

# MEMORANDUM

DATE	January 22, 2014
FROM	Environmental Incentives
TO	Nevada Sagebrush Ecosystem Council (SEC)
RE	Preparation for the January 24 <sup>th</sup> SEC meeting

At the January 24<sup>th</sup> SEC meeting, the SEC will be presented an update on the status of the Conservation Credit System (Credit System), and several policy and operational considerations that will be addressed by the Credit System. Draft Credit System introductory concepts, a brief update on the habitat quantification approach, and an overview of key policy and operational consideration are provided below to prepare the SEC for this discussion at the meeting.

## DRAFT CREDIT SYSTEM INTRODUCTORY CONCEPTS

*The concepts in this section will guide the development of the Credit System. The following DRAFT language will be revised based on feedback received from the SEC on January 24<sup>th</sup>, and then included in subsequent drafts of the Credit System Manual.*

### Goal of the Credit System

Efficiently achieve no net unmitigated loss of greater sage-grouse habitat due to anthropogenic disturbances.

### Guiding Principles

- Produce high quality conservation where it makes significant ecological difference.
- Foster transparency, accountability, and credibility.
- Improve the effectiveness of greater sage-grouse conservation efforts and the efficiency of the Conservation Credit System over time.
- Base decisions on the best available science.
- Create an efficient and friendly marketplace, where every transaction is anticipated to result in a net benefit for the greater sage-grouse.

### Scope

Credits are awarded for projects that create benefits for greater sage-grouse habitat, and debits are generated by anthropogenic disturbances within the State of Nevada. The Credit System can be expanded to support additional conservation needs in the future.

### Organizational Structure

The anticipated organizational structure and interactions between the participants in the Credit System are depicted in Figure 1 below.

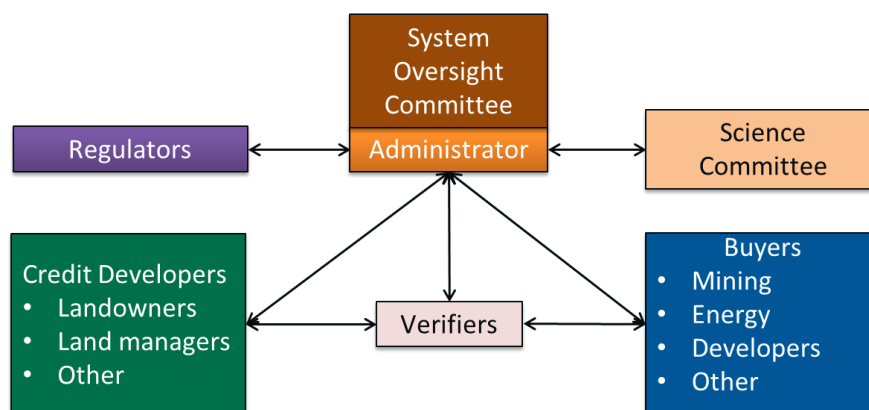


Figure 1: Credit System Organizational Structure

CREDIT SYSTEM HABITAT QUANTIFICATION APPROACH UPDATE

The content in this section provides a brief overview of the habitat quantification approach currently under development and the process to ensure the best available science is leveraged.

The habitat quantification approach will describe, document supporting rationale, and operationalize the method of quantifying changes to greater sage-grouse habitat. The approach will use a set of metrics applied at multiple spatial scales to quantify changes in habitat conditions in terms of “functional acres,” which incorporates both quantity and quality of habitat.

The Sage Grouse Habitat Assessment Framework (Stiver et. al.) is the proposed framework to quantify changes to greater sage-grouse habitat for the Credit System. The Sage Grouse Habitat Assessment Framework incorporates four spatial scales as depicted in the figure to the right.

The SETT and recently formed Technical Review Group (TRG) have been engaged to determine what attributes of habitat condition should be measured at each scale and which existing habitat quantification approaches should be used to measure attributes identified. The TRG contains five scientists from academia and state and federal agencies to inform the development of the quantification approach.

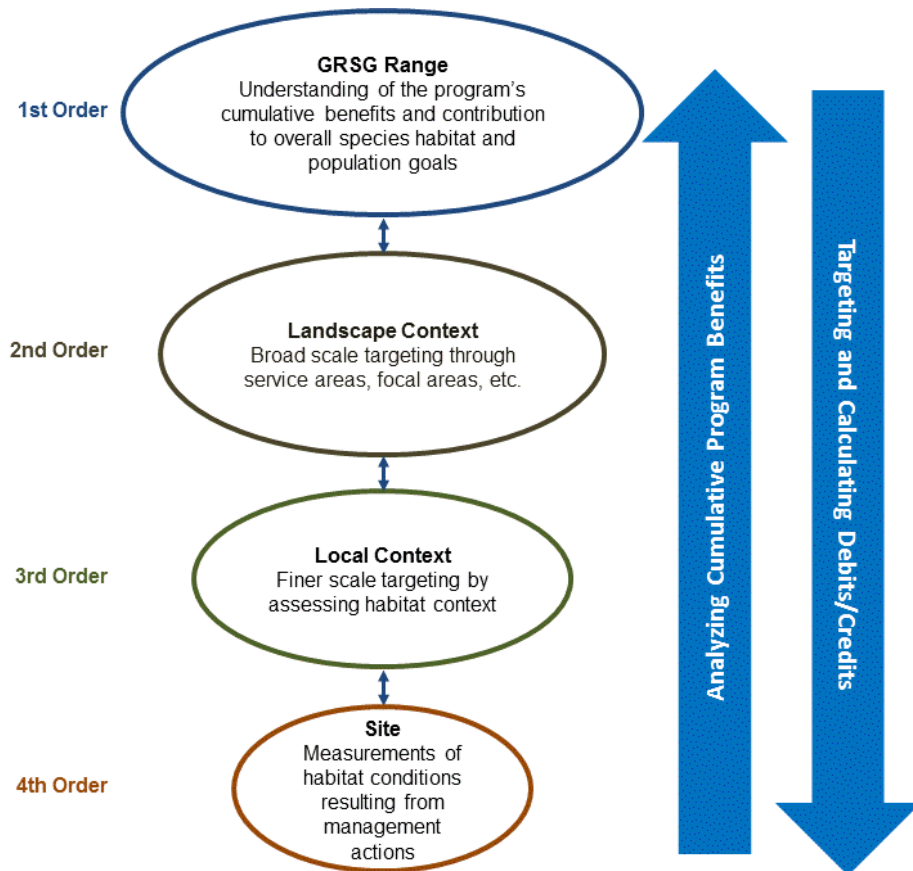


Figure 2: Four spatial scales of habitat selection in greater sage-grouse (Johnson 1980)

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## CREDIT SYSTEM POLICY AND OPERATIONAL CONSIDERATIONS

The general concepts described in this section are intended to create a starting point for understanding the Credit System, which is necessary to efficiently provide input on operational and policy considerations in the future.

The Credit System Manual will define the operations of the Credit System and describe key policy and technical considerations. The Credit System Manual is the step-by-step guide for how to generate, verify, track and purchase credits. Figure 3 provides an overview of this credit generation and transaction process. It includes blue chevrons which represent the steps undertaken for Credit Developers to generate credits, green chevrons which represent the steps for Buyers to acquire credits, and the orange connector which represents the steps to transfer credits between parties. The most influential considerations related to each operational step in this process are introduced below with titles in **green bold font**.



Figure 3: Overview of the process steps to generate, verify, track and purchase credits

### GENERATING CREDITS

- 1) **Select & Validate Site:** Using the Credit System Manual, Credit Developers determine eligibility to generate credits. Credit Developers can also engage with the Administrator to ask questions about the potential project design.
  - **Service Area** is a mapped geographic sub-region with unique ecological, practical or political significance where credits are tracked and reported.
- 2) **Implement & Calculate Credit:** Credit Developers design the project, use the Habitat Quantification Tool to quantify the expected number of credits, implement conservation practices, and refine credit calculations based on on-the-ground conditions.
  - **Credit Baseline** is the starting point from which credits are measured. Baseline can be defined in numerous ways, each carrying different social and ecological implications. Pre-project condition, or the existing habitat functionality present on a project site prior to implementation, does not necessarily need to be the defined credit baseline for a program.
- 3) **Verify Conditions:** All credit projects undergo verification by a third-party or the Administrator to confirm that protocols were followed correctly, and anticipated credits were appropriately calculated and match actual on-the-ground conditions.
  - **Credit Verification** is an expert check on the Habitat Quantification Tool calculations and other specifications of the Credit System that occurs throughout the life of a credit project.

**Ensuring Net Benefit to the Species**

The Credit System ensures net benefit to the species from transactions using the following combination of factors:

**Outcome-Based Quantification & Performance-Based Credit Release** links the release of credits to the observation of on-the-ground functional habitat that is understood to be able to support populations.

**Verification with Performance & Financial Assurances** create strong incentives for Credit Developers to remain focused on producing functional habitat over the long-term, knowing that ongoing performance will be both confirmed through verification and that there will be penalties through enforcement of performance and financial assurances.

**Reserve Account** creates a programmatic buffer or insurance pool of credits with the associated on-the-ground function, such that when specific projects unexpectedly cease to produce functional habitat and credit, the overall program ensures that sufficient credits are available to offset debits, including meeting mitigation ratios requirements.

**Mitigation Ratios** ensure that the total functional acres of credit are always greater than the functional acres of debit.

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.

- 4) **Register & Issue:** Once a project has been verified, supporting documentation is submitted to the Administrator where it is reviewed for completeness before credits are registered and issued to the Credit Developer’s account on the registry.
  - **Credit Release** is the authorization and transfer of credits from the Administrator to the Credit Developer based on a pre-defined schedule, dependent on the conservation outcomes achieved.
- 5) **Track & Transfer:** Issued credits are tracked by the Administrator and either transferred to Buyers or retired using the registry. Credit Developers annually confirm that performance standards are met and phased credit releases are triggered, when applicable.
  - **Reserve Account** is a pool of credits that are used when credits that have been released and sold are invalidated. The Administrator dedicates a percentage of credits from each credit transaction into the reserve account, and manages the account over time to ensure that there is never a net loss of habitat within the system.

**ACQUIRING CREDITS**

- 1) **Indicate Initial Interest:** Buyers become aware of the opportunity to participate in the Conservation Credit System, and contact the Administrator to provide basic information.
- 2) **Determine Credit Need:** Using the Credit System Manual and Habitat Quantification Tool, Buyers determine the geographic region, duration and amount of credit needed to best meet their needs. If fulfilling a regulatory offset, Buyers determine credit amount needed by determining debit baseline and post-project conditions of the debit site.
  - **Debit Baseline** is the starting point from which debits are measured. Similar to credit baseline, it can be defined in multiple ways.
  - **Mitigation Ratios** are the multiplier used in combination with the number of debits, as determined by the Habitat Quantification Tool, to calculate the total credit obligation of Buyers.
- 3) **Acquire Credits:** Buyers contact the Administrator and agree to terms on credit quantities, price, and timing of funding and other terms. The Administrator provides notice to all parties when credits have been transferred between accounts.
  - **Debit Verification** is an expert check on the Habitat Quantification Tool calculations and other specifications of the Credit System that occurs throughout the life of an impact project.
- 4) **Track & Transfer:** Credits listed on the registry are assigned unique serial numbers that identify information such as the source of each credit, the Habitat Quantification Tool version used to estimate credits, and the current owner. Once credits are transferred, Buyers can use that information for internal and external reporting.

**Adaptive Management & Annual Reporting**

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The Conservation Crediting System uses a **programmatic adaptive management process** that includes **annual reporting** in order to:

- 1) Cumulatively assess and ensure net benefit to the species across the system.
- 2) Systematically incorporate scientific learning and operational improvements.