

State of Nevada

Conservation Credit System Manual

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Version 1.5

The Nevada Conservation Credit System is administered by Sagebrush Ecosystem Technical Team of the Division of State Lands' Sagebrush Ecosystem Program within the State Department of Conservation and Natural Resources.



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The consulting team was led by Environmental Incentives, LLC and included Ecometrix Solutions Group and Environmental Defense Fund.

The Nevada Conservation Credit System (**CCS**) incorporates design, organization, and content from documents developed by Environmental Incentives, LLC, Willamette Partnership, and Environmental Defense Fund, among others. In particular, the Nevada ~~Conservation Credit System~~ **CCS** operations were adapted from the Colorado Habitat Exchange Manual Version 0.95. Thus, in accordance with the Open Content License from that document: This content was created in part through the adaptation of

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The ~~Credit System~~ **CCS** has been developed with an eye toward transparency and easy extension to address multiple environmental issues across geographic regions. As such, permission to use, copy, modify and distribute this publication and its referenced documents for any purpose and without fee is hereby granted, provided that the following acknowledgement notice appears in all copies or modified versions: "This content was created in part through the adaptation of procedures and publications developed by Environmental Incentives, LLC, Environmental Defense Fund, and Willamette Partnership, but is not the responsibility or property of any one of these entities."

Commented [EM1]: Conservation Credit System was found many times, changes have been made to abbreviate the term.

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IMPLEMENTATION TIMELINE & STATUS

In October 2014, the Nevada Conservation Credit System ([Credit System CCS](#)) opened for *credit project* enrollment and development. The [Credit System CCS Administrator](#) – the Nevada Sagebrush Ecosystem Technical Team - began working with landowners to validate potential credit sites to determine if they are eligible to produce credits and estimating the expected credits generated by the proposed projects using the Habitat Quantification Tool (HQT) and site-specific *Management Plans*.

In 2015, the [Credit System CCS](#) completed a pilot credit project and evaluated several credit and *debit projects* to estimate credits and *credit obligations*, respectively. In addition, the [Credit System CCS](#)'s policies and technical requirements were updated systematically through the formal, annual adaptive *management process* defined in this Manual. The process culminated with the *Oversight Committee* – Nevada Sagebrush Ecosystem Council (SEC) – adopting several improvement recommendations, which were based on the SETT's experience evaluating potential credit and debit projects, at the SEC meeting ~~on December 10,~~ [in late 2015](#).

The Nevada Sagebrush Ecosystem Program (SEP) encourages landowners and other parties interested in developing credits to contact the Nevada Sagebrush Ecosystem Technical Team (SETT) to get started. Application fees are waived as of January 2016; however, application fees should be expected after the initial credit projects are completed in 2016. Potential [Project Proponents, Credit Developers and Credit Buyers](#) should contact the SETT to determine if application fees are required. Also, any changes to the [Credit System CCS](#) through the annual adaptive management process will only apply to new credit and debit projects, thus credits awarded and credit obligations fulfilled through the [Credit System CCS](#) will not be impacted by future updates to the [Credit System CCS](#).

The [Credit System CCS](#) can be used to meet regulatory requirements established by State of Nevada statute NRS Chapter 232.162, and are intended to fulfill *compensatory mitigation* requirements currently under development for anthropogenic disturbances to greater sage-grouse habitat on Bureau of Land Management (BLM) and U.S. Forest Service (USFS) lands in the State of Nevada. The [Credit System CCS](#) does not currently provide *participants* with federal regulatory assurances in the event that greater sage-grouse is listed as threatened or endangered under the Endangered Species Act (ESA); however, the State of Nevada requested that the U.S. Fish and Wildlife Service (USFWS) provide regulatory assurances in July 2015, and intends to work with USFWS to develop this agreement in 2016.

Commented [EM2]: Terminology relating to Credit buyers, developers, and debit projects have been updated throughout to refer to Project Proponent. Further definitions include Credit project proponent and Debit project proponent.

INTRODUCTION TO THIS MANUAL

The Nevada Conservation Credit System Manual (Credit System CCS Manual) provides the necessary materials and information for understanding and participating in the Nevada Conservation Credit System (Credit System CCS). The table below provides a summary of the contents of the Credit System CCS Manual. The Credit System CCS Administrator will use this document to guide Credit System CCS operations and policies over time. Landowners and other parties interested in generating credits, and any parties interested in purchasing credits through the Credit System CCS should refer specifically to guidance provided in *Section 2: Technical and Policy Considerations*, regarding specific technical and policy considerations that arise during the generation and *transfer* of credits to Credit Buyers and the determination of credit obligations for debit projects.

CREDIT SYSTEM CCS MANUAL CONTENTS

Section 1: Credit System CCS Overview Provides an overview of the objectives, scope and primary participants of the Credit System CCS.

Section 2: Policy & Technical Elements Summarizes the primary policy and technical requirements necessary to develop credits and *offset* credit obligations, and govern the Credit System CCS.

Defines the detailed steps, tools and timing to:

Section 3: Credit System CCS Operations

- Quantify *and verify* credits generated and credit obligations from individual project sites, including fulfilling ongoing *verification* requirements.
- Obtain credits and use them to mitigate debit projects (credit obligations), or define and report the effectiveness of *management actions* not used to offset impacts.
- Systematically evaluate new information, report results and improve the accuracy and efficiency of the Credit System CCS over time.

Appendix A: Glossary Defines key terms used throughout the Credit System CCS Manual.

Appendix B: Forms and Instructions Lists forms to be filled out by Credit System CCS participants and submitted to the Credit System CCS Administrator. Contact the Sagebrush Ecosystem Technical Team for form and guidance documents.

The first use of a term defined in the glossary in *Appendix A* is in italic font.

GREDIT-SYSTEMCCS TOOLS & DOCUMENTS

Several tools and documents are used to describe and operationalize the **Credit System CCS**. The primary tools and documents are summarized in Figure 1 and the most recent versions are available on the **Credit System CCS** website (sagebrushco.nv.gov/CCS/ConservationCreditSystem/<https://www.enviroaccounting.com/NVCreditSystem/Program/Home>) or through the Administrator.

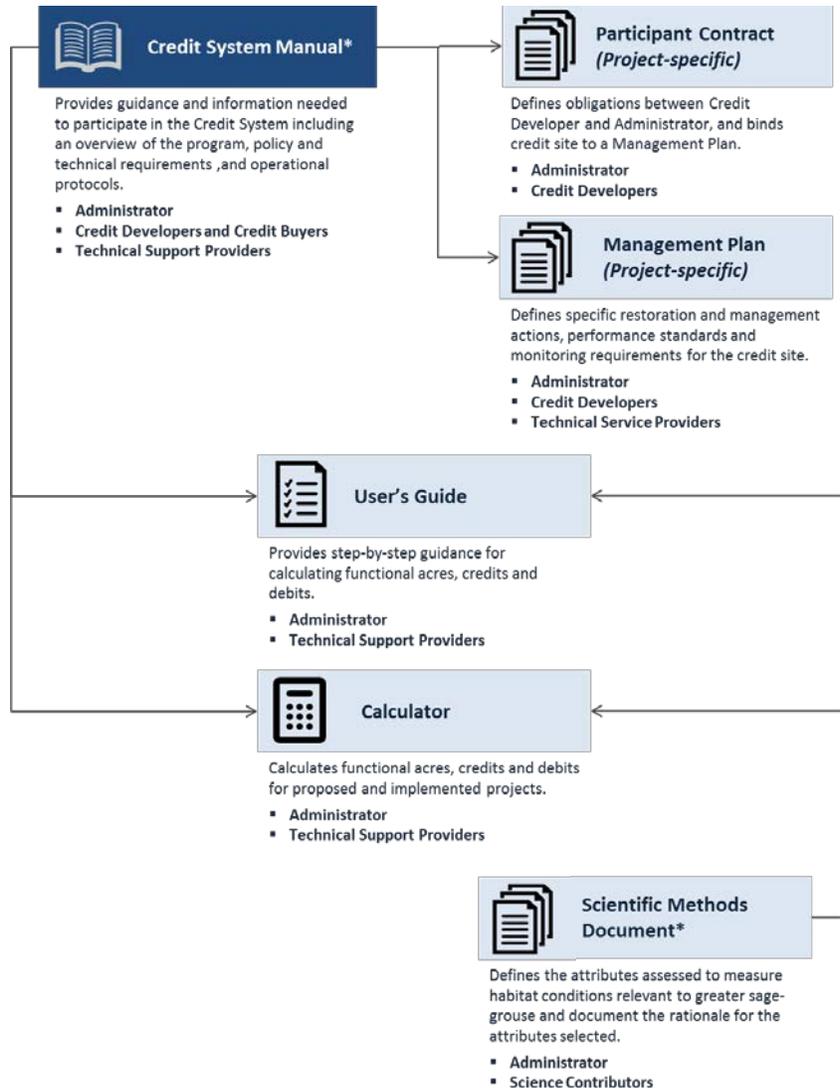


Figure 1: Primary Credit-SystemCCS tools and documents (documents with an * define the scope and form of the Credit SystemCCS and changes to these documents will be approved by the Oversight Committee as described in Step A1.1 in Section 3)

LIST OF ACRONYMS

ACEC Area of Critical Environmental Concern

AIM	BLM's Assessment, Inventory, and Monitoring data
BLM	Bureau of Land Management
BSU	Biologically Significant Units
CCA	Candidate Conservation Agreement
CCAA	Candidate Conservation Agreement with Assurances
<u>CCS</u>	<u>Nevada's Conservation Credit System</u>
ESA	Endangered Species Act
FOIA	Freedom of Information Act
HCP	Habitat Conservation Plan
HSI	Habitat Suitability Index
HQT	Habitat Quantification Tool
MOU	Memorandum of Understanding
MZ	Management Zone
NDOW	Nevada Department of Wildlife
NEPA	National Environmental Policy Act
PMU	Population Management Unit
ROW	Right-of-Way
SEC	Sagebrush Ecosystem Council
SEP	Sagebrush Ecosystem Program
SETT	Sagebrush Ecosystem Technical Team
SHA	Safe Harbor Agreement
SGMA	Sage-grouse Management Area
USDA	U.S. Department of Agriculture
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
WAFWA	Western Association of Fish and Wildlife Agencies

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SECTION 1: CREDIT SYSTEM CCS OVERVIEW

Greater sage-grouse (*Centrocercus urophasianus*) populations have declined significantly from historic numbers¹, in Nevada and throughout their current range (which includes 11 US states and 2 Canadian provinces). The decline of greater sage-grouse populations is largely attributable to the degradation, fragmentation and loss of habitat caused by wildfire, particularly in the western portion of the species range, and by the increased prevalence of invasive species and conifer encroachment. Additionally, anthropogenic disturbances resulting from infrastructure, mineral and energy development, improper grazing practices and other human activity contribute to habitat loss for the species².

In 2010, the U.S. Fish and Wildlife Service (USFWS) announced the finding that listing the greater sage-grouse as threatened or endangered under the Endangered Species Act (ESA) is warranted, but precluded by higher priority listing actions³. The USFWS reviewed the status of the greater-sage-grouse again in September 2015 and announced the finding that protection for the greater sage-grouse under ESA is no longer warranted and is withdrawing the species from the candidate species list. Unprecedented conservation partnership, investment and innovation across the western United States contributed to the 2015 not warranted finding, and one central component of Nevada’s proactive conservation strategy is the Nevada Conservation Credit System ([Credit System CCS](#)). The status of the greater sage-grouse will be reviewed as frequently as every five years, and a listing could significantly impact Nevada’s economy and way of life.

The SEP was established in 2013 and its purpose is to protect and enhance Nevada’s sagebrush ecosystems, culture and economy by promoting good stewardship, as stated in the Sagebrush Ecosystem Council mission statement. The [Credit System CCS](#) provides a mechanism to achieve sage-grouse conservation goals while preserving the integrity of the culture and economy of the State of Nevada.

The [Credit System CCS](#) is an innovative solution to greater sage-grouse habitat protection that ensures habitat impacts from anthropogenic disturbances are fully compensated by long-term enhancement and protection of habitat that result in a net benefit for the species, while allowing appropriate anthropogenic disturbances that are vital to the Nevada economy and the Nevada way of life. The [Credit System CCS](#) creates new incentives 1) to avoid and minimize impacts from anthropogenic disturbances to important species habitat, and 2) for private landowners and public land managers to preserve, enhance, and restore habitat, while reducing threats to important habitat for the species. The [Credit System CCS](#) is a performance-driven and market-based approach to species conservation that quantifies benefits from enhancement and protection of habitat (*credits*) and negative impacts to habitat from anthropogenic disturbances (*debits*), operationalizes market transactions, and reports net benefit from all transactions processed by the [Credit System CCS](#).

1.1 [CREDIT SYSTEM CCS](#) GOALS & PRINCIPLES

The goal of the [Credit System CCS](#) is for impacts from anthropogenic disturbances to be offset by enhancement and protection that results in a net benefit for greater sage-grouse habitat in the State of Nevada. In the future, the [Credit System CCS](#) may be expanded to support the *stewardship* and *restoration* of Nevada’s sagebrush ecosystem overall and other sagebrush obligate species, in addition to the greater sage-grouse.

¹ Garton, E.O., J.W. Connelly, J.S. Horne, C.A. Hagen, A. Moser, and M. Schroeder. 2011. Greater sage-grouse population dynamics and probability of persistence.

² U.S. Fish and Wildlife Service. 2013. Greater Sage-grouse (*Centrocercus urophasianus*) Conservation Objectives: Final Report. U.S. Fish and Wildlife Service, Denver, CO. February 2013.

³ “Endangered and Threatened Wildlife and Plants; 12-Month Findings for Petitions to List the Greater Sage-Grouse (*Centrocercus urophasianus*) as Threatened or Endangered,” 50 Federal Register 17. Volume 75, No. 55 (23 March 2010), pp. 13910-13911.

GUIDING PRINCIPLES

The [Credit System CCS](#) enables the stewardship and restoration of a resilient and resistant sagebrush ecosystem. The [Credit System CCS](#) works within the regulatory *mitigation* hierarchy, where anthropogenic disturbance impacts are first avoided, then minimized, and then the residual unavoidable impacts are mitigated using the [Credit System CCS](#). The following principles guide the development and operation of the [Credit System CCS](#) and are meant to provide clarity and guidance in cases where the [Credit System CCS](#) Manual is silent or unclear.

- Produce high quality conservation where it makes a significant ecological and biological difference.
- Enable decision-making based on the best available science.
- Create an efficient marketplace, where each transaction is anticipated to result in a net benefit for greater sage-grouse.
- Foster transparency, accountability, and credibility.
- Improve the effectiveness and efficiency of the [Credit System CCS](#) over time.

1.2 GEOGRAPHIC & PARTICIPANT SCOPE

The geographic scope of the [Credit System CCS](#) is consistent with the current Biologically Significant Unit (BSU) mapped area provided in Figure 2 as an example. The range of the Bi-State Distinct Population Segment of the greater sage-grouse in the State of Nevada is not included in this [Credit System CCS](#).

Proposed anthropogenic disturbances to habitat on State of Nevada, BLM, USFS, and local government lands within the BSUs require consultation with the SETT and the appropriate federal agency, as defined in the 2014 Nevada Greater Sage-Grouse Conservation Plan⁴. This consultative process will determine when residual unavoidable impacts require compensatory mitigation through the [Credit System CCS](#). Private landowners are not required to mitigate anthropogenic disturbances on their land; however, they are encouraged to voluntarily participate in the [Credit System CCS](#) by generating or purchasing credits. The [Credit System CCS](#) scope can be expanded in the future to support additional conservation needs and to correspond with revisions to habitat and management maps.

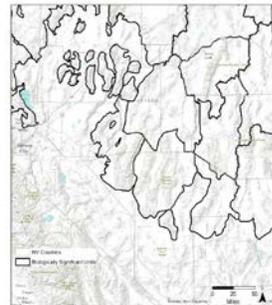


Figure 2: Biologically Significant Units (BSU) map, produced by NDOW

1.3 ORGANIZATIONAL STRUCTURE & ROLES

The organizational structure and interactions between the participants in the [Credit System CCS](#) are depicted in Figure 3 below, followed by a description of each participant. Additional detail regarding the governance structure and roles is provided in [Section 2.1.1: Program Governance](#).

Nevada Division of State Lands (NDSL): NDSL is a division of the Nevada Department of Conservation and Natural Resources, and holds the ultimate responsibility to ensure the [Credit System CCS](#) functions as designed.

⁴ http://sagebrushco.nv.gov/uploadedFiles/sagebrushconvgov/content/home/features/2014_ConsolidatedStatePlan.pdf

Oversight Committee: The Sagebrush Ecosystem Council (SEC) is a legislatively established council comprised of representatives from conservation interests, industry, ranching, and government which is responsible for overseeing the operations of the **Credit System CCS** and making policy decisions.

Administrator: The SETT is responsible for managing the day-to-day operations of the **Credit System CCS**; including facilitating and overseeing all credit generation and transaction activities. The SETT ensures consistent operations, issues credits, and reports results.

Resource Managers: Agencies that manage greater sage-grouse populations or habitat areas within the scope of the **Credit System CCS**, and ensure that the **Credit System CCS** functions according to current law, policy, and regulations.

Science Committee: Species and ecology scientists and experts, who inform science-related policy decisions and development of technical products and tools, like the HQT. The Science Committee makes recommendations to the Administrator, based on the best-available science regarding the greater sage-grouse and its habitat.

Verifiers: State, local and federal agency staff or private contractors **who quantify and verify who assess the accuracy of** credit and debit calculations **using the HQT**. Verifiers must be trained and certified by the Administrator and must meet qualifications established by the Oversight Committee.

Credit Developer/Credit Project Proponents: Landowners or managers, organizations, or agencies, that produce, register, or sell credits in the **Credit System CCS**. **Credit Developer/Credit Project Proponents** may also be facilitators, such as conservation banking companies or other types of **Aggregators**, who work with multiple landowners to implement credit projects, develop Management Plans, secure *financial assurances*, and register and sell credits.

Credit Buyer/Debit Project Proponents: Entities that purchase credits to meet credit obligations or to meet other conservation objectives.

Technical Support Providers (Not included in Figure 3): Individuals and entities with technical expertise in conservation planning and project design, who understand how to use the **Credit System CCS** tools and forms. Technical Support Providers may be hired by **Project Proponents/Credit Developers or Credit Buyers** to help design credit projects and estimate credit obligations, use the HQT to estimate credits and debits, and submit all required materials to the Administrator. There is no formal process to designate or certify a Technical Support Providers.

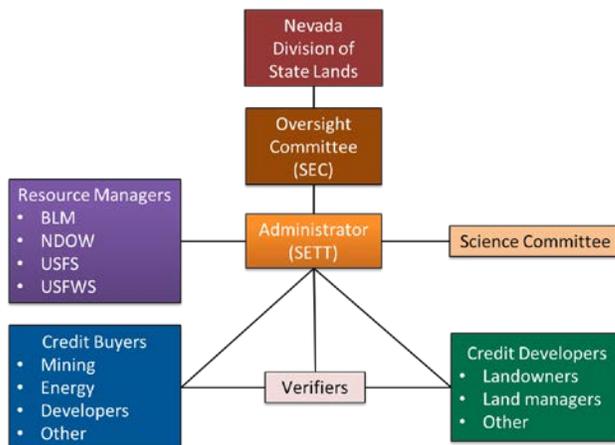


Figure 3: Operational structure of the Nevada Conservation Credit System

Commented [KP3]: Updated to coincide with regulation and other documents

1.4 HABITAT QUANTIFICATION & CREDIT SYSTEM CCS CURRENCY

Credits are the currency of the **Credit System CCS**. A credit consists of **verified** habitat value that **has been quantified through implementation of the HQT and is** made durable for the defined duration of the project through financial assurances and contract requirements to maintain habitat performance standards as defined in a site-specific Management Plan. Credits are primarily awarded for meeting performance standards, not for implementing conservation practices.

Credits are used to offset debits, which represent units of greater sage-grouse habitat value lost by anthropogenic disturbances. The credit obligation is the quantity of credits required to offset a debit project.

The **Credit System CCS** measures habitat value in units of *functional acres*. Function refers to the role of the habitat in providing life history requirements for greater sage-grouse, and includes the direct and indirect effects of anthropogenic disturbances. Function is expressed as a percent function in relation to fully-functioning habitat for greater sage-grouse. Functional acres are the product of percent function and acres within the relevant area assessed as illustrated in Figure 4.

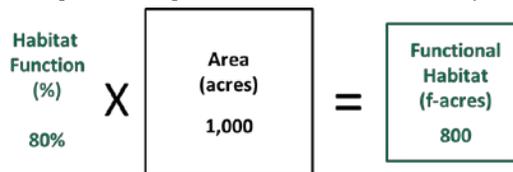


Figure 4: Illustration of functional acre concept

The **Credit System CCS** uses the HQT to quantify functional acres for both credit and debit sites. A summary of the HQT and credit and debit calculation is provided

below, and the concepts below are described in detail in the *HQT Scientific Methods Document*, and the following sections of this Manual: [Section 2.3.4: Calculating Credit Baseline Habitat Function](#), [Section 2.5.4: Calculating Debit Baseline Habitat](#) and [Section 2.2: Habitat Quantification and Credit and Debit Calculation](#).

Habitat Quantification Tool

The HQT quantifies *habitat function* for greater sage-grouse habitat in the State of Nevada. The HQT generates a percent function and a number of functional acres for each seasonal habitat type (breeding, late brood-rearing, and winter) within the area assessed.

The HQT accounts for habitat characteristics or attributes that influence sage-grouse habitat selection across multiple scales. These habitat characteristics were based on different orders of selection (Johnson 1980, Stiver et al. 2010) that represent four spatial scales at which habitat attributes influence where greater sage-grouse reside and obtain resources necessary for survival and reproduction⁵. The HQT assessed habitat quality at four orders.

Key Terms

Credit: A quantifiable unit of a greater sage-grouse habitat conservation value measured as the difference between credit baseline functional acres and post-project functional acres multiplied by a mitigation ratio, and secured by contract requirements, a project-specific Management Plan and financial assurances.

Credit Obligation: Quantity of credits that must be acquired to offset debits generated by a debit project.

Debit: A quantifiable unit of loss to greater sage-grouse habitat value from an impact measured as the difference between debit baseline functional acres and post-project functional acres multiplied by a mitigation ratio.

Habitat Function: The ability for habitat to provide life history requirements for greater sage-grouse considering needs across multiple spatial scales. Function is expressed as a percentage in relation to fully functioning habitat for greater sage-grouse.

⁵ While the term ‘selection’ may be interpreted as relating to individual bird behavior, in this context the term is applied broadly to describe the four geographic scales at which sage-grouse occur, are organized into populations and use habitat (per Johnson 1980,

Range-wide Scale (1st order): The range considered by the [Credit System CCS](#) is the geographic range of the sage-grouse population in Nevada.

Landscape Scale (2nd order): Landscape selection is based on the availability of seasonal habitats needed to support a population or subpopulation.

Local Scale (3rd order): Local selection is based on suitability of the habitat within their home range and the effects of anthropogenic disturbances.

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

See the *HQT Scientific Methods Document* for additional information on the attributes measured at each scale (order), and the methods used to measure those attributes.

Credits, Debits and Credits Obligations

Credits and debits represent the difference between baseline functional acres and post-project functional acres, multiplied by a mitigation ratio that incorporates biologically significant factors that are not captured through the HQT. Figure 5 illustrates how baseline is subtracted from the post-project habitat value to determine the functional acres above baseline for a credit project. Figure 6 illustrates how the functional acres above baseline are multiplied by a mitigation ratio to determine the number of credits generated by the credit site. Debits are calculated in a similar way; however the post-project functional acres are subtracted from the baseline functional acres to determine the loss in habitat value.



Figure 5: Illustration of functional acres above baseline for a credit project

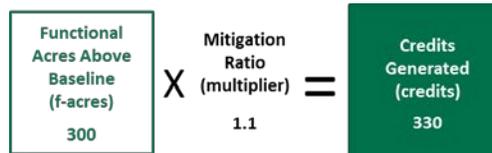


Figure 6: Illustration of the credits generated from a credit project

The HQT generates functional acre values for each seasonal habitat type (breeding, late brood-rearing and winter), and unique mitigation ratios are also generated for each habitat type. The change in habitat value for each seasonal habitat is tracked and reported by the [Credit System CCS when requested](#); however only the most valuable habitat type is used to determine the credits or debits generated from the site. Guidance for determining the mitigation ratio for each seasonal habitat type is provided in [Section 2.2.2: Mitigation and Proximity Ratios](#), and the calculation to determine the seasonal habitat type of greatest value is illustrated in [Section 2.2.3: Credits and Debit Calculation](#).

The amount of credits required to offset a debit project, the credit obligation, is the number of debits generated by the project adjusted by a proximity ratio, determined by the proximity between the debit site and the offsetting credit site. Guidance for determining the proximity ratio and the credit obligation for a debit project is provided in [Section 2.2.2: Mitigation and Proximity Ratios](#).

Connelly et al 2003, Stiver et al 2010). These four scales also correspond to scales at which sage-grouse policy and management are typically implemented (Stiver et al. 2010). Throughout this document, orders of selection will be identified by their descriptive terms (e.g., site scale, local scale, landscape scale).

1.5 CREDIT SYSTEM CCS OPERATIONS OVERVIEW

This section provides an overview of the steps used to generate and transfer credits between accounts for credit and debit projects, and for the Administrator to manage the program. These processes are defined in detail in [Section 3: Credit System CCS Operations](#) of this [Credit System CCS Manual](#). Specific tools, forms,



and guidance that are tailored to the [Credit System CCS](#) are included in [Appendix B](#).

The steps for generating and transacting credits are depicted in Figure 7, above. Blue chevrons signify the steps undertaken to generate credits, green chevrons represent the steps to buy credits to offset credit

Figure 7: Overview of the process steps to generate and purchase credits

obligation or for conservation purposes, and the orange Track and Transfer connector represents the steps and platform within which transactions occur.

GENERATING CREDITS

The following steps outline the process to generate, ~~verify-quantify~~, and register credits from a credit project under the [Credit System CCS](#).

1. **Select & Validate Site:** [Credit Developer Credit Project Proponent](#)s may select any project site on private or public land that provides ~~verified-confirmed~~ benefit to greater sage-grouse habitat, as determined by the [Credit System CCS](#)'s *credit site eligibility* requirements. The [Credit Developer Credit Project Proponent](#) completes a Validation Checklist to determine whether eligibility requirements are met and submits to the Administrator for approval or rejection and commentary. This stage provides a screen to minimize investment and cost to participants for sites that may not be eligible to generate credits.
2. **Implement & Calculate-Estimate Credit:** [Credit Developer Credit Project Proponent](#)s design the project, ~~quantify-estimate~~ the expected number of credits using the HQT, implement conservation practices, and refine ~~calculations-estimates~~ based on *conditions* on-the-ground.
3. **Verify-Assess Conditions to Quantify Credits:** All projects undergo ~~third-party verification~~ HQT quantification through ~~certified third-party Verifiers~~ to ~~ensure confirm that~~ protocols ~~were~~ *are* followed correctly and ~~projected~~-credits are appropriately calculated, according to actual on-the-ground conditions.
4. **Register & Issue:** Once ~~credits from~~ a project ~~has-have~~ been ~~verified~~*quantified*, supporting documentation is submitted to the Administrator where it is reviewed for completeness before credits are registered and issued to the [Credit Developer Credit Project Proponent](#)'s account on the [Credit System CCS](#) Registry. Upon issuance, credits are given a unique serial number so they can be tracked over time.
5. **Track & Transfer:** Issued credits are tracked by the Administrator using the [Credit System CCS](#) Registry and are either transferred to a [Credit Buyer Debit Project Proponent](#)'s account or held in other accounts. After transfer, the [Credit Developer Credit Project Proponent](#) is responsible for meeting the *monitoring*, reporting and verification requirements of each project for the life of the project (described in [Step D3 in Section 3](#)). [Credit Developer Credit Project Proponent](#)s annually confirm that *performance standards* are met and additional *credit releases* are triggered, where applicable.

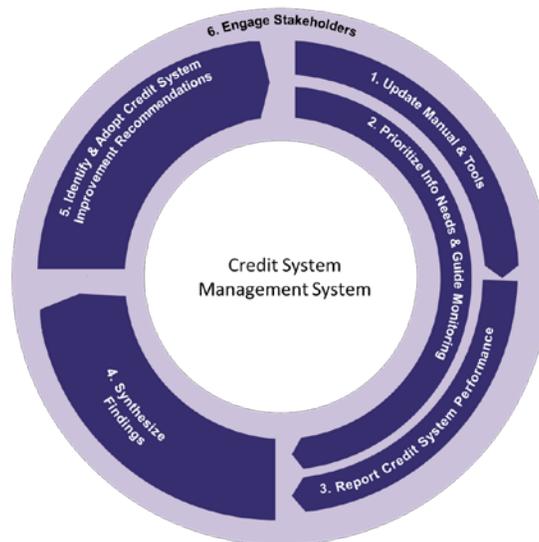
ACQUIRING CREDITS

The following steps outline the process to purchase credits under the **Credit System CCS**.

1. **Indicate Initial Interest:** **Credit Buyer/Debit Project Proponent**s become aware of the opportunity or requirement to participate in the **Credit System CCS** and contact the Administrator to provide basic information. Additional assistance and technical support is available, if desired.
2. **Determine Credit Need:** **Credit Buyer/Debit Project Proponent**s determine the duration and amount of credit needed to best meet their needs. If fulfilling a regulatory offset, **Credit Buyer/Debit Project Proponent**s determine credit amount needed by estimating and **verifying calculating** debit baseline and post-project conditions of the debit site in accordance with the relevant regulatory instrument and the HQT, and the geographic location of credit offsets.
3. **Acquire Credits:** **Credit Buyer/Debit Project Proponent**s contact the Administrator and confirm needed credit quantities. The price, terms and conditions are all set by the **Credit Buyer/Debit Project Proponent** and **Credit Developer/Credit Project Proponent**, or Administrator. The Administrator provides notice when credits have been transferred between accounts.
4. **Track & Transfer:** Credits are tracked using unique serial numbers that identify the source of each credit, the HQT version used to estimate credits, and the current owner. Once credits are transferred to a **Credit Buyer/Debit Project Proponent**'s account, the **Credit Buyer/Debit Project Proponent** can use that information for internal and external reporting.

MANAGING THE CREDIT SYSTEM CCS

The **Credit System CCS** is managed by an Administrator, using a transparent and inclusive management process to improve the efficiency and effectiveness of the **Credit System CCS** over time. The Oversight Committee acts as a board of directors for the **Credit System CCS**, and is responsible for adopting any changes made to the **Credit System CCS** through a defined management process. This process follows the steps depicted in Figure 8.



1. **Update Manual & Tools:** Administrator updates this **Credit System CCS** Manual, as well as tools, forms, and related guidance to ensure practical experience and new scientific information result in increased efficiency and effectiveness.
2. **Prioritize Information Needs & Guide Monitoring:** In coordination with the Science Committee and federal land management agencies, the Administrator identifies and prioritizes research and monitoring needs, coordinates funding efforts, and oversees monitoring and research.
3. **Report Credit System CCS Performance:** Administrator develops the Annual Performance Report to summarize credit awards, debits and habitat improvements achieved. Routine reporting of accomplishments is essential to ensure transparency and drive accountability.

4. **Synthesize Findings:** Administrator synthesizes relevant research, monitoring and operational findings to inform [Credit System CCS](#) improvements. Synthesizing findings into information that is directly related to the operations of the [Credit System CCS](#) is essential to inform management decisions. Incorporating the best available science and other new information into the program and HQT ensures the calculation of credits and debits is accurate, improves project selection and design decisions, and improves accountability.
5. **Identify & Adopt [Credit System CCS](#) Improvement Recommendations:** Administrator develops operational and technical improvement recommendations which are reviewed and acted upon by the Oversight Committee to ensure the [Credit System CCS](#) continues to motivate effective actions over time. Creating and transparently adopting clear recommendations to improve the [Credit System CCS](#) is the most critical step in the annual [Credit System CCS](#) management process. The transparency of this adjustment process enables [Project Proponents](#), [Credit Developers](#), [Credit Buyers](#) and other stakeholders to participate in the process and gain knowledge of the reasoning for adjustments as adopted.
6. **Engage Stakeholders:** Throughout the year, the Administrator engages stakeholders to keep them informed of progress and solicit input for how to improve the [Credit System CCS](#). Consistent stakeholder engagement is necessary to ensure the [Credit System CCS](#) operates efficiently, increases understanding, and facilitates accountability.

All of the steps described in Section 1.4 above are defined in detail in [Section 3: \[Credit System CCS Operations\]\(#\)](#). [Section 2: Policy and Technical Elements](#) defines the primary policy and technical requirements that enable consistent application of the [Credit System CCS](#) by all participants.

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SECTION 2: POLICY & TECHNICAL ELEMENTS

This section of the [Conservation Credit System Manual \(CCS Manual\)](#) defines specific policy and technical requirements and additional considerations for generating credits for sale, determining debits and credit obligations, and managing the Nevada Conservation Credit System ([Credit System CCS](#)). Table 1 below provides a summary of these requirements and considerations, including the primary audience and brief description.

Table 1: Summary of Policy & Technical Considerations

Credit System CCS Elements	Primary Audience	Element Description & Guidance
2.1 Program Governance		
2.1.1 Governance Roles	Administrator	<ul style="list-style-type: none"> The Administrator facilitates day-to-day operations, participant engagement, and program reporting and improvement
2.1.2 Implementation of State Policy		<ul style="list-style-type: none"> State of Nevada policy that established the Credit System CCS, and requires mitigation for anthropogenic disturbances which impact greater sage-grouse habitat to be determined by the Credit System CCS
2.1.3 Federal Regulatory Predictability		<ul style="list-style-type: none"> Credit System CCS is included in BLM and USFS land use plans, and is designed to accommodate other regulatory mechanisms in order to provide certainty to Project Proponents, Credit Buyers, and Credit Developers
2.1.4 Accounting System & Reporting		<ul style="list-style-type: none"> Rigorous accounting system tracks functional acres, credits and debits Annual Performance Report includes Credit System CCS performance and program improvements
2.1.5 Adaptive Management		<ul style="list-style-type: none"> Formal, structured programmatic adaptive management approach that deals with uncertainty and leverages management experience and research results
2.1.6 Participant Confidentiality		<ul style="list-style-type: none"> As a State-run program, certain information must be disclosed upon request by a member of the public; however, published information protects <i>participant confidentiality</i> by aggregating information and removing identification information
2.1.7 Reserve Account Management and Use of Financial Assurances		<ul style="list-style-type: none"> <i>Reserve account</i> serves as an insurance mechanism for the overall Credit System CCS by allowing the Administrator to temporarily cover invalidated credits until they are <i>remediated</i> or replaced Financial assurances are used to remediate unintentional <i>reversals</i>, or to replace credits lost due to unintentional and intentional reversals that cannot be remediated
2.2 Habitat Quantification and Credit and Debit Calculation		
2.2.1 Habitat Quantification Tool	Project Proponents & Credit Developers & Credit Buyers	<ul style="list-style-type: none"> Percent function and an amount of functional acres for each seasonal habitat type are generated for each <i>map unit</i> within a project boundary, including the area indirectly impacted by debit projects Field sampling must be collected during specific times of the year for breeding and late brood-rearing habitat
2.2.2 Mitigation & Proximity Ratios		<ul style="list-style-type: none"> Credit and debit ratios determined by management importance and meadow habitat affected Debits are adjusted by a proximity ratio, determined by the proximity between the debit site and offsetting credit site
2.2.3 Credit and Debit Calculation		<ul style="list-style-type: none"> Total credits and debits generated by a project represent the difference between baseline and post project functional acres multiplied by a mitigation ratio

2.3 Credit Additionality Provisions

2.3.1 Credit Service Area		<ul style="list-style-type: none"> All sites must be located within the mapped BSUs
2.3.2 Credit Project Area & Management Action Types		<ul style="list-style-type: none"> Project area may be made up of land controlled by the Credit DeveloperCredit Project Proponent, and/or outside of Credit DeveloperCredit Project Proponent’s control if indirectly benefited from removal of anthropogenic feature Credits can be generated from habitat stewardship or habitat restoration
2.3.3 Credit Site Eligibility		<ul style="list-style-type: none"> Site must be located in the <i>Service Area</i> <i>Participant Contract</i> with Administrator is required and must attest to ownership or use rights and past stewardship <i>Additionality</i> must be demonstrated and post-project habitat functionality must meet minimum habitat function requirements No evidence of an imminent threat of direct or indirect disturbance Necessary financial assurances must be complete Credit DeveloperCredit Project Proponent must attest to the accuracy of the information
2.3.4 Calculating Credit Baseline Habitat Function	<p>Credit DeveloperCredit Project Proponents</p>	<ul style="list-style-type: none"> For land controlled by Credit DeveloperCredit Project Proponent: local-scale, pre-project habitat function combined with a site-scale, regional standard habitat function for each seasonal habitat type For land outside of Credit DeveloperCredit Project Proponent control: local-scale, pre-project habitat function combined with site-scale, pre-project habitat function using HSI as a proxy
2.3.5 Developing Credits on Public Lands and Other Land Designations		<ul style="list-style-type: none"> Additional benefit is required above and beyond what would have been achieved by planned and funded public <i>conservation actions</i>, and existing land designations
2.3.6 Partnering with Federal Programs on Private Lands		<ul style="list-style-type: none"> Additional benefit is required <ul style="list-style-type: none"> During Federal Contract: Allocation of credits proportionate to non-federal contribution Following Federal Contract: Full credit for long-term extensions or agreements following expiration of federal contract
2.3.7 Stacking Credit Types		<ul style="list-style-type: none"> Credits from other conservation programs can be generated on a Conservation Credit SystemCCS credit site if the credit site can demonstrate additional benefits based on specific conservation and management practices
2.3.8 Integration with CCA/CCAAs		<ul style="list-style-type: none"> Credits can be generated in combination with enrollment in CCA/CCAAs if they demonstrate additionality of specific conservation and management practices

2.4 Credit Durability Provisions

2.4.1 Credit Site Protection	<p>Credit DeveloperCredit Project Proponents</p>	<ul style="list-style-type: none"> Participant Contract with Administrator is required for all credit projects, as well as and accompanying Management Plan for projects containing land controlled by the Credit DeveloperCredit Project Proponent Additional site protection measures such as easements reduce reserve account contribution and thus increase generated credits available for sale
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2.4.2 Credit Project Duration		<ul style="list-style-type: none"> Minimum Stewardship projects have 30-year minimum term lengths, with possible terms lasting to perpetuity. Uplift projects allow terms less than 30 years and the ability to be prorated with 5-year term increments afterwards, up to in perpetuity
2.4.3 Reserve Account Contribution		<ul style="list-style-type: none"> Contribution amount determined by base contribution, probability of adverse impacts from wildfire, and probability of competing land uses
2.4.4 Credit Release		<ul style="list-style-type: none"> Stewardship Projects: One or more habitat function performance standards triggers credit releases Restoration Projects: Combination of one performance standard defined by management actions and multiple habitat performance standards triggers credit releases
2.4.5 Credit Site Project Quantification, Monitoring, Verification Qualitative Assessments, and Verification		<ul style="list-style-type: none"> Quantification Before initial credit release, monitoring, qualitative assessments including spot checks, and verification before increased credit releases if applicable and at 15 year increments every 5th year, and periodic spot checks
2.4.6 Financial Assurances		<ul style="list-style-type: none"> Financial instrument contains sufficient funds for management of credit project Financial penalty or instrument provides appropriate funds to disincentivize intentional reversals and replace invalidated credits
2.5 Credit Obligation Provisions and Credit Investment Strategies		
2.5.1 Debit Service Area		<ul style="list-style-type: none"> All sites must be located within the mapped BSUs
2.5.2 Debit Project Types		<ul style="list-style-type: none"> Anthropogenic disturbances to greater sage-grouse habitat on state and federal lands within the current BSUs
2.5.3 Mitigation Hierarchy and Permit Requirements		<ul style="list-style-type: none"> Credits are used to offset debits that occur when disturbances are proven unavoidable and minimization does not provide for complete direct or indirect impact avoidance Debit projects must fulfill regulatory requirements of relevant public agency permitting process
2.5.4 Debit Project Duration	<p>Credit Buyer Debit Project Proponents</p>	<ul style="list-style-type: none"> Time until verification confirms that habitat function impacted by a debit project returns to pre-project habitat function and an additional set period of time to allow greater sage-grouse to begin to use the site, up to in perpetuity, and can be different for different portions of a debit project
2.5.5 Calculating Debit Baseline Habitat Function		<ul style="list-style-type: none"> Local-scale, pre-project habitat function combined with site-scale, pre-project habitat function
2.5.6 Debit Site Project Quantification and Verification		<ul style="list-style-type: none"> Debits Quantification Before construction, verification at time when debits are reduced or end, and periodic spot checks
2.5.7 Credit Investment Strategies		<ul style="list-style-type: none"> Strategies include direct credit purchase, reverse auctions, requests for proposals, and selection from list of credit development opportunities

2.1 PROGRAM GOVERNANCE

This section describes the **Credit System CCS**'s governance, enforcement, accounting and adaptive management procedures pursuant to NRS 321.594, as well as other relevant state and federal policies and assurances. The Administrator is the primary audience of this section.

2.1.1 GOVERNANCE ROLES

The **Credit System CCS** uses a governance structure that includes an Oversight Committee, Administrator and Science Committee to ensure that the program is managed consistently and policy and technical requirements are improved over time without causing uncertainty for regulators or participants. Information regarding the key duties and responsibilities for each of these entities are provided below.

Oversight Committee

The SEC serves as the **Credit System CCS** Oversight Committee. State of Nevada statute NRS 232.162 established the SEC; it also directed the SEC to institute and oversee a program to mitigate damage to sagebrush ecosystems. Statute NRS 232.162 also defines the membership, duties, and other aspects of the SEC, including the oversight of any team within the Division of State Lands of the Department of Natural Resources and Conservation, which provides technical services concerning sagebrush ecosystems. The SEC contains nine voting members representing specific constituencies that are appointed by the Governor, and six ex-officio members representing specific State and Federal agencies.

The SEC is responsible for overseeing the operations of the **Credit System CCS**, making high-level **Credit System CCS** management decisions, and conducting other critical ongoing duties described in Table 2.

Table 2: Key Responsibilities of the Oversight Committee

Oversight Committee Key Responsibilities	
Ensure Program Performance	<ul style="list-style-type: none"> Pursues the memorandum of understanding (MOU) with BLM and potentially programmatic agreements with USFWS and other participating agencies; and participates in negotiations with USFWS and other participating agencies to amend the agreements as necessary. Oversees Administrator's implementation of the Credit System CCS policy and technical components. Evaluates annual reports from the Administrator that include assessment of the effectiveness of credit projects in relation to both species habitat and overall programmatic performance goals of the Credit System CCS and provide reports to USFWS, BLM and other participating agencies as necessary. Executes annual audit, or contract for the auditing of, the Administrator's finances and operations, and determine if corrective actions are needed to ensure finances and operations are sufficiently in order for the ongoing, consistent operations of the Credit System CCS.
Ensure Programmatic Adaptive Management	<ul style="list-style-type: none"> Considers and adopts Credit System CCS improvement recommendations provided by the Administrator and participants. Specifically approves any changes to the Credit System CCS Manual and HQT. Gains input from the Administrator and Science Committee on new scientific information to be incorporated into the Credit System CCS's tools and processes as necessary and at least annually. Evaluates and approves adaptive management actions.
Participant Oversight	<ul style="list-style-type: none"> Resolves disputes among Credit System CCS participants that cannot be resolved independently or in consultation with the Administrator.

Administrator

The SETT serves as the Administrator of the **Credit System CCS**. As Administrator, the SETT implements the **Credit System CCS**, making day-to-day management decisions based on the direction detailed in this **Credit System CCS** Manual and authority granted in the BLM MOU and programmatic agreements with USFWS and other agencies.

Table 3 outlines the key responsibilities of the SETT, and is aligned with the processes described in [Section 3: Credit System CCS Operations](#). The SETT will develop and maintain a comprehensive work plan to guide the allocation of resources, and define procedures to consistently and efficiently facilitate transactions.

Table 3: Key Responsibilities of the Administrator

Administrator Key Responsibilities

<p>Program Administration & Credit Accounting</p>	<ul style="list-style-type: none"> Manages day-to-day Credit System CCS operations. Manages all Credit System CCS tools, guidance and forms. Manages credit accounts and the complete ledger of all credits and debits. Manages accounting of reserve account credits.
<p>Credit Developer Credit Project Proponent & Credit Buyer Debit Project Proponent Engagement</p>	<ul style="list-style-type: none"> Responds to inquiries of interest from Project Proponents Credit Buyers and Credit Developers, connecting them to relevant resources as desired. Ensures any necessary outreach to Project Proponents Credit Developers and Credit Buyers occurs.
<p>Adaptive Management & Reporting</p>	<ul style="list-style-type: none"> Implements Credit System CCS adaptive management process. Compiles Improvement Recommendations throughout the year, develops the annual Synthesis of Findings, and develops the Annual Performance Report. Brings products developed through the adaptive management process to the Oversight Committee for consideration. Makes improvements to the Calculator, User’s Guide, Forms and Guidance Documents consistent with direction defined in the Manual and HQT. Informs Oversight Committee on operational changes so that the Oversight Committee can elect to review and provide alternative direction.
<p>Compliance & Enforcement</p>	<ul style="list-style-type: none"> Performs quality control review on information submitted by Verifiers and Credit System CCS participants. Ensures programmatic compliance of the Credit System CCS with relevant USFWS, BLM, Nevada Department of Wildlife (NDOW) and other relevant agency policies. Works with Credit Developer Credit Project Proponents to implement corrective actions through <i>remedial action plans</i> when appropriate in cases of intentional and unintentional reversals. Enforces contract compliance and any associated penalties in cases of intentional reversals.
<p>Financial & Contracting Support</p>	<ul style="list-style-type: none"> Oversees management of funds, contracts, and partnerships for monitoring. Confirms financial assurances are in place for credit projects. May facilitate credit auctions or Request for Proposals for Credit Buyers. May administer contract payments between Credit Buyers and Credit Developer Credit Project Proponents.
<p>Science & Technical Support</p>	<ul style="list-style-type: none"> Creates and gains input from the Science Committee on new scientific information to be incorporated into the Credit System CCS’s tools and processes. Defines questions to guide monitoring and research investments, and Science Committee input. Trains and certifies Verifiers. Evaluates results of any effectiveness monitoring established for credit and debit projects.

Science Committee

The Science Committee consists of species and ecology scientists and experts whose purpose is to inform the development and revision of HQTs for species and habitat included in the scope of the **Credit**

SystemCCS. The Sciences Committee contributes to prioritizing and defining monitoring efforts to improve HQTs and the **Credit SystemCCS**, and informing the conservation and species recovery objectives that influence and guide **Credit SystemCCS** design.

The Science Committee is composed of a minimum of four and a maximum of seven biologists, rangeland ecologists or other qualified scientists with recognized knowledge and expertise on the species and habitat. One position on the Science Committee will be held by the NDOW upland game staff specialist responsible for greater sage-grouse. The SETT appoints members of the Science Committee and members commit to serve two-year terms. Specific duties of the Science Committee include:

- Compile and analyze the latest and best-available science regarding the species and habitat, and make recommendations to the SETT regarding how that new information may be used to update the HQT through the **Credit SystemCCS** adaptive management process; and
- Assist the SETT with making changes to the HQT through the **Credit SystemCCS** adaptive management process.

2.1.2 IMPLEMENTATION OF STATE OF NEVADA POLICY

In 2012, under Governor Brian Sandoval, the 2012 Strategic Plan for Conservation of Greater Sage-Grouse in Nevada was developed and recommended the creation of Sagebrush Ecosystem Program, including the SEC and the SETT. The SEC was originally established under Executive Order 2012-19, on November 19, 2012, and later codified under State of Nevada statute NRS Chapter 232.162, which also directed the SEC to establish a crediting program for compensatory mitigation of sagebrush ecosystems⁶.

The **Credit SystemCCS** was developed to fulfill NRS Chapter 232.162 requirements and is included in the updated 2014 Nevada Greater Sage-Grouse Conservation Plan, which states mitigation requirements for anthropogenic disturbances that impact habitat will be determined by the **Credit SystemCCS**, as approved by the SEC on October 1, 2014.

2.1.3 FEDERAL REGULATORY PREDICTABILITY

The **Credit SystemCCS** is designed to accommodate different regulatory mechanisms to ensure that efforts taken to facilitate conservation of the greater sage-grouse are recognized achieve net benefit for the species, and increase regulatory certainty for **Project ProponentsCredit-Buyers and Credit-Developers**.

BLM Compensatory Mitigation

The **Credit SystemCCS** is included in the BLM and USFS land use plans as a tool for defining and fulfilling compensatory mitigation requirements for anthropogenic disturbances to greater sage-grouse habitat on BLM and USFS lands in the State of Nevada. The land use plans state that disturbances within the Service Area [on Nevada BLM and USFS lands] will trigger evaluations and consultation with the SETT. Credits are expected to be purchased to meet credit obligations established when disturbances are proven unavoidable and minimization does not provide for complete direct or indirect impact avoidance.⁷

The Sagebrush Ecosystem Program signed a MOU with BLM and USFS in April of 2016 to define roles and responsibilities for implementation of the **Credit SystemCCS** on BLM and USFS lands.

⁶ The establishment of the **Credit SystemCCS** by the Sagebrush Ecosystem Council is outlined in State statute (NRS 232.162 (7)(e)), and the administration of the Credit System by the Division of State Lands of the State Department of Conservation and Natural Resources is authorized in State statute (NRS 232.162).

⁷ US Fish and Wildlife Service. Greater Sage-Grouse Range-Wide Mitigation Framework Version 1.0. September 3, 2014. Page 6.

USFWS Pre-Listing and Endangered Species Act

The ~~Credit System CCS~~ is intended to be consistent with the Greater Sage-Grouse Range-Wide Mitigation Framework⁸ (Mitigation Framework), and as such, the ~~Credit System CCS~~ aims to provide regulatory assurances and thus increase certainty related to permitting and future species protections for ~~Project Proponents both Credit Buyers and Credit Developers~~.

The Sagebrush Ecosystem Program intends for credits generated prior to the listing decision to be considered prelisting mitigation credits and treated as measures to mitigate the impact of *incidental take*, should greater sage-grouse be listed. If an agreement with the U.S. FWS were to be adopted, it would signify that the ~~Credit System CCS~~ can be integrated with other regulatory mechanisms to provide incidental take protection assurances to ~~Project Proponents Credit Developers and Credit Buyers~~.

The ~~Credit System CCS~~ could be used in listing scenarios as follows:

- In the event of a threatened (not endangered) listing, USFWS may create a 4(d) rule that would exempt a number of activities from ESA restrictions. These would be activities that USFWS determines to minimize the impacts to listed species to the extent that additional federal protections are not required. If a 4(d) rule is issued, it may be possible for activities using mitigation from the ~~Credit System CCS~~, both credit and debit projects, to be exempt from take requirements. Note that a 4(d) rule could also include exemptions for some agricultural and ranching activities to reduce the burden on farmers and ranchers.
- In the event of either a threatened or endangered listing, and if the ~~Credit System CCS~~ is not included as an exemption in a 4(d) rule, take protection for ~~Credit Buyer Debit Project Proponents~~ may be secured using Incidental Take Permits or Certificates of Participation issued through individual or regional Habitat Conservation Plans (HCPs) created for greater sage-grouse in the State of Nevada, or permittee-responsible mitigation. Any of these regulatory take coverage mechanisms could use the ~~Credit System CCS~~ by specifying that the credit obligation for all debit projects will be determined and offset using the ~~Credit System CCS~~.
- In the event of either a threatened or endangered listing, and if the ~~Credit System CCS~~ is not included as an exemption in a 4(d) rule, take protection for ~~Credit Developer Credit Project Proponents~~ may be secured using additional types of regulatory mechanisms. More discussion on these regulatory mechanisms is needed and currently underway.

2.1.4 ADMINISTRATIVE TRANSACTION FEES

The Administrator collects application and transaction fees from ~~Project Proponents Credit Developers and Credit Buyers~~ in order to cover administrative costs incurred by the Administrator. Administrative costs range from the evaluating and awarding credits to credit projects to ~~verification quantification~~ of credit and debit projects ~~and verification~~ throughout their duration. The Administrator maintains and publishes the fee structure and amounts, and regularly reviews the fee structure and amounts through the ~~Credit System CCS~~ adaptive management process. Changes to the fee structure and amounts must be approved by the Oversight Committee.

⁸ US Fish and Wildlife Service. Greater Sage-Grouse Range-Wide Mitigation Framework Version 1.0. September 3, 2014. Page 5. http://www.fws.gov/greatersagegrouse/documents/Landowners/USFWS_GRSG%20RangeWide_Mitigation_Framework20140903.pdf

2.1.5 VERSION

Debit calculations and mitigation provisions for a debit project must be based on the current version(s) of the [Credit System CCS](#) Manual and HQT. Specifically, the Debit Disclosure Summary in the Debit Project Review Form must be submitted for final approval by the ~~administrator~~ [Administrator](#) using a) the most recent version of the [Credit System CCS](#) Manual and HQT posted on the [Credit System CCS](#) website on the date of submittal, or b) the previous version of the [Credit System CCS](#) Manual and HQT if the current version of the [Credit System CCS](#) Manual and HQT was posted less than 90 days prior to the date of submittal. In addition, the same version of the [Credit System CCS](#) Manual and HQT must be used by the project. If revisions to the Debit Disclosure Summary are required by the ~~administrator~~ [Administrator](#) upon their review, then the version of the [Credit System CCS](#) Manual and HQT used depends on the final submittal date of the Debit Disclosure Summary.

Credit calculations and additionality and durability provisions for a credit project must be based on the current version(s) of the [Credit System CCS](#) Manual and HQT. Specifically, the Management Plan with all information complete excluding Section 5.2 Funding & Financial Assurances must be submitted for final approval by the ~~administrator~~ [Administrator](#) using a) the most recent version of the [Credit System CCS](#) Manual and HQT posted on the [Credit System CCS](#) website on the date of submittal, or b) the previous version of the [Credit System CCS](#) Manual and HQT if the current version of the [Credit System CCS](#) Manual and HQT was posted less than 90 days prior to the date of submittal. In addition, the same version of the [Credit System CCS](#) Manual and HQT must be used by the project. If revisions to the Management Plan excluding Section 5.2 Funding & Financial Assurances are required by the SETT upon their review, then the version of the [Credit System CCS](#) Manual and HQT used depends on the final submittal date of the complete Management Plan excluding Section 5.2 Funding & Financial Assurances.

2.1.6 ACCOUNTING SYSTEM & REPORTING

The [Credit System CCS](#) employs a rigorous accounting system that operates on an annual cycle. Credits and debits are tracked according to [Credit System CCS](#) reporting and [quantification and verification](#) standards. See [Section 2.4.2 Credit Project Duration](#), [Section 2.4.5 Credit Site Quantification, Monitoring, Qualitative Assessments, and Verification](#), [Section 2.5.3 Debit Project Duration](#) and [Section 2.5.5 Debit Site Project Quantification and Verification](#) for more information on credit and debit project reporting and [quantification and verification](#) standards. The [Credit System CCS](#) accounting and reporting system uses the following key tools:

- **[Credit System CCS Registry](#):** Tracks functional acres, credits, debits, and other transactional information.
- **[Annual Performance Reports](#):** Use [Credit System CCS](#) Registry outputs and the [Credit System CCS](#) adaptive management process to report on the change in functional acres, and the number of credits and debits generated each year, along with other information needed by state and federal regulatory agencies.

Tracking & Accounting

The [Credit System CCS](#) tracks the functional acres impacted by anthropogenic disturbances as well as those enhanced and protected by credit projects. Each credit is tracked on the [Credit System CCS](#) Registry and related to the specific debit project it is used to offset, if applicable. This tracking facilitates annual reporting, ~~verifies~~ [confirms](#) the [Credit System CCS](#) always generates more credits than debits in any given year, and provides information necessary for effective adaptive management.

The [Credit System CCS](#) accounting structure will differentiate functional acres and credits that will be actively managed over the term of the credit project from those that are indirectly benefited from removal of certain anthropogenic features as part of a credit project. See [Section 2.3.2: Credit Project Area and Management Action Types](#) for more information on defining credit project areas.

The [Credit System CCS](#) accounting structure can also account for the functional acres impacted by natural disturbances, such as wildfire, and management actions that do not generate credits for offset. Tracking functional acres impacted by natural disturbances and management actions facilitates a complete understanding of the state of habitat for the greater sage-grouse and provides useful data for adaptive management of the [Credit System CCS](#) and other conservation strategies. The quantification of functional acres for calculating credits and debits is accomplished using the HQT, which uses vegetation characteristics collected in the field along with desktop analyses. Pre-natural disturbance vegetation characteristics would not be available and it would not be practical to collect post-natural disturbance vegetation characteristics for large natural disturbances, therefore a proxy assessment of vegetation characteristics would need to be used and there are options that would provide relatively accurate results. See [Section 2.2.1: Habitat Quantification Tool](#) for additional information on the HQT.

Annual Performance Reports

The Administrator will use the [Credit System CCS](#) Registry and adaptive management process to report annually on the performance of the [Credit System CCS](#). See [Section 3.3: Managing the Credit System CCS](#) for detailed information about the annual reporting process. Annual reports are expected to include the following information:

- Total functional acres lost by anthropogenic disturbances, and natural disturbances if tracked
- Total functional acres protected by credit projects, differentiating those actively managed and those indirectly benefited from removal of certain anthropogenic features, and management actions if tracked
- Total number of debit and credit projects statewide that are enrolled in the [Credit System CCS](#)
- Total debits and credits generated by enrolled projects, and by WAFWA Zone and PMU
- Total credits held in the reserve account
- A description of any credit reversals that occurred over the course of the previous year, including a brief summary of the method and status of replacing invalidated credits
- A description of anticipated improvements to be made to [Credit System CCS](#) operations identified through the adaptive management process

2.1.7 ADAPTIVE MANAGEMENT

The [Credit System CCS](#) uses a formal, structured adaptive management approach to dealing with uncertainty, using the experience of management and the results of research as an ongoing feedback loop for continuous improvement. The Oversight Committee and Administrator are responsible for implementing the annual adaptive management process with support from the Science Committee and other stakeholders, as described in [Section 3.3: Managing the Credit System CCS](#).

The annual adaptive management process focuses on improving the effectiveness of [Credit System CCS](#) Manual policy and technical elements, the HQT, and individual management actions used to generate credits by:

- Evaluating [Credit System CCS](#) performance data related to changes in functional acres and the volume of credits relative to debits in the [Credit System CCS](#) to improve the [Credit System CCS](#) Manual and HQT;
- Identifying priorities and conducting research and monitoring, including comparing project success to overall population dynamics; and
- Collecting input on the application and results of 1) the Manual policy and technical elements, and 2) HQT scoring from [Credit System CCS](#) participants and cooperating public agencies.

Each year, adaptive management findings are synthesized and improvement recommendations are produced by the Administrator, and published in the annual Findings & Recommendations Report.

Significant changes are approved by the Oversight Committee through a public meeting process. Any changes will only apply to new credit and debit projects, thus credits awarded and credit obligations fulfilled through the [Credit System CCS](#) will not be impacted by future updates to the [Credit System CCS](#).

2.1.8 PARTICIPANT CONFIDENTIALITY

Some [Credit Developer Credit Project Proponents](#) may be concerned about the [Credit System CCS](#) publicly disclosing personal information. However, it may also be necessary for federal and state agencies to evaluate individual actions in order to properly assess the effectiveness of the [Credit System CCS](#) in reducing threats and providing net benefit to the species. Furthermore, the [Credit System CCS](#) is run by the State of Nevada; therefore, certain information must be disclosed to the public in response to Freedom of Information Act (FOIA) requests.

The [Credit System CCS](#) will annually publish a Performance Report that describes overall [Credit System CCS](#) performance. This Performance Report will be provided to relevant federal and state agencies. To the maximum extent possible under federal, state, and local law, the [Credit System CCS](#) will protect against disclosure of personal and confidential information from participants by using a case by case review and determination. Additionally, upon entering with the [Credit System CCS](#), personal and confidential information will be posted to the Program's website for tracking of the Project's Progress through the [Credit System CCS](#). Personal and confidential information may include: names, contact information, general and legal description of the enrolled property, grazing practices, land use practices, commercial activities on the land, recreational activities on the land, site-specific species sightings, and site-specific species habitat condition. However, the use of personal and confidential information will be prefaced with a Release Form available upon entering the [Credit System CCS](#), where the [Project Proponent Credit Developer or Credit Buyer](#) will have a chance to determine the type of information disclosed.

Disclosure of Information

In the event that a request for information outside the scope of the initial Release Form is made to the Administrator that would result in the possible disclosure of personal or commercial confidential information, the [Project Proponent Credit Developer or Credit Buyer](#) will be notified of the request and provided with a Release Form. Additionally, the [Project Proponent Credit Developer or Credit Buyer](#) will be provided the opportunity to state in writing why a release of the requested information would constitute a clearly unwarranted invasion of privacy or cause substantial harm to their commercial interest. The USFWS will provide a notice when a FOIA request for records concerning the [Credit System CCS](#) is made, and allow the Administrator, [Credit Developer Credit Project Proponent](#) or [Credit Buyer Debit Project Proponent](#) to prepare a notification requesting that any confidential personal or commercial information be withheld.

2.1.9 RESERVE ACCOUNT MANAGEMENT AND USE OF FINANCIAL ASSURANCES

The [Credit System CCS](#) creates a reserve account of credits and requires credit projects to provide financial assurances so that the Administrator can ensure the [CCS Credit System](#) generates net benefit even if specific credit projects do not fulfill performance standards throughout the duration of each credit project. Credit projects that do not fulfill performance standards are considered credit reversals.

The reserve account is not a financial assurance method to hold a [Credit Developer Credit Project Proponent](#) financially responsible in the event of project failure. Rather, the reserve account includes [verified/confirmed](#), released credits that are providing greater sage-grouse benefits and have not used to offset debit projects. The reserve account serves as an insurance mechanism for the overall [Credit System CCS](#). Each credit transaction contributes a percentage of credits generated based on the probability of the credits being invalidated as described in [Section 2.4.3: Reserve Account Contribution](#).

Financial assurances are fiscal mechanisms used to ensure that funds are available for the implementation and long-term management of each credit project, including remedial actions in the event of unintentional reversals, and to promptly replace credits that have been sold but become invalidated due to intentional reversals. Financial assurances can consist of contract terms, such as financial penalties for intentional reversals, and financial instruments, such as long-term stewardship funds and contract surety bonds. See [Section 2.4.6: Financial Assurances](#) for additional information on financial assurance requirements and guidance.

Reserve Account Management

The Administrator manages the reserve account and uses credits in the reserve account to temporarily cover credits invalidated due to intentional or unintentional causes as described in this section. Credits in the reserve account are never used to offset debit projects. Credits withdrawn from the reserve account to temporarily cover invalidated credits are transferred back into the reserve account after the invalidated credits that they were withdrawn to temporarily cover are remediated or replaced using financial assurances associated to the invalidated credits. Term credits in the reserve account are permanently withdrawn from the reserve account when the term of the credits has expired.

The Administrator reviews the balance of the reserve credits at least annually. The Administrator at any time may propose adjustments to the required reserve account allocation to be approved by the Oversight Committee as part of the [Credit System CCS](#) adaptive management process. The Administrator can propose the required contributions be adjusted upward or downward as needed to account for insufficient or excessive amounts of reserve credits.

Use of Reserve Account and Financial Assurances

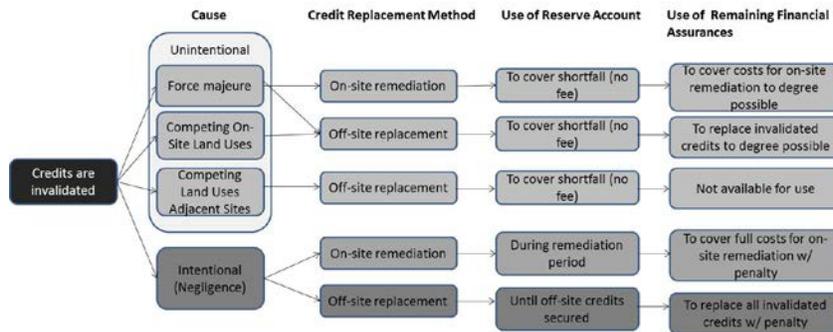


Figure 9: Credit invalidation replacement process

Depending on the specific cause and circumstances of a reversal, invalidated credits can be replaced using a combination of the reserve account and financial assurances, as illustrated in Figure 9 below.

Unintentional reversals

Force Majeure

When credits generated by a credit site are invalidated by an extraordinary event or circumstance beyond the control of the [Credit Developer/Credit Project Proponent](#), such as wildfire, the [Credit Developer/Credit Project Proponent](#) is not liable and thus the financial assurances secured for intentional reversals are not available to the Administrator to replace the invalidated credits. Instead, the Administrator withdraws credits from the reserve account to cover the invalidated credits at no cost to the [Credit Developer/Credit Project Proponent](#). In cases where the credit site can be fully or partially recovered within a reasonable amount of time and cost, the [Credit Developer/Credit Project Proponent](#) has the option to develop a remedial action plan that is approved by the Administrator. In this situation, financial instruments secured for long-term management and unintentional reversals may be used to pay for activities included

in the remedial action plan. See [Section 2.4.6: Financial Assurances](#) for additional information on financial assurance requirements. If only a portion of the credits are recovered following a *force majeure* event, then payments from financial instruments secured for long-term management and unintentional reversals are reduced according to the amount of credits actually being generated on the ground. The Administrator may use the remaining amount in the project site's financial instruments to purchase credits elsewhere. Any dedicated reserve account credits are returned to the reserve account if the invalidated credits are remediated, assuming all requirements of those reserve account credits are still being met.

In cases where the credit site cannot be recovered within a reasonable amount of time and cost, the [Credit Developer/Credit Project Proponent](#) has the option to cancel the contract without penalties, but retains the ability to re-enroll the site as a different project at a later time. If the contract is canceled, payments to the [Credit Developer/Credit Project Proponent](#) cease immediately and the Administrator uses the remaining amount in the project site's financial instrument for long-term management and unintentional reversals to purchase credits from a different credit site.

Competing On-site Land Uses

In the case of an unintentional reversal due to competing land uses on-site, such as *split estate* minerals development, the Administrator will withdraw credits from the reserve account to cover the invalidated credits at no additional cost to the [Credit Developer/Credit Project Proponent](#). Similar to the policies described for force majeure events, if the impact of the competing land use reduces credit generation on a credit site, payments are reduced according to the amount of credits actually being generated. The Administrator uses the remaining funds in the project site's financial instrument to purchase credits elsewhere to the extent feasible. If the impact of the competing land use results in the credit site not being able to generate credits as expected, the contract can be canceled without penalties. If the contract is canceled, payments to the [Credit Developer/Credit Project Proponent](#) cease immediately and the Administrator uses the remaining amount in the project site's financial instrument to purchase credits from a different credit site.

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 effect of competing land uses on sites adjacent to the enrolled credit project sites are determined using the anthropogenic disturbance curves defined in [Section 3.3.1: Cumulative Anthropogenic Disturbances in the HQT Scientific Methods Document](#). These occurrences are out of the direct control of the [Credit Developer/Credit Project Proponent](#). Therefore in cases of unintentional reversals due to competing land uses on adjacent sites, the Administrator will withdraw credits from the reserve account to cover the invalidated credits at no cost to the [Credit Developer/Credit Project Proponent](#). In these cases, the remaining financial assurances for the credit project site are not available to the Administrator to purchase replacement credits. The [Credit Developer/Credit Project Proponent](#) must continue to maintain habitat function at the project site-scale according to the performance requirements stated in the credit project's Management Plan.

Intentional Reversals

In the case of an intentional reversal, such as not implementing management activities to achieve habitat quality as defined in the Management Plan or intentional mineral development, all payments to the [Credit Developer/Credit Project Proponent](#) immediately cease. The [Credit Developer/Credit Project Proponent](#) and Administrator determine if a remedial action plan can be developed or if credits must be replaced off-site. The [Credit Developer/Credit Project Proponent](#) is responsible to the Administrator for the entire cost of purchasing replacement credits from a different credit site, any associated legal fees, and an additional 10% administrative fee (i.e. contract penalty). If there is a time lag between the intentional reversal and the recovery of the site, or a time lag between the intentional reversal and when the

Administrator secures new credit contracts, the Administrator will withdraw from the reserve account for a limited duration to prevent any gaps in coverage for sold credits. The credit withdrawal from the reserve account ceases as credits are acquired to cover the remainder of the contract.

2.1.10 RECOGNITION AND SUPPORT OF EXISTING GREATER SAGE-GROUSE CONSERVATION PROGRAMS

To the extent appropriate, the Administrator may work with the sponsors of existing greater sage-grouse conservation programs to make [Credit System CCS](#) tools and operations, such as the HQT, credit accounting and transfer protocols, [quantification and verification protocols](#) and credit investment strategies available to such programs. The terms under which the [Credit System CCS](#) will be available to such programs shall be set forth in agreements between the Administrator and the program sponsors.

2.2 HABITAT QUANTIFICATION AND CREDIT AND DEBIT CALCULATION

This section describes how to calculate [Credit System CCS](#) credits, debits and credit obligations, which are the amount of credits required to offset the debits generated by a debit project. The credit obligation is the number of debits generated by a debit project adjusted by a proximity ratio, determined by the proximity between the debit site and offsetting credit site. [Project Proponents, Credit Developers and Credit Buyers](#) are the primary audience of this section.

Credits and debits represent the functional acre difference between baseline functional acres and post-project functional acres, multiplied by a mitigation ratio that incorporates biologically significant factors that are not captured through the HQT. This section begins with an overview of the HQT, which is used to quantify functional acres for both credit and debit sites. The difference in baseline functional acres and post-project functional acres is the starting point for calculating credits and debits, and guidance for determining baseline functional acres is provided in [Section 2.3.4: Calculating Credit Baseline Habitat Function](#) and [Section 2.5.4: Calculating Debit Baseline Habitat Function](#) for credit and debit sites, respectively. Following the overview of the HQT, guidance is provided for determining the mitigation ratio for credit and debit sites, and the credit obligation for debit projects. Lastly, an example calculation of credits and debits beginning with baseline and post-project functional acres is provided.

The [Conservation Credit System CCS User's Guide \(User's Guide\)](#) describes the detailed steps necessary to calculate credits and credit obligations for credit and debit sites, respectively, for the Nevada [Conservation Credit System CCS](#).

2.2.1 HABITAT QUANTIFICATION TOOL

The HQT quantifies habitat function for greater sage-grouse habitat in the State of Nevada. Habitat function refers to the role of the habitat in providing life history requirements for greater sage-grouse, and includes the direct and indirect effects of anthropogenic disturbances. Habitat function is expressed as a percent function in relation to fully-functioning habitat for greater sage-grouse, and is multiplied by the area (acres) assessed to calculate functional acres associated to the area assessed.

HQT Framework for Quantifying Habitat Function

The HQT was developed to account for habitat characteristics or attributes which influence sage-grouse habitat selection across multiple scales. These habitat characteristics were based on different orders of selection (Johnson 1980, Stiver et al. 2010), which represent four spatial scales at which habitat attributes

influence where sage-grouse reside and obtain resources necessary for survival and reproduction⁹. The HQT assessed habitat quality at four orders.

Range-wide Scale (1st order): The range considered by the [Credit System CCS](#) is the geographic range of the sage-grouse population in Nevada.

Landscape Scale (2nd order): Landscape selection is based on the availability of seasonal habitats needed to support a population or subpopulation.

Local Scale (3rd order): Local selection is based on suitability of the habitat within their home range and the effects of anthropogenic disturbances.

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

See the *HQT Scientific Methods Document* for additional information on the attributes measured at each scale (order), and the methods used to measure those attributes.

Functional Acre Calculation

The HQT generates a percent function and a number of functional acres for each seasonal habitat type (breeding, late brood-rearing, and winter) for each *map unit* delineated within a project site. Map units are sub-divisions of the project area based on unique vegetation communities and vegetation structure. Map units are delineated based on variation in habitat attributes assessed by the HQT, such as sagebrush canopy cover, forb abundance and distance to sagebrush cover. Guidance for delineating map units within a credit or debit site is provided in the *HQT Scientific Methods Document*.

The HQT generates a local-scale habitat function score and site-scale habitat function scores for each seasonal habitat type. The product of the local-scale habitat function and site-scale habitat function scores for each seasonal habitat type determines overall habitat function for each seasonal habitat type for a map unit. The overall habitat function for each seasonal habitat type is multiplied by the acreage of the map unit to produce a functional acre value for each seasonal habitat type. Table 4 provides an example calculation of functional acres for each seasonal habitat type for a single map unit.

Table 4: Example calculation of functional acres for a single map unit

Seasonal Habitat Type	Local-Scale Habitat Function	Site-Scale Habitat Function	Overall Habitat Function	Acres	Functional Acre Values
Breeding	80%	60%	48%	500	240
Late Brood-Rearing	40%	0%	0%	500	0
Winter	65%	45%	29%	500	146

Application of the HQT

The [Credit System CCS](#) uses the functional acre difference between baseline functional acres and post-project functional acres for each seasonal habitat type as the starting point for calculating credits and debits for each map unit delineated within a project site, including the area indirectly benefitted by a credit project that includes removal of an anthropogenic feature and the area indirectly impacted by a

⁹ While the term 'selection' may be interpreted as relating to individual bird behavior, in this context the term is applied broadly to describe the four geographic scales at which sage-grouse occur, are organized into populations and use habitat (per Johnson 1980, Connelly et al 2003, Stiver et al 2010). These four scales also correspond to scales at which sage-grouse policy and management are typically implemented (Stiver et al. 2010). Throughout this document, orders of selection will be identified by their descriptive terms (e.g., site scale, local scale, landscape scale).

debit project. Guidance for determining baseline functional acres is provided in [Section 2.3.4: Calculating Credit Baseline Habitat Function](#) and [Section 2.5.4: Calculating Debit Baseline Habitat Function](#) for credit and debit sites, respectively.

The HQT is used throughout the life of a credit project to 1) ~~substantiate-quantify~~ the release of credits at the point that the project meets habitat function thresholds, and 2) verify that conditions are being maintained as expected over time. For debit projects, the HQT is used to determine pre-project functional acres before impacts occur, to determine post-project functional acres after impacts occur, and is used as necessary over time to determine if impacts are increased or reduced. Verification of credit and debit site conditions over time is conducted ~~using the verification protocol, which is as a streamlined follow-up~~ application of the HQT. ~~Pre-project~~Initial HQT ~~quantification~~ results for credit and debit projects can be used for up to 5 years ~~after a site has been verified~~ as long as the [Annual Management and Monitoring Reports have been submitted and suggest](#) habitat function is ~~believed to be~~ similar to the previous assessments ~~and with~~ no significant changes ~~have occurred~~ on or adjacent to the project site, ~~prior to the need for a five year qualitative assessment by the Administrator, described further below.~~

Field Data Collection Timing

Site-scale vegetation measurements required by the HQT must be collected during a specific period of the year ~~for measurements to~~ accurately and consistently ~~measure-quantify~~ or verify the function of a credit or debit project site. These vegetation measurements are primarily related to sagebrush, forbs and grasses. The forbs and grasses necessary to sustain greater sage-grouse differ in availability throughout the year. To ensure accurate and consistent quantification the habitat function of a project site, field work for the collection of forbs and grasses needs to occur during the peak of the vegetation growing season in northern Nevada.

Permissible Window

Vegetation sampling of sage-grouse habitat attributes will be conducted during the peak of the growing season. The peak of the growing season on northern Nevada rangeland generally occurs between **April 15th and June 30th**. These dates may vary slightly annually due to temperature and precipitation. The peak of the growing season varies between sites based upon elevation, latitude, and winter and spring precipitation. ~~Project Proponents, Credit Developers, Credit Buyers,~~ and Verifiers must take annual and site variations into account when approximating the peak of the growing season within the permissible window for a particular site. Some indicators of peak growing season can be described when the culms of cool season grasses have fully elongated and seed heads have emerged (not necessarily seed ripe) and the preponderance of forb species are between early bloom and seed set phonological stages. ~~Project Proponents, Credit Developers, and Credit Buyers~~ must collect forbs and grasses data during the permissible window in order for ~~functional-acre measurements~~ ~~measurements to be accurate and~~ ~~quantification and~~ verifications to be official and approved by the Administrator.

Date Confirmation

~~Project Proponents, Credit Developers, and Credit Buyers~~ may request written confirmation from the Administrator that their planned field work is scheduled within the permissible window in order in to ensure functional acre scores based on the field data collected will be accepted by the Administrator.

Timing of Grazing: Credit Projects

We recommend that credit project proponents avoid livestock grazing or haying during the field data collection window of April 15th – June 30th unless field data collection is complete for specific map units. If livestock grazing occurs prior to April 15th, or once green-up of perennial forbs and grasses has begun, we recommend a minimum 14-day recovery period prior to collecting field data.

Historical and current livestock grazing management operations will be included in the project's Management Plan, documented under Section 3.4 Conservation Issues Addressed-Livestock Management.

Timing of Grazing: Debit Projects

We recommend that debit project proponents work with permittees to avoid livestock grazing during the field data collection window of April 15th – June 30th unless field data collection is complete for specific map units within the allotment. If livestock grazing occurs prior to April 15th, or once green-up of perennial forbs and grasses has begun, we recommend a minimum 14-day recovery period prior to collecting field data.

Livestock grazing management operations occurring in the debit project area will be submitted to the SETT during the initial stage of the ~~verification~~-[HQT quantification or verification](#) processes. If the debit project proponent is unable to participate in a collaborative effort with the allotment permittee and/or land management agency to minimize grazing effects prior to data collection, then an adjustment to the credits based on ecological site descriptions or relevant data collected nearest to the project in similar habitats may be used.

Field Data Outside of Permissible Window for Planning Purposes

~~Project Proponents, Credit Developers and Credit Buyers~~ may collect field data outside the permissible window to estimate credit generation and credit obligations for **project planning purposes only**, such as to negotiate options contracts between ~~Credit Developer, Credit Project Proponents~~ and ~~Credit~~ Buyers. Credits will not be released for sale based on field data collected outside of the permissible window. Similarly, debit projects are not permitted to develop any area where field data has not been collected during the permissible window when it is needed to generate accurate quantification of habitat function. All credit and debit amounts must be finalized based on field data collected during the permissible window.

All preliminary estimates of habitat function collected outside the permissible window will be clearly indicated as such. These estimates should also include an indication of when field work will occur during the permissible window. ~~Project Proponents, Credit Developers and Credit Buyers~~ should make conservative estimates when using field data collected outside of the permissible window (e.g. underestimate credits, over-estimate debits). In particular, estimates for forbs, grasses and other attributes that are affected by specific growing seasons should be conservative in order to minimize risk in planning decisions and capital investments.

2.2.2 MITIGATION AND PROXIMITY RATIOS

A mitigation ratio is applied to the functional acre difference between baseline functional acres and post-project functional acres for each map unit within a credit or debit project respectively. See [Section 2.2.1: Habitat Quantification Tool](#) for additional information on calculating functional acres, and guidance for determining baseline functional acres is provided in [Section 2.3.4: Calculating Credit Baseline Habitat Function](#) and [Section 2.5.4: Calculating Debit Baseline Habitat Function](#) for credit and debit sites, respectively. The mitigation ratio incorporates biologically significant factors that are not incorporated into the quantification of functional acres using the HQT.

The mitigation ratio enables credits acquired to offset debits generated by debit projects to achieve net benefits for greater sage-grouse by ensuring the total functional acres of credit acquired are greater than the functional acres of debit. The mitigation ratio incentivizes avoidance of impacts, while encouraging enhancement and protection of habitat in high priority areas.

The mitigation ratio is defined for each map unit delineated within a credit or debit project, including the area indirectly impacted by a debit project, and is based on multiple factors described below. The mitigation ratio is applied to the difference between baseline functional acres and post-project functional acres associated to each map unit for both credit and debit projects, as illustrated in Figure 10. See [Section 2.3.4: Calculating Credit Baseline Habitat Function](#) and [Section 2.5.4: Calculating Debit Baseline Habitat Function](#) for determining baseline for credit and debit projects respectively.

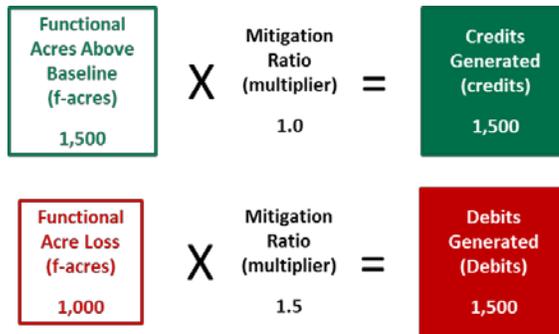


Figure 10: Illustration of calculation of debit and credits

The amount of credits required to offset a debit project, or the credit obligation, is the number of debits generated by the project adjusted by a proximity ratio, determined by the proximity between the debit site and offsetting credit site. The proximity ratio incentivizes credit sites used for mitigation to be in close proximity to debit sites.

Credit and Debit Mitigation Ratios

The **Credit System CCS** applies a mitigation ratio to credit and debit sites to incorporate 1) estimated space use by greater sage-grouse, and 2) meadow habitat impacted, negatively or positively.

Management Importance Factor

The management importance factor incorporates estimated space use by greater sage-grouse into the calculation of credits and debits. The management importance factor is determined by the Priority Habitat Management Area (PHMA), General Habitat Management Area (GHMA) or Other Habitat Management Area (OHMA) for which the credit or debit is located within, as defined by the Sagebrush Ecosystem Program’s Management Categories map depicted in Figure 11. The PHMA is the highest conservation priority and the OHMA is the lowest conservation priority under the management category importance factor. Table 5 and Table 6 below provide the management category importance factor values for debit and credit sites, respectively.

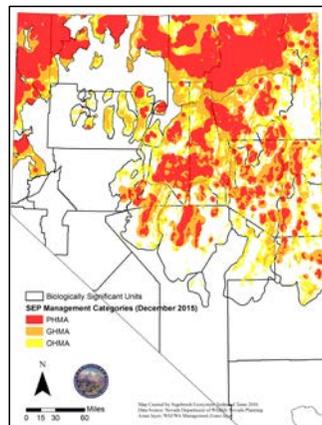


Figure 11: Sagebrush Ecosystem Program's Management Categories map

Table 5: Debit Site Management Importance Factor Values

Category	Factor Value
PHMA	1.25
GHMA	1.15
OHMA	1.05

Table 6: Credit Site Management Importance Factor Values

Category	Factor Value
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PHMA	1.2
GHMA	1.1
OHMA	1.0

In accordance with the 2014 Nevada Greater Sage-Grouse State Plan Table 3-1, disturbances not located in Management Category Areas require evaluations to determine whether the disturbance will cause an indirect impact to Management Category Areas. If the evaluation determines that an indirect impact will occur in a Management Category Area, the management category importance factor of that area is applied to the indirect disturbance area of the debit project.

If a single map unit crosses two or more Management Category Areas, the management category importance factor value used is an area-weighted average based on the Management Category Areas included in the map unit (see Figure 14 for an example of calculating an area-weighted average value).

Meadow Habitat Power Factor

Meadows are rare in occurrence throughout the sagebrush ecosystem landscape in Nevada. Yet, meadow habitat is crucial for sage-grouse to fulfill their late brood-rearing life cycle requirements, so the absence of meadows across a greater landscape can make the surrounding upland habitats unsuitable for sage-grouse without this crucial component. Also, meadow habitats are disproportionately important for sage-grouse life cycle requirements because they are typically small in acreage, however they result in relatively smaller functional acre scores due to their limited area in comparison to upland habitats. In order to more appropriately incorporate the immense value of meadow habitat into the calculation of credits and debits, a power factor is applied to all map units made up of meadow habitat. See *Section 3.2.2: Meadow Habitat* in the *HQT Scientific Methods Document* for additional information.

The meadow habitat power factor value from Table 7 is incorporated in the mitigation ratio for each map unit designated as meadow habitat.

Table 7: Meadow Habitat Power Factor Values

Habitat Type	Factor Value
Meadow	8.0

Conifer Removal Factors

When included as part of credit projects, areas with pinyon-juniper encroachment into sagebrush habitats will require complete removal of conifers where likely to benefit sage-grouse populations. Benefits to sage-grouse include reducing real and perceived threats of predation and providing forage and connectivity to late brood-rearing habitats. Areas between 1-10% pinyon-juniper cover will be characterized as Phase 1. Areas between 10-20% pinyon-juniper cover or greater than 20% cover where high quality understory vegetation remains will be considered Phase 2 pinyon-juniper. See *Section 3.3.5.: Modification of Local Scale Habitat Function to Determine Immediate Uplift from Conifer Removal* in the *HQT Scientific Methods Document* for additional information.

The conifer removal factor values from Table 8 will be applied to the local-scale habitat function for areas phase I and II conifer cover exist in order to calculate credits for immediate uplift to GRSG. Confirmation that pinyon-juniper has been totally eliminated will be required.

Table 8: Conifer Factor Values

Phase	Factor Value
Phase 1 (1-10% cover)	1.2

Phase 2 (> 10% cover) 1.5

Combining Factors to Determine Credit and Debit Mitigation Ratio

The management category importance and meadow habitat power factors are summed to determine the overall mitigation ratio for a site, as per Equation 1.

Equation 1: Combining factor values to determine overall debit or credit mitigation ratio

$$\begin{aligned} \text{Mitigation Ratio} &= \text{Management Category Importance Factor Value} \\ &+ \text{Meadow Habitat Power Factor Value} \end{aligned}$$

Proximity Ratio

The credit obligation is the number of credits that must be purchased to offset the debits generated by a debit project. The credit obligation is the number of debits calculated using the debit ratio above adjusted by a proximity ratio, determined by the proximity between the debit site and offsetting credit site.

The proximity ratio incentivizes debit projects to offset their credit obligation (purchase credits) in close proximity to debit sites in order to increase the likelihood that the mitigation serves the same populations of birds that are adversely impacted by the debit site. The WAFWA Management Zones, Nevada Biologically Significant Units (BSUs) and the NDOW PMUs illustrated in Figure 12 are used to determine whether the debit

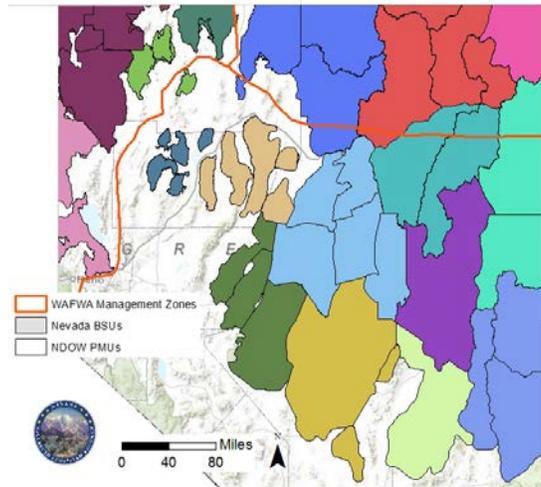


Figure 12: WAFWA Management Zones, Nevada Biological Significant Units and NDOW Population Management Units

and credit sites 1) have no population connection, 2) are connected through population dispersal, or 3) impact and benefit a single population. These categories are defined using these map units as follows:

- If the debit and credit sites are located within one PMU, they are considered to be relevant to a single population.
- If the debit and credit sites are located within the same BSU, they are considered to be connected through regional populations.
- If the debit and credit sites are located within the same WAFWA management zone, but not the same BSU, they are considered to be connected through regional population dispersal.
- Finally, if the debit and credit sites are located in different WAFWA management zones they are considered to have no population connection.

The proximity ratio value associated with each of these categories is in the Table 9.

Table 9: Proximity Ratio Values

Category	Factor Value
No population connection between credit and debit sites (different WAFWA Management Zone)	1.15
Credit and debit sites connected through population dispersal (same WAFWA Management Zone)	1.10
Credit and debit sites located within a regional population (same BSU, even if in different WAFWA Management Zones)	1.05
Credit and debit sites located within a single population (same PMU, even if in different WAFWA Management Zones)	1.00

If your debit project falls within 25 miles of one of the above boundaries (PMU, BSU, WAFWA Management Zone), a 25 mile buffer will be drawn around the debit project area and credits may be purchased in the area that gets encompassed across any of the boundaries with no additional factor value being applied.

Preferred conservation areas are expected to be defined and incorporated into the State of Nevada’s strategic action plan. After preferred conservation areas are defined, waiving the proximity ratio for debit projects that acquire credit offsets from these areas but outside of the PMU or WAFWA zone for which the debit is located will be considered. This exception will be considered as an additional method to prioritizing mitigation in areas that best serve the greater sage-grouse at a landscape-scale instead of focusing exclusively at the individual population level.

Credit Obligation

The credit obligation for each debit project is determined by multiplying the number of debits by the proximity ratio, as per Equation 2.

Equation 2: Credit obligation for debit projects

$$\text{Credit Obligation} = \text{Debits} * \text{Proximity Factor Value}$$

2.2.3 CREDIT AND DEBIT CALCULATION

The amount of credits and debits generated from a project is determined by the greatest benefit for credit projects or the greatest impact for debit projects. The greatest benefit or impact from a project is the sum of the greatest benefit or impact determined for each delineated map unit within a credit or debit project. The greatest benefit or impact associated with each map unit is the largest product of the difference between baseline functional acres and post-project functional acres and the unique mitigation ratio associated to each seasonal habitat type. See [Section 2.2.1: Habitat Quantification Tool](#) for additional information on calculating functional acres, and guidance for determining baseline functional acres is provided in [Section 2.3.4: Calculating Credit Baseline Habitat Function](#) and [Section 2.5.5: Calculating Debit Baseline Habitat Function](#) for credit and debit sites, respectively.

An example calculation of the credits generated from a credit project with three map units is provided in Table 10. The left most group of columns contain the difference between baseline functional acres and post-project functional acres for each seasonal habitat type, and the next group of columns moving the right contains the unique mitigation ratio for each seasonal habitat type. The next group of columns to the right contains the potential credit value of each seasonal habitat type, which is the product of the difference between baseline functional acres and post-project functional acres and the unique mitigation ratio for each seasonal habitat type. The last column contains the credits generated by each map unit, which is the highest seasonal habitat credit value circled in red. The credits generated by each map unit are summed and rounded to the nearest whole number to represent the total credits generated by the project.

2.2.4 MINIMIZATION MEASURES ASSESSMENT & APPROVAL PROCESS

Effective and durable minimization measures can reduce impacts to greater sage-grouse. [Project Proponents, Credit Developers, and Credit Buyers](#) with existing and/or proposed anthropogenic features that are implementing effective and durable minimization measures that reduce impacts to greater sage-grouse may apply for a reduction the indirect effects from the specific anthropogenic feature. The project proponent is responsible for submitting a complete minimization measure assessment form, which will contain the minimum eligibility criteria (provided below), including the need to delineate and declare the functional-acres affected by the minimization measure. This requirement will objectively and consistently define the functional-acres affected by the minimization measure to greatly narrow the scope of impact from the minimization measure. The assessment of the proposal is completed by Administrator (SETT) with potential consultation from the Technical Review Group, and approval is provided by the SEC following the process outlined below.

Minimum Eligibility Criteria

The following minimum eligibility criteria must be fulfilled for a minimization measure to be considered for assessment.

- Requested reduction in indirect effects due to minimization measure will change the credits or debits associated to the anthropogenic feature by more than 5% compared to without the reduction.
- Spatial and temporal extent of the habitat affected by the minimization measure is defined using the HQT; the functional-acres affected by the minimization measure must be delineated and declared.
- Peer reviewed literature supporting the reduction in indirect effects is available.
- Financial Assurances are or will be in place to ensure the minimization measure will be effective through the entire life of the project.

Assessment & Approval Process

The following process must be completed to gain approval of an adjustment to indirect effects from an anthropogenic feature.

- 1) **Submit Minimization Measure Assessment Form** – The project proponent must submit a complete minimization measure assessment form. The form includes the minimum eligibility criteria as well as the proposed reduction in indirect effects from the minimization measure.
- 2) **Assess Proposed Reduction in Indirect Effects** – If the proposed minimization measure meets minimum eligibility criteria, the Administrator will assess the spatial and temporal analysis and review any supporting evidence. The Administrator may consult with the Technical Review Group to ensure the best available science and scientific opinion is considered. If the Administrator proposes an adjustment to the proposed reduction to indirect effects, the Administrator will work with the project proponent to come to a mutually agreed on outcome.
- 3) **Approve Reduction in Indirect Effects** – If the Administrator and project proponent mutually agree on a reduction in indirect effects for the specific anthropogenic feature, then the project proponent can incorporate the adjustment in their credit or debit score, and the Administrator will publish the adjustment in ~~the a~~ Minimization Measure Adjustments List **to be placed** on the **Credit System CCS** website. If the Administrator and project proponent do not mutually agree on a reduction, then both parties will present their proposals to the Oversight Committee (SEC), which will make the final determination.

Table 10: Example credit calculation for a project with three map units and enhancement and protection of limiting late brood-rearing habitat

Map Unit	Breeding F-Acres Above Baseline	Late Brood-Rearing F-Acres Above Baseline	Winter F-Acres Above Baseline	Breeding Mitigation Ratio	Late Brood-Rearing Mitigation Ratio	Winter Mitigation Ratio	Breeding Value	Late Brood-Rearing Value	Winter Value	Credits Generated
Map Unit 1	6	15	3	1	9	1	6	135	3	135
Map Unit 2	15	0	20	1	9	1	15	0	20	20
Map Unit 3	10	0	7	1	9	1	10	0	7	10
Total Project										165

12.3 CREDIT PROJECT REQUIREMENTS & ADDITIONALITY PROVISIONS

2 This section describes requirements including additionality provisions for credit projects to ensure credit
 3 projects provide benefits beyond those that would be achieved if the project and associated management
 4 actions had not taken place. Additionality provisions address credit projects on public lands, credit
 5 projects that have received public funds, and *stacking* of multiple credit types. [Credit Developer Credit](#)
 6 [Project Proponents](#) are the primary audience of this section. Specifics related to [Credit Buyer Debit Project](#)
 7 [Proponents](#) are outlined in [Section 2.5: Credit Obligation Provisions and Credit Investment Strategies](#).

8 2.3.1 CREDIT SERVICE AREA

9 The [Credit System CCS](#) service area is the mapped geographic region
 10 where credits can be generated and will be tracked and reported. The
 11 service area designation has important implications for the viability of
 12 the [Credit System CCS](#) transactions and for the ability of the [Credit](#)
 13 [System CCS](#) to generate a net benefit for greater sage-grouse habitat from
 14 the impacts from anthropogenic disturbances.

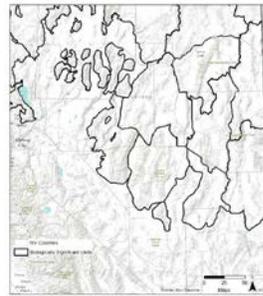


Figure 13: Greater sage-grouse-CCS service area

15 The current mapped Biologically Significant Unit (BSU) is the [Credit](#)
 16 [System CCS](#) service area, and is provided in Figure 13 as an example. The
 17 boundaries of this area are based on the range of the species in the State
 18 of Nevada and are aligned with State of Nevada development project
 19 review requirements for greater sage-grouse.

20 While the Service Area broadly defines the domain of the [Credit](#)
 21 [System CCS](#), mitigation ratios establish incentives to offset debits using
 22 credits generated in close proximity to debit sites. [Section 2.2.2: Mitigation and Proximity Ratios](#) describes
 23 how the WAFWA Management Zones, Nevada BSUs and NDOW PMUs depicted in Figure 12 are
 24 incorporated into the proximity ratio. In addition, three Management Categories are also incorporated
 25 into the mitigation ratios to encourage the generation of credits and discourage debits in PHMA and
 26 GHMA Management Category Areas, which are estimated to have high space-use by greater sage-
 27 grouse. Credits and debits will be tracked in the [Credit System CCS](#) Registry and reported by the
 28 Administrator by WAFWA Zones, BSUs and PMUs.

29 2.3.2 CREDIT PROJECT AREA AND MANAGEMENT ACTION TYPES

30 The area of a credit project may be made up of

- 31 a) The land that the [Credit Developer Credit Project Proponent](#) commits to actively managing
 32 over the term of the project and thus is included in the management plan and participant
 33 contract, and/or
- 34 b) The land outside of the [Credit Developer Credit Project Proponent](#)'s control that is indirectly
 35 benefited from removal of certain anthropogenic features as part of the credit project.

36 The land outside of the [Credit Developer Credit Project Proponent](#)'s control and indirectly benefited from
 37 removal of certain anthropogenic features is optional, and must fulfill the following stipulations to
 38 qualify for generating credits. Please contact the Administrator if you are interested in enrolling a credit
 39 project which consists of removal of an anthropogenic disturbance recognized by the [Credit System CCS](#).

40 To achieve conservation needs and facilitate recovery of greater sage-grouse, the [Credit System CCS](#)
 41 defines two credit project management action types:

- 42 1) **Habitat Stewardship** – Maintenance of high quality habitat currently used by or in close
 43 proximity to habitat used by greater sage-grouse, or manipulation of existing habitat to increase

1 specific habitat functionality. An example project could be placing a conservation easement on
2 existing high quality habitat and committing to maintaining that high quality for the full duration
3 of the credit project. Other example projects could include improvements to medium quality
4 habitats through implementation of prescribed grazing plans and/or removal of encroaching
5 conifer on existing rangeland, and committing to maintaining the post-project habitat function for
6 the duration of the credit project.

- 7 2) **Habitat Restoration** – The reestablishment of ecologically important habitat and other ecosystem
8 resource characteristics and functions at a site where they have ceased to exist or where they exist
9 in a substantially degraded state. Examples include the reestablishment of useable greater sage-
10 grouse habitat on abandoned mining claims, eradication of cheatgrass, removal of powerline
11 towers no longer in use, or restoration of a wet meadow that is currently not functioning
12 properly.

13 **Riparian Properly Functioning Condition Assessment**

14 A riparian properly functioning condition (PFC) assessment is required for riparian areas included in a
15 credit project. The results of the assessment in report format including the information from the field
16 forms, map, riparian plant list, and photographs must be included in the Management Plan associated
17 with the credit project. The assessment is intended to inform the ~~Credit Developer~~Credit Project
18 ~~Proponent~~ and Administrator of the ecosystem health of the riparian areas and thus the risk of generating
19 credits from those areas. The ~~Credit Developer~~Credit Project ~~Proponent~~ is not required to implement
20 management actions to increase the functioning condition of riparian areas. However, the habitat
21 function of riparian areas as measured by the HQT is likely to decrease when those areas are
22 nonfunctional or functional at risk. ~~Credit Developer~~Credit Project ~~Proponents are encouraged~~**must to**
23 implement management actions to ~~trend towards or~~ achieve properly functioning condition to reduce the
24 risk (as identified by the PFC assessment) of credits becoming invalidated.

25

2.3.3 CREDIT SITE ELIGIBILITY

To be eligible to participate in the **Credit System CCS**, credit sites must meet the eligibility criteria defined below.

Service Area

All credit sites must be located within the **Credit System CCS** Service Area. See [Section 2.3.1 Credit Service Area](#) consideration for additional information.

Ownership & Stewardship

Credit Developer Credit Project Proponents must attest to the current ownership, tenure or use rights, **control of water rights**, and past land management and land uses associated with the entire credit site over the previous 10 years in order to be eligible to generated credits from the credit site. In order to generate credits for a project on federal lands, enhancement or restorative actions must be completed. Credits will be determined based on the measurable habitat uplift achieved, as opposed to for preservation of the project area.

Minimum Performance Standards

The **Credit System CCS** requires that credit sites meet minimum performance standards related to habitat function and space use for the greater sage-grouse in order to be eligible to generate credits. The following minimum performance standards are based on post-project habitat function and must be met at all three scales in order to ensure credit sites are fulfilling the needs of greater sage-grouse at each scale:

- **Landscape-scale** – Credit projects must be located within the PHMA, GHMA or OHMA Management Category Areas using the SEP’s current Management Categories map.
- **Local-scale** – Anticipated local-scale, post-project habitat function (area-weighted average across all map units) determined using the HQT must be greater than or equal to 20%.
- **Site-scale** – Anticipated site-scale post-project habitat function (area-weighted average across all map units using maximum seasonal habitat function associated to each map unit) determined using the HQT must be greater than or equal to the relevant site-scale regional standard habitat functions plus 10% (area-weighted average across all map units using the relevant seasonal habitat type regional standard habitat function). See [Section 2.3.4: Calculating Credit Baseline Habitat Function](#) for site-scale regional standard habitat functions and Figure 14 for additional detail on calculating area-weighted averages.

Area-weighted average is the sum of products of Habitat Function and Area for each map unit divided by total area.

Step 1: Calculate product of habitat function and area, and total area

	Habitat Function	Acres	Product of Habitat Function and Area
Map Unit #1	70%	100	70
Map Unit #2	50%	500	250
Total		600	320

Step 2: Divide the sum of products of habitat function and area for each map unit by total area

Area-weighted Average Habitat Function = 320/600 = **53%**

Figure 14: Definition of and an example calculation of area-weighted average habitat function for a credit site with two map units

Additionality

Credit Developer Credit Project Proponents must demonstrate that the performance standard defined for the credit site in the Management Plan exceeds what is otherwise required by federal, state, and local regulations and statutes. **Credit Developer Credit Project Proponent**s must also describe how federal funds have been previously or are currently used to support the development and management of the credit project site. **Credit Developer Credit Project Proponent**s must demonstrate that the credit project site will provide additional benefit to the species above and beyond those generated through the

1 application of existing federal funds or participation in other credit markets. See *Sections 2.3.5 through*
2 *2.3.8* for additional information on additionality provisions.

3 **No Imminent Threat**

4 There cannot be evidence supporting imminent threat of direct or indirect disturbance by land uses that
5 will cause the habitat function of the total credit site to be less than the minimum performance standard
6 referenced above as measured by the HQT. Recently acquired subsurface rights, development plans (e.g.
7 a building permit recently submitted or National Environmental Policy Act (NEPA) documents currently
8 under development), or development designations (e.g. renewable energy zone or transmission corridor)
9 would constitute proof of imminent threat that may disqualify a credit site from participating in the
10 **Credit System CCS**. Proper grazing practices are not anticipated to pose an imminent threat of
11 disturbance. However, in order to develop credits on public land within a grazing allotment, the **Credit**
12 **Developer Credit Project Proponent** must either be the permittee or have an agreement with the permittee
13 that are necessary to ensure grazing practices are compatible with the performance standards defined in
14 the Management Plan associated with the credit project.

15 **Site Protection**

16 **Credit Developer Credit Project Proponent**s must show evidence of site protection for the duration of the
17 contract period on private lands. The only exception on private lands is for credit projects that only
18 generate credits from land outside of the **credit developer Credit Project Proponent**'s control and is
19 indirectly benefited from removal of certain anthropogenic features. A Participant Contract is required
20 for all credit projects, and a Participant Contract that commits the **Credit Developer Credit Project**
21 **Proponent** to maintain habitat function above the minimum performance standard is the minimum level
22 of site protection for credit projects that generate credits on land under the control of the **Credit**
23 **Developer Credit Project Proponent**. The Participant Contract includes contractual language and
24 references any other legally binding agreements, such as conservation easements.

25 **Financial Assurances**

26 **Credit Developer Credit Project Proponent**s must commit to financial assurances in the form of contract
27 terms and financial instruments. Financial assurances are specifically defined in each **Credit**
28 **Developer Credit Project Proponent**'s Participant Contract with the **Credit System CCS** and associated
29 Management Plan. See [Section 2.4.6: Financial Assurances](#) for additional information.

30 **Accuracy**

31 **Credit Developer Credit Project Proponent**s must attest to the accuracy of the information provided in all
32 documentation.

33 **2.3.4 CALCULATING CREDIT BASELINE HABITAT FUNCTION**

34 Credit project baseline habitat function is the starting point from which the functional acre difference
35 relative to post-project functional acres is calculated. The difference between a project's post-project
36 functional acres and the baseline functional acres are multiplied by the mitigation ratio to determine the
37 credits generated for each map unit within a credit project. The resulting sum of the functional acres of
38 the map units is the total credits **quantified** for the project. See [Section 2.2.2: Mitigation and Proximity Ratios](#)
39 for additional information on determining mitigation ratios.

40 The credit baseline habitat function is based on the pre-existing local-scale habitat function and the
41 typical site-scale habitat function for the relevant region and habitat type to account for the avoided risk
42 of potential threats that would degrade habitat function if the project was not implemented. In addition,
43 using the typical site-scale habitat function instead of pre-existing site-scale habitat function rewards
44 **Credit Developer Credit Project Proponent**s who have demonstrated stewardship and enables credits to
45 be generated by credit projects that will maintain and protect currently high quality habitat. There are
46 exceptions to using the typical site-scale habitat function to determine credit baseline habitat function and

these are described later in this section. See [Section 2.2.1: Habitat Quantification Tool](#) for description of scales. Credit baseline habitat function is calculated by multiplying

- Local-scale, pre-project habitat function as determined by the HQT, and
- Site-scale, regional standard habitat function as defined in Table 11.

The credit site-scale, regional habitat functions shown in Table 11 are used for the WAFWA Zone and seasonal habitat type associated to each map unit. These site-scale regional standard habitat functions are based on median habitat function values, and these values and spatial delineations will be reevaluated in the future as additional site-scale data on existing conditions and more effective methods of delineating habitat throughout the State of Nevada become available.¹⁰

Table 11: Site-scale regional standard habitat functions

SEASONAL HABITAT TYPES	WAFWA Management Zones		
	MZ III	MZ IV	MZ V
Breeding	30%	30%	20%
Late Brood-Rearing	20%	30%	20%
Winter	65%	60%	60%

The winter regional standard habitat function values in Table 11 are expected to be adjusted in the future. The current values are expected to be higher than appropriate because the winter scoring curves currently in the HQT and which were used to inform these baseline values do not entirely incorporate snow depth. The values in this table and the HQT will be adjusted at the same time in order to avoid impacting the relative value of winter habitat quantified before and after this change.

An example credit baseline habitat function calculation is illustrated in Table 12 for a map unit with high pre-project local-scale habitat function and a 20% site-scale regional standard habitat function.

Table 12: Example credit baseline habitat function calculation

Local-scale Pre-Project Habitat Function	Site-scale Regional Standard Habitat Function	Credit Baseline Habitat Function
80%	20%	16%

Credit Baseline Habitat Function for Land Benefited from Removal of an Anthropogenic Feature but Outside of Credit Developer/Credit Project Proponent’s Control

When calculating credit baseline habitat function and post-project habitat function for the land outside of the credit developer/Credit Project Proponent’s control, the Habitat Suitability Index (HSI) is used in place of the regional standard and assessed site-scale habitat function, respectively.

Additional Credit Baseline Habitat Function Considerations

Credit projects on public lands, or sites currently or previously participating in a federal funding program, or currently generating credits under other ecosystem service program or market, may require an adjusted credit baseline habitat function as defined by the following sections.

2.3.5 DEVELOPING CREDITS ON PUBLIC LANDS AND OTHER DESIGNATIONS

The Credit System CCS allows for credits to be generated on public lands (e.g. BLM, Forest Service, State of Nevada trust lands etc.) or other lands already under permanent conservation restrictions (e.g. existing conservation easements) for mitigation purposes if the proposed credit project would add additional

¹⁰ The site-scale regional standard habitat function values below are based on BLM’s Assessment, Inventory, and Monitoring (AIM) data and adjusted for identified bias in the data set for the use as regional standard within baseline calculations in the Credit System CCS.

1 benefit above and beyond what would be achieved under the existing land designation or planned and
2 funded conservation actions. Credit projects on public land are able to meet additionality requirements of
3 the [Credit System CCS](#) if the [Credit Developer Credit Project Proponent](#) can demonstrate that verifiable
4 benefit using the HQT can be attained by the credit project. Credits will be determined based on the
5 measurable habitat uplift achieved, as opposed to for preservation of the project area.

6 In order to generate credits on public lands, the Credit Producer must have authorization from the
7 relevant public land management agency, under which the public land manager maintains management
8 authority over the land. Further, in order to develop credits on public land within a grazing allotment,
9 the [Credit Developer Credit Project Proponent](#) must either be the permittee or have an agreement with the
10 permittee that are necessary to ensure grazing practices are compatible with the performance standards
11 defined in the Management Plan associated with the credit project.

12 2.3.6 PARTNERING WITH FEDERAL PROGRAMS ON PRIVATE LANDS

13 The [Credit System CCS](#) allows for credits to be generated on private lands currently or previously
14 participating in a federal funding program (e.g., U.S. Department of Agriculture (USDA) Farm Bill
15 conservation programs). Guidance for determining the number of potential credits on sites that are
16 currently or have previously participated in a federal funding program is provided below. There are two
17 discrete time periods when payments may be partnered with federal funds including 1) when a current
18 federal contract is still in effect, and 2) after a previous federal contract has expired.

19 Where conservation values have already been permanently protected or restored under other federal
20 programs benefitting the greater sage-grouse, the [Credit Developer Credit Project Proponent](#) can only
21 receive credit for conservation values if enrollment of the credit site in the [Credit System CCS](#) would
22 create additional conservation benefit above and beyond the terms of the original agreement.

23 **Prior to a Federal Contract**

24 Within an existing CCS Credit Project where the HQT has been completed to establish the current
25 condition and corresponding credits, federal expenditures associated with a federal contract for
26 improvements towards ranch infrastructure or habitat quality will not affect the initial condition and
27 corresponding credits measured during the initial HQT effort. However, any measurable uplift that
28 occurs thereafter in areas affected by treatments will not be awarded with credits until the expiration of
29 the federal contract. For immediate uplift within the federal contract period, see below.

30 **During an Existing Federal Contract**

31 Within an existing federal contract, a [Credit Developer Credit Project Proponent](#) can receive credits for
32 additional habitat benefit generated. The allocation of credits on affected acreage will be proportionate to
33 the non-federal contribution to the conservation benefit for sage-grouse. For example, acreage capable of
34 producing ten credits, but with a fifty percent (50%) federal contribution, will be allocated five
35 credits. This rule only applies to the portion of the benefit on a particular credit site that can be attributed
36 to federal funds. The rest of the benefit is fully creditable.

38 **Following a Federal Contract**

39 A [Credit Developer Credit Project Proponent](#) may receive full credit for long-term or permanent contract
40 extension, management or protection agreements following expiration of a federally-funded contract.
41 These long-term contract extensions and permanent conservation agreements could be entered into
42 contemporaneously with execution of the underlying contract or thereafter, but these provisions (and
43 [Credit System CCS](#) credits) would not take effect until after the expiration of the underlying contract.

44 2.3.7 STACKING CREDIT TYPES

1 Although the [Credit System CCS](#) currently only supports the generation and sale of one type of credit
2 (e.g. greater sage-grouse credits), the [Credit System CCS](#) allows for multiple credit types to be generated
3 from spatially overlapping areas. However, the amount of each type of credit generated must be based on
4 additional habitat function maintained compared to the habitat function maintained for other credit
5 types. If a site under the [Credit System CCS](#) is currently or has previously generated and sold credits
6 under a different ecosystem service program or market (i.e. carbon, water quality, etc.), then restrictions
7 related to partnering with federal funds during existing or following previous federal contracts apply.

8 In the future, the [Credit System CCS](#) may expand to support the generation and sale of credits for other
9 species and resources (e.g. mule deer) in addition to greater sage-grouse. Similar to restrictions on
10 generating credits within a federally-funded contract or on public lands, [Credit Developer Credit Project](#)
11 [Proponents](#) would be able to generate and sell credits for different species and resources if they
12 demonstrate additionality of specific conservation and management practices. A [Credit Developer Credit](#)
13 [Project Proponent](#) would not be eligible to sell multiple habitat credits from a single management
14 practice. However, additional and unique management practices undertaken for a particular species
15 would be eligible to generate additional credits. In order to demonstrate additionality for different
16 species and resources, the [Credit System CCS](#) will need to quantify and track habitat benefits for each
17 species or resource. HQTs will need to be developed to provide habitat function scores for multiple
18 species on a single project site. The species that receives the highest pre-project score will be the focus of
19 the initial project design. Then, any additional and unique management actions built into that project
20 design in order to generate function for other species or resources will be considered additional, and can
21 be sold as separate credits under the [Credit System CCS](#).

22 2.3.8 INTEGRATION WITH CCA/CCAAS

23 [Credit Developer Credit Project Proponents](#) enrolled in Candidate Conservation Agreements (CCAs) or
24 Candidate Conservation Agreement with Assurances (CCAAs) can enroll in the [Credit System CCS](#) and
25 generate credits if the benefits generated are additional to the minimum conservation measures required
26 by the CCA or CCAA. Credit projects previously enrolled in a CCA or CCAA must work with the
27 Administrator to determine an appropriate site-scale credit baseline, such as pre-project conditions,
28 considering the existing CCA or CCAA. This site-scale credit baseline adjustment should consider the
29 increased additionality and durability resulting from securing conservation benefits through a long-term
30 or permanent credit project that goes beyond the duration of the CCA or CCAA.

2.4 CREDIT DURABILITY PROVISIONS

2 This section describes credit project durability provisions to ensure credit projects are producing expected
3 outcomes for their entire duration. Durability provisions include legal, financial and ~~Credit System~~ **CCS**
4 management mechanisms. ~~Credit Developer~~ **Credit Project Proponents** are the primary audience of this
5 section.

2.4.1 CREDIT SITE PROTECTION

7 All participating credit projects that generate credits on land under the control of the ~~Credit~~
8 ~~Developer~~ **Credit Project Proponent** are required to have a signed a Participant Contract and
9 accompanying Management Plan that assigns responsibility for meeting ~~the project requirements of~~
10 monitoring, ~~reporting, working with the Administrator on five year qualitative assessments and, and~~
11 verification, ~~requirements of each project to the~~ ~~Credit Developer~~ **Credit Project Proponent** for the
12 duration of the project. Additional information on credit project duration is provided in [Section 2.4.2:](#)
13 [Credit Project Duration](#). The Participant Contract is the legal agreement between one or more ~~Credit~~
14 ~~Developer~~ **Credit Project Proponents** and the Administrator that defines obligations of the ~~Credit~~
15 ~~Developer~~ **Credit Project Proponents**, such as secured financial assurances, management actions defined
16 in a Management Plan, and the relevant terms and conditions for the development of credits under the
17 ~~Credit System~~ **CCS**. The terms typically include habitat function performance standards, financial
18 assurances for long-term management and intentional reversals, and other provisions related to the
19 signatories. Credit projects that only generate credits on land outside of the ~~credit developer~~ **Credit Project**
20 **Proponent**'s control and indirectly benefited from removal of certain anthropogenic features are required
21 to sign a Participant Contract, however the Participant Contract will not contain many of the typical
22 terms because the ~~credit developer~~ **Credit Project Proponent** is not committing to actively managing the
23 land.

24 Additional site protection measures, such as easements or public land use designations on private and
25 public lands respectively, can reduce the probability of competing land uses invalidating the credits
26 generated on the credit site. Reserve account contributions for individual projects reflect these
27 considerations – the probability of competing land uses, the level of risk of the specific site protection
28 mechanism secured, and the unique terms secured for each credit project. The level of risk then
29 determines the reserve account contribution amount required of each project, which creates an incentive
30 to increase land protection and select sites less likely to be affected by other uses. The increased
31 contribution amount also helps ensure the Reserve Account is capable of covering invalidated credits
32 regardless of the site protection measures in place. See [Section 2.4.3: Reserve Account Contribution](#) for more
33 information on the competing land use factor including how the probability of a reversal from competing
34 land uses is determined.

2.4.2 CREDIT PROJECT DURATION

36 Credit project duration is the length of time that the ~~Credit System~~ **CCS** recognizes a project. Credit
37 project duration is the length of time that a ~~Credit Developer~~ **Credit Project Proponent** has committed to
38 enhancing and maintaining habitat function as stated in credit project's Participant Contract and
39 Management Plan. The duration of credit projects can be either limited term or in perpetuity, and limited
40 term credit projects can be renewed within the ~~Credit System~~ **CCS** after the credit project duration expires.

41 The minimum ~~credit~~ project duration [for stewardship actions](#) is 30 years and the maximum ~~project~~
42 duration is in perpetuity. Project duration is defined in 5 year increments. Thus, project duration can be
43 30, 35, 40, 45 years, and so on, up to and including in perpetuity. The rationale behind the 30-year
44 minimum is based on scientific opinion that rapidly changing habitat function can be detrimental to
45 populations. Longer-term credit projects are preferable and credits from long-term projects are

1 anticipated to attract greater market demand, as [Credit Buyer Debit Project Proponents](#) are required to
2 match credit project duration to the expected duration of the debit project, which includes the time
3 required to allow species to begin to use the site after the debit project. See below for matching of
4 duration discussion.

5 [Credit Developer Credit Project Proponents](#) define project duration in the Participant Contracts and
6 Management Plans submitted to the Administrator. Upon expiration of the duration of the [stewardship](#)
7 credit project, the [Credit Developer Credit Project Proponent](#) can elect to renew the project under the
8 [Credit System CCS](#). Renewal entails developing a new Management Plan, using the current HQT and the
9 [Credit System CCS](#) Manual policy and technical requirements that are approved at the time of renewal to
10 assess the habitat function and amount of credit generated by the site. Renewal also requires a qualified,
11 third-party [verification Verifier to again conduct HQT quantification and reestablish the available credits](#).
12 See [Section 2.4.5: Credit Site-Project Quantification, Monitoring, Qualitative Assessments, and Verification](#) for
13 additional information on credit [site-project verification processes](#). If the project is not renewed, the [Credit](#)
14 [System CCS](#) no longer recognizes credits after the end of the project duration.

15 [To better facilitate uplift and restoration actions within the CCS, credits that are generated from uplift](#)
16 [and restoration are allowed to have a term length less than 30 years, and the period of time required to](#)
17 [create and maintain the uplift will be prorated to a debit term. Contracts resulting from the sale of uplift](#)
18 [credits are not intended to extend past the end of a typical stewardship project.](#)

Commented [EM4]: More clarification will be added to this section at the next council meeting.

19 2.4.3 RESERVE ACCOUNT CONTRIBUTION

20 A percentage of credits generated by a credit projects are transferred into the reserve account at the time
21 that credits are transferred to a Credit Buyer's account. Credits in the reserve account may be used to
22 temporarily cover credits invalidated from intentional and unintentional reversals in order to ensure
23 there are always more credits than debits in the [Credit System CCS](#). The percentage of credits that a credit
24 project contributes to the reserve account is determined by the probability of the credits on that site
25 becoming invalidated unintentionally, which creates an incentive for the [Credit Developer Credit Project](#)
26 [Proponent](#) to reduce the risks that could invalidate those credits. The use of the reserve account and
27 financial assurances is defined in [Section 2.1.7: Reserve Account Management and Use of Financial Assurances](#).

28 The reserve account checklists determine the unique contribution amount for each credit project, taking
29 the sum of the numeric values assigned to each of the factors defined below. As described in greater
30 detail below and illustrated in Equation 3, the total reserve account contribution percentage consists of a
31 standard base contribution and additional contributions related to the probability of adverse impacts
32 from wildfire and competing land uses. As shown in Equation 4, the total reserve account contribution
33 percentage is multiplied by the total number of credits transferred to a Credit Buyer's account to
34 determine the total reserve account contribution amount for each credit transfer. The credit site must
35 have sufficient credits available to fulfill the amount transferred to the Credit Buyer's account and the
36 reserve account contribution.

Equation 3: Total reserve account contribution percentage equation

$$\begin{aligned}
 &\text{Total Reserve Account Contribution Percentage} \\
 &= \text{Standard Base Contribution Percentage} \\
 &+ \text{Probability of Adverse Impacts from Wildfire Percentage} \\
 &+ \text{Probability of Competing Land Uses Percentage}
 \end{aligned}$$

Equation 4: Total reserve account contribution percentage equation

$$\begin{aligned}
 &\text{Total Reserve Account Contribution Amount} \\
 &= \text{Credits Transferred to Credit Buyer} \\
 &* \text{Reserve Account Contribution Percentage}
 \end{aligned}$$

Base Contribution

The base reserve account contribution for all credit projects is 4% of the credits generated on-site that are transferred to a Credit Buyer’s account. The base contribution is required due to the inherent uncertainty in the measurement and estimation of the long-term benefits of credit projects due to force majeure events, climate change, and other circumstances.

Probability of Adverse Impacts from Wildfire

In addition to the base reserve account contribution, a portion of each transfer of credits to a Credit Buyer’s account is transferred into the reserve account to be available to temporarily cover credits invalidated by wildfire, the predominant force majeure event anticipated to affect greater sage-grouse habitat in the State of Nevada. For each transfer of credits that occurs, a contribution for wildfire is determined by the credit project site’s:

- 1) Resistance to invasive annual grasses and resilience following wildfire
- 2) Ability to control wildfire

Resistance & Resilience

Using concepts of resistance and resilience to determine the reserve account contribution encourages credit sites to be located in areas that are less likely to be negatively affected by fire and more likely to recover from disturbances and helps to ensure that the reserve account is capable of covering credits invalidated based on natural disturbances from wildfire.¹¹

The resistance to invasive annual grasses and resilience following wildfire is determined using a score sheet that is adapted from the Miller et al. 2014 (Score Sheet for Rating Resilience to Disturbance, Resistance to Annual Invasive Grasses, and the Suitability of an Ecological Site or Type for Treatment) field guide and score sheet illustrated in Figure for use by the Credit System CCS.¹²

Score Sheet for Rating Resistance and Resilience to Disturbance to Invasive Annual Grasses in the Great Basin (adapted from Miller et al. 2014)						
Map Unit Name/Number:	Ecological Site Name/Number:	Date:				
Acreage of Map Unit/Ecosite:	UTMs:	PLOT SCORE				
SITE CHARACTERISTICS	SITE CONDITION (select one)	1	2	3	4	5
Temperature (Soil temperature regime + Species or subspecies of sagebrush) - Desktop						
Soil temperature regime	1 = hot-mesic; 2 = warm-mesic; 3 = cool-mesic or cool-cryic; 4 = warm-frigid; 5 = cool-frigid; 6 = warm-cryic					
Species or subspecies of sagebrush	1 = Wyoming, low, black, or Lahontan; 2 = basin, Bonneville, or junco; 3 = mountain					
Moisture (Precipitation + Soil Texture + Soil Depth) - Desktop						
Precipitation (in)	1 = <10; 2 = 10-12; 3 = 12-14; 4 = >14					
Soil texture	1 = clay, sand, or silt; 2 = silty, sandy, or clay loam; 3 = loam					
Soil depth (in)	0 = very shallow (<10); 1 = shallow (10-20); 3 = moderately deep to deep					
Vegetation (Plant groups modified by soil depth) - On-Site						
Plant Groups	0 = DRPG and POSE scarce to severely depleted (DRPG < 2-3m ² and less than 5% foliar cover); 3 = DRPG on soils >10 in. scarce, but POSE or PF >50% foliar cover; 6 = DRPG on soils >10 in. depleted (2-3m ² or about 5-10% foliar cover) and/or co-dominant with IAG, or on soils < 10 in. POSE and PF 5-15% foliar cover and co-dominant with IAG; 9 = DRPG and PF dominant on soils > 10 in. or POSE and PF dominant on soils < 10 in.					
Deep-rooted perennial grasses (DRPG) potentially dominant in shallow to deep soils >10 in.						
Sandberg bluegrass (POSE) potentially dominant in very shallow soils <10 in.						
Perennial forbs (PF)						
Invasive annual grasses (IAG)						
TOTAL:						

¹¹ Chambers, Jeanne C.; Pyke, David A.; Maestas, Jeremy D.; Pellant, Mike; Havlina, Douglas W.; Mayer, Kenneth E.; Wuenschel, Amarina. 2014. Using resistance and resilience concepts to reduce impacts of invasive annual grasses and altered fire regimes on the sagebrush ecosystem approach. Gen. Tech. Rep. RMRS-GTR-326. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 73 p.

¹² Miller, Richard F.; Chambers, Jeanne C.; Pellant, Mike. 2014. A field guide for selecting the most appropriate treatment in sagebrush and piñon-juniper ecosystems in the great basin: Evaluating resilience to disturbance and resistance to invasive annual

1 Variables defined in the score sheet, which is an appendix to the User Guide, produce a field assessment
2 with scoring based on soil temperature, moisture indicators, and vegetation. Credit projects often include
3 more than one ecological site type, and scores are determined for each ecological site type or grouping of
4 similar ecological sites within the credit project area. The score for each ecological site type within the
5 credit project area has a range of 0 – 26, with a score of <10 = Very Low; 10 -14 = low; 15 – 20 = Moderate;
6 and >20 = High. An area-weighted score, based on the proportion of the area within each ecological site
7 type is calculated for the credit project area. Table 13 below provides the reserve account contribution
8 percentage based on the weighted score for the credit project site combining the sites resistance and
9 resilience and the ability to control wildfire.

grasses, and predicting vegetation response.. Gen. Tech. Rep. RMRS-GTR-322 REVISED. Fort Collins, CO: U.S. Department of
Agriculture, Forest Service, Rocky Mountain Research Station. 66 p.

Ability to Control Wildfire

Factoring the ability to control wildfire into the overall reserve account contribution for credit projects encourages sites to be placed where natural and human-created features improve the ability to control a wildfire, including existing and new (e.g. developed as part of the credit project) human-created pre-suppression features (e.g. green strips). Any human-created feature that impacts the reserve account contribution must be maintained throughout the term of the project, and described in the site’s Management Plan.

The ability to control wildfire is determined using a score sheet developed by the Sagebrush Ecosystem Program with contributions from fire professionals at the Nevada Division of Forestry. The score sheet, which is an appendix to the User’s Guide, conducts an area and site-level assessment that evaluates common risk factors (i.e. fuels, topography, ease of access, and distance from initial attack fire-fighting resources) that hinder or improve the ability of firefighting resources to control a wildfire under typical summer weather conditions for the project site. The assessment, completed per distinct map unit or ecological site, includes evaluation of the effectiveness of existing fire suppression features on the landscape, as well as the effectiveness of fire suppression features implemented as part of the credit project. The score sheet ranks the ability to control wildfire on a site in the following categories: <21 = High; 21 – 35 = Moderate; and >35 = Low. Table 13 below provides the reserve account contribution percentage based on the weighted score for the credit project site combining the sites resistance and resilience and the ability to control wildfire.

Table 13: Ability to Control reserve account categories and contribution percentages

		Ability to Control Wildfire Score		
		High	Moderate	Low
Resistance and Resilience Score	High	1%	2%	3%
	Moderate	2%	3%	4%
	Low	3%	4%	5%
	Very Low	4%	5%	6%

Rebate of Credits from the Reserve Account

As an incentive for ~~credit-developer~~Credit Project Proponents to reduce the risk of credit invalidation from wildfire, a reserve account rebate of up to 2% of the total project credits is available to the ~~Credit Developer~~Credit Project Proponent if the ~~Credit-Developer~~Credit Project Proponent provides proof that the credit project has been included in a formal wildfire risk assessment (state, federal, local level) and wildfire risk reduction recommendations have been implemented. If the original Reserve Account contribution for the Probability of Adverse Effects is 1%, then the maximum potential rebate is 1%. The rebate program is only available within the first five years following transfer of the credits to a Credit Buyer.

Probability of Competing Land Uses

In addition to the base reserve account contribution, a portion of each transfer of credits to a Credit Buyer’s account is contributed into the reserve account to be available to temporarily cover credits invalidated by competing land uses. The ~~Credit System~~CCS determines the probability of competing land uses based on credit site ownership, the application of land protection mechanisms on the credit site and other characteristics of the credit project.

1 Different land protection mechanisms are available on privately- and publicly-owned land, and other
 2 unique characteristics of privately- and publicly-owned land influence the probability of completing land
 3 uses invalidating credit sites. Table 14 identifies different credit site characteristics related to the probability
 4 of completing land uses invalidating credits for private lands. Note that each credit site must meet
 5 minimum site eligibility requirements, including proof of no imminent threat of direct or indirect
 6 disturbance to the credit site. See the [Section 2.3.3: Credit Site Eligibility](#) for additional information.

7 Important credit site characteristics related to the probability of competing land uses are expected to arise
 8 that do not justify a different contribution percentage than defined by the tables below. In these cases, the
 9 [Credit Developer/Credit Project Proponent](#) and Administrator will address issues as they arise on a case-
 10 by-case basis. The Administrator is currently working with the federal land management agencies on a
 11 process for developing credits on public lands. Please contact the Administrator for further information
 12 regarding these projects.

13 Table 14: Competing Land Uses reserve account categories and contribution percentages for credits on
 14 privately-owned land

Minimum Competing Land Use Related Requirements	Contribution Percentage
Participant Contract <u>and</u> Conservation Easement <u>and</u> Ownership of Subsurface Rights	0%
Participant Contract <u>and</u> Conservation Easement	1%
Participant Contract <u>and</u> Ownership of Subsurface Rights	3%
Participant Contract	4%

15
 16 [Credit Developer/Credit Project Proponent](#)s must provide evidence that minimum competing land use
 17 related requirements have been fulfilled. For example, public land authorizations and relevant existing
 18 authorizations owned by the [Credit Developer/Credit Project Proponent](#) must be attachments to the
 19 Management Plan.

20 **Modifications to Standard Reserve Account Contributions**

21 Some credit project situations may require further reserve account contributions. When anthropogenic
 22 disturbances are removed on public lands to generate credits, a contribution of three times the standard
 23 reserve account calculation will be required. These increased reserve account contributions are necessary
 24 due to the lack of the project's requirement for monitoring, maintenance, management, and securing
 25 financial assurances to conduct these activities when credits are generated in this way. Without this
 26 additional contribution, the risk of loss due to natural events, man-made disturbances and the lack of
 27 financial assurances to address those potential losses would create an unmitigated burden to the existing
 28 reserve account credits.

29 **2.4.4 CREDIT RELEASE**

30 The [Credit System/CCS](#) uses credit release schedules to manage risk and uncertainty by releasing credits
 31 only when specific performance standards are met. Credit releases occur when a new milestone of
 32 performance standards, in terms of habitat function, is achieved on the credit site that warrants an
 33 increase in the amount of credit generated on that project site. Credit releases require a third-party
 34 verification, defined in [Section 2.4.5: Credit Site-Project Quantification, Monitoring, Qualitative Assessments,
 35 and Verification](#). Specific performance standards are defined in each credit project's Management Plan,
 36 and each credit project will have a unique credit release schedule based on those performance standards.
 37 A credit release schedule is different than credit payment schedules described in [Section 2.4.6 Financial
 38 Assurances](#).

1 If a credit project is unable to achieve performance standards defined in the credit project's Management
 2 Plan in order to release credits, the ~~Credit Developer~~Credit Project Proponent will work with the
 3 Administrator to adjust the performance standards and release schedule. A decline in habitat function
 4 outside of the tolerances defined in [Section 2.4.5: Credit Site-Project Quantification, Monitoring,](#)
 5 [Verification, Qualitative Assessments, and Verification](#) after credits are released will require the credit site to
 6 be remedied, or the credit site's financial assurances may be used to replace the invalidated credits. See
 7 [Section 2.4.6: Financial Assurances](#) for additional information on financial assurances.

8 Stewardship Management Actions

9 For credit projects based on stewardship management actions, credit release occurs when ~~a habitat~~
 10 ~~function performance standard conservation actions~~ defined in the credit project's Management Plan ~~are~~
 11 ~~implemented and associated HOT scores are is~~ achieved. ~~Credit projects based on stewardship~~
 12 ~~management actions cannot include performance standards defined by management actions, but rather~~
 13 ~~only performance standards defined by habitat function.~~ Credit projects that primarily maintain pre-
 14 project habitat function are likely to have a single credit release. If a credit project based on stewardship
 15 management actions includes multiple credit releases, the portion of credits released at each milestone
 16 must be less than or equal to the percent increase in habitat function relative to the total increase in
 17 habitat function expected to be achieved by the project. A credit release schedule associated with specific
 18 performance standards in the credit project's Management Plan can include multiple credit release
 19 intervals; however, each release must require at least a 5% increase in site-scale habitat function. Credits
 20 are released at the point when a third-party verifies an achieved performance standard. Credits released
 21 are valid for the full duration of the project's life, provided that the ~~Credit Developer~~Credit Project
 22 ~~Proponent~~ continues to meet that performance standard as confirmed by third-party verification and
 23 ~~self-annual management and monitoring -monitoring~~ reports. Verification requirements are defined in
 24 [Section 2.4.5: Credit Site-Project Quantification, Monitoring, Qualitative Assessments, and Verification](#).

25 Restoration Management Actions

26 For credit projects containing restoration management actions and habitat quality is anticipated to
 27 significantly improve over the life of the project, credit releases occur when ~~a performance~~
 28 ~~standard~~habitat goals defined in the project's Management Plan ~~are is~~ achieved. Credit projects containing
 29 restoration management actions can include performance standards defined by ~~management actions~~ and
 30 ~~habitat function~~, as described in the bullets below. Credits are released at the point that a third-party
 31 verifies an achieved performance standard. A credit release schedule associated ~~with to a performance~~
 32 ~~standard~~habitat goals in the credit project's Management Plan can include multiple credit release
 33 intervals; however, each credit release defined by habitat function must require at least a 5% increase in
 34 site scale habitat function. Credit release does not necessarily follow the same schedule as the payment
 35 structure for ~~Credit Developer~~Credit Project Proponents described in [Section 2.4.6 Financial Assurances](#).

- 36 ▪ Up to, but no more than the first **one third** of credits may be released upon implementation of
 37 management actions defined in the project's Management Plan. Credits released based on
 38 fulfilling management action criteria are limited to **one third** of the total credits that the project
 39 is ultimately anticipated to generate and the portion must be agreed to by the Administrator. For
 40 example, a credit project site with the potential to generate 600 credits, only 200 credits, may be
 41 released upon implementation of specified management actions.
- 42 ▪ The remaining **two thirds** or more of credits are released over additional credit release intervals
 43 upon verification that the habitat quality is meeting the performance standards. The portion of
 44 credits released at each milestone must be less than or equal to the percent increase in habitat
 45 function relative to the total increase in habitat function expected to be achieved by the project.

46 Table 15 below illustrates an example credit release scheduled with one third of credits released based on
 47 management actions, and the remaining two thirds released in two additional credit releases. Upon
 48 verifying conditions to release all credits anticipated by the credit project, all credits are expected to be

maintained for the full duration of the project’s life, according to the performance standards defined in the Management Plan and confirmed in verification and ~~self~~annual management and-monitoring reports.

Table 15: Example Credit Release Schedule for a Restoration Project

Performance criteria achieved	Credits Released
Milestone 1: Management Actions - Complete habitat restoration - 1/3 of performance assurances secured	33% of Total Anticipated Credits
Milestone 2: Habitat Function Performance - 66% of expected HQT score for the project - 2/3 of performance assurances secured	66% of Total Anticipated Credits
Milestone 3: Habitat Function Performance - 100% of expected HQT score for the project - All performance assurances secured	100% of Total Anticipated Credits

~~Net benefit for greater sage-grouse. The Credit System ensures net benefit for greater sage-grouse is achieved through mitigation offsets in the CCS, and limits overall program risk is limited by limiting awarding~~ management action-based credit releases ~~to up to~~only as much as one third of the anticipated credits and using a combination of additional mechanisms, including mitigation ratios, the reserve account, and financial assurances. Should a restoration project fail to generate the credits indicated in the credit site’s Management Plan, this combination of mechanisms covers any shortfalls in credits.

Although restoration projects may carry some risk of not achieving projected outcomes, it is important for the long-term viability of the species that habitat is restored to improved functionality, and therefore important that ~~Credit Developer~~Credit Project Proponents are incentivized to undertake these types of projects. A credit release upon implementation of management actions, along with the credit baseline function for restoration projects defined in [Section 2.3.4: Calculating Credit Baseline Habitat Function](#) helps to enable restoration activities to be more economically viable.

2.4.5. CREDIT SITE PROJECT VERIFICATION QUANTIFICATION, MONITORING, QUALITATIVE ASSESSMENTS, AND VERIFICATION

All credit projects require ~~verification-initial HQT quantification~~ prior to the release of any portion of the anticipated credits generated from projects, and monitoring, qualitative assessments, and verification throughout the duration of each credit project. See [Section 2.4.4: Credit Release](#) for additional information on credit release requirements and schedules.

The purpose of HQT quantification by a third-party Verifier ~~verification~~ for credit projects is to provide confidence to all participants, including the Administrator, that initial credit calculations represent ~~a true and~~an accurate account of ~~on-the-ground implementation actions and~~ habitat function and associated credits ~~credits~~ following the process outlined in the CCS User’s Guide, ~~as defined in each project’s Management Plan. Submissions by~~ HQT quantification results submitted by a certified third-party Verifiers. ~~of HQT quantification results go through a robust process by the Administrator to ensure accurate quantification of credits. Generally, the initial HQT quantification effort that establishes the current functional acre calculations and the first credit release will precede the negotiation of a credit sale. When this occurs, Credit Developer~~ Credit Project Proponents have an initial five year term in which credits can be offered for sale, should they work with the Administrator and sign an agreed-upon provided a management plan is signed and conduct annual monitoring is conducted as required. Should credits not sell in the initial five year term, a Credit Developer ~~Credit Project Proponent can choose to~~

1 ~~have the 5-year Verification qualitative assessment effort completed and maintain credits available for~~
2 ~~sale.~~

3 In addition, ongoing ~~verification and monitoring, qualitative assessments, and verification~~ ensures that
4 projects are maintained over time, ~~improved where on-the-ground uplift actions were implemented,~~ and
5 support the expected habitat quality commensurate with the amount of credits generated. ~~Ongoing~~
6 ~~monitoring, qualitative assessments, and verification~~ also confirms ~~evaluate~~ Annual monitoring evaluates
7 whether activities on adjacent project sites have occurred that compromise the ability of enrolled credit
8 sites to generate credits according to their Management Plan. ~~The required frequency and process for~~
9 ~~monitoring, qualitative assessments, verification, annual monitoring and Verifier selection,~~ is described
10 below.

11 ~~The Annual Management & Monitoring Report is to be submitted to the Administrator by credit project~~
12 ~~proponents each year with the exception of the years in which third-party verification is conducted. This~~
13 ~~report features not only questions about management actions and whether the commitments within the~~
14 ~~management plans were implemented, but a monitoring component to be carried out by credit project~~
15 ~~proponents between April 15th and June 30th with a focus on photo-monitoring sites. This report is due to~~
16 ~~the Administrator at the end of July each year.~~

17 ~~At five-year intervals with the exception of the years when third-party verification occurs, the~~
18 ~~Administrator will conduct a five-year qualitative assessment. This assessment will include GIS~~
19 ~~evaluation of the project area using the latest aerial imagery to assess any changes including~~
20 ~~anthropogenic disturbances, cheatgrass and wildfire layers, the Sage Grouse Initiative mesic layer, the~~
21 ~~Rangeland Analysis Platform, and potentially other remote sensing tools as they become available. As~~
22 ~~part of this qualitative assessment, the Administrator will then schedule a visit to the project site to meet~~
23 ~~with the credit project proponent, conduct annual monitoring alongside them, assess whether the project~~
24 ~~area is being managed as committed to, and provide an assessment of the habitat and critical areas within~~
25 ~~the project perimeter.~~

26 ~~Verification Along with other CCS requirements and adherence to the commitments in the management~~
27 ~~plan, verification of the HQT functional acre calculations and other criteria defined in the Management~~
28 ~~Plan is required prior to awarding any additional credit releases for habitat improvement and~~
29 ~~periodically during throughout the duration of the a project. These verifications are conducted using the~~
30 ~~HQT to assess habitat improvements since the initial HQT quantification effort and review of the~~
31 ~~Management Plan by third-party Verifiers and should be preceded by visual observation and confidence~~
32 ~~of improved habitat conditions and a likelihood of more than a 5% increase in habitat function, who are~~
33 ~~trained and certified by the Administrator.~~

34 ~~In addition to verifications to assess uplift and potentially calculate the credits from realized habitat~~
35 ~~improvements, verification is also to occur at Year 15 of 30-year credit projects, and at 15-year~~
36 ~~increments for longer duration credit projects. This verification is to ensure the habitat is being~~
37 ~~maintained as planned by implementing a full HQT verification (at 100% the effort of the initial HQT~~
38 ~~quantification for the project) by a certified third-party Verifier to allow comparisons with the initial~~
39 ~~HQT quantification effort. Credit Developers are also required to conduct and report on annual self-~~
40 ~~monitoring, as defined in each Management Plan.~~

41 ~~Often, the initial full Verification effort that establishes the current functional acre calculations and the~~
42 ~~first credit release will precede the negotiation of a credit sale. When this occurs, Credit Developers have~~
43 ~~an initial five year term in which credits can be offered for sale, should they work with the Administrator~~
44 ~~and agree upon and sign a management plan and conduct annual monitoring as required. In the interim,~~
45 ~~should credits not sell in the initial five year term, a Credit Developer can choose to have the 5 year~~
46 ~~Verification effort completed and maintain credits available for sale.~~

1 Indication of a trend in habitat decline or deviation from management commitments found by the
 2 Administrator during five year qualitative assessments or resulting from verification efforts could result
 3 in more robust evaluation of projects by the Administrator. The relatively comprehensive annual
 4 management and monitoring report to be turned in for all credit projects each year will add to the
 5 considerable knowledge about the management and condition of projects. Concerns over any of these
 6 efforts or the reports describing them could result in spot checks or audits from the Administrator, which
 7 can also be conducted randomly. After significant onsite degradation or mismanagement indicated
 8 through any of the above vectors and at the discretion of the Oversight Committee, full verification may
 9 be required by a certified third-party Verifier any time outside of the 15-year window with costs to be
 10 covered by the credit project proponent.

12 **Credit Quantification, Monitoring, Qualitative Assessment, and Verification Schedule**

13 The ~~verification~~ schedule for a credit project is based on the credit release schedule defined in each
 14 Management Plan, and incorporates the following requirements:

- 15 1. ~~HQT Quantification~~ **B**efore first credit release (Verifier)
- 16 2. ~~Verification~~ **B**efore additional credit releases (Verifier)
- 17 3. ~~Annual Management & Monitoring Report (Credit Project Proponent)~~
- 18 4. ~~Five-Year Qualitative Assessments (Administrator);~~
- 19 2. ~~Verification~~ **B**efore additional credit releases (Verifier)
- 20 3. ~~5. Verification~~ **A**t least every 15th year (Verifier)
- 21 6. ~~Periodic spot checks and audits (as authorized by the Administrator or relevant public land~~
 22 ~~management agency)~~
- 23
- 24 4. ~~Annual self-monitoring (Credit Developer)~~

25 ~~Before first credit release~~

26 ~~HQT quantification by a t~~Third-party ~~verification-Verifier~~ is required and the Administrator reviews the
 27 verification report as a necessary component of the documentation- all submitted documentation before
 28 the first credit release is approved.

29 ~~Before additional credit releases~~

30 Third-party verification is required to confirm that conditions ~~have resulted in an improvement that~~
 31 ~~translates to additional credits-meet the performance standard-habitat goals-specified in the credit release~~
 32 ~~schedule in a project's Management Plan before a release of additional credits.~~

33 ~~Annual Management & Monitoring Report (Credit Project Proponent)~~

34 ~~Completed every year.~~ Focus is on photo monitoring points and complete fulfillment of the annual
 35 monitoring report. Annual monitoring should also confirm that pinyon-juniper saplings ~~and/or trees~~
 36 greater than the height of sagebrush are not found within project areas.

37 ~~Five Year Qualitative Assessments (Administrator)~~

38 ~~At five year intervals with the exception of the years when third-party verification occurs, the~~
 39 ~~Administrator will conduct a five year qualitative assessment using various methods discussed above.~~

40 ~~At least e~~Every 15th year

41 At least every ~~fifteenth~~ year, a third-party verification is conducted and all documentation (i.e.
 42 current conditions data, HQT outputs, and final credit calculations) is reviewed by the Administrator to
 43 evaluate the project based on ~~performance standards~~habitat goals included in the Management Plan.
 44 ~~When verification is conducted to either support an increase in credit amount or for a periodic spot check~~
 45 ~~and audit, the verification required every five years is reset. Thus, if project verification is completed in~~
 46 ~~year 3 5 to support a new credit release, then the next verification is not required until year 810.~~

1 Verification at five year intervals, when relevant, should also confirm that pinyon-juniper saplings and/or
2 trees greater than the height of sagebrush are not found within project areas.

3 Periodic spot checks and audits

4 The Administrator or relevant public land management agency for credit projects on public lands may
5 conduct random audits of approximately 5-10% of credit sites in any particular year.

6 ~~Self~~Annual monitoring

7 Credit Developers are expected to conduct self~~annual~~ monitoring annually to ensure that the site is
8 meeting defined performance standards and to report results to the Administrator.

9 Credit Variability & Verification Results

10 *Credit variability* is variation in habitat function on a site as measured by the HQT at two different points
11 in time. Even on relatively stable sites, variability is likely to result due to variation in climatic conditions
12 and other natural events that influence habitat function. Credit variability is also likely to occur due to
13 sampling error that is inherent to any measurement method. Based on these considerations, the ~~Credit~~
14 ~~System~~CCS allows for limited variability in habitat function as a mechanism to insulate ~~Credit~~
15 ~~Developer~~Credit Project Proponents from being subject to penalties for minor fluctuations in habitat
16 quality.

17 Upon each credit release, third-party verification must substantiate that the site meets or exceeds the
18 habitat function defined in the credit release schedule of the project's Management Plan. The
19 Administrator, in coordination with the ~~Credit Developer~~Credit Project Proponent, will establish site-
20 specific performance measures after each credit release against which subsequent verifications will be
21 evaluated. The performance measures must be documented in the Management Plan after each credit
22 release. Credit project verifications that demonstrate satisfactory achievement of the performance
23 measures are considered as meeting performance standards defined in the Management Plan, and
24 therefore do not require a reduction in credits, or trigger the use of Financial Assurances for the site. In
25 years of extreme drought, or other atypical conditions, the Administrator may recommend waiting for
26 more typical conditions.

27 If verification shows that a credit site is performing below the credit variability tolerance and is therefore
28 not meeting performance standards, the ~~Credit Developer~~Credit Project Proponent must work with the
29 Administrator to determine a remedial action plan. Credit projects outside of the credit variability
30 tolerance may be subject to the ~~Credit System~~CCS's processes related to credit reversals. See [Section 2.1.7:](#)
31 [Reserve Account Management and Use of Financial Assurances](#) for more information on how credit reversals
32 are addressed.

33 Verifier Selection

34 Contracting and payment for third party verification of credit projects is generally handled by the Credit
35 Producer. The Administrator provides an annual pool of certified Verifiers, which allows the Credit
36 Buyer to accept bids before the chosen Verifier conducts a site visit. However, verifications conducted as
37 periodic spot checks and audits are funded by the Administrator.

39 2.4.6 FINANCIAL ASSURANCES

40 The ~~Credit System~~CCS requires that ~~Credit Developer~~Credit Project Proponents establish appropriate
41 financial assurances for each credit project site in order to sell credits. Financial assurances are fiscal
42 mechanisms that are used to ensure the durability of credits generated throughout the full duration of a
43 credit project. Financial assurances are defined in each ~~Credit Developer~~Credit Project Proponent's
44 Participant Contract and documented in an accompanying Management Plan, and can consist of contract
45 terms, such as financial penalties for intentional reversals and specific payment terms, and financial

1 instruments, such as long-term stewardship funds and contract surety bonds. Financial assurances must
2 ensure that funds are available:

- 3 1) For the implementation and long-term management of each credit project, including remedial
4 actions in the event of unintentional reversals, and
- 5 2) To promptly replace credits that have been sold but become invalidated due to intentional
6 reversals.

7 The Administrator and Credit Developer/Credit Project Proponent will define a financial assurance
8 package that is acceptable to both the Administrator and Credit Developer/Credit Project Proponent. The
9 specific financial assurances package can be a combination of one or various mechanisms (e.g., long-term
10 stewardship funds, contract payment terms, contract surety bonds and contract penalties) that ensure
11 sufficient funds are available to meet the above needs. Financial instruments must be held either by the
12 Administrator or a qualified third party institution that is approved by the Administrator.

13 The following overarching principles and basic minimum requirements guide the development of
14 financial assurance packages:

- 15 ▪ Minimize financial transaction costs and maximize payments to Credit Developer/Credit Project
16 Proponents for actions that improve habitat;
- 17 ▪ Appropriately allocate risk to Credit Developer/Credit Project Proponents and not solely to the
18 Administrator;
- 19 ▪ Preferably use mechanisms that do not require the Administrator to engage in costly litigation with
20 Credit Developer/Credit Project Proponents to secure funds for credit replacement;
- 21 ▪ Include provisions that hold to the principal that projects will not receive any future payments for
22 projects that are not producing credits, even in the case of force majeure if a credit project has been
23 deemed inappropriate to remediate;
- 24 ▪ Design financial instruments to cover long-term management of credit project sites and replacement
25 of credit reversals, considering:
 - 26 ▫ Management and maintenance activities defined in Management Plan
 - 27 ▫ Monitoring and verification defined in Management Plan
 - 28 ▫ Appropriate fund management and rate of return
 - 29 ▫ Relevant inflation rates
 - 30 ▫ Credit market price trends

31 Financial Assurances for Long-term Credit Site Management, Monitoring, and Unintentional Reversals

32 Financial assurances are required for the long-term management and monitoring of all credit projects.
33 Financial assurances established for long-term management and monitoring must be designed to meet
34 the following requirements:

- 35 ▪ Cover all anticipated costs expected to perform maintenance and monitoring of the project as
36 defined in the Management Plan for the duration of the contract;
- 37 ▪ Ensure contingency funds are available to address periodic project-related costs that are likely to
38 occur; and
- 39 ▪ Ensure an ongoing financial incentive that is greater than the anticipated cost to maintain and
40 monitor the project.

41 Financial instruments may be secured to ensure long-term credit site management, monitoring, and
42 remedial actions in the event of unintentional reversals. If used, the type of financial instrument required
43 is dependent on the duration of the credit project. Permanent credit projects require a long-term financial
44 instrument for which the principal amount is managed in perpetuity. Term credit projects require a
45 financial instrument that is managed such that no funds remain at the end of the credit project.

1 Financial instruments established for long-term management and monitoring must use an initial deposit
2 amount that factors in annual payments intended for the ~~Credit Developer~~[Credit Project Proponent](#) and
3 accounts for inflation, as well as expected financial returns from appropriately investing funds for long-
4 term management and monitoring. Annual payments may be structured to provide variable annual
5 amounts when additional costs are expected in specific years or on years when third-party verification is
6 performed and the credit site is shown to perform at, or above, expected performance. Variable payments
7 must be structured such that the financial instrument is sufficient to make all defined payments for the
8 full duration of the project. The Administrator must agree that the initial deposit amount for each credit
9 project will cover the necessary annual payments using a predictive financial model that accounts for
10 inflation and interest rates.

11 Financial instruments established for long-term management and monitoring must be accompanied by
12 contract terms that ensure funds intended for the ~~Credit Developer~~[Credit Project Proponent](#) are available
13 to the Administrator in the case of an unintentional reversal, so that all remaining funds for long-term
14 management and monitoring can be used to remediate the credit site or to purchase credits from a
15 different site, as defined in [Section 2.1.7: Reserve Account Management and Use of Financial Assurances](#). These
16 payment terms align the incentives of the ~~Credit Developer~~[Credit Project Proponent](#) and the
17 Administrator by sharing the financial risk for ongoing performance.

18 In situations where credit projects do not require long-term management and monitoring funds, or a
19 large upfront payment is made to the ~~Credit Developer~~[Credit Project Proponent](#), such as for restoration
20 projects, other financial instruments, such as a contract surety bond, may be used to ensure sufficient
21 funds are available to the Administrator in the case of unintentional reversals.

22 [Financial Assurances for Intentional Reversals](#)

23 Financial assurances must be established to ensure the Administrator has access to funds at the level
24 required to replace credits sold but that have become invalidated due to intentional reversals. Financial
25 assurances established for intentional reversals must be designed to meet the following requirements:

- 26 ▪ Cover the monetary costs of acquiring new credits to replace all invalidated credits; and
- 27 ▪ Ensure that the additional effort incurred by the Administrator to secure new credits is fully
28 funded.

29 Financial assurances that can fulfill the intentional reversals requirement include contract terms, such as
30 financial penalties, and financial instruments, such as contract surety bonds. Contract terms must define
31 that if performance standards on a credit project site are not met, the financial assurances used to fulfill
32 the intentional reversal requirement as well as remaining funds in that project's financial assurances for
33 long-term management and monitoring are available to the Administrator. See [Section 2.1.7: Reserve
34 Account Management and Use of Financial Assurances](#) for additional information on how the Administrator
35 will use the reserve account and financial assurances in the case of intentional reversals.

2.5 CREDIT OBLIGATION PROVISIONS & CREDIT INVESTMENT STRATEGIES

This section describes credit obligation provisions for debit projects to ensure credit obligations offset the direct and indirect impacts of debit projects. Credit obligation provisions include debit project duration and verification requirements. In addition, this section describes investment strategies that debit projects and other Credit Buyers can be used to acquire credits, depending on the goal of the acquisition. Credit Buyer/Debit Project Proponents are the primary audience of this section.

2.5.1 DEBIT SERVICE AREA

The Credit System CCS service area is the mapped geographic region where credits are required to offset debits that occur when disturbances are proven unavoidable, and minimization does not provide for complete direct or indirect impact avoidance.¹³ Debits on public lands within the service area will be tracked and reported by the Credit System CCS. The service area designation has important implications for the viability of the Credit System CCS transactions and for the ability of the System to generate a net benefit for greater sage-grouse habitat from the impacts from anthropogenic disturbances.



Figure 167: Greater sage-grouse service area

The current mapped BSUs are the Credit System CCS service area, and are provided in Figure as an example. The boundaries of this area are based on the range of the species in the State of Nevada and are aligned with State of Nevada development project review requirements. Anthropogenic disturbances to habitat on BLM, USFS, State of Nevada, and local government lands within the service area require consultation with the SETT and the appropriate government agency, as defined in the 2014 Nevada Greater Sage-Grouse Conservation Plan.

While the Service Area broadly defines the domain of the Credit System CCS, the Mitigation Ratios establish incentives to offset debits using credits generated in close proximity to debit sites. Section 2.2.2: Mitigation and Proximity Ratios describes how the WAFWA Management Zones, Nevada BSUs, and the NDOW PMUs depicted in the Figure 12 are incorporated into the proximity ratio. In addition, three Management Categories are also incorporated into the Mitigation Ratios to encourage the generation of credits and discourage debits in PHMA and GHMA Management Category Areas, which are estimated to have high space-use by greater sage-grouse. Credits and debits will be tracked in the Credit System CCS Registry and reported by the Administrator by WAFWA Zones and PMUs.

2.5.2 DEBIT PROJECT TYPES

Proposed anthropogenic disturbances to habitat on BLM, USFS, State of Nevada and local government lands within the Service Area require consultation with the SETT and the appropriate government agency, as defined in the 2014 Nevada Greater Sage-Grouse Conservation Plan. Anthropogenic disturbances are considered debit projects when they are proven to be unavoidable, and when minimization does not provide for complete direct or indirect impact avoidance¹⁴. A debit project may be

¹³ US Fish and Wildlife Service. Greater Sage-Grouse Range-Wide Mitigation Framework Version 1.0. September 3, 2014. Page 6.

¹⁴ US Fish and Wildlife Service. Greater Sage-Grouse Range-Wide Mitigation Framework Version 1.0. September 3, 2014. Page 6.

1 a new anthropogenic disturbance, an expansion in the operation of an existing anthropogenic
2 disturbance, or an extension in duration of an existing anthropogenic disturbance.

3 As defined in the 2014 Nevada Greater Sage-Grouse Conservation Plan, an anthropogenic disturbance is
4 defined as any human-caused activity or action or human-created physical structures that may have
5 adverse impacts on greater sage-grouse or their habitat. Anthropogenic disturbance project categories
6 include:

- 7 ▪ Mineral development and exploration and its associated infrastructure;
- 8 ▪ Renewable and nonrenewable energy production, transmission, and distribution and its
9 associated infrastructure;
- 10 ▪ Paved and unpaved roads and highways;
- 11 ▪ Cell phone towers;
- 12 ▪ Landfills;
- 13 ▪ Pipelines; Pipelines Linear Rights of Way (e.g., pipelines, fiber optic cables, etc.);
- 14 ▪ Residential and commercial subdivisions;
- 15 ▪ Activities undertaken pursuant to special use permits and right-of-way grants; and
- 16 ▪ Other infrastructure development.

17 Livestock operations and agricultural activities and infrastructure related to ranch and farm businesses
18 (e.g. water troughs, fences, etc.) are not included in this definition of debit project types. Section 7.5 and
19 Appendix A of the 2014 Nevada Greater Sage-Grouse Conservation Plan address how to minimize
20 impacts to greater sage-grouse and their habitat from these activities.

21 2.5.3 MITIGATION HIERARCHY AND PERMIT REQUIREMENTS

22 The ~~Credit System~~ CCS is intended to be used in the context of state and federal policies that require the
23 full mitigation hierarchy sequence (e.g. avoidance,
24 minimization, compensatory mitigation). Credits are used
25 to offset debits that occur when disturbances are proven
26 unavoidable, and minimization does not provide for
27 complete direct or indirect impact avoidance.¹⁵
28 ~~Debit~~ Pursuant to Nevada Administrative Code, Debit
29 projects permitted through federal and state agencies will
30 use the ~~Credit System~~ CCS to purchase credits that fulfill
31 their compensatory mitigation obligations prior to
32 development of the debit project.¹⁶

2014 Nevada Greater Sage-Grouse Conservation Plan

*The State of Nevada's overriding policy
for all management actions within the
Sage-grouse Management Area is to
"avoid, minimize, and mitigate"
impacts to sage-grouse habitat.*

33 ~~Credit Buyer~~ Debit Project Proponents can acquire ~~verified~~ credits directly from ~~Credit Developer~~ Credit
34 Project Proponents, including Aggregators, or the Administrator who may carry an inventory of Credits
35 to facilitate offset transactions. Credits cannot be acquired from ~~Credit Developer~~ Credit Project
36 Proponents or the Administrator until credits are released by the Administrator, which requires
37 ~~verification confirmation~~ that habitat function is meeting the defined performance criteria for the credit
38 project. ~~Credit Buyer~~ Debit Project Proponents may use alternative investment mechanisms to acquire
39 credits, such as reverse auctions that leverage competitive bidding processes to procure the greatest

¹⁵ US Fish and Wildlife Service. Greater Sage-Grouse Range-Wide Mitigation Framework Version 1.0. September 3, 2014. Page 6.

¹⁶ As of December 4, 2014, debit projects permitted through federal agencies are not required to use the ~~Credit System~~ CCS to fulfill their compensatory mitigation obligations. However, the ~~Credit System~~ CCS is expected to be included in the BLM/USFS Land Use Plans for the Northeastern California-Nevada Sub Region as the tool for defining and fulfilling compensatory mitigation requirements for anthropogenic disturbances to greater sage-grouse habitat on BLM and USFS lands in the State of Nevada.

1 amount of credits for a set amount of funding. The Credit Buyer pays the full cost of acquiring credits
2 including all necessary administrative fees.

3 Those Credit Buyers who purchase credits to fulfill regulatory requirements for compensatory mitigation
4 are responsible for meeting all requirements of the relevant permitting process through the State of
5 Nevada, BLM, or other government agencies. ~~Credit Buyer~~ **Debit Project Proponents** must provide
6 documentation of the permit stipulations and debit project design documents to the Administrator to
7 ensure proper identification of the total amount of credits needed to offset the debit project, and the total
8 duration of the debit project. This allows the Administrator to 1) ensure that the debit project is
9 appropriately offset with a credit project and 2) transparently track and report on all credit transactions
10 and programmatic net benefit generated. See [Section 2.2: Habitat Quantification and Credit and Debit](#)
11 [Calculation](#) for additional information on calculating credit obligations and [Section 2.5.4: Debit Project](#)
12 [Duration](#) for additional information on project duration provisions.

13 **2.5.4 DEBIT PROJECT DURATION**

14 Debit project duration is the length of time that the project is anticipated to impact habitat function or in
15 perpetuity. For impacts that are anticipated to return to pre-project habitat function, an additional set
16 period of time beyond the length of time that the project is anticipated to impact habitat function is
17 required to allow the species to begin to use the site. The stated duration in the permit or lease for each
18 anthropogenic disturbance plus an additional 10 years will be used as a starting point for establishing the
19 debit project duration for impacts with limited term impacts.

20 Like credit projects, the duration of debit projects can be either limited term or in perpetuity. Debit
21 projects that are not expected to return to pre-project habitat function have an in perpetuity project
22 duration. *Rehabilitation* necessary to return a debit site to pre-project habitat function will be defined in
23 the permit or lease for the anthropogenic disturbance in order for the Administrator to agree to the debit
24 project duration. Projects that generate perpetuity debits have the option to either purchase an equivalent
25 number of perpetuity credits or use a 4 time multiplier that would be applied to the number of
26 permanent debits to calculate the number of term credits the project would be required to purchase in
27 lieu of perpetuity credits.

28 Debit projects may include areas within the project boundary that are expected to return to pre-project
29 habitat function and other areas that are not expected to return to pre-project habitat function. Further,
30 debit projects may include areas that are impacted for longer durations than others. For example, habitat
31 indirectly impacted by a debit project is likely to return to pre-project habitat function with minimal
32 rehabilitation, such as removal of roads and structures. Habitat directly impacted by a debit project, such
33 as an open-pit of a mine, is not expected to return to pre-project habitat function. Therefore, debit projects
34 may generate debits with different project durations, including different term periods and a mix of term
35 and in perpetuity.

36 For term debits, third-party verification is required to demonstrate that the habitat impacted by the debits
37 has returned to pre-project habitat function. See [Section 2.5.6: Debit Site Verification](#) additional information
38 on verification requirements. If verification demonstrates that a term debit project has not yet been fully
39 rehabilitated, the Administrator will require additional credits sufficient to cover the residual impact be
40 purchased for an additional term.

41 **Matching the Duration of Credits and Debts**

42 The ~~Credit System~~ **CCS** requires the duration of a ~~contracted~~ **stewardship** credit ~~projects~~ **project** to be equal
43 to, or greater than, the duration of the debit project it is offsetting. [The ability to prorate uplift credits with](#)
44 [a term of less than 30 years in found in section 2.4.2.](#) The Administrator ensures that credit project
45 durations are sufficient to meet or exceed the duration of the debit project they are offsetting through
46 *static offsets* or *dynamic offsets*.

1 ■ **Static Offsets** – A debit project is offset by a credit project that is fixed in a single geographic
 2 location with the Participant Contract, Management Plan and associated site protection
 3 mechanisms in place for the contracted duration of the debit project. This type of offset requires
 4 the debit term and credit term to match equally.

5
 6 ■ **Dynamic Offsets** – A dynamic offset may allow multiple projects to contribute to a total debit
 7 obligation if the obligation cannot be met with from a single credit project. With dynamic offsets,
 8 debit and credit projects with disparate terms may be matched and used to offset debits through
 9 prorating. More information may be found in section 2.4.2: Credit Durability Provisions. This
 10 dynamic offset allows and encourages development and purchase of credits within the
 11 appropriate spatial scale. Combined with the ability to prorate credit terms it will also encourage
 12 uplift activities to play an increased role in offsetting debits. ~~–debit project is offset by a series of~~
 13 ~~limited term credit projects such that the location of the credit projects can shift across a defined~~
 14 ~~geographic space (i.e. a set of rolling term projects funded for the full duration of the debit~~
 15 ~~project). Dynamic offsets are defined as a series of strategically located, limited term-based~~
 16 ~~agreements that, when sequentially aggregated, meet or exceed the duration of the impact.~~

Commented [EM5]: This section was outdated and unclear.
 Rewritten to clarify in the context of the improvements.

17 Requirements for Dynamic Offsets

18 Utilization of this strategy may allow a debit project to purchase limited term uplift credits that only
 19 partially fulfill credit obligations and the purchase of multiple, spatially separated limited term projects
 20 would allow the fulfillment of the whole credit obligation. For example, a 60 year term debit project with
 21 an obligation of 100 credits could purchase multiple sets of credits from projects with different terms, if
 22 available. A Credit Developer, Aggregator, or the Administrator may develop a dynamic offset
 23 arrangement that commits to meet the credit requirements for a debit project using a series of limited
 24 term credit projects. The series of limited term credit projects under a dynamic offset arrangement must
 25 cover the credit obligation of the debit project for each year of the debit project. For example, if the credit
 26 obligation of a debit project is 1,000 credits into perpetuity, then the limited term credit projects must
 27 provide 1,000 credits for each year into perpetuity. The limited term credit projects cannot provide 3,000
 28 credits for the first 30 years and 0 credits for the next 60 years.

29 In addition, each limited term credit project under a dynamic offset arrangement must have duration of
 30 at least 30 years because the debit project is permanent and rapidly changing habitat function (credit
 31 sites) can be detrimental to populations.

32 The financial assurances associated with a dynamic offset credit project are similar to those required for
 33 static offset projects but include additional requirements to ensure durability and require that finances
 34 are in place to secure new limited term contracts for the full length of the impact. Additionally, the
 35 Administrator must be able to ensure compliance and accountability through tracking and reporting,
 36 enforcement for credit reversals, and direct management of financial instruments. See [Section 2.1.7:](#)
 37 [Reserve Account and Use of Financial Assurances](#) for more information.

38 The potential benefits of dynamic offset projects include increased participation and a greater number of
 39 total credit projects and credits available for sale due to [Credit Developer/Credit Project Proponent](#)
 40 preferences for term contracts. Term projects also enable the ability to shift the location of high quality
 41 habitat in response to population dynamics and potential effects of climate change.

42 **2.5.5 CALCULATING DEBIT BASELINE HABITAT FUNCTION**

43 Debit baseline habitat function is the starting point from which functional acre loss is measured.
 44 Functional acre loss is then multiplied by a mitigation ratio to determine the debits generated for each
 45 map unit within a debit project. See [Section 2.2.2: Mitigation and Proximity Ratios](#) for additional
 46 information on determining mitigation ratios. Functional acre loss represents the functional acre change

1 from debit baseline functional acres that results from implementing a project. Functional acre loss is equal
2 to the difference between the post-project functional acres and the pre-project functional acres.

3 Debit baseline habitat function is the pre-project habitat function of each map unit within the debit site,
4 and is calculated by multiplying

- 5 ▪ Local-scale, pre-project habitat function as determined by the HQT, and
- 6 ▪ Site-scale, pre-project habitat function as determined by the HQT.

7 See [Section 2.2.1: Habitat Quantification Tool](#) for description of scales.

8 An example debit baseline habitat function is illustrated in Table 16 for a map unit with high local-scale
9 and moderate site-scale pre-project habitat function.

10 Table 16: Example debit baseline calculation

Local-scale Pre-Project Habitat Function	Site-scale Pre-Project Habitat Function	Debit Baseline Habitat Function
80%	40%	32%

11 Pre-project habitat functional-acres calculated must be verified by a third-party Verifier before any
12 development on the site can begin. See [Section 2.5.6: Debit Site Verification](#) for additional information on
13 verification requirements.

14 **Recent Wildfire**

15 Vegetation characteristics required to calculate site-scale habitat function by the HQT are unlikely to
16 reflect the future habitat function on the site if wildfire has impacted a debit site recently. If wildfire has
17 impacted a debit site within the last 10 years, site-scale habitat function is calculated using the greater of
18 the following for the portion of the project area impacted by wildfire to calculate debit baseline:

- 19 1) Site-scale pre-project habitat function as determined by the HQT.
- 20 2) Site-scale regional standard habitat function as defined in Table 11 plus 10%.

21 **Inaccessible Areas**

22 For some debit projects, the [Credit Buyer/Debit Project Proponent](#) will not be able to calculate the site-
23 scale pre-project habitat function for a portion of the area indirectly impacted by the debit project. For
24 example, the debit project may indirectly impact a private party for which the [Credit Buyer/Debit Project](#)
25 [Proponent](#) is not able to secure access to in order to collect field data necessary to calculate site-scale
26 habitat function using the HQT. In these situations, the Habitat Suitability Index (HSI) score, as measured
27 by the HQT as part of the local-scale habitat function calculation, is used as a proxy for the site-scale
28 habitat function for the inaccessible areas. The HSI is spatially explicit and easily available for any site
29 within the Service Area.

30 **Decision to Eliminate Fieldwork**

31 If a [Credit Buyer/Debit Project Proponent](#) decides to not conduct field sampling, whether there is a time
32 constraint or the project will be developed in an area with high anthropogenic disturbance, a site-scale
33 habitat function of 100% can be assigned within the debit site-screening tool which would allow for the
34 most conservative debit calculation. If this option is preferred over utilizing the complete HQT, it would
35 create a systematic and consistent approach to calculating credit obligation for debit projects that would
36 always yield a higher debit estimate than if field data were collected.

37 **2.5.6 DEBIT SITE QUANTIFICATION AND VERIFICATION**

38 All debit projects require ~~verification~~ [HQT quantification](#) prior to beginning the development of the debit
39 project. The purpose of ~~HQT quantification verification~~ [HQT quantification](#) for debit projects is to provide confidence to all
40 participants, including the Administrator, that debit calculations represent a true and accurate account of
41 on-the-ground habitat function, as defined in each debit project's regulatory permit. Ongoing verification

1 and monitoring ensures that debit projects are implemented and impacts cease as defined in the project's
 2 permit. The required frequency and process for verification, as well as the process for verification
 3 selection, is described below.

4 Verification of debit projects is an independent, expert check on the HQT calculations and other project
 5 design documentation. Verifications are conducted using the HQT by third-party Verifiers trained and
 6 certified by the Administrator. Verification includes a review of changes to the site over the previous 10
 7 years to ensure that the site was not been recently degraded intentionally to reduce the credit obligation
 8 of the current permit application.

9 [Credit Buyer Debit Project Proponents](#) have the option to not have field data collected and instead use a
 10 100% site-scale habitat function as described in *Section 2.5.5 Debit Site [quantification and](#)* Verification.

11 **Debit [Quantification and Verification Schedule](#)**

12 Debits under the [Credit System CCS](#) are [quantified or](#) verified at four distinct points in time:

- 13 1. [Quantification of debits before](#) debit project begins (Verifier)
- 14 2. [Verification during](#) the project implementation period if phasing of debits is agreed upon
 15 (Verifier)
- 16 3. [Verification when](#) debits end or decrease (Verifier)
- 17 4. Periodic spot checks and audits (Administrator or relevant public land management agency)

18 **Before debit project begins**

19 Third-party verification of the pre-project condition of greater sage-grouse habitat on debit sites is
 20 required before development of debit projects can begin.

21 **During project implementation period**

22 Third-party verification is necessary to verify site conditions after a debit project has been implemented
 23 to confirm that the appropriate amount of debit is being attributed to the debit project or if phasing of
 24 debits has been approved. Verification during this period is aligned with project design documentation
 25 and permit and regulatory requirements.

26 **When term debits end or reduce**

27 Third party verification is necessary at the end of a term debit to confirm that the term debit site is no
 28 longer impacting habitat function. If, at the end of the debit project's duration, the site has not been
 29 rehabilitated to recover habitat function and allow for species use, the [Credit Buyer Debit Project](#)
 30 [Proponent](#) will be required to purchase additional credits for an additional term. If third-party
 31
 32

Biological Monitoring

Biological monitoring is an essential element of the [Credit System CCS](#), and is a separate but complementary process to verification. Biological monitoring is executed through the [Credit System CCS](#)'s adaptive management process as described in *Section 3.3: Managing the [Credit System CCS](#)*. While verification confirms on-site performance in relation to a Management Plan and HQT score, biological monitoring means observing, recording and assessing the quantity and quality of all credit-producing activities, as well as the biological response of greater sage-grouse and critical habitats across the [Credit System CCS](#) service area. The goals of biological monitoring under the [Credit System CCS](#) are to:

- Assess the status and trend of greater sage-grouse populations
- Assess the net contribution of conservation management outcomes to greater sage-grouse habitat and population goals at a variety of spatial scales
- Assess the effectiveness of management actions in regard to achieving expected habitat outcomes
- Collect and incorporate new information for adaptive management
- Detect and address changed or unforeseen circumstances (e.g. shifts in species distribution)

1 verification demonstrates a reduction in the impact and amount of credits needed as an offset, the **Credit**
 2 **BuyerDebit Project Proponent** may sell and transfer surplus credits to another **Credit BuyerDebit Project**
 3 **Proponent**'s account to fulfill their credit obligation in accordance to **Credit System CCS** requirements
 4 defined in *Step D5.2: Sell and Transfer Credits in Section 3.*

5 **Periodic spot checks and audits**

6 The Administrator or relevant public land management agency conducts random audits of
 7 approximately 10% of debit sites in any particular year.

8 **Verifier Selection**

9 Contracting and payment for third party verification of debit projects is handled by the Project
 10 Proponent. The Administrator provides a pool of certified Verifiers, which allows the Credit Buyer to
 11 accept bids before the chosen Verifier conducts a site visit. Verifications conducted as periodic spot
 12 checks and audits may be implemented and funded at the discretion of the Administrator.

13 **2.5.7 CREDIT INVESTMENT STRATEGIES**

14 Credit Buyers have the flexibility to acquire credits in whatever way best meets their credit investment
 15 goals, within the bounds and requirements of the **Credit System CCS**. Credit Buyers can create financial
 16 agreements and contracts to secure desired credits with **Credit DeveloperCredit Project Proponents**,
 17 including Aggregators, completely independent of Administrator oversight. However, financial
 18 agreements must provide for financial assurances to be appropriately accessible to the Administrator in
 19 the case of reversals, and must include provisions for all administrative fees and contract terms required
 20 by the **Credit System CCS**. Further, all credits and debits generated under the **Credit System CCS** must be
 21 quantified, verified and managed according to **Credit System CCS** requirements, giving appropriate
 22 access and authorities to the Administrator and other designated parties.

23 Different mechanisms can be used to acquire credits, depending on the goal of the acquisition. The goal of
 24 acquisitions ranges from acquiring credits for future sales to acquiring credits for a specific debit project.
 25 Table 17 describes a few of these potential investment approaches, but is not intended to be an exhaustive
 26 list.

27 Table 17: Potential investment strategies

28

Investment Strategy	Description	Benefits	Typical Uses
Reverse Auction or Requests for Proposal	Bids are solicited for credits or projects that meet defined criteria; Credit DeveloperCredit Project Proponents submit applications specifying price to deliver a defined quantity of credits	Efficient mechanism to procure the most habitat benefit (credits) for a set amount of funding	<ul style="list-style-type: none"> ▪ Investing set pools of funding ▪ Fulfill credit obligations
Direct Credit Purchase	Credit Buyers purchase verified credits directly from the Credit System CCS Registry	Limits risk for Credit BuyerDebit Project Proponent –credits already verified	<ul style="list-style-type: none"> ▪ High impact investing ▪ Fulfill credit obligations
Select from Potential Project List	Select project from a list of eligible projects that have not yet been implemented that are expected to meet Credit BuyerDebit Project Proponent criteria; Credit DeveloperCredit Project Proponents estimate expected number of credits	Credit BuyerDebit Project Proponents have quantified information to inform project selection	<ul style="list-style-type: none"> ▪ Conservation funding programs ▪ Fulfill future credit obligations

SECTION 3: ~~CREDIT SYSTEM~~ CCS OPERATIONS

This section defines the Nevada Conservation Credit System (~~Credit System~~CCS) Operations, along with associated tools, forms, and templates used to quantify, track, transfer, and report on habitat credit generated through the ~~Credit System~~CCS. The ~~Credit System~~CCS Operations are described in the three sections described in Table 18:

Table 18: Overview of the ~~Credit System~~CCS Operations Sections

Section Name	Primary Audience	Description
Section 3.1: Generating Credits	Credit Developer Credit Project Proponents	Steps for estimating and verifying quantified credits from an individual credit site, including fulfilling ongoing verification requirements. These steps are primarily implemented by Credit Developer Credit Project Proponents and thus are labeled D1 through D5 .
Section 3.2: Acquiring Credits	Credit Buyer Debit Project Proponents	Steps to obtain credits and use them to meet mitigation requirements and report on accomplishments. These steps are primarily implemented by Credit Buyer Debit Project Proponents and thus are labeled B1 through B3 .
Section 3.3: Managing the Credit SystemCCS	Credit System CCS Administrator	Steps to systematically evaluate new information, report results, and improve Credit System CCS operations. These steps are primarily implemented by Administrators and thus are labeled A1 through A6 .

The following legend is used throughout this section to indicate process steps:

- “D” indicates steps taken to develop credits
- “B” indicates steps taken to buy credits
- “A” indicates steps taken to administer and manage the ~~Credit System~~CCS over time

SECTION 3.1: GENERATING CREDITS

This section describes the process of turning management actions into verified credits. It begins by selecting a site and determining eligibility to generate credits and verifying that on-the-ground conditions are consistent with the submitted credit estimates. Credits are then issued, tracked and transferred between Credit Project Proponent and Debit Project Proponent accounts. After transfer, the Credit Project Proponent is responsible for meeting the monitoring, reporting, and verification requirements of each project for the life of the project. Figure 17 provides an overview of the steps of credit generation and the different participants engaged at each step.

Commented [KP6]: The Process has been updated to how we currently run the system. It's mostly a lot of cut-and-paste. Track changes not shown because it was so messy.



Figure 15: Credit Generation Overview

D1 SELECT & VALIDATE PROJECT SITE



Figure 16: Select & Validate Project Site

D1.1 INDICATE INITIAL INTEREST & INITIATE COMMUNICATION

This first step for the Credit Project Proponent is to become aware of the opportunity to participate in the CCS. The Credit Project Proponent is introduced to the CCS through outreach, communication materials or word of mouth, and learns about the potential benefits of participating. The Credit Project Proponent or the Credit Project Proponent’s representative makes contact with the Administrator by email or phone to provide basic information, such as name, area of interest, and contact information. The Administrator provides a list of Technical Support Providers or Certified Verifiers in the project area to assist with project design, credit quantification, and project implementation.

D1.2 SELECT PROJECT SITE

The Credit Project Proponent should consider potential conservation opportunities, the likelihood that a project will deliver significant sage-grouse habitat benefits, and the potential costs and challenges to implement the project. The Administrator, Technical Support Providers, Verifiers, or Aggregators can help provide advice to Credit Project Proponents on these considerations, especially if it is unsure whether the project would be a good fit for the CCS prior to hiring a Verifier.

D1.3 SELECT VERIFIER

All projects require verification. Verification is an independent, expert verification of valid credits on the project site. The purpose of verification is to provide confidence to all CCS participants that credit calculations represent a faithful, true, and fair account of impacts and benefits – free of material misstatement and conforming to accounting and credit generation standards. Ongoing verification ensures the project is maintained over time and supports the expected level of credit reflected in calculations. The required frequency of verification is defined in [Section 2.4.5: Credit Site Verification](#).

Initial project verification is completed for the credit project before credits are issued, and periodically over the life of the project as defined in [Section 2.4.5: Credit Site Verification](#). Annual Monitoring Reports must be completed in non-verification years to confirm that conditions are maintained according to the specifications in the Management Plan.

After working with the Administrator on the project design, the Credit Project Proponent will contract directly with a third-party Verifier to perform a full verification.

Verifiers must be accredited by the Administrator before they are eligible to conduct verification activities. The independence of verification is important. Verifiers acting on behalf of the Administrator must work in a credible, independent, nondiscriminatory and transparent manner, complying with applicable state and federal laws. Verifiers must demonstrate their ability to professionally assess a specific type of credit without conflicts of interest. This includes disclosing any pre-existing relationships between the Credit Project Proponent or Debit Project Proponent and the Verifier.

Verifiers must provide a Conflict of Interest Form to the Administrator before verification can proceed (included in the Pre-Field Work Submittal Packet below). Contact the Administrator for a list of current verifiers.

Product ■ List of Certified Verifiers

Becoming an Accredited Verifier

The CCS Administrator will accredit Verifiers to review credit projects. Verifiers will act as subcontractors to the CCS Administrator. Verifiers bear no liability for project implementation or project performance. Interested Verifiers must complete the following steps:

- Attend and pass a Verification Training Session
- Keep the CCS Administrator informed of any changes affecting the project (e.g. potential conflicts of interest)
- Participate in annual refresher courses held by the CCS Administrator

D2 VERIFY CONDITIONS



Figure 1920: Verify Conditions

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D2.1 VERIFY & IDENTIFY CONSERVATION OPPORTUNITY

The Administrator maintains a list of projects seeking funding for implementation while respecting confidentiality rules outlined by the CCS and described in [Section 2: Policy and Technical Elements](#). The Administrator may include the credit project on its list of credit projects seeking funding on the List of Credit Opportunities, if so desired by the Credit Project Proponent.

Product ■ List of Credit Opportunities

D2.2 COMPLETE FIELD WORK

The Credit Project Proponent completes an eligibility screen, describing a potential project and completing some pre-project paperwork. This step is typically supported by a knowledgeable Technical Support Provider, Verifier, or Aggregator who helps the Credit Project Proponent complete this Pre-Field Work Submittal Packet, which includes a Validation Checklist and valid shapefiles of the project site.

The Administrator reviews the Pre-Field Work Submittal Packet. If all criteria are met, the Administrator issues a notice of validation to the Credit Project Proponent. Once a notice of validation is submitted, the Verifier is able to complete the process of field verification.

The Verifier must then work with the Administrator to go through a Quality Assessment Process, which must be signed by the Administrator before the credit amount can be finalized.

All field work steps are detailed in Sections 3 or in the Project Checklist in the Appendix in the CCS User's Guide.

Product ■ Completed Pre-Field Work Submittal Packet

Product ■ Verifier Project Assessment Submission Packet

D3 CALCULATE CREDITS & ISSUE CREDITS



Figure 161: Verify Conditions

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D3.1 FINALIZE PRE-PROJECT CONDITIONS

The Verifier must confirm that:

- The CCS Manual was followed completely and accurately throughout the project.
- Appropriate documentation is in place (e.g. land protection or management agreements).
- The amount of credit issued for a project is appropriate given actual, on-the-ground conditions as verified through the HQT methods.
- For sites with future credit releases scheduled, management actions have been implemented and the desired performance criteria have been achieved as indicated by the HQT.

The Credit Project Proponent has the option to check the design calculations with the Administrator to gain confidence that the initial credit estimate is accurate. Credit calculations must be found to be free of material misstatements and verified as such by both the Verifier and the Administrator through a Quality Assessment Process, which must be signed by the Administrator before the credit amount can be finalized.

If the pre-project conditions are found to be less than ideal, the Verifier will discuss the issues with the Credit Project Proponent and Administrator. The Credit Project Proponent and Administrator determine if corrective actions are necessary and appropriate to be added to the Management Plan, and the Administrator defines the appropriate amount of credit to be awarded given site conditions. If appropriate corrective actions or amount of credit cannot be agreed to by the Credit Project Proponent and Administrator, then the Oversight Committee will facilitate the dispute resolution process.

Product ■ Quality Assessment

D4.2 DEFINE & SUBMIT PROJECT MANAGEMENT INFORMATION

The Credit Project Proponent, along with the Technical Support Provider, Verifier, or Aggregator, completes a draft Management Plan Section A that outlines the credit project boundaries and anticipated post-project conditions, based on HQT results. Planned management actions, including ongoing maintenance and monitoring and expected uplift opportunities for the site are also documented in the Management Plan. If appropriate and requested by the Credit Project Proponent or a potential Debit Project Proponent, regulatory entities may also be involved to confirm the credit project meets any special requirements necessary for regulatory approval. This optional step provides the Credit Project Proponent with an indication of the amount of credits expected from the project if the conservation measures are

implemented as designed. The draft Management Plan is submitted to the Administrator for approval, prior to the implementation of management practices. Once approved, the version used is locked in and credits are officially available for sale. Should the Management Plan not be signed before 90-days after a new version is released, the project must be updated to the new version.

Product ■ Management Plan
Product ■ Issued Credits

D4 REGISTER PROJECT & ISSUE CREDITS



Figure 172: Register & Issue Credits

D4.1 ESTABLISH A CCS REGISTRY ACCOUNT

The Administrator sets up an account on the CCS Registry for the Credit Project Proponent. Registration ensures that credits from a specific project are real and traceable throughout the entire life of the project. All verified and certified credits generated through the CCS must be registered. Supporting information related to each credit include the year issued, HQT and Manual version used, duration of the credit, and owner of the credit. Once the Administrator establishes a user account for the Credit Project Proponent, any number of projects can be registered under the same user account.

Product ■ CCS Registry

D4.2 PERFORM ONGOING PROJECT MAINTENANCE AND MONITORING

The Credit Project Proponent is responsible for monitoring and maintaining project conditions throughout the life of the project to ensure that on-the-ground conditions reflect the information provided in the verified credit estimate and Management Plan. Depending on the implemented conservation practices, project conditions may appropriately degrade throughout the year. Before project monitoring is finalized, the Credit Project Proponent maintains the project as necessary to ensure that actual, on-the-ground conditions support the credits documented in the Management Plan. In years when an on-site verification is not required, the Credit Project Proponent submits an Annual Monitoring Report to the Administrator in accordance with the requirements in the Management Plan. This ensures that the credits are still valid and will show any ecological issues before they invalidate the credits. This report can be completed by the Credit Project Proponent or by a certified Verifier.

Every 15 years throughout the duration of the project, the Credit Project Proponent, with their Verifier, will rerun the HQT to ensure validation of credits and to quantify any potential uplift. They will send in the information to the Administrator just as was done to determine pre-project habitat conditions.

Annual monitoring is to be completed each year even if the credits have not been sold. On the 5th year, if the credits have still not been sold, the Credit Project Proponent may choose to conduct a 5-year Qualitative Assessment to maintain the credits for another 5 years or to withdraw from the CCS.

Product ■ Annual Monitoring Report
Product ■ 15-Year Verification Report

D5 TRACK & TRANSFER CREDITS



Figure 183: Track & Transfer Credits

Credits issued on the CCS Registry are assigned unique serial numbers so that they can be tracked over time. Once issued, credits can be sold and transferred between CCS Registry accounts. The sale, transfer and ownership of each credit are tracked by the CCS Registry. The terms of payments and sales are completed external to any of the CCS Registry or processes. All CCS Registry activities, including credit transfers, are monitored by the Administrator, and information is subject to confidentiality provisions defined in [Section 2.1.7: Participant Confidentiality](#).

D5.2 SELL AND TRANSFER CREDITS

Credit Project Proponents and Debit Project Proponents can connect via the Administrator, the CCS Registry, or through their own negotiations. The price, terms and conditions are all set by the Credit Project Proponents and Debit Project Proponents, and are completed external to any of the CCS Registry or Administrator processes. Once an agreement to transfer credits is reached, the Credit Project Proponent and Debit Project Proponent work with the Administrator to finalize the Participant Contract, any missing portions in the Management Plan, and the Credit Purchase Agreement. Once the transaction has occurred, the Credit Project Proponent submits a Credit Transfer Form to the Administrator, who transfers credits between accounts and assesses appropriate transaction fees.

All listed credits can be transferred between accounts until they expire and are no longer available to be transferred to another Debit Project Proponent. Thus, a Debit Project Proponent may resell and retransfer credits that have not expired and are no longer used to fulfill credit obligations to another Debit Project Proponent. Once credits expire, the CCS Registry moves them into an expired credit account that can be reported on but not accessed for transfer.

The portion of credits from each transaction that are dedicated to the reserve account are transferred directly to the reserve account, which can be accessed by the Administrator in the future for authorized uses, such as to cover invalidated credits from a credit reversal. Credits allocated to the reserve account are never available for sale.

- Product ■ Participant Contract
- Product ■ Management Plan
- Product ■ Credit Purchase Agreement
- Product ■ Credit Transfer Form

D5.3 REPORT OF ACCOMPLISHMENTS (OPTIONAL)

The Administrator generates reports that summarize the amount of credit generated from each registered project and the total amount of credit generated from all registered projects. Supporting information related to each credit can also be produced, including vintage (year issued), HQT version, and duration of the credit. Reports can also be generated that show transfers of credits and expired credits.

- Product ■ Accomplishments Report (optional)

SECTION 3.2: ACQUIRING CREDITS

This section describes the process to acquire credits. Debit Project Proponents include entities mitigating for impacts to fulfill regulatory requirements, and entities seeking to improve the environment. The CCS enables private and public Debit Project Proponents to efficiently invest with confidence, knowing that quantified environmental benefits are consistently defined, transparent, and traceable. Debit Project Proponents can increase efficiency by relying on the programmatic structure to guide project design and verify that completed projects deliver expected environmental benefits. This increases accountability with Credit Project Proponents and allows for greater coordination with other Debit Project Proponents to fund large-scale projects. Further, credits provide Debit Project Proponents with quantitative information to evaluate and report on the environmental value generated from their investments. Figure 23 provides an overview of the steps of credit acquisition and the different participants that may be engaged at each step.



Figure 194: Credit Acquisition Overview

B1 INDICATE INTEREST



Figure 205: Indicate Interest

The Debit Project Proponent defines their investment goal and selects an appropriate strategy for acquiring credits.

B1.1 INDICATE INITIAL INTEREST & INITIATE COMMUNICATION

This first step for the Debit Project Proponent is to become aware of the opportunity or requirement to participate in the CCS. The Debit Project Proponent is introduced to the CCS through outreach materials or word of mouth, and learns about the potential benefits of participating. The Debit Project Proponent or the Debit Project Proponent's representative contacts the Administrator to provide basic information, such as name, area of interest, and contact information. The Administrator provides a list of Technical Support Providers or Certified Verifiers in the project area who can assist with developing an investment strategy, if this assistance is desired.

B2 DETERMINE CREDIT NEED



Figure 21: Determine Credit Need

Debit Project Proponents determine the geographic region, duration and amount of credit needed to best meet their regulatory requirements or investment goals.

B2.1 DETERMINE APPLICABLE GEOGRAPHY & PROJECT CHARACTERISTICS

The Debit Project Proponent identifies the specific geographic region from which to purchase Credits, in accordance with their investment goal, taking into account the applicable geographic scope of the CCS as well as the proximity ratio applied to debit sites. Debit Project Proponents may also choose to focus investment within a specific geographic area to achieve unique investment goals.

The Buyer must also consider the duration or term to purchase credits. Projects produce credits for specific durations of time, including some projects which produce credits perpetually.

The Buyer may also be interested in other characteristics that would focus investment on specific project types or Credit Project Proponents. For instance, the Debit Project Proponent may want to only invest in projects that produce new habitat on working lands from small farms and ranches.

B2.2 DETERMINE CREDIT AMOUNT (REGULATORY OFFSET DEBIT PROJECT PROPONENTS ONLY)

Each Debit Project Proponent defines their needed or desired amount of credit. If the Debit Project Proponent is not in a regulatory context, skip ahead to Step B3.

The remainder of this step defines the process to determine the amount of debit resulting from anthropogenic disturbances and the associated credit obligation to offset these impacts in a regulatory context. Development activities must be avoided and minimized through the SETT Consultation process, using best available and practicable technology and practice. Full compliance with all relevant laws and rules is required before credits can be used to satisfy the remaining regulatory requirements from unavoidable impacts.

Debits are quantified and verified units of functional acre loss using the HQT, and adjusted based on a mitigation ratio defined in [Section 2.2.2: Mitigation and Proximity Ratios](#). The number of credits that must be acquired to offset the debits generated is the number of debits calculated adjusted by the proximity ratio defined in the same section. The process to calculate and verify debits is the same as the process to quantify credits except that verification occurs prior to project implementation. The following sections are a summary of that process.

Select Verifier

All projects require verification. Verification is an independent, expert verification of valid credits on the project site. The purpose of verification is to provide confidence to all CCS participants that credit calculations represent a faithful, true, and fair account of impacts and benefits – free of material misstatement and conforming to accounting and credit generation standards.

Initial project verification is completed for the debit project before debits are locked in. After working with the Administrator on the project design, the Debit Project Proponent will contract directly with a third-party Verifier to perform a full verification.

Verifiers must be accredited by the Administrator before they are eligible to conduct verification activities. The independence of verification is important. Verifiers acting on behalf of the Administrator must work in a credible, independent, nondiscriminatory and transparent manner, complying with applicable state and federal laws. Verifiers must demonstrate their ability to professionally assess a specific type of credit without conflicts of interest. This includes disclosing any pre-existing relationships between the Credit Project Proponent or Debit Project Proponent and the Verifier.

Verifiers must provide a Conflict of Interest Form to the Administrator before verification can proceed (included in the Pre-Field Work Submittal Packet below). Contact the Administrator for a list of current verifiers.

Product ■ List of Certified Verifiers

Complete Field Work

The Debit Project Proponent completes an eligibility screen, describing a potential project and completing some pre-project paperwork. This step is typically supported by a knowledgeable Technical Support Provider, Verifier, or Aggregator who helps the Debit Project Proponent complete this Pre-Field Work Submittal Packet, which includes a Validation Checklist and valid shapefiles of the project site.

The Administrator reviews the Pre-Field Work Submittal Packet. If all criteria are met, the Administrator issues a notice of validation to the Debit Project Proponent. Once a notice of validation is submitted, the Verifier is able to complete the process of field verification.

Becoming an Accredited Verifier

The CCS Administrator will accredit Verifiers to review credit projects. Verifiers will act as subcontractors to the CCS Administrator. Verifiers bear no liability for project implementation or project performance. Interested Verifiers must complete the following steps:

- Attend and pass a Verification Training Session
- Keep the CCS Administrator informed of any changes affecting the project (e.g. potential conflicts of interest)
- Participate in annual refresher courses held by the CCS Administrator

The Verifier must then work with the Administrator to go through a Quality Assessment Process, which must be signed by the Administrator before the debit amount can be finalized.

All field work steps are detailed in Sections 3 or in the Project Checklist in the Appendix in the CCS User's Guide.

Product ■ Completed Pre-Field Work Submittal Packet

Product ■ Verifier Project Assessment Submission Packet

Determine Credit Obligation

The Verifier must confirm that:

- The CCS Manual was followed completely and accurately throughout the project.
- Appropriate documentation is in place

The amount of debits required for a project is appropriate given actual, on-the-ground conditions as verified through the HQT methods. A Debit Project Proponent's credit obligation is based on the difference between baseline functional acres and anticipated post-project functional acres, adjusted by mitigation and proximity ratio as defined in [Section 2.2: Habitat Quantification and Credit and Debit Calculation](#). The estimated post-project habitat function is produced using the baseline functional acre assessment and development design documents defining the area, scope and activities to be completed as part of the development actions. The data sets are entered in the HQT, which produce the functional acre loss, debits and the credit obligation, and are submitted to the Administrator. The Administrator reviews the information and confirms all calculations are complete and consistent with relevant regulatory guidance.

The Debit Project Proponent has the option to check the design calculations with the Administrator to gain confidence that the initial debit estimate is accurate. Debit calculations must be found to be free of material misstatements and verified as such by both the Verifier and the Administrator through a Quality Assessment Process, which must be signed by the Administrator before the debit amount can be finalized. Once the QA process has been approved, the debits and version used is locked in and a transaction can occur. Should the QA process not be signed before 90-days after a new version is released, the project must be updated to the new version.

Debit Project Proponents must also complete and sign the second section of the Debit Project Review Form. If the debits have still not been offset within five years from signing this form, the project must be rerun under the newest version of the CCS.

Product ■ Quality Assessment

Product ■ Debit Project Review Form Part 2

Acquire Agency Approval (If Necessary)

Consult with development permitting agencies for specific permit requirements to determine if agency approval is needed to use credits for regulatory offsets.

Post-Project Verification (If Necessary)

Consult [Section 2.5.6: Debit Site Verification](#) and specific permit requirements to determine if post-project verification is required to ensure that the amount of debit is not greater than what was estimated during project design.

B3 ACQUIRE CREDITS



Figure 227: Acquire Credits

B3.1 PURCHASE CREDITS

Credit Project Proponents and Debit Project Proponents connect via the Administrator, the CCS Registry, or through their own negotiations, and come to agreement on credit quantities, price, timing of funding, and other terms. The terms of payments and sales are completed between Credit Project Proponents and Debit Project Proponents, external to any of the CCS Registry or Administrator processes. Once an agreement is complete, the Debit Project Proponent or Credit Project Proponent notify the Administrator.

B4 TRACK & TRANSFER CREDITS



Figure 238: Track & Transfer Credits

Credits and debits are assigned unique serial numbers that identify the source of each credit or debit, the HQT and version used to estimate credits and debits, and the current owner. All registered projects are tracked by the Administrator, and information is subject to confidentiality provisions defined in [Section 2.1.7: Participant Confidentiality](#). The terms of payments and sales are completed external to any of the CCS Registry or Administrator processes.

B4.1 TRANSFER CREDITS

Once an agreement to transfer credits is reached, the Credit Project Proponent and Debit Project Proponent work with the Administrator to finalize the Credit Purchase Agreement and the final section of the Debit Project Review Form.

Credits used to fulfill credit obligations are not available for resale. All remaining credits may be held by the Debit Project Proponent or resold. A Debit Project Proponent may resell and retransfer credits that have not expired and are no longer used to fulfill credit obligations to another Debit Project Proponent. Once credits expire, the CCS Registry moves them into an expired credit account that can be reported on but not accessed for transfer.

Product ■ Credit Purchase Agreement

Product ■ Debit Project Review Form Part 3

B4.2 REPORT ON ACCOMPLISHMENTS (OPTIONAL)

The Administrator can generate reports for Debit Project Proponents that show transfers of credits and expired credits.

Product ■ Accomplishments Report (optional)

SECTION 3.3: ADAPTIVELY MANAGING THE ~~CREDIT SYSTEM~~ CCS

QUESTIONS ANSWERED

- How is the ~~Credit System~~ CCS managed to improve accuracy and efficiency without causing market uncertainty?
- What information is reported to ensure transparency and increase accountability?
- How are research and monitoring findings synthesized and used to improve the ~~Credit System~~ CCS?
- How are ~~Credit System~~ CCS improvement recommendations developed and used to inform annual ~~Credit System~~ CCS improvement decisions?

The ~~Credit System~~ CCS Management System is defined as a formal, structured programmatic adaptive management approach to dealing with uncertainty in natural resources management, using the experience of management and the results of research as an ongoing feedback loop for continuous improvement. This section describes the transparent and inclusive management process used for the ~~Credit System~~ CCS. The ~~Credit System~~ CCS Management System requires an ongoing flow of information from 1) research and monitoring activities conducted by scientists, 2) the practical experiences of ~~Project Proponents~~ ~~Credit Developers~~ and ~~Credit Buyers~~, and 3) changing context from stakeholders to inform ~~Credit System~~ CCS improvements. A systematic and transparent decision making process ensures that improvements to the ~~Credit System~~ CCS do not cause uncertainty for participants. Figure 24 and Table 21 provide an overview of the ~~Credit System~~ CCS Management System steps and the different participants that may be engaged at each step¹⁷.

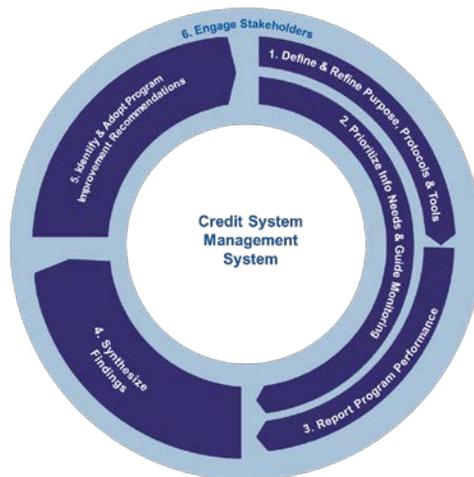


Figure 249: Overview of ~~Credit System~~ CCS Improvement Management System Steps

¹⁷ This management process has been adapted from The Conservation Measures Partnership's Open Standards for the Practice of Conservation, which can be found at www.conservationmeasures.org. Significant changes were made to adapt the Open Standards to 1) a market context where individual projects are selected and implemented by individual market participants and 2) be a formally governed process that balances the needs for improvements with the needs to limit market uncertainty for all participants.

The Administrator performs the day-to-day functions to manage the [Credit System CCS](#). The Administrator is accountable to an Oversight Committee, which approves all changes to the [Credit System CCS](#) Manual and HQT. The composition of the Oversight Committee and the relationship between the Oversight Committee, Administrator and [Credit System CCS](#) participants are defined in [Section 2.1.1: Governance Roles](#).

Table 19: Overview of Roles, Tools & Products to Manage [Credit System CCS](#) Operations

Process Step	Credit System CCS & Byers Project	Administrator	Oversight Committee	Science Committee & Stakeholders	Relevant Forms & Templates	Completed Products
A1. Update Protocol & Tools	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> Credit System CCS Improvement Recommendation Form 	<ul style="list-style-type: none"> Credit System CCS Improvements List New & Updated Documents, Guidance and Tools
A2. Prioritize Information Needs & Guide Monitoring	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> Research & Monitoring Contract Templates 	<ul style="list-style-type: none"> List of Research Needs
A3. Report Credit System CCS Performance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> Performance Report Template 	<ul style="list-style-type: none"> Annual Performance Report
A4. Synthesize Findings	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> Input Request Template 	<ul style="list-style-type: none"> Synthesis of Findings Report
A5. Identify & Adopt Credit System CCS Improvement Recommendations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> Credit System Improvement Recommendation Form CCS Improvement Recommendation Form 	<ul style="list-style-type: none"> Credit System CCS Improvements Recommendations Record of Decisions Audit Report
A6. Engage Stakeholders	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> n/a 	<ul style="list-style-type: none"> Updated Website Quarterly Email Updates Stakeholder Meeting Summary of Input

Indicates a necessary or active role
 Indicates potential participation or a support role

A1 UPDATE PROTOCOL & TOOLS



Figure-2930: Update Manual & Tools

This [Credit System CCS](#) Manual and associated tools, templates and forms provide guidance for the [Credit System CCS](#) to consistently track and report benefits and impacts. Updating the [Credit System CCS](#) Manual, tools, templates, and forms is necessary to ensure practical experience and new scientific information result in increased efficiency and effectiveness. This step describes the process for the [Credit System CCS](#) to review and update guidance documents, policies and tools.

A1.1 UPDATE [CREDIT SYSTEM CCS](#) IMPROVEMENTS LIST

[Credit System CCS](#) participants, the Administrator and other stakeholders may make suggestions to improve the [Credit System CCS](#) at any time throughout the year by submitting a recommendation through the [Credit System CCS](#) website. The Administrator adds recommendations received to the compiled [Credit System CCS](#) Improvements List. The Administrator may also add improvement recommendations to the list reflecting personal experience or non-formal input from stakeholders. The [Credit System CCS](#) Improvements List ensures that suggestions are not overlooked during the annual [Credit System CCS](#) adjustment process.

Product ■ [Credit System CCS](#) Improvements List

Review & Sort Improvement Suggestions

The Administrator reviews the [Credit System CCS](#) Improvements List throughout the year and identifies relevant thematic changes that are categorized according to the following definitions:

- **Category 1** improvements consist of minor administrative adjustments or clarifications to communication or guidance materials that does not change the intent, form or operations. Category 1 improvements may be executed by the Administrator at any time; however the Oversight Committee and public must be informed of these changes as they occur.
- **Category 2** improvements are substantive changes to technical tools, protocols or guidance. Category 2 adjustments require input and approval from the Oversight Committee before they are implemented. The process for Oversight Committee review and adoption is defined in Step A5: Identify & Adopt [Credit System CCS](#) Improvement Recommendations. When in doubt, the Administrator assigns the recommendation to Category 2. Upon review by the Oversight Committee, these suggestions may be re-categorized as needed.
- **Category 3** improvements necessitate adjustments to related policies if adopted. Category 3 adjustments are reviewed and approved or rejected by the Oversight Committee with consultation from the appropriate agency staff. These improvements may require agency approval, and thus follow the appropriate policy change process as defined by relevant state and federal agencies.

It is at the discretion of the Administrator, with guidance from the Oversight Committee, to prioritize funding to implement the most important improvements which can be successfully completed using available resources. The Administrator provides a prioritized [Credit System CCS](#) Improvements List to the Oversight Committee, which includes Category 1 improvements implemented so that they can be reviewed and confirmed by the Oversight Committee. The Oversight Committee decides which

improvement recommendations are to be implemented, at the periodic meetings described in Step A5: Identify & Adopt **Credit System CCS** Improvement Recommendations. For improvements that require additional time or resources to implement, the Administrator develops a brief implementation plan that is approved by the Oversight Committee.

Product ■ Updated **Credit System CCS Improvements List**

A1.2 UPDATE EXISTING HQT, FORMS AND TEMPLATES

The Administrator may implement Category 1 improvements throughout the year. The Administrator implements all additional approved Category 2 and 3 improvements within a timeline approved by the Oversight Committee. The date at which updates go into effect should be clearly defined by the Oversight Committee with the expectation that changes which may affect the amount of credit generated from a project are not applied to previously registered projects.

Product ■ Updated Documents, Guidance & Tools

A1.3 INTEGRATE NEW AND ALTERNATIVE QUANTIFICATION TOOLS

The **Credit System CCS** Manual is built to easily integrate new credit types (e.g. mule deer) and new or alternative HQTs. Once a new credit type and a new or alternative quantification tool is identified, the Administrator convenes a technical committee to assess the proposed method and provide recommendations for improvement or adoption. Quantification tools require several field tests to determine accuracy, repeatability, sensitivity and ease of use. Once improvement recommendations are addressed, the Administrator presents the proposed new or alternative quantification tool, with supporting materials that define the use of any new credit types, to the Oversight Committee for review and approval (as described in Step A5: Identify & Adopt **Credit System CCS** Improvement Recommendations).

Recommended Research and Monitoring Contract Terms

Research and monitoring contracts should reflect the need for clear, timely and consistently presented findings so that findings can be easily used to address identified needs. Specific contract requirements can increase the likelihood that funded research and monitoring projects produce directly useful findings by:

- Identifying specific questions for investigators to address through specific projects.
- Requesting a one-to-two page summary of findings that directly relates findings to identified questions and related items on the List of Areas for Investigation.
- Requiring that reports be submitted in a timely manner so findings may be considered in the development of the Synthesis of Findings Report (Step A4).
- Requesting interim updates for long-duration projects, in order for these projects to provide insights with potential to influence current decisions and future expectations.
- Holding final payments until a draft report has been reviewed by an appropriate group of participants and review comments have been satisfactorily addressed.

Product ■ New Quantification Tools

A2 PRIORITIZE INFORMATION NEEDS & GUIDE MONITORING



Figure 251: Prioritize Information Needs & Guide Monitoring

Monitoring and research are necessary to check that the habitat benefits projected by the HQT result in the projected improvements for the habitat attributes of concern. The **Credit System CCS** may collaborate with monitoring initiatives led by other active programs in the region or initiate its own research with approval from the Oversight Committee.

A2.1 DEVELOP & ADJUST LIST OF AREAS FOR INVESTIGATION

The Administrator takes input from the Science Committee and other technical experts and maintains the List of Research Needs. The List of Research Needs catalogs and prioritizes research and monitoring needs identified by participants as being important to improve HQT, better understand the effectiveness of management actions and impact of anthropogenic disturbances, and follow the status and trend of habitat attributes of concern.

The **Credit System CCS** may be able to collaborate with other monitoring programs to monitor status and trend of habitat conditions and greater sage-grouse populations, but is likely to take a more active role in directing monitoring intended to calibrate HQTs and improve their accuracy. The HQT estimates the amount of credit expected from credit projects based on technical assumptions. These assumptions are tested by technical experts and practitioners conducting monitoring and research to address items on the List of Research Needs. Scientists review results and improve HQT and associated field methods accordingly.

Product ■ List of Research Needs

A2.2 PROVIDE INPUT TO RESEARCH & MONITORING FUNDING PROCESSES

The Administrator coordinates with participants, regulators, technical support, grant funders and stakeholders to identify and secure funding for priority needs identified on the List Research Needs. Research and monitoring may be conducted through direct contracts with the **Credit System CCS** funded through transaction fees or conducted through partnerships with existing monitoring programs, or any other parties.

Product ■ Research & Monitoring Contracts and Results

A3 REPORT CREDIT SYSTEM CCS PERFORMANCE



Figure 262: Report Credit System CCS Performance

Routine reporting of accomplishments is essential to ensure transparency and drive accountability. The annual Credit System CCS Performance Report (Performance Report) reports all credits tracked by the Credit System CCS and informs interested parties of recent changes to the Credit System CCS.

The Performance Report highlights successes and challenges from the past year, both regionally and for each specific geographic area of interest. This is the highest profile product produced by the Credit System CCS and is targeted to an informed public audience.

Recommended Performance Report Content

The use of a standard report template both increases efficiency and enhances understanding by providing information in a consistent format. The Performance Report addresses:

- Overall credit and debit results from the past year and over the life of the Credit System CCS, including progress towards goals
- Credits and debits within specific geographic areas of interest
- Summary of recent and expected near-term changes

A3.1 COMPILE CONTENT & PUBLISH PERFORMANCE REPORT

The Administrator uses tracking outputs, such as the number of credits created during the year, to generate the quantitative information for the Performance Report, which includes a ledger of all credits and debits generated cumulatively and each year to demonstrate net benefit for greater sage-grouse. Credits are summed across geographic locations and for each specific area of interest. Additionally, information related to non-habitat accomplishments may also be highlighted, such as administrative improvements. The Performance Report is posted online and submitted to any relevant regulatory agencies.

The Administrator updates the content from the previous year's Performance Report and develops a narrative summary of overall accomplishments, and projected improvements to the Credit System CCS over the past year. The Performance Report is annually approved by the Oversight Committee. It is then posted to the Credit System CCS website within an appropriate timeframe and available to all interested stakeholders.

Product ■ Annual Credit System CCS Performance Report

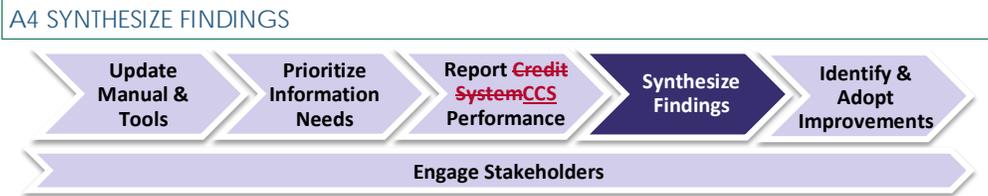


Figure 273: Synthesize Findings

Synthesizing findings into information that is directly related to the operations of the **Credit System CCS** is essential to inform management decisions. The Synthesis of Findings Report bridges the gaps between the Oversight Committee, **Credit System CCS** participants, engaged scientists, and agency staff, by synthesizing learning from experience implementing the **Credit System CCS** and from new monitoring and research findings. It is not intended to be a comprehensive review of all literature and available information. Providing highly-nuanced recommendations with extensive discussion does not meet the primary audience’s needs. Rather, findings are presented in clear statements. Supporting information should be targeted, providing the most relevant information necessary to understand the issues in context of the **Credit System CCS**.

The Synthesis of Findings report is developed by the Administrator annually. A more formal review of the **Credit System CCS and committee structure is recommended to occur at least every fifth year.**

A4.1 COMPILE FINDINGS & DEVELOP SYNTHESIS OF FINDINGS REPORT

The Administrator requests input from participants and relevant stakeholders, including posting an invitation for input to the **Credit System CCS** website. Findings may address needs related to improving 1) the accuracy of credit estimation and verification methods, 2) the effectiveness of different management actions, and 3) the efficiency of **Credit System CCS** operations. The Administrator decides how to catalogue and organize input received and develops a brief report to present to the Oversight Committee.

Product ■ Synthesis of Findings Report

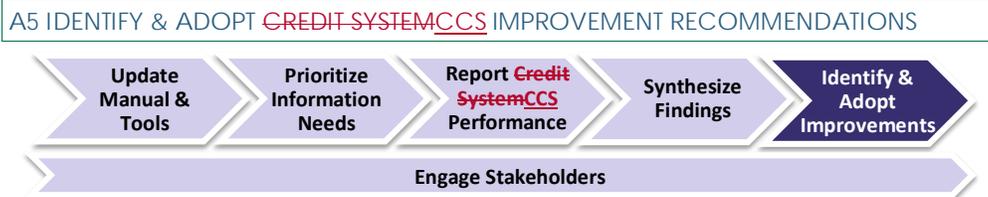


Figure 284: Identify & Adopt **Credit System CCS** Improvement Recommendations

Creating and transparently adopting clear recommendations to improve the **Credit System CCS** is the most critical step in the annual **Credit System CCS** management process. The predictability and transparency of the adjustment process enables **Project Proponents**, **Credit Developers**, **Credit Buyers** and other stakeholders to adjust practices and expectations without causing market uncertainty or disruptions that result in participants becoming resistant to changes.

A5.1 PROPOSE CREDIT SYSTEM CCS IMPROVEMENT RECOMMENDATIONS

The process for maintaining and prioritizing the Credit System CCS Improvements List is described in Step A1: Update Credit System CCS Improvements List. The Credit System CCS Improvement List and the Synthesis of Findings Report are the most critical inputs for the Administrator to consider when identifying Credit System CCS Improvement Recommendations.

Develop Credit System CCS Improvement Recommendations

The Administrator reviews the Credit System CCS Improvements List and identifies priority improvements to recommend to the Oversight Committee for implementation. The Administrator will engage the Science Committee in the development and prioritization of the Improvements List. The Administrator describes the following for each recommended improvement:

- Clear statement of need for change and expected improvements to efficiency or effectiveness resulting from implementing the change.
- Description of what specific portions of documents, forms, guidance, or the HQT will be changed, potentially including red-line versions of recommended changes.
- Identification of any potential complications or impacts the change may have to stakeholders or to the Credit System CCS.
- For changes that require contract resources or greater than one-month to implement, a brief implementation plan with associated budget.

Recommendations are grouped by the Categories described in Step A1.1. Note, all Category 1 improvements implemented by the Administrator during the year are documented and may be reviewed by the Oversight Committee to confirm that changes are acceptable.

Product ■ Draft Credit System CCS Improvement Recommendations

Develop Final Recommendations

The Credit System CCS Improvement Recommendations are sent to the Oversight Committee for review in advance of the next Oversight Committee meeting. The Oversight Committee members discuss recommendations of interest or concern with the Administrator and consult stakeholders as necessary.

Product ■ Final Credit System CCS Improvement Recommendations

A5.2 ADOPT CREDIT SYSTEM CCS IMPROVEMENTS

The Oversight Committee meets, discusses and considers adopting Credit System CCS Improvement Recommendations at least annually. For policy decisions and those directly related to regulatory or funding requirements, the decision may be to bring a proposal before relevant agency management or other decision making authorities.

The Oversight Committee designates an individual to compile a Record of Decisions. A Record of Decisions defines the agreed-to changes, the rationale, the party responsible for implementing the changes, and the date when changes go into effect for any new projects or operational practices. Changes do not alter the amount of credit available from previously registered projects for the duration of the project, and should not require changes to existing project management plans or credit obligations. Any recommendations not acted upon are addressed by providing a brief rationale and an indication of whether the recommendation may be considered at a later date or if the recommendation has been rejected and should not be brought back in the future.

Product ■ Record of Decisions

A5.3 OVERSEE CREDIT SYSTEM CCS OPERATIONS

Annually, the Oversight Committee conducts or designates an independent entity to conduct a third-party audit of Credit System CCS operations, including a detailed review of a portion of individual credit and debit sites. The audit confirms that procedures are being consistently followed, all documentation is present and complete, and all Credit System CCS management products are developed and maintained. An Audit Report describes the audit procedures, findings and any proposed areas where corrective actions should be considered. The Audit Report is made available to the Oversight Committee and discussed at a subsequent Oversight Committee meeting. The final Audit Report, less information identified as confidential, is posted to the Credit System CCS website.

Product ■ Audit Report

A5.4 RESOLVE OUTSTANDING DISPUTES

As defined in the dispute resolution process defined in Step D3, the Oversight Committee or a subcommittee of the Oversight Committee resolves disputes between Credit System CCS participants that cannot be resolved independently or in consultation with the Administrator. If the dispute is in reference to regulatory requirements, the regulatory agency has the final decision-making authority.

A6 ENGAGE STAKEHOLDERS



Figure 295: Engage Stakeholders

Consistent stakeholder engagement is necessary to ensure the Credit System CCS operates efficiently, increases understanding, and drives accountability. Stakeholder engagement occurs throughout the year using the reports and products defined in Steps A1-A5, as well as through email and in-person engagements.

A6.1 MAINTAIN CREDIT SYSTEM CCS WEBSITE

The Administrator maintains the Credit System CCS website as the central location for all publicly available information not deemed confidential. This includes all tools, guidance and reference materials related to the Credit System CCS. The website also informs interested stakeholders of upcoming events and meetings, and provides the opportunity for stakeholders to provide Credit System CCS improvement recommendations (as described in A1).

Product ■ Updated Credit System CCS Website

A6.2 DISTRIBUTE UPDATE EMAILS

The Administrator maintains an ongoing list of interested stakeholders and their email contact information. The Administrator disseminates a periodic email update to interested stakeholders to provide information about Credit System CCS progress. Email updates also notify stakeholders when reports are expected to be available for public review, and about upcoming opportunities for in-person engagement.

Product ■ Email Communications

A6.3 PRESENT AT COMMUNITY FORUMS

The Administrator and other participants may make presentations at community events and meetings upon request and as resources are available. This is critical to ensure local groups understand the basic functions and role of the [Credit System CCS](#) and understand how they may be able to participate.

Product ■ Community Presentations

A6.4 CONDUCT TRAININGS

The Administrator or experienced Technical Support Providers periodically conducts trainings to teach potential [Credit System CCS](#) participants how to efficiently use the [Credit System CCS](#), including guidance on using tools and forms. These trainings are generally open to all interested parties. Verifier certification trainings are conducted as needed with an expectation of at least annually.

Product ■ Hosted Trainings

A6.5 CONVENE ANNUAL STAKEHOLDER MEETING

The Administrator annually convenes meeting open to all stakeholders. This meeting is an opportunity to highlight accomplishments and identify areas for improvement with participants and interested stakeholders. The meeting is held after the annual Performance Report is posted to the [Credit System CCS](#) website for review, and before final Program Improvement Recommendations are considered by the Oversight Committee (as described in Step A5).

At this annual meeting, stakeholder input should be structured such that input directly related to identified areas of operational improvement and areas for investigation are recorded in context of the specific need. Stakeholders also should have the opportunity to identify new needs and concerns for consideration. Input may be added to the [Credit System CCS](#) Improvements List or List of Research Needs.

Stakeholder input that does not directly relate to these ongoing lists of needs is summarized and the notes posted to the [Credit System CCS](#) website.

Product ■ Stakeholder Meeting & Summary of Input Received

APPENDIX A: GLOSSARY

Additionality: Habitat functionality improvements that represent an overall increase in, or avoided reduction of, habitat functionality, relative to the habitat functionality that would occur in absence of the [Credit System CCS](#).

Administrator: An organization or entity responsible for managing the day-to-day operations of the [Credit System CCS](#), including facilitating and overseeing all credit generation and transaction activities.

Aggregator: A person or institution that works with multiple landowners to implement credit projects, secure performance assurances, and register and sell credits. An Aggregator facilitates financial transactions between the Credit Buyers and [Credit Developer/Credit Project Proponents](#), and may charge a fee for the service, but is not directly involved in the chain of ownership of credits.

Agreement: A signed agreement between the Administrator and other public agencies that authorizing the use of [Credit System CCS](#) credits for mitigation purposes within the State of Nevada, or between the Administrator and other parties to use [Credit System CCS](#) tools and procedures.

Baseline: The starting point for calculating the functional acres generated by a credit or debit, which is the difference between baseline and post-project functional acres. Baseline does not necessarily mean pre-project condition.

Candidate Conservation Agreement (CCA): A formal agreement between the USFWS and one or more Federal or non-Federal parties to address the conservation needs of proposed or candidate species, or species likely to become candidates for listing under the Endangered Species Act, in which participants voluntarily commit to implementing specific actions that will remove or reduce the threats to these species, so that listing is no longer necessary.¹⁸

Candidate Conservation Agreement with Assurances (CCAA): A formal agreement between the USFWS or NMFS and one or more non-Federal parties who voluntarily agree to manage their lands or waters to remove threats to candidate or proposed species and in exchange receive assurances that their conservation efforts will not result in future regulatory obligations in excess of those they agreed to at the time they entered into the Agreement.¹⁹

Competing Land Uses: Land uses that reduce the functionality of habitat and invalidate the credits being generated on a site.

Compensatory Mitigation: The stewardship or restoration of habitat to compensate for unavoidable adverse impacts to the habitat elsewhere.²⁰

Condition: Condition is the relative ability of a site to support and maintain its complexity and capacity for self-organization with respect to species composition, physicochemical characteristics and functional processes.

Conservation Action: Actions to conserve habitat and do not generate credits.

Conflict of Interest: A situation in which, because of activities or relationships with or perceived to be with other persons or organizations, a person or firm is unable or potentially unable to render an impartial verification opinion of [Credit Developer/Credit Project Proponent](#)'s estimated credits.

Credit: A quantifiable unit of a greater sage-grouse habitat conservation value which serves as the currency in the [Credit System CCS](#). A credit is a measure of the difference between credit baseline functional acres (see Functional Acre definition) and post-project functional acres multiplied by a

¹⁸ USFWS DRAFT GRSG Mitigation Framework Glossary

¹⁹ USFWS DRAFT GRSG Mitigation Framework Glossary

²⁰ USFWS DRAFT GRSG Mitigation Framework Glossary revised

mitigation ratio. Credits are consistently quantified and traded, and secured by contract requirements, a project-specific Management Plan and financial assurances.

Credit Buyer: An entity that purchases or transfers credits for a range of reasons including general conservation purposes or mitigating the adverse effects of a debit project.

~~**Credit Developer:** Landowners or managers who produce and sell credits in the Credit System CCS.~~

Credit Obligation: Quantity of credits that must be acquired to offset debits generated by a debit project. Credit obligation is the number of debits calculated using the HQT and debit mitigation ratio adjusted by the proximity ratio, determined by the proximity between the debit site and offsetting credit site.

Credit Project: Management actions and administrative requirements including a Participant Contract and Management Plan that create a credit.

Credit Release: An award of credits made available for transfer by the Administrator to a Credit Developer/Credit Project Proponent upon meeting specified management and performance criteria.

Credit Site Eligibility: A set of requirements that a credit project site must meet in order to be able to participate in the Credit System CCS.

~~**Credit System CCS Operations:** A set of rules that defines the universal processes through which credits and debits are generated, tracked, and traded within the Credit System CCS.~~

Credit Variability: Fluctuations in the generation of credits and debits on a project site that are created due to factors that are outside the control of the participants, such as environmental conditions and climatic effects.

Debit: A quantifiable unit of loss to greater sage-grouse habitat conservation value from an impact. A debit is a measure of the difference between debit baseline functional acres (see Functional Acre definition) and post-project functional acres multiplied by a mitigation ratio (but not yet multiplied by proximity factor), and are based on the same methods and HQT used to calculate credits.

Debit Project: An anthropogenic disturbance that creates a debit.

Direct Impact: The effects that are caused by, or will ultimately result from, the direct footprint of a debit project.

Durability: Credit projects that demonstrate defined habitat functionality performance prior to credit release through the end of the project's duration.

Dynamic Offsets: When a stream of term credits are used to cover a debit, such that the mitigation is functionally the same duration as the debit but shifts on the landscape.

Ecosystem Services: The benefits people obtain from nature. These include provisioning services such as food, water, timber, and fiber; regulating services that affect climate, floods, disease, wastes, and water quality; cultural services that provide recreational, aesthetic, and spiritual benefits; and supporting services such as soil formation, photosynthesis, and nutrient cycling.

Financial Assurances: Mechanism to ensure that funds are available to replace credits invalidated by intentional causes, and to ensure funds are available for long-term management and monitoring of individual project sites.

Force Majeure: Event or circumstance beyond the control of Participants under which they are not liable. This includes Acts of God, including fire, flood, earthquake, storm, hurricane or other natural disasters.

Functional Acre: The single unit of value that expresses the assessment of quantity (acreage) and quality (function) of habitat or projected habitat through the quantification of a range-wide scale, landscape-scale, local-scale and site-scale attributes defined in the *HQT Scientific Methods Document*.

Habitat Conservation Plan (HCP): A conservation plan that specifies the anticipated effects of a proposed activity on the taking (see “*Incidental take*”) of federally-listed species and how those impacts will be minimized and mitigated. The HCP is submitted with an incidental take permit application to the USFWS or NMFS. Incidental take permits are available to private landowners, State and local governments, Tribal governments and other non-Federal landowners through section 10 of the Endangered Species Act.²¹

Habitat Function: The ability or value of a measured patch of land to meet the needs of greater sage-grouse.

Habitat Suitability Index (HSI): A continuous map surface developed by Nevada’s Sagebrush Ecosystem Program that contains the probability of use by sage-grouse per pixel across Nevada. This surface is represented by probability values that range across a continuous spectrum of 0.0 to 1.0.

Habitat Quantification Tool: A set of metrics (i.e. measurements and methods), applied at multiple spatial scales, to evaluate current conditions and changes in conditions indicative of habitat quality, baseline, and mitigation ratios to determine the amount of total credit or credit obligation debit resulting from credit and debit projects. The attributes measured and methods used to measure those attributes are defined in the *HQT Scientific Methods Document*.

Incidental Take: take of listed species that results from, but is not the purpose of, carrying out an otherwise lawful activity. Incidental take may be authorized through section 7 or 10 of the Endangered Species Act.²²

Indirect Impact: Effects that are caused by or will ultimately result from a debit project. Indirect impacts could occur at some point in the future or outside of the direct footprint of the debit project site.

Landscape Scale (2nd order): 2nd order selection is described by the home range of a sage-grouse population or subpopulation, and attributes are measured to delineate the best areas for conservation and identify where credit projects should be targeted and disturbances should be avoided.

Local Scale (3rd order): 3rd order selection is based on sage-grouse use of, and movement between, seasonal habitats within their home range according to their life cycle needs, and attributes are measured to consider the availability of suitable habitat and the effects of anthropogenic disturbances.

Management Actions: Stewardship and restoration of a site in order to generate credits.

Management Plan: Plan that defines specific restoration and management actions over the life of a credit project, including ongoing maintenance and monitoring requirements. Plan includes existing project site information, such as a site map and information on current management practices, and anticipated project start and end dates, and any management limitations.

Management Process: A formal, structured programmatic adaptive management approach to dealing with uncertainty in natural resources management, using the experience of management and the results of research as an ongoing feedback loop for continuous improvement.

Map Unit: Sub-divisions of the project area based on unique vegetation communities and vegetation structure.

Mitigation: Stewardship or restoration of habitat to compensate for unavoidable adverse impacts from a debit project and verified through the [Credit System CCS](#). Credit projects are mitigation for debit projects.

²¹ USFWS DRAFT GRSG Mitigation Framework Glossary

²² USFWS DRAFT GRSG Mitigation Framework Glossary

Monitoring: The process to observe and record current environmental conditions, changes in environmental conditions and effects of management actions over space and time.

Offset: See *Mitigation*.

Oversight Committee: Formal, representative stakeholder group, which is responsible for overseeing the operations of the [Credit System CCS](#) and making [Credit System CCS](#) management decisions. The Sagebrush Ecosystem Council serves as the Oversight Committee.

Participant: General term for all entities participating in the [Credit System CCS](#), with the exception of the Administrator and the Oversight Committee. Participants include: [Credit Developers](#), [Credit Buyers](#), [Project Proponents](#), Technical Support Providers, Aggregators, and Verifiers.

Participant Contract: Legal agreement between one or more [Credit Developer](#)/[Credit Project Proponents](#) and the Administrator that defines obligations of the [Credit Developer](#)/[Credit Project Proponents](#) and secured financial assurances, binds a participating credit site to a Management Plan, and lays out the relevant terms and conditions for the development of credits under the [Credit System CCS](#).

Participant Confidentiality: Processes to ensure sufficient information is available to monitor compliance, ensure progress toward environmental goals, and inform a robust [Credit System CCS](#) management process, while not revealing identifying information of participants.

Performance Standards: Management actions and habitat function described in a credit project's Management Plan that defined credit project expectations including requirements for credit releases.

Project Duration: The period of time that the [Credit System CCS](#) recognizes a credit or debit before requiring that the project be renewed using current HQT and protocols.

Project Proponent: A person or entity that proposes or implements:

[Debit Project Proponent:](#) an anthropogenic disturbance within Greater Sage-Grouse habitat.

[Credit Project Proponent:](#) a credit project within Greater Sage-Grouse habitat.

Commented [KP7]: Added

Range-wide Scale (1st order): 1st order selection is described by the geographic range of the sage-grouse population in Nevada.

Rehabilitate: Return habitat function of a debit site to pre-project or better condition.

Remedial Action Plan: Any corrective measure which the Administrator or a [Credit Developer](#)/[Credit Project Proponent](#) is required to take to correct an adverse impact to a participating credit site as a result of a failure to achieve the performance criteria outlined in the site's Management Plan.

Remediate: Correction of an adverse impact to a credit site.

Reserve Account: A pool of credits, funded by a percentage of the credits transferred in each transaction, that are used to cover shortfalls when credits that have been generated and sold are invalidated due to contract breach, a force majeure, or other circumstances. The Reserve Account helps to ensure that there is always a net positive amount of habitat tracked under the [Credit System CCS](#).

Restoration: The reestablishment of ecologically important habitat or other ecosystem resource characteristics and function(s) at a site where they have ceased to exist, or where they exist in a substantially degraded state, and that renders a positive biological response by the species or habitat.

Reversal: Credit project that does not persist for the full, required, duration due to natural or man-made causes.²³

Safe Harbor Agreement (SHA): Formal agreement between the USFWS or NMFS and one or more non-Federal landowners in which landowners voluntarily manage land for listed species for an agreed amount of time providing a net conservation benefit to the species at the end of the time period and, in return, receive assurances from the Federal agency that no additional future regulatory restrictions will be imposed.²⁴

Science Committee: The group of species and ecology experts appointed by the Sagebrush Ecosystem Council and are responsible for analyzing the best-available species and ecological science and making adaptive management recommendations.

Service Area: The geographic area within which habitat credit trading occurs, as defined by the current Service Area; the geographic area within which impacts to covered species' habitat can be offset at a particular habitat offset site as designated in an agreement or program.²⁵

Site Scale (4th order): 4th order selection is based on sage-grouse selection for vegetation structure and composition that provide for their daily needs, including forage and cover.

Split Estate: Surface rights and subsurface rights (such as the rights to develop minerals) for a piece of land are owned by different parties.²⁶

Stacking Payments and Credits: The creation of different credit types or payments on the same project site. Stacking credits allows [Credit Developer/Credit Project Proponent](#) to market multiple ecological values, and also allows payments from federal programs to be paired with payments from private sector mitigation markets for different services on the same land.

Static Offset: Mitigation achieved for a debit project by the use of single credit project produced for the duration of the relevant debit project.

Stewardship: Maintenance of high quality habitat currently used by or in close proximity to habitat used by greater sage-grouse, or manipulation of existing habitat to increase specific habitat functionality. Examples range from placing a conservation easement on existing high quality habitat and committing to maintaining that high quality for the full duration of the credit project to improvement of habitat quality, as measured through functional HQT scores, through a prescribed grazing plan on existing rangeland.

Technical Support Provider: Entities with technical expertise in conservation planning and project design, who understand how to use the [Credit System/CCS](#) tools and forms. May be hired by [Credit Developer/Credit Project Proponents](#) to help design credit projects, use the HQT to estimate credits, and submit all required materials to the Administrator. There is no formal process to designate or certify a Technical Support Providers as qualified.

Transfer: The transfer of credits between account, such as between the account of a [Credit Developer/Credit Project Proponent](#) and [Credit Buyer/Debit Project Proponent](#), or a [Credit Developer/Credit Project Proponent](#) and the reserve account. After transfer of credits between the accounts of a [Credit Developer/Credit Project Proponent](#) and a [Credit Buyer/Debit Project Proponent](#), the

²³ USFWS DRAFT GRSG Mitigation Framework Glossary revised

²⁴ USFWS DRAFT GRSG Mitigation Framework Glossary

²⁵ USFWS DRAFT GRSG Mitigation Framework Glossary

²⁶ USFWS DRAFT GRSG Mitigation Framework Glossary

Credit Developer/Credit Project Proponent is responsible for meeting the monitoring, reporting and verification requirements of each project for the life of the project (described in [Step D3 in Section 3](#)).

Verification: An independent, expert check on the HQT calculations and other specifications of the **Credit System/CCS**. The purpose of verification is to provide confidence to all participants, including the Administrator, that credit and debit calculations represent a faithful, true and fair account of conditions on-the-ground.

Verifier: A person that conducts site visits to assess the accuracy of credit and debit calculations. Verifiers must be trained and certified by the Administrator and must meet qualifications established by the Oversight Committee.

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APPENDIX B: TOOLS, FORMS & TEMPLATES

Several tools, forms and templates support efficient and effective ongoing operations of the [Nevada Conservation Credit System \(Credit System CCS\)](#), and are referenced throughout in the [Credit System CCS Manual](#).

[Table 22](#)

[Table 22](#)

[Table 22](#) below describes the following products used by the [Credit System CCS](#):

- **Tool:** A document, spreadsheet, or website used by [Credit Developers, Credit Buyers, Project Proponents](#) or the Administrator to carry out a particular operational step in the [Credit System CCS](#) Manual. For example, the Habitat Quantification Tool (HQT) is used to determine credits and debits from a project site.
- **Form:** A document with pre-defined fields that participants fill out and submit to the Administrator. For example, the Validation Checklist provides a set of fields that [Credit Developer, Credit Project Proponents](#) fill out to provide basic information to the Administrator about a proposed credit project.
- **Template:** A document with defined content outline and formats that a [Credit System CCS](#) participant uses to efficiently populate with unique information. For example, the Administrator uses the previous year’s Annual Performance Report to update information and create the next year’s Annual Performance Report.

The current version of the tools, forms and templates in [Table 22](#) are available on the [Credit System CCS](#) website, or from the Administrator by request: <http://sagebrushco.nv.gov/CCS/ConservationCreditSystem/https://www.enviroaccounting.com/NVCreditSystem/Program/Home>

Table 20: Tools, forms and templates that support efficient and effective ongoing operations of the [Credit System CCS](#)

#	Name	Type	Description	Related Step(s)	Responsible Party
1	VALIDATION CHECKLIST	Form	Basic information to provide an initial screen of a credit project's eligibility to participate in the Credit System CCS .	D1.3	Credit Developer, Credit Project Proponent
2	LIST OF CREDIT OPPORTUNITIES	Tool	List of credit projects seeking funding and Credit Buyer, Debit Project Proponents interested in purchasing credits.	D1.4, B1.1	Administrator
3	HABITAT QUANTIFICATION TOOL (HQT)	Tool	A set of metrics (i.e. measurements and methods), applied at multiple spatial scales, to evaluate vegetation, anthropogenic, and environmental conditions related to habitat quality and quantity.	D2, B2.2	Credit Developer, Credit Buyer, Project Proponents

#	Name	Type	Description	Related Step(s)	Responsible Party
4	MANAGEMENT PLAN	Template	<p>Template that guides a Credit Developer<u>Credit Project Proponent</u> to record the results of HQT outputs, and define specific restoration and management actions over the life of a credit project, including ongoing maintenance and monitoring requirements.</p> <ul style="list-style-type: none"> Existing project site information, such as a site map and information on current management practices. Management plan information, including proposed management or restoration practices, anticipated start and end dates, and any management limitations. 	D2.3	Credit Developer <u>Credit Project Proponent</u>
5	VERIFICATION CONTRACT	Form	A Project Proponents <u>Credit Developer or Buyer</u> signs a contract with the Administrator for third-party verification of a credit or debit site.	D3.1, B2.2	Credit Developer, Credit Buyer <u>Project Proponents</u>
6	CONFLICT OF INTEREST FORM	Form	Submitted by a Verifier to the Administrator about any pre-existing conflicts of interest for verification.	D3.1, B2.2	Verifier
7	VERIFICATION REPORT	Template	Report submitted by a Verifier after site verification attesting to his or her opinion on whether a Credit Developer's Credit Estimate Report matches on-the-ground conditions, or a Buyer's baseline measurement.	D3.3, B2.2	Verifier
8	SELF <u>ANNUAL MANAGEMENT AND</u> -MONITORING REPORT	Template	Report submitted by Credit Developer <u>Credit Project Proponent</u> s in non-verification years demonstrating that specifications of the Management Plan <u>and annual monitoring requirements</u> have been fulfilled.	D3.3, B2.2	Credit Developer <u>Credit Project Proponent</u>
9	SETT CONSULTATION FORM	Form	Form populated by the Administrator and Credit Buyer <u>Debit Project Proponent</u> throughout the SETT consultation process, and containing avoidance and minimization measures, as well as the credit obligation if residual impacts exist, and a summary of credit fulfillment if the Credit System <u>CCS</u> is used to mitigate those impacts.	B2.2	Credit Buyer <u>Debit Project Proponent</u>
10	VERIFICATION PROTOCOL	Tool	The step-by step description of the verification process for Verifiers to use as guidance.	D3.3, B2.2	Administrator

#	Name	Type	Description	Related Step(s)	Responsible Party
11	NOTICE OF CREDIT TRANSFER	Form	Notice from the Project Proponents Credit Developer or Buyer to direct the Administrator to transfer credits between accounts.	D5.1, D5.2, B3.2	Project Proponents Credit Developer , Credit Buyer
12	ACCOMPLISHMENT REPORTS	Template	Reports provided by the Administrator to Project Proponents Credit Developers and Credit Buyers outlining project accomplishments.	D5.3, B4.2	Administrator
13	CREDIT SYSTEM CCS IMPROVEMENTS LIST	Tool	Suggestions for improving the Credit System CCS collected throughout the year and maintained by the Administrator, including research and monitoring needs.	A1.1	Administrator
14	CREDIT SYSTEM CCS PERFORMANCE REPORT	Template	The Administrator generates quantitative information to show Credit System CCS accomplishments with respect to overall goals.	A3.1	Administrator
15	FINDINGS & IMPROVEMENT RECOMMENDATIONS REPORT	Template	Synthesizes learning from experience implementing the Credit System CCS and from new monitoring and research findings, and describes recommendations of priority Credit System CCS improvements for approval by the Oversight Committee	A4.1	Administrator
16	RECORD OF DECISIONS	Template	Defines the agreed-to changes, rationale, the party responsible for implementing changes, and the date changes go into effect.	A5.2	Administrator
17	AUDIT REPORT	Template	Independent audit of the Credit System CCS operations by the Oversight Committee or third-party.	A5.3	Oversight Committee