Attachment 2

IDAHO SAGE-STEPPE MITIGATON PRINCIPLES

Version 1.1

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The Idaho Sage-Steppe Mitigation Principles are administered by the State of Idaho through the Idaho Governor's Office of Species Conservation with technical and implementation support from Idaho Department of Fish and Game.



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LIST OF ACRONYMS

BLM	Bureau of Land Management
ESA	Endangered Species Act
EIS	Environmental Impact Statement
HMA	Habitat Management Area
HSI	Habitat Suitability Index
HQT	Habitat Quantification Tool
IDFG	Idaho Department of Fish and Game
MOA	Memorandum of Agreement
NEPA	National Environmental Policy Act
OSC	Idaho Governor's Office of Species Conservation
ROW	Right-of-Way
USDA	U.S. Department of Agriculture
USFS	U.S. Forest Service

USFWS U.S. Fish and Wildlife Service

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HOW TO USE THIS DOCUMENT

The Idaho Sage-Steppe Mitigation Principles (Mitigation Principles) provides useful information for Permittee Responsible Mitigation (PRM), approved mitigation banking endeavors and describes the principles and standards of the State of Idaho for all forms of compensatory mitigation in sage-grouse habitat. Adherence to these core principles and standards sets a floor for all mitigation that is proffered for a permit. This document offers core principles and standards for determining what effective mitigation is to help businesses, government entities, and individuals meet their mitigation objectives associated with permits for infrastructure development in sage-grouse habitat in Idaho. These principles have been generalized to describe the standards governing all compensatory mitigation for sage-grouse in Idaho.

MITIGATION MANUAL CONTENTS

Chapter 1: Mitigation Authority, Core Principles	Establishes the State of Idaho's mitigation core principles to which all compensatory mitigation projects should adhere.
Chapter 2: Sage-steppe Mitigation Overview	Provides an overview of the objectives, scope, and primary participants for sage-grouse mitigation in Idaho.
Chapter 3: Participation Steps	 Defines the detailed steps, tools, and process to: Quantify and verify debits and credits from individual project sites, including fulfilling ongoing verification requirements. Obtain credits and use them to mitigate impacts (debits). Systematically evaluate new information, report results and improve the accuracy and efficiency of the Mitigation Principles over time.
Chapter 4: Mitigation Policies	Defines the policies necessary to generate credits and offset debits.
Appendix A: Glossary	Defines key terms used throughout this document. The first use of a term defined in the glossary in Appendix A is shown in green bold font.
Appendix B: Mitigation Program Policies Quick Reference	Provides a quick reference for Mitigation Policies defined in Chapter 3 and 4.

CHAPTER 1 OVERVIEW

This chapter identifies the State of Idaho's core principles to which all compensatory mitigation projects for sage-grouse should be applied. These principles are intended to ensure that any mitigation actions proposed during the project permitting process can be counted on to deliver reliable, sound results. The State's recommendation is that mitigation for infrastructure projects (Section 1.4 – Impacts) should be designed to achieve a defined mitigation standard of no net loss, based on the Habitat Quantification Tool (HQT), after accounting for measures to avoid and minimize project impacts.

Table 1.1. Overview

SECTION NAME	PRIMARY AUDIENCE	DESCRIPTION
1.1 Need and Opportunity	Credit Generators, Credit Buyers & Partner Agencies	Compensatory mitigation consists of compensating for residual project impacts that are not avoided or minimized by providing substitute resources or habitats, often at a different location than the project area.
1.2 Mitigation Core Principles	Credit Generators, Credit Buyers & Partner Agencies	These core principles are intended to inform project proponents and permitting agencies of state expectations. The amount and type of mitigation recommended would be analyzed in coordination the permitting agency.
1.3 Mitigation Authority and Establishing Documents	Credit Generators, Credit Buyers & Partner Agencies	This section describes the foundational documents that have built the mitigation manual and the authorities that they carry.
1.4 Impacts Addressed	Credit Generators, Credit Buyers & Partner Agencies	Primarily focused on providing compensatory mitigation for human-caused or "anthropogenic" disturbance.

1.1 NEED & OPPORTUNITY

Idaho's sage-steppe rangelands provide great value to the state. This remarkably rich natural ecosystem sustains diverse wildlife and plant species, rural communities that depend on ranching and farming, outdoor recreation, and key parts of Idaho's natural resources-based economy.

The decline of greater sage-grouse (*Centrocercus urophasianus*; hereafter sage-grouse) in Idaho and across its eleven-state range in the West underscores the challenges facing sagebrush country.

The State of Idaho is working with a wide range of partners on a multi-faceted effort to stabilize sagegrouse populations, conserve the State's sage-steppe habitats, and avoid any future need for ESA protection. The State recognizes that new infrastructure projects such as transmission lines, wind energy facilities, and mineral development in sage-grouse habitat will face additional scrutiny. Where permits are required, the permitting agency's review process for these projects will analyze how these projects affect sage-grouse and will consider a range of potential mitigation measures to avoid, minimize, or offset any impacts. If the review process concludes that compensatory mitigation is appropriate, it will consist of compensating for residual project impacts that are not avoided or minimized by providing substitute resources or habitats, often at a different location than the project area. For sage-grouse, this would include, among other things, protecting and restoring sagebrush habitats to offset habitat losses and other effects of infrastructure projects.

1.2 MITIGATION AUTHORITY AND ESTABLISHING DOCUMENTS

The Idaho Sage-Steppe Mitigation Principles arise from the Conservation Plan for the Greater Sagegrouse in Idaho (Idaho Sage-Grouse Advisory Committee 2006; as amended in 2009), which calls for the development of a "proposal for a mitigation and crediting program for sagebrush steppe habitats in Idaho and recommendations for policy consideration" (Measure 6.2.4.). In early 2010, the Idaho Sage-Grouse Advisory Committee (SAC) established the Mitigation Subcommittee to complete this task. The Subcommittee developed the Idaho Mitigation Framework, which set forth a conceptual proposal for a state-based mitigation program to compensate for the impacts of infrastructure projects on sage-grouse and their habitats. The Idaho Mitigation Framework was incorporated in Governor Otter's Alternative for Greater Sage-Grouse Management in Idaho in 2012 which was incorporated into law in 2015, through Executive Order 2015-04, Adopting Idaho's Sage-grouse Management Plan, and included in the land use plan amendments adopted by the Bureau of Land Management in 2015 and 2019.

In June 2017, Secretary of the Interior Zinke authorized Secretarial Order 3353 to enhance cooperation and support partnerships between the Department of the Interior and state entities in eleven western states for sage-grouse management and conservation on federal lands. The Department of the Interior and Bureau of Land Management worked collaboratively with western governors to start the process to amend the 2015 federal sage-grouse management plans to better align with state plans. The State of Idaho sought input and recommendations from key stakeholders on how to best improve certain elements of the federal plan through the 2018 Draft Environmental Impact Statement. The State of Idaho tailored the 2018 Management Alignment Alternative, which contains the foundational elements and intent of the 2012 Alternative and Executive Order 2015-04. Currently, the State of Idaho is working on a new Executive Order that would adopt the 2021 Idaho Sage-Grouse Management Plan as Idaho's official policy on sage-grouse management which includes compensatory mitigation.

The State of Idaho has entered into a Memorandum of Agreement (MOA) with the BLM and a Memorandum of Understanding (MOU) with the USFS to enhance coordination for the implementation and management of mitigation for sage-grouse and it's habitat. The MOA and MOU outlines how the parties involved will coordinate when a proposed action is brought to the table. These documents define the specific roles and responsibilities, procedures, and tasks that would occur between BLM, USFS and the State of Idaho when approaching mitigation in sage-grouse habitat. The agreements spell out the process that the BLM, USFS and the State would follow, starting at a proposed action and walking through the process to where a proposed action would end in a permit. The MOA and MOU are included as an appendix of this document for reference. This mitigation principles document provides recommendations that the State feels are needed to ensure that the compensatory mitigation obligations will be sustainable through time when required in permits. To expand further, the types of impacts that can be offset, the types of offsets allowed, the resource focus, and its geographic scope within the State of Idaho are all outlined in this document. The Mitigation Principles document is anticipated to be included in mitigation projects from a range of entities that have the capacity and commitment to contribute to its implementation. This includes land and wildlife management agencies, counties, tribes, participating private infrastructure development companies, and non-governmental organizations.

The State of Idaho recognizes that it has limited authority to impose conditions on certain uses related to locatable and leasable mineral activities on federal lands conducted pursuant to the general mining laws. Accordingly, the state will apply mitigation management actions only to the extent that they are consistent with the general mining laws.

1.2.1 SCOPE

The core principles are primarily focused on compensatory mitigation for human-caused or "anthropogenic" disturbance, outlined in Section 1.4. An anthropogenic disturbance is defined by BLM as any human-caused activity or action or human-created physical structures that may have adverse impacts on sage-grouse or their habitat (BLM 2015). The core principles do not extend to existing infrastructure projects unless they are subject to a new permit process with compensatory mitigation obligations. Some utilities are obligated by current regulation to serve customers with safe and reliable service. In order to avoid impacting operational abilities and routine maintenance of these companies, agencies, and landowners, certain practices do not fall within this definition. However, utilities must comply with required design features for sage-grouse within the 2021 Idaho Sage-grouse Plan. Livestock operations and agricultural activities and infrastructure related to ranch and farm businesses (e.g., water troughs, fences) are not included in this definition of debit project types (BLM 2015) for compensatory mitigation, but will still follow the avoid and minimize hierarchy during project planning. Offsets may be provided through restoration or preservation of sage-grouse habitat within the program's geographic scope.

The initial focus is on sage-grouse; however, the core principles can potentially be adapted to deliver compensatory mitigation for other sagebrush obligate and associated species.

The geographic scope encompasses the Habitat Management Areas (HMAs) within the state of Idaho. Impacts resulting from debit projects must occur in Priority (PHMA), Important (IHMA), or General (GHMA) habitats while credit projects to offset the impact should be focused primarily in PHMA and IHMA and within GHMA on a case by case basis only to be considered for mitigation relating to sagegrouse in Idaho (Figure 1. Habitat Management Areas within Idaho). Sage-grouse habitat functionality (habitat quality and quantity) across these Habitat Management Areas can vary greatly and depending on a projects location, can be affected directly or indirectly by anthropogenic disturbance, wildfire, invasive annual grasses and conifers which can alter the functionality of the habitat for sage-grouse.



Photo Credit: OSC - Juniper Treatment in Sage-grouse Habitat, Cassia County

Service Area

The service area is equivalent to the geographic scope (Figure 1, below) within which a debit project may occur, and a credit project may offset impacts to habitat. Credits should be generated and used to offset debits that were generated within the geographic scope outlined in this document. The service area is defined as the area within the 4 Conservation Areas and designated sage-grouse Habitat Management Areas. The purpose is to provide flexibility to locate mitigation projects in places that provide maximum benefit to sage-grouse and their habitats. The primary focus for credit projects should be focused in PHMA and IHMA within the same Conservation Area as the impact or debit occurred. If that cannot occur credit projects should be focused in the PHMA and IHMA of other Conservation Areas. Credit projects should be placed in GHMA only on a case by case basis with approval from the Technical and Policy Teams.



Figure 1. Habitat Management Areas within Idaho

1.3 MITIGATION CORE PRINCIPLES

The Idaho Sage-Steppe Mitigation Principles will provide strategic and effective mitigation for unavoidable impacts to sage-grouse habitat associated with infrastructure projects requiring permits of rights-of-way from the BLM, USFS, or other permitting agencies. The core principles stated here will be put forth for consideration by the Idaho Board of Land Commissioners to guide mitigation actions on lands administered by the Idaho Department of Lands. This is expected to happen in the winter of 2021 or spring of 2022. These core principles are intended to inform project proponents and permitting agencies of state expectations. The authority for implementing these is intended to be provided by executive order. The amount and type of mitigation required would be analyzed and determined in coordination with the permitting agency. To offset their debit obligation infrastructure project developers may choose to conduct permittee-responsible mitigation, work with an approved in lieu fee (ILF) program or purchase from an approved conservation bank.

The mitigation hierarchy can be an effective tool for steering development impacts away from highpriority natural resources and contributing to the restoration and recovery of imperiled resources. The last few decades of successes and failures with mitigation projects and programs have highlighted some best practices and principles that can help ensure positive mitigation outcomes. The State of Idaho has adopted the following core principles to ensure effective mitigation outcomes:

Mitigation Standard & Authorities – Compensatory mitigation requirements should achieve the defined mitigation standard "no net loss" as determined in coordination with the permitting agency.

Strategic Investment – Compensatory mitigation projects should be sited and designed to support the most effective conservation or restoration projects; the effectiveness of mitigation actions should be based on the best available science.

Consistent Metrics – Impacts (debits) and benefits (credits) should be expressed, to the extent possible, using the same metrics to ensure benefits are commensurate with impacts; debits and credits are measured in functional acres using the Idaho Sage-Grouse Habitat Quantification Tool (HQT). See Chapter 6, <u>Consistent Metrics</u>, for additional information.

Mitigation Hierarchy – Compensatory mitigation should only occur when disturbances are proven unavoidable, minimization does not eliminate direct or indirect impacts, or avoidance and minimization cannot achieve the best possible conservation outcome for the species.

Additionality – Compensatory mitigation should demonstrate that the proposed credit project will create additional benefit above and beyond what would otherwise be achieved under the existing land designation or planned and funded conservation actions. See Chapter 7, <u>Additionality</u>, for additional information.

Demonstrating Effectiveness & Durability – Compensatory mitigation should positively demonstrate the benefit of the action to sage-grouse and ensure that performance standards are in place to maintain the expected benefits for the entire impact duration. See Chapter 8, <u>Demonstrating Effectiveness &</u> <u>Durability</u>, for additional information.

Duration & Timeliness of Offsets – The length of time compensatory mitigation actions persist on and influence the landscape should meet the length of time that projected impacts will negatively affect sage-grouse. Compensatory mitigation that provides benefits in advance of, or at the same time as, impacts to sage-grouse is preferred; any lag between impact and offset should be accounted for. See Chapter 9, <u>Duration & Timeliness of Offsets</u>, for additional information.

Risk & Uncertainty - Tools should be put in place to effectively limit the risk that mitigation projects will not deliver anticipated benefits, including reserve accounts, phased release of mitigation credits, compliance and enforcement mechanisms, and legal and financial protections. See Chapter 10, Risk & Uncertainty, for additional information.

Tracking & Transparency – All mitigation projects should demonstrate to regulators, stakeholders, and the interested public that benefits are real and lasting.

Effective mitigation projects for covered resources in sage-steppe habitats of Idaho should conform to these core principles. A quick reference of this chapter is available in *Appendix B: Mitigation Policies Quick Reference*.

1.4 IMPACTS ADDRESSED

The core principles will govern compensatory mitigation for infrastructure projects in Idaho where project proponents seek to use mitigation to meet applicable standards or objectives in the project review process or where permitting agencies seek to incorporate mitigation into relevant permits. The core principles are also available to assist infrastructure developers to meet any mitigation requirements for sage-grouse or recommendations issued by the Idaho Department of Lands or other state agencies as a condition for leases or other development permits.

The core principles are primarily focused on providing compensatory mitigation for human-caused or "anthropogenic" disturbance. An anthropogenic disturbance is defined by BLM as any human-caused activity or action or human-created physical structures that may have adverse impacts on sage-grouse or their habitat (BLM 2015). Anthropogenic disturbance project categories include:

- Mineral development and exploration and its associated infrastructure¹
- Renewable and nonrenewable energy production, transmission, and distribution and its associated infrastructure
- Paved and unpaved roads and highways
- Communication towers
- Landfills
- Pipelines (excluding stockwater)
- Residential and commercial subdivisions
- Activities undertaken pursuant to special use permits and right-of-way grants
- Other infrastructure development as defined by the 2021 Idaho Sage-grouse Plan

A debit project may be a new anthropogenic disturbance, an expansion in the operation of an existing anthropogenic disturbance, or an extension in duration of an existing anthropogenic disturbance. The core principles do not extend to existing infrastructure projects unless they are subject to a new permit process with new disturbance that would require compensatory mitigation. Some utilities are obligated by current regulation to serve customers with safe and reliable service. In order to avoid impacting operational abilities and routine maintenance of these companies, agencies, and landowners, certain practices do not fall within this definition. However, utilities must comply with required design features for sage-grouse with the 2021 Idaho Sage-grouse Plan. Livestock operations and agricultural activities and infrastructure related to ranch and farm businesses (e.g., water troughs, fences) are not included in this definition of debit project types (BLM 2015). Private landowners are not required to mitigate human-caused disturbances that occur on their land; however, they are encouraged to voluntarily participate in the program by generating credits.

1.4.1 ACTIVITIES GENERATING MITIGATION OFFSETS

Compensatory mitigation in Idaho is anticipated to provide offsets through the list of conservation actions below:

- Tall structure removal (e.g., inactive or unnecessary powerlines, communication towers, etc.)
- Wetland, riparian and wet meadow restoration

¹ The State of Idaho recognizes that it has limited authority to impose conditions on certain uses related to locatable mineral activities on federal lands conducted pursuant to the General Mining Laws. Accordingly, the state will apply mitigation management actions only to the extent that they are consistent with the General Mining Laws.

- Juniper and invasive species removal
- Planting, seeding and establishing sagebrush, desirable forbs, and grasses within sage-grouse habitat
- Rehabilitation or restoration of disturbed sites
- Preservation of existing habitat with a defined performance standard, stewardship commitments and durability mechanism (e.g., conservation easement, conservation rights-ofway, and leases)

This list is suggested to illustrate the types of conservation actions that can generate credits while conducting mitigation in Idaho and is not exhaustive.



Photo Credit: OSC - Sage-grouse Habitat in Owyhee County

2.1 MITIGATION

CHAPTER 2 OVERVIEW

This chapter provides background on the development of the mitigation principles

Table 2.1. Overview of the Mitigation Principles.

SECTION NAME	PRIMARY AUDIENCE	DESCRIPTION
2.1 Mitigation Policy	Credit Generators, Credit Buyers & Partner Agencies	The Mitigation principles are a strategic, science- based, and landscape-scale approach to compensatory mitigation for impacts to sage-steppe habitat in the state of Idaho.
2.2 Mitigation Policy Goals and Objectives	Credit Generators, Credit Buyers & Partner Agencies	The goal of the policy is to provide strategic and effective mitigation for unavoidable impacts to sage- grouse habitat associated with infrastructure projects requiring permits of rights-of-way.
2.3 Organizational Structure and Roles of Sage-grouse Mitigation in Idaho	Credit Generators, Credit Buyers & Partner Agencies	A structural overview of the roles of each individual and entity that will be involved in sage-grouse mitigation in Idaho.

2.1 MITIGATION POLICY

The core principles of Chapter 1 are put forth to give those interested in credits or debits an understanding of how mitigation should look for sage-grouse habitat in Idaho. Chapters 2 – 4 is based on these core principles.

The Mitigation principles use a Habitat Quantification Tool (HQT) to allow infrastructure impacts (debits) and mitigation project benefits (credits) to be measured in a "common currency" based on the quality or functional value of the sage-grouse habitat in a project area.

Habitat Quantification Tool

The Idaho HQT is a scientific approach for assessing habitat function and conservation outcomes for sage-grouse. The HQT uses a set of measurements and methods, applied at multiple spatial scales, to evaluate criteria related to sage-grouse habitat function for both debit and credit projects. The HQT is:

- Sensitive to landscape context at the site (e.g., location in priority areas, habitat quality, anthropogenic disturbance, etc.);
- Repeatable, sensitive, accurate, and transparent;
- Practical, economical and easy to use; and
- Capable of assessing projects of different scales.

The HQT utilizes a GIS-based model at the local scale combined with site-specific data collected at the debit or credit project site, with metrics summarized into a functional acre score. See the *HQT Scientific Methods Document* for additional information on the attributes measured at each scale, and the methods used to measure those attributes.

[Note to Readers: The HQT is housed at the Idaho Department of Fish and Game office in Boise, Idaho. This tool was completed in summer 2019.]

MITIGATION CURRENCY – DEBITS AND CREDITS

Sage-steppe mitigation in Idaho measures credits and debits in terms of *functional acres*. Habitat function refers to the quality and amount of habitat available for meeting life history requirements (reproduction, recruitment and survival) for sage-grouse at multiple scales and includes biotic and abiotic factors as well as the direct and indirect effects of anthropogenic disturbances on and surrounding the site. In the simplest terms:

Functional acres = habitat quality x habitat quantity

The HQT will be used to quantify functional acres for debit and credit sites. Credits and debits are calculated using functional acres as described in *Chapter 3: Mitigation Policy*, sections 6.3 Calculation of Debits and 6.4 Calculation of Credits.

2.2 MITIGATION PRINCIPLES: GOALS & OBJECTIVES

The goal of the Idaho Sage-Steppe Mitigation Principles is to provide strategic and effective mitigation for unavoidable impacts to sage-grouse habitat associated with infrastructure projects requiring permits of rights-of-way from the BLM, USFS, or other permitting agencies. Further, these principles aim to achieve the following objectives:

- **Support avoidance and minimization** of impacts to valuable habitat by creating mitigation cost reduction incentives, before requiring compensatory mitigation for impacts.
- Meet infrastructure project proponents' objectives for including mitigation in project proposals and agency standards for incorporating mitigation into project permits as appropriate.
- Incentivize cost-effective conservation of valuable habitat and target compensatory mitigation and other sources of conservation funding to the sites and conservation actions with the highest probability of aiding species recovery and supporting healthy sagebrush ecosystems.
- Produce high quality conservation where it makes a significant ecological and biological difference to help conserve sage-grouse populations in Idaho.
- Preserve the culture and economy of the State of Idaho by providing landowners an opportunity to leverage financial incentives to implement conservation measures and maintain working lands. Similarly, support responsible economic development and the long-term social and economic vitality of rural communities.
- Support a timely and predictable permitting process to increase certainty for developers and agencies and provide a supply of mitigation credits to reduce the time and cost needed to meet permit conditions. Ensure permitting and mitigation decision-making approaches are predictable, transparent, equitable, and science-based.
- Engage partners, landowners, and organizations in developing practical projects and solutions.
- **Evaluate issues based on best available scientific information**, while acknowledging and responding to scientific uncertainty.
- Retaining state sovereignty over Idaho's wildlife and preclude the need to list sage-grouse under the ESA

2.3 ORGANIZATIONAL STRUCTURE & ROLES OF THE MITIGATION PRINCIPLES

The organizational structure and interactions between the participants for sage-steppe mitigation in Idaho are depicted in Figure 2. below, followed by a description of each participant.



Figure 2. Integrating Mitigation into the Permit Process

Note: The process in Figure 2, above reflects a situation, if the project proponent agrees to incorporate the State's recommendation into its application, including offsite compensatory mitigation. If this occurs the permitting agency will analyze the recommendation as part of the proposed action alternative in their analysis.

If the proponent does not include the State's recommendation for mitigation into its application, the Governor's recommendations will be analyzed as a separate alternative in the permitting agency's analysis. It will be disclosed whether the project proponent incorporated the Governor's recommendations into their proposal.

PRIMARY ROLES

These following entities are responsible for administering the Idaho Mitigation Principles.

Technical Team: A team of experts drawn from the 2021 Idaho Sage-grouse Management Plan and other targeted industry groups and organizations who provide input and advice on science-based and technical aspects of the program. The Technical Team consists of several individuals with expertise in relevant areas such as habitat protection and restoration, landscape ecology, spatial analysis, wildlife biology, and sage-grouse ecology. These experts inform science-related policy decisions and development of technical products and tools, like the HQT. The Technical Team makes recommendations to the Policy Team based on the best-available science regarding the sage-grouse and its habitat.

Policy Team: Decision-makers from the State of Idaho, BLM, USFS or other organizations as identified by the 2021 Idaho Sage-grouse Management Plan comprise this team. This team has the following responsibilities:

- Review and discuss recommendations from the Technical Team.
- Give a mitigation recommendation to the permitting agency for NEPA analysis or State planning.

Credit Buyers: Credit Buyers (project proponents) are entities that request permission from Permitting Agencies to conduct development activities that impact sage-grouse habitat.

Credit Generators: Credit Generators include project proponents in certain cases, landowners or land managers, organizations, agencies, or other entities that will carry out compensatory mitigation projects.

Permitting Agencies: Agencies that manage sage-grouse habitat within the sage-grouse mitigation Service area regarding current law, policy, and regulations. Permitting Agencies hold the authority to approve or deny permits or project requests. Permitting agencies are the entity that will be Credit Buyers and Generators will report mitigation monitoring to.



Photo Credit: OSC - riparian area in Blaine County

CHAPTER 3 OVERVIEW

This chapter defines how credits and debits will be quantified, tracked, and transferred. Operations are described in two sections, shown in Table 3.1. Specific policy and technical guidance further described in *Chapter 4: Mitigation Policy* is referenced within this section and shown in **Bolded Green Text**, upon first mention.

Table 3.1. Overview of the Mitigation Operations.

SECTION NAME	PRIMARY AUDIENCE	DESCRIPTION
3.1 Guidance for Credit Buyers	Credit Buyers & Permitting Agencies	Steps to obtain credits and use them to meet mitigation requirements.
3.2 Guidance for Credit Generators	Credit Generators	Steps for estimating and verifying quantified credits from an individual credit site, including fulfilling ongoing verification requirements.

3.1 GUIDANCE FOR CREDIT BUYERS

The following section outlines the steps for Credit Buyers to acquire credits. Credit Buyers are entities mitigating for impacts to sagebrush habitat to fulfill regulatory requirements.

3.1.1 PROPOSE DEBITING PROJECT

The first step for Credit Buyers fulfilling a compensatory mitigation obligation is to submit a permit request to a relevant permitting agency for an action with the potential to affect sage-grouse habitat (Credit Buyers not mitigating impacts skip to Step 3.1.3). The permitting agency will coordinate with the State to ensure the Technical Team is convened to calculate the potential debits and credits as well as ensuring that projects meet all relevant avoidance and minimization requirements following the **Mitigation Hierarchy**. At the request of the permitting agency, the Governor or designated State agency with the help of the Technical and Policy Teams, shall timely review any proposed project in sage-grouse Habitat Management Areas to determine whether that proposed project complies with the State policies and programs relating to sage-grouse and offsite compensatory mitigation in Idaho.

Credit Buyers should begin exploring crediting options with the permitting agency and the state and permitting agency early in the process in order to meet credit obligations as required for **Timeliness**.

3.1.2 CALCULATE DEBITS

If mitigation is determined to be needed for unavoidable impacts to sage-grouse habitat, the amount and duration of compensatory mitigation is determined by the HQT.

Debit Amount

The amount of compensatory mitigation must be commensurate with the project's impact. The project's impact is determined through **Use of The HQT**, following the Mitigation policy regarding **Calculation of Debits**. Debits may be generated for impacts to sage-grouse habitat within the **Geographic Scope**.

The number of debits generated by the project is not necessarily equal to the number of credits that must be secured to offset the impact. Compensatory mitigation requirements may be adjusted to account for temporal loss and other considerations as specified by this document. The number of credits that must be secured to compensate for the impact is thus referred to as the 'credit obligation'.

Because the credit obligation must be defined prior to the approval of any permit or right-of-way, debits must be estimated based on expected impact as defined in project documentation. The maximum permitted impact should always be used to estimate debits.

Debit Duration

Debit Project Duration is the length of time that the project is anticipated to impact habitat function and may range from short term to permanent. The permitting agency will determine the appropriate duration for debit projects.

The permitting agency will also stipulate requirements for **Debit Project Rehabilitation** of any direct surface disturbance as appropriate. Permanent credits commensurate with impacts resulting from direct surface disturbance that will not be rehabilitated to baseline habitat function may be required.

Debit Verification

A **Site Assessment** is required to determine baseline habitat function. Credit Buyers may seek the services of a technical service provider to conduct the site assessment or conduct the site assessment themselves provided they have the necessary expertise. Prior to final approval of any impacts to sage-steppe habitat, the permitting agency or its agent will conduct a **Debit Verification** of the debit calculation to ensure its accuracy.

3.1.3 ACQUIRE CREDITS

A Credit Buyer may satisfy compensatory mitigation by proposing and conducting permitteeresponsible mitigation working with an approved in lieu fee program, or obtaining credits from an approved conservation bank within the Service Area. Approval of the credits that will fulfill the debits will be signed off by the permitting agency. Credit durations must comply with the policies regarding **Matching the Duration of Credits and Debits**.

3.1.4 CREDIT BUYER CHECKLIST

The Credit Buyer and permitting agency may use the following checklist to ensure all requirements for compensatory mitigation have been met.

REQUIREMENT	RELEVANT POLICY
Need for compensatory mitigation determined by the State in coordination with the permitting agency	Mitigation Authority; Mitigation Standard
Duration of compensatory mitigation determined by the required analysis (State, Federal, other) of the permitting agency	Debit Project Duration
Mitigation hierarchy has been followed	Mitigation Hierarchy
Impacts occur within the Mitigation Program's geographic scope	Geographic Scope
Debit project rehabilitation requirements are defined	Debit Project Rehabilitation
Site Assessment conducted prior to impacts to determine baseline	Site Assessment,
 functional acres	Verification & Monitoring
HQT results are within the 5 year valid window	Valid Window for HQT
	Results

Proper HQT version was used	HQT Version Control
Debits verified by permitting agency, state or its agent prior to impacts	Debit Verification Schedule
Credits used to offset impacts meets timeliness standard	Timeliness
Any temporal loss is accounted for	Temporal Loss
The duration of credits matches the duration of debits	Matching the Duration of Credits & Debits
Benefits from credits are reasonably related to impacts from debits	Reasonable Relation
Credits used are in conformance with all other Mitigation Program policies	See 2.3 Guidance for Credit Generators

3.2 GUIDANCE FOR CREDIT GENERATORS

This section describes how Credit Generators develop sage-grouse habitat credits (Figure 3)





3.2.1 PROPOSE CREDITING PROJECT

The first step for generating credits is to propose a credit project to the appropriate authority. For permittee-responsible mitigation and credits being purchased through an in lieu fee (ILF) program or from a conservation bank, the project proponent should propose and approve the credit project with the permitting agency and the State before purchasing. If credits are planned to be created ahead of time the State should be contacted in order to convene the Technical Team and analyze potential functional acres, uplift, and benefits to sage-grouse.

The State and permitting agency, in conjunction with the Technical Team, will evaluate the proposed project, ILF, or conservation bank to ensure it meets **Credit Site Eligibility** requirements. They will also consider information relating to ownership (**Developing Credits on Public Lands and Other Designations**), site history

(Partnering with Federal Programs on Private Lands), and other credit types existing on the site (Stacking Credit Types).

The project proponent should ensure the credit project is sited and designed based on the **Best Available Science**, a **Landscape-Scale Approach**, and within the **Service Area**. The project must include **Valid Compensatory Mitigation Measures**, such as habitat restoration and stewardship.

3.2.2 CALCULATE CREDITS

The number of potential credits generated by the project is estimated through **Use of the HQT**, following the policy regarding **Calculation of Credits**. Credits may be generated for benefits to sage-grouse habitat within the **Service Area**.

Final credit project documentation should be drafted, describing project boundaries (**Credit Project Area**), planned management actions (including habitat management and ongoing maintenance and monitoring), proposed **Credit Project Duration**, anticipated **Credit Release** schedule, and expected postproject conditions. Complete project documentation also provides an overall project summary and site characteristics, describe land ownership and control of the property, including **Credit Site Protection Instruments**, specific **Performance Standards** for the site, and **Site Assessment**, **Verification & Monitoring** expectations, including a **Credit Verification Schedule**.

Credit Duration

Credit Project Duration is the length of time a Credit Generator has committed to restoring, preserving and stewarding habitat function as stated in the project documentation. The duration of credit projects can be either term or perpetual.

The minimum credit project duration is 20 years, and the maximum project duration is in perpetuity. Project duration is defined in 5-year increments. Thus, project duration can be 20, 25, 30, 35, 40, 45 years, and so on, up to and including in perpetuity. The rationale behind the 20-year minimum is based on scientific rationale that rapidly changing habitat function can be detrimental to populations. Longer-term credit projects are preferable and credits from long-term projects are anticipated to attract greater market demand.

3.2.3 IMPLEMENT ACTIONS & VERIFY CONDITIONS

Once credit project documentation is complete and the credit project is approved by the State in coordination with the permitting agency, the Credit Generator implements the project according to project documentation.

Credit Verification

All mitigation projects require credit verification. Verification is an independent, expert check on the credit estimates provided by Credit Generators, or Technical Support Providers. The purpose of verification is to provide confidence to all participants that credit calculations represent a true and fair account of impacts and benefits, conforming to the accounting and credit generation standards. Once verification is completed by the Credit Generator, reporting documentation will be returned to the permitting agency for approval. This process should be defined within the Mitigation plan and the permit. Credits will be released according to the credit release schedule that will be defined within the management plan.

3.2.4 ONGOING CREDIT MANAGEMENT, MONITORING, & ADAPTIVE MANAGEMENT

For any credit project, the Credit Generator is responsible for conducting ongoing management and monitoring of habitat conditions on site and demonstrating progress toward meeting the performance standards outlined in credit project documentation.

Project-Level Management & Self-Monitoring

Every credit site must have an agreed-upon set of measurable performance standards that need to be met at specific time intervals, as outlined in credit project documentation. Credit Generators are responsible for managing project sites to meet these performance standards throughout the life of the project. Credit Generators should conduct annual monitoring until all performance standards have been achieved. A monitoring schedule will be outlined in the Mitigation Plan attached to the permit.

Manage Reversals

Projects can fail to meet performance standards for many reasons: (1) a force majeure event, such as wildfire, flooding, or extreme drought, that is beyond the Credit Generator's control; (2) avoidable implementation failure, or actions that a Credit Generator has the ability to foresee and correct; and (3) an unavoidable land use conflict such as development on an adjacent site within or out of the landowner control. Credit Generators must notify the State and permitting agency if any problems or unforeseen circumstances arise that affect habitat outcomes on the site.

Credit Generators are responsible for remedying avoidable implementation failures, or actions that a Credit Generator can foresee and correct. The project proponent and the permitting agency should define management actions associated with each of these reversal types within the permit and Mitigation Plan.

3.2.5 CREDIT GENERATOR CHECKLIST

REQUIREMENT **RELEVANT POLICY** Project approval from appropriate authority (Technical Mitigation Authority; Authority and Policy Team) Credit Project Area located within Service Area **Credit Project Area; Service Area Reasonable Relation** Credit project benefits sage-grouse **Best Available Science;** Proper siting & design Landscape-scale Approach **Credit Site Eligibility** Meets credit site eligibility requirements \square **Calculation of Credits** Credits calculated using HQT HQT results are within valid window Valid Window for HQT Results Proper HQT version was used **HQT Version Control** Duration identified and agreed upon **Credit Project Duration** Credit verification schedule defined **Credit Verification Schedule** Credits meet additionality requirements **Credits Resulting from Preservation; Credits Resulting** from Indirect Benefit; Generating **Credits on Public Lands & Other Designations; Partnering with Federal Programs on Private** Lands; Stacking Credits meet durability requirements **Credit Durability**

The Credit Buyer and the State or permitting agency may use the following checklist to ensure all requirements for credit projects have been met.

Credit project documentation complete	Credit Project Documentation
Performance standards defined	Performance Standards
Financial assurances secured	Financial Assurances
Cooperators consulted	Cooperators
Responsible Parties identified	Responsible Parties



Photo Credit: Connor White with Pheasants Forever. Sagebrush Planting after the Laidlaw Fire - Minidoka County

CHAPTER 4: MITIGATION POLICY

4.1 MITIGATION POLICY GUIDANCE

CHAPTER 4 - 5 OVERVIEW

These chapters provide an understanding of authorities, assurances, eligibility, mitigation measures and project relation to other variables.

Table 4.1 Overview of Chapters 4 & 5.	
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SECTION NAME	PRIMARY AUDIENCE	DESCRIPTION
4.1 Mitigation Authority	Credit Generators, Credit Buyers & Partner Agencies	This section describes the authority behind mitigation and this document. Also, the hierarchy that should be followed when an action is proposed to the permitting agency is outlined.
	Credit	This section describes that the intent behind this
4.2 Regulatory Predictability	Generators, Credit Buyers &	document is to provide consistency to how
	Partner Agencies	mitigation is applied in Idaho.
5.1 Credit Site Eligibility	Credit Generators, Credit Buyers & Partner Agencies	The goal of this section is to provide readers an idea of where credit projects should be located.
5.2 Valid Compensatory	Credit	Provides an outline for the types of mitigation
- · · ·	Generators, Credit Buyers &	measures that should be used to offset a debit
Mitigation Measures	Partner Agencies	obligation.
5.3 Reasonable Relation	Credit Generators, Credit Buyers & Partner Agencies	The section helps the reader understand that credits projects that are offsetting a debit obligation for sage- grouse, should be based in an area or address factors that would be beneficial to sage-grouse.

4.1 MITIGATION STANDARD AND AUTHORITY

Mitigation in Idaho is designed to achieve a defined mitigation standard of no net loss. Authority for determining the amount and type of mitigation required to meet the no net loss standard is retained by the state and the permitting agency. Nothing in this manual is intended to or will be construed to limit or affect in any way the authority or legal responsibilities of the State of Idaho or the permitting agency.

4.1.1 Mitigation Authority

The State of Idaho plans to issue an executive order adopting this document, which will give the State of Idaho authority to recommend if and how much compensatory mitigation should be implemented to offset unavoidable impacts from an infrastructure project.

Mitigation in Idaho is based on a consistent set of principles to which all compensatory mitigation projects should adhere. Infrastructure project developers may choose to conduct permittee-responsible mitigation, work with an in lieu fee program or purchase from an approved conservation bank.

4.1.2 Mitigation Hierarchy

Mitigation in Idaho is part of a broader suite of state and federal policies that utilize the mitigation hierarchy sequence (i.e., avoidance, minimization, and compensatory mitigation). Compensatory mitigation should only occur when disturbances are proven unavoidable, minimization does not completely eliminate direct or indirect impacts, or avoidance and minimization cannot achieve the best possible conservation outcome for the species. Infrastructure project proponents and permitting agencies still have obligations to avoid and minimize environmental impacts through appropriate project siting, design, and implementation.

4.2 Regulatory Predictability

This document was developed to have consistent principles on mitigation, to provide a basis for both infrastructure developers and landowners to work from and thus increase certainty related to permitting and future species protections. Regulatory predictability from the U.S. Fish and Wildlife Service's (USFWS) must be addressed through the USFWS. This document has a foundation for mitigation principles, but does not offer regulatory predictability.

5 STRATEGIC INVESTMENT

Strategic investment standards ensure compensatory mitigation projects are sited and designed to support the most effective conservation or restoration projects and that the effectiveness of mitigation actions is based on the best available science.

5.1 Credit Site Eligibility

Credit Generators may propose credit projects that meet the following eligibility criteria:

5.1.1 **Located within the Service Area:** All credit sites must be located within the Mitigation Program Service Area, Section 1.2.1..

5.1.2 **No Imminent Threat:** Credit projects must be located on sites that are not under imminent threat to loss or degradation of habitat quality that is not abated by the credit project, (i.e. unavoidable impacts on adjacent lands that would affect the credit project.) see pg. 45, section 10.2 No Imminent Threat.

Credit projects may be established on private, public or tribal lands. Credit projects may also be established on lands participating in programs that provide federal compensation from public sources (e.g., USDA Farm Bill programs) or lands generating credits for other resources. See sections 7.4 Developing Credits on Public Lands & Other Designations, 7.5 Partnering with Federal Programs on Private Lands, and 7.6 Stacking Credit Types.

5.2 Valid Compensatory Mitigation Measures

The Mitigation principles recognize restoration, enhancement, and preservation as valid compensatory mitigation measures.

For simplicity, restoration, and enhancement are collectively referred to as 'habitat restoration' in this document. Habitat restoration is defined as the reestablishment of ecologically important habitat and other ecosystem resource characteristics and functions at a site where they have ceased to exist or where they exist in a substantially degraded state. Examples include the reestablishment of usable sage-grouse habitat by planting sagebrush, eradication of invasive annual grasses, removal of power line towers no longer in use, or restoration of a wet meadow that is currently not functioning properly.

All credit projects must have a habitat restoration component and also include habitat stewardship, the protection and maintenance of high-quality habitat, during the duration of the credit project.

Habitat preservation is a valid compensatory mitigation measure which can act as a standalone mitigation measure but must be secured when implementing habitat stewardship. Preservation is valid when either (1) preservation would prevent the degradation or loss of habitat due to direct or indirect anthropogenic disturbance or (2) preservation would prevent the degradation of habitat quality through changes in vegetation characteristics (e.g., invasion of a site by cheatgrass). Habitat preservation is valid on quality habitat, in accordance with the HQT. An example project could be placing a conservation easement on existing high-quality habitat and committing to maintaining that high quality for the full duration of the credit project.

See section 6.4 Calculation of Credits and 7.2 Credits Resulting from Protection/Preservation for more information.

5.3 Reasonable Relation

Compensatory mitigation must be reasonably related to the impact being offset. Impacts to sagegrouse habitat must be offset by benefits to sage-grouse habitat. However, credit projects should be selected and designed to achieve the greatest benefit for sage-grouse, so they can replace lost functions and service used for mitigation.

The primary focus for credit projects should be in PHMA and IHMA within the local fine scale area and adjacent local fine scale areas in which the impact is occurring (See 1.2.1 Scope and Service Area). If this cannot be implemented the credit should be implemented in PHMA and IHMA of the same Conservation Area as the impact or debit occurred. If that cannot occur credit projects should be focused in the PHMA and IHMA of other Conservation Areas. Credit projects should generally not be located at or near the impact site due to the indirect effects of different infrastructure project impacts, but can be located within the same local fine scale habitat if the credit project is not affected directly or indirectly by the impact that is being offset.

If the permitting agency stipulates specific mitigation requirements as a condition of the permit, the project proponent must work to implement the requirements of the mitigation plan.



Photo Credit: OSC Riparian Habitat Restoration - Lemhi County

CHAPTER 6 OVERVIEW

This chapter provides background on the development of the mitigation principles

Table 6.1. Overview of credits and debits and their relationship with the HQT.

SECTION NAME	PRIMARY AUDIENCE	DESCRIPTION
6.1 Mitigation Currency	Credit Generators, Credit Buyers & Partner Agencies	This section provides how credits and debits are defined.
6.2 Use of the HQT	Credit Generators, Credit Buyers & Partner Agencies	The goal of this section is to give the reader an understanding of how the HQT is used. Also, a brief background on the components that make up the tool.
6.3 Calculation of Debits	Credit Generators, Credit Buyers & Partner Agencies	Describes how debits are calculated.
6.4 Calculation of Credits	Credit Generators, Credit Buyers & Partner Agencies	Describes how credits and associated factors are calculated.

6 CONSISTENT METRICS

Impacts (debits) and benefits (credits) should be expressed, to the extent possible, using the same metrics to ensure benefits are commensurate with impacts. For mitigation in Idaho, this is accomplished using the HQT.

6.1 Mitigation Currency

Quantified impacts are 'debits' and quantified, eligible compensatory mitigation actions are 'credits'. Debits are a defined unit representing the loss of ecological functions and/or services for sage-grouse at an impact site. Credits are the defined unit representing the accrual or attainment of ecological functions and/or services for sage-grouse at a compensatory mitigation site or within a mitigation program. Credits are established to offset the impacts of debits and meet compensatory mitigation obligations.

6.2 Use of the HQT

The HQT quantifies habitat function of sage-grouse habitat in the State of Idaho. Habitat function refers to the quality of habitat available for meeting life history requirements (reproduction, recruitment and survival) of sage-grouse at multiple scales and includes biotic and abiotic factors as well as the direct and indirect effects of anthropogenic disturbances on and surrounding the site. Habitat function is multiplied by the area benefited or impacted to calculate functional acres. Functional acres are a quality-weighted measure of habitat availability. See Text Box 1 for an overview of the HQT.

Debits and credits are calculated in terms of functional acres using the HQT. For both debit and credit projects, the HQT is used before project implementation to calculate pre-project functional acres and used to estimate post-project functional acres based on project design documentation. See sections 6.3 Calculation of Debits and 6.4 Calculation of Credits.

For credit projects, the site scale assessment within the HQT is also used throughout the duration of the project to substantiate the release of credits once performance standards have been met and to monitor ongoing project performance. See section 8.4.3 Credit Verification Schedule.

For debit projects, the HQT may be used as necessary over time to determine if impacts are increased or reduced. See section 8.4.2 Debit Verification Schedule.

6.2.1 Valid Window for HQT Results

Pre-project HQT results for debit and credit projects can be used for up to 5 years after a site has been assessed provided the habitat function is believed to be similar to the previous assessments and no significant changes have occurred on or adjacent to the project site that would affect HQT results (e.g., anthropogenic impacts on neighboring properties). The permitting agency in coordination with the State may require re-application of the HQT at their discretion.

6.2.2 HQT Version Control

The HQT will be updated periodically as necessary based on an annual review process through the HQT Science Team (see HQT Methods document for makeup of the team). The HQT is based on the best available science and best professional judgment at the time of development. The results of pilot testing have been used to revise and refine the HQT and methods document. Peer review and sensitivity analyses were completed in the development of the HQT. The goal is to ensure that the HQT meets the key criteria of repeatability, sensitivity, accuracy, transparency, and ease of use, while also reflecting Idaho's landscape. The results of the HQT will have an impact on credits and debits so project proponents and Credit Generators will want to know how the HQT will be changed over time. The HQT will be updated to reflect pertinent new scientific information and understanding of sage-grouse and sagebrush ecosystems based on feedback at the annual review. It will be important to update the HQT regularly or it will lose credibility over time. The most recent version of the HQT should always be used when calculating credits or debits for new projects. If a new version of the HQT has been released within the past 90 days, the previous version of the HQT may continue to be used if the credit or debit project is already undergoing assessment by that version of the HQT. In either case, the version of this document that was or is valid at the same time as the HQT version being used should also be used (i.e., if using an older version of the HQT, also use the corresponding version of this document).

For existing credit or debit projects, the version of the HQT and Mitigation principles document that was used during the initial calculation of credits or debits should continue to be used throughout the duration of the project.

Text Box 1 | Overview of the Habitat Quantification Tool (HQT)

The HQT was developed to account for habitat characteristics or attributes, both natural and anthropogenic, which influence sage-grouse habitat selection across multiple scales. Idaho's Mitigation Principles document adopts the hierarchical approach to habitat selection, as described by Johnson (1980) and Stiver et al. (2015). The approach describes four spatial scales at which sage-grouse occur and are organized into populations and habitat. The Mitigation Principles document considers habitat quality at four orders:

Range-wide Scale (1st order): The range-wide scale describes the geographic range of greater sage-grouse in North America.

Landscape Scale (2nd order): Landscape selection describes habitat and anthropogenic characteristics that influence sage-grouse population distribution in Idaho.

Local Scale (3rd order): The local scale encompasses the seasonal habitats of a sage-grouse population and the factors that affect grouse use of, and movement between, seasonal ranges, including the effects of anthropogenic disturbances.

Site Scale (4th order): Site selection is based on vegetation structure and composition that provide forage and cover.

While the HQT does not specifically utilize the range-wide scale, it is useful to evaluate Idaho's contribution to range-wide conservation and population goals. See the *HQT Scientific Methods Document* for additional information on the attributes measured at the local and site scales, and the methods used to measure those attributes.

The HQT generates local-scale habitat function and site-scale habitat function for each map unit within a project area. Map units are sub-divisions of the project area based on unique vegetation communities and vegetation structure. Guidance for delineating map units within a credit or debit site is provided in the HQT Scientific Methods Document.

Weighted values of the local and anthropogenic disturbance scores and the site-scale score produces an overall habitat function, as defined in the HQT Scientific Methods Document. The overall habitat function is multiplied by the acreage of the map unit to produce a functional acre value. Functional acres are further modified by a Landscape Importance Factor to incorporate consideration of the relative importance of large landscapes to sage-grouse. The Landscape Importance Factor is determined by the Habitat Management Area in which the credit or debit project is located (i.e., Priority, Important or General). All map units are tallied for a total functional acreage for the project.

6.3 Calculation of Debits

Debits generated by a debit project are calculated as the difference between baseline (i.e., preproject) functional acres and post-project functional acres.

Equation 1. Debit Calculation

 $Debits = (Facres_{Post \ project} - Facres_{Pre \ project})$

Debit Project Area

Debits are calculated within the Debit Project Area. The Debit Project Area includes any habitat directly or indirectly impacted by the infrastructure project (i.e., the area within the indirect impact distance for the feature proposed as defined by the HQT).

Credit Obligation

The number of debits generated by the project is not necessarily equal to the number of credits that must be secured to offset the impact. The amount of compensatory mitigation considered appropriate may be adjusted to account for temporal loss and other considerations as specified by this document. The number of credits that must be secured to compensate for the impact is thus referred to as the 'credit obligation'.

Estimating Debits

Because the credit obligation must be defined prior to the approval of any permit or right-of-way, debits must be estimated based on expected impact as defined in project documentation. The maximum permitted impact should always be used to estimate debits. Infrastructure projects that involve phased development should consult section 9.3 Debit Project Duration and section 10.1 Strategic Investment for additional information.

6.4 Calculation of Credits

Credits generated by a credit project are calculated as the sum of credits resulting from uplift due to habitat restoration and credits resulting from avoided loss due to preservation.

Equation 2. Credit Calculation

$$Credits = Credits_{Uplift} + Credits_{Preservation}$$

Uplift Credits

The number of credits generated resulting from uplift due to habitat restoration is equal to the difference between baseline (i.e., pre-project) functional acres and post-project functional acres.

Equation 3. Calculation of Credits Resulting from Uplift

 $Credits_{Uplift} = (Facres_{Post \ project} - Facres_{Pre \ project})$

Preservation Credits

The number of credits generated from avoided loss due to preservation and the threats being addressed is equal to the product of the baseline (i.e., pre-project) functional acres and an Avoided Loss Factor.

Equation 4. Calculation of Credit Resulting from Protection/Preservation/Threats Addressed

$Credits_{Preservation/Threat} = (Facres_{Pre Project} * Avoided Loss Factor)$

The Avoided Loss Factor is similar to that used by other States in their analysis of the underlying rate of loss to sage-grouse habitat functionality due to threats from development, wildfire or habitat degradation within the local area of the project and the extent to which these threats are abated by the mitigation project. As of August 2019, Montana's Policy guidance on avoided loss has 40% of the credits calculated within the boundaries of perpetual conservation easements recognized as credits (pg. 27 Version 1.0 Montana Mitigation System Policy Guidance Document

for greater sage-grouse). See section 7.2 Credits Resulting from Protection/Preservation, for further information on the relationship between Additionality and avoided loss.

Most credit projects are expected to provide benefits to sage-grouse, and thus generate credits, through both habitat restoration and preservation measures. An illustration of the credit calculation is provided by

Figure 4, which illustrates a 100-acre project where baseline function is 60%, post-project habitat function is 75%, and the Avoided Loss Factor for preservation only is 75%. Seventy-five (75) credits are generated resulting from protection/preservation and an additional 15 credits are generated over the duration of the project resulting from uplift. Additional credits can be generated if a credit project addresses specific actions to minimize threats to sage-grouse habitat, including wildfire risk, invasive annual grasses, wet meadow degradation, and fence collisions (see Table 2). For example, this credit project, through a 50% Avoided Loss Factor for measures addressing wildfire risk generated 50 additional credits by working with the BLM and Rangeland Fire Protection Association on increasing the gravel shoulder on the main roads of the property and implementing strategic fuel breaks and water sources to fill engines. This credit project through an Avoided Loss Factor of 200% generated an additional 30 credits through mapping and treating 15 acres of annual grasses across the project area and revegetating these areas to meet grass cover and density standards for perennial bunchgrasses and shrubs. This credit project also marked all high collision risk fences on the property and received an additional <u>10 credits</u> through a 10% Avoided Loss Factor pertaining to the threat of collision. The total amount of credits received would be 180, which is the sum of 75 preservation, 15 uplift/ maintain, 50 wildfire threat, 30 annual grass threat and 10 marking all high collision risk fences.



Figure 4. Example Credit Calculation over Time

Credits are calculated as described above. Calculating credits requires the use of the Avoided Loss Factor. The Avoided Loss Factor is based on the assumption that sage-grouse habitat functionality is affected by threats from development or habitat degradation within the local area of the project and the extent to which these threats are abated by the mitigation project. Every credit project should be assessed based on the threats being addressed. Table 1 below provides a subset of the list of threats identified in the Conservation Plan for the Greater Sage-Grouse in the State of Idaho (Conservation Plan; 2006). To calculate the Threats Addressed portion of the Avoided Loss Factor for a credit project, identify all threats and the amount of area that will be abated by the project. Sum the Avoided Loss Factor for all threats that will abated and the amount of preservation. The Avoided Loss Factor for each threat is based on the relative magnitude of each threat to sage-grouse populations. Refer to the 2006 Conservation Plan, Executive Order 2015-04 for definitions of threats and recommendations and best management practices for abating the threats identified below.

Table 1. Avoided Loss Variables and Avoided Loss Factors

	AVOIDED LOSS VARIABLES	AVOIDED LOSS FACTOR	
1	Wildfire Risk –	50%	
2	Annual Grasses	200%	
3	Marking High & Moderate Collision Risk Fences -	10%	
	Wet Meadow Degradation		
4	(minimize threat through simple structures, Beaver Dam Analogs -	50%	
	Wet Meadow Degradation –		
5	(minimize threat through complex restoration or, wetland creation)	100%	
6	Preservation	75%	
	SUM each threat addressed based on the actual acreage affected or preserved		

Equation 5. Calculation of Avoided Loss Factor based on each Avoided Loss Variables addressed. Avoided Loss Factor = (Acres_{Avoided Loss Variable#1} * Avoided Loss Factor) + (Acres_{Avoided Loss Variable#2} * Avoided Loss Factor) + (Acres_{Avoided Loss Variable#3} * Avoided Loss Factor)

Avoided Loss Variables

Wildfire Risk: This variable pertains to actions that decrease the risk of wildfire affecting the project (ex. Expanding the gravel shoulder on roads, strategic fuel breaks along roads that tie into the larger landscape, creating a new, non-duplicative watering source or fill station that can be used by firefighting entities in the area). Practices such as fuel breaks would need to be carefully considered based on the amount of habitat, they remove compared to the amount of habitat they are protecting. The Wildfire Risk variable will be calculated on the number of acres within the project area that are protected or affected by the variables implemented under this category multiplied by an Avoided Loss Factor of 50%.

Annual Grasses: This variable pertains to actions that are not considered maintenance, but treat existing acres of annual grasses to restore habitat within the project area (ex. chemical treatments for annual grasses, followed by seeding and establishment of perennial bunchgrasses that inhibit further annual grass invasion.) The Annual Grasses variable will be calculated on the number of acres of annual grasses treated and improved to perennial bunchgrasses multiplied by an Avoided Loss Factor of 200%.

Marking High and Moderate Risk Fences: This variable pertains to the action of marking all of the high and moderate collision risk fences on the property with anti-collision devices. This variable will be calculated by multiplying the number of high and moderate collision risk acres that will be mitigated within the project area by an Avoided Loss Factor of 10%. Wet Meadow Degradation: This variable is broken up into two categories, 1) Simple structures that improve mesic meadows or riparian areas such as Beaver Dam Analogs, Post Assisted Log Structures, Woody Debris jams 2) Complex structures or wetland creation that improve or create, expand and improve wetland or mesic meadow habitat such as creating a shallow water wetland, reconnecting a side channel, etc. The Wet Meadow Degradation variable will be calculated by multiplying the number of direct acres the restoration implementation improves by an Avoided Loss Factor of 50% for Simple structures and by 100% for Complex Structures.

Preservation: This variable is explained above and is calculated by multiplying the number of functional acres within the project area that are protected through an easement, deed restriction, etc. by 75%.

Credit Project Area

Credits are calculated within the Credit Project Area. The Credit Project Area includes any habitat that a Credit Generator commits to stewarding, preserving, and/or restoring over the duration of the credit project. The Credit Project Area must be defined in the Credit Project documentation.

For credit projects that propose to remove or modify existing anthropogenic features, benefits to sage-grouse from the reduction or elimination of indirect impacts may extend beyond the boundaries of the land that the Credit Generator owns or controls. In this case, the Credit Project Area may include any habitat for which the removal of anthropogenic features produces indirect benefit (i.e., the area within the indirect impact distance for the feature removed as defined by the HQT). These credits must conform to the stipulations in section 7.3 Credits Resulting from Indirect Benefits described below.

Estimating Credits

Credits can be estimated before project implementation but must be verified after project implementation. To estimate credits generated, the expected improvements to habitat characteristics are assessed using the HQT to provide an estimate of the increase in functional acres from baseline habitat function.



CHAPTER 7 OVERVIEW

This chapter provides an understanding of how additionality relates to mitigation.

Table 7.1. Overview of the variables that are entailed within additionality.

SECTION NAME	PRIMARY AUDIENCE	DESCRIPTION
7.1 Full Cost Accounting	Credit Generators, Credit Buyers & Partner Agencies	Each credit not only entails the restoration needed to offset a debit. It also requires monitoring, maintenance, etc. This section describes what full cost accounting entails when creating a credit project.
7.2 Credits Resulting from Protection/Preservation	Credit Generators, Credit Buyers & Partner Agencies	Protection/Preservation is recognized as a valid source of developing credits. An Avoided Loss Factor is associated with this type of credit.
7.3 Credits Resulting from Indirect Benefits	Credit Generators, Credit Buyers & Partner Agencies	Credits that are created based on the indirect benefits of a project yet are not within the control of the Credit Generator can be accounted for based on a set of factors.
7.4 Developing Credits on Public Lands and Other Designations	Credit Generators, Credit Buyers & Partner Agencies	Developing credits on public land is possible but comes with additional variables that need to be negotiated and defined in the Mitigation Plan and permit.
7.5 Partnering with Federal Programs on Private Lands	Credit Generators, Credit Buyers & Partner Agencies	If credits are going to be developed in association with federal programs they must align with certain stipulations, these are spelled out in this section.
7.6 Stacking Credit Types	Credit Generators, Credit Buyers & Partner Agencies	If a site is generating credits for another ecosystem function those credits cannot fulfill a new obligation.

7 ADDITIONALITY

Additionality considerations ensure that compensatory mitigation provides benefits beyond those that would otherwise be achieved if the project and associated management actions had not taken place.

7.1 Full-cost Accounting

The Credit Buyer is responsible for the full cost of the credits required to offset an impact based on the language within the permit. The cost of mitigation credits should cover all mitigation project costs. Funding should be sufficient to ensure with a high degree of certainty that expected outcomes will be produced and maintained throughout the duration of the project. The full cost of creating a credit may include the following, without limitation:

- Site identification and suitability surveys
- Project planning
- Site protection and associated transaction costs
- Habitat restoration and enhancement costs
- Monitoring, reporting and adaptive management
- Financial assurances and other risk-mitigation measures
- Land acquisition

- Mitigation site management
- Long-term management and stewardship
- Contingencies

7.1.1 Public Investments

Public entities may subsidize credit cost by providing public funding for some portion of mitigation costs in order to facilitate or incentivize economic development. Where used, this choice should be explicit and transparent, and should not draw on public funds that are specifically dedicated to achieving conservation outcomes.

Transportation, utility, county, and many other sources of funds that are not restricted to providing conservation benefit may be used to generate credits.

7.2 Credits Resulting from Protection/Preservation/Threats

Habitat protection/preservation is recognized as a valid compensatory mitigation measure to the extent that it avoids the future loss or degradation of habitat by legally removing identified threats through conservation easements or term leases. Credits for habitat preservation are calculated as described in section 6.4 Calculation of Credits. Calculating credits resulting from protection/preservation requires the use of the Avoided Loss Factor. The Avoided Loss Factor is similar to other State's mitigation plans, as stated above in Chapter 6, and their analysis of the underlying rate of loss to sage-grouse habitat functionality due to threats from development or habitat degradation within the local area of the project and the extent to which these threats are abated by the mitigation project.

To more accurately reflect that perpetual easements, in the absence of any additional restoration or enhancement activity, preserve the status quo and do not create new functional acres, The Avoided Loss Factor is 75% (0.75) for perpetual preservation credit projects. The Avoided Loss Factor is multiplied by the pre-project habitat function (functional acres) determined by the HQT to calculate credits resulting from preservation.

In order not to have mitigation in Idaho based solely on protection/preservation, only 75% of the credits calculated within the boundaries of perpetual conservation easements will be recognized as being available to offset impacts of development.

To generate preservation credits, the credit project must (1) currently be located in high-quality habitat as measured by the HQT.

In addition to the Avoided Loss factor for preservation the State of Idaho included an Avoided Loss factor based on the type of threat that will be addressed such as wildfire, annual grasses, fence collisions and wet meadows. See Section 6.4 for values and descriptions associated with each.

7.3 Credits Resulting from Indirect Benefits

Habitat outside of a Credit Generator's control which is indirectly benefited from the removal of certain anthropogenic features by the credit project may be considered part of the Credit Project Area, and therefore receive credit for mitigation in Idaho. However, these credits do not conform to the standards for durability. Thus, credits resulting from indirect benefits, specifically those that do not conform to durability standards, are subject to the following provisions:
- Only credits due to uplift can be generated; because the project proponent cannot protect or provide stewardship for the habitat, preservation credits cannot be generated.
- The term of the credits generated is limited to a minimum of 50 years. If there is evidence that the benefit to sage-grouse generated by the project will not persist for the full term, the State or permitting agency may require, based on the permit, a duration commensurate with the expected length of time benefits to sage grouse habitat will persist on and influence the landscape. If there is evidence that the benefits to sage-grouse will persist less than the minimum credit project duration, as defined in section 9.5 Credit Project Duration, credits will not be generated. This 50-year minimum credit duration limit can be waived if the new feature is offset by removing an equivalent existing feature. Credits for such projects will not be considered perpetual and will not be used to offset future impacts. If this type of credit project is developed speculatively (i.e., before a debit project is identified), but due to the lack of durability, a 10-year limitation is applied, and a credit of this type must be used within 10 years or it will be considered invalid.
- The increased risk of loss or degradation of habitat benefited by the project must be considered through additional risk and uncertainty provisions that will be defined upon creation of the management plan associated with the permit.
- The Credit Generator may choose to exclude these areas from the credit project, if desired.

7.4 Developing Credits on Public Lands & Other Designations

Credits may be generated on federal public lands (e.g., BLM, USFS) in accordance with agency policy regarding mitigation site management, monitoring and durability. Credits may also be generated on State lands (e.g. land administered by the Department of Fish and Game or Department of Parks and Recreation) provided additionality and durability provisions are met. On IDL managed lands the mitigation will dpend on Land Board Sage-grouse Plan approval. Credit Generators must demonstrate that the proposed credit project will create additional benefit above and beyond what would be achieved under the existing land designation or planned and funded conservation actions. In order to generate credits on public lands, the Credit Generator must have authorization from the relevant public agency, under which the public land manager maintains management authority over the land.

7.5 Partnering with Federal Programs on Private Lands

Public funds specifically dedicated to conservation actions are prohibited from funding the generation of compensatory mitigation credits for mitigation in Idaho. Also, any required "match" funding or services to a federally funded project may also not be used for mitigation purposes. Credits can be generated on private lands that are currently or were previously participating in a federal funding program (e.g., U.S. Department of Agriculture (USDA) Farm Bill conservation programs) in proportion to the additional benefit provided. Where conservation values have already been permanently protected or restored under other federal programs benefitting the sage-grouse, the Credit Generator can only receive credit for conservation values if enrollment of the credit site in the Credit System would create additional conservation benefit as defined in this section.

Guidance for determining the number of potential credits on sites that are currently or have previously participated in a federal funding program is provided below. Payments may be partnered with federal funds after a previous federal contract has expired.

Credit Projects Following a Federal Contract

A Credit Generator may receive full credit for long-term or permanent contract extension, management or protection agreements following expiration of a federally-funded contract. These long-term contract extensions and permanent conservation agreements could be entered into contemporaneously with execution of the underlying contract or thereafter, but these (and credits) would not take effect until after the expiration of the underlying contract.

Box 2 | Example partnerships with federal program

- 1. Through the Sage Grouse Initiative (SGI), NRCS funds 1,000 acres of juniper treatment on private land. The Credit Generator proposes to voluntarily treat an additional 1,000 acres in conjunction with the SGI project. If this additional acreage was not a "match" or requirement for the SGI contract, these acres are considered to go above and beyond the scope of the federal program and therefore can be counted as credits.
- 2. A Credit Generator cuts 1,000 acres of juniper through SGI, the treatment has a conservation practice life span of 10 years, when the life span of the projects has passed, a Credit Generator can therefore treat the site for juniper and generate credits.

7.6 Stacking Credit Types

The amount of each type of credit generated must be based on additional habitat function maintained compared to the habitat function maintained for other credit types. If a site is currently or has previously generated and sold credits under a different ecosystem service program or market (i.e. carbon, water quality, etc.), then restrictions related to partnering with federal funds during an existing contract or following previous federal contracts apply.



Photo Credit: Connor White with Pheasants Forever. Cottonwood Basin Year 1 Cheatgrass Treatment - Cassia County

CHAPTER 8 OVERVIEW

This chapter provides an understanding of how durability should be addressed when developing a credit.

Table 8.1. Overview of the variables that are entailed within durability.

SECTION NAME	PRIMARY AUDIENCE	DESCRIPTION
8.1 Credit Durability	Credit Generators, Credit Buyers & Partner Agencies	A mitigation plan should outline how a credit will be durable through time.
8.2 Credits Project Documentation	Credit Generators, Credit Buyers & Partner Agencies	Credit Project Documentation is necessary to have the permitting agency, the Credit Buyer, the Credit Generator and the interested public on the same page in terms of what will be implemented.
8.3 Performance Standards	Credit Generators, Credit Buyers & Partner Agencies	Performance standards and timelines are key to understanding if a credit is and continues to fulfill debits and offset the disturbance to sage-grouse.
8.4 Site Assessment,	Credit	An assessment, verification and monitoring schedule
Verification and Self-	Generators, Credit Buyers &	should be established within the Mitigation Plan and
Monitoring	Partner Agencies	permit.
8.5 Periodic Spot Checks	Credit Generators, Credit Buyers & Partner Agencies	The permitting agency and the State can conduct periodic spot checks to understand if performance standards and performance reporting are consistent.
8.6 Habitat Stewardship of Credit Sites	Credit Generators, Credit Buyers & Partner Agencies	Ongoing management and monitoring of habitat conditions for credits and demonstrating progress toward meeting the performance standards will be a requirement within approved permits that mandate compensatory mitigation.

8 DEMONSTRATING EFFECTIVENESS & DURABILITY

Compensatory mitigation should positively demonstrate the benefit of the action to sage-grouse and ensure that expected benefits are maintained for the entire permit duration.

8.1 Credit Durability

Credit projects must be durable, meaning the effectiveness of the measure is sustained for the duration of the credit project. Credit projects must be secured by adequate legal, real estate, and financial protections that ensure the success of the mitigation, as described below.

8.2 Credit Project Documentation

This section describes the necessary elements that must be included in documentation for credit projects. Proper credit project documentation ensures the project has undergone sufficient planning for project development, management, and maintenance of the habitat values over time, clarifies responsible parties, and provides a means of enforcing project and permit requirements, among other objectives. Each compensatory mitigation mechanism (e.g., permittee-responsible mitigation, conservation banking, ILF) may also include additional requirements and may offer templates for Credit Generators to use.

- Credit Generation Agreement: legal contract between the Credit Generator and the relevant authority to generate credits. All other project documentation must be included by reference to this agreement.
- Management Plan: describes the proposed compensatory mitigation measures and the inputs and activities required to improve and/or maintain habitat quality over the duration of the project. A budget should also be included.
- Monitoring and Verification Plan: includes indicators, methods, and schedule for ongoing monitoring of project conditions and trends in both implementation and stewardship phases. A schedule for verification of project conditions should also be included.
- Site Protection Instrument: recorded easements and/or other legal instruments
 protecting the land for the duration of the credit project. In some instances, the Credit
 Generation Agreement may serve as the Site Protection Instrument if the agreement is
 able to provide legal protection of habitat from development.

8.2.1 Credit Site Protection Instrument

Credit projects must provide for the legal protection of habitat from development and other incompatible uses. If legal protection cannot be guaranteed i.e. federal lands with a multiple use mandate, removal of an anthropogenic feature on adjacent land, credit projects should be placed in areas with the least likelihood of development or conflict with the outcomes of the credit project. The site protection instruments should clearly outline what legal mechanism is being used to protect the site, what the duration of the agreement is, which conflicting uses will be precluded, and what entities will be responsible for implementation and authorized to enforce the agreement. Inclusion of specific conservation measures from the site-specific plan in the legal protection documents is not recommended in order to allow for adaptive management of the site in response to changing conditions over the duration of the project.

Site protection mechanisms that may be considered include conservation easements, deed restrictions, transfers of title, multiparty agreements, contractual documents such as conservation land use agreements, and regulatory mechanisms. For credit projects with perpetual or especially long credit project durations (i.e., greater than 30 years), site protection instruments that remain with the land regardless of ownership are preferred (e.g., conservation easements).

8.3 Performance Standards

Performance standards are clearly defined and measurable outcomes of mitigation measures. Performance standards should be defined for each credit project and should support the credit project's objectives as defined in the credit project documentation. Performance standards may be defined for both resource outcomes (e.g., achievement of sagebrush density and age class diversity) and administrative outcomes (e.g., execution of the site protection instrument). Performance standards related to resource outcomes are often defined to be the same as or compatible with indicators measured by the HQT; however, any performance standard that supports the credit project objective may be defined. Best management practices (e.g., wildlife escape ramps in water troughs) may be incorporated in a credit project through the use of performance standards.

8.4 Site Assessment, Verification & Self-Monitoring

Site assessment, verification and self-monitoring are important for ensuring compliance with permit and project documentation and evaluating the effectiveness of compensatory mitigation

actions. Collectively, they allow quantification of benefits and impacts, ensure that credit and debit projects are in compliance with project documentation and performance standards allow evaluation of credit project effectiveness, ensure habitat quality is maintained over time and commensurate with the amount of credits generated. Site assessment, verification, and self-monitoring are defined as follows:

Site Assessment – An evaluation of the site using the site scale forms of the HQT and/or an evaluation of a credit project to determine achievement of performance standards. **Verification** – An expert check on the site assessment and a review of compliance with project documentation. This will be completed by the permitting agency as it administers mitigation principles within the permit to ensure standards are being met. **Self-monitoring** – An evaluation of a credit project by the Credit Generator, which may not entail a full site assessment. The Credit Generator will submit self-monitoring reports to the permitting agency based on the reporting schedule within the mitigation plan of the permit.

If verification shows that a credit site is not meeting performance standards, the project proponent or Credit Generator may need to acquire additional credits elsewhere. This will be outlined within the mitigation plan of the permit.

8.4.1 Site Assessment, Verification & Self-Monitoring Responsibilities

Verification must be conducted by approved Verifiers who are trained in the use of the HQT. Site assessments conducted by Verifiers do not require independent verification. Minimum qualifications for a verifier will be outlined by the permitting agency.

For debit projects, site assessments may be carried out by the Credit Buyer, with assistance from a Technical Service Provider, the State, or the permitting agency. The permitting agency, with support from the State, will verify the debit project's site assessment and conformance with other requirements based on the verification schedule outlined in the permit.

For credit projects, including permittee-responsible mitigation, ILF, and conservation banks, the Credit Generator, with assistance from a Technical Service Provider will conduct site assessments. The State and permitting agency will verify the site assessment and compliance with other requirements.

Verification Report

Following verification or site assessment by a Verifier, verifiers must submit a Verification Report to the permitting agency which summarize project results, including

- A summary of what was verified on-site and when
- Initial credit or debit estimates
- Specific conservation measures which worked and did not work, and other information for adaptive management and increasing the knowledge base about mitigation success.
- Potential sources of future challenges to track over time.

8.4.2 Debit Verification Schedule

Verification of debit projects must take place prior to final approval by the permitting agency in coordination with the State for any impacts to sage-grouse. Subsequent verifications may be required at the discretion of the permitting agency.

8.4.3 Credit Verification Schedule

Credit site assessment and verification is required at least every five years until the project achieves all performance standards, at which point verification will be reduced to periodic spot checks of a subset of all credit projects each year. This should be outlined in the management plan to identify how credits will be released when verified.

A site assessment is required prior to the credits being accepted. Look to section 3.2 Guidance for Credit Generators for additional information on credit requirements.

Self-monitoring is conducted annually by Credit Generators until all performance standards of the credit project have been achieved. Self-monitoring reports must be sent to the permitting agency who will coordinate with the State for review. Once this has occurred the permitting agency will conduct periodic spot checks.

8.5 Periodic Spot Checks

The State or relevant public land management agency may conduct periodic spot checks of credit sites in any particular year to ensure compliance and effectiveness of credit projects. The permitting agency in coordination with the State of Idaho, will determine the appropriate frequency for spot checks.

8.6 Habitat Stewardship of Credit Sites

Habitat stewardship is critical to the durability and effectiveness of compensatory mitigation measures. Habitat stewardship is required for all credit projects. Credit Generators are responsible for conducting ongoing management and monitoring of habitat conditions on-site and demonstrating progress toward meeting the performance standards.



Photo Credit: Caribou Cattlemen Association. Dry Creek Riparian Project - Caribou County

CHAPTER 9 OVERVIEW

This chapter provides an understanding of how durability should be addressed when developing a credit.

SECTION NAME	PRIMARY AUDIENCE	DESCRIPTION
9.1 Timeliness	Credit Generators, Credit Buyers & Partner Agencies	A mitigation plan should outline how actions will achieve targeted biological conditions in a timeframe commensurate and proportional to the biological impacts to be offset.
9.2 Temporal Loss	Credit Generators, Credit Buyers & Partner Agencies	This section is set up to make the reader aware that credit projects should be implemented in advance of debit projects when feasible. In cases where this cannot occur temporal loss needs to be factored into the mitigation obligation.
9.3 Debit Project Duration	Credit Generators, Credit Buyers & Partner Agencies	The length of time an anthropogenic disturbance is estimated to impact the function of habitat for sage- grouse.
9.4 Debit Project Rehabilitation	Credit Generators, Credit Buyers & Partner Agencies	Debit project rehabilitation will be defined in the mitigation plan of the permit.
9.5 Credit Project Duration	Credit Generators, Credit Buyers & Partner Agencies	The length of time a credit project must meet performance standards.

9 DURATION & TIMELINESS OF OFFSETS

The length of time compensatory mitigation actions persists on and influence the landscape must meet the length of time that projected impacts will negatively affect sage-grouse. Compensatory mitigation that provides benefits in advance of, or at the same time as, impacts to sage-grouse is preferred; any lag between impact and offset must be accounted for. If credits are planned to be created ahead of time the State should be contacted in order to convene the Technical Team and analyze the potential functional acres, uplift, and benefits to sage-grouse.

9.1 Timeliness

Compensatory mitigation actions should achieve targeted biological conditions in a timeframe commensurate and proportional with the biological impacts to be offset. The Mitigation Principles promote compensatory mitigation measures that provide benefits in advance of, or at the same time as, impacts to sage-grouse habitat. Both the timeliness of securing the credit project and the timeliness of actual benefits produced by the project should be considered. In other words, credit projects should be secured, and credits released, prior to the impact whenever possible. If timeliness of compensatory mitigation cannot be achieved, the temporal loss resulting from lack of timeliness should be addressed by adjusting the amount of compensatory mitigation required. If credits are planned to be created ahead of time the State should be contacted in order to convene the Technical Team and analyze potential functional acres, uplift, and benefits to sage-grouse.

9.2 Temporal Loss

Temporal loss refers to the loss of ecosystem services resulting from the time between impact and offset and the time between initiation of mitigation measures and maturation of anticipated ecological functions on a compensatory mitigation site. The permitting agency should work with the State and the project proponent to adjust the amount of compensatory mitigation required to account for temporal loss based on the significance of the impact under the National Environmental Policy Act (NEPA). However, all debit projects are strongly encouraged to secure credits prior to impacts.

For all debit projects, credits should be secured within three years of the impact. Each permit should have language that addresses measures that will occur if credits are not secured within three years of impact.

9.3 Debit Project Duration

Debit project duration is the length of time that the project is anticipated to impact habitat function. The duration of debit projects can be either a defined term or perpetual. Debit projects that have a perpetual impact on sage-grouse have a perpetual project duration. Debit project duration will be defined by the permitting agency and be documented by the permitting agency in the permit or right-of-way.

It is recommended that agencies implementing or approving compensatory mitigation define debit project duration to include an additional period of time beyond the length of time that the project is anticipated to impact habitat function to allow the species to begin use of the site again. An additional period of 10 years is recommended.

Debit projects may include impacts of different durations – ranging from short-term to permanent. Therefore, debit projects may generate debits with different project durations, including different term periods and a mix of term and perpetual. Credits used to offset debits must meet the stipulations for matching the duration of credits and debits (section 9.5, described below.

9.4 Debit Project Rehabilitation

For short-term projects (i.e., not perpetual), required rehabilitation of direct surface disturbance will be defined in the permit or lease for the anthropogenic disturbance. The permitting agency is responsible for ensuring impacts cease and direct surface disturbance is rehabilitated according to permit stipulations and agency policy. The State recommends that compensatory mitigation be implemented in perpetuity for any direct surface disturbance that will not be fully rehabilitated commensurate with the expected impact as quantified by the HQT.

9.5 Credit Project Duration

Credit project duration is the length of time the Credit Generator is required by the permit to meet performance standards. Specifically, credit project duration is the length of time that a Credit Generator has committed to restoring, preserving and stewarding habitat function as stated in the project documentation.

The duration of credit projects can be either term or perpetual. Longer-term credit projects are generally preferable. The minimum credit project duration is 20 years, and the maximum project duration is in perpetuity, See 3.2.2 Calculate Credits

CHAPTER 10 OVERVIEW

This chapter provides an understanding of how risk and uncertainty should be addressed when developing a credit.

SECTION NAME	PRIMARY AUDIENCE	DESCRIPTION
10.1 Credit Project	Credit	Credit projects should be selected and designed
Selection and Design	Generators, Credit Buyers &	to reduce risk and uncertainty for a project
Selection and Design	Partner Agencies	meeting performance standards.
	Credit	When developing a credit project the reader should
10.2 No Imminent Threat	Generators, Credit Buyers &	keep in mind certain factors. Placement of projects
	Partner Agencies	can influence the eligibility of a credit project.
	Credit	The difference between an intentional and an
10.3 Credit Reversals	Generators, Credit Buyers &	unintentional reversal will be distinguished in this
	Partner Agencies	section.
	Credit Generators, Credit Buyers & Partner Agencies	Invalidation of credits will be addressed through
10.4 Managing Credit		specific actions, depending on the type of reversal.
Reversals		Force majeure, competing land uses and intentional
		reversals will be discussed in this section.

10 RISK & UNCERTAINTY

Tools should be put in place to effectively limit the risk that mitigation projects will not deliver anticipated benefits, including compliance and enforcement mechanisms. Legal and financial protections are expected to be put in place. A remedial action or contingency plan should be established and incorporated into the permit for instances that projects are not delivering the anticipated benefits.

10.1 Credit Project Selection & Design

Credit projects should be selected and designed to reduce risk and uncertainty. Pursuant with section 4.2 the Mitigation Principles document is intended to be the foundation for principles on mitigation in Idaho, and as such, this document aims to provide an expectation for both infrastructure developers and landowners and thus increase certainty related to permitting and future species protections.

Strategic Investment, project proponents are recommended to work with the permitting agency, the State, and the Technical Team to work on the best credit locations based on best available science and a landscape-scale approach.

10.2 No Imminent Threat

Credit sites must be able to demonstrate no evidence of an imminent threat of direct or indirect disturbance by land uses that would cause the habitat function of the total credit site to be less than the minimum performance standard referenced below.

Recently acquired subsurface rights, development plans (e.g. a building permit recently submitted or National Environmental Policy Act (NEPA) documents currently under development), or development designations (e.g. renewable energy zone or transmission

corridor) would constitute proof of imminent threat that may disqualify a credit site from being recognized by the permitting agency and the State of Idaho. Proper grazing practices are not anticipated to pose an imminent threat of disturbance.

Risk of wildfire is also not considered an imminent threat; however, sites with a high fire frequency may need additional assurances or protections to protect the credit investment. Credit Generators are encouraged to reduce the risk of wildfire through coordinating with BLM, USFS and the State of Idaho (IDFG, IDL, and OSC) on the use of best management practices in context with the broader landscape.

10.3 Credit Reversals

A credit reversal describes the invalidation of released credits due to a credit project's failure to meet performance standards or prevent habitat degradation or loss. Credit reversals are categorized as either unintentional or intentional.

- **Unintentional Reversals:** include force majeure, competing on-site land use outside of the Credit Generator's control, competing adjacent land use, and other causes not due to neglect or intentional acts by the Credit Generator.
- **Intentional Reversals:** include failure to implement management activities to achieve habitat quality as defined in the project documentation or intentional degradation to serve a competing on-site use.

Credit Generators must notify the permitting agency who will coordinate with the State, if any problems or unforeseen circumstances arise that affect habitat outcomes on the site.

10.4 Managing Credit Reversals

The Mitigation Principles work to ensure that mitigation in Idaho operates at a no net loss of habitat.

Financial assurances should be outlined in the mitigation plan within the permit to outline the long-term management and monitoring of all credit projects. These assurances must be designed to meet the following requirements:

- Cover all anticipated costs expected to perform maintenance and monitoring of the project as defined in the Management Plan for the duration of the contract; and
- Ensure contingency funds are available to address periodic project-related costs that are likely to occur.

Unintentional reversals

Force Majeure

When credits are invalidated by an unexpected event or circumstance beyond the control of a Credit Generator, the Credit Generator should work with the permitting agency to replace the credits on the existing site or an alternate location.

In cases where the credit site can be fully or partially recovered within a reasonable amount of time and cost, the Credit Generator should develop a remedial action plan that is approved by the permitting agency.

Competing On-site Land Uses

Land use conflict should generally be avoided through the durability requirements for credit projects. However, in rare cases, it may be not be possible to legally preclude all incompatible uses on mitigation lands (for example, mining rights on some public lands or loss of land due to eminent domain. If the impact of the competing land use results in the credit site not being able to generate credits as expected, the Credit Generator must supply new credits to compensate for the loss.

Competing Land Uses on Adjacent Sites

There may be cases where verification shows that competing land uses on sites adjacent to enrolled credit project sites have occurred, which impairs the ability of the enrolled credit project site to generate benefit for the species. The indirect effect of competing land uses on sites adjacent to the enrolled credit project sites are determined using scientifically informed distance-decay curves for anthropogenic disturbances defined in the HQT. These occurrences are out of the direct control of the Credit Generator. The Credit Generator must continue to maintain habitat function at the project site-scale according to the performance requirements stated in the credit project's Management Plan and the permit. The number of credits on the site will not be reduced.

Intentional Reversals

In the case of an intentional reversal, such as not implementing management activities to achieve habitat quality as defined in the project documentation or intentional degradation to serve a competing on-site use (i.e., development impact, the Credit Generator must coordinate with the permitting agency who will coordinate with the State of Idaho to remedy the situation. The Credit Generator, permitting agency and the State of Idaho determine if a remedial action plan can be developed or if credits must be replaced off-site. The Credit Generator is responsible for the entire cost of purchasing replacement credits from a different credit site and any associated legal fees.

Financial assurances that can fulfill the intentional reversals requirement include contract terms, such as financial penalties, and financial instruments, such as contract surety bonds. Contract terms within the permit should define that if performance standards on a credit project site are not met, the financial assurances used to fulfill the intentional reversal requirement as well as remaining funds in that project's financial assurances for long-term management and monitoring are available.

CHAPTER 11 OVERVIEW

This chapter provides an understanding of how mitigation should be tracked and transparent.

SECTION NAME	PRIMARY AUDIENCE	DESCRIPTION
11.1 Reporting	Credit Generators, Credit Buyers & Partner Agencies	This section describes what reporting is meant to accomplish.
11.2 Responsible Parties and Cooperators	Credit Generators, Credit Buyers & Partner Agencies	This section describes who the responsible parties and cooperators are for implementation, monitoring and overall performance of the mitigation projects.

Table 11.1. Overview of the variables that are entailed within the context of risk and uncertainty.

11 TRACKING & TRANSPARENCY

All mitigation projects should demonstrate to regulators, stakeholders, and the interested public that benefits are real and lasting. The Mitigation Management Plan within the permit for an approved action should include the variables discussed in this mitigation principles document. A quick reference guide to this is outlined in Appendix B of this document.

11.1 Reporting

Reporting provides confidence to stakeholders and the public that compensatory mitigation measures are effective and implemented in accordance with applicable laws, permits, and policies. Reporting should be conducted at both the project scale and program scale. Project and program reports should be made available to the public, while redacting or withholding sensitive or confidential information, to the extent possible. All reports will be submitted to the permitting agency who will track mitigation compliance based on the terms of the permit.

11.2 Responsible Parties and Cooperators

For any approved permitted impact that requires compensatory mitigation, responsible parties should be identified that are accountable for fulfilling all aspects of mitigation obligations, including but not limited to, ensuring the durability and effectiveness of mitigation measures, achieving mitigation measures' outcomes, and complying with monitoring, adaptive management, and reporting requirements. Responsible parties should be clearly defined in any project documentation and approved permit.

In the case of credit reversals, the permitting agency in coordination with the State of Idaho will work with the responsible party to identify appropriate actions for achieving the required mitigation outcomes and for complying with the terms and conditions of applicable land use authorizations

Successful landscape-scale compensatory mitigation depends on the engagement of affected communities and stakeholders. Cooperators may include government agencies, community leaders, NGOs, industry and trade groups, and other individuals. Cooperators should be consulted to inform priorities and reach out to landowners to locate credit projects.

APPENDIX A: GLOSSARY

Adaptive Management: an ongoing, transparent, science-based, and inclusive process of learning and adapting over time.

Additionality: a property of compensatory mitigation where the conservation outcomes are demonstrably above and beyond results that would have occurred if the mitigation had not taken place and exceed what is otherwise required by federal, state, and local regulations.

Baseline: the pre-existing condition of a defined area that can be quantified by an appropriate metric or metrics to determine level of function or value and re-measured at a later time to determine if the same area has increased, decreased, or maintained the same level of function or value.

Compensatory Mitigation: compensating for residual project impacts that are not avoided or minimized by providing substitute resources or habitats, often at a different location than the project area; the preservation, enhancement, restoration and/or establishment of a resource to compensate for or offset unavoidable adverse impacts to the resource elsewhere.

Competing land use: incompatible land uses on or near Credit Projects that cause direct or indirect impacts to the site.

Cooperator: local partners such as the Natural Resources Conservation Service offices, Soil & Water Conservation Districts, and sage-grouse local working groups that can be consulted to inform priorities and reach out to landowners to locate credit projects.

Credit: a defined unit representing the accrual or attainment of ecological functions and/or services for a species at a compensatory mitigation site or within a mitigation program that meets additionality and durability provisions set forth by mitigation program

Credit Buyer: entities that request permission from Permitting Agencies to conduct development activities that impact sage-grouse habitat.

Credit Generator: includes landowners or land managers, organizations, agencies, or other entities that will carry out compensatory mitigation projects.

Credit Obligation: the number of credits that must be created to offset an impact, calculated by the HQT.

Credit Project Area: includes any habitat that a Credit Generator commits to stewarding, preserving, and/or restoring over the duration of the credit project.

Credit Project Duration: the length of time that the permitting agency and the State recognizes a project as enhancing and maintaining habitat function, and the Credit Generator is required to meet performance standards for credits. Specifically, credit project duration is the length of time that a Credit Generator has committed to enhancing and maintaining habitat function as stated in their permit and Management Plan.

Credit Variability: variation in habitat function on a site as measured by the HQT at two different points in time. Even on relatively stable sites, variability is likely due to variation in climatic conditions and other natural events that influence habitat function, or due to sampling error that is inherent to any measurement method.

Debits: a defined unit representing the loss of ecological functions and/or services for sage-grouse at an impact site.

Debit Project Duration: the length of time that the project is anticipated to impact habitat function, including direct, indirect and cumulative impacts as well as the time period for an impact site to be fully restored.

Durability: ability for mitigation measures to be effective for as long as the impacts those measures are designed to offset. Durability is often addressed through legal, financial, and management mechanisms.

Dynamic Offsets: a strategy for provisioning compensatory mitigation such that mitigation sites are not fixed in space, but can be relocated in response to changing conditions, such as changing climate conditions.

Effectiveness: effective actions or plans proposed as compensatory mitigation demonstrate timeliness, ecological durability, and are accompanied by durable site protections and financial assurances that secure and protect the conservation status of the mitigation site and credits for at least as long as associated impacts persist.

Financial Assurances: fiscal mechanisms that are used to ensure the durability of credits generated throughout the full duration of a credit project.

Force Majeure: an event or circumstance beyond the control of the Credit Generator such as wildfire, flooding, or extreme drought (for drought as defined by the drought index).

Functional Acre: a quality-weighted measure of habitat availability.

Habitat Function: refers to the quality and amount of habitat available for meeting life history requirements (reproduction, recruitment and survival) for sage-grouse at multiple scales and includes biotic and abiotic factors as well as the direct and indirect effects of anthropogenic disturbances on and surrounding the site.

Habitat Quantification Tool (HQT): a scientific approach for assessing habitat function and conservation outcomes for sage-grouse.

In-Kind Mitigation: replacement or substitution of resources or values that are of the same type and kind as those replaced.

Landscape Approach: Projects will be steered to the locations where sage-grouse and other sage-steppe ecosystem species will benefit the most.

Landscape-scale: a large area encompassing an interacting mosaic of ecosystems and human systems that is characterized by a set of common management concerns; biologically, landscape selection describes habitat and anthropogenic characteristics that influence sage-grouse population distribution in Idaho.

Local-scale: encompasses the seasonal habitats of a sage-grouse population and the factors that affect grouse use of, and movement between, seasonal ranges, including the effects of anthropogenic disturbances.

Management Plan: a document that sets out what long-term stewardship, a remedial action plan,, management, monitoring and verification of performance standards for Credit Projects will be.

Mitigation Hierarchy (sequence): the preferentially tiered approach to mitigation that includes avoidance, minimization, and compensatory mitigation. Compensatory mitigation is only considered after all avoidance and minimization measures have been explored. Avoidance is the most desirable approach to preventing impacts to sage-grouse from development.

Mitigation Standard: a description of the extent to which mitigation will be applied in order to support achieving resource objectives (e.g., no net loss, net benefit).

No Net Loss: a mitigation standard by which impacts caused by the project are balanced or outweighed by measures taken to avoid and minimize the project's impacts and compensate any residual impacts so that no loss remains.

Performance Standards: observable or measurable administrative or ecological (physical, chemical, or biological) attributes that are used to determine if a compensatory mitigation project meets the agreed upon objectives.

Permittee-responsible Mitigation: a form of mitigation in which the permittee retains responsibility for ensuring that the required compensatory mitigation activities are completed and successful. Each permittee-responsible mitigation site is linked to the specific activity that required the offset. Permittee-responsible mitigation approved for a specific action is not transferable and cannot be used for other mitigation needs.

Permitting Agency: agencies that manage sage-grouse habitat within the scope of this document and ensure that mitigation functions according to current law, policy, and regulations.

Reasonably Related: to be demonstrably and rationally linked in terms of resource quantity, quality, and characteristics, as guided by the best available science.

Restoration: the reestablishment of ecologically important habitat and other ecosystem resource characteristics and functions at a site where they have ceased to exist or where they exist in a substantially degraded state.

Reversal: describes when compensatory mitigation does not persist for the full duration due to unplanned circumstances, whether through natural or man-made intentional or unintentional causes.

Self-monitoring: An evaluation of the site by the project proponent or Credit Generator using a checklist defined in the site-specific management plan.

Service Area: the geographic area within which impacts to a species' habitat can be offset at a particular habitat offset site as designated in an agreement or program; the geographic area within which habitat credit trading occurs.

Site Assessment: an evaluation of the site using a complete implementation of the HQT.

Site Protection Instrument: a written description of the legal arrangements including ownership, management, and enforcement of any restrictions that will be used to ensure the protection of a compensatory mitigation site, whether the mitigation is placed on federal or nonfederal lands. Instruments most commonly used for this purpose include conservation easements, deed restrictions, transfer of title, multiparty agreements, contractual documents such as conservation land use agreements, and regulatory mechanisms governing management of federal lands such as federal land management plans.

Site-scale: characteristics of the habitat that describe vegetation structure and composition that provide forage and cover for sage-grouse.

Split Estate: when surface rights and subsurface rights (such as the rights to develop minerals for a piece of land are owned by different parties

Stacking: generating multiple mitigation credit types on the same parcel of land.

Stewardship: maintenance of high quality habitat currently used by or in close proximity to habitat used by sage-grouse, or manipulation of existing habitat to increase specific habitat functionality.

Temporal loss: the loss of ecosystem services resulting from the time between impact and offset and the time between initiation of mitigation and maturation of anticipated ecological functions on a compensatory mitigation site.

Verification: an independent, expert check on the credit estimates provided by Credit Generators and other processes used to confirm that mitigation policies have been followed. Verification also provides a standardized process for reporting and monitoring.

Verifiers: consultants, conservation district staff, BLM staff or contractors, or other restoration professionals that conduct verifications.

AFFEINL	DIX B: MITIGATION POLICIES QUICK REFERENCE
MITIGATION	MITIGATION STANDARD & AUTHORITIES
AUTHORITY	 State and Permitting agencies retain authority The core policies and standards provide a consistent set of guidelines to which all compensatory mitigation projects should adhere
MITIGATION HIERARCHY	 Compensatory mitigation should only occur when disturbances are: proven unavoidable, minimization does not provide for complete direct or indirect impact avoidance, or avoidance and minimization cannot achieve the best possible conservation outcome for the species
MITIGATION STANDARD	 Mitigation should seek to achieve no net loss of habitat
PROGRAM AUTHORITY	 Arises from the Conservation Plan for the Greater Sage-grouse in Idaho (2006), which is a foundation for Executive Order 2015-04, Adopting Idaho's Sage-grouse Management Plan and the 2018 Management Alignment Alternative. Seeking authority from BLM & USFS Land Use Plans and MOA between the Idaho, BLM and USFS
ESTABLISHING DOCUMENTS	 Mitigation in sage-grouse habitat in Idaho plans to be incorporated into law through an upcoming Executive Order (EO) This EO is expected to be finalized during the fall of 2021.
PROGRAM SCOPE (IMPACTS)	 Focused on providing compensatory mitigation for large scale infrastructure human- caused or "anthropogenic" disturbance, defined in Section 1.4 – Impacts Addressed.
PROGRAM SCOPE (OFFSETS)	 Designed to provide offsets through habitat restoration (i.e., establishment, enhancement and restoration) or habitat preservation and stewardship
PROGRAM SCOPE (RESOURCES)	 The initial focus is sage-grouse These policies could potentially be adapted to deliver compensatory mitigation for other sagebrush obligate and associated species
PROGRAM SCOPE (GEOGRAPHY)	 The geographic scope encompasses the Sage-grouse Habitat Management Areas within the state of Idaho
REGULATORY PREDICTABILITY	 These policies aim to provide regulatory predictability to both Credit Buyers and Credit Generators
	STRATEGIC INVESTMENT
BEST AVAILABLE SCIENCE	 These policies are based on a science-based document: a Habitat Quantification Tool (HQT)
LANDSCAPE- SCALE APPROACH	 Mitigation funds will be steered to the locations where sage-grouse and other sage-steppe ecosystem species will benefit the most
SERVICE AREA	 Encompasses the Sage-grouse Habitat Management Areas (PHMA, IHMA, GHMA) within the sage-grouse Conservation Areas for the State of Idaho. The Service area prioritizes project by Conservation Areas. Debits can be in PHMA, IHMA and GHMA while credits should be focused in PHMA and IHMA and only placed in GHMA on a case by case basis after Technical and Policy Team Review.

APPENDIX B. MITICATION POLICIES OLICK REFERENCE

CREDIT SITE ELIGIBILITY	 To meet eligibility requirements, credit sites must be: Located within PHMA, IHMA or GHMA(GHMA only on a case by case basis through Technical and Policy Team approval) in the Service Area
	 Demonstrates no evidence of imminent threat or shows the ability to remove a threat.
VALID COMPENSATORY MITIGATION MEASURES	 These policies recognize restoration, enhancement, and preservation as valid compensatory mitigation measures
	Impacts to sage-grouse habitat must be offset by benefits to sage-grouse habitat.
RELATION	 Offsets should be selected and designed to achieve the greatest benefit for sage-grouse, not necessarily to replace functions lost by the impact.
	 If a permitting agency stipulates specific requirements as a condition of the permit, the mitigation provider may to accommodate the requirement or decline to accept mitigation responsibility
	CONSISTENT METRICS
MITIGATION CURRENCY	 These policies refers to any impact as a "debit" and any compensatory mitigation action as a "credit"
	 Impacts (debits) and benefits (credits) are measured in functional acres
USE OF THE HQT	 The HQT is used to calculate credits and debits
	 For credit projects, the HQT is used during the project to substantiate credit releases, and monitor effectiveness
	 For debit projects, the HQT may be used as necessary to determine if impacts are increased or reduced
VALID WINDOW FOR HQT RESULTS	 Pre-project HQT data for credit and debit projects are valid for up to 5 years provided the habitat function is believed to be similar to the previous assessments
	 The permitting agency in coordination with the State may require re-application of the HQT at their discretion
HQT VERSION CONTROL	 The current version of the HQT, or previous version within 90 days of releasing a new version of the HQT, must be used to calculate credits and debits, and the same version of the HQT and Manual must be applied.
CALCULATION OF DEBITS	 Debits generated by a debit project are calculated as the difference between baseline (i.e., pre-project) functional acres and post-project functional acres.
CALCULATION OF CREDITS	 Credits generated by a credit project are calculated as the sum of credits resulting from uplift due to habitat restoration and credits resulting from avoided loss due to preservation and amelioration of specific threats
	 Credits generated due to habitat restoration are equal to the difference between baseline (i.e. pre-project) functional acres and post-project functional acres and an Avoided Loss Factor. Credits generated due to preservation are equal to the product of the baseline (i.e. pre-
	project) functional acres and an Avoided Loss Factor.
FULL-COST ACCOUNTING	ADDITIONALITY Funding and financial assurances should be sufficient to ensure with a high degree of certainty that expected outcomes will be produced and maintained.

CREDITS	 Preservation is a valid and creditable action.
RESULTING FROM PRESERVATION	 Calculating credits resulting from preservation requires the use of the Avoided Loss Factor. The Avoided Loss Factor is based on an analysis of the underlying rate of loss to sage-grouse habitat functionality due to threats from development or habitat degradation within the local area of the project and the extent to which these threats are abated by the mitigation project. The credit project must either (1) currently be located in high-quality habitat as measured by the local-scale component of the HQT or (2) must include habitat restoration that will,
	with a high degree of certainty, result in high quality habitat for sage-grouse at the site scale when surrounded by high-quality habitat at the local scale as measured by the HQT
CREDITS RESULTING FROM INDIRECT	 Habitat indirectly benefited by removal of anthropogenic disturbance may receive credits, provided:
BENEFITS	 Only credits due to habitat restoration (uplift) are awarded
	The term of the credits cannot exceed 50 years
	The risk of loss is appropriately accounted for
CREDITS ON PUBLIC LANDS	 Credit Generators must demonstrate that the proposed credit project will create additional benefit above and beyond what would be achieved under the existing land designation or planned and funded conservation actions
PARTNERING WITH FEDERAL PROGRAMS	 Credits generated on private lands that are currently or previously participating in a federal funding program may receive credits in proportion to the additional benefit provided by additional compensatory mitigation measures
	DEMONSTRATING EFFECTIVENESS & DURABILITY
CREDIT DURABILITY	 Credit projects must be durable, meaning the project proponent should minimize the risk that competing land uses or other factors could cause credits on a particular credit site to become invalidated within the contract period. (i.e. conservation easements, project placement, etc.)
CREDIT PROJECT	 Complete credit project documentation includes the following elements:
DOCUMENTATION	Credit Generation Agreement (e.g., Participant Contract)
	 Management Plan
	 Monitoring & Verification Plan
	 Proof of any site protection instrument
CREDIT SITE	
PROTECTION	 Can include deed restrictions, transfers of title, multiparty agreements, contractual documents such as conservation land use agreements, regulatory mechanisms, and others
	 Where possible, a site protection instrument should designate an appropriate third party the right and resources to enforce site protections
PERFORMANCE STANDARDS	 Every credit site must have an agreed-upon set of measurable performance standards that need to be met at specific time intervals
	Performance standards can include both administrative and ecological benchmarks
VERIFICATION, ASSESSMENT & MONITORING	 Self-monitoring should be conducted annually by Credit Generators these reports are sent to the permitting agency Verification is conducted by the permitting agency to ensure performance standards of the
	site are being met and confirm compliance with project documentation
	 Site assessment is required prior to the release of any portion of the anticipated credits generated from projects, this will be outlined in the permit

SITE ASSESSMENT, VERIFICATION & SELF-	 For credit or debit projects, site assessments may be carried out by the project proponent, Credit Generator or permitting agency.
MONITORING RESPONSIBILITIES	The permitting agency is responsible for verification of debit and credit sites.
DEBIT VERIFICATION SCHEDULE	 Debit verification must take place prior to final approval by the permitting agency of any impacts to sage-grouse.
CREDIT VERIFICATION SCHEDULE	 Credit verification is conducted: To determine baseline conditions To substantiate when performance measures are met
HABITAT STEWARDSHIP OF CREDIT SITES	 Credit Generators are responsible for conducting ongoing management and monitoring of habitat conditions on-site and demonstrating progress toward meeting the performance standards
	DURATION & TIMELINESS OF OFFSETS
TIMELINESS	 Compensatory mitigation actions should achieve targeted biological conditions in a timeframe commensurate and proportional with the biological impacts to be offset Sage-grouse mitigation in Idaho should be geared to develop credit projects in advance of
	impacts
DEBIT PROJECT REHABILITATION	 The permitting authority is responsible for ensuring impacts cease and are rehabilitated according to permit stipulations
	 For perpetual impacts or impacts that will not be rehabilitated to pre-project (i.e., baseline) condition, the permitting authority should require the permittee to acquire permanent credits commensurate with the permanent impact
MATCHING THE DURATION OF CREDITS & DEBITS	 The number of released credits must always be at least equal to the number of approved debits
	RISK & UNCERTAINTY
CREDIT PROJECT SELECTION & DESIGN	Credit projects should be selected and designed to reduce risk and uncertainty
NO IMMINENT THREAT	 Credit Projects must be able to demonstrate no evidence of an imminent threat of direct or indirect disturbance by land uses that would cause the habitat function of the total credit site to be less than the minimum performance standards; credit projects will be required to disclose all known leases, water rights, and other entitlements that could influence the risk of unintentional reversal
	 Recently acquired subsurface rights, development plans (e.g. a building permit recently submitted or National Environmental Policy Act (NEPA) documents currently under development), or development designations (e.g. renewable energy zone or transmission corridor) would constitute some instances the would be proof of imminent threat Grazing and risk of wildfire are not considered imminent threats
CREDIT REVERSALS	 Unintentional reversals include force majeure, competing on-site land use outside of the Credit Generator's control, and competing adjacent land use Intentional Payarsals include not implementing management activities to achieve babitat
	 Intentional Reversals include not implementing management activities to achieve habitat quality as defined in the Management Plan or intentional degradation to serve a competing on-site use
	TRACKING & TRANSPARENCY
REPORTING	 Project and program reports should be made available to the public, while redacting or withholding sensitive or confidential information, to the extent possible

RESPONSIBLE PARTIES	Credit Generators are responsible for project-level performance standards
COOPERATORS	 Cooperators should be consulted to inform priorities and reach out to landowners to locate credit projects