e.g. *fire suppression may not be eligible but certain fire prevention approaches might be*) and meet the test for additionality.

Mitigation programs 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 if rationalized through quantitative analysis (e.g. offset of population impacts from direct habitat loss using problem fence marking / removal, transmission line burying (pole removal), etc.). Research may play a role if it can be shown how research ties into clear net conservation benefit to sage-grouse populations.

→ Using the COT Report as a guide, identify and rank by preference eligible project types and conservation measures.

VI. Land Ownership/Management

Mitigation can occur on either public or private land. However, criteria related to additionality and assurances of implementation present significant challenges to use of public lands (*expand; list pros and cons of each and reference BLM's draft MS-1794 policy: "Mitigation site, projects, and measures should be focused where the impacts of the use authorization can be best mitigated and BLM can achieve the most benefit to its resource and value objectives, regardless of land ownership. The most appropriate area for mitigation projects may be on Federal lands (the BLM or another agency) or on non-Federal lands."*)

→ Develop a framework that will recognize compensatory mitigation on all ownership types.

VII. Additionality test

Only the amount of sage-grouse conservation benefit that occurs beyond what would have happened (business as usual) without the mitigation project would be considered "additional". The value of a mitigation project is determined by the delta, or change that occurs due to the project. For compensatory mitigation, measures must be above what would already occur under normal management (legally and ecologically). Since the COT report strongly emphasizes the importance of protecting habitat, preservation of existing habitat may meet the additionality test.

→ Figure out how to allow crediting for restoration that will provide benefits in the future. We should develop a list of concrete examples of how additionality could be measured or judged. E.g. Ranchers managing habitat to a condition for GSG that is better than average range condition could be rewarded for the additional conservation benefit they provide with credits.

VIII. Baseline

(A universal requirement for an ecological uplift for mitigation credit could penalize some landowners by precluding their involvement in mitigation transactions who have previously undertaken desired management activities and are already supporting species conservation)

→ recommend a process to document and establish a baseline for each project type so that additionality can be measured.

IX. Agreement Type

A legally binding agreement will increase the Service's confidence that the conservation benefits from compensatory mitigation will persist. Agreements can demonstrate durability of a mitigation program.

→ Rank the strength of different agreements that could be used (CBAs v MOUs v CCAAs, etc).
Ranking factors to consider: perpetual conservation; clear performance standards; monitoring; adaptive management; financial assurances;

X. Duration

Consider how long a credit should last = at least as long as the impact that is being mitigated.

XI. 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.

→ Present a range of options that would help address the risk of reversals. *For example, add a premium to the calculation of the cost of each mitigation project, the premium could then be used by the administrator of the mitigation program to invest in an insurance pool of projects that would replace any projects lost due to unintentional reversals. Intentional reversals should require compensatory mitigation by the new developer.*

XII. Governance/Administration of Mitigation Programs

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.

→ The Service should describe the range of possibilities for administration that the Service finds acceptable.

XIII. Accounting System

A mitigation program should provide an accounting system whereby credits and debits can be exchanged. The credits and debits are based on a common "currency" that is based on sage-grouse conservation. 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.

XIV. Currency/Metrics and Equivalence

If the Service is going to provide future incidental take permits for credits that are purchased today, the Service will need to be able to convert credits or debits from different mitigation programs across the sage-grouse range. Ultimately, metrics must tie back to populations.

Credits should be measurable and proven to be reasonably likely to deliver expected conservation benefits. Monitoring and adaptive management should be important components mitigation programs to ensure success.

Although they may differ by state, mitigation ratios should be defined for the entire range, 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.

APPENDIX 1

Foundations for a Sage-Grouse Mitigation Program

Conservation success for wide ranging species such as the Greater sage-grouse requires implementation of conservation and mitigation tools within landscape-level conservation planning efforts. The Service does not currently have a mitigation policy that addresses non-listed species such as sage-grouse. However, established principles and standards from sources of recognized regulatory and management authority are available as guides. The following are general goals and basic mitigation standards that the Service considers foundational for a successful mitigation program that would cover avoidance, for sage-grouse in any state or local area.

Goals

1. The Service's primary goal for any sage-grouse mitigation program is to work with others to support conservation of the species by reducing or stopping threats, protecting populations, and reversing declines. Implementation of a mitigation program should contribute to reducing the need to list the species or reduce adverse regulatory implications of a listing while allowing for well-sited actions to move forward smoothly.
2. The program should represent a collaborative, unified approach between the Service, the State, and stakeholders, and should utilize existing regional, state, and local-level processes as the primary authorizing, implementing and enforcing mechanisms to the greatest extent practicable.
3. Benefits derived from the mitigation program should include: (a) streamlined and expedited project review/permitting, (b) utilization across multiple local, state and federal regulatory frameworks, (c) regulatory predictability, (d) increased public transparency and confidence, (e) increased economic incentives for landowners engaged in conservation actions, (f) a foundation for incorporating mitigation into other conservation programs, and (g) legal, scientific, political, and economic defensibility and credibility of actions and entities covered under the program.
4. The program should be developed with (a) state-of-the-science conservation strategies and plans, and (b) generally-accepted principles, standards and practices for mitigation.
5. The program will need to be based on criteria that reliably and predictably (a) determine the types, amounts, and locations of impacts and associated avoidance, minimization and offset obligations, (b) result in selection of habitat restoration, enhancement, protection and other management actions that satisfy any compensatory mitigation obligations, and (c) result in measurable conservation outcomes for the species.
6. The program should apply regionally and consistently to each of the land-development activities that affect sage-grouse (e.g. energy, transmission, roads and transportation, agricultural conversion, commercial and residential development, and mining).
7. The program should positively influence expanded use of mitigation as a conservation tool for other listed and imperiled species by demonstrating its viability and by increasing public understanding of associated principles, standards, and policies.

Standards

The following list includes overarching standards to consider when developing a mitigation program for sage-grouse. This list is based on existing regulatory authorities and experience in mitigation for wetlands and listed species but purposefully general so that we may work with our partners to find the best solution for sage-grouse and our stakeholders.

1. **Landscape Planning**
A mitigation program should be developed in conjunction with, or guided by, a landscape-level conservation plan to ensure the viability of the species and the ecosystem upon which it depends over time.
2. **Mitigation Hierarchy**
New and ongoing activities should be designed, sited and implemented to adhere to the basic hierarchy of avoidance, minimization, rehabilitation, and compensatory mitigation (also referred to as “offset”) as guided by a conservation/mitigation strategy.
3. **Location**
Compensatory mitigation actions should be sited in locations that have been identified in conservation strategies to most benefit from the types of conservation actions targeted in the mitigation program.
4. **Additionality**
Actions proposed as mitigation must provide benefits beyond those that would be achieved anyway under applicable regulations and/or land-use management plans.
5. **Effectiveness**
Actions should be measurable and proven to be reasonably likely to deliver expected conservation benefits. Monitoring and adaptive management will be important components to ensure success.
6. **Timeliness**
Mitigation actions should achieve targeted biological conditions in a timeframe commensurate with the life of the associated biological impacts.
7. **Durability**
Actions or plans proposed as mitigation should be accompanied by appropriate legal and financial assurances.
8. **Metrics**
Determining the expected impacts of actions and the measures necessary to avoid, minimize, restore and/or offset those impacts should be based solely on biological conditions/information and upon reliable and repeatable methods.
9. **Species Benefit**
Including mitigation, overall outcomes should result in no net loss to the species; a net benefit will assure overall net conservation status improvement and assist in precluding the need to list.