



State of Nevada

Conservation Credit System Manual

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Version 2.0

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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In addition, many knowledgeable and dedicated individuals from the Nevada Governor’s Office and various other state agencies, U.S. Fish and Wildlife Service, U.S. Bureau of Land Management, U.S. Forest Service, and citizens of the State of Nevada provided guidance, insight and support that was essential to ensure the Nevada Conservation Credit System (CCS) is aligned with the needs of key constituents and is a viable component for species conservation.

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 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 procedures and publications developed by Environmental Incentives, LLC (www.enviroincentives.com), Environmental Defense Fund (www.edf.org), and the Willamette Partnership (www.willamettepartnership.org), but is not the responsibility or property of any one of these entities.

IMPLEMENTATION TIMELINE & STATUS

In October 2014, the Nevada Conservation Credit System (CCS) opened for credit project enrollment and development. The 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 CCS completed a pilot credit project and evaluated several credit and Debit Projects to estimate credits and credit obligations, respectively. In addition, the CCS policies and technical requirements were updated systematically through the formal, annual programmatic improvement 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 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. Any changes to the CCS through the annual programmatic improvement process will only apply to new credit and Debit Projects, thus credits awarded, and credit obligations fulfilled through the CCS will not be impacted by future updates to the CCS.

The 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 GRS habitat on Bureau of Land Management (BLM) and U.S. Forest Service (USFS) lands in the State of Nevada. The CCS does not currently provide participants with federal regulatory assurances in the event that GRS 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 continue working with USFWS to develop this agreement.

INTRODUCTION TO THIS MANUAL

The Nevada Conservation Credit System Manual (CCS Manual) provides the necessary materials and information for understanding and participating in the Nevada Conservation Credit System (CCS). The table below provides a summary of the contents of the CCS Manual. The CCS Administrator will use this document to guide CCS operations and policies over time. Landowners and other parties interested in generating credits, and any parties interested in purchasing credits through the CCS should refer specifically to guidance provided in [Section 2 Policy & Technical Elements](#) 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.

CCS MANUAL CONTENTS

Section 1 CCS Overview	Provides an overview of the objectives, scope, and primary participants of the CCS.
Section 2 Policy & Technical Elements	Summarizes the primary policy and technical requirements necessary to develop credits and offset credit obligations and govern the CCS.
Section 3 CCS Operations	<p>Defines the detailed steps, tools, and timing to:</p> <ul style="list-style-type: none"> Quantify 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 CCS over time.
Appendix 1 Glossary	Defines key terms used throughout the CCS Manual.

CCS DOCUMENTS & TOOLS

Several tools and documents are used to describe and operationalize the CCS. The primary tools and documents are summarized below and the most recent versions are available on the [CCS website](#) or through the Administrator.

Conservation Credit System Manual

- Provides guidance and information needed to participate in the Credit System including an overview of the program, policy, and technical requirements, and operational protocols.
- Audience:
 - Administrator
 - Credit Developers and Credit Buyers
 - Technical Support Providers
- Informs the User's Guide and Calculator

Scientific Methods Document

- Defines the attributes assessed to measure Greater Sage-grouse habitat conditions and document the rationale for the attributes selected
- Audience:
 - Administrator
 - Science Contributors
- Informs the User's Guide and Calculator

User's Guide

- Provides step-by-step guidance for efficiently and accurately calculating functional acres, credits, and debits for projects in the Credit System, including the desktop analysis and field data collections methods.
- Audience:
 - Administrator
 - Technical Support Providers
- Provides instructions for filling out the Calculator

Calculator

- Calculates functional acres, credits, and debits for proposed and implemented projects.
- Audience:
 - Administrator
 - Technical Support Providers

LIST OF ACRONYMS

ACEC	Area of Critical Environmental Concern
AIM	BLM Assessment, Inventory, and Monitoring data
BLM	Bureau of Land Management
BSU	Biologically Significant Units
CCA	Candidate Conservation Agreement
CCAA	Candidate Conservation Agreement with Assurances
CCS	Nevada Conservation Credit System
ESA	Endangered Species Act
GRSG	Greater Sage-grouse
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 CCS OVERVIEW

Greater Sage-grouse (*Centrocercus urophasianus*; hereafter GRSG) populations have declined significantly from historic numbers (Garton et al. 2011), in Nevada and throughout their current range (which includes 11 US states and 2 Canadian provinces). The decline of GRSG populations is largely attributable to the degradation, fragmentation, and loss of GRSG habitat due to wildfire, increased prevalence of invasive species, pinyon-juniper woodland encroachment, and anthropogenic disturbances resulting from infrastructure, mineral and energy development, improper grazing practices and other human activity (U.S. Fish and Wildlife Service 2013).

In 2010, the U.S. Fish and Wildlife Service (USFWS) announced the finding that listing the GRSG as threatened or endangered under the Endangered Species Act (ESA) is warranted but precluded by higher priority listing actions (U.S. Fish and Wildlife Service 2015). The USFWS reviewed the status of the GRSG again in September 2015 (U.S. Fish and Wildlife Service 2010) and announced that protection for the GRSG 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 (CCS). The status of the GRSG 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 with the purpose to protect and enhance Nevada sagebrush ecosystems, culture, and economy by promoting good stewardship, as stated in the Sagebrush Ecosystem Council mission statement. The CCS, the use of which was made a state requirement in 2019 under NAC 232.400 – 232.480, provides a mechanism to achieve GRSG conservation goals while preserving the integrity of the culture and economy of the State of Nevada.

The CCS is an innovative solution to GRSG habitat protection that ensures impacts from anthropogenic disturbances are fully compensated by long-term enhancement and protection of GRSG 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 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 GRSG habitat, while reducing threats to important habitat for the species. The CCS is a performance-driven and market-based approach to species conservation that quantifies the positive impacts from GRSG habitat enhancement and protection (credits) and negative impacts from anthropogenic disturbances (debits) to GRSG habitat, operationalizes market transactions, and reports net benefit from all transactions processed by the CCS.

1.1 CCS GOALS & PRINCIPLES

The goal of the CCS is for impacts from anthropogenic disturbances to be offset by enhancement and protection that result in a net benefit for GRSG habitat in the State of Nevada. In the future, the CCS may be expanded to support the stewardship and restoration of Nevada sagebrush ecosystems overall and other sagebrush obligate species, in addition to the GRSG.

GUIDING PRINCIPLES

The CCS enables the stewardship and restoration of a resilient and resistant sagebrush ecosystem. The 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 CCS. The

following principles guide the development and operation of the CCS and are meant to provide clarity and guidance in cases where the 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 credit marketplace, where each transaction is anticipated to result in a net benefit for GRSG.
- Foster transparency, accountability, and credibility.
- Improve the effectiveness and efficiency of the CCS over time.

1.2 GEOGRAPHIC & PARTICIPANT SCOPE

The geographic scope of the CCS is consistent with current Biologically Significant Units (BSUs; Figure 1). The range of the Bi-State Distinct Population Segment of GRSG in the State of Nevada is not included in this CCS.

Proposed anthropogenic disturbances to GRSG habitat on State of Nevada, BLM, and USFS lands within the BSUs require consultation with the Sagebrush Ecosystem Technical Team (SETT) and the appropriate state or federal agency, as defined in the Nevada Greater Sage-Grouse Conservation Plan (Sagebrush Ecosystem Program State of Nevada 2019), with few exceptions. This consultative process will determine when residual unavoidable impacts require compensatory mitigation through the CCS. Private landowners are not required to mitigate anthropogenic disturbances on their land; however, they are encouraged to voluntarily participate in the CCS by generating or purchasing credits. The CCS scope can be expanded in the future to support additional conservation needs and to correspond with revisions to GRSG habitat and management maps.

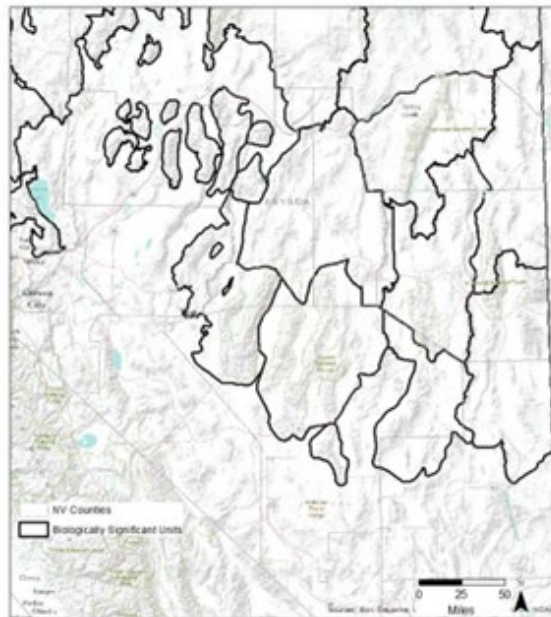


Figure 1. Biologically Significant Units (BSU) map produced by NDOW

1.3 ORGANIZATIONAL STRUCTURE & ROLES

The organizational structure and interactions between the participants in the CCS are depicted in Figure 2, followed by a description of each participant. Additional details regarding the governance structure and roles is provided in [Section 2.1: 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 CCS functions as designed.

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 CCS and making policy decisions.

Administrator: The SETT is responsible for managing the day-to-day operations of the 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 GRSG populations or its habitat within the scope of the CCS and ensure that the CCS functions according to current law, policy, and regulations.

Science Committee: Scientists and subject-matter experts who ensure the best-available science regarding the GRSG and its habitat are taken into account by the Sagebrush Ecosystem Program. Recommendations are used to inform science-related policy decisions and guide the development of technical products and tools, such as the Habitat Quantification Tool (HQT).

Credit Project Proponents: Landowners or land managers, organizations, or agencies that produce, register, or sell credits in the CCS. 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.

Debit Project Proponents: Entities that will create anthropogenic disturbances in, or within 6km of, GRSG habitat on public land, who must purchase or generate credits to meet credit obligations or other conservation objectives.

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

Technical Support Providers (Not included in Figure 2): Individuals and entities with technical expertise in conservation planning and project design, who understand how to use the CCS tools and forms. Technical Support Providers may be hired by Project Proponents 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 Technical Support Providers.

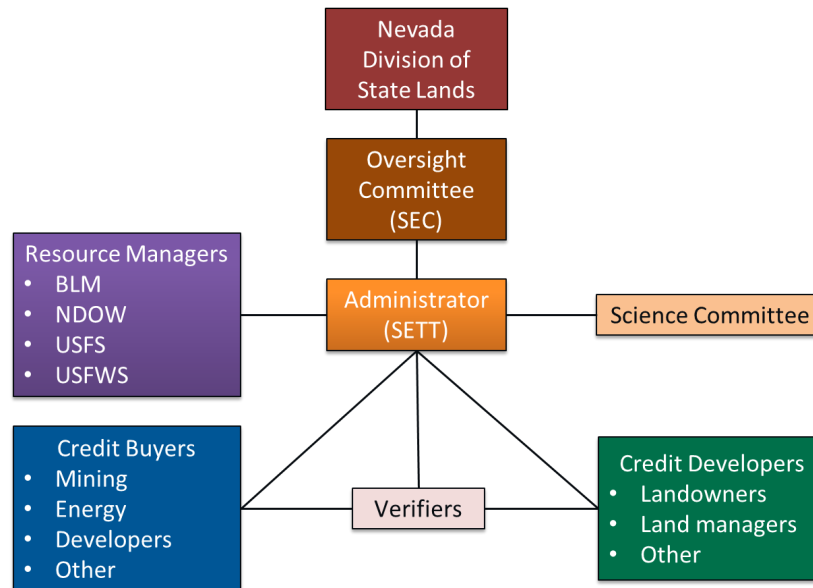


Figure 2. Operational structure of the Nevada Conservation Credit System

1.4 HABITAT QUANTIFICATION & CCS CURRENCY

Credits are the currency of the CCS. A credit is a unit of GRSG habitat value that has been quantified through implementation of the HQT, unless another method is determined by the Sagebrush Ecosystem Council and made durable for the defined duration of the project through financial assurances and contract requirements to maintain performance standards as defined in a site-specific Management Plan. Credits are primarily awarded for meeting Management Plan performances standards, but there may be considerations for implementing conservation practices in restoration.

Credits are used to offset debits, which represent units of GRSG habitat value lost due to anthropogenic disturbances. The credit obligation is the quantity of credits required to offset a Debit Project.

The CCS measures GRSG habitat value in units of functional acres. Greater Sage-grouse habitat function refers to the role of the ecosystem in providing life history requirements for GRSG and includes the direct and indirect effects of anthropogenic disturbances. Function is expressed as a percentage in relation to fully functioning GRSG habitat. Functional acres are the product of percent function and acres within the relevant area assessed as conceptually illustrated in Figure 3.

The CCS uses the HQT to quantify functional acres for both credit and debit sites. A summary of the HQT and credit and debit calculations are provided below. Additional details can be found in [Section 2.2 Habitat Quantification and Credit and Debit Calculations](#), [Section 2.3.4 Calculating Credit Baseline Greater Sage-grouse Habitat Function](#), and [Section 2.5.5 Calculating Debit Baseline GRSG Habitat Function](#) or within the *HQT Scientific Methods Document*.

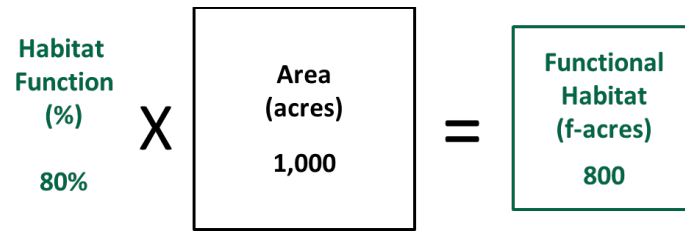


Figure 3. Conceptual illustration of a functional acre

KEY TERMS

Credit: A quantifiable unit of a GRSG 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 GRSG habitat value from an impact measured as the difference between debit baseline functional acres and post-project functional acres multiplied by a mitigation ratio.

GRSG Habitat Function: The ability of an ecosystem to provide life history requirements for GRSG considering needs across multiple spatial scales. Function is expressed as a percentage in relation to fully functioning habitat for GRSG.

HABITAT QUANTIFICATION TOOL

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

The HQT accounts for environmental characteristics or attributes that influence GRSG habitat selection across multiple scales. These characteristics are based on different orders of selection (Johnson 1980, Connelly et al. 2003, Stiver et al. 2015) that represent four spatial scales at which ecosystem attributes influence where GRSG reside and obtain resources necessary for survival and reproduction. The HQT assesses GRSG habitat quality at four orders.

Range-wide Scale (1st order): The range considered by the CCS is the geographic range of the GRSG population in Nevada.

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

Local Scale (3rd order): Local selection is based on GRSG habitat quality 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 for GRSG.

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 CREDIT 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 4 illustrates how baseline is subtracted from the post-project GRSG habitat value to determine the functional acres above baseline for a Credit Project. 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 GRSG habitat value.

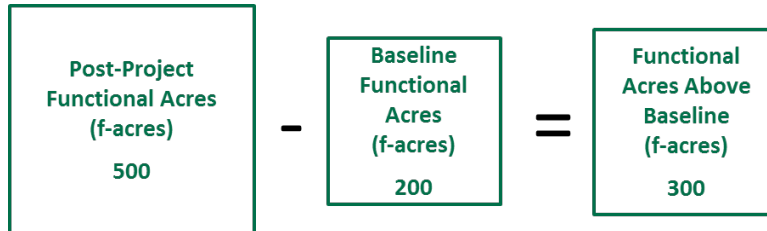


Figure 4. Conceptual illustration of functional acres above baseline for a credit project

Figure 4 illustrates how the functional acres above baseline are multiplied by a mitigation ratio to determine the number of credits generated by the credit site. habitat value.

The HQT generates functional acre values for each seasonal GRSG habitat type (breeding, late brood-rearing, and winter), and unique mitigation ratios are also generated for each.

The change in value for each seasonal GRSG habitat type is tracked and reported by the CCS when requested; however, only the most valuable type is used to determine the credits or debits generated from the site. Guidance for determining the mitigation ratio for each seasonal GRSG habitat type is provided in [Section 2.2.2 Mitigation, Proximity Ratios, and Credit Phasing](#), and the calculation to determine the seasonal GRSG habitat type of greatest value is illustrated in [Section 2.2.3 Credits and Debit Calculation](#).

The quantity 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. The ratio is determined by the proximity (geographic space) between the debit site and the offsetting credit site from which credits are acquired (Figure 5). Guidance for determining the proximity ratio and the credit obligation for a Debit Project is provided in [Section 2.2.2 Mitigation, Proximity Ratios, and Credit Phasing](#).

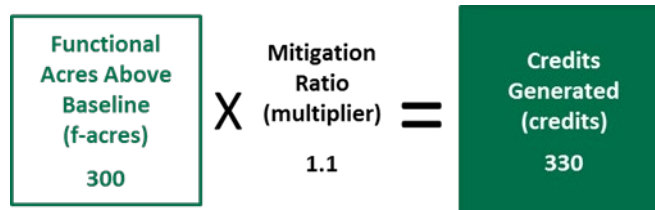


Figure 5. Conceptual illustration of the credits generated from a credit project

1.5 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 discussed in detail in [Section 3 CCS Operations](#) of this CCS Manual.

The steps for generating and transacting credits are depicted in Figure 6. Blue chevrons signify the steps undertaken to generate credits, green chevrons represent the steps to buy credits to offset credit obligation or for conservation purposes, and the orange Track and Transfer connector represents the steps and platform within which transactions occur.



Figure 6. Overview of the process steps to generate and purchase credits

GENERATING CREDITS

The following steps outline the overall process to generate, quantify, and register credits from a Credit Project under the CCS.

1. **Select & Validate Site:** Credit Project Proponents may select any project site on private or public land that provides confirmed benefit to GRS habitat, as determined by the CCS credit site eligibility requirements. The 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. **Estimate Credit Amount:** Credit Project Proponents, with the assistance of a certified Verifier or other technical expert, design the project and estimate the expected number of credits using the HQT.
3. **Assess Conditions to Quantify Credits:** All projects undergo HQT quantification through certified third-party Verifiers to ensure protocols are followed correctly and credits are appropriately calculated, according to actual on-the-ground conditions.
4. **Register & Issue:** Once credits from a project have been quantified, supporting documentation is submitted to the Administrator where it is reviewed for completeness before credits are registered and issued to the Credit Project Proponent's account on the CCS Registry. Upon issuance, credits are given a unique serial number so they can be tracked over time and are available for sale by the Credit Project Proponent.
5. **Track & Transfer:** Issued credits are tracked by the Administrator using the CCS Registry and are either transferred to a Debit Project Proponent's account or held in other 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 (described in [Section 3.2.4 Track & Transfer Credits](#)). Credit Project Proponents annually confirm that performance standards are met, and additional credit releases are triggered, where applicable.

ACQUIRING CREDITS

The following steps outline the overall process to purchase credits under the CCS.

1. **Indicate Initial Interest:** Debit Project Proponents become aware of the opportunity or requirement to participate in the CCS and contact the Administrator to provide basic information. Additional assistance and technical support are available, if desired.
2. **Determine Credit Need:** Debit Project Proponents, with the assistance of a certified Verifier, determine the duration and amount of credits needed to best meet their needs. Debit Project Proponents must determine the credit amount needed by estimating and 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:** Debit Project Proponents contact the Administrator and confirm needed credit quantities. The price, terms and conditions are all set by the Debit Project Proponent and 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 Debit Project Proponent's account, the Debit Project Proponent can use that information for internal and external reporting.

MANAGING THE CCS

The CCS is managed by the Administrator, using a transparent and inclusive process to improve the efficiency and effectiveness of the CCS over time. The Oversight Committee acts as a board of directors for the CCS and is responsible for adopting any changes made to the CCS through a defined programmatic improvement process. This process follows the steps depicted in Figure 7.

1. **Update Manual & Tools:** Administrator updates this CCS Manual, as well as tools, documents, forms, and related guidance to ensure practical experience and new scientific information result in increased efficiency and effectiveness of GRSG habitat conservation.
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 CCS Performance:** Administrator develops the Semi-Annual Report to summarize credit awards, debits and GRSG habitat improvements achieved. Routine reporting of accomplishments is essential to ensure transparency and accountability.
4. **Identify & Adopt CCS Improvement Recommendations:** Administrator develops operational and technical improvement recommendations which are reviewed and acted upon by the Oversight Committee to ensure the CCS continues to motivate effective conservation actions over time. Creating and transparently adopting clear recommendations to improve the CCS is the most critical step in the annual CCS improvement process. The transparency of this adjustment process enables Project Proponents and other stakeholders to participate in the process and gain knowledge of the reasoning for adjustments as adopted.
5. **Engage Stakeholders:** Throughout the year, the Administrator engages with stakeholders to report progress and solicit input on how to improve the CCS. Consistent stakeholder engagement is necessary to ensure the CCS operates efficiently, increases understanding, and facilitates accountability.

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

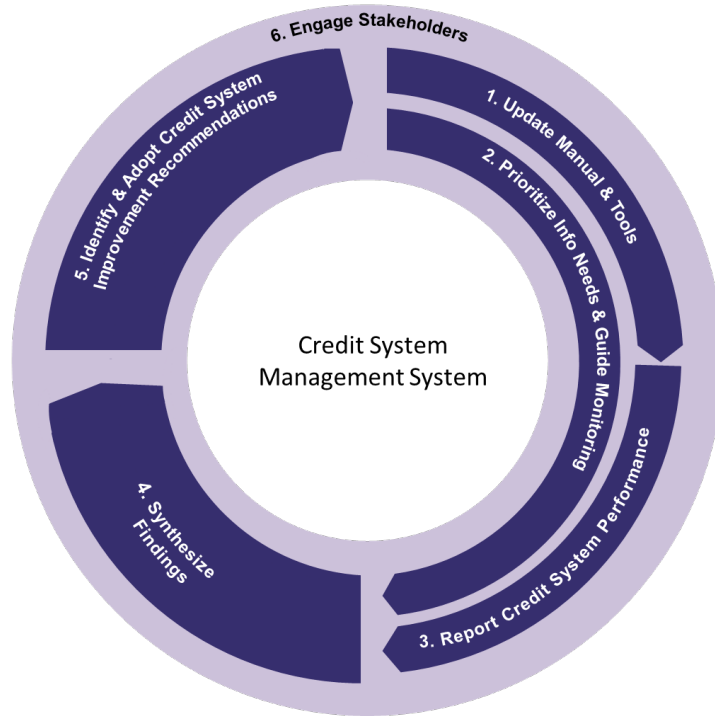


Figure 7. Overview of CCS management

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 (CCS). Table 1, Table 2, and Table 3 provide a summary of these requirements and considerations and a brief description per primary audience of each section within Section 2 of the CCS Manual.

Table 1. Summary of policy & technical considerations for all parties of the CCS

CCS Elements		Element Description & Guidance
2.1 Program Governance		
2.1.1	Governance Roles	<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 Nevada State Policy	<ul style="list-style-type: none"> State of Nevada policy established the CCS, and requires mitigation for anthropogenic disturbances which impact GRSG habitat to be determined by the CCS
2.1.3	Federal Regulatory Predictability	<ul style="list-style-type: none"> CCS is included in BLM and USFS land use plans, and is designed to accommodate other regulatory mechanisms to provide certainty to Project Proponents
2.1.4	Version	<ul style="list-style-type: none"> A project is committed to CCS Documents and the HQT version once a project has started NEPA and other permitting conditions are met.
2.1.5	Accounting System & Reporting	<ul style="list-style-type: none"> Rigorous accounting system tracks functional acres, credits, and debits Semi-Annual Report includes CCS performance and program improvements
2.1.6	Programmatic Improvement	<ul style="list-style-type: none"> Formal, structured programmatic improvement approach that deals with uncertainty and leverages management experience and research results
2.1.7	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 participant confidentiality by aggregating information and removing identification information
2.1.8	Reserve Account Management & Use of Financial Assurances	<ul style="list-style-type: none"> Reserve account serves as an insurance mechanism for the overall CCS by allowing the Administrator to cover invalidated credits until they are remediated 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
2.1.9	Recognition & Support of Existing GRSG Conservation Programs	<ul style="list-style-type: none"> Percent function and number of functional acres for each seasonal GRSG habitat type are generated for each map unit 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 Habitat Quantification & Credit & Debit Calculation		
2.2.1	Habitat Quantification Tool	<ul style="list-style-type: none"> Credit and debit ratios determined by management importance and meadow ecosystem affected Debits are adjusted by a proximity ratio, determined by the geographic proximity between the debit site and offsetting credit site

2.2.2	Mitigation, Proximity Ratios, & Credit Phasing	<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
2.2.3	Credit & Debit Calculation	<ul style="list-style-type: none">• Credits and debits are calculated from the difference between the greatest benefit or disturbance a project may create to the function acres pre-project
2.2.4	Minimization Measures Assessment & Approval Provisions	<ul style="list-style-type: none">• Debit Project proponents may apply for a reduction of indirect effects by developing minimization measures for specific anthropogenic features

Table 2. Summary of policy & technical considerations for Credit Project Proponents

CCS Elements		Element Description & Guidance
2.3 Credit Project Requirements & 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 Project Proponent, and/or outside of Credit Project Proponent’s control if indirectly benefited from removal of anthropogenic feature Credits can be generated from GRSG habitat stewardship or GRSG habitat uplift
2.3.3	Credit Site Eligibility	<ul style="list-style-type: none"> Site must be located in the Service Area Participant Contract with Administrator is required and must attest to ownership or use rights and past stewardship Additionality must be demonstrated, and post-project GRSG habitat functionality must meet minimum function requirements No evidence of an imminent threat of direct or indirect disturbance Necessary financial assurances must be complete Credit Project Proponent must attest to the accuracy of the information
2.3.4	Calculating Credit Baseline GRSG Habitat Function	<ul style="list-style-type: none"> For land controlled by Credit Project Proponent: local-scale, pre-project function combined with a site-scale, regional standard function for each seasonal GRSG habitat type
2.3.5	Developing Credits on Public Lands & 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 conservation actions, existing land designations, and existing regulatory mechanisms
2.3.6	Anthropogenic Disturbance Removal on Private & Public Lands	<ul style="list-style-type: none"> Proponents can remove anthropogenic disturbances to generate credits on private or public lands
2.3.7	Partnering with Federal Programs on Private Lands	<ul style="list-style-type: none"> Additional benefit is required
2.3.8	Stacking Credit Types	<ul style="list-style-type: none"> During Federal Contract: Allocation of credits proportionate to non-federal contribution
2.3.9	Integration with CCA/CCAAs	<ul style="list-style-type: none"> Following Federal Contract: Full credit for long-term extensions or agreements following expiration of federal contract
2.4 Credit Durability Provisions		
2.4.1	Credit Site Protection	<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 Project Proponent Additional site protection measures such as easements reduce reserve account contribution and thus increase generated credits available for sale
2.4.2	Credit Project Duration	<ul style="list-style-type: none"> 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
2.4.3	Reserve Account Contribution	<ul style="list-style-type: none"> Contribution amount varies and is determined by base contribution, probability of adverse impacts from wildfire, and probability of <i>competing</i>

		<i>land uses.</i> Contribution on for credits generated on public land is set at a standard 25%
2.4.4	Credit Release	<ul style="list-style-type: none"> • Stewardship Projects: One credit release once GRSG habitat function is quantified • Enhancement Projects: One or more GRSG habitat function performance standards triggers uplift credit releases • Restoration Projects: Combination of one performance standard defined by management actions and multiple GRSG habitat performance standards triggers credit releases
2.4.5	Credit Project Quantification, Monitoring, Qualitative Assessments, & 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
2.4.6	Financial Assurances	<ul style="list-style-type: none"> • Financial instrument contains sufficient funds for management of a Credit Project • Financial penalty or instrument provides appropriate funds to disincentivize intentional reversals and replace invalidated credits

Table 3. Summary of policy & technical considerations for Debit Project Proponents

CCS Elements		Element Description & Guidance
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 in or within 6 km of mapped BSUs
2.5.2	Debit Project Types	<ul style="list-style-type: none"> Anthropogenic disturbances to GRSG habitat on state and federal lands within the current BSUs
2.5.3	Mitigation Hierarchy & 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 <i>impact</i> avoidance Debit Projects must fulfill regulatory requirements and seasonal restrictions of relevant public agency permitting process
2.5.4	Debit Project Duration	<ul style="list-style-type: none"> Time until verification confirms that GRSG habitat function impacted by a Debit Project returns to pre-project function and an additional set period of time to allow GRSG 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 GRSG Habitat Function	<ul style="list-style-type: none"> Local-scale, pre-project GRSG habitat function combined with site-scale, pre-project GRSG habitat function
2.5.6	Debit Site Quantification & 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 governance, enforcement, accounting, and programmatic improvement procedures pursuant to NRS 321.594, as well as other relevant state and federal policies and assurances.

2.1.1 GOVERNANCE ROLES

The 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 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 includes nine voting members representing specific constituencies that are appointed by the Governor, and seven ex-officio members representing specific State and Federal agencies.

The SEC is responsible for overseeing the operations of the CCS, making high-level CCS management decisions, and conducting other critical ongoing duties described in Table 4. The Oversight Committee, or a subcommittee of the Oversight Committee, resolves policy and regulatory disputes that cannot be resolved independently after consultation with the Administrator. After consultation with the Administrator, the disputer may request that their dispute be considered for the next available Sagebrush Ecosystem Council meeting. The disputer and Administrator will present information relevant to the issue and the SEC will issue a final determination.

Table 4. 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 implementations of the 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 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 CCS. • Settles disputes between the Project Proponent and Administrator
Ensure Programmatic Improvements	<ul style="list-style-type: none"> • Considers and adopts CCS improvement recommendations provided by the Administrator and participants. Approves any changes to the CCS Documents and HQT. • Gains input from the Administrator and Science Committee on new scientific information to be incorporated into the CCS tools and processes as necessary and at least annually. • Evaluates and approves programmatic improvement actions.
Participant Oversight	<ul style="list-style-type: none"> • Resolves policy and regulatory disputes that cannot be resolved independently or in consultation with the Administrator.

ADMINISTRATOR

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

Table 5 outlines the key responsibilities of the SETT and is aligned with the processes described in [Section 3 CCS Operations](#). The SETT develops and maintains a comprehensive work plan to guide the allocation of resources and define procedures to facilitate transactions consistently and efficiently.

Table 5. Key responsibilities of the Administrator

Administrator Key Responsibilities	
Program Administration & Credit Accounting	<ul style="list-style-type: none"> • Manages day-to-day CCS operations. • Manages all CCS tools, guidance, and forms. • Manages credit accounts and the complete ledger of all credits and debits. • Manages accounting of reserve account credits.
Credit Project Proponent & Debit Project Proponent Engagement	<ul style="list-style-type: none"> • Responds to inquiries of interest from Project Proponents, connecting them to relevant resources as desired. • Ensures any necessary outreach to Project Proponents occurs.
Programmatic Improvement & Reporting	<ul style="list-style-type: none"> • Implements CCS programmatic improvement process. • Compiles Improvement Recommendations throughout the year and develops the Semi-Annual Report. • Brings products developed through the programmatic improvement 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.
Compliance & Enforcement	<ul style="list-style-type: none"> • Performs quality control and quality assessment reviews on information submitted by Verifiers and CCS participants. • Ensures programmatic compliance of the CCS with relevant USFWS, BLM, Nevada Department of Wildlife (NDOW) and other relevant agency policies. • Works with 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.
Financial & Contracting Support	<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 Project Proponents.
Science & Technical Support	<ul style="list-style-type: none"> • Creates and gains input from the Science Committee on new scientific information to be incorporated into the CCS 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 scientists and other subject-matter experts whose purpose is to inform the development and revision of HQTs for species and their habitats included in the scope of the CCS. The Science Committee contributes to prioritizing and defining monitoring efforts to improve HQTs and the CCS and informing the conservation and species recovery objectives that influence and guide CCS design.

The Science Committee is composed of the members of the Technical Review Group plus a maximum of seven biologists, rangeland ecologists, or other qualified scientists with recognized knowledge and expertise on relevant species and their habitats. One position on the Science Committee will be held by

the NDOW upland game staff specialist responsible for GRSG. The SETT appoints members of the Science Committee. Specific duties of the Science Committee include:

- Compile and analyze the latest and best-available science regarding relevant species and their habitats, and make recommendations to the SETT regarding how that new information may be used to update the HQT through the CCS programmatic improvement process; and
- Assist the SETT with making changes to the HQT through the CCS programmatic improvement 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 the 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 ecosystems (NV NRS 232.162 (7)(e)).

The CCS was developed to fulfill NRS Chapter 232.162 requirements and is included in the updated Nevada Greater Sage-grouse Conservation Plan, which states mitigation requirements for anthropogenic disturbances that impact GRSG habitat will be determined by the CCS. In 2020, NAC 232.400 – 232.480 was adopted that legally mandates mitigation for disturbances to GRSG habitat on public lands and requires the use of the CCS to fulfill those mitigation requirements.

2.1.3 FEDERAL REGULATORY PREDICTABILITY

The CCS is designed to accommodate different regulatory mechanisms to ensure that efforts taken to facilitate conservation of the GRSG are recognized, achieve net benefit for the species, and increase regulatory certainty for Project Proponents.

BLM COMPENSATORY MITIGATION

The CCS is included in the BLM and USFS land use plans as a tool for defining and fulfilling compensatory mitigation requirements for anthropogenic disturbances to GRSG 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 (U.S. Fish and Wildlife Service 2014). Additionally, the federal agencies must comply with NAC 232.400 – 232.480 which require mitigation for disturbances on public lands.

The Sagebrush Ecosystem Program signed a MOU with BLM and USFS in April of 2016, updated in August of 2019, to define roles and responsibilities for implementation of the CCS on BLM and USFS lands.

USFWS PRE-LISTING AND ENDANGERED SPECIES ACT

The CCS is intended to be consistent with the Greater Sage-grouse Range-Wide Mitigation Framework (U.S. Fish and Wildlife Service 2014), and as such, the CCS aims to provide regulatory assurances and thus increase certainty related to permitting and future species protections for Project Proponents.

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 GRSG be listed. If an agreement with the U.S. FWS were to be adopted, it would signify that the CCS can be integrated with other regulatory mechanisms to provide incidental take protection assurances to Project Proponents.

The 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 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 CCS is not included as an exemption in a 4(d) rule, take protection for 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 GRSG in the State of Nevada, or permittee-responsible mitigation. Any of these regulatory take coverage mechanisms could use the CCS by specifying that the credit obligation for all Debit Projects will be determined and offset using the CCS.
- In the event of either a threatened or endangered listing, and if the CCS is not included as an exemption in a 4(d) rule, take protection for 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 CCS VERSION POLICY & PROCEDURE

New CCS Documents and HQT versions may be created and distributed annually or intermittently for time-sensitive changes. Updates and changes may warrant a version change to include new scientific research or to clarify or updated language.

Credit calculations, and additionality and durability provisions, for a credit project must be based on the current versions of the CCS Documents and HQT. Specifically, the completed Management Plan, must be submitted for final approval by the Administrator using:

1. the most recent version of the CCS Documents and HQT posted on the CCS website on the date of submittal; or
2. the most recent previous versions of the CCS Documents and HQT. However, if submittal occurs prior to May 1st of the same year and a new version of the CCS Document and HQT is released then the previous version may be used.

In addition, the same version of the CCS Documents and HQT must be used by the project (e.g., a project cannot use Manual version 1.8 and HQT version 2.0). If revisions to the Management Plan occurs upon SETT review, then the version of the CCS Documents and HQT used depends on the final submittal date of the complete Management Plan.

Exceptions - Credit Projects enrolled prior to version 1.6 can use HQT version 1.6 for Uplift Improvement (Pro-rating/Baseline Adjustments).

Debit calculations and mitigation provisions for a Debit Project must be based on the current versions of the CCS Documents and HQT. When warranted, a new version will be released and go into effect on January 31st of the year. A Debit Project will be assured the current version of the CCS Documents and HQT when the following conditions are met:

1. Debit Review Form 1 has been submitted to the SETT
2. The project has started the official NEPA process
 - a. NEPA is considered started according to the IM-NV-2024-019 or upon the release of the following:
 - i. Environmental Impact Statement (EIS): Notice of Intent (NOI) published in the Federal Register
 - ii. Environmental Assessment (EA): The date of the notification to the project proponent that the ROW along with associated POD is completed, or Notice of Intent (NOI) published in the Federal Register
 - iii. Categorical Exclusion (CE): Signature/Published Date
 - iv. Determination of NEPA Adequacy (DNA): Signature/Published Date

If a new HQT version is released prior to a project receiving a finalized debit obligation from the SETT, then the proponent can choose to update to the new version, but is not required to do so. Debit obligations are considered finalized when the following conditions are met:

1. The Administrator has issued a signed, final Quality Assessment form to the project proponent; and
2. The Administrator has issued a signed Formal Quality Assessment letter with a final debit amount to the project proponent.

Note: A final Quality Assessment form and letter will not be issued until the following conditions are met:

- a) The close of the public comment period for the final EIS;
- b) The close of the public comment period for the final EA;
- c) The signature of a CX or DNA by the BLM; or
- d) State equivalent on state-owned land

Example A: A debit project proponent submits Debit Review Form 1 and officially begins NEPA in 2025. They are assured to run under HQT v2.0 at this time. On January 31st, 2026, the CCS Documents and HQT are updated to v2.1. The debit proponent has not received a finalized QA form and letter from the SETT, so they now have the option to run the project under HQT v2.1 if desired.

Example B: A debit project proponent submits Debit Review Form 1 and officially begins NEPA in 2025. They are assured to run under HQT v2.0 at this time. On January 31st, 2026, the CCS Documents and HQT are updated to v2.1. The debit project final EA comment period ended on December 20th, 2025, and the proponent finalized the QA on December 30th, 2025. Because the debit obligation was already finalized, the debit project proponent cannot choose to run the project under HQT v2.1.

Any debit estimates developed before meeting the guaranteed requirements listed above should be based on the current CCS Documents and HQT version on the Sagebrush Ecosystem Program website. These should be considered preliminary estimates for planning purposes only, not definitive debit obligations for the project.

Even after an obligation has been finalized under a previous version of the CCS Documents and HQT, if there is a change to the project footprint or disturbance area, and a reopening of the NEPA, a new obligation must be determined with the most recent version of the CCS Documents and HQT following the rules above. If a project proposes an addition or expansion to the original project that requires NEPA

approval, then it is also required to mitigate through the CCS as a new project and with the latest CCS Documents and HQT versions.

Example C: A debit estimate was developed using CCS Documents and HQT v2.0, but no finalized QA form or letter have been issued because the project is still in the pre-NEPA process. The project footprint or disturbance area has changed since the original estimate. The project must be reassessed using the latest HQT version, because the project is still in pre-NEPA, thus has not been assured a HQT version. The debit estimate should be recalculated based on the updated version and project footprint. The version will be assured once NEPA has officially begun. A QA form and letter with a finalized debit obligation will not be issued to the proponent by the SETT until the end of NEPA (outlined above).

Example D: A debit obligation was finalized using CCS Documents and HQT v2.0. The project has nearly completed the NEPA process and has received a signed QA form and letter from the SETT; however, the footprint or disturbance area has changed for the project since receiving the final QA documents. The project must be reassessed using HQT v2.0, and the debit obligation should be recalculated based on the updated project footprint. A new QA form must then be submitted to SETT for the Administrator's signature, and a new QA letter, with the recalculated debit obligation, will be issued to the proponent.

2.1.5 ACCOUNTING SYSTEM & REPORTING

The CCS employs a rigorous accounting system that operates on an annual cycle. Credits and debits are tracked according to 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 2.5.4 Debit Project Duration](#) and [Section 2.5.6 Debit Site Quantification and Verification](#) for more information on credit and Debit Project reporting and quantification and verification standards. The CCS accounting and reporting system uses the following key tools:

- **CCS Registry:** Tracks functional acres, credits, debits, and other transactional information.
- **Semi-Annual Reports:** Use CCS Registry outputs and the CCS programmatic improvement 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 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 CCS Registry and related to the specific Debit Project it is used to offset, if applicable. This tracking facilitates annual reporting, confirms the CCS always generates more credits than debits in any given year, and provides information necessary for effective programmatic improvements.

The 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 & Management Action Types](#) for more information on defining Credit Project areas.

The 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 GRS habitat and provides useful data for programmatic improvement of the 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.

SEMI-ANNUAL PERFORMANCE REPORTS

The Administrator will use the CCS Registry and programmatic improvement process to report semi-annually on the performance of the CCS. See [Section 1.5 CCS Operations Overview](#) for detailed information about the semi-annual reporting process. Semi-annual reports are expected to include the following information:

- Known anthropogenic and natural disturbances to the sagebrush ecosystem
- 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 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 CCS operations identified through the programmatic improvement process

2.1.6 PROGRAMMATIC IMPROVEMENT

The CCS uses a formal, structured programmatic improvement 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 programmatic improvement process with support from the Science Committee and other stakeholders, as described in [Section 1.5 CCS Operations Overview](#).

The annual programmatic improvement process focuses on improving the effectiveness of CCS policy and technical elements, the HQT, and individual management actions used to generate credits by:

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

Significant changes are approved by the Oversight Committee through a public meeting process and reported in the Semi-Annual Performance Report. Any changes will only apply to new credit and Debit Projects, thus credits awarded, and credit obligations fulfilled through the CCS will not be impacted by future updates to the CCS.

2.1.7 PARTICIPANT CONFIDENTIALITY

Some Credit Project Proponents may be concerned about the CCS publicly disclosing personal information. However, it may also be necessary for federal and state agencies to evaluate individual actions to properly assess the effectiveness of the CCS in reducing threats and providing net benefit to the species. Furthermore, the 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 CCS will publish a Semi-annual Report that describes overall CCS performance. This Semi-annual Report will be provided to relevant federal and state agencies. The CCS will protect against premature disclosure of personal and confidential information from participants to the maximum extent possible under federal, state, and local law until the project has entered the CCS. Upon entering the CCS, personal and confidential information will be posted to the Program website for project tracking through the 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 CCS.

DISCLOSURE OF INFORMATION

If 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 will be notified of the request and provided with a Release Form. Additionally, the Project Proponent 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 CCS is made, and allow the Administrator, Credit Project Proponent or Debit Project Proponent to prepare a notification requesting that any confidential personal or commercial information be withheld.

2.1.8 RESERVE ACCOUNT MANAGEMENT & USE OF FINANCIAL ASSURANCES

The CCS creates a reserve account of credits and requires Credit Projects to provide financial assurances so that the Administrator can ensure the CCS generates net benefit even if specific Credit Projects do not fulfill performance standards throughout their duration. Credit Projects that do not fulfill performance standards are considered credit reversals (detailed below).

The reserve account is not a financial assurance method to hold a Credit Project Proponent financially responsible in the event of project failure. Rather, the reserve account includes confirmed, released credits (signed Management Plan is in place) that provide GRSG benefits and have not been used to offset Debit Projects. The reserve account serves as an insurance mechanism for the overall 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 this reserve account to temporarily cover credits invalidated due to intentional or unintentional reversals as described in this section. Reserve credits withdrawn to cover invalidated credits are intended to revert back to the reserve account, when possible, when the invalidated credits have been replaced either through the use of financial assurances associated with the invalidated credits, or natural site recovery. Financial assurances may be used to purchase credits elsewhere or used for site remediation. Term credits in the reserve account are removed from the reserve account when the term of the credits has expired.

Reserve account credits contributed by Credit Projects will be tracked according to their land ownership (public land versus private land). Use of reserve credits will match (to the extent possible) the land ownership of the reversal that necessitated the use of the reserve credits. For example, for credits impacted by anthropogenic disturbance on public land, the reserve credits used will be from contributions made by Credit Projects on public lands. As another example, for a force majeure impact invalidating credits on private land, credits used will be from contributions made by Credit Projects on private lands.

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 CCS programmatic improvement 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.

CREDIT PROJECT FAILURE

A Credit Project failure may include an unintentional reversal or an intentional reversal. The Credit Project Proponent or Administrator must notify the other party as soon as possible and no later than 30 days following an event that may cause a Credit Project failure. This may include but is not limited to failure to execute the required Management Actions according to the terms and conditions of execution or the Administrator determines that site-specific performance measures are not maintained based on an evaluation of the Management Plan, field data, and the Habitat Quantification Tool (taking into account natural climate variability). The SETT will coordinate with the Credit Project Proponent to consider whether adaptive management measures can be implemented to remediate a Credit Project prior to concluding there has been a Credit Project failure.

If the Credit Project Proponent and Administrator cannot agree as to whether there has been a Credit Project failure or the intentionality of the Credit Project Failure, the final decision falls to the Administrator. The Project Proponent may request an appeal as specified in [Section 2.1.1 Governance Roles](#).

Depending on the specific cause and circumstances of a Credit Project failure, invalidated credits can be either temporarily or permanently replaced using a combination of the reserve account and financial assurances, as illustrated in Figure 8.

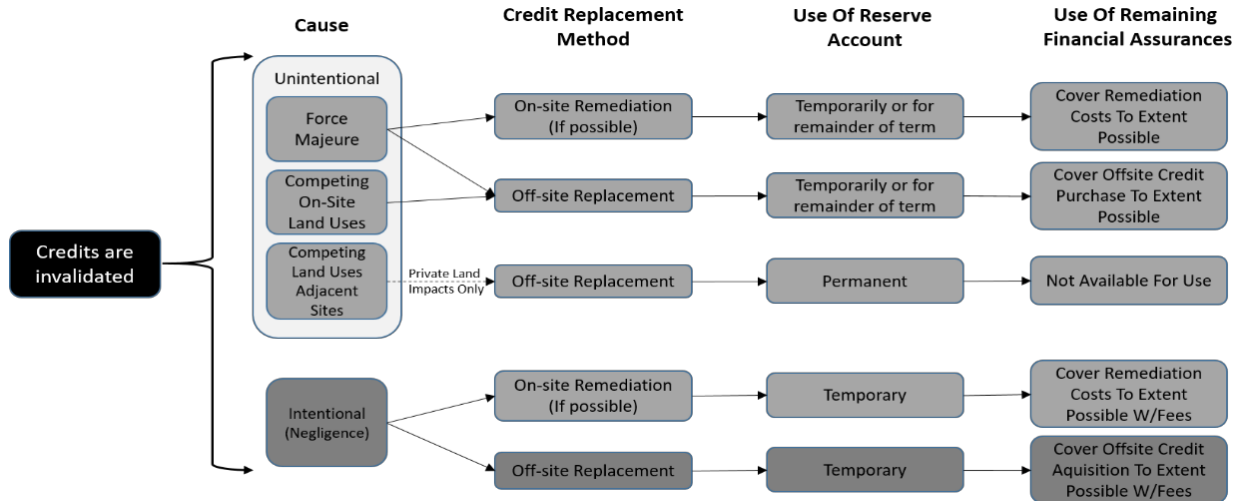


Figure 8. Credit invalidation replacement process

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 Project Proponent, such as wildfire, the Credit Project Proponent is not liable. Financial assurances may be used in these cases by the Administrator to replace the invalidated credits. The Administrator will withdraw credits initially from the reserve account to cover the invalidated credits. In cases where the credit site can be fully or partially recovered within a reasonable amount of time and cost, the Credit Project Proponent may develop a remedial action plan that is approved by the Administrator and paid for with the financial instruments secured for long-term management and unintentional reversals. 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 number of credits actually being generated on the ground. The Administrator may use the remaining amount in the project financial instruments to acquire 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 entire credit site is affected, or both the Administrator and the Credit Project Proponent agree that the site will not be recovered within a reasonable amount of time and cost, the 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 Project Proponent cease immediately and the Administrator uses the remaining amount in the project financial instrument for long-term management and unintentional reversals to acquire 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 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 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 Project Proponent cease immediately and the Administrator uses the remaining amount in the project financial instrument to acquire 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. A Debit Project qualifies as competing land use when the Debit Project reaches the end of NEPA (the close of the public comment period for the final EIS or final EA, The signature of a CX or DNA by the BLM)) or state equivalent on state-owned land. 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 direct control of the Credit Project Proponent. Therefore, in cases of unintentional reversals on private lands due to impacts from adjacent sites (public land), valid credits (i.e., have a signed Management Plan) that become invalidated by the disturbance will not impact the credit producer's total credits. Instead, the impacted credits will be replaced by the Debit Project proponent prorated for the remaining term. If no term is in place, then the offset will be the same term as the Debit Project. When the SEP is made aware of impacts occurring from adjacent sites which are not required to mitigate (i.e., private land), reserve credits from the appropriate reserve account will be used to offset those impacts.

Intentional Reversals

Anything not covered under unintentional reversals may be considered an intentional reversal. Examples may include but are not limited to not implementing management activities to achieve GRSG habitat quality as defined in the Management Plan, decreased GRSG habitat quality due to over-utilization, intentional disturbance, development, or inappropriately managed or unaddressed known risks. Prior to a finding by the Administrator, the Credit Project Proponent and Administrator will determine if an agreed-upon remedial action plan can be implemented or if credits must be replaced either by transferring available credits generated by the Credit Project proponent or by purchasing available off-site credits. If a remedial action plan cannot be agreed upon, and the Administrator determines the reversal to be intentional, then the Project Proponent may request an appeal. Following a finding by the Administrator or the Sagebrush Ecosystem Council of Credit Project failure due to an Intentional Reversal, all payments to the Credit Project Proponent immediately cease. The Credit Project Proponent is responsible to the Administrator for the entire cost of acquiring replacement credits from a different credit site, any associated legal fees, and an additional 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 reversals 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 reverts back to the account as credits are acquired to cover the remainder of the contract. See [Section 2.5.4 Debit Project Duration](#) for information on matching credit duration for more information.

For details regarding Credit Project failures and the requirements of both parties, please see the Participant Contract.

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

To the extent appropriate, the Administrator may work with the sponsors of existing GRSG conservation programs to make 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 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 CALCULATIONS

This section describes how to calculate 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 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 Greater Sage-grouse Habitat Function](#) and [Section 2.5.5 Calculating Debit Baseline Greater Sage-grouse 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 *CCS User's Guide Document* describes the detailed steps necessary to calculate credits and credit obligations for credit and debit sites, respectively, for the Nevada CCS.

2.2.1 HABITAT QUANTIFICATION TOOL

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

HQT FRAMEWORK FOR QUANTIFYING HABITAT FUNCTION

The HQT was developed to account for ecosystem characteristics or attributes which influence GRSG habitat selection across multiple scales. These characteristics were based on different orders of selection (Johnson 1980, Connelly et al. 2003, Stiver et al. 2015), which represent four spatial scales at which ecosystem/vegetation attributes influence where GRSG reside and obtain resources necessary for survival and reproduction. The HQT assessed GRSG habitat quality at four orders.

Range-wide Scale (1st order): The range considered by the CCS is the geographic range of the GRSG population in Nevada.

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

Local Scale (3rd order): Local selection is based on quality of the GRSG 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 GRSG 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 ecosystem 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 function score and site-scale function score for each seasonal GRSG habitat type. The product of the local-scale and site-scale function scores determines overall function for each seasonal GRSG habitat type for a map unit. The overall function is multiplied by the acreage of the map unit to produce a functional acre value for each seasonal GRSG habitat type. Table 6 provides an example calculation of functional acres for each seasonal GRSG habitat type for a single map unit.

Table 6. 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 CCS uses the functional acre difference between baseline functional acres and post-project functional acres for each seasonal GRSG 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 Debit Project.

Guidance for determining baseline functional acres is provided in [Section 2.3.4 Calculating Credit Baseline Greater Sage-grouse Habitat Function](#) and [Section 2.5.5 Calculating Debit Baseline Greater Sage-grouse Habitat Function](#) for credit and debit sites, respectively.

The HQT is used throughout the life of a Credit Project to 1) quantify the release of credits at the point that the project meets GRSG 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 as a follow-up application of the HQT. Initial HQT quantification results for credit and Debit Projects can be used for up to 5 years as long as the Annual Management and Monitoring Reports have been submitted and suggest GRSG habitat function is similar to the previous assessments with no significant changes 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 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 GRSG differ in availability throughout the year. To ensure accurate and consistent quantification of the GRSG 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 GRSG 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 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 phenological stages. Project Proponents must collect forbs and grasses data during the permissible window in order for measurements to be accurate and quantification and verification to be official and approved by the Administrator.

Date Confirmation

Project Proponents may request written confirmation from the Administrator that their planned field work is scheduled within the permissible window in order 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.

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 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 ecosystems, vegetation types, and ecological conditions may be used.

Field Data Outside of Permissible Window for Planning Purposes

Project Proponents 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 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 GRSG habitat function. All credit and debit amounts must be finalized based on field data collected during the permissible window.

All preliminary estimates of GRSG 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 should make conservative estimates when using field data collected outside of the permissible window (e.g., under-estimate credits, over-estimate debits). In particular, estimates for forbs, grasses and other attributes that are affected by specific growing seasons should be conservative to minimize risk in planning decisions and capital investments.

2.2.2 MITIGATION, PROXIMITY RATIOS, & CREDIT PHASING

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 Greater Sage-grouse Habitat Function](#) and [Section 2.5.5 Calculating Debit Baseline Greater Sage-grouse 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 GRSG 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 GRSG habitat in high priority areas.

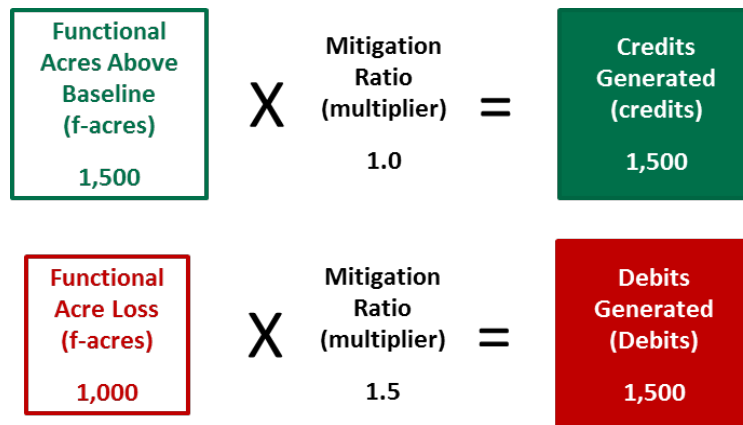


Figure 9. Conceptual illustration of calculation of debit and credits

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 9. See [Section 2.3.4 Calculating Credit Baseline Greater Sage-grouse Habitat Function](#) and [Section 2.5.5 Calculating Debit Baseline Greater Sage-grouse Habitat Function](#) for determining baseline for credit and Debit Projects respectively.

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 CCS applies a mitigation ratio to credit and debit sites to incorporate 1) estimated space used by GRSG, and 2) meadow ecosystem impacted, negatively or positively.

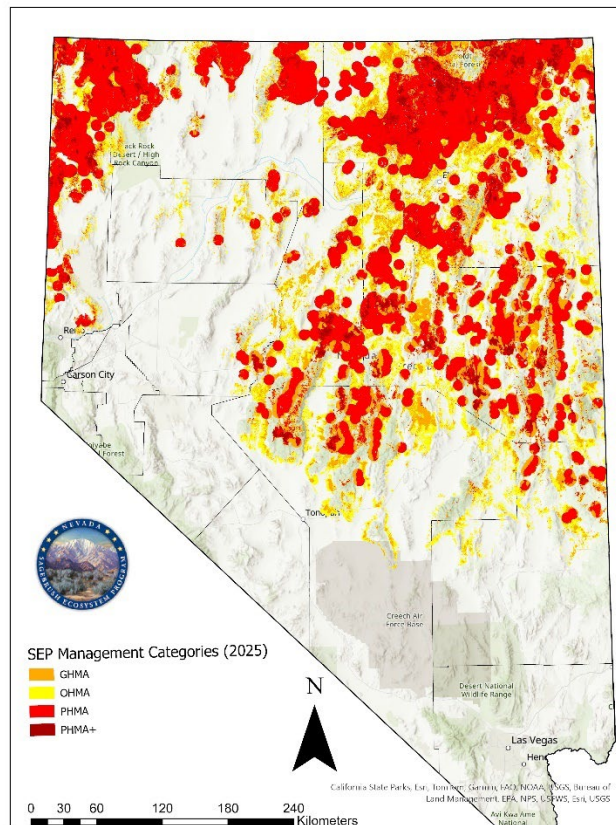


Figure 10. Sagebrush Ecosystem Program's Management Categories map

Management Importance Factor

The management importance factor incorporates estimated space use by GRSG into the calculation of credits and debits. The management importance factor is determined by the quality of GRSG habitat, within which a credit or debit is located, as defined by the Sagebrush Ecosystem Program Management Categories map (Figure 10). In order from highest to lowest conservation priority, GRSG habitat management categories are Priority Habitat Management Area (PHMA), General Habitat Management Area (GHMA), and Other Habitat Management Area (OHMA) Table 7 and Table 8 provide the management category importance factor values for debit and credit sites, respectively.

In accordance with the 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 Table 7 and Table 8 for an example of calculating an area-weighted average value).

Table 7. Debit site management importance factor values

Category	Factor Value
PHMA	1.25
GHMA	1.15
OHMA	1.05

Table 8. Credit site management importance factor values

PHMA	1.2
GHMA	1.1
OHMA	1.0

Meadow Ecosystem Power Factor

Meadows are rare in occurrence throughout the sagebrush landscape in Nevada. Yet, meadow ecosystems are crucial for GRSG to fulfill their late brood-rearing life cycle requirements. At a landscape scale, suitable upland GRSG habitat can become unsuitable when it is absent of meadows, illustrating the importance of meadow ecosystems. Meadow ecosystems are typically small in acreage, but play a disproportionately large role in the GRSG life cycle. Due to their limited area in comparison to uplands, meadows result in relatively smaller functional acre scores. To more appropriately incorporate the immense value of meadows, functional acres above base line within a meadow map unit have an 8.0 times multiplier applied. The resulting value is then used in proportion to the total number of functional acres, resulting in the meadow ecosystem power factor (Equation 1). See *Section 3.2.2 Meadow Ecosystem* in the *HQT Scientific Methods Document* for additional information.

Equation 1. Combining meadow ecosystem multiplier and meadow map unit late brood rearing functional acreage above baseline with the proportion of total late brood rearing map units to determine the meadow ecosystem power factor

$$\begin{aligned}
 & \text{Meadow Ecosystem Power Factor} \\
 &= \frac{\text{Meadow Map Unit LBR functional acreage above baseline} \times 8}{\text{Total LBR functional acreage above baseline for all Map Units}}
 \end{aligned}$$

Combining Factors to Determine Credit and Debit Mitigation Ratio

The management category importance and meadow ecosystem power factors are summed to determine the overall mitigation ratio for a site, as per Equation 2.

Equation 2. Combining factor values to determine overall debit or credit mitigation ratio

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

Pinyon-Juniper (P/J) Removal Factors

When included as part of Credit Projects, areas with pinyon-juniper woodland encroachment into sagebrush ecosystems will require complete removal of pinyon and juniper where likely to benefit GRSG populations. Pinyon and juniper removal on private land must be included with a private land preservation project; while on public lands, due to use limitations, P/J removal can be completed as its own Credit Project. Benefits to GRSG include reducing real and perceived threats of predation and providing forage and connectivity to late brood-rearing habitats. Areas between 1 - 10% pinyon and juniper cover will be characterized as Phase I. Areas between 10 - 20% P/J cover or greater than 20% cover where high-quality understory vegetation remains will be considered Phase II P/J. See *Section 3.2.3 Pinyon-Juniper Removal* in the *HQT Scientific Methods Document* for additional information.

The P/J removal factor values from Table 9 will be applied to the local-scale GRSG habitat function for areas Phase I and II P/J cover exist to calculate credits for immediate uplift to GRSG. Confirmation that pinyon-juniper has been totally eliminated will be required.

Table 9. Pinyon-juniper woodland factor values

Phase	Factor Value
Phase I (1 - 10% cover)	1.2
Phase II (> 10% cover)	1.5

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 mitigation ratio 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 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 11 are used to determine whether the debit 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 relevant to a single population.
- If the debit and credit sites are located within the same BSU, they are considered 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 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.

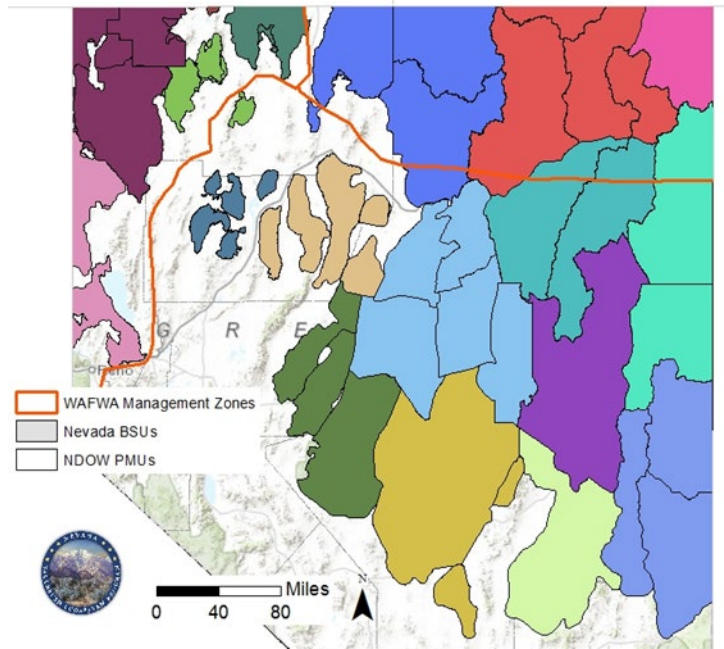


Figure 11. WAFWA Management Zones, Nevada Biological Significant Units and NDOW Population Management Units

The proximity ratio value associated with each of these categories is in the Table 10. Proximity ratio values

If the 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 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 GRSG at a landscape-scale instead of focusing exclusively on the individual population level.

Table 10. 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

Credit Obligation

The credit obligation for each Debit Project is determined by multiplying the number of debits by the proximity ratio, as per Equation 3.

Equation 3. Credit obligation for Debit Projects

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

PHASING IN CREDIT PURCHASING: ANTICIPATED TO BE DISCONTINUED BY 2029

Debit Project Proponents have the option to phase their credit purchasing to allow for the beginning of production; but there will be a credit phasing factor of 1.05 applied to any balance remaining following the initial offset to the credit obligation. Prior to breaking ground, one-third of the total term debits (rounded up) and all the permanent debits will be required to be purchased or transferred (Phase I). No more than two additional phases of credit acquisition will be allowed (Phase II and Phase III), and all credits acquired must cover the entire term of the project, regardless of when they become effective. The remaining number of credits must be acquired within 10 years of the first transaction. For project terms under 30 years (e.g., exploration) the remaining credits must be acquired by 1/3 of the term length. The project proponent is required to comply with a Phased Credit Purchasing Agreement. The SEC may revise this phasing methodology periodically, but it is anticipated to be discontinued in 2029.

2.2.3 CREDIT & DEBIT CALCULATION

The number of credits or debits generated from a project are 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 GRSG 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 Greater Sage-grouse Habitat Function](#) and [Section 2.5.5 Calculating Debit Baseline Greater Sage-grouse 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 11. Example credit calculation for a project with . For each GRSG habitat type, the table displays functional acres above baseline (difference between baseline functional acres and post-project functional acres), mitigation ratios, potential credit value (acres above baseline * mitigation ratio), and credits generated by each map unit (the greatest potential 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.

Table 11. Example credit calculation for a project with five map units, two of which are meadow map units

Map Unit	Meadow	Breeding F-Acres Above Baseline	Winter F-Acres Above Baseline	Late Brood Rearing F-Acres Above Baseline	Meadow Multiplier	Adjusted LBR F-Acres above baseline (used to calculate Meadow Power Factor)
MU1	No	50	40	50	N/A	N/A
MU2	No	20	0	100	N/A	N/A
MU3	No	5	5	25	N/A	N/A
MU4	Yes	0	0	5	8	40
MU5	Yes	0	0	5	8	40
Total		75	45	185		80

Calculations:

Meadow Power Factor = 80/185 = 0.43

Management Category Importance Factor = 1.2 (project located entirely within PHMA)

Area-weighted Average Factor Multiplier = mngmt imp factor + Meadow Power Factor = 1.2 + 0.43 = 1.63

Credits Generated = f-acres above baseline (for all seasonal GRSG habitats) x area-weighted average factor multiplier = (75+45+185) * 1.63 = 497.15

2.2.4 MINIMIZATION MEASURES ASSESSMENT & APPROVAL PROCESS

Effective and durable minimization measures can reduce impacts to GRSG. Project Proponents with existing and/or proposed anthropogenic features that are implementing effective and durable minimization measures that reduce impacts to GRSG may apply for a reduction of the indirect effects from the specific anthropogenic feature. The project proponent is responsible for completing a minimization assessment 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 GRSG 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:** The project proponent must submit a complete minimization measure assessment. This 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 a Minimization Measure Adjustments List to be placed on the 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.

2.3 CREDIT PROJECT REQUIREMENTS & ADDITIONALITY PROVISIONS

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

2.3.1 CREDIT SERVICE AREA

The CCS service area is the mapped geographic region where credits can be generated and will be tracked and reported. The service area designation has important implications for the viability of the CCS transactions and for the ability of the CCS to generate a net benefit for GRSG habitat from the impacts from anthropogenic disturbances.

The current mapped Biologically Significant Unit (BSU) is the CCS service area and is provided in Figure 1. The boundaries of this area are based on the range of the species and are developed by NDOW.

While the Service Area broadly defines the domain of the CCS, mitigation ratios establish incentives to offset debits using credits generated in close proximity to debit sites. [Section 2.2.2 Mitigation, Proximity Ratios, and Credit Phasing](#) describes how the WAFWA Management Zones, Nevada BSUs and NDOW PMUs depicted in Figure 11. WAFWA Management Zones, Nevada Biological Significant Units and NDOW Population Management Units 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 GRSG. Credits and debits will be tracked in the CCS Registry and reported by the Administrator by WAFWA Zones, BSUs and PMUs.

2.3.2 CREDIT PROJECT AREA & MANAGEMENT ACTION TYPES

The area of a Credit Project may be made up of

- The land that the Credit Project Proponent commits to actively managing over the term of the project and thus is included in the Management Plan and participant contract, and/or

To achieve conservation needs and facilitate recovery of GRSG, the CCS defines two Credit Project management action types:

1. **GRSG Habitat Stewardship:** Maintenance of high-quality GRSG habitat, or areas adjacent to GRSG habitat, or manipulation of intact GRSG habitat to increase specific seasonal functionality. Greater Sage-grouse habitat stewardship will still require additional commitments depending on the status of the project area and the level of management already in place. For more details on these commitments, see the latest Management Plan template and additional resources. An example project could be placing a conservation easement on existing high-quality GRSG habitat and committing to maintaining that high quality for the full duration of the Credit Project. Other example projects could include improvements to medium quality GRSG habitat through implementation of prescribed grazing plans, and commitment to maintaining the post-project GRSG habitat function for the duration of the Credit Project.
2. **GRSG Habitat Uplift:** The re-establishment of species habitat and other ecosystem resource characteristics and functions at a site where they have ceased to exist or where they exist in a substantially degraded state. Examples include the reestablishment of useable GRSG habitat through the removal of pinyon-juniper or anthropogenic disturbances on the landscape, reduction of cheatgrass in quality GRSG habitat, or restoration of a wet meadow that is currently not functioning properly.

RIPIARIAN PROPERLY FUNCTIONING CONDITION ASSESSMENT

A riparian properly functioning condition (PFC) assessment is required for each riparian area or reach included in a Credit Project. The results of the assessment in report format including the information from the field forms, map, riparian plant list, and photographs must be included in the Management Plan associated with the Credit Project. The assessment is intended to inform the Credit Project Proponent and Administrator of the ecosystem health of the riparian areas and thus the risk of generating credits from those areas. The Credit Project Proponent is not required to implement management actions to increase the functioning condition of riparian areas meeting PFC. However, the function of riparian areas as calculated by the HQT is likely to decrease when those areas are nonfunctional or functional at risk. Credit Project Proponents must implement management actions to trend towards or achieve properly functioning condition to reduce the risk (as identified by the PFC assessment) of credits becoming invalidated.

2.3.3 CREDIT SITE ELIGIBILITY

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

SERVICE AREA

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

OWNERSHIP & STEWARDSHIP

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 years to be eligible to generate credits from the credit site. To generate credits for a project on federal lands, enhancement or restorative actions must be completed. Credits will be determined based on the measurable GRSG habitat uplift achieved, as opposed to preservation of the project area. Credits can also be awarded for removal of anthropogenic disturbances within a private lands Credit Project or within a public lands right of way through assessment of the reduction on indirect impacts.

MINIMUM SITE QUALIFICATIONS

The CCS requires that credit sites meet minimum qualifications related to GRSG habitat function and space use for the GRSG to be eligible to generate credits for stewardship. The following minimum qualifications are based on post-project GRSG habitat function and must be met at all three scales to ensure credit sites are fulfilling the needs of GRSG at each scale:

- **Landscape-scale:** Credit Projects must be located within the PHMA, GHMA, or OHMA Management Category Areas using the SEP current Management Categories map.
- **Local-scale:** Anticipated local-scale, post-project GRSG habitat function determined using the HQT must be greater than or equal to 20%.
- **Site-scale:** Anticipated site-scale post-project GRSG habitat function determined using the HQT must be greater than or equal to the relevant site-scale baseline GRSG habitat functions plus 10%. See [Section 2.3.4 Calculating Credit Baseline Greater Sage-grouse Habitat Function](#) for site-scale regional standard GRSG habitat function baseline for stewardship projects and pre-project condition baseline for uplift projects. See [Section 3.4 Site Scale \(4th Order\)](#) in the *HQT Scientific Methods Document* 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 12. Definition of and an example calculation of GRSG habitat function for a credit site with two map units

ADDITIONALITY

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 Project Proponents 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 Project Proponents must demonstrate that the Credit Project site will provide additional benefit to the species above and beyond those generated through the application of existing federal funds or participation in other credit markets. See [Sections 2.3.5 Developing Credits on Public Land & Other Designations](#) through [Section 2.3.8 Stacking Credit Types](#) for additional information on additionality provisions.

NO IMMINENT THREAT

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

SITE PROTECTION

Although different site protections are expected on private and public lands, Credit Project Proponents must show evidence of site protection for the duration of the contract period on private lands and are encouraged to do the same on public lands. Regardless, a Participant Contract is required for all Credit Projects. A Participant Contract commits the Credit Project Proponent to maintain GRSg habitat function above the minimum performance standard and serves as the minimum site protection level for Credit Projects that generate credits on land under the control of the Credit Project Proponent. A Participant Contract includes contractual language and references any other legally binding agreements, such as conservation easements. Where lands are interspersed with public lands and fencing does not enable control over multiple grazing permittees the responsibility for GRSg habitat quality remains with the credit developer regardless of the source of negative impacts due to grazing. The credit developer must undertake reasonable actions to prevent the unlawful entry and trespass by people, feral or stray horses, and livestock whose activities may degrade the functional values as quantified by the HQT calculation. In these circumstances, eligibility will be at the discretion of the administrator.

FINANCIAL ASSURANCES

Credit Project Proponents must commit to financial assurances in the form of contract terms and financial instruments. Financial assurances are specifically defined in each Credit Project Proponents' Participant Contract with the CCS and associated Management Plan. See [Section 2.4.6 Financial Assurances](#) for additional information. The one exception is with the removal of anthropogenic disturbances on public lands rights of ways where maintenance and monitoring are not required into the future, thus financial assurances, are not required.

ACCURACY

Credit Project Proponents must attest to the accuracy of the information provided in all documentation.

2.3.4 CALCULATING CREDIT BASELINE GREATER SAGE-GROUSE HABITAT FUNCTION

For Credit Projects, baseline GRSG habitat function is the starting point from which the functional acre difference relative to post-project functional acres is calculated. The difference between the post-project functional acres and the baseline functional acres is multiplied by the mitigation ratio to determine the number of credits generated per map unit within a Credit Project. The summation of the functional acres for all map units is the total credits quantified for the project. See [Section 2.2.2 Mitigation, Proximity Ratios and Credit Phasing](#) for additional information on determining mitigation ratios.

The credit baseline GRSG habitat function is based on the pre-existing local-scale GRSG habitat function and the regionally typical site-scale GRSG habitat function and type. This accounts for the avoided risk of potential threats that would degrade function if the project was not implemented. In addition, using the typical site-scale function instead of pre-existing site-scale function rewards Credit Project Proponents who have demonstrated stewardship and enables credits to be generated by Credit Projects that will maintain and protect currently high-quality GRSG habitat. There are exceptions to using the typical site-scale function to determine credit baseline GRSG habitat function and these are described in this section. See [Section 2.2.1 Habitat Quantification Tool](#) for description of scales. Credit baseline GRSG habitat function is calculated by multiplying;

- Local-scale, pre-project GRSG habitat function as determined by the HQT, and
- Site-scale, regional standard GRSG habitat function as defined in Table 12.

The credit site-scale, regional GRSG habitat functions shown in Table 12 are used for the WAFWA Zone and seasonal GRSG habitat type associated to each map unit. These regionally standardized site-scale functions are based on median GRSG habitat function values. 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 GRSG habitat throughout the State of Nevada become available (Kachergis et al. 2022, Bureau of Land Management 2024).

Table 12. Site-scale regional standard GRSG habitat functions of WAFWA Management Zones versus seasonal GRSG habitat types

	WAFWA MZ III	WAFWA MZ IV	WAFWA 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 12 are expected to be adjusted in the future. The current values are higher than expected because the HQT winter scoring curves do not incorporate snow depth. This increase in site-scale GRSG habitat function serves as a proxy for snow depth. The values in this table and the HQT will be adjusted at the same time to avoid impacting the relative value of winter GRSG habitat quantified before and after this change.

An example credit baseline GRSG habitat function calculation is illustrated in Table 13 for a map unit with high pre-project local-scale function and a 20% site-scale regional standard function.

Table 13. Example credit baseline GRSG habitat function calculation

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

CREDIT BASELINE FOR LAND BENEFITED FROM ANTHROPOGENIC FEATURE REMOVAL

In the case of the removal of anthropogenic disturbances benefiting public lands outside of the Credit Project Proponent's control, the credits yielded equal the change in credits calculated with and without the disturbance in the area of its impact when conducting the desktop analysis with the HSI used in lieu of the regional standard and field data.

CREDIT BASELINE FOR UPLIFT

Credits generated from stewardship projects will be subject to the regional standard baseline, however credits generated after the signing of a management plan (uplift credits) will use the stewardship project condition at the time of initial verification as baseline. Calculating uplift credits in this manner will allow for the possibility of credits generated from 0 function up to any function measured by the HQT for any appropriate seasonal type. The SETT will evaluate the risk profile of each project before releasing credits early and may require additional financial assurances if warranted. Perverse incentives have been considered in the development of the CCS, and while this baseline approach may increase the probability for that occurrence, the SETT will evaluate recent land-uses during the past 10 years.

ADDITIONAL CREDIT BASELINE GRSG 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 GRSG habitat function as defined by the following sections.

2.3.5 DEVELOPING CREDITS ON PUBLIC LANDS & OTHER DESIGNATIONS

The CCS allows for credits to be generated on public lands or other lands already under permanent conservation restrictions (e.g., existing conservation easements) for mitigation purposes if the proposed Credit Project would add additional benefit above and beyond what would be achieved under the existing land designation or planned and funded conservation actions. Credit Projects on public land can meet additionality requirements of the CCS if the Credit Project Proponent can demonstrate that verifiable benefit using the HQT can be attained by the Credit Project. Credits will be determined based on the measurable GRSG habitat uplift achieved, as opposed to for preservation of the project area.

To generate credits on public lands, the Debit Project Proponents must have a credit establishment plan that follows the CCS, is approved by the Sagebrush Ecosystem Council, and has approval for all proposed actions from the relevant public land management agencies. The project proponent is not required to own all grazing permits. However, a cooperative plan must include grazing permittees and be submitted with the credit establishment plan to reduce the risk of not meeting performance standards established for the Credit Project and thus invalidation of the credits due to incompatible practices.

NEPA AUTHORIZATION

The CCS will not give credit for NEPA costs. The responsibility for federal authorization of a proposed project rests solely on the credit developer. The SETT and the authorizing agency will work together to ensure that the two authorizing documents accomplish the same mitigation offset as measured by the HQT. Project implementation may commence when the SEC credit establishment plan has been approved, and the federal authorization has been issued. Project proponents are encouraged to include the analysis of any proposed proponent driven mitigation projects in the authorization of the initial project requiring mitigation. The use of existing NEPA cleared projects and areas is highly encouraged, however coordination with the SETT is crucial, as aspects of existing NEPA cleared areas may conflict with sage grouse conservation values (e.g., extremely poor surrounding GRS habitat, surrounding and future land uses, existing rights, wildfire risk, etc.).

PROJECT TYPES

The CCS will initially focus on improvements related to pinyon-juniper removal and meadow/riparian ecosystem. Further project types may be approved as the quantification and administrative methods are developed.

Pinyon-Juniper Removal

For Credit Projects that remove pinyon and juniper on public lands, the calculation of credits will be similar to pinyon-juniper (P/J) removal on private lands with the exception that the resulting credits will be calculated using a desktop analysis using the Habitat Suitability Index in lieu of field data collection. See 3.2.3 *Pinyon-Juniper Removal* in the *HQT Scientific Methods Document* for additional information. Credits resulting from the desktop analysis will be subject to the HQT version control and may be released subsequent to the credit establishment plan being approved by the SEC and when all treatments outlined in the plan have been completed. The credit establishment plan may include phased work plans and will include a credit release schedule. Pinyon-juniper removal projects will include a re-treatment in 10-year intervals with a re-treatment 10 years prior to the term end as the final treatment. For example, a removal project with a 30-year term will include the initial treatment, and re-treatments in years 10 and 20. Financial assurances (e.g., bonding) will be required to ensure the completion of a re-treatment plan. For removal projects occurring in Phase II juniper, a one-time prophylactic herbicide treatment for invasive weed establishment will be required if the land management agency and SETT conclude a treatment is warranted.

Pinyon-juniper removal projects that have a term of 10 years may be implemented by exploration companies by performing an initial removal to fulfill credit obligations of 10 years. Exploration projects that have terms of greater than 10, and less than 20 will be required to do a re-treatment at year 20. Ten-year P/J removal projects will still be required to do a prophylactic herbicide treatment in phase II.

Meadow Improvements

Meadow improvement credits will not be calculated differently on public lands than private lands. Approved projects will need to demonstrate a high degree of confidence that they will be maintained in cooperation with authorized uses, compliance with land use plans, and anticipated infrastructure. Projects planned in meadow areas must document the cooperation of grazing permittees in the form of a cooperative management/monitoring agreement included within the credit Management Plan. All seeding or planting efforts must comply with the SETT approved plant lists. Reach out to the SETT for more information or to acquire the approval plant list.

Restrictions

The Sagebrush Ecosystem Council desires that credits generated on public land from P/J removal be limited in comparison with credits generated on private lands. Debit projects will thus be required to attempt to purchase the initial one-third of their obligation through a private credit purchase and provide documentation before initiating credits on public land.

2.3.6 ANTHROPOGENIC DISTURBANCE REMOVAL ON PRIVATE & PUBLIC LANDS

On private land, the removal of anthropogenic disturbance (defined in the CCS) can generate credits if the removal occurs within the footprint of the Credit Project. Additionally, private land Credit Projects can generate credits indirectly by removing anthropogenic disturbances on public lands. The indirect impact is calculated with the HSI used in lieu of field data to assess the change in the value of credits before and after the removal on public lands and the difference will be awarded.

Removal of an anthropogenic disturbance (defined in the CCS) is eligible on public lands rights of ways with credits awarded for the reduction of indirect impacts on public lands. The HSI is used in lieu of field data to assess the change in the value of credits before and after the removal on public lands and the difference will be awarded. These credits can only be generated by the entity owning the anthropogenic feature and cannot enter the market other than for use offsetting their own projects. These credits can be used for a maximum term of 50 years, after which they are retired. Program requirements for additionality must be met. Outside of removing anthropogenic disturbance features and completing actions necessitated to coincide with the removal (e.g., reclamation or restoration), further maintenance, monitoring, and financial assurances are not required. However, due to the uncertainty in the GRS habitat durability in these instances, a reserve account contribution of three times the standard calculated amount.

2.3.7 PARTNERING WITH FEDERAL PROGRAMS ON PRIVATE LANDS

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

Where conservation values have already been permanently protected or restored under other federal programs benefitting the GRS, the Credit Project Proponent can only receive credit for conservation values if enrollment of the credit site in the CCS would create additional conservation benefit above and beyond the terms of the original agreement.

PROJECT APPROVED PRIOR TO A FEDERAL CONTRACT

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

PROJECT APPROVED DURING AN EXISTING FEDERAL CONTRACT

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

PROJECT APPROVED FOLLOWING A FEDERAL CONTRACT

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

2.3.8 STACKING CREDIT TYPES

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

In the future, the CCS may expand to support the generation and sale of credits for other species and resources (e.g., mule deer) in addition to GRSG. Similar to restrictions on generating credits within a federally-funded contract or on public lands, Credit Project Proponents would be able to generate and sell credits for different species and resources if they demonstrate additionality of specific conservation and management practices. A Credit Project Proponent would not be eligible to sell multiple species habitat credits from a single management practice. However, additional and unique management practices undertaken for a particular species would be eligible to generate additional credits. To demonstrate additionality for different species and resources, the CCS will need to quantify and track benefits for each species' habitat or resource. HQTs will need to be developed to provide species habitat function scores for multiple species on a single project site. The species that receives the highest pre-project score will be the focus of the initial project design. Then, any additional and unique management practices built into that project design to generate function for other species or resources will be considered additional and can be sold as separate credits under the CCS.

2.3.9 INTEGRATION WITH CCA/CCAAS

Credit Project Proponents enrolled in Candidate Conservation Agreements (CCA), or Candidate Conservation Agreements with Assurances (CCAA) can enroll in the CCS and generate credits if the benefits generated are additional to the minimum conservation measures required by the CCA or CCAA. Credit Projects previously enrolled in a CCA or CCAA must work with the Administrator to determine an appropriate site-scale credit baseline, such as pre-project conditions, considering the existing CCA or CCAA. This site-scale credit baseline adjustment should consider the increased additionality and

durability resulting from securing conservation benefits through a long-term or permanent credit project that goes beyond the duration of the CCA or CCAA.

2.4 CREDIT DURABILITY PROVISIONS

This section describes Credit Project durability provisions to ensure Credit Projects are producing expected outcomes for their entire duration. Durability provisions include legal, financial and CCS management mechanisms. Credit Project Proponents are the primary audience of this section.

2.4.1 CREDIT SITE PROTECTION

All participating Credit Projects that generate credits on land under the control of the Credit Project Proponent are required to have signed a Participant Contract and accompanying Management Plan that assigns responsibility for meeting the project requirements of monitoring, reporting, working with the Administrator on five-year qualitative assessments, annual monitoring, and re-verification for the duration of the project. Additional information on Credit Project duration is provided in [Section 2.4.2 Credit Project Duration](#). The Participant Contract is the legal agreement between one or more Credit Project Proponents and the Administrator that defines obligations of the Credit Project Proponents, such as secured financial assurances, management actions defined in a Management Plan, and the relevant terms and conditions for the development of credits under the CCS. The terms typically include GRSG habitat function performance standards, financial assurances for long-term management and intentional reversals, and other provisions related to the signatories. Credit Projects that only generate credits on land outside of the Credit Project Proponent's control and indirectly benefited from removal of certain anthropogenic features are required to sign a Participant Contract, however the Participant Contract will not contain many of the typical terms because the Credit Project Proponent is not committing to actively managing the land.

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

Circumstances relating to site protection on public land is less clear compared to private lands due to the mandate for multiple use. The SEP recognizes that site protection is limited, and information on credit invalidation on public lands can be found in [Section 2.2.3 Credit and Debit Calculation](#), and the reserve account contribution for public land can be found in [Section 2.4.3 Reserve Account Contribution](#). Furthermore, there are unique mechanisms for when anthropogenic disturbances are removed which are most thoroughly covered in [Section 2.3.6 Anthropogenic Disturbance Removal on Private and Public Lands](#).

2.4.2 CREDIT PROJECT DURATION

Credit Project duration is the length of time that the CCS recognizes a project. Credit Project duration is the length of time that a Credit Project Proponent has committed to enhancing and maintaining GRSG habitat function as stated in Credit Project Participant Contract and Management Plan. The duration of Credit Projects can be either limited term or in perpetuity, and limited term Credit Projects can be renewed within the CCS after the Credit Project duration expires.

The minimum project duration for stewardship actions is 30 years and the maximum duration is in perpetuity. Project duration is defined in 5-year increments. Thus, project duration can be 30, 35, 40, 45 years, and so on, up to and including in perpetuity. The rationale behind the 30-year minimum is based on scientific opinion that rapidly changing GRSG habitat function can be detrimental to populations. Debit Project Proponents are required to match credit project duration to the expected duration of the Debit Project.

Credit Project Proponents define project duration in the Participant Contracts and Management Plans submitted to the Administrator, with the exception of anthropogenic disturbance removal projects on public lands rights of ways which are provided a 50-year term that cannot be renewed. Otherwise, upon expiration of the duration of the stewardship Credit Project, the Credit Project Proponent can elect to renew the project under the CCS. Renewal entails developing a new Management Plan, using the current HQT and the CCS policy and technical requirements that are approved at the time of renewal to assess the GRSG habitat function and amount of credit generated by the site. Renewal also requires a qualified, third-party Verifier to again conduct HQT quantification and reestablish the available credits. See [Section 2.4.5 Credit Project Quantification, Monitoring, Qualitative Assessments, and Verification](#) for additional information on Credit Project processes. If the Credit Project proponent chooses not to renew, the CCS no longer recognizes credits after the end of the Credit Project duration and transactions can no longer occur on this project.

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

2.4.3 RESERVE ACCOUNT CONTRIBUTION

A percentage of credits generated by a Credit Project are transferred into the reserve account at the time that credits are sold and transferred to a Credit Buyer's account. Credits in the reserve account may be used to temporarily cover credits invalidated from intentional (e.g., withdrawal of the property from the CCS) and unintentional (e.g., wildfire) reversals to ensure there are always more credits than debits in the CCS. The percentage of credits that a Credit Project contributes to the reserve account is determined by the probability of the credits on that site becoming unintentionally invalidated, which creates an incentive for the Credit Project Proponent to reduce the risks that could invalidate those credits. The use of the reserve account and financial assurances is defined in [Section 2.1.8 Reserve Account Management and Use of Financial Assurances](#).

The reserve account checklists determine the unique contribution amount for each Credit Project, taking the sum of the numeric values assigned to each of the factors defined below. As described in greater detail below and illustrated in Equation 3, the total reserve account contribution percentage consists of a standard base contribution (4%) and additional contributions related to the probability of adverse impacts from wildfire (1 - 6%) and competing land uses (0 - 4%). As shown in Equation 4, the total reserve account contribution percentage is multiplied by the total number of credits transferred to a Credit Buyer's account to determine the total reserve account contribution amount for each credit transfer. The credit site must have sufficient credits available to fulfill the amount transferred to the Credit Buyer's account and the reserve account contribution.

Equation 4. Total reserve account contribution percentage equation

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

Equation 5. Total reserve account contribution equation

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

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 GRSG habitat in the State of Nevada. For each transfer of credits that occurs, a contribution for wildfire is determined by the Credit Project site:

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 (Chambers et al. 2014).

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 for use by the CCS (Miller et al. 2014). Variables defined in the score sheet, which is an appendix to the User Guide, produce a field assessment with scoring based on soil temperature, moisture indicators, and vegetation. Credit Projects often include more than one ecological site type, and scores are determined for each ecological site type or grouping of similar ecological sites within the Credit Project area. The score for each ecological site type within the Credit Project area has a range of 0 – 26, with a score of < 10 = Very Low; 10 – 14 = low; 15 – 20 = Moderate; and > 20 = High. An area-weighted score, based on the proportion of the area within each ecological site type is calculated for the Credit Project area. Table 14 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.

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				
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 xeric, 3 = mountain					
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					
Plant Groups	0 = DRPG and POSE scarce to severely depleted (DRPG < 2-3/m ²) and less than 5% foliar cover 3 = DRPG on soils >10 in. scarce, but POSE of PF >50% foliar cover 6 = DRPG on soils >10 in. depleted (2-3/m 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 (DRPR) 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:						
R & R RATING (circle one)	Very low < 10; Low = 10-14; Moderate = 15-20; High > 20					

Figure 13. Miller et al. 2014 score sheet.

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 project 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 conducts an area and site-level assessment that evaluates common risk factors (e.g., 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 14 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 14. Ability to control reserve account categories and contribution percentages

		High	Moderate	Low
Resistance & 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 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 Project Proponent if the 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 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.

Different land protection mechanisms are available on privately and publicly owned lands, and other unique characteristics of privately and publicly owned lands influence the probability of completing land uses invalidating credit sites. Table 15 identifies different credit site characteristics related to the probability of completing land uses invalidating credits for private lands. Note that each credit site must meet minimum site eligibility requirements, including proof of no imminent threat of direct or indirect disturbance to the credit site. See [Section 2.3.3 Credit Site Eligibility](#) for additional information.

Important credit site characteristics related to the probability of competing land uses are expected to arise that do not justify a different contribution percentage than defined by the tables below. In these cases, the Credit Project Proponent and Administrator will address issues as they arise on a case-by-case basis.

Credit Project Proponents must provide evidence that minimum competing land use related requirements have been fulfilled. For example, public land authorizations and relevant existing authorizations held by the Credit Project Proponent must be attachments to the Management Plan.

Table 15. Competing land uses reserve account categories and contribution percentages for credits on 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%

RESERVE ACCOUNT CONTRIBUTION FOR ANTHRO. DISTURBANCE REMOVAL ON PUBLIC LANDS ROW

When anthropogenic disturbances are removed on public lands rights of way to generate credits, a contribution of three times the standard calculated reserve amount will be required. The increased reserve account contribution is required due to the lack of monitoring, maintenance, management, and securing financial assurances to conduct these activities when credits are generated in this way. Without this additional contribution, the risk of loss due to natural events, man-made disturbances, and the lack of financial assurances to address those potential losses would create an unmitigated burden to the existing reserve account credits.

RESERVE ACCOUNT CONTRIBUTION FOR DEVELOPING CREDITS ON PUBLIC LANDS

The reserve account contribution for credits on public land will be set at a flat rate of 25%. This includes the standard base rate, the maximum competing land use score (due to the multiple use mandate on public lands), a maximum score for the probability of adverse impacts from wildfire, and an additional 11% contribution due to a reduced ability to protect credit sites on public land. The additional 11% may be adjusted in the future based on the frequency of withdrawals.

2.4.4 CREDIT RELEASE

The CCS uses credit release schedules for uplift actions by releasing credits only when specific Management Plan performance standards are met to manage risk and uncertainty. Credit releases occur when a new milestone of performance standards, in terms of GRSG habitat function, are achieved that warrant an increase in the amount of credit generated on that project site. Credit releases require a third-party verification, defined in [Section 2.4.5 Credit Project Quantification, Monitoring, Qualitative Assessments, and Verification](#). Performance standards and credit release schedules are unique to each Credit Project and are defined in each Credit Project Management Plan. A credit release schedule is different than credit payment schedules described in [Section 2.4.6 Financial Assurances](#).

If a Credit Project is unable to achieve performance standards defined in the Credit Project Management Plan in order to release credits, the Credit Project Proponent will work with the Administrator to adjust the performance standards and release schedule. After credits are released if a decline in habitat function occurs beyond of the tolerances defined in [Section 2.4.5 Credit Project Quantification, Monitoring, Qualitative Assessments, and Verification](#) two options are available 1) the credit site is required to remedy the habitat function, 2) or the financial assurances may be used to replace the invalidated credits. See [Section 2.4.6 Financial Assurances](#) for additional information on financial assurances.

STEWARDSHIP MANAGEMENT ACTIONS

For Credit Projects based on stewardship management actions, a credit release occurs when the Management Plan is signed by the Credit Project Proponent and Administrator. Credit Projects that primarily maintain pre-project GRSG habitat function will have a single credit release.

UPLIFT MANAGEMENT ACTIONS

The term “uplift” is an umbrella term which refers to any efforts that achieve GRSG habitat improvement. Both enhancement and restoration efforts fall under the “uplift” term. Enhancement describes actions that are meant to capture GRSG habitat improvements when the GRSG habitat is already above the set baseline and can be incorporated into a standard stewardship project. Restoration describes more intensive actions that are outside the standard stewardship project and restore GRSG habitat to the set baseline level. The portion of credits released at each management action milestone must be less than or equal to the percent increase in GRSG habitat function relative to the total increase in GRSG habitat function expected to be achieved by the project. A credit release schedule associated with specific performance standards in the Credit Project Management Plan can include multiple credit release intervals; however, each release must require at least a 5% increase in site-scale GRSG habitat function. Credits are released when a third-party verifies an achieved performance standard. Credits released are valid for the full duration of the project life, provided that the Credit Project Proponent continues to meet that performance standard as confirmed by third-party verification and annual management and monitoring reports. Verification requirements are defined in [Section 2.4.5 Credit Project Quantification, Monitoring, Qualitative Assessments, and Verification](#).

Enhancement Actions

For Credit Projects incorporating enhancement actions, the resulting enhancement credits will be issued upon quantification of the enhanced GRSG habitat. The quantification of enhancement credits may be calculated at any time (within reason) using certified verifiers. See [Section 2.4.5 Credit Project Quantification, Monitoring, Qualitative Assessments, and Verification](#) for more information on mandatory re-verification of Credit Projects. Enhancement credits may be matched with debits that have disparate terms. Prorating will be used to match enhancement credit terms of less than 30 years with debit terms that have a 30-year minimum. All enhancement terms must have a minimum of 10 years. This will allow enhancement credit terms the ability to expire concurrently with the associated stewardship project. If prorating is desired at the time of sale, the time remaining on the stewardship project at the time of quantification will set the assigned credit term, and the enhancement credits will be maintained for the term of the stewardship contract. If notification/evidence of enhancement actions is given to the SETT prior to implementation, then ½ the time of the project implementation will be added to the assigned term. There is no requirement to prorate enhancement credits, they may be sold as a conventional offset if the term is equal to or greater than 30 years (i.e., 30-year credit with a 30-year debit). Any enhancement plans developed subsequent to the signing of the original management plan may be included as an addendum.

The reserve account contributions for enhancement actions are calculated in the same manner as the associated stewardship project.

A prorating formula will be used to match enhancement credits with debits is as follows:

$$C_p = \frac{T_d}{T_c} * C$$

Where:

C_p = Number of prorated credits available for offsetting disturbance

T_c = Term of uplift credits (Time remaining on original contract)

T_d = Term of Debit Project

C = Number of uplift credits generated

More information on matching credits with debits can be found in [Section 2.5.4 Debit Project Duration](#).

Restoration Actions

For Credit Projects containing restoration management actions involving significant resource and GRSG habitat quality improvements over the life of the project, credit releases occur when project Management Plan goals are achieved. Credit Projects containing restoration management actions can include performance standards defined by management actions and GRSG habitat function, as described in the bullets below. Credits are released when a third-party verifies an achieved performance standard. A credit release schedule associated with GRSG habitat goals in the Credit Project Management Plan can include multiple credit release intervals; however, each credit release defined by GRSG habitat function must require at least a 5% increase in site scale function. Up to, but no more than the first one third of credits may be released upon implementation of management actions defined in the project Management Plan. Credits released based on implementing management actions are limited to one third of the total credits that the project is ultimately anticipated to generate and the portion must be agreed to by the Administrator. For example, a Credit Project site with the potential to generate 600 credits, only 200 credits, may be released upon implementation of specified management actions.

- The remaining two thirds or more of credits are released over additional credit release intervals upon verification that the GRSG habitat quality is meeting agreed upon performance standards specified in a management plan. The portion of credits released at each milestone may not exceed credits available measured by the HQT at the time of quantification. These credits are made available for sale contingent upon a new management plan being signed.

Table 16 illustrates an example credit release scheduled with one third of credits released based on management actions, and the remaining two thirds released in two additional credit releases. Upon verifying conditions to release all credits anticipated by the Credit Project, all credits are expected to be maintained for the full duration of the credit life, according to the performance standards defined in the Management Plan and confirmed in verification and annual management and monitoring reports. Due to the complexities of tracking credits and timelines, if multiple credit releases are required, prorated timelines will not be available to projects which use this type of credit release structure.

Table 16. Example credit release schedule for a restoration project

Performance Criteria Achieved	Credits Released
Milestone 1: Management Actions - Implementation of agreed upon management action	33% of Total Anticipated Credits
Milestone 2: GRSG Habitat Function Performance - Increase of agreed upon metrics (e.g., meadow area expansion, increased perennial grass cover, etc.)	Measured Credits Exceeding Initial Release
Milestone 3: GRSG Habitat Function Performance - Additional metric increases	Credits Exceeding Prior Release

Net benefit for GRSG is achieved through mitigation offsets in the CCS, and overall program risk is limited by awarding management action-based credit releases 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 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 their habitat is restored to improved functionality, and therefore important that 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 Greater Sage-grouse Habitat Function](#) helps to enable restoration activities to be more economically viable.

CREDIT RELEASE FOR PROJECTS ON PUBLIC LAND

The release of credits for projects implemented on public land will be detailed in the credit establishment plan approved by the SEC and will conform to the above guidelines. Credits being issued in advance of quantification as described above will trigger a more in-depth review by the SETT which will involve using outside professional judgement from federal, state, and local partners (e.g., NDOW, BLM, USFS, UNR, NDA, NACO, local CD, permittees, etc.) to develop a recommendation to the SEC for approval.

2.4.5 CREDIT PROJECT QUANTIFICATION, MONITORING, QUALITATIVE ASSESSMENTS, & VERIFICATION

All Credit Projects require initial HQT quantification prior to the release of any portion of the anticipated credits generated from projects, and with 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 for Credit Projects is to provide confidence to all participants, including the Administrator, that initial credit calculations represent an accurate account of GRSG habitat function and associated credits. HQT quantification results submitted by a certified third-party Verifier 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 Project Proponents have an initial five-year term in which credits can be offered for sale, provided a Management Plan is signed and annual monitoring is conducted as required. Should credits not sell in the initial five-year term, a Credit Project Proponent can choose to have the five-year qualitative assessment completed and maintain credits available for sale.

In addition, ongoing monitoring, qualitative assessments, and verification ensure that over time projects are maintained, improve when uplift actions are implemented, and support the expected GRSG habitat quality commensurate with the number of credits generated. Annual monitoring evaluates whether activities on adjacent project sites have occurred that compromise the ability of enrolled credit sites to generate credits according to their Management Plan.

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

At five-year intervals with the exception of the years when third-party verification occurs, the Administrator will conduct a five-year qualitative assessment. This assessment will include GIS

evaluation of the project area using the latest aerial imagery to assess any changes including anthropogenic disturbances, cheatgrass and wildfire layers, the Sage Grouse Initiative mesic layer, the Rangeland Analysis Platform, and potentially other remote sensing tools as they become available. As part of this qualitative assessment, the Administrator may schedule a visit to the project site to meet with the Credit Project Proponent, conduct a portion of annual monitoring alongside them, assess whether the project area is being managed as committed to, and provide an assessment of the GRSG habitat and critical areas within the project perimeter. The Administrator or Credit Project Proponent may request a site visit outside of the 5-year intervals when desired.

Along with other CCS requirements and adherence to the commitments in the Management Plan, verification is required prior to awarding any additional credit releases for GRSG habitat improvement during a project. These verifications are conducted using the HQT to assess GRSG habitat improvements since the initial HQT quantification and should be preceded by visual observation and confidence of improved GRSG habitat conditions.

In addition, verification occurs at Year 15 of 30-year Credit Projects, and at 15-year increments for longer duration Credit Projects. This verification is to ensure GRSG habitat is being maintained as planned by implementing a full HQT verification (at 100% the effort of the initial HQT quantification for the project) by a certified third-party Verifier to allow comparisons with the initial HQT quantification. Indication of a trend in GRSG habitat decline or deviation from management commitments found by the Administrator during five-year qualitative assessments or resulting from verification efforts could result in more robust evaluation of projects by the Administrator. The relatively comprehensive annual management and monitoring report to be turned in for all Credit Projects will add to the considerable knowledge about the management and condition of projects. The Administrator may conduct scheduled or random spot checks or audits as a result of any site visit or report. At the discretion of the Oversight Committee, after significant onsite degradation or mismanagement indicated through any of the above vectors and, full verification may be required by a certified third-party Verifier any time outside of the 15-year window with costs to be covered by the Credit Project Proponent.

CREDIT QUANTIFICATION, MONITORING, QUALITATIVE ASSESSMENT, AND VERIFICATION SCHEDULE

The schedule for a Credit Project is based on the credit release schedule defined in each Management Plan, and incorporates the following requirements:

1. HQT Quantification before first credit release (Verifier)
2. Verification before additional credit releases (Verifier)
3. Annual Management & Monitoring Report (Credit Project Proponent or Verifier)
4. Five-Year Qualitative Assessments (Administrator)
5. Verification at least every 15th year (Verifier)
6. Periodic spot checks and audits (as authorized by the Administrator)

Before first credit release

HQT quantification by a third-party Verifier is required and the Administrator reviews all submitted documentation before the first credit release is approved.

Before additional credit releases

Third-party verification is required to confirm that conditions have resulted in an improvement that translates to additional credits.

Annual Management & Monitoring Report (Credit Project Proponent)

The focus is on photo monitoring points and complete fulfillment of the annual monitoring report. Annual monitoring should also confirm that pinyon-juniper saplings greater than the height of sagebrush are not found within project areas.

Five-Year Qualitative Assessments (Administrator)

At five-year intervals apart from the years when third-party verification occurs, the Administrator will conduct a five-year qualitative assessment using various methods discussed above. When a P/J removal effort has been conducted as part of the project, a more thorough qualitative assessment will be conducted at ten-year intervals to ensure that all new growth has been removed.

Every fifteenth year (at minimum), a third-party verification is conducted and all documentation (i.e., current conditions data, HQT outputs, and final credit calculations) is reviewed by the Administrator to evaluate the project based on GRSG habitat goals included in the Management Plan.

Periodic spot checks and audits

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

CREDIT VARIABILITY & VERIFICATION RESULTS

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

Upon each credit release, third-party verification must substantiate that the site meets or exceeds the GRSG habitat function defined in the credit release schedule of the project Management Plan. The Administrator, in coordination with the Credit Project Proponent, will establish site-specific performance measures after each credit release against which subsequent verifications will be evaluated. The performance measures must be documented in the Management Plan after each credit release. Credit Project verifications that demonstrate satisfactory achievement by meeting performance standards defined in the Management Plan do not require a reduction in credits or trigger the use of Financial Assurances for the site. In years of extreme drought, or other atypical conditions, the Administrator may recommend waiting for more typical conditions to verify a credit release.

If verification shows that a Credit Project is performing below the credit variability tolerance and is therefore not meeting performance standards, the Credit Project Proponent must work with the Administrator to determine a remedial action plan. Credit Projects outside of the credit variability tolerance may be subject to credit reversals. See [*Section 2.1.8 Reserve Account Management and Use of Financial Assurances*](#) for more information on how credit reversals are addressed.

VERIFIER SELECTION

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

2.4.6 FINANCIAL ASSURANCES

The CCS requires that Credit Project Proponents establish appropriate financial assurances for each Credit Project site to sell credits. Financial assurances are fiscal mechanisms that are used to ensure the durability of credits generated throughout the full duration of a Credit Project. Financial assurances are defined in each Credit Project Proponent's Participant Contract and documented in an accompanying Management Plan, and can consist of contract terms, such as financial penalties for intentional reversals and specific payment terms, and financial instruments, such as long-term stewardship funds and contract surety bonds. Financial assurances must ensure that funds are available:

1. For the implementation and long-term Credit Project management, including remedial actions in the event of unintentional reversals; and
2. To promptly replace credits that have been sold but become invalidated due to intentional reversals.

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

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

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

FINANCIAL ASSURANCES FOR LONG-TERM CREDIT SITE MANAGEMENT, MONITORING, AND UNINTENTIONAL REVERSALS

Financial assurances are required for the long-term management and monitoring of all Credit Projects. Financial assurances established for long-term management and monitoring must be designed to meet the following requirements:

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

- Ensure an ongoing financial incentive that is greater than the anticipated cost to maintain and monitor the project.

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

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

Financial instruments established for long-term management and monitoring must be accompanied by contract terms that ensure funds intended for the Credit Project Proponent are available to the Administrator in the case of an unintentional reversal, so that all remaining funds for long-term management and monitoring can be used to remediate the credit site or to purchase credits from a different site, as defined in [Section 2.1.8 Reserve Account Management and Use of Financial Assurances](#). These payment terms align the incentives of the Credit Project Proponent and the Administrator by sharing the financial risk for ongoing performance.

In situations where Credit Projects do not require long-term management and monitoring funds, or a large upfront payment is made to the Credit Project Proponent, such as for restoration projects, other financial instruments, such as a contract surety bond, may be used to ensure sufficient funds are available to the Administrator in the case of unintentional reversals.

Financial Assurances for Intentional Reversals

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

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

Financial assurances that can fulfill the intentional reversals requirement include contract terms, such as financial penalties, and financial instruments, such as contract surety bonds. Contract terms must define that if performance standards on a Credit Project site are not met, the financial assurances used to fulfill the intentional reversal requirement as well as remaining funds in that project financial assurances for long-term management and monitoring are available to the Administrator. See [Section 2.1.8 Reserve Account Management and Use of Financial Assurances](#) for additional information on how the Administrator 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 requirements for Debit Projects to ensure credit obligations offset the direct and indirect impacts of Debit Projects. Credit obligation provisions must act in accordance with the Debit Project duration and verification requirements. In addition, this section describes investment strategies that Debit Projects and other Credit Buyers can use to acquire credits, depending on the goal of the acquisition. Debit Project Proponents are the primary audience of this section.

2.5.1 DEBIT SERVICE AREA

The 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 (U.S. Fish and Wildlife Service 2014). Debits on public lands and within the service area will be tracked and mitigated through the CCS. The service area designation has important implications for the viability of the CCS transactions and for the ability of the System to generate a net benefit for GRSG habitat from the impacts from anthropogenic disturbances.

The current mapped BSUs are the CCS service area. 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 GRSG habitat on BLM, USFS, and State of Nevada lands within the service area require consultation with the SETT and the appropriate government agency, as defined in the Nevada Greater Sage-Grouse Conservation Plan. Exemptions to this include:

- An activity or project on public lands which was subject to state or federal review, approval, or authorization before December 7, 2018, so long as the activity or project maintains compliance with any condition or requirement for any such approval.
 - Authorized project/activities that were approved prior to December 7, 2018, will not be required to mitigate if the renewal is exclusive to an extension of the term.
 - Should the project/activity require state or federal review, approval, or authorization to alter the authorized project, project boundary, or propose new activity or disturbance, the project proponent may be subject to mitigation through the Conservation Credit System for those proposed activities that occur on public lands.
- An activity or project using a mitigation agreement or framework agreement for GRSG signed by the United States Fish and Wildlife Service before December 7, 2018, and any amendments thereto;
- A mineral exploration project which is limited to a surface disturbance of not more than 5 acres
- An activity or project that:
 - Is necessary to protect public health or safety; or
 - Will have a de minimis impact to GRSG and sagebrush ecosystems in this State.
- Any emergency activity or routine administrative activity that:
 - Is performed by a federal agency, state agency, local government, or utility for a public purpose; and
 - Does not require any additional approval from the Federal government or the State government.

While the Service Area broadly defines the domain of the CCS, the Mitigation Ratios incentivizes debits to be offset by credits with a close geographic proximity to the debit site. [Section 2.2.2 Mitigation, Proximity Ratios, and Credit Phasing](#) describes how the WAFWA Management Zones, Nevada BSUs, and the NDOW PMUs are incorporated into the proximity ratio. In addition, three Management Categories are 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 GRSG. Credits and debits will be tracked in the CCS Registry and reported by the Administrator by WAFWA Zones and PMUs.

2.5.2 DEBIT PROJECT TYPES

Proposed anthropogenic disturbances to GRSG habitat on BLM, USFS, and State of Nevada lands within the Service Area require consultation with the SETT and the appropriate government agency, as defined in the 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 avoidance (U.S. Fish and Wildlife Service 2014). A Debit Project may be a new anthropogenic disturbance, an expansion in the operation of an existing anthropogenic disturbance, or an extension in duration of an existing anthropogenic disturbance. Environmental Impact Statements, Environmental Assessments, Categorical Exclusions, Determination of NEPA Adequacy, Finding of No Significant Impacts, or other NEPA determinations all still require consultation with the SETT to determine actual direct and indirect impacts. Because Rights-of-Way are established prior to any actual disturbance, they must be mitigated for when the disturbance is proposed within them instead of at establishment.

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

- Mineral development and its associated infrastructure;
- Mineral exploration, which includes exploration associated with mining, oil and gas, geothermal (not resource confirmation), and other CCS defined anthropogenic disturbances;
- Renewable and nonrenewable energy production, transmission, and distribution and its associated infrastructure;
- Paved and unpaved roads and highways;
- Cell phone towers;
- Landfills;
- Linear Rights of Way (e.g., pipelines, fiber optic cables, etc.);
- Residential and commercial subdivisions;
- Activities undertaken pursuant to special use permits and right-of-way grants; and
- Other infrastructure development.

Livestock operations and agricultural activities and infrastructure related to ranch and farm businesses (e.g., water troughs, fences, pivots, etc.) are not included in this definition of Debit Project types. *Section 7.5 and Appendix A of the Nevada Greater Sage-grouse Conservation Plan* address how to minimize impacts to GRSG and their habitat from these activities.

NEVADA GREATER SAGE-GROUSE CONSERVATION PLAN

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

2.5.3 MITIGATION HIERARCHY & PERMIT REQUIREMENTS

The CCS is intended to be used in the context of state and federal policies that require the full mitigation hierarchy sequence (e.g., avoidance, minimization, compensatory mitigation). 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 (U.S. Fish and Wildlife Service 2014). Pursuant to Nevada Administrative Code 232.400 – 232.480, Debit Projects permitted through federal and state agencies will use the CCS to purchase credits that fulfill their compensatory mitigation obligations prior to development of the Debit Project, unless pursuing phasing in credit purchasing (see [Section 2.2.2 Mitigation, Proximity Ratios, and Credit Phasing](#)).

Debit Project Proponents can acquire credits directly from Credit Project Proponents, including Aggregators, or the Administrator who may carry an inventory of Credits to facilitate offset transactions. Credits cannot be acquired from Credit Project Proponents or the Administrator until credits are released by the Administrator, which requires confirmation that GRSG habitat function is meeting the defined performance criteria for the Credit Project. Debit Project Proponents may use alternative investment mechanisms to acquire credits, such as reverse auctions that leverage competitive bidding processes to procure the greatest amount of credits for a set amount of funding. The Credit Buyer pays the full cost of acquiring credits including all necessary administrative fees.

Credit Buyers who acquire credits to fulfill regulatory requirements for compensatory mitigation are responsible for meeting all requirements of the relevant permitting process through the State of Nevada, BLM, or other government agencies. Other agency timing restrictions, stipulations, best management practices, etc. still need to be adhered to even after the purchase of credits to offset debits. Debit Project Proponents must provide documentation of the permit stipulations and Debit Project design documents to the Administrator to ensure proper identification of the total amount of credits needed to offset the Debit Project, and the total duration of the Debit Project. This allows the Administrator to 1) ensure that the Debit Project is appropriately offset with a Credit Project and 2) transparently track and report on all credit transactions and programmatic net benefit generated. See [Section 2.2 Habitat Quantification and Credit and Debit Calculations](#) for additional information on calculating credit obligations and [Section 2.5.4 Debit Project Duration](#) for additional information on project duration provisions.

2.5.4 DEBIT PROJECT DURATION

Debit Project duration is the length of time that the project is anticipated to impact GRSG habitat function or in perpetuity. For impacts that are anticipated to return to pre-project GRSG habitat function, an additional set period of time beyond the anticipated Debit Project duration is required to compensate the time lag effect for populations to returning to a previous disturbed region. Unless otherwise stated, the duration in the permit or lease for each anthropogenic disturbance in increments of five years (rounded up), plus an additional 10 years to account for reclamation and monitoring. A minimum project duration of thirty years total will be used as a starting point for establishing the Debit Project duration for impacts with limited term impacts. Exploration projects (mineral, geothermal, etc.) that are temporary disturbances (< 10 years) will have a 10-year minimum term duration due to the shorter duration of exploration activities.

Like Credit Projects, the duration of Debit Projects can be either a limited term or in perpetuity. Debit Projects that are not expected to return to pre-project GRSG habitat function have an in-perpetuity project duration. The rehabilitation necessary to return a debit site to pre-project GRSG habitat function will be defined in the permit or lease for the anthropogenic disturbance for the Administrator to agree to the Debit Project duration. Projects that generate perpetuity debits have the option to either purchase an equivalent number of perpetuity credits or use a 4-time multiplier that would be applied to the number of permanent

debits to calculate the number of minimum term credits (30 yr.) the project would be required to purchase in lieu of perpetuity credits.

Debit Projects may include areas within the project boundary that are expected to return to pre-project GRSG habitat function and other areas that are not expected to return to pre-project GRSG habitat function. Further, Debit Projects may include areas that are impacted for longer durations than others. For example, GRSG habitat indirectly impacted by a Debit Project is likely to return to pre-project function with minimal rehabilitation, such as removal of roads and structures. GRSG habitat directly impacted by a Debit Project, such as the open pit of a mine, is not expected to return to pre-project function. Therefore, Debit Projects may generate debits with different project durations, including different term periods and a mix of term and in perpetuity.

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

MATCHING THE DURATION OF CREDITS AND DEBITS

In most cases the CCS requires the duration of a stewardship Credit Projects to be equal to, or greater than, the duration of the Debit Project it is offsetting. The ability to prorate uplift credits with a term of less than 30 years is available and more information is in [Section 2.4.2 Credit Project Duration](#). The Administrator ensures that Credit Project durations are sufficient to meet or exceed the duration of the debit project they are offsetting through static offsets, dynamic offsets, or prorating.

Static Offsets

A Debit Project is offset by a Credit Project that is fixed in a single geographic location with the Participant Contract, Management Plan, and associated site protection mechanisms in place for the contracted duration of the debit project. This type of offset requires the debit term and credit term to match equally.

Dynamic Offsets

A dynamic offset may allow multiple projects to contribute to a total debit obligation if the obligation cannot be met with from a single Credit Project. With dynamic offsets, debit and Credit Projects with disparate terms may be matched and used to offset debits through prorating. More information may be found in [Section 2.4.2 Credit Project Duration](#). This dynamic offset allows and encourages development and purchase of credits within the appropriate spatial scale. Combined with the ability to prorate credit terms it will also encourage uplift activities to play an increased role in offsetting debits. Use of this strategy may allow a Debit Project to purchase limited term uplift credits that only partially fulfill credit obligations and the purchase of multiple, spatially separated limited term projects would allow the fulfillment of the whole credit obligation. For example, a 60-year term Debit Project with an obligation of 100 credits could purchase multiple sets of credits from projects with different terms, if available. The potential benefits of dynamic offset projects include increased participation and a greater number of total Credit Projects and credits available for sale due to Credit Project Proponent preferences for term contracts. Term projects also enable the ability to shift the location of high-quality GRSG habitat in response to population dynamics and potential effects of climate change.

Prorating

Prorating of credits may be done in certain circumstances. The purpose of prorating is to match disparate credit and debit terms in an effort to accomplish the larger goals of the CCS.

The table below describes generally the result of matching the duration of credits and debits using available prorating concepts.

Prorating Action	Result
Debit Term > Credit Term Purchased	# of Credits acquired increases
Debit Term < Credit Term Purchased	# of Credits acquired decreases
Debit Term = Credit Term	# of Credits required remains unchanged

The equation used to determine a credit obligation for prorating actions is listed below:

$$C_p = \frac{T_d}{T_c} * C$$

Where:

C_p = Number of prorated credits required for offsetting disturbance

T_c = Term of credits

T_d = Term of Debit Project

C = Credit obligation

STANDARD DEBIT PROJECTS

All Debit Projects are required to acquire credits to offset the term of their project, with an additional 10 years for reclamation. The minimum term for a standard debit project is 30 years, see exploration below. A Debit Project may meet its obligation through matching credits on a 1:1 basis (30-year debit term matched with a 30-year Credit Project), or it may prorate credits that have a term less than or more than the Debit Project. Standard projects are expected to apply prorating in isolated cases, and generally to purchase credits that have terms of less than the standard 30 years (e.g., uplift credits). The formula listed below will be used to determine the ultimate debit obligation.

For example: A Debit Project with an obligation of 30 credits and a term of 30-years purchases 30 credits and negotiates a term of 30 years with the private seller. Credits and debits are matched 1:1. This is the ideal situation and the standard that the CCS tries and achieve with all projects.

*Another example involving prorating: A Debit Project with an obligation of 20 credits and a term of 30 years purchases uplift credits with a 15-year term. 40 credits would need to be purchased in this example. $(30 / 15) * 20 = 40$.*

EXPLORATION DEBIT PROJECTS

Exploration projects will must have a minimum term of 10-years , but are typically less than 30 years. This may require the purchase of uplift credits, or the significant prorating of stewardship credits. Exploration projects are expected to generally apply prorating to purchase credits that have terms longer than 10 years, thus reducing the total debit obligation.

*For example: An exploration project with an obligation of 45 credits and a 15-year term purchases uplift credits with a 20-year term. In this example 34 credits would need to be purchased in cases of partial, credits the CCS will always round up. $(15yr / 20yr) * 45 credits = 33.75 \approx 34 credits$*

To accommodate the difficulty exploration companies may face acquiring credits and applying prorating, exploration companies may complete projects on public land that may have terms equal to 10 years. See [Section 2.3.5 Developing Credits on Public Lands and Other Designations](#) for more information on this option.

COMPETING LAND USES ON ADJACENT SITES

If existing credit sites are impacted by projects requiring mitigation on adjacent sites, prorating will be used to determine the total credit obligation. Credits invalidated on adjacent sites are required to be replaced but may prorate the amount purchased for the remaining term.

*For example, a 30-year project requiring mitigation that impacts 50 existing credits that have 15 years remaining of a 45-year life will be required to purchase 17 credits with a 30-year life. $(15\text{yr} / 45\text{yr}) * 50 \text{ credits} = 16.66 \approx 17 \text{ credits}$*

DISCONTINUATION OF CREDITS

If credits are discontinued (e.g., intentional reversals, sold property), see [Section 2.1.8 Reserve Account Management and Use of Financial Assurances](#) and [3.2.4 Track & Transfer Credits](#) for more information.

2.5.5 CALCULATING DEBIT BASELINE GRSG HABITAT FUNCTION

Debit baseline GRSG habitat function is the starting point from which functional acre loss is measured. Functional acre loss is then multiplied by a mitigation ratio to determine the debits generated for each map unit within a Debit Project. See [Section 2.2.2 Mitigation, Proximity Ratios, and Credit Phasing](#) for additional information on determining mitigation ratios. Functional acre loss is equal to the difference between the post-project functional acres and the pre-project functional acres.

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

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

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

An example debit baseline GRSG habitat function is illustrated in Table 17 for a map unit with high local-scale and moderate site-scale pre-project GRSG habitat function.

Table 17. Example debit baseline calculation

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

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

RECENT WILDFIRE

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

- Site-scale pre-project GRSG habitat function as determined by the HQT, and
- Site-scale regional standard habitat function as defined in Table 12 plus 10%.

If fire impacts the debit site prior to a signed QA, The HQT field collection can be run or rerun at the Debit Project Proponent's discretion, in the burn area, but the Proponent must wait until the land management agency reopens the area (minimum of 2 years).

INACCESSIBLE AREAS

For some Debit Projects, the Debit Project Proponent will not be able to calculate the site-scale pre-project GRSG habitat function for a portion of the area indirectly impacted by the Debit Project. For example, the Debit Project may indirectly impact a private property for which the Debit Project Proponent is not able to secure access to for collecting field data necessary to calculate site-scale GRSG habitat function. In these situations, the Habitat Suitability Index (HSI) score, as measured by the HQT as part of the local-scale GRSG habitat function calculation, is used as a proxy for the site-scale GRSG habitat function for the inaccessible areas. The HSI is spatially explicit and easily available for any site within the Service Area.

DECISION TO ELIMINATE FIELDWORK

If a Debit Project Proponent decides to not conduct field sampling, whether there is a time constraint or the project will be developed in an area with high anthropogenic disturbance, a site-scale GRSG habitat function of 100% can be assigned within the debit site-screening tool which would allow for the most conservative debit calculation. It creates a systematic and consistent approach to calculating credit obligation for Debit Projects that would always yield a higher debit estimate than if field data were collected.

2.5.6 DEBIT SITE QUANTIFICATION & VERIFICATION

All Debit Projects require HQT quantification prior to beginning the development of the Debit Project. The purpose of HQT verification for Debit Projects is to provide confidence to all participants, including the Administrator, that debit calculation represents a true and accurate account of on-the-ground GRSG habitat function, as defined in each Debit Project's regulatory permit. Continued verification and monitoring ensure that Debit Projects are implemented, and impacts are as defined in the project's permit.

A preliminary debit estimated may be provided by the Administrator, during the planning and pre-permitting project phases. The preliminary debit estimate is not a final estimate, it is only a tool for Project Proponents to evaluate avoidance and minimization efforts and budgetary efforts. The final debit obligation is a result of the verification process. The verification of Debit Projects is an independent, expert check on the HQT calculations and other project design documentation. Verifications are conducted using the HQT by third-party Verifiers trained and certified by the Administrator. Verification includes a review of changes to the site over the previous 10 years to ensure that the site had not been recently degraded intentionally to reduce the credit obligation of the current permit application.

There are two forms of verification, desktop and field. Desktop verification is required for all Debit Projects while field verification is not. Debit Project Proponents have the option to not have field data collected and instead use a 100% site-scale GRSG habitat function as described in [Section 2.5.6 Debit Site Quantification and Verification](#), resulting in no field verification. If the proponent chooses to use a Desktop-only analysis, the data used for the Quality Assessment (QA) Process will expire five years from the signed QA form. Flexibility is possible at the Administrator's discretion. A request for an extension must be made six months before the expiration of the data. After this expiration, the project must be rerun under the latest version of the CCS.

DEBIT QUANTIFICATION AND VERIFICATION SCHEDULE

Debts under the CCS are quantified or verified at three distinct points in time:

1. Quantification of debts before Debit Project begins (Verifier)
2. Verification during the project implementation period if phasing of debts is agreed upon (Verifier)
3. Verification when debts end or decrease (Verifier)

Before a Debit Project Begins

Third-party verification of the pre-project condition of GRSG habitat on debit sites is required before development of Debit Projects can begin.

During Project Implementation Period

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

When Term Debts End or Reduce

Third-party verification is necessary at the end of a term debit to confirm that the term debit site is no longer impacting GRSG habitat function. At the end of the Debit Project duration, if the site has not been rehabilitated to recover GRSG habitat function and allow for species use, the Debit Project Proponent will be required to purchase additional credits for an additional term.

VERIFIER SELECTION

Contracting and payment for third party verification of Debit Projects is handled by the Project Proponent. The Administrator provides a pool of certified Verifiers, which allows the Credit Buyer to accept bids before the chosen Verifier conducts a site visit. Project Proponents are encouraged to engage in discussions with one another to exchange insights and obtain recommendations regarding the selection of a Verifier. Verifications conducted as periodic spot checks and audits may be implemented and funded at the discretion of the Administrator.

2.5.7 CREDIT INVESTMENT STRATEGIES

Credit Buyers have the flexibility to acquire credits in whatever way best meets their credit investment goals, within the bounds and requirements of the CCS. Credit Buyers can create financial agreements and contracts to secure desired credits with Credit Project Proponents, including Aggregators, completely independent of Administrator oversight. However, financial agreements must provide for financial assurances to be appropriately accessible to the Administrator in the case of reversals and must include

provisions for all administrative fees and contract terms required by the CCS. Further, all credits and debits generated under the CCS must be quantified, verified, and managed according to CCS requirements, giving appropriate access and authorities to the Administrator and other designated parties.

Different mechanisms can be used to acquire credits, depending on the goal of the acquisition. The goal of acquisitions ranges from acquiring credits for future sales to acquiring credits for a specific Debit Project. Table 18 describes a few of these potential investment approaches but is not intended to be an exhaustive list.

Table 18. Potential investment strategies

Reverse Auction or Requests for Proposal	Bids are solicited for credits or projects that meet defined criteria; Credit Project Proponents submit applications specifying price to deliver a defined quantity of credits	Efficient mechanism to procure the most GRSG 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 CCS Registry	Limits risk for Debit 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 Debit Project Proponent criteria; Credit Project Proponents estimate expected number of credits	Debit Project Proponents have quantified information to inform project selection	<ul style="list-style-type: none"> Conservation funding programs Fulfill future credit obligations

BIOLOGICAL MONITORING

Biological monitoring is an essential element of the CCS and is a separate but complementary process to verification. Biological monitoring is executed through the CCS’s programmatic improvement process as described in [Section 3.3 Improving the 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 GRSG and critical sage-grouse habitats across the CCS service area. The goals of biological monitoring under the CCS are to:

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

SECTION 3 CCS OPERATIONS

This section defines the Nevada Conservation Credit System (CCS) Operations, along with associated tools, forms, and templates used to quantify, track, transfer, and report on GRSG habitat credit generated through the CCS. The CCS Operations are described in the three sections described in Table 19.

Table 19. Overview of the CCS Operations sections for Credit Project Proponents

3.1.1	Select & Validate Project Site	<ul style="list-style-type: none"> Steps for estimating and verifying quantified credits from an individual credit site, including fulfilling ongoing verification requirements. These steps are primarily implemented by Credit Project Proponents.
3.1.2	Verify Conditions	<ul style="list-style-type: none"> A collaborative step to determine if a potential project would be eligible to become a CCS Credit Project.
3.1.3	Calculate Credits & Issue Credits	<ul style="list-style-type: none"> Steps for finalizing a project credit amount and the development of a Project Management Plan.
3.1.4	Register Project & Issue Credits	<ul style="list-style-type: none"> Details on monitoring and maintaining project credits through time.
3.1.5	Track & Transfer Credits	<ul style="list-style-type: none"> Methodology of selling and transferring credits from a Credit Project proponent to a Debit Project proponent.

Table 20. Overview of the CCS Operations sections for Debit Project Proponents

CCS Element	Element Description & Guidance	
3.2 Acquiring Credits		
3.2.1	Indicate Interest	<ul style="list-style-type: none"> Steps to obtain credits and use them to meet mitigation requirements and report on accomplishments. These steps are primarily implemented by Debit Project Proponents.
3.2.2	Determine Credit Need	<ul style="list-style-type: none"> Details of determining a Debit Projects credit needs based on the location of the projects, how a project is verified and how to become a verifier, and debit amount calculations.
3.2.3	Acquire Credits	<ul style="list-style-type: none"> How Credit and Debit projects connect.
3.2.4	Track & Transfer Credits	<ul style="list-style-type: none"> Steps on the buying and selling of credits.

Table 21. Overview of the CCS Operations sections for all parties of the CCS

3.3.1	Update Protocol & Tools	<ul style="list-style-type: none"> Steps to systematically evaluate new information, report results, and improve CCS operations. These steps are primarily implemented by Administrators.
3.3.2	Prioritize Information Needs & Guide Monitoring	<ul style="list-style-type: none"> Steps to thoroughly evaluate new scientific information and GRSG habitat changes within the CCS.
3.3.3	Report CCS Performance	<ul style="list-style-type: none"> Details of the CCS Semi-Annual Report contents and development.
3.3.4	Identify & Adopt CCS Improvement Recommendations	<ul style="list-style-type: none"> Specifics on how all CCS parties may submit recommendations to the Administrator regarding the CCS.
3.3.5	Engage Stakeholders	<ul style="list-style-type: none"> Specifics on how all parties may connect, receive updates regarding the CCS, and attend meetings and trainings.

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. The following section provides an overview of the steps of credit generation and the different participants engaged at each step.



Figure 14. Credit generation overview

3.1.1 SELECT & VALIDATE PROJECT SITE

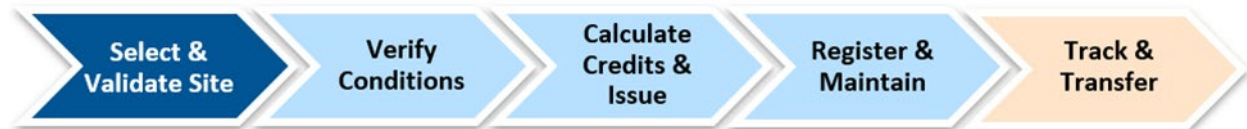


Figure 15. Select & validate project site

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 contacts 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.

SELECT PROJECT SITE

The Credit Project Proponent should consider potential conservation opportunities, the likelihood that a project will deliver significant GRSG 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.

SELECT VERIFIER

All projects require verification. Verification is an independent, impartial, 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 Project Quantification, Monitoring, Qualitative Assessments, and 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 Project Quantification, Monitoring, Qualitative Assessments, and 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. Credit Project Proponents are encouraged to engage in discussions with one another to exchange insights and obtain recommendations regarding the selection of a Verifier.

BECOMING AN ACCREDITED VERIFIER

The CCS Administrator will train and certify Verifiers to assess GRSG habitat attributes for debit and 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 an in-person Verification training session to receive certification
- Keep the CCS Administrator informed of any issues affecting their ability to work on a project (e.g., potential conflicts of interest)
- Participate in annual refresher courses held by the CCS Administrator
- Re-certify (i.e., attend and pass in-person Verification training session) every 5 years

Verifiers must be accredited by the Administrator before they are eligible to conduct verification activities. The independent and unbiased nature 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. Lead verifiers or co-leads must provide a Conflict-of-Interest Form to the Administrator before verification can proceed (included in the Pre-Field Work Submittal Packet below).

Certification as a verifier for the Sagebrush Ecosystem Program comes with certain responsibilities and requirements. Even if the required training is completed and test(s) are passed, complete the required training and pass the test(s), if the SEP guidelines are not adhered to, work performance is repeatedly sub-standard, or if the program is misrepresented, the SETT has the right to initiate the de-certification process.

Contact the Administrator or visit the Sagebrush Ecosystem Program website for a list of current verifiers.

3.1.2 VERIFY CONDITIONS



Figure 16. Verify conditions

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.

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 the *CCS User’s Guide*.

3.1.3 CALCULATE CREDITS & ISSUE CREDITS

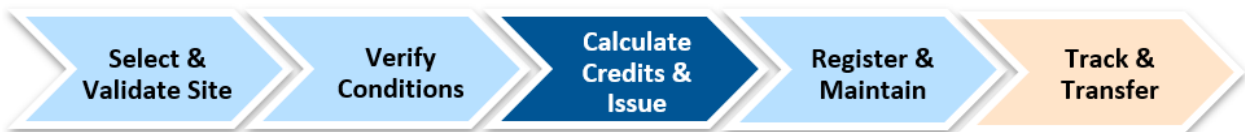


Figure 17. Calculate credit & issue

FINALIZE PRE-PROJECT CONDITIONS

The Verifier must confirm that:

- The CCS Documents were followed completely and accurately throughout the project.
- Appropriate documentation is in place (e.g., land protection or management agreements).
- The amount of credits issued for a project is appropriate given actual, on-the-ground conditions as verified through the HQT Scientific Methods Document.
- Sites with future credit releases scheduled, the 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 there is a difference between the credit estimate by the verifier and Program Manager, the Program Manager will work with the verifier to finalize the calculation. If there is still a difference between the estimate by the verifier and the Program Manager, the estimate by the Program Manager applies.

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. 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 upon by the Credit Project Proponent and Administrator, then the Oversight Committee will facilitate the dispute resolution process.

DEFINE & SUBMIT PROJECT MANAGEMENT PLAN

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 if the Credit Project meets any special requirements for regulatory approval. The draft Management Plan is submitted to the Administrator for approval, prior to the implementation of management practices. Once approved, the HQT and CCS Document version used is locked in and credits are officially available for sale.

3.1.4 REGISTER PROJECT & ISSUE CREDITS

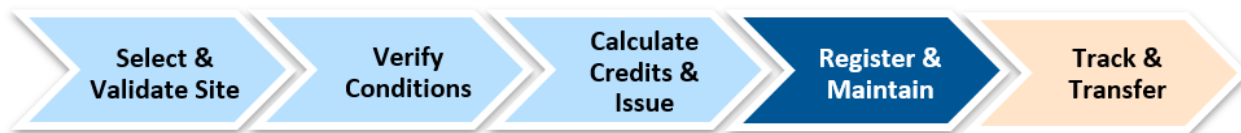


Figure 18. Register & maintain credits

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 CCS Documents 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.

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. If ecological issues threaten the status of credits, the administrator and technical support provider will contact and work with the Credit Project Proponent to find a solution, so the credits do not become invalidated. 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 a 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 GRSG 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.

3.1.5 TRACK & TRANSFER CREDITS

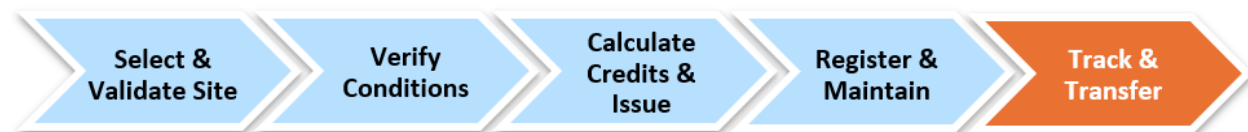


Figure 19. Track & transfer credits

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](#).

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 and any missing portions in the Management Plan. Once the transaction has occurred, the Credit Project Proponent submits a Credit Purchase Form to the Administrator, who transfers credits between accounts.

Credits are available for transfer until they expire which occurs at the end of the term. Once credits expire, the CCS Registry moves them into an expired credit account that can be reported on but not accessed for transfer. The Credit Project then can again be reverified and new credits can become available.

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.

DISCONTINUATION OF CREDITS

If credits are discontinued (e.g., intentional reversals, sold property), see [Section 2.1.8 Reserve Account Management and Use of Financial Assurances](#) and [3.2.4 Track & Transfer Credits](#) for more information.

3.2 ACQUIRING CREDITS



Figure 20. Credit acquisition overview

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. The following section provides an overview of the steps of credit acquisition and the different participants that may be engaged at each step.

3.2.1 INDICATE INTEREST



Figure 21. Indicate interest

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

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 benefits of participating. The Debit Project Proponent or the Debit Project Proponent’s representative contacts the Administrator to provide basic information, such as name, geographic information regarding the area of interest and proposed project 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.

3.2.2 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.



Figure 22. Determine credit need

DETERMINE APPLICABLE GEOGRAPHY & PROJECT CHARACTERISTICS

The Debit Project Proponent identifies the specific geographic region from which to purchase or create 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 GRS habitat on working lands from small farms and ranches.

DETERMINE CREDIT AMOUNT (REGULATORY OFFSET DEBIT PROJECT PROPONENTS ONLY)

Each Debit Project Proponent defines their needed or desired amount of credit.

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, timing restrictions, 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, Proximity Ratios, and Credit Phasing](#). 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, impartial, expert verification of valid credits on the project site. The purpose of verification is to provide confidence to all CCS participants that debit and 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. Project Proponents are encouraged to engage in discussions with one another to exchange insights and obtain recommendations regarding the selection of a Verifier.

BECOMING AN ACCREDITED VERIFIER

The CCS Administrator will train and certify Verifiers to assess GRS habitat attributes for debit and 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 an in-person Verification training session to receive certification
- Keep the CCS Administrator informed of any issues affecting their ability to work on a project (e.g., potential conflicts of interest)
- Participate in annual refresher courses held by the CCS Administrator
- Re-certify (i.e., attend and pass in-person Verification training session) every 5 years

Verifiers must be accredited by the Administrator before they are eligible to conduct verification activities. The independent and unbiased nature of verification is important. Verifiers acting on behalf of the Administrator and project proponent 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. Lead verifiers or co-leads must provide a Conflict-of-Interest Form to the Administrator before verification can proceed (included in the Pre-Field Work Submittal Packet below).

Certification as a verifier for the Sagebrush Ecosystem Program comes with certain responsibilities and requirements. Even if the required training is completed and test(s) are passed, complete the required training and pass the test(s), if the SEP guidelines are not adhered to, work performance is repeatedly substandard, or if the program is misrepresented, the SETT has the right to initiate the de-certification process.

The Sagebrush Ecosystem Program verifier certification comes with certain responsibilities and requirements. If a verifier is found to not meet SEP guidelines, performance standards, or are misrepresenting the program overall, the Administrator has the right to initiate the verifier de-certification process. Contact the Administrator or look on the Sagebrush Ecosystem Program website for a list of current 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.

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. Field data is valid for 5 years from the first collection, with the possibility of flexibility per the Administrator's discretion. A request for extension must be made 6 months prior the expiration of the data.

All field work steps are detailed in the *CCS User's Guide*.

DETERMINE CREDIT OBLIGATION

The Verifier must confirm that:

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

The number of debits required for a project is appropriate given actual, on-the-ground conditions as verified through the HQT Scientific Methods Document. 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 Calculations](#). The estimated post-project GRSG 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 must check the 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 (QA) Process, which must be signed and a letter issued by the Administrator before the debit amount can be finalized. If there is a difference between the credit estimate by the verifier and Program Manager, the Program Manager will work with the verifier to finalize the calculation. If there is still a difference between the estimate by the verifier and the Program Manager, the estimate by the Program Manager applies. While a preliminary estimate can be issued prior, a submission will not be considered final and a formal QA letter will not be issued until the comment period for the Final EA or EIS ends or the CX or DNA have been signed by the BLM, or equivalent on State-owned land. Once the QA letter has been issued, the debit obligation is locked-in and a transaction can occur.

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.

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 Quantification and 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.

3.2.3 ACQUIRE CREDITS



Figure 23. Acquire credits

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.

3.2.4 TRACK & TRANSFER CREDITS



Figure 24. Track & transfer

Credits and debits are assigned unique serial numbers that identify the source of each credit or debit, the HQT 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 [Section 2.1.7 Participant Confidentiality](#). The terms of payments and sales are completed external to any of the CCS Registry or Administrator processes.

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. Once credits expire, the CCS Registry moves them into an expired credit account that can be reported on but not accessed for transfer.

DISCONTINUATION OF CREDITS

If credits are discontinued (e.g., intentional reversals), the participant listed on the participant contract will be required to replace the credits prorated for the remaining term. See [Section 2.1.8 Reserve Account Management and Use of Financial Assurances](#) for more information on reserve account management and intentional reversals.

If the property on which credits have been generated is sold, the current proponent will need to purchase the unsold credits that remain or transfer those credits to the next owner with an intent to stay in the program and fulfill the management actions signed for in the management plan.

*For example: If a project is sold and has 100 credits with 18 years remaining on a 40-year term, then 45 credits with a 40-year term will be required to be replaced by the project participant. $(18\text{yr} / 40\text{yr}) * 100 \text{ credits} = 45 \text{ credits}$*

3.3 IMPROVING THE CCS

The CCS Management System is defined as a formal, structured programmatic improvement 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 improvement process used for the CCS. The 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, and 3) changing context from stakeholders to inform CCS improvements. A systematic and transparent decision-making process ensures that improvements to the CCS do not cause uncertainty for participants. Table 22 provide an overview of the CCS Management System steps and the different participants that may be engaged at each step (*Open Standards for the Practice of Conservation 2020*).

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

Table 22. Overview of roles, tools & products to manage CCS Operations.

Process Step	Project Proponents	Administrator	Oversight Committee	Science Committee & Stakeholders	Relevant Forms & Templates	Completed Products
Update Protocol & Tools	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> • CCS Improvement Recommendation Form 	<ul style="list-style-type: none"> • CCS Improvements List • New & Updated Documents, Guidance and Tools
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
Report CCS Performance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> • Semi-Annual Report Template 	<ul style="list-style-type: none"> • Semi-Annual Report
Identify & Adopt CCS Improvement Recommendations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> • CCS Improvement Recommendation Form 	<ul style="list-style-type: none"> • CCS Improvements Recommendations • Record of Decisions • Audit Report
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

3.3.1 UPDATE PROTOCOL & TOOLS

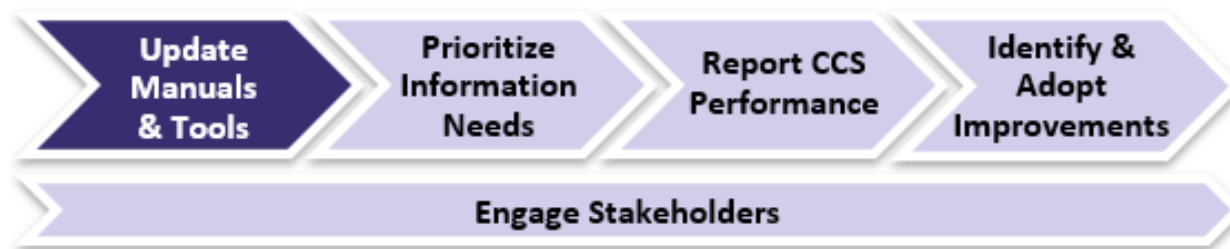


Figure 25. Update manual & tools

This CCS Documents and associated tools, templates and forms provide guidance for the CCS to consistently track and report benefits and impacts. Updating the CCS Documents, 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 CCS to review and update guidance documents, policies, and tools.

UPDATE CCS IMPROVEMENTS LIST

CCS participants, the Administrator and other stakeholders may make suggestions to improve the CCS at any time throughout the year by submitting a recommendation to members of the SETT. The Administrator adds recommendations received, to the compiled CCS Improvements List. The

Administrator may also add improvement recommendations to the list reflecting personal experience or informal input from stakeholders. The CCS Improvements List ensures that suggestions are not overlooked during the annual CCS adjustment process.

Review & Sort Improvement Suggestions

The Administrator reviews the 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 [Section 3.3.4 Identify & Adopt 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 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 [Section 3.3.4 Identify & Adopt CCS Improvement Recommendations](#). For improvements that require additional time or resources to be implemented, the Administrator develops a brief implementation plan that is approved by the Oversight Committee.

UPDATE EXISTING HQT, FORMS, & 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.

INTEGRATE NEW & ALTERNATIVE QUANTIFICATION TOOLS

The CCS 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 [Section 3.3.5 Identify & Adopt 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 Semi-annual Report.
 - 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.
-

3.3.2 PRIORITIZE INFORMATION NEEDS & GUIDE MONITORING



Figure 26. Prioritize information needs

Monitoring and research are necessary to check that the GRSG habitat benefits projected by the HQT result in the projected improvements for the GRSG habitat attributes of concern. The 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.

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 catalogs and prioritizes research and monitoring needs identified by participants to improve the HQT, better understand the effectiveness of management actions, impacts of anthropogenic disturbances, and follow the status and trends of GRSG habitat attributes of concern.

The CCS may be able to collaborate with other monitoring programs to monitor status and trend of GRSG habitat conditions and populations but is likely to take a more active role in directing monitoring intended to calibrate and improve the HQT. 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.

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 CCS funded through transaction fees or conducted through partnerships with existing monitoring programs, or any other parties.

3.3.3 REPORT CCS PERFORMANCE



Figure 27. Report CCS performance

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

- Overall credit and debit results from the past year and over the life of the CCS, including progress towards goals
- Credits and debits within specific geographic areas of interest
- Summary of recent and expected near-term changes
- Any new scientific findings or management decisions

Routine reporting of accomplishments is essential to ensure transparency and drive accountability. The CCS Semi-Annual Report (Semi-Annual Report) reports all credits tracked by the CCS and informs interested parties of recent changes to the CCS. The Semi-Annual Report highlights successes and challenges from the past year, both regionally and for geographic areas of interest. This is the highest profile product of the CCS and is targeted at an informed public audience.

COMPILE CONTENT & PUBLISH SEMI-ANNUAL REPORT

The Administrator uses tracking outputs, such as the number of credits created during the year, to generate the quantitative information for the Semi-Annual Report, which includes a ledger of all credits and debits generated, develops a narrative summary of overall accomplishments, and projected improvements to the CCS. Additionally, information related to non-habitat accomplishments may also be highlighted, such as administrative improvements. The Semi-Annual Report is approved by the Oversight Committee and posted online and available to any relevant regulatory agencies.

3.3.4 IDENTIFY & ADOPT CCS IMPROVEMENT RECOMMENDATIONS



Figure 28. Identify & adopt CCS improvement recommendations

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

PROPOSE CCS IMPROVEMENT RECOMMENDATIONS

The process for maintaining and prioritizing the CCS Improvements List is described in [Section 3.3.1 Update Protocol and Tools](#). The CCS Improvement List are the most critical inputs for the Administrator to consider when identifying CCS Improvement Recommendations.

Develop CCS Improvement Recommendations

The Administrator reviews the 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 on stakeholders or on the CCS.
- For changes that require contract resources or more than one-month to implement, a brief implementation plan with associated budget.

Recommendations are grouped by the Categories described in [Section 3.3.1 Update Protocol and Tools](#). 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.

Develop Final Recommendations

The 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.

ADOPT CCS IMPROVEMENTS

The Oversight Committee meets, discusses, and considers adopting 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.

OVERSEE CCS OPERATIONS

Annually, the Oversight Committee conducts or designates an independent entity to conduct a third-party audit of 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 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, with less information identified as confidential, is posted to the CCS website.

RESOLVE OUTSTANDING DISPUTES

Refer to [Section 2.1.1 Governance Roles](#).

3.3.5 ENGAGE STAKEHOLDERS



Figure 29. Engage stakeholders

Consistent stakeholder engagement is necessary to ensure the CCS operates efficiently, increases understanding, and drives accountability. Stakeholder engagement occurs throughout the year using the reports and products [Section 3.3.4 Identify & Adopt CCS Improvement Recommendations](#), as well as through email and in-person engagements.

MAINTAIN CCS WEBSITE

The Administrator maintains the 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 CCS. The website also informs interested stakeholders of upcoming events and meetings and provides the opportunity for stakeholders to provide CCS improvement recommendations ([*Section 3.3.1 Update Protocol and Tools*](#)).

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 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.

PRESENT AT COMMUNITY FORUMS

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

CONDUCT TRAININGS

The Administrator or experienced Technical Support Providers periodically conducts trainings to teach potential CCS participants how to efficiently use the 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.

CONVENE PERIODIC STAKEHOLDER MEETINGS

The Administrator periodically convenes meeting open to all stakeholders. This meeting is an opportunity to highlight accomplishments and identify areas for improvement with participants and interested stakeholders.

At this 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 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 CCS website.

APPENDIX 1. GLOSSARY

Additionality: GRSG habitat functionality improvements that represent an overall increase in, or avoided reduction of, GRSG habitat functionality, relative to the GRSG habitat functionality that would occur in absence of the CCS.

Administrator: An organization or entity responsible for managing the day-to-day operations of the 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 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 CCS credits for mitigation purposes within the State of Nevada, or between the Administrator and other parties to use 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. *

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. *

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

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

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 GRSG 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 Project Proponent's estimated credits.

Credit: A quantifiable unit of a GRSG habitat conservation value which serves as the currency in the 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 mitigation ratio. Credits are consistently quantified and traded, and secured by contract requirements, a project-specific Management Plan and financial assurances and become official when the Management Plan is signed.

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 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. A Credit Project qualifies as a competing land use, and is protected from future competing land uses, when the landowner submits a signed Management Plan.

Credit Project Failure: Unintentional or intentional reversal of a Credit Project, whether in its entirety or a portion thereof.

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

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

CCS Operations: A set of rules that defines the universal processes through which credits and debits are generated, tracked, and traded within the 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 GRSG 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. A Debit Project qualifies as competing land use when the Debit Project reaches the end of NEPA (the close of the public comment period for the final EIS or final EA, the signature of a CX or DNA by the BLM) or state equivalent on state-owned land.

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 GRSG 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 GRSG 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. *

Habitat Function: The ability or value of a measured patch of land to meet the needs of GRSG.

Habitat Suitability Index (HSI): A continuous map surface developed by Nevada Sagebrush Ecosystem Program that contains the probability of use by GRSG 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 GRSG 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. *

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 GRSG 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 GRSG use of, and movement between, seasonal GRSG habitats within their home range according to their life cycle needs, and attributes are measured to consider the availability of habitat and the effects of anthropogenic disturbances.

Management Actions: Stewardship and restoration of a site 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.

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

Mineral Exploration: Exploration of gas, oil, coal and other gaseous, liquid, and solid hydrocarbons, oil shale, cement material, sand, gravel, road material, building stone, chemical raw material, gemstone, fissionable and non-fissionable ores, colloidal and other clay, steam and other geothermal resources, precious metals, base metals, and industrial minerals.

Mitigation: Stewardship or restoration of GRSG habitat to compensate for unavoidable adverse impacts from a Debit Project and verified through the CCS. Credit Projects are mitigation for Debit Projects.

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 CCS and making CCS management decisions. The Sagebrush Ecosystem Council serves as the Oversight Committee.

Participant: General term for all entities participating in the CCS, with the exception of the Administrator and the Oversight Committee. Participants include Project Proponents, Technical Support Providers, Aggregators, and Verifiers.

Participant Contract: Legal agreement between one or more Credit Project Proponents and the Administrator that defines obligations of the 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 CCS.

Participant Confidentiality: Processes to ensure sufficient information is available to monitor compliance, ensure progress toward environmental goals, and inform a robust CCS programmatic improvement process, while not revealing identifying information of participants.

Performance Standards: Management actions and GRSG habitat function described in a Credit Project Management Plan that defined Credit Project expectations including requirements for credit releases.

Project Duration: The period of time that the 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: a project resulting in anthropogenic disturbance within GRSG habitat.

Credit Project Proponent: a project resulting in GRSG habitat conservation.

Public Lands: All lands within the exterior boundaries of the State of Nevada except lands to which title is held by any private person, private entity, or local government

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

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

Remedial Action Plan: Any corrective measure which the Administrator or a 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 the site 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 GRSG habitat tracked under the CCS.

Restoration: The reestablishment of ecologically important species 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 its habitat.

Reversal (Intentional or Unintentional): Credit Project that does not persist for the full, required, duration due to natural or man-made causes. *

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. *

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 programmatic improvement recommendations.

Service Area: The geographic area within which species 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 offset site as designated in an agreement or program. *

Site Scale (4th order): 4th order selection is based on GRSG 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. *

Stacking Payments and Credits: The creation of different credit types or payments on the same project site. Stacking credits allows Credit Project Proponent to market multiple ecological values and 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 using single Credit Project produced for the duration of the relevant Debit Project.

Stewardship: Maintenance of high-quality GRSG habitat currently used by or in close proximity to habitat used by GRSG, or manipulation of existing GRSG habitat to increase specific functionality. Examples range from placing a conservation easement on existing high-quality GRSG habitat and committing to maintaining that high quality for the full duration of the Credit Project to improvement of GRSG 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 CCS tools and forms. May be hired by 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 Project Proponent and Debit Project Proponent, or a Credit Project Proponent and the reserve account. After transfer of credits between the accounts of a Credit Project Proponent and a Debit Project Proponent, the Credit Project Proponent is responsible for meeting the monitoring, reporting and verification requirements of each project for the life of the project.

Verification: An independent, expert check on the HQT calculations and other specifications of the 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 third-party that conducts site visits and uses the HQT for the purpose of calculating credits and debits. Verifiers must be trained and certified by the Administrator and must meet qualifications established by the Oversight Committee.

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