

State of Nevada

Conservation Credit System Manual

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Version 1.5

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

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

The Nevada Conservation Credit System (CCS) incorporates design, organization, and content from documents developed by Environmental Incentives, LLC, Willamette Partnership, and Environmental Defense Fund, among others. In particular, the Nevada 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

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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's policies and technical requirements were updated systematically through the formal, annual adaptive *management process* defined in this Manual. The process culminated with the *Oversight Committee* – Nevada Sagebrush Ecosystem Council (SEC) – adopting several improvement recommendations, which were based on the SETT's experience evaluating potential credit and debit projects, at the SEC meeting in late 2015.

The Nevada Sagebrush Ecosystem Program (SEP) encourages landowners and other parties interested in developing credits to contact the Nevada Sagebrush Ecosystem Technical Team (SETT) to get started. Application fees are waived as of January 2016; however, application fees should be expected after the initial credit projects are completed in 2016. Potential *Project Proponents* should contact the SETT to determine if application fees are required. Also, any changes to the CCS through the annual adaptive management process will only apply to new credit and debit projects, thus credits awarded and credit obligations fulfilled through the 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 greater sage-grouse 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 greater sage-grouse is listed as threatened or endangered under the Endangered Species Act (ESA); however, the State of Nevada requested that the U.S. Fish and Wildlife Service (USFWS) provide regulatory assurances in July 2015, and intends to work with USFWS to develop this agreement in 2016.

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: Technical and Policy Considerations](#), regarding specific technical and policy considerations that arise during the generation and *transfer* of credits to Credit Buyers and the determination of credit obligations for debit projects.

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 <i>offset</i> 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 <i>verification</i> requirements. ▪ Obtain credits and use them to mitigate debit projects (credit obligations), or define and report the effectiveness of <i>management actions</i> not used to offset impacts. ▪ Systematically evaluate new information, report results and improve the accuracy and efficiency of the CCS over time.
Appendix A: Glossary	Defines key terms used throughout the CCS Manual.
Appendix B: Forms and Instructions	Lists forms to be filled out by CCS participants and submitted to the CCS Administrator. Contact the Sagebrush Ecosystem Technical Team for form and guidance documents.

The first use of a term defined in the glossary in [Appendix A](#) is in italic font.

CCS TOOLS & DOCUMENTS

Several tools and documents are used to describe and operationalize the CCS. The primary tools and documents are summarized in Figure 1 and the most recent versions are available on the CCS website (sagebrushco.nv.gov/CCS/ConservationCreditSystem/) or through the Administrator.

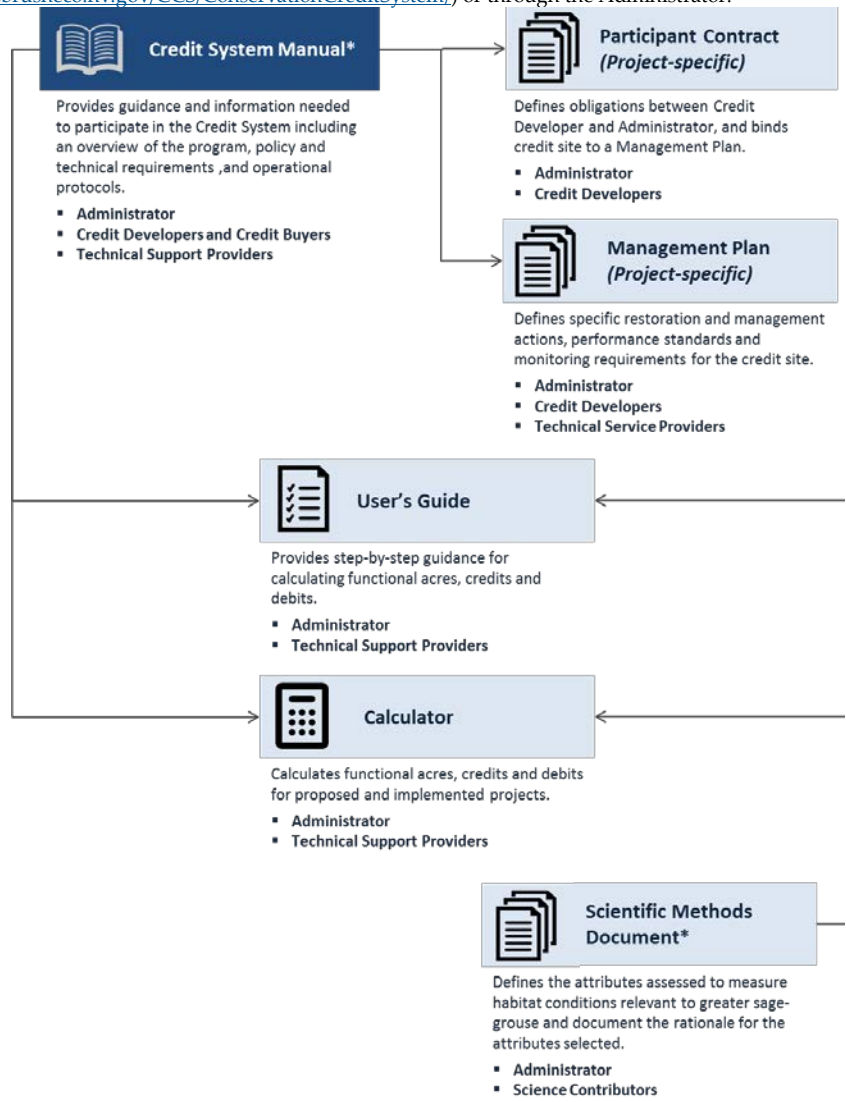


Figure 1: Primary CCS tools and documents (documents with an * define the scope and form of the CCS and changes to these documents will be approved by the Oversight Committee as described in *Step A1.1 in Section 3*)

LIST OF ACRONYMS

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

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SECTION 1: CCS OVERVIEW

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

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

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

The CCS is an innovative solution to greater sage-grouse habitat protection that ensures habitat impacts from anthropogenic disturbances are fully compensated by long-term enhancement and protection of habitat that result in a net benefit for the species, while allowing appropriate anthropogenic disturbances that are vital to the Nevada economy and the Nevada way of life. The CCS creates new incentives 1) to avoid and minimize impacts from anthropogenic disturbances to important species habitat, and 2) for private landowners and public land managers to preserve, enhance, and restore habitat, while reducing threats to important habitat for the species. The CCS is a performance-driven and market-based approach to species conservation that quantifies benefits from enhancement and protection of habitat (*credits*) and negative impacts to habitat from anthropogenic disturbances (*debts*), 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 results in a net benefit for greater sage-grouse habitat in the State of Nevada. In the future, the CCS may be expanded to support the *stewardship* and *restoration* of Nevada’s sagebrush ecosystem overall and other sagebrush obligate species, in addition to the greater sage-grouse.

GUIDING PRINCIPLES

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

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

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

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 marketplace, where each transaction is anticipated to result in a net benefit for greater sage-grouse.
- Foster transparency, accountability, and credibility.
- Improve the effectiveness and efficiency of the CCS over time.

1.2 GEOGRAPHIC & PARTICIPANT SCOPE

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

Proposed anthropogenic disturbances to habitat on State of Nevada, BLM, USFS, and local government lands within the BSUs require consultation with the SETT and the appropriate federal agency, as defined in the 2014 Nevada Greater Sage-Grouse Conservation Plan⁴. This consultative process will determine when residual unavoidable impacts require compensatory mitigation through the 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 habitat and management maps.

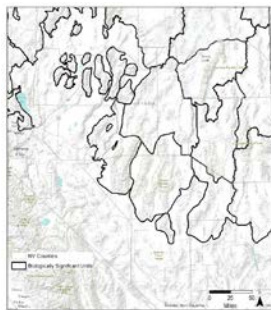


Figure 2: Biologically Significant Units (BSU) map, produced by NDOW

1.3 ORGANIZATIONAL STRUCTURE & ROLES

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

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

⁴ http://sagebrushheco.nv.gov/uploadedFiles/sagebrushheconvgov/content/home/features/2014_ConsolidatedStatePlan.pdf

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

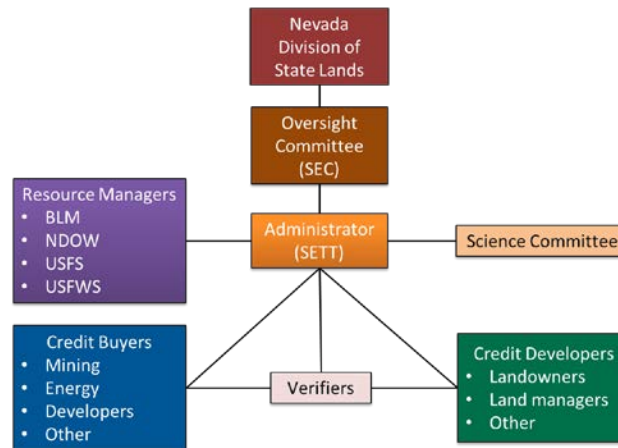


Figure 3: Operational structure of the Nevada Conservation Credit System

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

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

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

Credit Project Proponents: Landowners or 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 purchase credits to meet credit obligations or to meet other conservation objectives.

Technical Support Providers (Not included in Figure 3): Individuals and entities with technical expertise in conservation planning and project design, who understand how to use the 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 a Technical Support Providers.

Commented [KP1]: Updated to coincide with regulation and other documents

1.4 HABITAT QUANTIFICATION & CCS CURRENCY

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

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

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

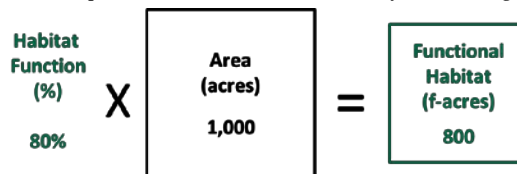


Figure 4: Illustration of functional acre concept

The CCS uses the HQT to quantify functional acres for both credit and debit sites. A summary of the HQT and credit and debit calculation is provided below, and the concepts below are described in detail in the *HQT Scientific Methods Document*, and the following sections of this Manual: [Section 2.3.4: Calculating Credit Baseline Habitat Function](#), [Section 2.5.4: Calculating Debit Baseline Habitat](#) and [Section 2.2: Habitat Quantification and Credit and Debit Calculation](#).

Habitat Quantification Tool

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

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

Key Terms

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

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

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

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

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

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

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

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

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

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

Credits, Debits and Credits Obligations

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



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

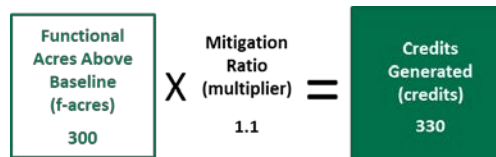


Figure 6: Illustration of the credits generated from a credit project

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

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

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

1.5 CCS OPERATIONS OVERVIEW

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



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

The steps for generating and transacting credits are depicted in Figure 7, above. Blue chevrons signify the steps undertaken to generate credits, green chevrons represent the steps to buy credits to offset credit obligation or for conservation purposes, and the orange Track and Transfer connector represents the steps and platform within which transactions occur.

GENERATING CREDITS

The following steps outline the process to generate, 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 greater sage-grouse habitat, as determined by the CCS's *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. **Implement & Estimate Credit:** Credit Project Proponents design the project, estimate the expected number of credits using the HQT, implement conservation practices, and refine estimates based on *conditions on-the-ground*.
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.
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 [Step D3 in Section 3](#)). 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 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 is available, if desired.
2. **Determine Credit Need:** Debit Project Proponents determine the duration and amount of credit needed to best meet their needs. If fulfilling a regulatory offset, Debit Project Proponents determine 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 an Administrator, using a transparent and inclusive management 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 management process. This process follows the steps depicted in Figure 8.

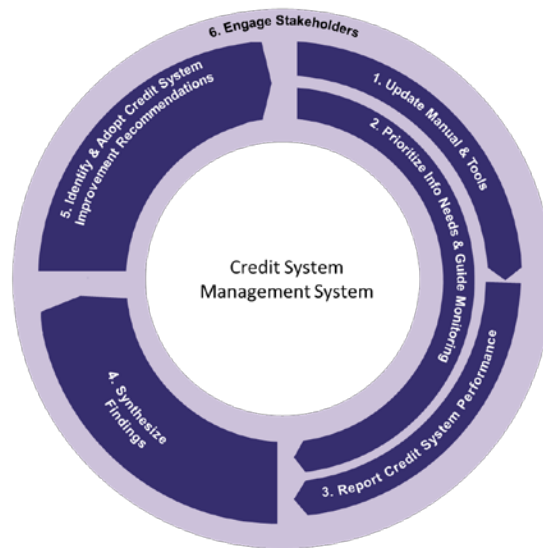


Figure 8: Overview of CCS Management

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

4. **Synthesize Findings:** Administrator synthesizes relevant research, monitoring and operational findings to inform CCS improvements. Synthesizing findings into information that is directly related to the operations of the CCS is essential to inform management decisions. Incorporating the best available science and other new information into the program and HQT ensures the calculation of credits and debits is accurate, improves project selection and design decisions, and improves accountability.
5. **Identify & Adopt 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 actions over time. Creating and transparently adopting clear recommendations to improve the CCS is the most critical step in the annual CCS management 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.
6. **Engage Stakeholders:** Throughout the year, the Administrator engages stakeholders to keep them informed of progress and solicit input for how to improve the CCS. Consistent stakeholder engagement is necessary to ensure the CCS operates efficiently, increases understanding, and facilitates accountability.

All of the steps described in Section 1.4 above are defined in detail in [Section 3: 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.

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SECTION 2: POLICY & TECHNICAL ELEMENTS

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

Table 1: Summary of Policy & Technical Considerations

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

2.3 Credit Additionality Provisions

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

2.4 Credit Durability Provisions

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

2.1 PROGRAM GOVERNANCE

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

2.1.1 GOVERNANCE ROLES

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

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

Table 2: Key Responsibilities of the Oversight Committee

Oversight Committee Key Responsibilities	
Ensure Program Performance	<ul style="list-style-type: none"> ▪ Pursues the memorandum of understanding (MOU) with BLM and potentially programmatic agreements with USFWS and other participating agencies; and participates in negotiations with USFWS and other participating agencies to amend the agreements as necessary. ▪ Oversees Administrator’s implementation of the 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.
Ensure Programmatic Adaptive Management	<ul style="list-style-type: none"> ▪ Considers and adopts CCS improvement recommendations provided by the Administrator and participants. Specifically approves any changes to the CCS Manual and HQT. ▪ Gains input from the Administrator and Science Committee on new scientific information to be incorporated into the CCS’s tools and processes as necessary and at least annually. ▪ Evaluates and approves adaptive management actions.
Participant Oversight	<ul style="list-style-type: none"> ▪ Resolves disputes among CCS participants 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 3 outlines the key responsibilities of the SETT, and is aligned with the processes described in [Section 3: CCS Operations](#). The SETT will develop and maintain a comprehensive work plan to guide the allocation of resources, and define procedures to consistently and efficiently facilitate transactions.

Table 3: Key Responsibilities of the Administrator

Administrator Key Responsibilities	
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.
Adaptive Management & Reporting	<ul style="list-style-type: none"> ▪ Implements CCS adaptive management process. ▪ Compiles Improvement Recommendations throughout the year, develops the annual Synthesis of Findings, and develops the Annual Performance Report. ▪ Brings products developed through the adaptive management process to the Oversight Committee for consideration. ▪ Makes improvements to the Calculator, User's Guide, Forms and Guidance Documents consistent with direction defined in the Manual and HQT. Informs Oversight Committee on operational changes so that the Oversight Committee can elect to review and provide alternative direction.
Compliance & Enforcement	<ul style="list-style-type: none"> ▪ Performs quality control review 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's tools and processes. ▪ Defines questions to guide monitoring and research investments, and Science Committee input. ▪ Trains and certifies Verifiers. ▪ Evaluates results of any effectiveness monitoring established for credit and debit projects.

Science Committee

The Science Committee consists of species and ecology scientists and experts whose purpose is to inform the development and revision of HQTs for species and habitat included in the scope of the CCS. The Sciences 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 a minimum of four and a maximum of seven biologists, rangeland ecologists or other qualified scientists with recognized knowledge and expertise on the species and habitat. One position on the Science Committee will be held by the NDOW upland game staff specialist responsible for greater sage-grouse. The SETT appoints members of the Science Committee and members commit to serve two-year terms. Specific duties of the Science Committee include:

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

2.1.2 IMPLEMENTATION OF STATE OF NEVADA POLICY

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

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

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

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

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

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

USFWS Pre-Listing and Endangered Species Act

The CCS is intended to be consistent with the Greater Sage-Grouse Range-Wide Mitigation Framework⁸ (Mitigation Framework), 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 greater sage-grouse 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 greater sage-grouse 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 ADMINISTRATIVE TRANSACTION FEES

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

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

2.1.5 VERSION

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

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

2.1.6 ACCOUNTING SYSTEM & REPORTING

The 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 2.5.3 Debit Project Duration](#) and [Section 2.5.5 Debit Project 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.
- **Annual Performance Reports:** Use CCS Registry outputs and the CCS adaptive management process to report on the change in functional acres, and the number of credits and debits generated each year, along with other information needed by state and federal regulatory agencies.

Tracking & Accounting

The 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 adaptive management.

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 and 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 habitat for the greater sage-grouse and provides useful data for adaptive management 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.

Annual Performance Reports

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

2.1.7 ADAPTIVE MANAGEMENT

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

The annual adaptive management process focuses on improving the effectiveness of CCS Manual 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 Manual and HQT;
- Identifying priorities and conducting research and monitoring, including comparing project success to overall population dynamics; and
- Collecting input on the application and results of 1) the Manual policy and technical elements, and 2) HQT scoring from CCS participants and cooperating public agencies.

Each year, adaptive management findings are synthesized and improvement recommendations are produced by the Administrator, and published in the annual Findings & Recommendations Report. Significant changes are approved by the Oversight Committee through a public meeting process. Any changes will only apply to new credit and debit projects, thus credits awarded and credit obligations fulfilled through the CCS will not be impacted by future updates to the CCS.

2.1.8 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 in order 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 annually publish a Performance Report that describes overall CCS performance. This Performance Report will be provided to relevant federal and state agencies. To the maximum extent possible under federal, state, and local law, the CCS will protect against disclosure of personal and confidential information from participants by using a case by case review and determination. Additionally, upon entering with the CCS, personal and confidential information will be posted to the Program's website for tracking of the Project's Progress 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, where the Project Proponent will have a chance to determine the type of information disclosed.

Disclosure of Information

In the event that a request for information outside the scope of the initial Release Form is made to the Administrator that would result in the possible disclosure of personal or commercial confidential information, the Project Proponent 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.

2.1.9 RESERVE ACCOUNT MANAGEMENT AND 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 the duration of each credit project. Credit projects that do not fulfill performance standards are considered credit reversals.

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

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

Reserve Account Management

The Administrator manages the reserve account and uses credits in the reserve account to temporarily cover credits invalidated due to intentional or unintentional causes as described in this section. Credits in the reserve account are never used to offset debit projects. Credits withdrawn from the reserve account to

temporarily cover invalidated credits are transferred back into the reserve account after the invalidated credits that they were withdrawn to temporarily cover are remediated or replaced using financial assurances associated to the invalidated credits. Term credits in the reserve account are permanently withdrawn from the reserve account when the term of the credits has expired.

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

Use of Reserve Account and Financial Assurances

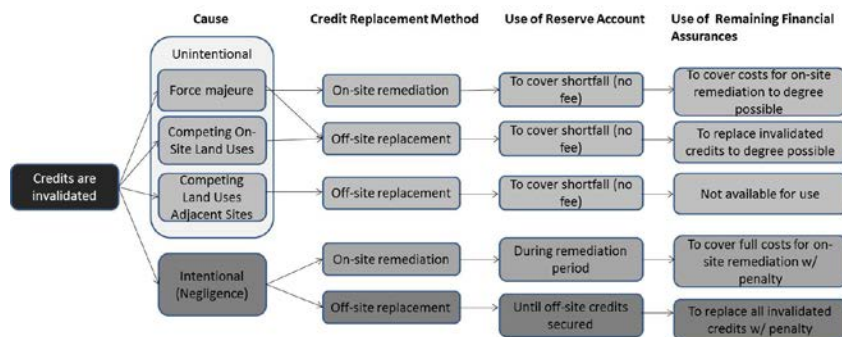


Figure 9: Credit invalidation replacement process

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

Unintentional reversals

Force Majeure

When credits generated by a credit site are invalidated by an extraordinary event or circumstance beyond the control of the Credit Project Proponent, such as wildfire, the Credit Project Proponent is not liable and thus the financial assurances secured for intentional reversals are not available to the Administrator to replace the invalidated credits. Instead, the Administrator withdraws credits from the reserve account to cover the invalidated credits at no cost to the Credit Project Proponent. In cases where the credit site can be fully or partially recovered within a reasonable amount of time and cost, the Credit Project Proponent has the option to develop a remedial action plan that is approved by the Administrator. In this situation, financial instruments secured for long-term management and unintentional reversals may be used to pay for activities included in the remedial action plan. See [Section 2.4.6: Financial Assurances](#) for additional information on financial assurance requirements. If only a portion of the credits are recovered following a *force majeure* event, then payments from financial instruments secured for long-term management and unintentional reversals are reduced according to the amount of credits actually being generated on the ground. The Administrator may use the remaining amount in the project site’s financial instruments to purchase credits elsewhere. Any dedicated reserve account credits are returned to the reserve account if the invalidated credits are remediated, assuming all requirements of those reserve account credits are still being met.

In cases where the credit site cannot be recovered within a reasonable amount of time and cost, the Credit 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

site's financial instrument for long-term management and unintentional reversals to purchase credits from a different credit site.

Competing On-site Land Uses

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

Competing Land Uses on Adjacent Sites

There may be cases where verification shows that competing land uses on sites adjacent to enrolled credit project sites have occurred, which impairs the ability of the enrolled credit project site to generate benefit for the species. The effect of competing land uses on sites adjacent to the enrolled credit project sites are determined using the anthropogenic disturbance curves defined in *Section 3.3.1: Cumulative Anthropogenic Disturbances* in the *HQT Scientific Methods Document*. These occurrences are out of the direct control of the Credit Project Proponent. Therefore in cases of unintentional reversals due to competing land uses on adjacent sites, the Administrator will withdraw credits from the reserve account to cover the invalidated credits at no cost to the Credit Project Proponent. In these cases, the remaining financial assurances for the credit project site are not available to the Administrator to purchase replacement credits. The Credit Project Proponent must continue to maintain habitat function at the project site-scale according to the performance requirements stated in the credit project's Management Plan.

Intentional Reversals

In the case of an intentional reversal, such as not implementing management activities to achieve habitat quality as defined in the Management Plan or intentional mineral development, all payments to the Credit Project Proponent immediately cease. The Credit Project Proponent and Administrator determine if a remedial action plan can be developed or if credits must be replaced off-site. The Credit Project Proponent is responsible to the Administrator for the entire cost of purchasing replacement credits from a different credit site, any associated legal fees, and an additional 10% administrative fee (i.e. contract penalty). If there is a time lag between the intentional reversal and the recovery of the site, or a time lag between the intentional reversal and when the Administrator secures new credit contracts, the Administrator will withdraw from the reserve account for a limited duration to prevent any gaps in coverage for sold credits. The credit withdrawal from the reserve account ceases as credits are acquired to cover the remainder of the contract.

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

To the extent appropriate, the Administrator may work with the sponsors of existing greater sage-grouse conservation programs to make 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 CALCULATION

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 Habitat Function](#) and [Section 2.5.4: Calculating Debit Baseline Habitat Function](#) for credit and debit sites, respectively. Following the overview of the HQT, guidance is provided for determining the mitigation ratio for credit and debit sites, and the credit obligation for debit projects. Lastly, an example calculation of credits and debits beginning with baseline and post-project functional acres is provided.

The CCS User's Guide (User's Guide) describes the detailed steps necessary to calculate credits and credit obligations for credit and debit sites, respectively, for the Nevada CCS.

2.2.1 HABITAT QUANTIFICATION TOOL

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

HQT Framework for Quantifying Habitat Function

The HQT was developed to account for habitat characteristics or attributes which influence sage-grouse habitat selection across multiple scales. These habitat characteristics were based on different orders of selection (Johnson 1980, Stiver et al. 2010), which represent four spatial scales at which habitat attributes influence where sage-grouse reside and obtain resources necessary for survival and reproduction⁹. The HQT assessed habitat quality at four orders.

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

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

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

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

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

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

Functional Acre Calculation

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

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

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

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

Application of the HQT

The CCS uses the functional acre difference between baseline functional acres and post-project functional acres for each seasonal habitat type as the starting point for calculating credits and debits for each map unit delineated within a project site, including the area indirectly benefitted by a credit project that includes removal of an anthropogenic feature and the area indirectly impacted by a debit project. Guidance for determining baseline functional acres is provided in [Section 2.3.4: Calculating Credit Baseline Habitat Function](#) and [Section 2.5.4: Calculating Debit Baseline Habitat Function](#) for credit and debit sites, respectively.

The HQT is used throughout the life of a credit project to 1) quantify the release of credits at the point that the project meets habitat function thresholds, and 2) verify that conditions are being maintained as expected over time. For debit projects, the HQT is used to determine pre-project functional acres before impacts occur, to determine post-project functional acres after impacts occur, and is used as necessary over time to determine if impacts are increased or reduced. Verification of credit and debit site conditions over time is conducted 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 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 greater sage-grouse differ in availability throughout the year. To

ensure accurate and consistent quantification the habitat function of a project site, field work for the collection of forbs and grasses needs to occur during the peak of the vegetation growing season in northern Nevada.

Permissible Window

Vegetation sampling of sage-grouse habitat attributes will be conducted during the peak of the growing season. The peak of the growing season on northern Nevada rangeland generally occurs between **April 15th and June 30th**. These dates may vary slightly annually due to temperature and precipitation. The peak of the growing season varies between sites based upon elevation, latitude, and winter and spring precipitation. Project Proponents 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 in to ensure functional acre scores based on the field data collected will be accepted by the Administrator.

Timing of Grazing: Credit Projects

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

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

Timing of Grazing: Debit Projects

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

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

Field Data Outside of Permissible Window for Planning Purposes

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

All preliminary estimates of habitat function collected outside the permissible window will be clearly indicated as such. These estimates should also include an indication of when field work will occur during the permissible window. Project Proponents 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 in order to minimize risk in planning decisions and capital investments.

2.2.2 MITIGATION AND PROXIMITY RATIOS

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

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

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

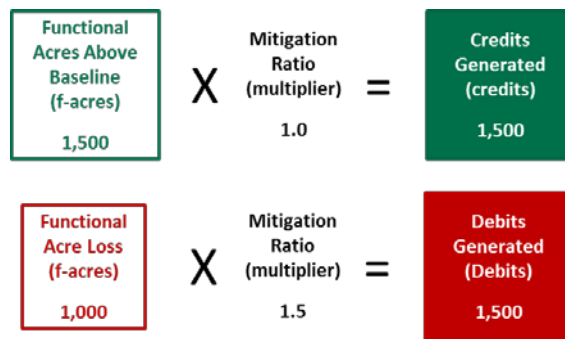


Figure 10: Illustration of calculation of debit and credits

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

Credit and Debit Mitigation Ratios

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

Management Importance Factor

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

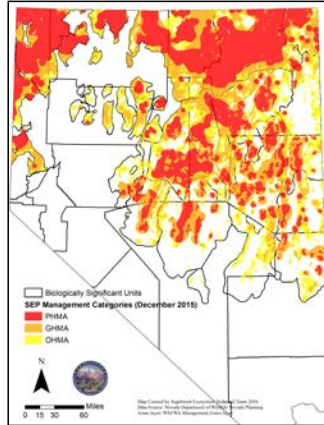


Figure 11: Sagebrush Ecosystem Program's Management Categories map

Table 5: Debit Site Management Importance Factor Values

Category	Factor Value
PHMA	1.25
GHMA	1.15
OHMA	1.05

Table 6: Credit Site Management Importance Factor Values

Category	Factor Value
PHMA	1.2
GHMA	1.1
OHMA	1.0

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

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

Meadow Habitat Power Factor

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

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

Table 7: Meadow Habitat Power Factor Values

Habitat Type	Factor Value
Meadow	8.0

Conifer Removal Factors

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

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

Table 8: Conifer Factor Values

Phase	Factor Value
Phase 1 (1-10% cover)	1.2
Phase 2 (>10% cover)	1.5

Combining Factors to Determine Credit and Debit Mitigation Ratio

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

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

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

Proximity Ratio

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

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

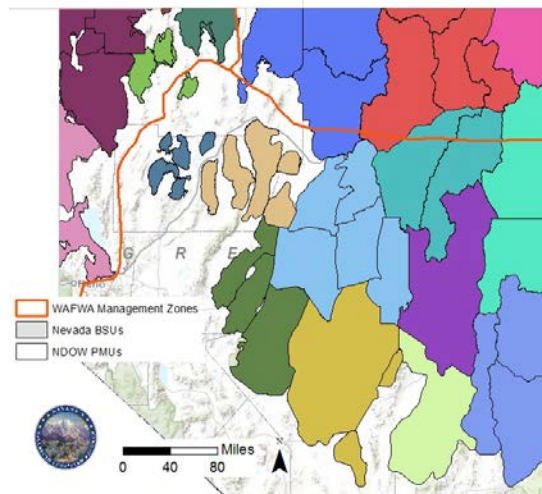


Figure 12: WAFWA Management Zones, Nevada Biological Significant Units and NDOW Population Management Units

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

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

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

Table 9: Proximity Ratio Values

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

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

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

Credit Obligation

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

Equation 2: Credit obligation for debit projects

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

2.2.3 CREDIT AND DEBIT CALCULATION

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

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

2.2.4 MINIMIZATION MEASURES ASSESSMENT & APPROVAL PROCESS

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

Minimum Eligibility Criteria

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

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

Assessment & Approval Process

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

- 1) **Submit Minimization Measure Assessment Form** – The project proponent must submit a complete minimization measure assessment form. The form includes the minimum eligibility criteria as well as the proposed reduction in indirect effects from the minimization measure.
- 2) **Assess Proposed Reduction in Indirect Effects** – If the proposed minimization measure meets minimum eligibility criteria, the Administrator will assess the spatial and temporal analysis and review any supporting evidence. The Administrator may consult with the Technical Review Group to ensure the best available science and scientific opinion is considered. If the Administrator proposes an adjustment to the proposed reduction to indirect effects, the Administrator will work with the project proponent to come to a mutually agreed on outcome.
- 3) **Approve Reduction in Indirect Effects** – If the Administrator and project proponent mutually agree on a reduction in indirect effects for the specific anthropogenic feature, then the project proponent can incorporate the adjustment in their credit or debit score, and the Administrator will publish the adjustment in 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.

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

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

12.3 CREDIT PROJECT REQUIREMENTS & ADDITIONALITY PROVISIONS

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

8 2.3.1 CREDIT SERVICE AREA

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

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

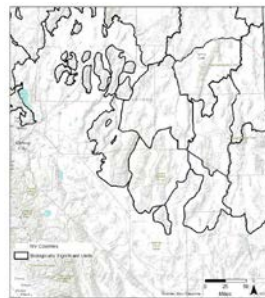


Figure 13: CCS service area

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

29 2.3.2 CREDIT PROJECT AREA AND MANAGEMENT ACTION TYPES

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

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

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

39 To achieve conservation needs and facilitate recovery of greater sage-grouse, the CCS defines two credit
 40 project management action types:

- 41 1) **Habitat Stewardship** – Maintenance of high quality habitat currently used by or in close proximity
 42 to habitat used by greater sage-grouse, or manipulation of existing habitat to increase specific
 43 habitat functionality. An example project could be placing a conservation easement on existing

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

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

11 **Riparian Properly Functioning Condition Assessment**

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

22

1 **2.3.3 CREDIT SITE ELIGIBILITY**

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

3 **Service Area**

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

6 **Ownership & Stewardship**

7 Credit Project Proponents must attest to the current ownership, tenure or use rights, control of water
8 rights, and past land management and land uses associated with the entire credit site over the previous
9 10 years in order to be eligible to generated credits from the credit site. In order to generate credits for a
10 project on federal lands, enhancement or restorative actions must be completed. Credits will be
11 determined based on the measurable habitat uplift achieved, as opposed to for preservation of the project
12 area.

13 **Minimum Performance Standards**

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

- 18 ▪ **Landscape-scale** – Credit projects must be
19 located within the PHMA, GHMA or OHMA
20 Management Category Areas using the SEP’s
21 current Management Categories map.
- 22 ▪ **Local-scale** – Anticipated local-scale, post-
23 project habitat function (area-weighted
24 average across all map units) determined
25 using the HQT must be greater than or equal
26 to 20%.
- 27 ▪ **Site-scale** – Anticipated site-scale post-project
28 habitat function (area-weighted average across
29 all map units using maximum seasonal habitat
30 function associated to each map unit)
31 determined using the HQT must be greater
32 than or equal to the relevant site-scale regional
33 standard habitat functions plus 10% (area-
34 weighted average across all map units using
35 the relevant seasonal habitat type regional
36 standard habitat function). See [Section 2.3.4:
37 Calculating Credit Baseline Habitat Function](#) for
38 site-scale regional standard habitat functions and Figure 14 for additional detail on calculating
39 area-weighted averages.

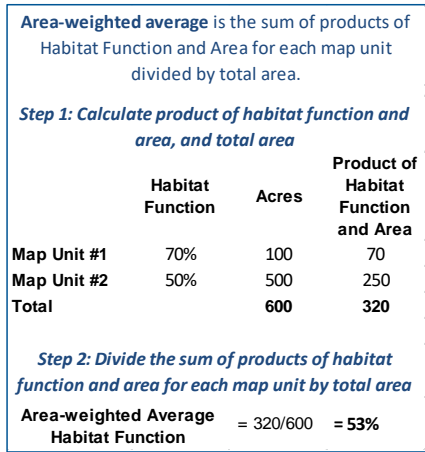


Figure 14: Definition of and an example calculation of area-weighted average habitat function for a credit site with two map units

40 **Additionality**

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

1 other credit markets. See *Sections 2.3.5 through 2.3.8* for additional information on additionality
2 provisions.

3 **No Imminent Threat**

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

15 **Site Protection**

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

24 **Financial Assurances**

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

29 **Accuracy**

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

31 **2.3.4 CALCULATING CREDIT BASELINE HABITAT FUNCTION**

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

38 The credit baseline habitat function is based on the pre-existing local-scale habitat function and the
39 typical site-scale habitat function for the relevant region and habitat type to account for the avoided risk
40 of potential threats that would degrade habitat function if the project was not implemented. In addition,
41 using the typical site-scale habitat function instead of pre-existing site-scale habitat function rewards
42 Credit Project Proponents who have demonstrated stewardship and enables credits to be generated by
43 credit projects that will maintain and protect currently high quality habitat. There are exceptions to using
44 the typical site-scale habitat function to determine credit baseline habitat function and these are described
45 later in this section. See [Section 2.2.1: Habitat Quantification Tool](#) for description of scales. Credit baseline
46 habitat function is calculated by multiplying

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

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

8 Table 11: Site-scale regional standard habitat functions

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

9
 10 The winter regional standard habitat function values in Table 11 are expected to be adjusted in the future.
 11 The current values are expected to be higher than appropriate because the winter scoring curves
 12 currently in the HQT and which were used to inform these baseline values do not entirely incorporate
 13 snow depth. The values in this table and the HQT will be adjusted at the same time in order to avoid
 14 impacting the relative value of winter habitat quantified before and after this change.

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

17 Table 12: Example credit baseline habitat function calculation

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

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

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

23 **Additional Credit Baseline Habitat Function Considerations**

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

27 **2.3.5 DEVELOPING CREDITS ON PUBLIC LANDS AND OTHER DESIGNATIONS**

28 The CCS allows for credits to be generated on public lands (e.g. BLM, Forest Service, State of Nevada
 29 trust lands etc.) or other lands already under permanent conservation restrictions (e.g. existing
 30 conservation easements) for mitigation purposes if the proposed credit project would add additional
 31 benefit above and beyond what would be achieved under the existing land designation or planned and
 32 funded conservation actions. Credit projects on public land are able to meet additionality requirements of
 33 the CCS if the Credit Project Proponent can demonstrate that verifiable benefit using the HQT can be

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

1 attained by the credit project. Credits will be determined based on the measurable habitat uplift achieved,
2 as opposed to for preservation of the project area.

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

9 **2.3.6 PARTNERING WITH FEDERAL PROGRAMS ON PRIVATE LANDS**

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

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

20 **Prior to a Federal Contract**

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

27 **During an Existing Federal Contract**

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

34

35 **Following a Federal Contract**

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

41 **2.3.7 STACKING CREDIT TYPES**

42 Although the CCS currently only supports the generation and sale of one type of credit (e.g. greater sage-
43 grouse credits), the CCS allows for multiple credit types to be generated from spatially overlapping areas.
44 However, the amount of each type of credit generated must be based on additional habitat function

1 maintained compared to the habitat function maintained for other credit types. If a site under the CCS is
2 currently or has previously generated and sold credits under a different ecosystem service program or
3 market (i.e. carbon, water quality, etc.), then restrictions related to partnering with federal funds during
4 existing or following previous federal contracts apply.

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

18 **2.3.8 INTEGRATION WITH CCA/CCAAS**

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

2.4 CREDIT DURABILITY PROVISIONS

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

2.4.1 CREDIT SITE PROTECTION

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

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

2.4.2 CREDIT PROJECT DURATION

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

38 The minimum project duration for stewardship actions is 30 years and the maximum duration is in
39 perpetuity. Project duration is defined in 5 year increments. Thus, project duration can be 30, 35, 40, 45
40 years, and so on, up to and including in perpetuity. The rationale behind the 30-year minimum is based
41 on scientific opinion that rapidly changing habitat function can be detrimental to populations. Longer-
42 term credit projects are preferable and credits from long-term projects are anticipated to attract greater
43 market demand, as Debit Project Proponents are required to match credit project duration to the expected
44 duration of the debit project, which includes the time required to allow species to begin to use the site
45 after the debit project. See below for matching of duration discussion.

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

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

Commented [EM2]: More clarification will be added to this section at the next council meeting.

14 2.4.3 RESERVE ACCOUNT CONTRIBUTION

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

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

32 Equation 3: Total reserve account contribution percentage equation

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

38 Equation 4: Total reserve account contribution percentage equation

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

43 Base Contribution

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

1 **Probability of Adverse Impacts from Wildfire**

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

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

9 **Resistance & Resilience**

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

17 The resistance to invasive annual grasses and resilience
 18 following wildfire is determined using a score sheet that
 19 is adapted from the Miller et al. 2014 (Score Sheet for
 20 Rating Resilience to Disturbance, Resistance to Annual
 21 Invasive Grasses, and the Suitability of an Ecological Site
 22 or Type for Treatment) field guide and score sheet
 23 illustrated in Figure 15 for use by the CCS.¹² Variables
 24 defined in the score sheet, which is an appendix to the
 25 User Guide, produce a field assessment with scoring
 26 based on soil temperature, moisture indicators, and
 27 vegetation. Credit projects often include more than one
 28 ecological site type, and scores are determined for each
 29 ecological site type or grouping of similar ecological sites
 30 within the credit project area. The score for each ecological site type within the credit project area has a
 31 range of 0 – 26, with a score of <10 = Very Low; 10 - 14 = low; 15 – 20 = Moderate; and >20 = High. An area-
 32 weighted score, based on the proportion of the area within each ecological site type is calculated for the
 33 credit project area. Table 13 below provides the reserve account contribution percentage based on the
 34 weighted score for the credit project site combining the sites resistance and resilience and the ability to
 35 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						
SITE CHARACTERISTICS		SITE CONDITION (select one)		1	2	3	4	5
Temperature (Soil temperature regime + Species or subspecies of sagebrush) - Desktop								
Soil temperature regime	1 = hot-mesic; 2 = warm-mesic; 3 = cool-mesic or cool-cryic; 4 = warm-frigid; 5 = cool-frigid; 6 = warm-cryic.							
Species or subspecies of sagebrush	1 = Wyoming, low, black, or Lahontan; 2 = basin, Bonneville, or xeric; 3 = mountain							
Moisture (Precipitation + Soil Texture + Soil Depth) - Desktop								
Precipitation (in)	1 = <10; 2 = 10-12; 3 = 12-14; 4 = >14							
Soil texture	1 = clay, sand, or silt; 2 = silty, sandy, or clay loam; 3 = loam							
Soil depth (in)	0 = very shallow (<10); 1 = shallow (10-20); 3 = moderately deep to deep							
Vegetation (Plant groups modified by soil depth) - On-Site								
Plant Groups	0 = DRPG and POSE scarce to severely depleted (DRPG < 2-3m ² and less than 5% foliar cover); 3 = DRPG on soils >10 in. scarce, but POSE of PF >50% foliar cover; 6 = DRPG on soils >10 in. depleted (<2-3m ² or about 5-10% foliar cover) and/or co-dominant with IAG, or on soils < 10 in. POSE and PF 5-15% foliar cover and co-dominant with IAG; 9 = DRPG and PF dominant on soils > 10 in. or POSE and PF dominant on soils < 10 in.							
Deep-rooted perennial grasses (DRPG) potentially dominant in shallow to deep soils >10 in.								
Sandberg bluegrasses (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 15: Miller et al. 2014 score sheet

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

¹² Miller, Richard F.; Chambers, Jeanne C.; Pellant, Mike. 2014. A field guide for selecting the most appropriate treatment in sagebrush and piñon-juniper ecosystems in the great basin: Evaluating resilience to disturbance and resistance to invasive annual grasses, and predicting vegetation response. Gen. Tech. Rep. RMRS-GTR-322 REVISED. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 66 p.

Ability to Control Wildfire

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

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

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

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

Rebate of Credits from the Reserve Account

As an incentive for Credit 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 land, and other unique characteristics of privately- and publicly-owned land influence the probability of completing land

1 uses invalidating credit sites. Table 14 identifies different credit site characteristics related to the probability
 2 of completing land uses invalidating credits for private lands. Note that each credit site must meet
 3 minimum site eligibility requirements, including proof of no imminent threat of direct or indirect
 4 disturbance to the credit site. See the [Section 2.3.3: Credit Site Eligibility](#) for additional information.

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

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

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

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

17 **Modifications to Standard Reserve Account Contributions**

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

26 **2.4.4 CREDIT RELEASE**

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

35 If a credit project is unable to achieve performance standards defined in the credit project's Management
 36 Plan in order to release credits, the Credit Project Proponent will work with the Administrator to adjust
 37 the performance standards and release schedule. A decline in habitat function outside of the tolerances
 38 defined in [Section 2.4.5: Credit Project Quantification, Monitoring, Qualitative Assessments, and Verification](#)

1 after credits are released will require the credit site to be remedied, or the credit site’s financial assurances
2 may be used to replace the invalidated credits. See [Section 2.4.6: Financial Assurances](#) for additional
3 information on financial assurances.

4 **Stewardship Management Actions**

5 For credit projects based on stewardship management actions, credit release occurs when conservation
6 actions defined in the credit project’s Management Plan are implemented and associated HQT scores are
7 achieved. Credit projects that primarily maintain pre-project habitat function are likely to have a single
8 credit release. If a credit project based on stewardship management actions includes multiple credit
9 releases, the portion of credits released at each milestone must be less than or equal to the percent
10 increase in habitat function relative to the total increase in habitat function expected to be achieved by the
11 project. A credit release schedule associated with specific performance standards in the credit project’s
12 Management Plan can include multiple credit release intervals; however, each release must require at
13 least a 5% increase in site-scale habitat function. Credits are released at the point when a third-party
14 verifies an achieved performance standard. Credits released are valid for the full duration of the project’s
15 life, provided that the Credit Project Proponent continues to meet that performance standard as
16 confirmed by third-party verification and annual management and monitoring reports. Verification
17 requirements are defined in [Section 2.4.5: Credit Project Quantification, Monitoring, Qualitative Assessments,
18 and Verification](#).

19 **Restoration Management Actions**

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

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

40 Table 15 below illustrates an example credit release scheduled with one third of credits released based on
41 management actions, and the remaining two thirds released in two additional credit releases. Upon
42 verifying conditions to release all credits anticipated by the credit project, all credits are expected to be
43 maintained for the full duration of the project’s life, according to the performance standards defined in
44 the Management Plan and confirmed in verification and annual management and-monitoring reports.

Table 15: Example Credit Release Schedule for a Restoration Project

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

Net benefit for greater sage-grouse 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 credit site's Management Plan, this combination of mechanisms covers any shortfalls in credits.

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

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

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

The purpose of HQT quantification by a third-party Verifier for credit projects is to provide confidence to all participants, including the Administrator, that initial credit calculations represent an accurate account of 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 projects are maintained over time, improved where on-the-ground uplift actions were implemented, and support the expected habitat quality commensurate with the amount 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

1 report features not only questions about management actions and whether the commitments within the
2 management plans were implemented, but a monitoring component to be carried out by credit project
3 proponents between April 15th and June 30th with a focus on photo-monitoring sites. This report is due to
4 the Administrator at the end of July each year.

5 At five-year intervals with the exception of the years when third-party verification occurs, the
6 Administrator will conduct a five-year qualitative assessment. This assessment will include GIS
7 evaluation of the project area using the latest aerial imagery to assess any changes including
8 anthropogenic disturbances, cheatgrass and wildfire layers, the Sage Grouse Initiative mesic layer, the
9 Rangeland Analysis Platform, and potentially other remote sensing tools as they become available. As
10 part of this qualitative assessment, the Administrator may schedule a visit to the project site to meet with
11 the credit project proponent, conduct a portion of annual monitoring alongside them, assess whether the
12 project area is being managed as committed to, and provide an assessment of the habitat and critical areas
13 within the project perimeter.

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

19 In addition to verifications to assess uplift and potentially calculate the credits from realized habitat
20 improvements, verification is also to occur at Year 15 of 30-year credit projects, and at 15-year increments
21 for longer duration credit projects. This verification is to ensure the habitat is being maintained as
22 planned by implementing a full HQT verification (at 100% the effort of the initial HQT quantification for
23 the project) by a certified third-party Verifier to allow comparisons with the initial HQT quantification.
24 Indication of a trend in habitat decline or deviation from management commitments found by the
25 Administrator during five year qualitative assessments or resulting from verification efforts could result
26 in more robust evaluation of projects by the Administrator. The relatively comprehensive annual
27 management and monitoring report to be turned in for all credit projects each year will add to the
28 considerable knowledge about the management and condition of projects. Concerns over any of these
29 efforts or the reports describing them could result in spot checks or audits from the Administrator, which
30 can also be conducted randomly. After significant onsite degradation or mismanagement indicated
31 through any of the above vectors and at the discretion of the Oversight Committee, full verification may
32 be required by a certified third-party Verifier any time outside of the 15-year window with costs to be
33 covered by the credit project proponent.

34

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

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

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

44

45 **Before first credit release**

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

1 **Before additional credit releases**

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

4 **Annual Management & Monitoring Report (Credit Project Proponent)**

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

8 **Five Year Qualitative Assessments (Administrator)**

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

11 **Every 15th year**

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

15 **Periodic spot checks and audits**

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

18 **Credit Variability & Verification Results**

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

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

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

40 **Verifier Selection**

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

45

1 2.4.6 FINANCIAL ASSURANCES

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

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

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

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

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

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

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

- 40 ■ Cover all anticipated costs expected to perform maintenance and monitoring of the project as
41 defined in the Management Plan for the duration of the contract;
- 42 ■ Ensure contingency funds are available to address periodic project-related costs that are likely to
43 occur; and
- 44 ■ Ensure an ongoing financial incentive that is greater than the anticipated cost to maintain and
45 monitor the project.

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

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

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

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

27 [Financial Assurances for Intentional Reversals](#)

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

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

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

2.5 CREDIT OBLIGATION PROVISIONS & CREDIT INVESTMENT STRATEGIES

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

2.5.1 DEBIT SERVICE AREA

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

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

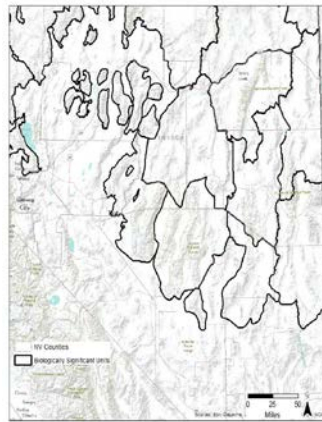


Figure 16: Greater sage-grouse service area

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

2.5.2 DEBIT PROJECT TYPES

35 Proposed anthropogenic disturbances to habitat on BLM, USFS, State of Nevada and local government
 36 lands within the Service Area require consultation with the SETT and the appropriate government
 37 agency, as defined in the 2014 Nevada Greater Sage-Grouse Conservation Plan. Anthropogenic
 38 disturbances are considered debit projects when they are proven to be unavoidable, and when
 39 minimization does not provide for complete direct or indirect impact avoidance¹⁴. A debit project may be
 40 a new anthropogenic disturbance, an expansion in the operation of an existing anthropogenic
 41 disturbance, or an extension in duration of an existing anthropogenic disturbance.

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

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

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

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

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

19 **2.5.3 MITIGATION HIERARCHY AND PERMIT REQUIREMENTS**

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

2014 Nevada Greater Sage-Grouse Conservation Plan

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

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

38 Those Credit Buyers who purchase credits to fulfill regulatory requirements for compensatory mitigation
 39 are responsible for meeting all requirements of the relevant permitting process through the State of
 40 Nevada, BLM, or other government agencies. Debit Project Proponents must provide documentation of
 41 the permit stipulations and debit project design documents to the Administrator to ensure proper

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

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

1 identification of the total amount of credits needed to offset the debit project, and the total duration of the
2 debit project. This allows the Administrator to 1) ensure that the debit project is appropriately offset with
3 a credit project and 2) transparently track and report on all credit transactions and programmatic net
4 benefit generated. See [Section 2.2: Habitat Quantification and Credit and Debit Calculation](#) for additional
5 information on calculating credit obligations and [Section 2.5.4: Debit Project Duration](#) for additional
6 information on project duration provisions.

7 **2.5.4 DEBIT PROJECT DURATION**

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

14 Like credit projects, the duration of debit projects can be either limited term or in perpetuity. Debit
15 projects that are not expected to return to pre-project habitat function have an in perpetuity project
16 duration. *Rehabilitation* necessary to return a debit site to pre-project habitat function will be defined in
17 the permit or lease for the anthropogenic disturbance in order for the Administrator to agree to the debit
18 project duration. Projects that generate perpetuity debits have the option to either purchase an equivalent
19 number of perpetuity credits or use a 4 time multiplier that would be applied to the number of
20 permanent debits to calculate the number of minimum term credits (30 yr.) the project would be required
21 to purchase in lieu of perpetuity credits.

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

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

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

36 The CCS requires the duration of a stewardship credit projects to be equal to, or greater than, the
37 duration of the debit project it is offsetting. The ability to prorate uplift credits with a term of less than 30
38 years is available and more information is found in section 2.4.2. The Administrator ensures that credit
39 project durations are sufficient to meet or exceed the duration of the debit project they are offsetting
40 through *static offsets* or *dynamic offsets*.

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

45

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

Commented [EM3]: This section was outdated and unclear.
 Rewritten to clarify in the context of the improvements.

12 **Requirements for Dynamic Offsets**

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

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

27 The financial assurances associated with a dynamic offset credit project are similar to those required for
 28 static offset projects but include additional requirements to ensure durability and require that finances
 29 are in place to secure new limited term contracts for the full length of the impact. Additionally, the
 30 Administrator must be able to ensure compliance and accountability through tracking and reporting,
 31 enforcement for credit reversals, and direct management of financial instruments. See for more
 32 information. The potential benefits of dynamic offset projects include increased participation and a
 33 greater number of total credit projects and credits available for sale due to Credit Project Proponent
 34 preferences for term contracts. Term projects also enable the ability to shift the location of high quality
 35 habitat in response to population dynamics and potential effects of climate change.

36 **2.5.5 CALCULATING DEBIT BASELINE HABITAT FUNCTION**

37 Debit baseline habitat function is the starting point from which functional acre loss is measured.
 38 Functional acre loss is then multiplied by a mitigation ratio to determine the debits generated for each
 39 map unit within a debit project. See [Section 2.2.2: Mitigation and Proximity Ratios](#) for additional
 40 information on determining mitigation ratios. Functional acre loss represents the functional acre change
 41 from debit baseline functional acres that results from implementing a project. Functional acre loss is equal
 42 to the difference between the post-project functional acres and the pre-project functional acres.

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

- 45 ■ Local-scale, pre-project habitat function as determined by the HQT, and

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

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

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

Table 16: Example debit baseline calculation

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

Pre-project 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 Verification](#) for additional information on verification requirements.

Recent Wildfire

Vegetation characteristics required to calculate site-scale habitat function by the HQT are unlikely to reflect the future habitat function on the site if wildfire has impacted a debit site recently. If wildfire has impacted a debit site within the last 10 years, site-scale 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 habitat function as determined by the HQT.
- Site-scale regional standard habitat function as defined in Table 11 plus 10%.

Inaccessible Areas

For some debit projects, the Debit Project Proponent will not be able to calculate the site-scale pre-project habitat function for a portion of the area indirectly impacted by the debit project. For example, the debit project may indirectly impact a private party for which the Debit Project Proponent is not able to secure access to in order to collect field data necessary to calculate site-scale habitat function using the HQT. In these situations, the Habitat Suitability Index (HSI) score, as measured by the HQT as part of the local-scale habitat function calculation, is used as a proxy for the site-scale 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 habitat function of 100% can be assigned within the debit site-screening tool which would allow for the most conservative debit calculation. If this option is preferred over utilizing the complete HQT, it would create 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 AND VERIFICATION

All debit projects require HQT quantification prior to beginning the development of the debit project. The purpose of HQT quantification for debit projects is to provide confidence to all participants, including the Administrator, that debit calculations represent a true and accurate account of on-the-ground habitat function, as defined in each debit project's regulatory permit. Ongoing verification and monitoring ensures that debit projects are implemented and impacts cease as defined in the project's permit. The required frequency and process for verification, as well as the process for verification selection, is described below.

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

6 Debit Project Proponents have the option to not have field data collected and instead use a 100% site-scale
7 habitat function as described in *Section 2.5.5 Debit Site quantification* and Verification.

8 **Debit Quantification and Verification Schedule**

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

- 10 1. Quantification of debits before debit project begins (Verifier)
- 11 2. Verification during the project implementation period if phasing of debits is agreed upon
12 (Verifier)
- 13 3. Verification when debits end or decrease (Verifier)

14 **Before debit project begins**

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

17 **During project implementation period**

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

22 **When term debits end or reduce**

23 Third party verification is necessary at the end of a term debit to confirm that the term debit site is no
24 longer impacting habitat function. If, at the end of the debit project's duration, the site has not been
25 rehabilitated to recover habitat function and allow for species use, the Debit Project Proponent will be
26 required to purchase additional credits for an additional term. If third-party verification demonstrates a
27 reduction in the impact and amount of credits needed as an offset, the Debit Project Proponent may sell
28 and transfer surplus credits to another Debit Project Proponent's account to fulfill their credit obligation
29 in accordance to CCS requirements defined in [Step D5.2: Sell and Transfer Credits in Section 3](#).

30 **Verifier Selection**

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 adaptive management process as described in *Section 3.3: Managing 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 greater sage-grouse and critical habitats across the CCS service area. The goals of biological monitoring under the CCS are to:

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

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

5 **2.5.7 CREDIT INVESTMENT STRATEGIES**

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

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

19 Table 17: Potential investment strategies

20

Investment Strategy	Description	Benefits	Typical Uses
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 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

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 habitat credit generated through the CCS. The CCS Operations are described in the three sections described in Table 18:

Table 18: Overview of the CCS Operations Sections

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

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

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

SECTION 3.1: GENERATING CREDITS

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

Commented [KP4]: The Process has been updated to how we currently run the system. It's mostly a lot of cut-and-paste. Track changes not shown because it was so messy.

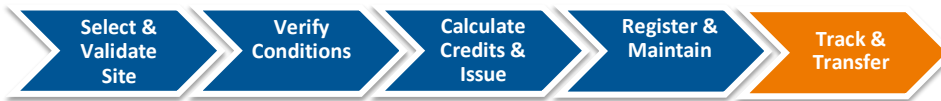


Figure 156: Credit Generation Overview

D1 SELECT & VALIDATE PROJECT SITE

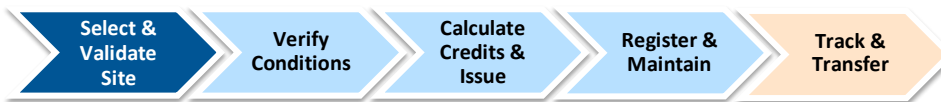


Figure 17: Select & Validate Project Site

D1.1 INDICATE INITIAL INTEREST & INITIATE COMMUNICATION

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

D1.2 SELECT PROJECT SITE

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

D1.3 SELECT VERIFIER

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

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

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

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

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

Product ■ List of Certified Verifiers

Becoming an Accredited Verifier

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

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

D2 VERIFY CONDITIONS

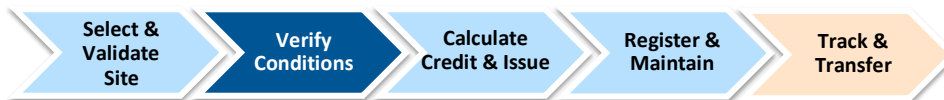


Figure 18: Verify Conditions

D2.1 VERIFY & IDENTIFY CONSERVATION OPPORTUNITY

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

Product ■ List of Credit Opportunities

D2.2 COMPLETE FIELD WORK

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

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

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

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

Product ■ Completed Pre-Field Work Submittal Packet

Product ■ Verifier Project Assessment Submission Packet

D3 CALCULATE CREDITS & ISSUE CREDITS

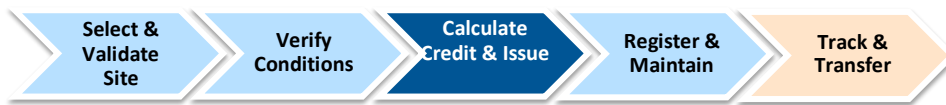


Figure 169: Calculate Credit & Issue

D3.1 FINALIZE PRE-PROJECT CONDITIONS

The Verifier must confirm that:

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

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

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

Product ■ Quality Assessment

D4.2 DEFINE & SUBMIT PROJECT MANAGEMENT INFORMATION

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

requirements necessary for regulatory approval. This optional step provides the Credit Project Proponent with an indication of the amount of credits expected from the project if the conservation measures are implemented as designed. The draft Management Plan is submitted to the Administrator for approval, prior to the implementation of management practices. Once approved, the version used is locked in and credits are officially available for sale. Should the Management Plan not be signed before 90-days after a new version is released, the project must be updated to the new version.

Product ■ Management Plan

Product ■ Issued Credits

D4 REGISTER PROJECT & ISSUE CREDITS

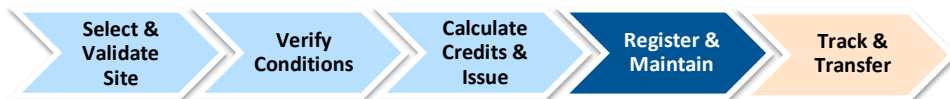


Figure 20: Register & Maintain Credits

D4.1 ESTABLISH A CCS REGISTRY ACCOUNT

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

Product ■ CCS Registry

D4.2 PERFORM ONGOING PROJECT MAINTENANCE AND MONITORING

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

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

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

Product ■ Annual Monitoring Report

Product ■ 15-Year Verification Report

D5 TRACK & TRANSFER CREDITS

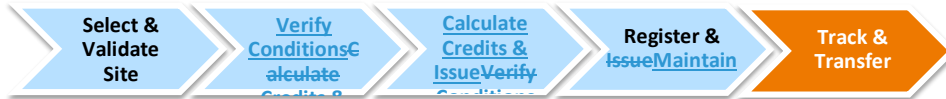


Figure 21: Track & Transfer Credits

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

D5.2 SELL AND TRANSFER CREDITS

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

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

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

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

D5.3 REPORT OF ACCOMPLISHMENTS (OPTIONAL)

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

- Product ■ Accomplishments Report (optional)

SECTION 3.2: ACQUIRING CREDITS

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



Figure 22: Credit Acquisition Overview

B1 INDICATE INTEREST



Figure 21: Indicate Interest

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

B1.1 INDICATE INITIAL INTEREST & INITIATE COMMUNICATION

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

B2 DETERMINE CREDIT NEED



Figure 22: Determine Credit Need

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

B2.1 DETERMINE APPLICABLE GEOGRAPHY & PROJECT CHARACTERISTICS

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

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

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

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

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

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

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

Select Verifier

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

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

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

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

Product ■ List of Certified Verifiers

Complete Field Work

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

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

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

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

Product ■ Completed Pre-Field Work Submittal Packet

Product ■ Verifier Project Assessment Submission Packet

Determine Credit Obligation

The Verifier must confirm that:

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

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

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

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

Product ■ Quality Assessment

Product ■ Debit Project Review Form Part 2

Acquire Agency Approval (If Necessary)

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

Post-Project Verification (If Necessary)

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

B3 ACQUIRE CREDITS



Figure 173: Acquire Credits

B3.1 PURCHASE CREDITS

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

B4 TRACK & TRANSFER CREDITS



Figure 184: Track & Transfer Credits

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

B4.1 TRANSFER CREDITS

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

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

Product ■ Credit Purchase Agreement

Product ■ Debit Project Review Form Part 3

B4.2 REPORT ON ACCOMPLISHMENTS (OPTIONAL)

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

Product ■ Accomplishments Report (optional)

SECTION 3.3: ADAPTIVELY MANAGING THE CCS

QUESTIONS ANSWERED

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

The CCS Management System is defined as a formal, structured programmatic adaptive management approach to dealing with uncertainty in natural resources management, using the experience of management and the results of research as an ongoing feedback loop for continuous improvement. This section describes the transparent and inclusive management process used for the 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. Figure 24 and Table 21 provide an overview of the CCS Management System steps and the different participants that may be engaged at each step¹⁷.

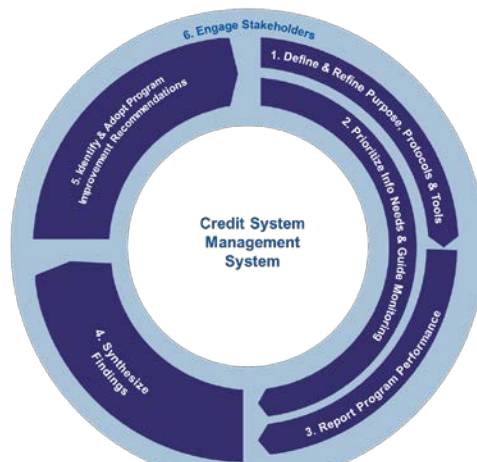


Figure 19: Overview of CCS Improvement Management System Steps

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 Manual and HQT. The

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

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 19: Overview of Roles, Tools & Products to Manage CCS Operations

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

A1 UPDATE PROTOCOL & TOOLS



Figure 26: Update Manual & Tools

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

A1.1 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 non-formal input from stakeholders. The CCS Improvements List ensures that suggestions are not overlooked during the annual CCS adjustment process.

Product ■ CCS Improvements List

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 Step A5: 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 Step A5: Identify &

Adopt CCS Improvement Recommendations. For improvements that require additional time or resources to implement, the Administrator develops a brief implementation plan that is approved by the Oversight Committee.

Product ■ Updated CCS Improvements List

A1.2 UPDATE EXISTING HQT, FORMS AND TEMPLATES

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

Product ■ Updated Documents, Guidance & Tools

A1.3 INTEGRATE NEW AND ALTERNATIVE QUANTIFICATION TOOLS

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

Product ■ New Quantification Tools

Recommended Research and Monitoring Contract Terms

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

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

A2 PRIORITIZE INFORMATION NEEDS & GUIDE MONITORING



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

A2.1 DEVELOP & ADJUST LIST OF AREAS FOR INVESTIGATION

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

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

Product ■ List of Research Needs

A2.2 PROVIDE INPUT TO RESEARCH & MONITORING FUNDING PROCESSES

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

Product ■ Research & Monitoring Contracts and Results

A3 REPORT CCS PERFORMANCE



Figure 27: Report CCS Performance

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

Recommended Performance Report Content

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

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

A3.1 COMPILE CONTENT & PUBLISH PERFORMANCE REPORT

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

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

Product ■ Annual CCS Performance Report

A4 SYNTHESIZE FINDINGS



Figure 21: Synthesize Findings

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

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

A4.1 COMPILE FINDINGS & DEVELOP SYNTHESIS OF FINDINGS REPORT

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

Product ■ Synthesis of Findings Report

A5 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 management 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.

A5.1 PROPOSE CCS IMPROVEMENT RECOMMENDATIONS

The process for maintaining and prioritizing the CCS Improvements List is described in Step A1: Update CCS Improvements List. The CCS Improvement List and the Synthesis of Findings Report 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 to stakeholders or to the CCS.
- For changes that require contract resources or greater than one-month to implement, a brief implementation plan with associated budget.

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

Product ■ Draft CCS Improvement Recommendations

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.

Product ■ Final CCS Improvement Recommendations

A5.2 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.

Product ■ Record of Decisions

A5.3 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, less information identified as confidential, is posted to the CCS website.

Product ■ Audit Report

A5.4 RESOLVE OUTSTANDING DISPUTES

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

A6 ENGAGE STAKEHOLDERS



Figure 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 defined in Steps A1-A5, as well as through email and in-person engagements.

A6.1 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 (as described in A1).

Product ■ Updated CCS Website

A6.2 DISTRIBUTE UPDATE EMAILS

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

Product ■ Email Communications

A6.3 PRESENT AT COMMUNITY FORUMS

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

Product ■ Community Presentations

A6.4 CONDUCT TRAININGS

The Administrator or experienced Technical Support Providers periodically conducts trainings to teach potential 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.

Product ■ Hosted Trainings

A6.5 CONVENE ANNUAL STAKEHOLDER MEETING

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

At this annual meeting, stakeholder input should be structured such that input directly related to identified areas of operational improvement and areas for investigation are recorded in context of the specific need. Stakeholders also should have the opportunity to identify new needs and concerns for consideration. Input may be added to the 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.

Product ■ Stakeholder Meeting & Summary of Input Received

APPENDIX A: GLOSSARY

Additionality: Habitat functionality improvements that represent an overall increase in, or avoided reduction of, habitat functionality, relative to the habitat functionality that would occur in absence of the 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.¹⁸

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

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

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

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

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

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

Credit: A quantifiable unit of a greater sage-grouse 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

¹⁸ USFWS DRAFT GRSG Mitigation Framework Glossary

¹⁹ USFWS DRAFT GRSG Mitigation Framework Glossary

²⁰ USFWS DRAFT GRSG Mitigation Framework Glossary revised

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

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

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

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

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

Credit Site Eligibility: A set of requirements that a credit project site must meet in order to be able to participate in the 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 greater sage-grouse habitat conservation value from an impact. A debit is a measure of the difference between debit baseline functional acres (see Functional Acre definition) and post-project functional acres multiplied by a mitigation ratio (but not yet multiplied by proximity factor), and are based on the same methods and HQT used to calculate credits.

Debit Project: An anthropogenic disturbance that creates a debit.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

²¹ USFWS DRAFT GRSG Mitigation Framework Glossary

²² USFWS DRAFT GRSG Mitigation Framework Glossary

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

Offset: *See Mitigation.*

Oversight Committee: Formal, representative stakeholder group, which is responsible for overseeing the operations of the 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 management process, while not revealing identifying information of participants.

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

Project Duration: The period of time that the CCS recognizes a credit or debit before requiring that the project be renewed using current HQT and protocols.

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

Debit Project Proponent: an anthropogenic disturbance within Greater Sage-Grouse habitat.

Credit Project Proponent: a credit project within Greater Sage-Grouse habitat.

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

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

Remedial Action Plan: Any corrective measure which the Administrator or a Credit 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's Management Plan.

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

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

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

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

²³ USFWS DRAFT GRSG Mitigation Framework Glossary revised

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

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

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

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

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

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

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

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

Technical Support Provider: Entities with technical expertise in conservation planning and project design, who understand how to use the 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 (described in [Step D3 in Section 3](#)).

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.

²⁴ USFWS DRAFT GRSG Mitigation Framework Glossary

²⁵ USFWS DRAFT GRSG Mitigation Framework Glossary

²⁶ USFWS DRAFT GRSG Mitigation Framework Glossary

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

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APPENDIX B: TOOLS, FORMS & TEMPLATES

Several tools, forms and templates support efficient and effective ongoing operations of the CCS, and are referenced throughout in the CCS Manual.

Table 22 below describes the following products used by the CCS:

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

The current version of the tools, forms and templates in Table 22 are available on the CCS website, or from the Administrator by request:

<http://sagebrusheco.nv.gov/CCS/ConservationCreditSystem/>

Table 20: Tools, forms and templates that support efficient and effective ongoing operations of the CCS

#	Name	Type	Description	Related Step(s)	Responsible Party
1	VALIDATION CHECKLIST	Form	Basic information to provide an initial screen of a credit project’s eligibility to participate in the CCS.	D1.3	Credit Project Proponent
2	LIST OF CREDIT OPPORTUNITIES	Tool	List of credit projects seeking funding and Debit Project Proponents interested in purchasing credits.	D1.4, B1.1	Administrator
3	HABITAT QUANTIFICATION TOOL (HQT)	Tool	A set of metrics (i.e. measurements and methods), applied at multiple spatial scales, to evaluate vegetation, anthropogenic, and environmental conditions related to habitat quality and quantity.	D2, B2.2	Project Proponents
4	MANAGEMENT PLAN	Template	<p>Template that guides a Credit Project Proponent to record the results of HQT outputs, and define specific restoration and management actions over the life of a credit project, including ongoing maintenance and monitoring requirements.</p> <ul style="list-style-type: none"> ▪ Existing project site information, such as a site map and information on current management practices. ▪ Management plan information, including proposed management or restoration practices, anticipated start and end dates, and any management limitations. 	D2.3	Credit Project Proponent

#	Name	Type	Description	Related Step(s)	Responsible Party
5	VERIFICATION CONTRACT	Form	A Project Proponents signs a contract with the Administrator for third-party verification of a credit or debit site.	D3.1, B2.2	Project Proponents
6	CONFLICT OF INTEREST FORM	Form	Submitted by a Verifier to the Administrator about any pre-existing conflicts of interest for verification.	D3.1, B2.2	Verifier
7	VERIFICATION REPORT	Template	Report submitted by a Verifier after site verification attesting to his or her opinion on whether a Credit Developer's Credit Estimate Report matches on-the-ground conditions, or a Buyer's baseline measurement.	D3.3, B2.2	Verifier
8	ANNUAL MANAGEMENT AND MONITORING REPORT	Template	Report submitted by Credit Project Proponents in non-verification years demonstrating that specifications of the Management Plan and annual monitoring requirements have been fulfilled.	D3.3, B2.2	Credit Project Proponent
9	SETT CONSULTATION FORM	Form	Form populated by the Administrator and Debit Project Proponent throughout the SETT consultation process, and containing avoidance and minimization measures, as well as the credit obligation if residual impacts exist, and a summary of credit fulfillment if the CCS is used to mitigate those impacts.	B2.2	Debit Project Proponent
10	VERIFICATION PROTOCOL	Tool	The step-by step description of the verification process for Verifiers to use as guidance.	D3.3, B2.2	Administrator
11	NOTICE OF CREDIT TRANSFER	Form	Notice from the Project Proponents to direct the Administrator to transfer credits between accounts.	D5.1, D5.2, B3.2	Project Proponents
12	ACCOMPLISHMENT REPORTS	Template	Reports provided by the Administrator to Project Proponents outlining project accomplishments.	D5.3, B4.2	Administrator
13	CCS IMPROVEMENTS LIST	Tool	Suggestions for improving the CCS collected throughout the year and maintained by the Administrator, including research and monitoring needs.	A1.1	Administrator
14	CCS PERFORMANCE REPORT	Template	The Administrator generates quantitative information to show CCS accomplishments with respect to overall goals.	A3.1	Administrator
15	FINDINGS & IMPROVEMENT RECOMMENDATIONS REPORT	Template	Synthesizes learning from experience implementing the CCS and from new monitoring and research findings, and describes recommendations of priority CCS improvements for approval by the Oversight Committee	A4.1	Administrator

#	Name	Type	Description	Related Step(s)	Responsible Party
16	RECORD OF DECISIONS	Template	Defines the agreed-to changes, rationale, the party responsible for implementing changes, and the date changes go into effect.	A5.2	Administrator
17	AUDIT REPORT	Template	Independent audit of the CCS operations by the Oversight Committee or third-party.	A5.3	Oversight Committee