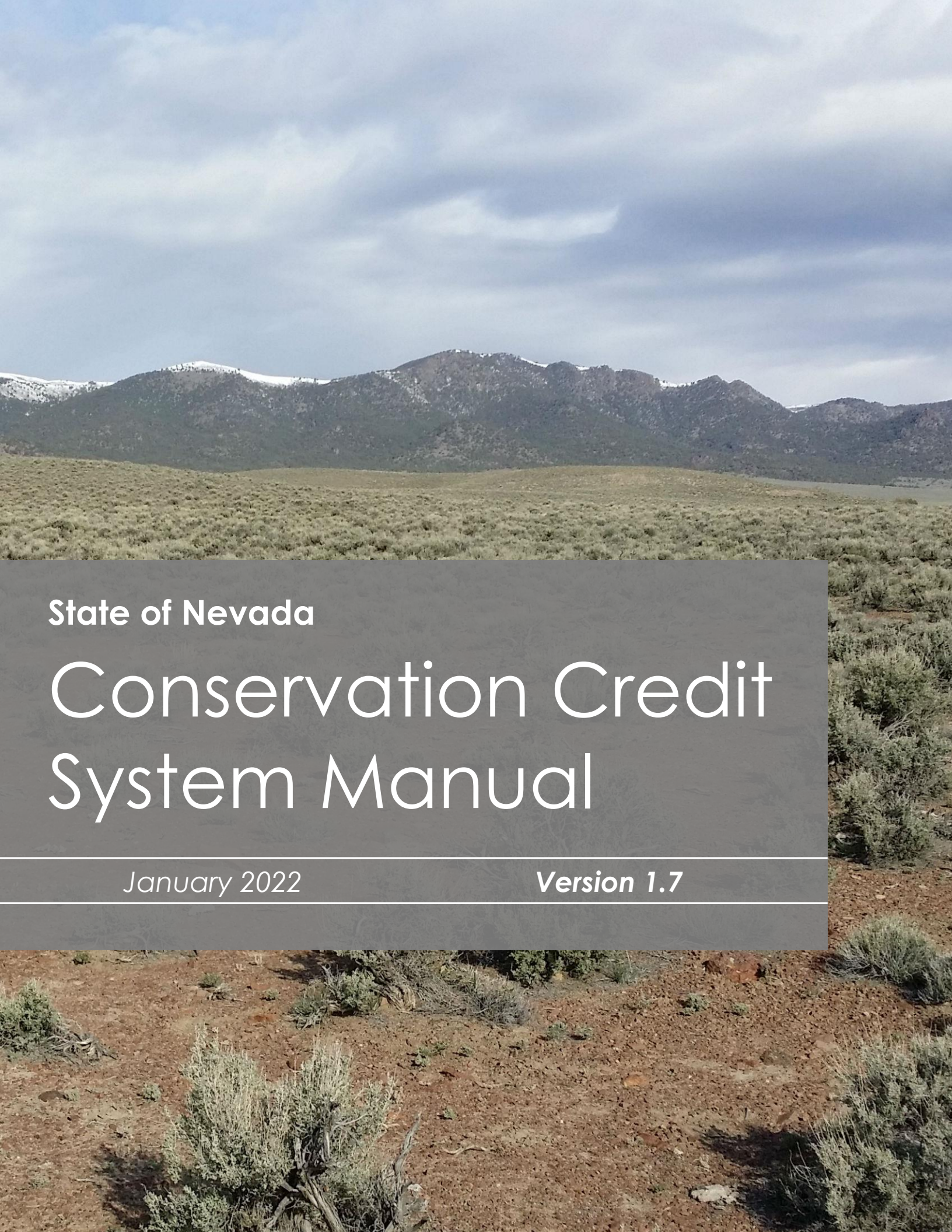

**State of Nevada**

# Conservation Credit System Manual

*January 2022* ***Version 1.7***

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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Prepared by Environmental Incentives, LLC. South Lake Tahoe, CA.

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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

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Environmental Defense Fund, among others. In particular, the Nevada CCS operations were adapted from the Colorado Habitat Exchange Manual Version 0.95. Thus, in accordance with the Open Content License from that document: This content was created in part through the adaptation of procedures and publications developed by Environmental Incentives, LLC (www.enviroincentives.com), Environmental Defense Fund (www.edf.org), and the Willamette Partnership (www.willamettepartnership.org), but is not the responsibility or property of any one of these entities.

## IMPLEMENTATION TIMELINE & STATUS

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

In 2015, the CCS completed a pilot credit project and evaluated several credit and *debit projects* to estimate credits and *credit obligations*, respectively. In addition, the CCS'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 *offset* credit obligations, and govern the CCS. |
| **Section 3: CCS Operations** | Defines the detailed steps, tools and timing to:<br>▪ Quantify credits generated and credit obligations from individual project sites, including fulfilling ongoing *verification* requirements.<br>▪ Obtain credits and use them to mitigate debit projects (credit obligations), or define and report the effectiveness of *management actions* not used to offset impacts.<br>▪ 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 (sagebrusheco.nv.gov/CCS/ConservationCreditSystem/) or through the Administrator.

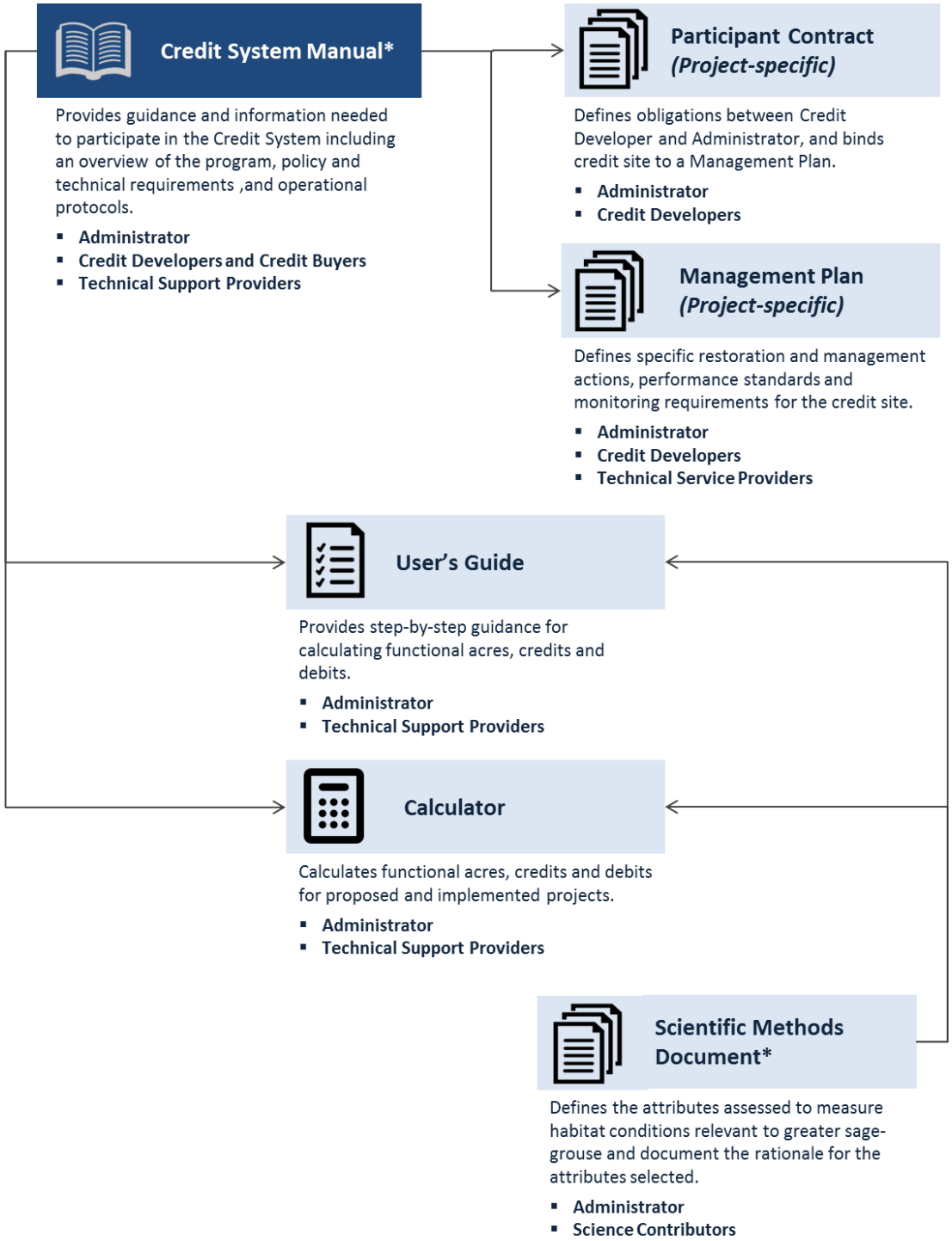


Figure 1: Primary CCS tools and documents (documents with an * define the scope and form of the CCS and changes to these documents will be approved by the Oversight Committee as described in *Step A1.1 in Section 3*)

## 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 numbers[1], 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 pinyon-juniper encroachment. Additionally, anthropogenic disturbances resulting from infrastructure, mineral and energy development, improper grazing practices and other human activity contribute to habitat loss for the species[2].

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 actions[3]. 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 (*debits*), 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.

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

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

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

### GUIDING PRINCIPLES

The 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, and USFS within the BSUs require consultation with the SETT and the appropriate federal agency, as defined in the Nevada Greater Sage-Grouse Conservation Plan[4], with few exceptions. This consultative process will determine when residual unavoidable impacts require compensatory mitigation through the CCS. Private landowners are not required to mitigate anthropogenic disturbances on their land; however, they are encouraged to voluntarily participate in the CCS by generating or purchasing credits. The CCS scope can be expanded in the future to support additional conservation needs and to correspond with revisions to habitat and management maps.

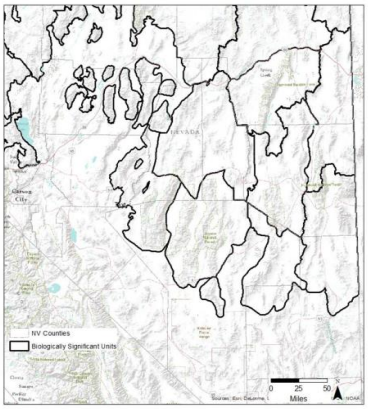

Figure 2: Biologically Significant Units (BSU) map, produced by NDOW

## 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: 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://sagebrusheco.nv.gov/uploadedFiles/sagebrusheconvgov/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.

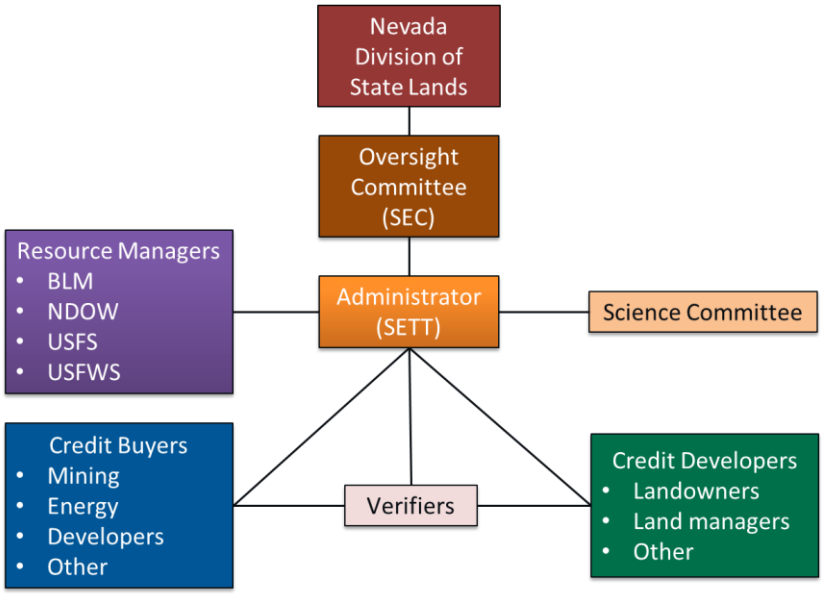

Figure 3: Operational structure of the Nevada Conservation Credit System

**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.

## 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, unless another method is determined by the Sagebrush Ecosystem Council, and made durable for the defined duration of the project through financial assurances and contract requirements to maintain 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.

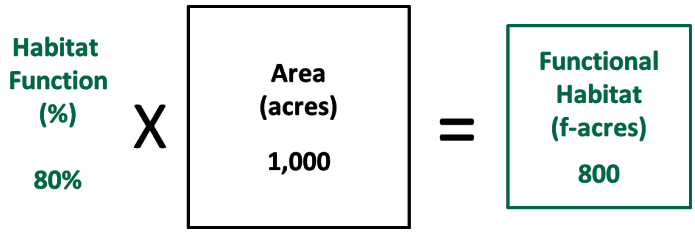

Figure 4: Illustration of functional acre concept

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 2.5.5: 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

### 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:** Quantify 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.

resources necessary for survival and reproduction[5]. 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.

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.

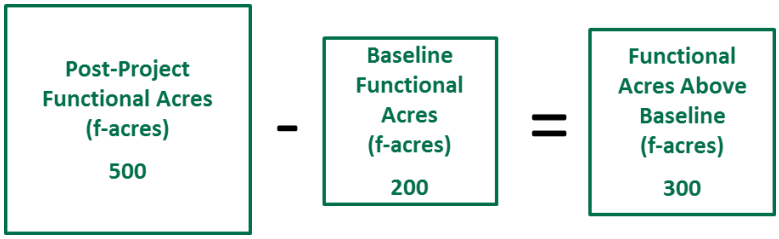


Figure 5: Illustration of functional acres above baseline for a credit project

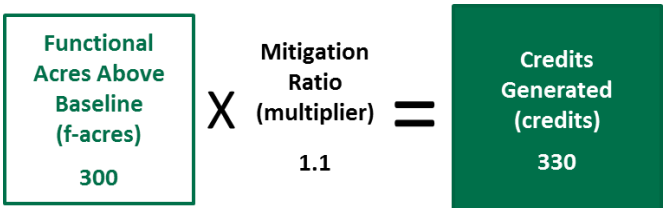


Figure 6: Illustration of the credits generated from a credit project

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*.

[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, 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 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. Debit Project Proponents must 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.

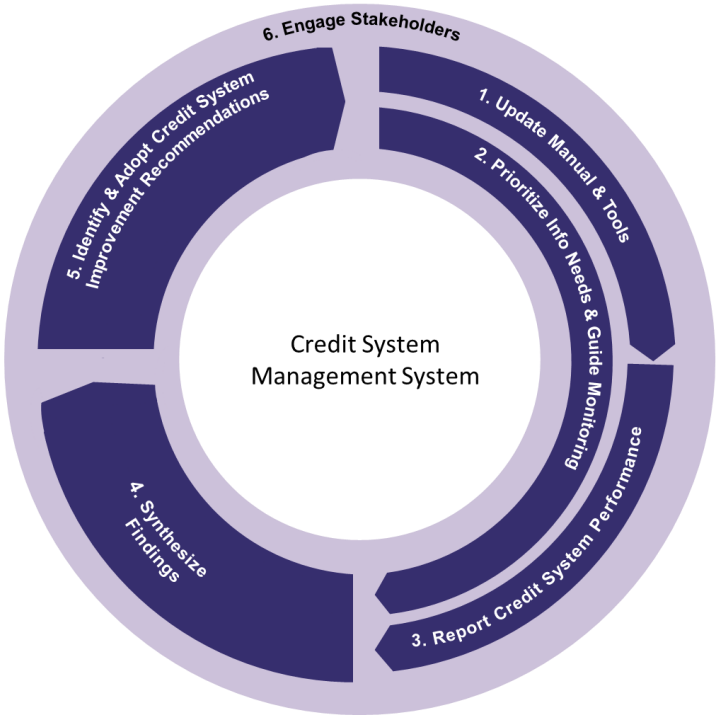


Figure 8: Overview of CCS Management

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** | ▪ The Administrator facilitates day-to-day operations, participant engagement, and program reporting and improvement |
| 2.1.2 | Implementation of State Policy | | ▪ 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 | | ▪ 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 | | ▪ Rigorous accounting system tracks functional acres, credits and debits<br>▪ Annual Performance Report includes CCS performance and program improvements |
| 2.1.5 | Adaptive Management | | ▪ Formal, structured programmatic adaptive management approach that deals with uncertainty and leverages management experience and research results |
| 2.1.6 | Participant Confidentiality | | ▪ As a State-run program, certain information must be disclosed upon request by a member of the public; however, published information protects *participant confidentiality* by aggregating information and removing identification information |
| 2.1.7 | Reserve Account Management and Use of Financial Assurances | | ▪ *Reserve account* serves as an insurance mechanism for the overall CCS by allowing the Administrator to cover invalidated credits until they are *remediated* or replaced<br>▪ Financial assurances are used to remediate unintentional *reversals*, 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** | ▪ Percent function and an amount of functional acres for each seasonal habitat type are generated for each *map unit* within a project boundary, including the area indirectly impacted by debit projects<br>▪ Field sampling must be collected during specific times of the year for breeding and late brood-rearing habitat |
| 2.2.2 | Mitigation & Proximity Ratios | | ▪ Credit and debit ratios determined by management importance and meadow habitat affected<br>▪ 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 | | ▪ 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 | **Credit Project Proponents** | ▪ All sites must be located within the mapped BSUs |
| 2.3.2 | Credit Project Area & Management Action Types | | ▪ 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<br>▪ Credits can be generated from habitat stewardship or habitat restoration |
| 2.3.3 | Credit Site Eligibility | | ▪ Site must be located in the *Service Area*<br>▪ *Participant Contract* with Administrator is required and must attest to ownership or use rights and past stewardship<br>▪ *Additionality* must be demonstrated and post-project habitat functionality must meet minimum habitat function requirements<br>▪ No evidence of an imminent threat of direct or indirect disturbance<br>▪ Necessary financial assurances must be complete<br>▪ Credit Project Proponent must attest to the accuracy of the information |
| 2.3.4 | Calculating Credit Baseline Habitat Function | | ▪ 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<br>▪ |
| 2.3.5 | Developing Credits on Public Lands and Other Land Designations | | ▪ Additional benefit is required above and beyond what would have been achieved by planned and funded public *conservation actions*, existing land designations, and existing regulatory mechanisms. |
| 2.3.6 | Partnering with Federal Programs on Private Lands | | ▪ Additional benefit is required<br>  ▫ **During Federal Contract:** Allocation of credits proportionate to non-federal contribution<br>  ▫ **Following Federal Contract:** Full credit for long-term extensions or agreements following expiration of federal contract |
| 2.3.7 | Stacking Credit Types | | ▪ Credits from other conservation programs can be generated on a CCS credit site if the credit site can demonstrate additional benefits based on specific conservation and management practices |
| 2.3.8 | Integration with CCA/CCAAs | | ▪ 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 | **Credit Project Proponents** | ▪ 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<br>▪ 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 | | ▪ 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 | | ▪ Contribution amount varies and is determined by base contribution, probability of adverse impacts from wildfire, and probability of *competing land uses.* Contribution on for credits generated on public land is set at a standard 25%. |
| 2.4.4 | Credit Release | | ▪ **Stewardship and Enhancement Projects:** One or more habitat function performance standards triggers credit releases<br>▪ **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 | | ▪ 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 | | ▪ Financial instrument contains sufficient funds for management of credit project<br>▪ 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 | **Debit Project Proponents** | ▪ All sites must be located in or within 6 km of mapped BSUs |
| 2.5.2 | Debit Project Types | | ▪ Anthropogenic disturbances to greater sage-grouse habitat on state and federal lands within the current BSUs |
| 2.5.3 | Mitigation Hierarchy and Permit Requirements | | ▪ Credits are used to offset debits that occur when disturbances are proven unavoidable and minimization does not provide for complete *direct or indirect impact* avoidance<br>▪ Debit projects must fulfill regulatory requirements and seasonal restrictions of relevant public agency permitting process |
| 2.5.4 | Debit Project Duration | | ▪ 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 | | ▪ Local-scale, pre-project habitat function combined with site-scale, pre-project habitat function |
| 2.5.6 | Debit Project Quantification and Verification | | ▪ Debits quantification before construction, verification at time when debits are reduced or end, and periodic spot checks |
| 2.5.7 | Credit Investment Strategies | | ▪ 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 seven ex-officio members representing specific State and Federal agencies.

The SEC is responsible for overseeing the operations of the CCS, making high-level CCS management decisions, and conducting other critical ongoing duties described in Table 2. The Oversight Committee or a subcommittee of the Oversight Committee resolves policy and regulatory disputes that cannot be resolved independently or in consultation with the Administrator. If there is a disagreement on a policy or regulatory decision, the disputer may request that their dispute be considered for a scheduled Sagebrush Ecosystem Council meeting. The disputer and Administrator will present information relevant to the issue and the SEC will issue a final determination.

Table 2: Key Responsibilities of the Oversight Committee

| | Oversight Committee Key Responsibilities |
|---|---|
| Ensure Program Performance | ▪ 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.<br>▪ Oversees Administrator's implementation of the CCS policy and technical components.<br>▪ 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.<br>▪ 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.<br>▪ Settles disputes between the Project Proponent and Administrator |
| Ensure Programmatic Adaptive Management | ▪ Considers and adopts CCS improvement recommendations provided by the Administrator and participants. Specifically approves any changes to the CCS Manual and HQT.<br>▪ 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.<br>▪ Evaluates and approves adaptive management actions. |

| Oversight Committee Key Responsibilities | |
|---|---|
| Participant Oversight | ▪ Resolves policy and regulatory disputes that cannot be resolved independently or in consultation with the Administrator. |

## Administrator

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

Table 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 | ▪ Manages day-to-day CCS operations.<br>▪ Manages all CCS tools, guidance and forms.<br>▪ Manages credit accounts and the complete ledger of all credits and debits.<br>▪ Manages accounting of reserve account credits. |
| Credit Project Proponent & Debit Project Proponent Engagement | ▪ Responds to inquiries of interest from Project Proponents, connecting them to relevant resources as desired.<br>▪ Ensures any necessary outreach to Project Proponents occurs. |
| Adaptive Management & Reporting | ▪ Implements CCS adaptive management process.<br>▪ Compiles Improvement Recommendations throughout the year, develops the annual Synthesis of Findings, and develops the Annual Performance Report.<br>▪ Brings products developed through the adaptive management process to the Oversight Committee for consideration.<br>▪ 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 | ▪ Performs quality control review on information submitted by Verifiers and CCS participants.<br>▪ Ensures programmatic compliance of the CCS with relevant USFWS, BLM, Nevada Department of Wildlife (NDOW) and other relevant agency policies.<br>▪ Works with Credit Project Proponents to implement corrective actions through *remedial action plans* when appropriate in cases of intentional and unintentional reversals.<br>▪ Enforces contract compliance and any associated penalties in cases of intentional reversals. |
| Financial & Contracting Support | ▪ Oversees management of funds, contracts, and partnerships for monitoring.<br>▪ Confirms financial assurances are in place for credit projects.<br>▪ May facilitate credit auctions or Request for Proposals for Credit Buyers.<br>▪ May administer contract payments between Credit Buyers and Credit Project Proponents. |
| Science & Technical Support | ▪ Creates and gains input from the Science Committee on new scientific information to be incorporated into the CCS's tools and processes.<br>▪ Defines questions to guide monitoring and research investments, and Science Committee input.<br>▪ Trains and certifies Verifiers.<br>▪ 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 ecosystems[6].

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

### 2.1.3 FEDERAL REGULATORY PREDICTABILITY

The CCS is designed to accommodate different regulatory mechanisms to ensure that efforts taken to facilitate conservation of the 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] Additionally, the federal agencies must comply with NAC 232.400 – 232.480 which require mitigation for disturbances on public lands.

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

[6] The establishment of the CCS by the Sagebrush Ecosystem Council is outlined in State statue (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 Framework[8] (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 QA must be completed and signed 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 the signed QA. In addition, the same version of the CCS Manual and HQT must be used by the project.

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 Management Plan Form Section B 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 Management Plan Form Section B 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 Management Plan Form Section B.

Exceptions - The following improvements can be utilized by prior versions:

| Improvement | Who it Affects | Version |
|---|---|---|
| Uplift Improvement (Pro-rating/ Baseline Adjustments) | Credit Projects | 1.6 |

### 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 1.5: 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 1.5: 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.

#### 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 (signed Management Plan is in place) that are providing greater sage-grouse benefits and have not been used to offset debit projects. The reserve account serves as an insurance mechanism for the overall CCS. Each credit transaction contributes a percentage of credits generated based on the probability of the credits being invalided as described in *Section 2.4.3: Reserve Account Contribution*.

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

#### Reserve Account Management

The Administrator manages the reserve account and uses credits in this reserve account to temporarily cover credits invalidated due to intentional or unintentional reversals as described in this section. Reserve credits withdrawn to cover invalidated credits are intended to revert back to the reserve account when possible, when the invalidated credits have been replaced either through the use of financial assurances associated with the invalidated credits, or natural site recovery. Financial assurances may be used to purchase credits elsewhere or used for site remediation. Term credits in the reserve account are removed from the reserve account when the term of the credits has expired.

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

The Administrator reviews the balance of the reserve credits at least annually. The Administrator at any time may propose adjustments to the required reserve account allocation to be approved by the Oversight Committee as part of the CCS 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.

## Credit Project Failure

The Credit Project Proponent or Administrator must notify the other party as soon as possible and not later than 30 days following the occurrence of an event that may cause a finding of Credit Project failure. This may include but is not limited to failure to execute the required Management Actions according to the terms and conditions of execution or the Administrator determines that site-specific performance measures are not maintained based on an evaluation of the Management Plan, field data, and the Habitat Quantification Tool (taking into account natural climate variability). The SETT will coordinate with the Credit Project Proponent to consider whether adaptive management measures can be implemented to remediate a Credit Project prior to concluding there has been a Credit Project failure.

If the Credit Project Proponent and Administrator cannot agree as to whether there has been a Credit Project failure or the determination of whether it was an Intentional or Unintentional Reversal, then the Project Proponent may request an appeal as specified in Section 2.1.1.Depending on the specific cause and circumstances of a credit project failure, invalidated credits can be either temporarily or permanently replaced using a combination of the reserve account and financial assurances, as illustrated in **Error! R eference source not found.** below.

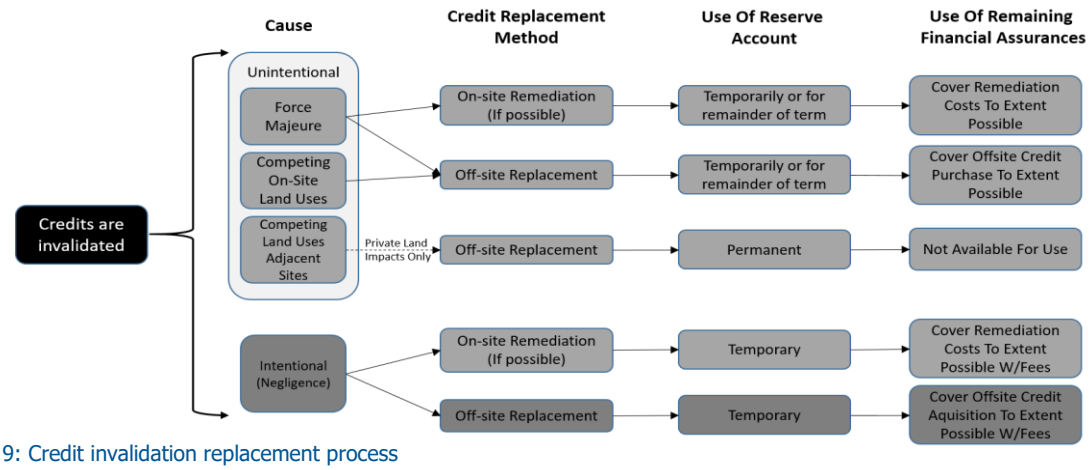


Figure 9: Credit invalidation replacement process

## Unintentional reversals

### *Force Majeure*

When credits generated by a credit site are invalided by an extraordinary event or circumstance beyond the control of the Credit Project Proponent, such as wildfire, the Credit Project Proponent is not liable. Financial assurances may be used in these cases by the Administrator to replace the invalided credits. The Administrator will withdraw credits initially from the reserve account to cover the invalidated credits. In cases where the credit site can be fully or partially recovered within a reasonable amount of time and cost, the Credit Project Proponent may develop a remedial action plan that is approved by the Administrator and paid for with the financial instruments secured for long-term management and unintentional reversals. See *Section 2.4.6: Financial Assurances* for additional information on financial assurance requirements. If only a portion of the credits are recovered following a *force majeure* event, then payments from financial instruments secured for long-term management and unintentional reversals are reduced according to the amount of credits actually being generated on the ground. The Administrator may use the remaining amount in the project site's financial instruments to acquire credits elsewhere. Any dedicated reserve account credits are returned to the reserve account if the invalidated credits are remediated, assuming all requirements of those reserve account credits are still being met.

In cases where the entire credit site is affected, or both the Administrator and the Credit Project Proponent agree that the site will not be recovered within a reasonable amount of time and cost, the Credit Project Proponent has the option to cancel the contract without penalties, but retains the ability to re-enroll the site as a different project at a later time. If the contract is canceled, payments to the Credit Project Proponent cease immediately and the Administrator uses the remaining amount in the project site's financial instrument for long-term management and unintentional reversals to acquire credits from a different credit site.

### *Competing On-site Land Uses*

In the case of an unintentional reversal due to competing land uses on-site, such as *split estate* minerals development, the Administrator will withdraw credits from the reserve account to cover the invalidated credits at no additional cost to the Credit Project Proponent. Similar to the policies described for force majeure events, if the impact of the competing land use reduces credit generation on a credit site, payments are reduced according to the amount of credits actually being generated. The Administrator uses the remaining funds in the project 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 acquire credits from a different credit site.

### *Competing Land Uses on Adjacent Sites*

There may be cases where verification shows that competing land uses on sites adjacent to enrolled credit project sites have occurred, which impairs the ability of the enrolled credit project site to generate benefit for the species. A debit project qualifies as competing land use when the debit project signs and submits the Debit Review Form to the SETT with proof of the start of NEPA (e.g., project initiation form) or state equivalent on state-owned land. The effect of competing land uses on sites adjacent to the enrolled credit project sites are determined using the anthropogenic disturbance curves defined in *Section 3.3.1: Cumulative Anthropogenic Disturbances* in the *HQT Scientific Methods Document*. These occurrences are out of the direct control of the Credit Project Proponent. Therefore in cases of unintentional reversals on private lands due to impacts from adjacent sites (public land), valid credits (i.e., have a signed Management Plan) that become invalidated by the disturbance will not impact the credit producer's total credits. Instead, the impacted credits will be replaced by the debit project proponent prorated for the remaining term. If no term is in place, then the offset will be the same term as the Debit Project. When the

SEP is made aware of impacts occurring from adjacent sites which are not required to mitigate (i.e., private land), reserve credits from the appropriate reserve account will be used to offset those impacts.

#### Intentional Reversals

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

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

### 2.1.10 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 2.5.5: 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 reproduction[9]. 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.

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.

[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).

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 2.5.5: 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 phonological 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, PROXIMITY RATIOS, AND CREDIT PHASING

A mitigation ratio is applied to the functional acre difference between baseline functional acres and post-project functional acres for each map unit within a credit or debit project respectively. See *Section 2.2.1: Habitat Quantification Tool* for additional information on calculating functional acres, and guidance for determining baseline functional acres is provided in *Section 2.3.4: Calculating Credit Baseline Habitat Function* and *Section 2.5.5: 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 2.5.5: Calculating Debit Baseline Habitat Function* for determining baseline for credit and debit projects respectively.

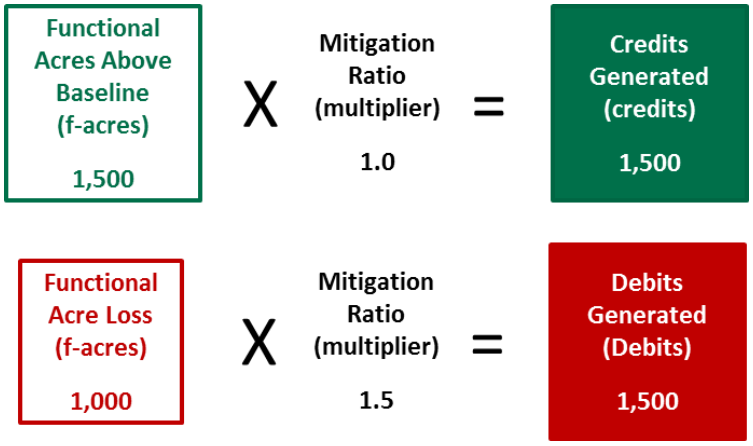


Figure 10: Illustration of calculation of debit and credits

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. 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.

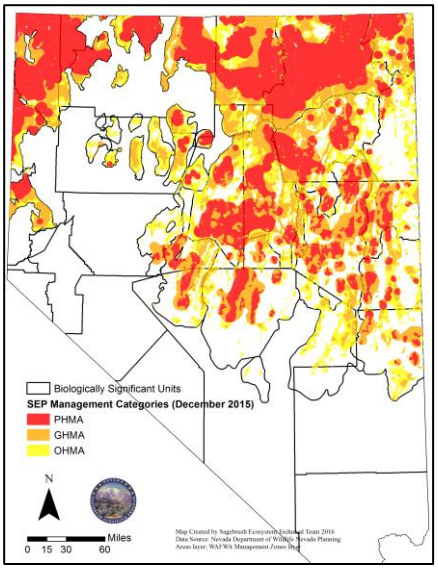


Figure 11: Sagebrush Ecosystem Program's Management Categories map

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 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 |

### Pinyon-Juniper (P/J) Removal Factors

When included as part of credit projects, areas with pinyon-juniper encroachment into sagebrush habitats will require complete removal of pinyon-juniper where likely to benefit sage-grouse populations. P/J removal on private land must be included with a private land preservation project; while on public lands, due to use limitations, P/J removal can be completed as its own credit project. Benefits to 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 3.2.3.: Pinyon-Juniper Removal* in the *HQT Scientific Methods Document* for additional information.

The P/J removal factor values from Table 8 will be applied to the local-scale habitat function for areas phase I and II P/J 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: P/J 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

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

## 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.

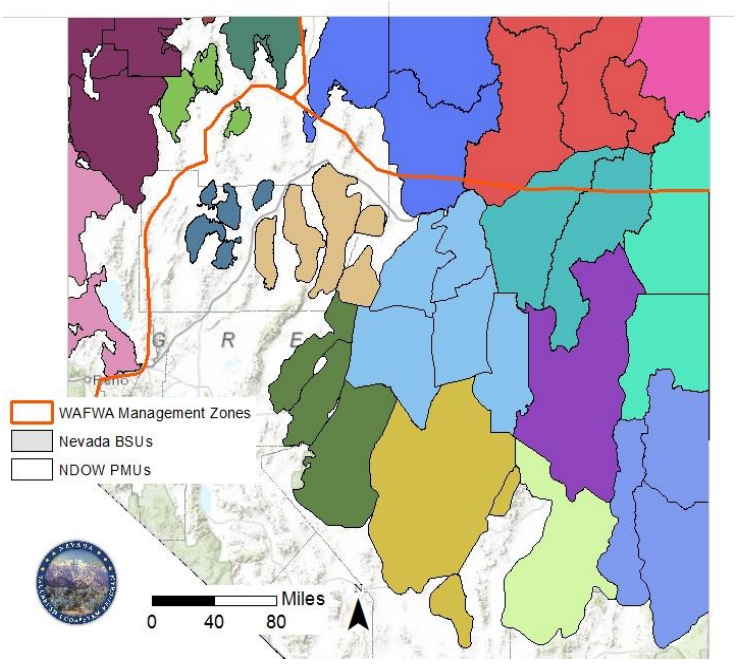


Figure 12: WAFWA Management Zones, Nevada Biological Significant Units and NDOW Population Management Units

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 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

$$Credit\ Obligation = Debits\ * Proximity\ Factor\ Value$$

### Phasing in Credit Purchasing: Anticipated to be discontinued by 2029

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

## 2.2.3 CREDIT 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.

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** |

### 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 of the indirect effects from the specific anthropogenic feature. The project proponent is responsible for completing a minimization assessment which will contain the minimum eligibility criteria (provided below), including the need to delineate and declare the functional-acres affected by the minimization measure. This requirement will objectively and consistently define the functional-acres affected by the minimization measure to greatly narrow the scope of impact from the minimization measure. The assessment of the proposal is completed by Administrator (SETT) with potential consultation from the Technical Review Group, and approval is provided by the SEC following the process outlined below.

#### Minimum Eligibility Criteria

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

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

#### Assessment & Approval Process

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

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

## 2.3 CREDIT PROJECT REQUIREMENTS & ADDITIONALITY PROVISIONS

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

### 2.3.1 CREDIT SERVICE AREA

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

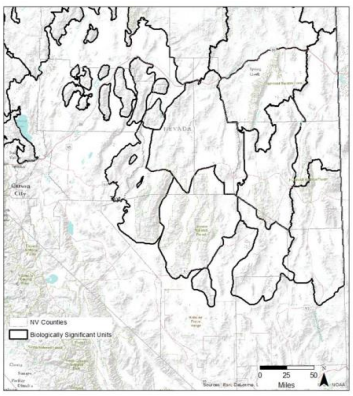

Figure 13: CCS service area

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

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

### 2.3.2 CREDIT PROJECT AREA AND MANAGEMENT ACTION TYPES

The area of a credit project may be made up of

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

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

1) **Habitat Stewardship** – Maintenance of high-quality habitat currently used by or near habitat used by greater sage-grouse, or manipulation of existing habitat to increase specific habitat functionality. Habitat stewardship will still require additional commitments depending on the status of the project area and the level of management already in place. For more details on these commitments, see the latest Management Plan template and additional resources. An example project could be placing a conservation easement on existing high-quality habitat and committing to maintaining that high quality for the full duration of the credit project. Other example projects could include improvements to medium quality habitats through implementation of prescribed grazing plans

and/or removal of encroaching P/J on existing rangeland, and committing to maintaining the post-project habitat function for the duration of the credit project.

2) **Habitat Uplift** – The reestablishment of ecologically important habitat and other ecosystem resource characteristics and functions at a site where they have ceased to exist or where they exist in a substantially degraded state. Examples include the reestablishment of useable greater sage-grouse habitat through the removal of pinyon-juniper or anthropogenic disturbances on the landscape, reduction of cheatgrass in quality sage-grouse habitat, or restoration of a wet meadow that is currently not functioning properly.

### Riparian Properly Functioning Condition Assessment

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

### 2.3.3 CREDIT SITE ELIGIBILITY

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

#### Service Area

All credit sites must be located within the CCS Service Area. See *Section 2.3.1 Credit Service Area* consideration for additional information.

#### Ownership & Stewardship

Credit Project Proponents must attest to the current ownership, tenure or use rights, control of water rights, and past land management and land uses associated with the entire credit site over the previous 10 years in order to be eligible to generated credits from the credit site. In order to generate credits for a project on federal lands, enhancement or restorative actions must be completed. Credits will be determined based on the measurable habitat uplift achieved, as opposed to for preservation of the project area. Credits can also be awarded for removal of anthropogenic disturbances within a private lands stewardship project or within a public lands right of way through assessment of the reduction on indirect impacts.

#### Minimum Performance Standards

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

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

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

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

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

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

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

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

#### Additionality

Credit Project Proponents must demonstrate that the performance standard defined for the credit site in the Management Plan exceeds what is otherwise required by federal, state, and local regulations and statutes. Credit Project Proponents must also describe how federal funds have been previously or are currently used to support the development and management of the credit project site. Credit Project

Proponents must demonstrate that the credit project site will provide additional benefit to the species above and beyond those generated through the application of existing federal funds or participation in other credit markets. See *Sections 2.3.5* through *2.3.8* for additional information on additionality provisions.

### No Imminent Threat

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

### Site Protection

Although different site protections are expected on private and public lands, Credit Project Proponents must show evidence of site protection for the duration of the contract period on private lands. The only exception is when anthropogenic disturbances are removed on public lands rights of way to generate credits without the expectation for maintenance and monitoring into the future. Regardless, a Participant Contract is required for all credit projects, and a Participant Contract that commits the Credit Project Proponent to maintain habitat function above the minimum performance standard is the minimum level of site protection for credit projects that generate credits on land under the control of the Credit Project Proponent. The Participant Contract includes contractual language and references any other legally binding agreements, such as conservation easements. Where lands are located interspersed with public land and fencing does not enable control over multiple grazing permittees, it will be made clear to credit developers that the responsibility for habitat quality remains with the credit developer regardless of the source of negative impacts due to grazing. The credit developer must undertake reasonable actions to prevent the unlawful entry and trespass by people, feral or estray horses and livestock whose activities may degrade the functional values as quantified by the HQT calculation. In these circumstances, eligibility will be at the discretion of the administrator.

### Financial Assurances

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

### Accuracy

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

## 2.3.4 CALCULATING CREDIT BASELINE HABITAT FUNCTION

Credit project baseline habitat function is the starting point from which the functional acre difference relative to post-project functional acres is calculated. The difference between a project's post-project functional acres and the baseline functional acres are multiplied by the mitigation ratio to determine the credits generated for each map unit within a credit project. The resulting sum of the functional acres of

the map units is the total credits quantified for the project. See *Section 2.2.2: Mitigation and Proximity Ratios* for additional information on determining mitigation ratios.

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

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

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

Table 11: Site-scale regional standard habitat functions

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

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

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

Table 12: Example credit baseline habitat function calculation

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

## Credit Baseline for Land Benefited from Removal of an Anthropogenic Feature

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

[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.

### Credit Baseline for Uplift

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

### Additional Credit Baseline Habitat Function Considerations

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

## 2.3.5 DEVELOPING CREDITS ON PUBLIC LANDS AND OTHER DESIGNATIONS

The CCS allows for credits to be generated on public lands[11] or other lands already under permanent conservation restrictions (e.g. existing conservation easements) for mitigation purposes if the proposed credit project would add additional benefit above and beyond what would be achieved under the existing land designation or planned and funded conservation actions. Credit projects on public land are able to meet additionality requirements of the CCS if the Credit Project Proponent can demonstrate that verifiable benefit using the HQT can be attained by the credit project. Credits will be determined based on the measurable habitat uplift achieved, as opposed to for preservation of the project area.

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

### NEPA Authorization

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

### Project Types

[11] "Public land" in this context refers to land owned by governments and managed for public benefit. The SETT anticipates that a majority of credit development on public land will occur on BLM and Forest Service managed land. Credit projects on other public lands (e.g., state, county, etc.) may be possible depending on authorizations.

The CCS will initially focus on improvements related to P/J removal and meadow/riparian habitat. Further project types may be approved as quantification and administrative methods are developed.

### Pinyon-Juniper (P/J) Removal

For credit projects that remove pinyon juniper on public lands, the calculation of credits will be similar to P/J removal on private lands with the exception that the resulting credits will be calculated using a desktop analysis using the Habitat Suitability Index in lieu of field data collection. See Section 2.2.2: Pinyon-Juniper Removal Factors and Section 3.2.3: *Pinyon-Juniper Removal* in the *HQT Scientific Methods Document* for additional information. Credits resulting from the desktop analysis will be subject to the HQT version control, and may be released subsequent to the credit establishment plan being approved by the SEC and when all treatments outlined in the plan have been completed. The credit establishment plan may include phased work plans and will include a credit release schedule. P/J removal projects will include a re-treatment in 10 year intervals with a re-treatment 10 years prior to the term end as the final treatment. For example, a removal project with a 30 year term will include the initial treatment, and re-treatments in years 10 and 20. Financial assurances (e.g., bonding) will be required to ensure the completion of a re-treatment plan. For removal projects occurring in phase 2 juniper, a one-time prophylactic herbicide treatment for invasive weed establishment will be required if the land management agency and SETT conclude a treatment is warranted.

PJ removal projects that have a term of 10 years may be implemented by exploration companies by performing an initial removal to fulfill credit obligations of 10 years. Exploration projects that have terms of greater than 10, and less than 20 will be required to do a re-treatment at year 20. 10 year PJ removal projects will still be required to do a prophylactic herbicide treatment in phase 2.

### Meadow Improvements

Meadow habitat improvement credits will not be calculated differently on public lands. Approved projects will need to demonstrate a high degree of confidence that they will be maintained in cooperation with authorized uses, compliance with land use plans, and anticipated infrastructure. Projects planned in meadow areas must document the cooperation of grazing permittees in the form of a cooperative management/monitoring agreement included within the credit Management Plan.

### Restrictions

The Sagebrush Ecosystem Council desires initially that credits generated on public land from P/J removal be limited in comparison with credits generated on private lands. Initial projects will thus be required to attempt a negotiation for a private credit purchase and provide documentation of negotiations before submitting a plan to develop credits on public land. Additionally, if projects are proposed that result in over 25% P/J removal, the council may not approve the project

## 2.3.6 ANTHROPOGENIC DISTURBANCE REMOVAL ON PRIVATE AND PUBLIC LANDS

Removal of an anthropogenic disturbance (defined in the CCS), which can result in a greater credit yield, is eligible on private lands within the footprint of credit projects that are also committed to preservation of habitat. In these cases, credits can also be awarded for reduction of indirect impacts on public lands with the HSI used in lieu of field data to assess the change in the value of credits before and after the removal on public lands, of which the difference will be awarded.

Removal of an anthropogenic disturbance (defined in the CCS) is eligible on public lands rights of ways with credits awarded for reduction of indirect impacts on public lands with the HSI used in lieu of field data to assess the change in the value of credits before and after the removal on public lands, of which the difference will be awarded. These credits can only be generated by the utilities, and cannot enter the market other than for use offsetting their own projects. These credits can be used for a maximum term of

50 years, after which they are retired. Program requirements for additionality must be met. Outside of removing anthropogenic disturbance features and completing actions necessitated to coincide with the removal (e.g., reclamation or restoration), further maintenance, monitoring, and financial assurances are not required. However, uncertain durability associated with the habitat in these instances has resulted in three times the reserve account contribution requirement for these types of projects.

### 2.3.7 PARTNERING WITH FEDERAL PROGRAMS ON PRIVATE LANDS

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

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

#### Prior to a Federal Contract

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

#### During an Existing Federal Contract

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

#### Following a Federal Contract

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

### 2.3.8 STACKING CREDIT TYPES

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

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

### 2.3.9 INTEGRATION WITH CCA/CCAAS

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

## 2.4 CREDIT DURABILITY PROVISIONS

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

### 2.4.1 CREDIT SITE PROTECTION

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

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

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

### 2.4.2 CREDIT PROJECT DURATION

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

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

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

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

### 2.4.3 RESERVE ACCOUNT CONTRIBUTION

A percentage of credits generated by a credit projects are transferred into the reserve account at the time that credits are transferred to a Credit Buyer's account. Credits in the reserve account may be used to temporarily cover credits invalidated from intentional and unintentional reversals in order to ensure there are always more credits than debits in the CCS. The percentage of credits that a credit project contributes to the reserve account is determined by the probability of the credits on that site becoming invalidated unintentionally, which creates an incentive for the Credit Project Proponent to reduce the risks that could invalidate those credits. The use of the reserve account and financial assurances is defined in *Section 2.1.9: Reserve Account Management and Use of Financial Assurances*.

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

Equation 3: Total reserve account contribution percentage equation

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

Equation 4: Total reserve account contribution percentage equation

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

## Base Contribution

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

## Probability of Adverse Impacts from Wildfire

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

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

### Resistance & Resilience

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

The resistance to invasive annual grasses and resilience following wildfire is determined using a score sheet that is adapted from the Miller et al. 2014 (Score Sheet for Rating Resilience to Disturbance, Resistance to Annual Invasive Grasses, and the Suitability of an Ecological Site or Type for Treatment) field guide and score sheet for use by the CCS.[13]

**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**<br>Deep-rooted perennial grasses (DRPR) potentially dominant in shallow to deep soils >10 in.<br><br>Sandberg bluegrass (POSE) potentially dominant in very shallow soils <10 in.<br><br>Perennial forbs (PF)<br><br>Invasive annual grasses (IAG) | **0 =** DRPG and POSE scarce to severely depleted (DRPG < 2-3/m$^2$) and less than 5% foliar cover<br>**3 =** DRPG on soils >10 in. scarce, but POSE of PF >50% foliar cover<br>**6 =** DRPG on soils >10 in. depleted (2-3/m$^2$ or about 5-10% foliar cover) and/or co-dominant with IAG, **or** on soils < 10 in. POSE and PF 5-15% foliar cover and co-dominant with IAG.<br>**9 =** DRPG and PF dominant on soils > 10 in. **or** POSE and PF dominant on soils < 10 in. | | | | | |
| | **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

[12] 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.

[13] 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.

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

### 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

| Resistance and Resilience Score | Ability to Control Wildfire Score: High | Moderate | Low |
|---|---|---|---|
| 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 invalided 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

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

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

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

| Minimum Competing Land Use Related Requirements | Contribution Percentage |
|---|---|
| Participant Contract 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% |

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

### Reserve Account Contribution for Anthro. Disturbance Removal on Public Lands ROW

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

### Reserve Account Contribution for Developing Credits on Public Lands

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

## 2.4.4 CREDIT RELEASE

The CCS uses credit release schedules to manage risk and uncertainty by releasing credits only when specific performance standards are met. Credit releases occur when a new milestone of performance standards, in terms of habitat function, is achieved on the credit site that warrants an increase in the amount of credit generated on that project site. Credit releases require a third-party verification, defined in *Section 2.4.5: Credit Project Quantification, Monitoring, Qualitative Assessments, and Verification*. Specific performance standards are defined in each credit project's Management Plan, and each credit project will

have a unique credit release schedule based on those performance standards. A credit release schedule is different than credit payment schedules described in *Section 2.4.6 Financial Assurances*.

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

### Stewardship Management Actions

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

### Uplift Management Actions

The term "uplift" is meant to serve as an umbrella term which serves to refer to any efforts expended to improve habitat. The term uplift includes enhancement actions which are meant to capture habitat improvements associated with stewardship credit projects and includes a wide variety of actions. The term uplift also includes restoration actions, which in the CCS will be narrow in scope and targeted to a few prioritized actions not associated with a stewardship project.

#### Enhancement Actions

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

The reserve account contribution will be calculated in the same manner as the associated stewardship project.

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

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

Where:

$C_p$ = Number of prorated credits available for offsetting disturbance

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

$T_d$ = Term of debit project

C = Number of uplift credits generated

More information on matching credits with debits can be found in Section 2.5.4.

### Restoration Actions

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

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

Table 15 below illustrates an example credit release scheduled with one third of credits released based on management actions, and the remaining two thirds released in two additional credit releases. Upon verifying conditions to release all credits anticipated by the credit project, all credits are expected to be maintained for the full duration of the credit life, according to the performance standards defined in the Management Plan and confirmed in verification and annual management and-monitoring reports. Due to the complexities of tracking credits and timelines, if multiple credit releases are required, prorated timelines will not be available to projects which utilize this type of credit release structure.

Table 15: Example Credit Release Schedule for a Restoration Project

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

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.

### Credit Release for Projects on Public Land

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

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

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

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

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

### Credit Quantification, Monitoring, Qualitative Assessment, and Verification Schedule

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

1. HQT Quantification before first credit release (Verifier)

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

### Before first credit release

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

### Before additional credit releases

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

### Annual Management & Monitoring Report (Credit Project Proponent)

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

### Five Year Qualitative Assessments (Administrator)

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

### Every 15th year

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

### Periodic spot checks and audits

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

## Credit Variability & Verification Results

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

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

If verification shows that a credit site is performing below the credit variability tolerance and is therefore not meeting performance standards, the Credit Project Proponent must work with the Administrator to

determine a remedial action plan. Credit projects outside of the credit variability tolerance may be subject to the CCS's processes related to credit reversals. See *Section 2.1.7: Reserve Account Management and Use of Financial Assurances* for more information on how credit reversals are addressed.

### Verifier Selection

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

## 2.4.6 FINANCIAL ASSURANCES

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

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

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

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

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

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

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

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

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

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

Financial instruments established for long-term management and monitoring must be accompanied by contract terms that ensure funds intended for the Credit Project Proponent are available to the Administrator in the case of an unintentional reversal, so that all remaining funds for long-term management and monitoring can be used to remediate the credit site or to purchase credits from a different site, as defined in *Section 2.1.9: Reserve Account Management and Use of Financial Assurances*. These payment terms align the incentives of the Credit Project Proponent and the Administrator by sharing the financial risk for ongoing performance.

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

### Financial Assurances for Intentional Reversals

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

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

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

long-term management and monitoring are available to the Administrator. See *Section 2.1.9: Reserve Account Management and Use of Financial Assurances* for additional information on how the Administrator will use the reserve account and financial assurances in the case of intentional reversals.

## 2.5 CREDIT OBLIGATION PROVISIONS & CREDIT INVESTMENT STRATEGIES

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

### 2.5.1 DEBIT SERVICE AREA

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

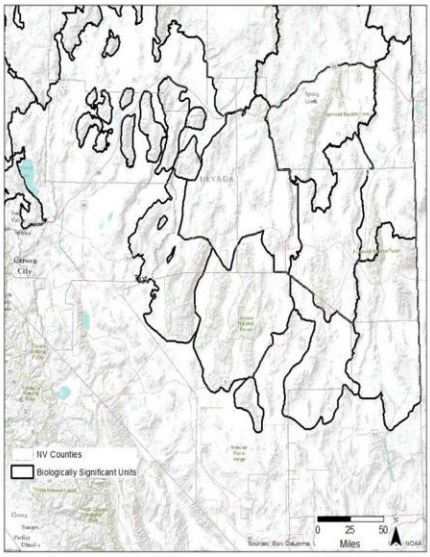

Figure 16: Greater sage-grouse service area

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

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

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

- Is performed by a federal agency, state agency, local government or utility for a public purpose; and
- Does not require any additional approval from the Federal government or the State.

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

### 2.5.2 DEBIT PROJECT TYPES

Proposed anthropogenic disturbances to habitat on BLM, USFS, and State of Nevada lands within the Service Area require consultation with the SETT and the appropriate government agency, as defined in the Nevada Greater Sage-Grouse Conservation Plan. Anthropogenic disturbances are considered debit projects when they are proven to be unavoidable, and when minimization does not provide for complete direct or indirect impact avoidance[15]. A debit project may be a new anthropogenic disturbance, an expansion in the operation of an existing anthropogenic disturbance, or an extension in duration of an existing anthropogenic disturbance.

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

- Mineral development and its associated infrastructure;
- Mineral exploration, which includes exploration associated with mining, oil and gas, renewable, and other CCS defined anthropogenic disturbances;
- Renewable and nonrenewable energy production, transmission, and distribution and its associated infrastructure;
- Paved and unpaved roads and highways;
- Cell phone towers;
- Landfills;
- Linear Rights of Way (e.g., pipelines, fiber optic cables, etc.);
- Residential and commercial subdivisions;
- Activities undertaken pursuant to special use permits and right-of-way grants; and
- Other infrastructure development.

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

**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.***

### 2.5.3 MITIGATION HIERARCHY AND PERMIT REQUIREMENTS

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

The CCS is intended to be used in the context of state and federal policies that require the full mitigation hierarchy sequence (e.g. avoidance, minimization, compensatory mitigation). Credits are used to offset debits that occur when disturbances are proven unavoidable, and minimization does not provide for complete direct or indirect impact avoidance.[16] Pursuant to Nevada Administrative Code 232.400 – 232.480, debit projects permitted through federal and state agencies will use the CCS to purchase credits that fulfill their compensatory mitigation obligations prior to development of the debit project, unless pursuing phasing in credit purchasing (see Section 2.2.2 Mitigation, Proximity Rations, and Credit Phasing).[17]

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

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

### 2.5.4 DEBIT PROJECT DURATION

Debit project duration is the length of time that the project is anticipated to impact habitat function or in perpetuity. For impacts that are anticipated to return to pre-project habitat function, an additional set period of time beyond the length of time that the project is anticipated to impact habitat function is required to allow the species to begin to use the site. Unless otherwise stated, the duration in the permit or lease for each anthropogenic disturbance in increments of five years rounded up, plus an additional 10 years to account for reclamation and monitoring, at a minimum of thirty years total, will be used as a starting point for establishing the debit project duration for impacts with limited term impacts. Mineral exploration projects will have a 10-year minimum term due to the shorter duration of exploration activities.

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

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

[17] As of October 30, 2019, debit projects permitted through federal agencies are required to use the CCS to fulfill their compensatory mitigation obligations per NAC 232.400 – 232.480.

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

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

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

### Matching the Duration of Credits and Debits

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

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

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

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

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

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

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

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

Where:

Cp = Number of prorated credits required for offsetting disturbance

Tc = Term of credits

Td = Term of debit project

C = Credit obligation

Specific circumstances relating to prorating are discussed below.

**Standard Debit projects** –All debit projects are required to acquire credits to offset the term of their project, with an additional 10 years for reclamation. The minimum term is 30 years. Exploration projects may have a duration of 10 years or greater. More details on exploration projects are given below. A debit project may meet its obligation through matching credits on a 1:1 basis (30 year debit term matched with a 30 year credit project), or it may prorate credits that have a term less than or more than the debit project. Standard projects are expected to apply prorating in isolated cases, and generally in order to purchase credits that have terms of less than the standard 30 years (i.e., uplift credits). The formula listed below will be used to determine the ultimate debit obligation. For example: A debit project with an obligation of 30 credits and a term of 30-years purchases 30 credits and negotiates a term of 30 years with the private seller. Credits and debits are matched 1:1. This is the ideal situation and the standard that the CCS will try and achieve with all projects. Another example involving prorating: A debit project with an obligation of 20 credits and a term of 30 years purchases uplift credits with a 15 year term. 40 credits would need to be purchased in this example (30/15 X 20 = 40).

**Exploration Debit projects** – Exploration projects will typically have terms of less than 30 years. This may require the purchase of uplift credits, or significant prorating of stewardship credits. Exploration projects are expected to generally apply prorating in order to purchase credits that have terms longer than 10 years, thus reducing the total debit obligation. For example: An exploration project with an obligation of 45 credits and a 15-year term purchases uplift credits with a 20 year term. In this example 34 credits would need to be purchased (15/20 X 45 = 33.75, in cases of partial credits the CCS will always round up).

In an attempt to accommodate the difficulty exploration companies may face acquiring credits and applying prorating, exploration companies may complete projects on public land that may have terms equal to 10 years. See Section 2.3.5 for more information on this option.

**Competing land uses on adjacent sites:** If existing credit sites are impacted by projects requiring mitigation on adjacent sites, prorating will be used to determine the total credit obligation. Credits invalidated on adjacent sites are required to be replaced, but may prorate the amount purchased for the remaining term. For example, a 30 year project requiring mitigation that impacts 50 existing credits that have 15 years remaining of a 45 year life will be required to purchase 17 credits with a 30 year life (50credits X 15yr/45yr).

**Discontinuation of credits:** If credits are discontinued (i.e., intentional reversals), the participant listed on the participant contract will be required to replace the credits prorated for the remaining term. For example, if a project is sold and has 100 credits with 18 years remaining on a 40 year term, then 45 credits with a 40 year term will be required to be replaced by the project participant (100credits X 18yr/40yr). See Section 2.1.9 for more information on reserve account management and intentional reversals.

### 2.5.5 CALCULATING DEBIT BASELINE HABITAT FUNCTION

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

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

- 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 Quantification and 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:

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

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

### Inaccessible Areas

For some debit projects, the Debit Project Proponent will not be able to calculate the site-scale pre-project 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.

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

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

### Debit Quantification and Verification Schedule

#### 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)

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

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

#### Before debit project begins

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

#### During project implementation period

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

#### When term debits end or reduce

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

### Verifier Selection

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

## 2.5.7 CREDIT INVESTMENT STRATEGIES

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

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

Table 17: Potential investment strategies

| 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 | ▪ Investing set pools of funding<br>▪ 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 | ▪ High impact investing<br>▪ 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 | ▪ Conservation funding programs<br>▪ 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. The following section provides an overview of the steps of credit generation and the different participants engaged at each step.

Figure 17: Credit Generation Overview

## D1 SELECT & VALIDATE PROJECT SITE

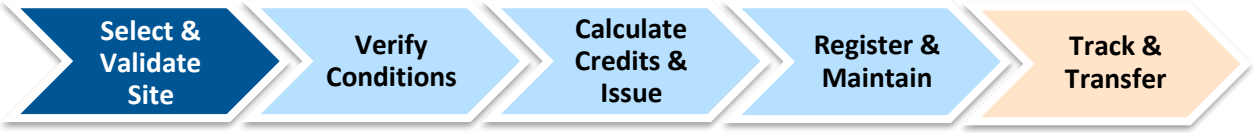


Figure 18: Select & Validate Project Site

### 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.

**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

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**

## D2 VERIFY CONDITIONS

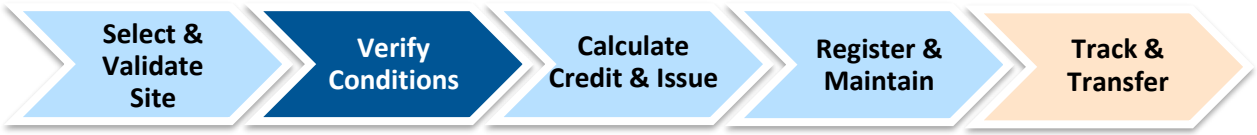


Figure 19: Verify Conditions

### 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

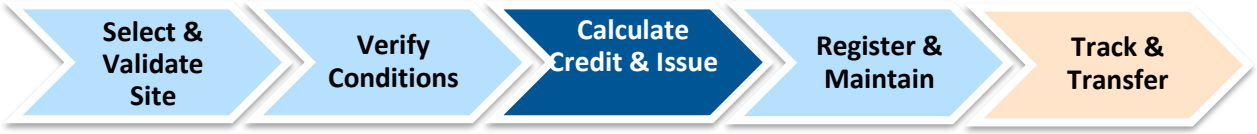


Figure 20: Calculate Credit & Issue

### 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 there is a difference between the credit estimate by the verifier and Program Manager, the Program Manager will work with the verifier to finalize the calculation. If there is still a difference between the estimate by the verifier and the Program Manager, the estimate by the Program Manager apply.

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

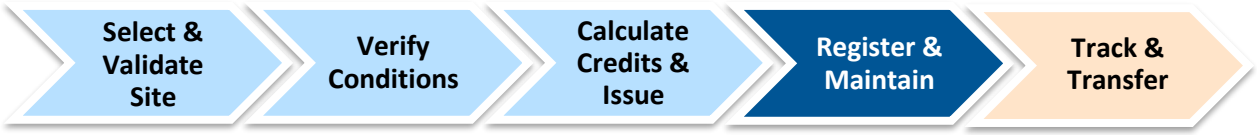


Figure 21: Register & Maintain Credits

### 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

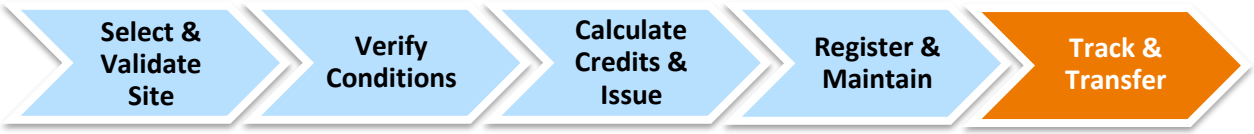


Figure 22: Track & Transfer Credits

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 and any missing portions in the Management Plan. Once the transaction has occurred, the Credit Project Proponent submits a Credit Purchase Form to the Administrator, who transfers credits between accounts 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. Credits are available for transfer until the term expires. Once credits expire, the CCS Registry moves them into an expired credit account that can be reported on but not accessed for transfer. The Credit Project then can again be reverified and new credits can become available.

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

**Product ■ Participant Contract**
**Product ■ Management Plan**
**Product ■ Credit Purchase Agreement (optional)**
**Product ■ Credit Purchase 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. The following section provides an overview of the steps of credit acquisition and the different participants that may be engaged at each step.

Figure 23: Credit Acquisition Overview

## B1 INDICATE INTEREST

Figure 24: 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, geographic information system information regarding the area of interest and proposed project, and contact information. The Administrator provides a list of Technical Support Providers or Certified Verifiers in the project area who can assist with developing an investment strategy, if this assistance is desired.

# B2 DETERMINE CREDIT NEED

Figure 25: 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 or create Credits, in accordance with their investment goal, taking into account the applicable geographic scope of the CCS as well as the proximity ratio applied to debit sites. Debit Project Proponents may also choose to focus investment within a specific geographic area to achieve unique investment goals.

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

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

Development activities must be avoided and minimized through the SETT Consultation process, using best available and practicable technology and practice. Full compliance with all relevant laws, timing restrictions, and rules is required before credits can be used to satisfy the remaining regulatory requirements from unavoidable impacts.

Debits are quantified and verified units of functional acre loss using the HQT, and adjusted based on a mitigation ratio defined in *Section 2.2.2: Mitigation 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 or look on the Sagebrush Ecosystem Program website 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. Field data is valid for 5 years from the first collection, with the possibility of flexibility per the Administrator's discretion. A request for extension must be made 6 months prior the expiration of the data.

All field work steps are detailed in 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. If there is a difference between the credit estimate by the verifier and Program Manager, the Program Manager will work with the verifier to finalize the calculation. If there is still a difference

between the estimate by the verifier and the Program Manager, the estimate by the Program Manager apply. 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 26: 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

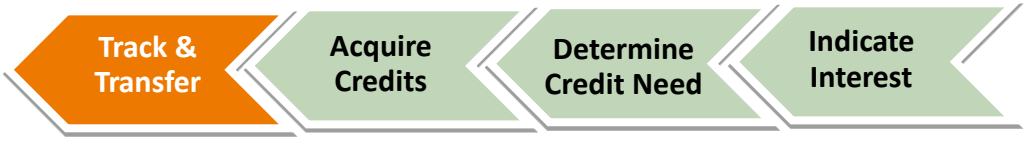


Figure 27: Track & Transfer Credits

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 28 and Table 19 provide an overview of the CCS Management System steps and the different participants that may be engaged at each step[18].

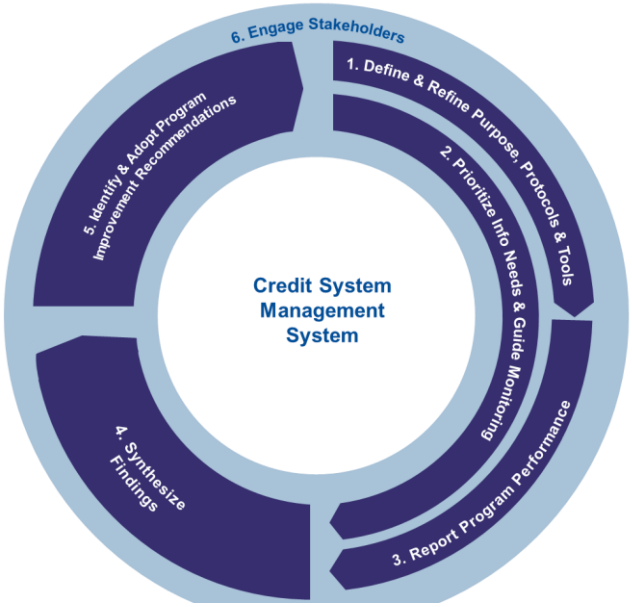


Figure 28: Overview of CCS Improvement Management System Steps

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

[18] 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 | ☐ | ■ | ☐ | ■ | ▪ CCS Improvement Recommendation Form | ▪ CCS Improvements List<br>▪ New & Updated Documents, Guidance and Tools |
| A2. Prioritize Information Needs & Guide Monitoring | ☐ | ■ | ☐ | ■ | ▪ Research & Monitoring Contract Templates | ▪ List of Research Needs |
| A3. Report CCS Performance | ☐ | ■ | ☐ | ☐ | ▪ Performance Report Template | ▪ Annual Performance Report |
| A4. Synthesize Findings | ■ | ■ | ■ | ■ | ▪ Input Request Template | ▪ Synthesis of Findings Report |
| A5. Identify & Adopt CCS Improvement Recommendations | ☐ | ■ | ■ | ☐ | ▪ CCS Improvement Recommendation Form | ▪ CCS Improvements Recommendations<br>▪ Record of Decisions<br>▪ Audit Report |
| A6. Engage Stakeholders | ☐ | ■ | ■ | ■ | ▪ n/a | ▪ Updated Website<br>▪ Quarterly Email Updates<br>▪ Stakeholder Meeting<br>▪ Summary of Input |

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

# A1 UPDATE PROTOCOL & TOOLS

Figure 29: 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

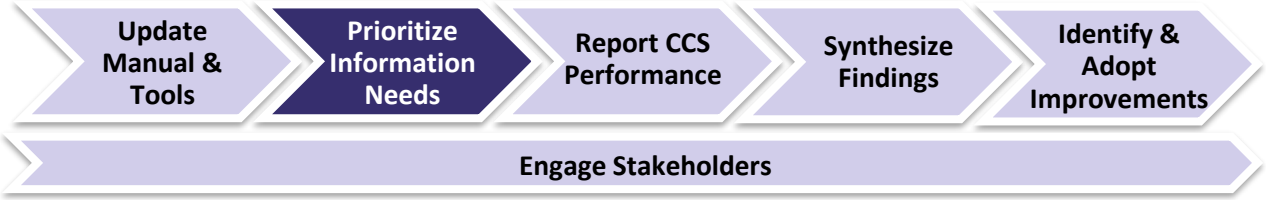


Figure 30: Prioritize Information Needs

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 31: 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

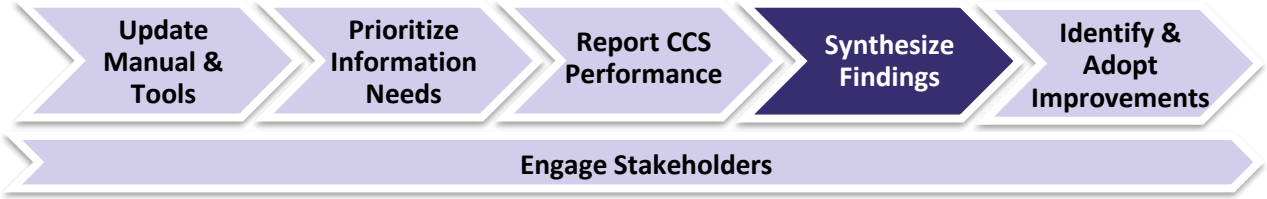


Figure 32: Synthesize Findings

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 33: 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

Refer to Section 2.1.1.

## A6 ENGAGE STAKEHOLDERS

Figure 34: 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 PERIODIC STAKEHOLDER MEETINGS

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

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

Stakeholder input that does not directly relate to these ongoing lists of needs is summarized and the notes posted to the CCS website.

**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.[19]

**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.[20]

**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.[21]

**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

[19] USFWS DRAFT GRSG Mitigation Framework Glossary

[20] USFWS DRAFT GRSG Mitigation Framework Glossary

[21] USFWS DRAFT GRSG Mitigation Framework Glossary revised

consistently quantified and traded, and secured by contract requirements, a project-specific Management Plan and financial assurances and become official when the Management Plan is signed.

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

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

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

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

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

**Credit Site Eligibility:** A set of requirements that a credit project site must meet 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. A debit project qualifies as competing land use when the debit project signs and submits the Debit Review Form to the SETT with proof of the start of NEPA (e.g., project initiation form) or state equivalent on state-owned land.

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

**Durability:** Credit projects that demonstrate defined 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.[22]

**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.[23]

**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.

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[22] USFWS DRAFT GRSG Mitigation Framework Glossary

[23] USFWS DRAFT GRSG Mitigation Framework Glossary

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

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

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

**Offset:** *See Mitigation*.

**Oversight Committee:** Formal, representative stakeholder group, which is responsible for overseeing the operations of the CCS and making CCS management decisions. The Sagebrush Ecosystem Council serves as the Oversight Committee.

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

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

**Participant Confidentiality:** Processes to ensure sufficient information is available to monitor compliance, ensure progress toward environmental goals, and inform a robust CCS 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.

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

**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 (Intentional or Unintentional):** Credit project that does not persist for the full, required, duration due to natural or man-made causes.[24]

**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.[25]

**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.[26]

**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.[27]

**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

[24] USFWS DRAFT GRSG Mitigation Framework Glossary revised

[25] USFWS DRAFT GRSG Mitigation Framework Glossary

[26] USFWS DRAFT GRSG Mitigation Framework Glossary

[27] USFWS DRAFT GRSG Mitigation Framework Glossary

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.

**Verifier:** A person that conducts site visits and uses the HQT for the purpose of calculating credits and debits. Verifiers must be trained and certified by the Administrator and must meet qualifications established by the Oversight Committee.

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