State of Nevada Conservation Credit System 2018 PERFORMANCE REPORT

December 2018

STATE OF NEVADA CONSERVATION CREDIT SYSTEM

The *Performance Report* is an annual product of the Nevada Conservation Credit System (CCS). The Sagebrush Ecosystem Technical Team (SETT) produces the report for the Sagebrush Ecosystem Program (SEP), and the SETT and Sagebrush Ecosystem Council (SEC) use the report to inform future improvements to the Credit System.

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*Denotes former SEP and SETT members involved in the SEP during 2018.

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FROM THE SAGEBRUSH ECOSYSTEM TECHNICAL TEAM

Significant milestones in the implementation of the Nevada Conservation Credit System (CCS) were achieved in 2018. The second and third credit transfers within the CCS occurred on July 17th and October 31st, when Newmont transferred 243 and 5 credits from its West IL Ranch credit project to fulfill the current mitigation obligation for its Greater Phoenix Mine and Philadelphia Canyon Expansion project, respectively, (also part of Greater Phoenix). The Sagebrush Ecosystem Technical Team (SETT) applauds Newmont for utilizing the CCS to ensure their mitigation achieves net conservation gain and is thrilled to support this significant contribution to the conservation of Greater Sage-grouse in the State of Nevada.

The SETT has worked closely with our Federal partners to update and further develop the Sage-Grouse Resource Management Plan, Environmental Impact Statement (Bureau of Land Management) and Land Management Plan for Greater Sage-Grouse Conservation (U.S. Forest Service) to better align with the Nevada Greater Sage-Grouse Conservation Plan. As part of the revision process, the SETT worked with Federal partners and Science Work Groups to develop an Adaptive Management Plan, which was approved and adopted by the Sagebrush Ecosystem Council during the July 17th meeting to be included within the Nevada State Plan and the BLM and USFS Sage-Grouse Plans.

The Sagebrush Ecosystem Program continues to gain interest and involvement from private landowners in generating credits on their private land. During 2018, three new credit projects or project areas, utilized the Habitat Quantification Tool (HQT) to generate and quantify credits. Six project proponents for mining operations also ran the HQT to estimate debits generated from proposed disturbances. Several Resource Conservation Partnership Program (RCPP) announcements have been made over the last two years to fund the HQT and habitat enhancements on private lands. The most recent RCPP announcement aimed to identify potential projects to restore and rehabilitate areas affected by the Martin and other significant wildfires that occurred in 2018.

This is the second annual CCS Performance Report, which aims to provide a summary of the program's achievements over the past year. In addition to informing the Sagebrush Ecosystem Council, implementation partners and all stakeholders on the achievements of the CCS, the report sets out to continue the Sagebrush Ecosystem Program's commitment to transparency and continual improvement.

We express our gratitude and appreciation for the many partners that work to support the implementation and success of the CCS, including landowners and mitigation buyers, and implementing agency partners – Bureau of Land Management, Natural Resources Conservation Service, Nevada Department of Conservation and Natural Resources, Nevada Conservation Districts Program, Nevada Department of Wildlife, Nevada Department of Agriculture, Nevada Division of Forestry, U.S. Fish and Wildlife Service, and U.S. Forest Service.

Kelly McGowan

Program Manager Sagebrush Ecosystem Program

2018 PERFORMANCE REPORT

The CCS's 2018 Performance Report provides a summary of the program's achievements over the past year including a synthesis of key outcomes from credit and debit projects as well as program operations. This annual report is essential in supporting the program's transparency and to focus on rigorous outcomes.

CREDIT SYSTEM OVERVIEW & GOVERNANCE

The CCS is a market-based compensatory mitigation program that aligns the objectives of landowners, industry, and the State of Nevada. The CCS ensures that negative impacts to greater sage-grouse habitat from anthropogenic disturbances (*debits*) are fully offset by long-term habitat enhancement and protection (*credits*) that results in a net benefit for Greater Sage-grouse in the State of Nevada. The CCS preserves the state's ecological, cultural and economic integrity by providing important contributions to the preservation of the sagebrush ecosystem while increasing business certainty to industry, and providing an opportunity for ranches to fund additional stewardship of their land and diversify their incomes. The program is designed to accommodate many regulatory mechanisms. The figure below illustrates the use of the CCS by key participants – resource managers, mitigation buyers and credit developers.

The CCS uses a governance structure, which includes

- Oversight Committee Sagebrush Ecosystem Council
- Administrator Sagebrush Ecosystem Technical Team
- Science Committee Scientists and experts with critical knowledge of the sagebrush ecosystem in the State of Nevada



INTRODUCTION • CREDIT SYSTEM OVERVIEW CONT.

HABITAT ASSESSMENT & DURABILITY STANDARDS

The Credit System defines standards to ensure mitigation achieves net conservation gain, provides business certainty to landowners and mitigation, and streamlines administrative operations. The standards include consistent metrics for assessing habitat loss and gain, as well as clearly defined provisions to ensure durability such as financial assurances. All credits awarded fulfill these standards. Figure 2 depicts the primary elements of a credit.

For additional background and details on the CCS, please see the latest version of the <u>CCS</u> <u>Manual</u> and <u>HQT Methods Document</u> on the <u>CCS website</u>.



FIGURE 2: Composition of a CCS Credit

CONTINUAL IMPROVEMENT

Making continual improvements to the CCS is crucial to ensure the Credit System fulfills participant needs and achieves program objectives over time. The CCS uses a transparent, structured continual improvement approach to identify important opportunities for program improvement and implements approved improvements every year.



FIGURE 3: CCS Continual Improvement Process

2018 PROGRAM RESULTS • NET BENEFIT GENERATED

The goal of the CCS is for impacts from anthropogenic disturbances to be offset by habitat enhancement and protection resulting in a net benefit for Greater Sage-grouse habitat in the State of Nevada.

The CCS ensures net benefit to Greater Sage-grouse habitat by using a scientifically rigorous habitat quantification tool to assess both debit and credit projects, mitigation ratios to ensure more functional-acres are gained than lost, and several standards to ensure credits are additional and durable. Functional acres for both credits and debits projects are multiplied by a mitigation ratio, which incorporates the Management Importance and Meadow Factor. The Management Importance Factor (Priority, General and Other Habitat Management Area) are 5% higher for debit projects than for credit projects. A 5% functional gain is automatically incorporated into the functional acre calculation.

In addition to the Mitigation Ratio, the Proximity Ratio is multiplied to the final debit score to account for how far the offsetting credit project is located from the disturbance. The Proximity Ratio ranges from 0% to 15% increase in credit obligation (primarily in place to encourage conservation nearest to the disturbance). The combination of Mitigation and Proximity Ratios results in a net benefit for sage-grouse habitat in Nevada.

Standards that Ensure Net Benefit							
\checkmark	Consistent metrics are used to measure both credits and debits						
\checkmark	A mitigation ratio ensures that functional-acres gained are greater than functional-acres lost						
\checkmark	A reserve account of credits that are not used to offset debits is maintained to ensure that credits are available to offset credit projects that fail so the CCS would still achieve net benefit						
\checkmark	Advanced mitigation is required to replace habitat before impacts occur						
\checkmark	Additionality provisions that ensure credits are based on habitat enhancement and protection that were not funded by public sector investments						

BACKGROUND

Credit development encompasses enhancement and/or restoration of habitat, quantification of credits that will be generated by the project, development of a management plan, securement of financial assurances and signing a participant contract. After determination of available credits, the sale price of credits is based on market value and determined in private negotiations between landowners and mitigation buyers. When credits are sold, they are transferred to fulfill a mitigation obligation, and landowners commit to achieving performance standards for the projects for at least a 30-year period. Landowners can continue agricultural and livestock operations compatible with Greater Sage-grouse habitat needs throughout the contract term.

Figure 4 contains awarded credits and credits in development as of December 2018 by credit development phase.

CREDIT PHASES

TRANSFERRED CREDITS

Credits are awarded when all requirements are fulfilled, including a participant contract signed by the Credit Developer and the SETT. They may have been transferred to fulfill mitigation obligations for a debit project or banked to fulfill future mitigation obligations. In addition, a portion of all credits generated are transferred to the reserve account.

AVAILABLE CREDITS

Available credits are based on verified habitat quantification tool scores and have an approved management plan, but do not have financial assurances or a signed Participant Contract. Therefore, they can be quickly awarded and transferred to fulfill mitigation obligations, but are not yet durable mitigation.

ANTICIPATED CREDITS

Anticipated credits are based on rough credit estimates and a commitment to generate credits for sale. For example, credits expected from projects receiving seed funding from the State of Nevada are reported as anticipated credits.



Credits

FIGURE 4: Credits by development phase as of December 2018**

*Anticipated credits are estimated based on the average credits generated per acre from awarded and available credits verified to date. **Note:** Credits reported include credits transferred and credits available for sale. Credits represent functional acres. Reserve account contributions 8 required through the CCS are excluded.

2018 PROGRAM RESULTS • CREDIT DEVELOPMENT CONT.

STATE OF NEVADA SEED FUNDING OF CREDIT PROJECTS

The SEP facilitated a successful solicitation of credit projects in 2016 and 2017 attracting 32 applications which resulted in seed funding for nine projects with approximately \$2M. The funding was or will be used to implement on-the-ground habitat improvements, develop management plans and quantify habitat quality.

The SEP utilized a Pay for Performance procurement strategy to solicit and provide seed funding to credit projects in 2016 and 2017. The seed funding contracts defined payments associated with key milestones, rather than reimbursement of costs as typically seen in traditional grants. Reimbursement of state funds and purchase of credits by Mitigation Buyers are based on credits generated under the seed funding contracts. The procurement strategy illustrated below, incentivized Credit Developers to maximize credit generation at the lowest cost, allowed the SEP to fund the projects expected to generate the greatest number of CCS credits per dollar of state funds, and minimized financial risk and outcome uncertainty for the state. This procurement strategy also allows a revolving fund which requires no additional appropriations requests for the state to fund new projects.



FIGURE 5: Illustration of the Pay for Performance procurement strategy utilized by the State of Nevada

A portion of this seed funding procurement strategy was designed with funding support from the NRCS Conservation Innovation Grant (CIG) program. In addition, the state was awarded a grant from NRCS's Regional Conservation Protection Partnership to provide additional funding to kickstart credit projects in 2017-2019. Three RCPP announcements have been made available over the past two years. Several applications were received, however no projects have been funded. The most recent RCPP announcement aimed to identify potential projects to restore and rehabilitate areas affected by the Martin and other significant wildfires that occurred in 2018; the announcement closed in December, so the SEP is hopeful to fund projects to achieve meaningful enhancements or restoration activities

CREDIT PROJECTS (AS OF DECEMBER 2018)

The map and table below depict all credit projects with awarded credits or currently committed to generate credits in the Credit System.



FIGURE 6: Map of all credit projects. The numbers in the map are identified within project names in the table on the right (December 2018).

*Credits listed are credits transferred and used to offset debits for projects listed under Transferred Credits, and credits available for sale for projects listed under Available Credits. Reserve account contributions associated with transferred and required by credits not transferred are excluded from this table.

**Projects receiving state seed funding were dependent on varying amounts of match funding from the landowners. In some cases, landowners covered the majority of the total cost to generate credits.

PROJECT NAME	CREDITS*	COUNTY	ACRES CONSERVED	WAFWA MGMT. ZONE	STATE SEED FUNDED**	
		TRANSFERRE	D CREDITS			
Tumbling JR Ranch (1)	2,514	Elko, White Pine	5,868	III	Yes	
West IL Ranch (2)	248	Elko	158	IV	No	
		AVAILABLE	CREDITS			
Cottonwood Ranch (3)	711	Elko	1,009	III	Yes	
Crawford Cattle (4 & 5)	2,365	Humboldt, Elko	11,134	III, IV	Yes	
Johns Ranch (6)	164	Elko	1,073	III	Yes	
RDD (7)	740	Humboldt	1,155	V	Yes	
Tumbling JR Ranch (1)	1,663	Elko, White Pine	3,882	III	No	
West IL Ranch (2)	2,175	Elko	1,539	IV	No	
		ANTICIPATE	D CREDITS			
Adobe (8)	TBD	Elko	10,901	IV	No	
Cave Valley Ranch (9)	TBD	Lincoln	1,769	III	No	
Coleman Valley Ranch (10)	TBD	Washoe	1,045	V	Yes	
Estill Ranches (11)	TBD	Washoe	1,671	V	No	
Eureka Livestock (12)	TBD	Eureka	1,641	III	Yes	
Heguy Ranch (13)	TBD	Elko	6,450	IV	Yes	
Humboldt Ranch (14)	TBD	Elko	198	IV	No	

TABLE 1: Description of all credit projects (December 2018)

2018 PROGRAM RESULTS • CREDIT DEVELOPMENT CONT.

FEATURED PROJECT – WEST IL RANCH

The West IL Ranch is the second credit project to transfer credits to offset anthropogenic disturbance within the CCS. The West IL Ranch is operated by Elko Land and Livestock Company (ELLCo), and is one of several ranching properties owned by Newmont USA Limited (Newmont). ELLCo lands are managed for livestock production, wildlife values, conducting conservation activities and to provide the land access needs for Newmont's mining activities. The West IL Ranch was affected by wildfires during both the 2017 and 2018 fire season; however, ELLCo has committed to maintaining the existing credits and strive to recover habitat that was lost to fire. The SEP expresses its gratitude to the West IL Ranch for participating and enrolling in the CCS to generate mitigation to offset impacts to Greater Sage-grouse habitat.



SITE DESCRIPTION

- Working livestock ranch
- High-quality meadow and late brood-rearing habitat
- Adjacent to many active leks
- Minimal anthropogenic disturbances nearby
- Project area is primarily within Priority and General Habitat Management Areas (PHMA & GHMA)

MANAGEMENT ACTIONS

- Rangeland seeding following fires
- Planting sagebrush following fires
- Managing irrigation and fencing infrastructure
- Working collaboratively with the BLM on fire rehabilitation on the associated grazing allotment
- Working closely with the BLM to coordinate grazing post fires

REASONS FOR PARTICIPATING

- Improve operations and land management knowledge
- Help meet Newmont's mitigation needs at their mine sites
- Ensures Newmont meets its own internal Biodiversity Management Standard
- Gives certainty to ranching operation that management is consistent with Greater sage-grouse needs





2018 PROGRAM RESULTS • DEBITS MITIGATED

The CCS is used to offset the impact to Greater Sage-grouse from anthropogenic disturbances, such as mines, geothermal facilities, energy development, transmission lines, and other temporary or permanent infrastructures which directly or indirectly impact Greater Sage-grouse habitat. Ranching and farming activities are not considered impacts and can contribute to conservation objectives.

MITIGATION HIERARCHY

The CCS works within the mitigation hierarchy in which anthropogenic disturbance impacts are avoided first, then minimized, and finally any residual unavoidable impacts (*debits*) are mitigated using the CCS. The CCS also applies financial incentives that supports avoidance and minimization.

FEDERAL AGENCY COLLABORATION

The State of Nevada, BLM and USFS have signed a memorandum of understanding detailing the collaborative implementation of the CCS. Project proponents permit anthropogenic disturbances on federal lands through federal land management agencies and then use the CCS to fulfill their mitigation obligation. Project proponents can use the CCS to verify mitigation (*credits*) that they generate themselves or acquire credits from other Credit Developers.

Figure 8 includes the debits offset using credits through the CCS as of December 2018, as well as debits expected to be offset using the CCS.



Debits

FIGURE 7: Debits mitigated or anticipated through the CCS (December 2018). Debits represent functional acres lost.

2017 PROGRAM RESULTS • DEBITS MITIGATED CONT.

DEBIT PROJECTS (AS OF DECEMBER 2018)

The map and table below depicts all debit projects that have used, or are expected to use, CCS credits to offset impacts to Greater Sage-grouse habitat from anthropogenic disturbance.



FIGURE 8: Map of debit projects having offset disturbance through the CCS or anticipated to in the future (December 2018). Project area includes sage-grouse habitat directly and indirectly effected by projects.

* Direct impact is the surface area of Greater Sage-grouse habitat disturbed by the debit project. The number of debits generated is dependent on the quality and quantity of habitat directly and indirectly effected by the disturbance. There is not a consistent direct ratio applied to each debit project based on acres alone.

2018 PROGRAM RESULTS • DEBITS MITIGATED CONT.

FEATURED PROJECT – GREATER PHOENIX MINE

The Greater Phoenix Mine is the second debit project to use credits from the CCS from two separate transactions to offset its anthropogenic disturbance on the Nevada landscape. The Greater Phoenix Mine generated 211 debits, but was offset using 243 credits to account for the proximity factor. The Philadelphia Canyon Expansion generated an additional 4 debits, offset by 5 credits to account for the proximity factor. In both transactions, a total of 248 credits were transferred to offset the Greater Phoenix Mine and Philadelphia Canyon expansions. The SEP expresses its appreciation to Newmont for using the CCS to ensure net benefit from their mining operation, and for working with the SETT to be among the first debit projects to use this new and innovative mitigation program.

Newmont has enrolled the West IL Ranch under their ownership into the CCS to generate credits and fulfill their mitigation obligation. As Newmont owned both the debit and credit projects, their mitigation could be considered Permittee Responsible Mitigation. Using the standards defined by the CCS ensured that their mitigation achieved net benefits and enabled Newmont to fulfill their mitigation obligation.



MINE SITE DESCRIPTION

- Existing disturbance (roads, power lines and mining operation) related to existing mining operations fall within the project and analysis area
- Direct and indirect proposed disturbance occurred partially within Habitat Management Categories
- Lower habitat quality due to moderate habitat suitability, in particular in close proximity to the footprint of the project, and significant existing disturbance



PROJECT DESCRIPTION

- Plan to expand gold mining operation by 716 acres of direct surface disturbance, which totaled 215 debits
- 248 credits, to account for the proximity factor, were transferred from the West IL Ranch credit project to fulfill the Greater Phoenix Mine expansion project credit obligations



- Ensure net benefit related to impacts to Greater Sage-grouse
- Streamline mitigation approval process
- Helps Newmont meet its own internal commitments through their Biodiversity Management Standard



2018 PROGRAM OPERATIONS • RESERVE ACCOUNT

A primary responsibility of the SETT is to manage the reserve account. The reserve account serves as an insurance mechanism for the overall CCS and ensures there are always more credits than debits in the CCS in the event of credit project failure due to intentional or unintentional reversals.

A percentage of credits generated by each credit project 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 by the SETT to temporarily cover invalidated credits until invalidated credits are replaced through corrective actions and/or using financial assurance funds. Credits can be invalidated through a variety of ways, both intentional and unintentional, such as a new road or fire. The process of generating and using reserve credits is described in Figure 10.

Table 3 contains deposits, withdrawals and balance of the reserve account as of December 2018. A positive balance (column 4) confirms there are more credits than debits in the CCS. As of December 2018, no credits were withdrawn from the reserve account.



FIGURE 9: Reserve Account generation and use

CREDIT PROJECT NAME	RESERVE ACCOUNT DEPOSIT	RESERVE ACCOUNT WITHDRAWAL	RESERVE ACCOUNT BALANCE	REASON FOR INVALIDATED CREDITS (WITHDRAWALS ONLY)	INVALIDATED CREDITS REMEDIAL ACTION PLAN (WITHRAWALS ONLY)
Tumbling JR Ranch	343	N/A	343	N/A	N/A
West IL Ranch	31	N/A	31	N/A	N/A

TABLE 3: Reserve Account Ledger

2018 PROGRAM OPERATIONS • ADMINISTRATION OVERVIEW

As the administrator of the CCS, the SETT is responsible for day-to-day operations of the CCS, as well as the many other responsibilities and initiatives of the Sagebrush Ecosystem Program. Key SETT responsibilities related to the CCS include the following.

PROGRAM ADMINISTRATION & COMPLIANCE

- Ensure consistent and accurate application of CCS policies and tools
- Award credits, verify debits and track credit transfers between credit and debit accounts
- Ensure long-term stewardship and periodic verification of credit projects
- Enforce contract compliance, implement corrective actions in response to intentional and unintentional reversals. and manage reserve account
- Maintain agreements and coordinate with implementing partners

CONTINUAL IMPROVEMENT & REPORTING

- Identify opportunities to improve the CCS based on new science findings, operational experience and changing policy context
- Develop improvement recommendations through analyzing alternatives and engaging science community
- Publish improvement recommendations with supporting rationale, and facilitate review and approval by the Sagebrush Ecosystem Council
- Publish program results in the Annual Performance Report

PARTICIPANT SUPPORT & OUTREACH

- Support Credit Buyers and Credit Developers through credit generation and debit verification
- Educate stakeholders, and encourage Credit Buyer and Credit Developer participation
- Train Verifiers



2018 PROGRAM OPERATIONS • CONTINUAL IMPROVEMENT

Implementing annual improvements to the CCS is a primary responsibility of the SETT and necessary to ensure that the program achieves its goals. The SETT actively engages program participants and verifiers throughout the year to understand how the program is working and where it could be improved. Once a year the SETT synthesizes findings related to CCS operations, achievements, challenges, and new, relevant science. The SETT develops improvement recommendations based on the findings, vets them with the science community and then they are considered for adoption by the Sagebrush Ecosystem Council (SEC). The SETT completed an improvements process and report for 2016 and 2017. Improvements initiated by the SETT in 2018 to be adopted or amended in early 2019 are summarized below.



ANTHROPOGENIC DISTURBANCE CATEGORIES

Pipelines and landfills are identified within the CCS and State Plan as anthropogenic disturbances, however no weight or distance are assigned to them due to a lack of science. The SETT plans to apply a weight and distance to pipelines and landfills to account for this disturbance on the landscape.



UPLIFT CREDITS

The CCS identifies uplift credits that can be achieved through enhancements; however, there is a need for further development of how uplift credits are assessed and quantified in the HQT to incentivize enhancements on primarily preservation credit projects. Benefits of meadow enhancements are also described in this improvement.



CREDIT SITE VERIFICATION PROCESS

The current process for verification of credit projects involves a five year verification. The SETT aims to improve this process by increasing SETT engagement, the use of remote sensing techniques, and by changing the verification schedule and effort level of the habitat sampling completed throughout the 30 year term. This will increase efficiency as well as reduce costs associated with credit monitoring and maintenance and potentially lowering costs for credit buyers.

2017 PROGRAM OPERATIONS • IMPLEMENTING PARTNERS

The Sagebrush Ecosystem Program is grateful for the agency partnerships and support that is critical for program implementation and long-term success of the CCS.



