



State of Nevada Sagebrush Ecosystem Program

SEMI-ANNUAL REPORT

June 2018

**STATE OF NEVADA
SAGEBRUSH ECOSYSTEM PROGRAM**

The *Semi-Annual Report* is an annual product of the Nevada Sagebrush Ecosystem Program (SEP). The Sagebrush Ecosystem Technical Team (SETT) and Sagebrush Ecosystem Council (SEC) submit this document biennially to report on the status of greater sage-grouse and the sagebrush ecosystem in Nevada, the Progress of the Nevada Conservation Credit System (CCS), as well as other strategies, programs, or projects carried out in pursuant of NRS 321.592 and NRS 321.594.

**NEVADA DEPARTMENT OF CONSERVATION AND
NATURAL RESOURCES**

Bradley Crowell (Director)

Charlie Donohue (Administrator, Nevada Division of State Lands)

Jim Lawrence (Deputy Director)

SAGEBRUSH ECOSYSTEM TECHNICAL TEAM

Kelly McGowan (SEP Program Manager)

Katie Andrie (Nevada Department of Wildlife)

Dan Huser (Nevada Division of Forestry)

Kathleen Petter (Nevada Division of State Lands)

Ethan Mower (Nevada Department of Agriculture)



For more information, please contact the SETT at:

201 South Roop Street, Suite 101
Carson City, Nevada 89701-5247
(775) 684-8600

*Denotes former SEC and SETT members involved in the SEP during the timeline of this report.

SAGEBRUSH ECOSYSTEM COUNCIL

J.J. Goicoechea, Chair (Local Government)

Chris MacKenzie, Vice Chair (Board of Wildlife)

Allen Biaggi (Mining)

Steve Boies (Ranching)

Gerry Emm (Tribal Nations)

Starla Lacy (Energy)

Bevan Lister (Agriculture)

William Molini (Conservation and Environmental)

Sherman Swanson (General Public)

Ex-Officio Members

Bradley Crowell (Nevada Department of Conservation and Natural Resources)

Jim Barbee (Nevada Department of Agriculture)

Ray Dotson (U.S.D.A. Natural Resources Conservation Service)

Bill Dunkelberger (U.S. Forest Service)

John Ruhs (Bureau of Land Management)*

Carolyn Swed (U.S. Fish & Wildlife Service)

Marci Todd (Bureau of Land Management)

Tony Wasley (Nevada Department of Wildlife)

The Sagebrush Ecosystem Council's mission is to maintain and restore a functional and resilient sagebrush ecosystem to benefit all species while allowing for various land uses. This will be accomplished by working through a diverse coalition of public and private stakeholders.

sagebrusheco.nv.gov

TABLE OF CONTENTS



Letter From the Chairman	4
Greater Sage-Grouse Updates	
Population Status	5
Threats	6
2018 CCS Progress	
CCS Overview	7
Net Benefit Generated	10
Credit Development	11
Debits Mitigated	15
Reserve Account	18
Continual Improvements	19
2018 SEP Operations	
BLM Draft RMPA and Draft EIS	21
Conservation Partners	22

BRIAN SANDOVAL

Governor



Kelly McGowan, Program Manager

Katie Andrie, Wildlife

Kathleen Petter, State Lands

Dan Huser, Forestry/Wildland Fire

Ethan Mower, Agriculture

Sagebrush Ecosystem Program

201 South Roop Street, Suite 101

Carson City, Nevada 89701

Telephone (775) 684-8600

Facsimile (775) 684-8604

www.sagebrusheco.nv.gov

Letter from the Chairman
Sagebrush Ecosystem Council

Dear Governor Sandoval,

The Sagebrush Ecosystem Program (SEP) continues to contribute to further conservation of sagebrush and sage-grouse habitat in Nevada. One of the more significant recent tasks for the SEP has been playing an instrumental role in coordinating with the Bureau of Land Management in their task to update the Sage Grouse Resource Management Plan Amendment through the National Environmental Policy Act (NEPA) process to better align with the Nevada Greater Sage-Grouse Conservation Plan. Updating and aligning the two plans will result in a more coordinated effort between the state and the federal agencies as well as greater acceptance of the BLM plan by various stakeholders. This effort not only requires working with BLM on the Environmental Impact Statement (EIS) as part of NEPA, but also taking the opportunity to update the 2014 Nevada Greater Sage-grouse Conservation Plan so that the state has significant input in the implementation of the EIS. There are also plans to soon begin coordination with the US Forest Service to assist with updating their Land Management Plan for Greater Sage-Grouse Conservation to align more closely with the State Plan.

Progress is continually being made to enhance and improve the Conservation Credit System (CCS). The Sagebrush Ecosystem Technical Team (SETT) continues to work with private landowners to conduct conservation practices on their land that will enhance and protect Greater Sage-grouse habitats, eventually leading to credit generation and the sale of credits to those needing to offset anthropogenic disturbances. Collectively to date, credit projects with transferred, available and anticipated credits account for approximately 70,000 acres of private land and may generate as many as 18,000 credits. The SETT has also seen an increase in interest in the CCS on the industry side, which sparks hope for the first credit sale between different parties.

We are dedicated to the oversight and guidance of the Sagebrush Ecosystem Program that will lead to responsible multiple uses of Nevada's natural resources while ensuring that unavoidable impacts are adequately offset through the use of the CCS. 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, U.S. Forest Service, U.S. Fish and Wildlife Service, Natural Resources Conservation Service, Nevada Department of Conservation and Natural Resources, Nevada Conservation Districts Program, Nevada Department of Wildlife, Nevada Department of Agriculture, and Nevada Division of Forestry.

Sincerely,

J.J. Goicoechea, Chairman

Sagebrush Ecosystem Council

GREATER SAGE-GROUSE • POPULATION STATUS

GREATER SAGE-GROUSE POPULATION OVERVIEW

Each year NDOW surveys approximately 40% of the 1,886 known sage-grouse leks and approximately 75% trend leks identified within the state. Trend leks are a subset of total leks in Nevada that are monitored several times each year to enable a better trend estimate for sage-grouse populations in Nevada. In addition to lek monitoring, NDOW collects hunter harvested sage-grouse wings to conduct a demographic analysis to estimate recruitment into the population. Lek count data have not been compiled and analyzed for the 2018 season but will be available in the December 2018 report, along with hunter harvest and recruitment information that are collected each fall.

In addition to NDOW lek count data, USGS is analyzing population trends at several spatial scales to indicate whether leks, lek clusters, or biologically significant units (BSUs) are in need of management action by identifying population warnings, soft and hard triggers at the respective spatial scale (Coates et al. 2017). Figure 1 displays individual leks and spatial boundaries of lek clusters and BSUs. In 2016, the USGS analysis indicated that 17 leks and 7 lek clusters reached a soft trigger, and 5 leks reached a hard trigger. The analysis analyzed population data from Nevada and California over a 17 year period and estimated an average decline of 3.86%/year during this time frame. This population modeling will be conducted annually to track warnings and triggers that can be used to better manage sage-grouse populations in Nevada.

Coates, P.S., Prochazka, B.P., Ricca, M.A., Wann, G.T., Aldridge, C.L., Hanser, S.E., Doherty, K.E., O'Donnell, M.S., Edmunds, D.R., and Espinosa, S.P. 2017. Hierarchical population monitoring of greater sage-grouse (*Centrocercus urophasianus*) in Nevada and California – Identifying populations for management at the appropriate spatial scale: U.S. Geological Survey Open-File Report 2017-1089, 49p.

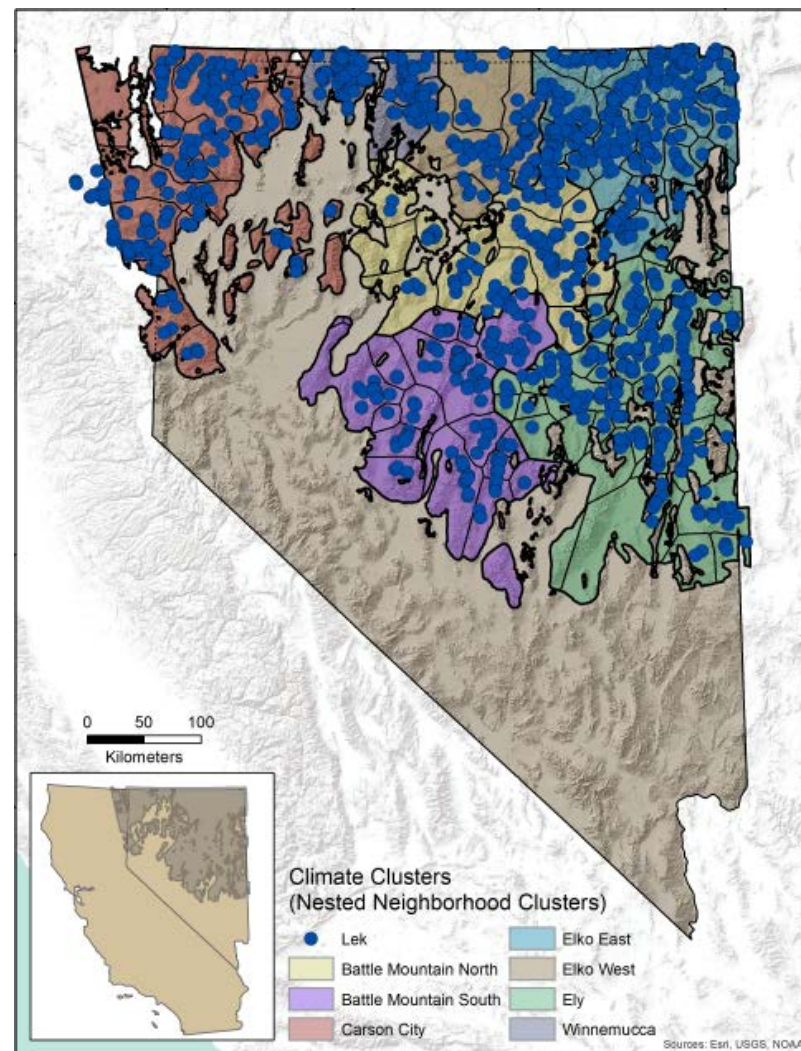


FIGURE 1. Leks, lek clusters, and BSUs within the USGS population monitoring framework (Coates et al. 2017).

GREATER SAGE-GROUSE • THREATS

THREATS TO THE SAGEBRUSH ECOSYSTEM AND THE GREATER SAGE-GROUSE

Threats to the greater sage-grouse are numerous but can be placed into several categories that all affect the grouse's habitat. Direct habitat loss from wildfire and invasive species and habitat fragmentation are the greatest contributing factors to the declining grouse population.

FIRE

2017	Acres Burned	GRSG Habitat Burned	Percent of total
Nationwide	10,026,086	2,073,859	21%
Nevada	1,329,289	967,324	73%

TABLE 1. Fire occurrence in the United States for 2017. Source: National Interagency Fire Center

INVASIVE PLANTS (CHEATGRASS)

2016	Acres of GRSG Habitat	Acres of >2% Cheatgrass	Percent of total
Rangewide	288,965,933	60,277,800	21%
Central Basin	51,521,764	19,986,841	39%

TABLE 2. Invasive species occurrence in sage-grouse habitat for 2016. Source: Pacific Northwest National Laboratory

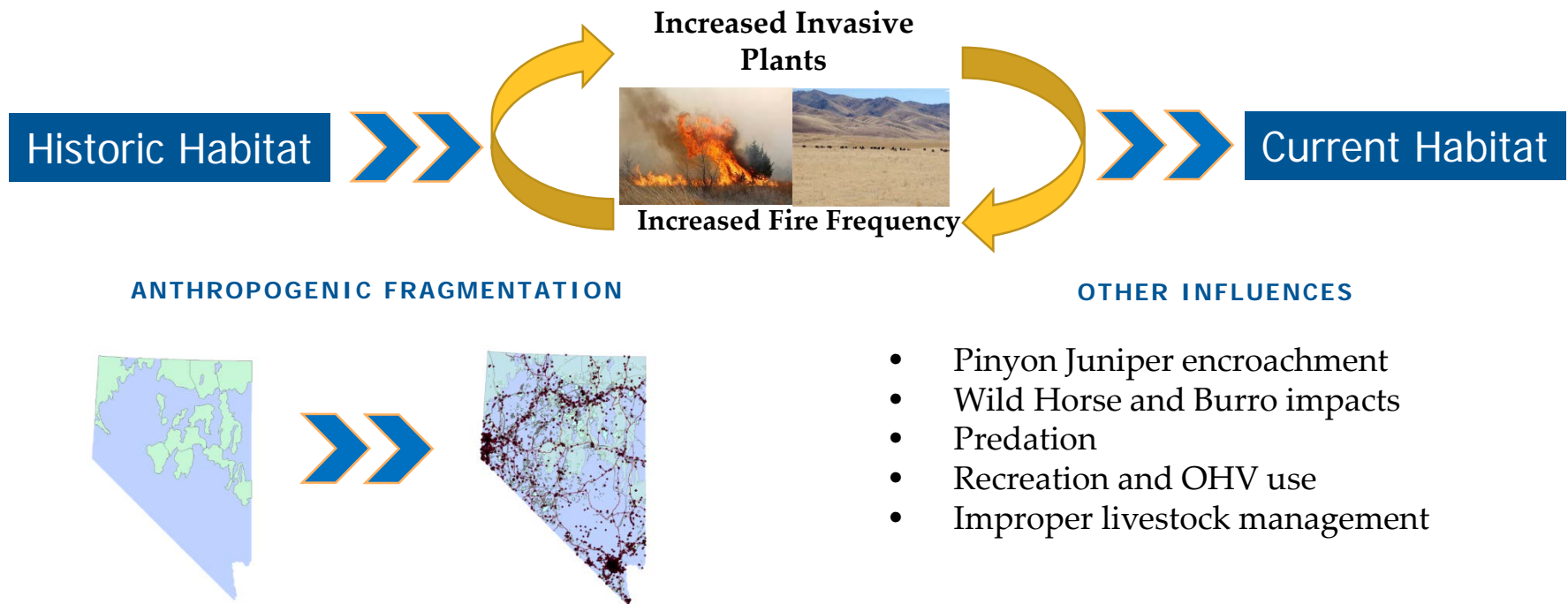


FIGURE 2: Threats to Sagebrush Ecosystems

As habitat loss and fragmentation continue, offsetting impacts through preservation, restoration, and mitigation will become increasingly necessary

CONSERVATION CREDIT SYSTEM • OVERVIEW

CREDIT SYSTEM OVERVIEW & GOVERNANCE

One of the major roles of the Sagebrush Ecosystem Program is managing the Nevada Conservation Credit System (CCS). 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 (*debts*) 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 regulatory stability to industry, and providing an opportunity for landowners 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 current 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

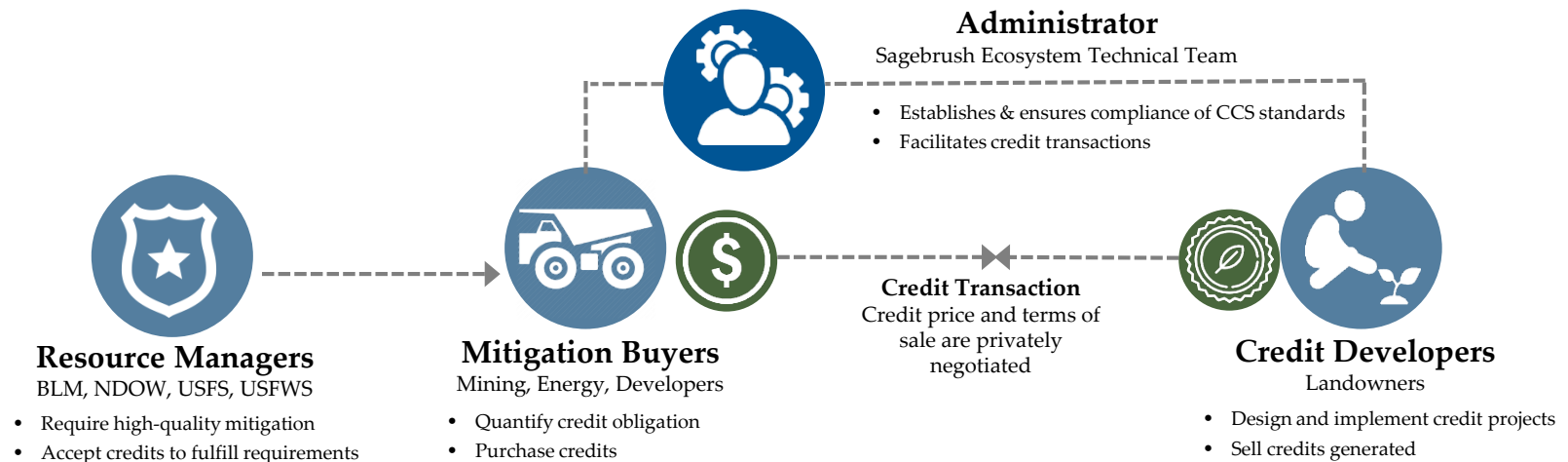


FIGURE 3: Credit System Operations

CONSERVATION CREDIT SYSTEM • ADMINISTRATION OVERVIEW

The Sagebrush Ecosystem Council ultimately determines when significant changes to CCS policy and processes are appropriate. The Sagebrush Ecosystem Technical Team (SETT) serves as staff to the Council and is the administrator of the CCS. The SETT is also 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 Semi-Annual 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



CONSERVATION CREDIT SYSTEM • PROGRAM OVERVIEW

HABITAT ASSESSMENT & DURABILITY STANDARDS

The Credit System is designed to provide more habitat gain than is lost through development (net conservation benefit), and to provide regulatory certainty to landowners and developers. All credits awarded fulfill certain scientifically developed standards which can achieve a net conservation gain. Figure 4 depicts the primary elements of a credit. Credits are developed using a combination of data gathering and GIS analysis.

For additional background and details on the CCS, please see the latest version of the [CCS Manual](#) and [HQT Methods Document](#) on the CCS website.



FIGURE 4: 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 implement approved improvements every year.



FIGURE 5: CCS Continual Improvement Process

2018 PROGRAM RESULTS • NET BENEFIT GENERATED

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

Cumulative net benefit generated by the CCS is illustrated in Figure 4. Net benefit is calculated as the difference between acres of habitat lost and acres of habitat gained, taking into account built in factors such as mitigation ratios and proximity ratios. In 2018 2,095 acres of habitat were lost and 2,273 acres were gained through mitigation in the CCS. Mitigation action also deposited 310 acres into a reserve account guarding against natural disturbance events (e.g. wildfire). Therefore, net benefit in June 2018 was 488 acres. An additional 5,643 acres are enrolled in the program. These additional acres have been awarded credits, but they have not been used to date.

Net benefit is reported here based on functional-acres; however, other reporting is based on credits and debits, the currency of the CCS. Credits and debits are determined based on acres of functional habitat.

Standards that Ensure Net Benefit

- ✓ **Consistent metrics** are used to measure both credits and debits
- ✓ **A mitigation ratio** ensures that functional-acres gained are greater than functional-acres lost
- ✓ **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
- ✓ **Mitigation in advance** is required to replace habitat before impacts occur
- ✓ **Additionality provisions** ensure credits are based on habitat enhancement and protection that were not funded by public funds

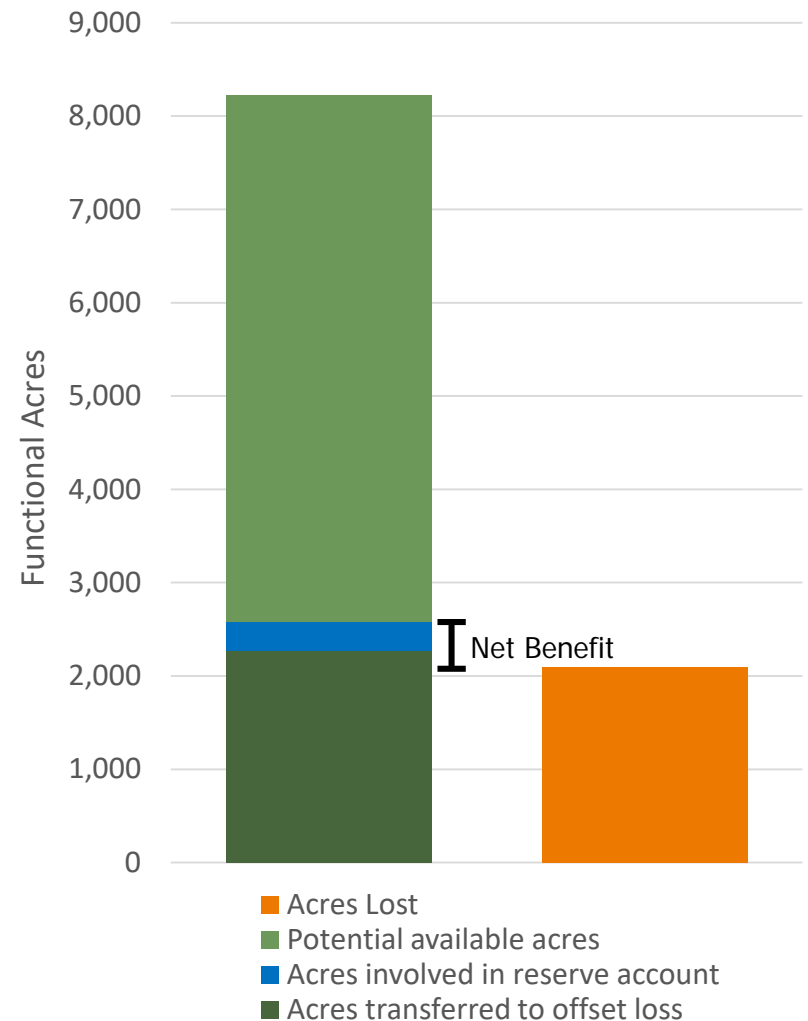


FIGURE 6: Cumulative Functional-Acre Loss, Functional-Acre Gain and Net Benefit generated by the Credit System (June 2018)

2018 PROGRAM RESULTS • CREDIT DEVELOPMENT

BACKGROUND

Credit development involves quantifying the habitat quality contained within a proposed project, and credits can then be determined from the quantification process. A management plan is then designed to enhance or restore habitat, and financial assurances are developed to protect the investment. After this work is done a participant contract can be signed. Once available credits are determined, the sale price of credits is based on market value and is 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 the management plan throughout the contract term.

CREDIT PHASES

TRANSFERRED CREDITS

Once an agreement has been formed to use the available credits to offset debts, a participant contract is signed by the Credit Developer and the SETT. These may have been transferred to fulfill mitigation obligations or are purchased and saved to fulfill future mitigation obligations.

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. They can be quickly awarded and transferred to fulfill mitigation obligations, but are not yet active mitigation efforts.

ANTICIPATED CREDITS

Anticipated credits are based on rough credit estimates and a commitment to generate credits for sale.



FIGURE 7: Available credits as of June 2018

2018 PROGRAM RESULTS • CREDIT DEVELOPMENT

STATE OF NEVADA SEED FUNDING OF CREDIT PROJECTS

After a successful solicitation of credit projects in 2016 that attracted 21 applications and resulted in public (seed) funding four projects with approximately \$1M, the Sagebrush Ecosystem Program (SEP) facilitated another solicitation of credit projects in 2017 that attracted 11 applications and resulted in seed funding five more projects with approximately \$1M. Thus, the \$2 million State funding has been entirely appropriated to starter credit projects. Once the first credits are sold, the funds are expected to be paid back and returned to a rotating fund to assist additional projects. Due to the return of unused funds as well as recovered funds from a sale or transfer of credits, the SETT hopes to have another State Funding Application period in 2019. The funding was and will continue to be used to implement on-the-ground habitat improvements, develop management plans and quantify habitat quality.

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. The SEP also utilized a Pay for Performance strategy rather than reimbursement of costs as typically seen in traditional grants.

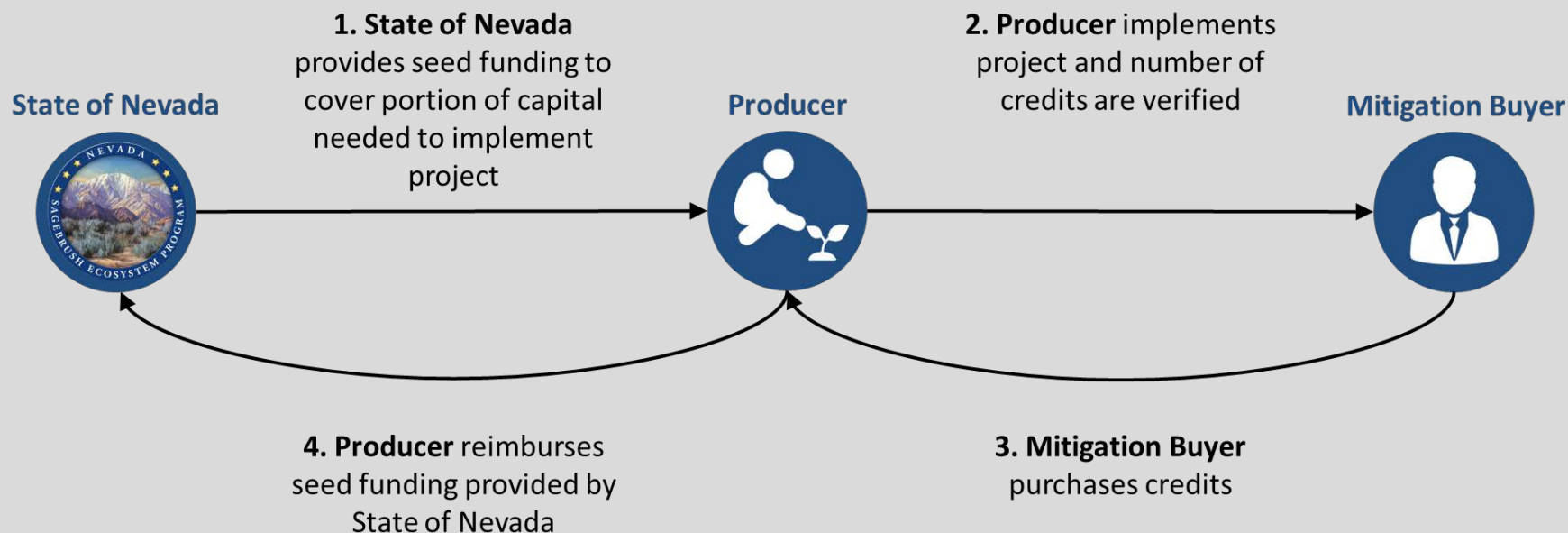


FIGURE 8: Illustration of the Pay for Performance procurement strategy utilized by the State of Nevada

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.

2018 PROGRAM RESULTS • CREDIT DEVELOPMENT

CREDIT PROJECTS

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

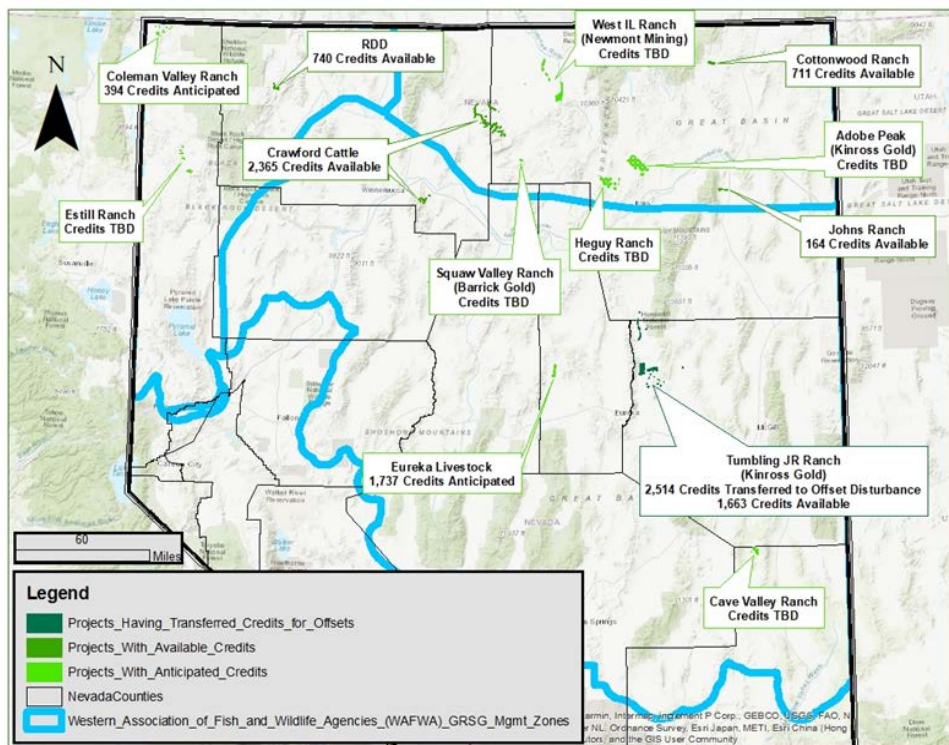


FIGURE 9: Map of all credit projects (June 2018)

PROJECT NAME	CREDITS*	COUNTY	ACRES CONSERVED	WAFWA MGMT. ZONE	STATE SEED FUNDED**
TRANSFERRED CREDITS					
Tumbling JR Ranch	2,514	Elko, White Pine	5,868	III	Yes
AVAILABLE CREDITS					
Tumbling JR Ranch	1,663	Elko, White Pine	3,882	III	Yes
Cottonwood Ranch	711	Elko	1,009	III	Yes
Crawford Cattle	2,365	Humboldt, Elko	11,134	III, IV	Yes
Johns Ranch	164	Elko	1,073	III	Yes
RDD	740	Humboldt	1,099	V	Yes
ANTICIPATED CREDITS					
Eureka Livestock	TBD	Eureka	1,641	III	Yes
Coleman Valley Ranch	TBD	Washoe	1,045	V	Yes
Squaw Valley Ranch	TBD	Elko	198	IV	Yes
West IL Ranch	TBD	Elko	8,058	IV	Yes
Heguy Ranch	TBD	Elko	6,450	IV	Yes
Estill Ranches	TBD	Washoe	1,468	V	No
Cave Valley	TBD	White Pine, Lincoln	1,772	III	No
Adobe Peak	TBD	Elko	10,900	IV	No

TABLE 3: Description of all credit projects (June 2018)

*Transferred Credits are credits used to offset debits, and Available Credits are credits available for sale. Reserve account contributions associated with the awarded credits 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

2018 PROGRAM RESULTS • FEATURED PROJECT

FEATURED PROJECT – CAVE VALLEY RANCH

Cave Valley Ranch is one of the newest credit development projects. Dana Johnson, the ranch's manager, sought out the CCS in hopes that the program would allow him the financial means to conduct beneficial enhancements for various wildlife species. The ranch provides important seasonal habitat to an adjacent lek. A pending lek on the property has two years of documented attendance. To assist with the match for an NRCS Conservation Innovation Grant, the SETT had the pleasure of assisting in the data collection on this property, and commend Mr. Johnson for the work that has already been done to improve the property and for his commitment to work with the BLM to improve the surrounding lands as well.



SITE DESCRIPTION

- Working livestock ranch
- High-quality meadow and late brood-rearing habitat
- Minimal manmade disturbances nearby
- Adjacent to Wilderness Area
- Property is in and surrounded by Priority and General Habitat Management Areas (PHMA/GHMA)



MANAGEMENT ACTIONS

- Seeding of sagebrush, forbs, and perennial grasses
- Invasive Treatment
- Conifer Removal
- Meadow Enhancements
- Riparian Improvements



REASONS FOR PARTICIPATING

- Improve land management and wildlife habitat
- Technical and financial assistance to overcome learning curve of implementing conservation practices and enrolling in the CCS
- Long-term financial stability to enable the property to remain a working ranch as well as good wildlife habitat



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 (*debts*) 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.

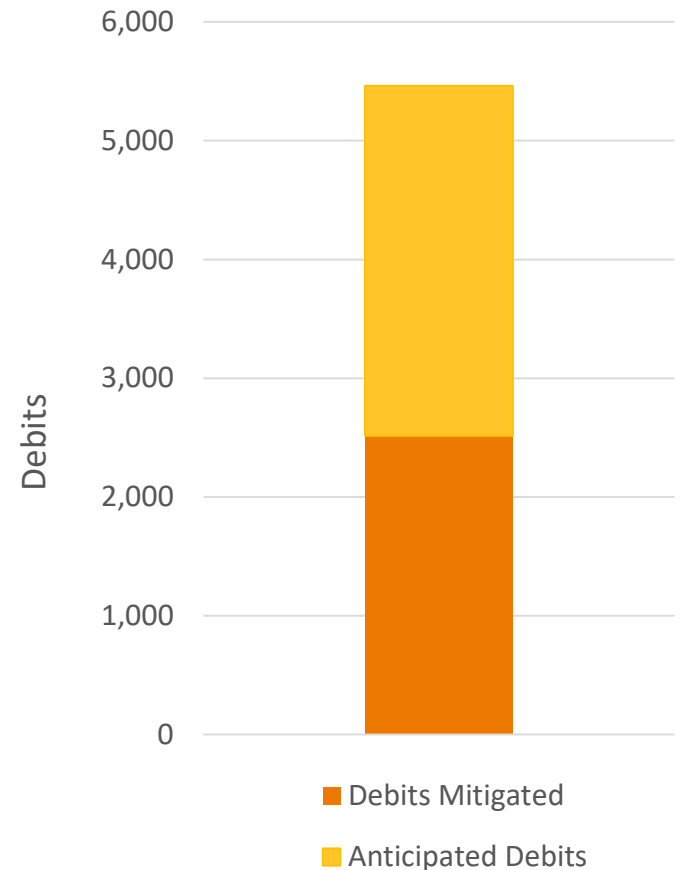
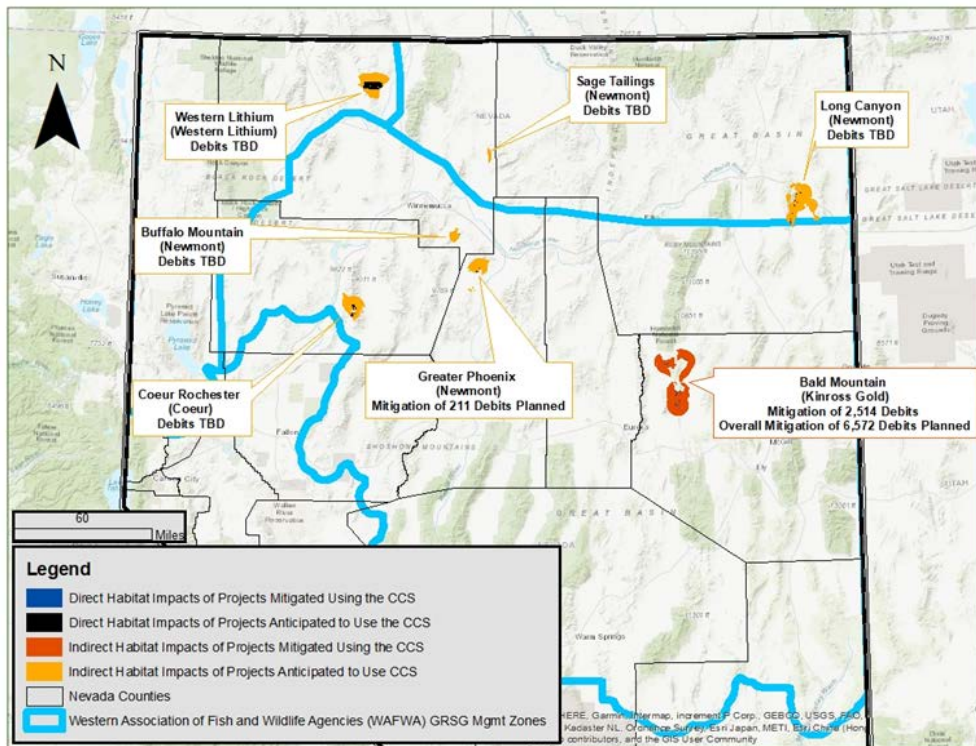


FIGURE 10: Debits mitigated or Anticipated Debits that have been documented but mitigation has not yet been completed through the CCS (June 2018)

2018 PROGRAM RESULTS • DEBITS MITIGATED

DEBIT PROJECTS (AS OF JUNE 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 (GRSG) habitat from anthropogenic disturbance.



PROJECT NAME	DEBITS	COUNTY	ACRES OF DIRECT IMPACT*	WAFWA MGMT. ZONE
DEBITS MITIGATED				
Bald Mountain Mine (Phase 1)	2,514	White Pine	2,521	III
ANTICIPATED DEBITS				
Bald Mountain Mine (Expected)	2,737	White Pine	2,745	III
Greater Phoenix Mine	211	Lander	513	III
Buffalo Mountain	TBD	Humboldt	105	III
Coeur Rochester	TBD	Pershing	2,825	III
Long Canyon	TBD	Elko	1,572	IV
Sage Tailings	TBD	Humboldt	0	IV
Western Lithium	TBD	Humboldt	TBD	V

TABLE 4: Description of debit projects that have used or with the intention of participating in the CCS (June 2018).

FIGURE 11: Map of direct and indirect impacts on GRSG habitat from debit projects having participated or with the intention of participating in the CCS (June 2018). Direct habitat impacts represent the planned footprint of direct disturbances to habitat. Indirect impacts represent the habitat indirectly impacted by projects according to the CCS Habitat Quantification Tool (HQT) Methodology. All direct and indirect disturbance areas are assessed in the field using the HQT to determine the habitat quality & quantity to be impacted and ultimately the debits to offset the disturbance

2018 PROGRAM RESULTS • DEBITS MITIGATED

FEATURED PROJECT – GREATER PHOENIX

The Greater Phoenix Mine is the second debit project to calculate and verify debits with the intention of using the CCS to offset proposed disturbances. The SEP expresses its appreciation to Newmont Mining Corporation for choosing to use the CCS as their mitigation alternative to ensure net benefit for sage-grouse habitat.

Newmont Mining Corporation enrolled ranches under their ownership into the CCS to generate credits with the intention of using these credit projects to fulfill their mitigation obligation. As Newmont owns both the debit and credit projects, their mitigation could be considered Permittee Responsible Mitigation. Using the standards defined by the CCS will ensure that Newmont's mitigation will achieve net benefits and enable Newmont to fulfill their mitigation.



MINE SITE DESCRIPTION

- Significant existing disturbance (roads, power lines and mining infrastructure) related to existing mining operations
- Low habitat quality due to significant existing disturbance and occurring near the edge of sage-grouse management areas



PROJECT DESCRIPTION

- Plan to expand gold mining operation by 4,015 acres of direct surface disturbance that are in addition to an existing 5,089 acres, which will total 211 debits



REASONS FOR PARTICIPATING

- Ensure net benefit related to impacts to Greater Sage-grouse
- Streamline mitigation approval process
- Increase cost and time certainty to fulfill mitigation obligation



2018 PROGRAM RESULTS • 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 depicted in Figure 12.

Table 5 contains deposits, withdrawals and balance of the reserve account as of June 2018. A positive balance confirms there are more credits than debits in the CCS. As of June 2018, no credits were withdrawn from the reserve account.

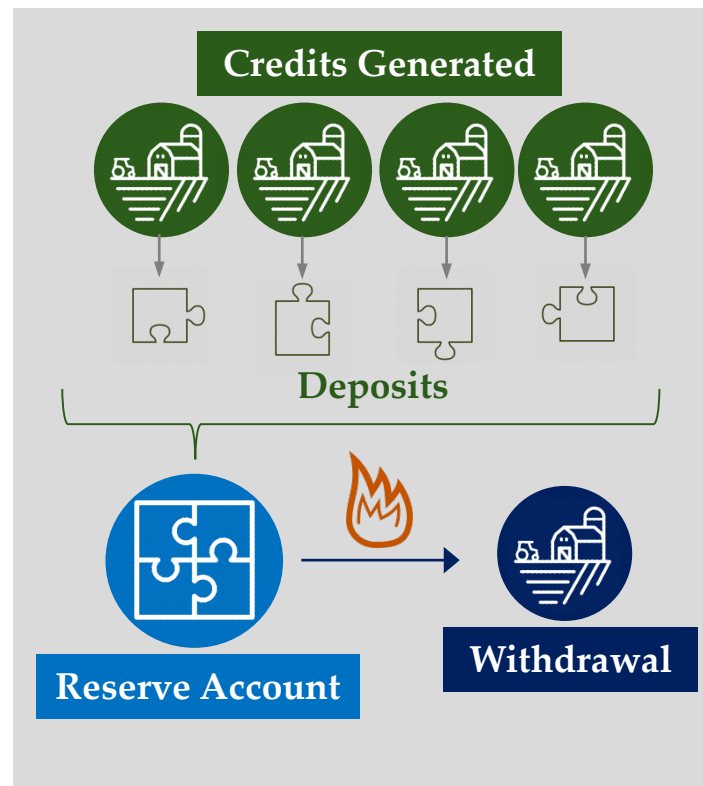


FIGURE 12: Reserve Account generation and use

CREDIT PROJECT NAME	RESERVE ACCOUNT DEPOSIT	RESERVE ACCOUNT WITHDRAWAL	RESERVE ACCOUNT BALANCE	REASON FOR INVALIDATED CREDITS (WITHDRAWALS ONLY)	INVALIDATED CREDITS REMEDIAL ACTION PLAN (WITHDRAWALS ONLY)
Tumbling JR Ranch	310	N/A	310	N/A	N/A

TABLE 5: Reserve Account Ledger

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).

Major improvements adopted by the SEC and implemented by the SETT in 2018 are summarized below, and are detailed in the 2017 Findings and Improvement Recommendations Report, along with ten other improvements of moderate and minor significance. The SETT continues to meet with the Public Lands Team monthly to determine the procedures for implementing credit projects on public lands. We intend to implement a pilot project on public lands in the near future.



4:1

TERM CREDITS MAY OFFSET PERMANENT IMPACTS

One challenge facing credit developers and credit buyers alike was the difficulty in selling and developing permanent credits when only small amounts are needed. The SEP developed an opportunity to allow term credits to be used to offset permanent impacts if a ratio of 4 term credits to one permanent debit is used.



DE MINIMIS QUALITY

Debit projects often have high costs associated with habitat quantification efforts, and often have areas with almost no habitat quality (De Minimis). The SEP Recommended excluding those areas from the quantification process which can serve to significantly reduce costs for industry.



REMOVAL OF DISTURBANCE REQUIRES HIGHER RESERVE CONTRIBUTION

Removing human caused disturbances can be one way of generating credits within a project. Monitoring these removal areas to ensure that habitat continues to improve can be a major challenge if a public right-of-way is involved. The SEP recommended that these projects included more contribution to the reserve account than normal.

2018 PROGRAM OPERATIONS • CONTINUAL IMPROVEMENT



POWERLINES

Different types of powerlines have different abilities to provide nesting for Ravens. The SEP recommended assigning different weights and classifications to powerlines based on the ability to facilitate nesting surfaces for birds.



ANCILLARY FEATURE IN DISTURBANCE SITES

Development projects often have infrastructure and other features associated with the project that may not provide the same amount of disturbance as the core development (e.g. water pipeline to a mine site). The SEP recommended that some ancillary features be classified as such and receive a lower weight when calculating the number of debits required for mitigation.



CONIFER REMOVAL

Conifer presence is a detriment to sage grouse nesting survival. The SEP recommended a process whereby credits could be generated by removing conifers where it would be beneficial to sage grouse. Habitat quality would be multiplied by 1.2 for phase 1 conifer removal, and 1.5 for phase 2 conifer removal.



LOW COST DEBIT CALCULATIONS

The cost associated with calculating the mitigation requirement from a large debit project can often be very high due to a 6km area analyzed around a debit project. The SEP recommended developing a site screening tool to minimize the field data collections required, and to provide the most conservative mitigation requirement possible if a project decided to not collect field data.

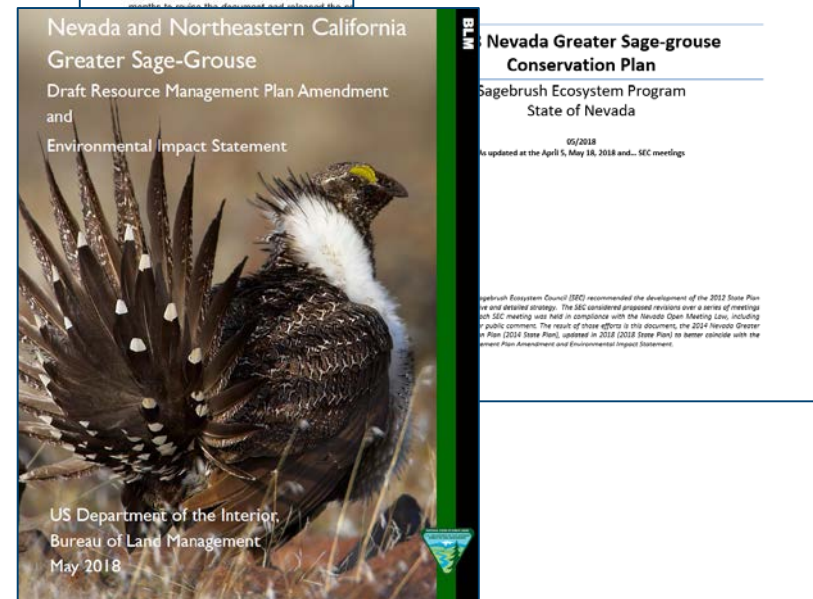
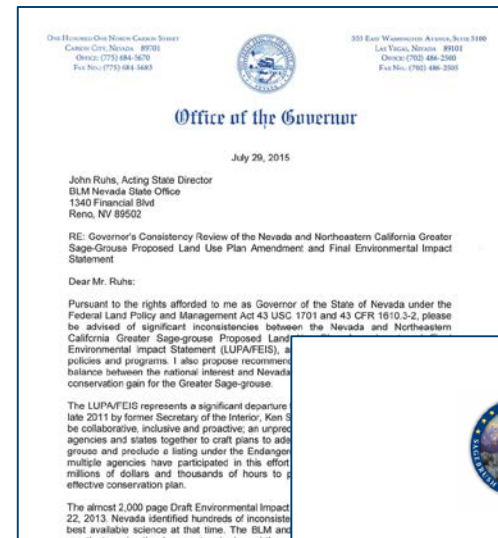
2018 PROGRAM OPERATIONS • BLM DRAFT RMPA AND DRAFT EIS

In 2015, the BLM submitted the new Proposed Plan Amendments to the relevant states for a 60-day Governors' Consistency Review. John Ruhs, Nevada BLM State Director received a letter from Brian Sandoval, the Governor of Nevada, identifying inconsistencies with State and local plans, policies, and programs; and outlining recommendations to address those inconsistencies. Such areas include:

- Sagebrush Focal Areas
- Anthropogenic Disturbance Caps
- Land Use Allocations that Create Exclusion Areas
- Mineral Rights
- Habitat Objectives and Associated Management Actions
- Mitigation for Anthropogenic Disturbances
- Map Updating Process
- Comprehensive Travel and Transportation Management

In 2016, a Memorandum of Understanding was signed between the Department of Conservation and Natural Resources and the BLM, and in 2017, a Notice of Intent to publish a Greater Sage-Grouse Draft Resource Management Plan Amendment (DRMPA) and Environmental Impact Statement (DEIS) for Nevada was announced. The aim was to improve sage-grouse conservation by collaborating with the states and aligning strategies and policies.

The SETT has been working closely with the BLM to review, improve, and align State and Federal plans. This will contribute to better collaboration and efficient implementation. The above topics as well as others have been discussed and considered by the SEC and the BLM with the intent of adoption and implementation. The Habitat Quantification Tool has the potential to be adopted as the tool to be used in determining mitigation requirements on BLM lands. Additionally, the SETT has been working extensively with the Science Work Group and the BLM to develop habitat and population triggers within both plans to ensure that long term monitoring and necessary implementation occur in the most critical areas of concern.



2018 PROGRAM OPERATIONS • CONSERVATION PARTNERS

Many groups and organizations across the state are coming together in order to conduct on-the-ground conservation for the greater sage-grouse. The Sagebrush Ecosystem Program is proud to work with these various groups in order to accomplish similar goals.



THE NEVADA COLLABORATIVE CONSERVATION NETWORK (NCCN)

The NCCN held its first in a series of collaborative workshops on May 8-9, 2018 in Elko, NV. Approximately 40 people attended this session, the majority representing locally-led conservation groups in Nevada. It was the first time that these groups have been brought together to build relationships, share information and network. They were joined by guest speakers from Utah who brought their knowledge of collaboration techniques to assist with the discussions. Another conference was highly requested and is currently being planned for early 2019.

The State of Nevada, the US Forest Service, and the Bureau of Land Management are working together to use the NCCN to achieve effective conservation of sagebrush ecosystems in Nevada. The NCCN is a state-wide effort to promote, support and incentivize local, community-based, collaborative conservation efforts in order to create and maintain thriving ecosystems and associated wildlife, communities and economies. This effort began in late 2016 and is spearheaded by representatives from over 15 local, state, federal and non-profit agencies and organizations. The NCCN empowers both stakeholders and land managers to cooperatively resolve conflict and build a collaborative position whether the discussion is at the local level, or when appropriate, referred to the Governor's Sagebrush Ecosystem Council.

OTHER COLLABORATORS INCLUDE:



- Non-Governmental Organizations
- Private Businesses
- State-Sponsored Conservation Organizations
- LAWGs
- LWGs
- Grazing Management Interest Groups
- Local Conservation Interest Groups



Photo credit: Laura Van Riper

2018 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.

