

# Nevada Sagebrush Ecosystem Program

## Semi-Annual Report

June 3, 2025

Presented by  
**Sagebrush Ecosystem Technical Team**



NEVADA  
**SAGEBRUSH ECOSYSTEM  
PROGRAM**







## State of Nevada Sagebrush Ecosystem Program

The *Semi-Annual Report* is a product of the Nevada Sagebrush Ecosystem Program (SEP). The Sagebrush Ecosystem Technical Team (SETT) and Sagebrush Ecosystem Council (SEC) submit this document semi-annually 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.

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# The Sagebrush Ecosystem Council's Mission

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.





# The Sagebrush Ecosystem Technical Team's Mission

To sustain and enhance Nevada's sagebrush ecosystems and the species that depend on them while supporting the State's economy through responsible land stewardship and resource management.





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# From the Sagebrush Ecosystem Technical Team

The Semi-Annual CCS Report provides a summary of the program's mitigation achievements each year. In addition to informing the SEC and all stakeholders on the achievements of the SEP relevant to mitigation and the CCS, the report highlights the continued commitment of the Sagebrush Ecosystem Program (SEP) to function transparently and implement mitigation uniformly.

In 2019, the Sagebrush Ecosystem Council (SEC) adopted a permanent mitigation regulation that was subsequently passed by the Legislative Commission. This regulation requires compensatory mitigation for greater sage-grouse using the Nevada Conservation Credit System (CCS). Mitigation is required for certain man-made disturbances on public lands as defined within the Nevada Greater Sage Grouse Conservation Plan. The CCS was intended to ensure consistent and durable mitigation in Nevada.

Due to the regulation, the Sagebrush Ecosystem Program (SEP) has seen a significant increase in the number of Debit Projects entering the CCS. The total number of active debit projects in the CCS is currently 106. No mitigation transactions have occurred in 2025, however several are in-progress or expected. The total number of acres of Greater sage-grouse habitat conserved in Nevada through the CCS is just under 129,000 as of June 2025.

Two new credit projects were entered into the CCS this year, accounting for approximately 3,600 new credits. This brings the total number of credit projects in the CCS to 31 (with one withdrawal re-entering, and one inactive project reactivating). The total number of available or anticipated credits is approximately 72,850. The Sagebrush Ecosystem Technical Team (SETT) also visited a potential new credit project for a site tour. This allowed the SETT to meet with project proponents on a more personal level, discuss the challenges and opportunities within the projects, and answer questions from the landowners. The SETT also held their first ever Mitigation Summit (with other State Agencies) in February, Credit/Debit Proponent Workshop in May, and Riparian Restoration Workshop in May.

We express our sincere gratitude and appreciation for the many partners who provided assistance, guidance, and support of the implementation of the CCS and the conservation of Nevada's sagebrush ecosystem.

**Kathleen Steele**  
Program Manager  
Sagebrush Ecosystem Program

# Introduction: Background Information

- The SEP was legislatively established in 2013. Work to develop a system for mitigating authorized adverse impacts (disturbances) to sagebrush ecosystems in the State promptly began, and the Conservation Credit System was adopted in December 2014.
- A primary goal expressed by all stakeholders was to ensure, based on best available science, that the system could be applied consistently to quantify authorized adverse impacts to Greater Sage-grouse habitat (debits), and preservation and restoration projects (credits). To achieve this goal, the Habitat Quantification Tool (HQT) was developed and approved by the Council.
- The 2015 Legislature appropriated funds to be used for grants to “kick start” credit projects. Funding was awarded initially in 2016, but several landowners began credit projects on their own without any state funding.
- The transfer of credits began in 2017. However, transfers stalled upon the issuance of Instructional Memorandum (IM) 2019-018 by the Department of Interior on December 6, 2018 directing that the Bureau of Land Management (BLM) could only require mitigation on federal lands if there was a state regulation requiring it.
- Because most disturbances occur on lands managed by the BLM, Nevada became more at risk of having the Greater Sage-grouse listed as threatened or endangered species due to lack of regulatory mechanisms to mitigate disturbances.
- In response, the Sagebrush Ecosystem Council immediately began work on a regulation requiring mitigation on public lands. A permanent regulation was passed in 2019 – NAC 232.400-232.480.
- A combination of continuous program engagement and the adoption of the regulation has resulted in a significant increase in credit project development and CCS mitigation transactions.
- Nevada began development of the mitigation program after many other western states with Sage-grouse habitat had begun development of their systems. Nevada is considered a regional leader in the implementation of a conservation credit system or habitat exchange, being one of the first to have finalized several transactions.

# Introduction: Semi-annual Report & Credit System Overview

## Semi-annual report

The CCS's *Semi-annual Report* provides a summary of the program's achievements over the past year and includes key outcomes from credit and debit projects as well as the program in general.

## 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 (*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 conservation of the sagebrush ecosystem. The CCS also provides regulatory certainty to industry and provides 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 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

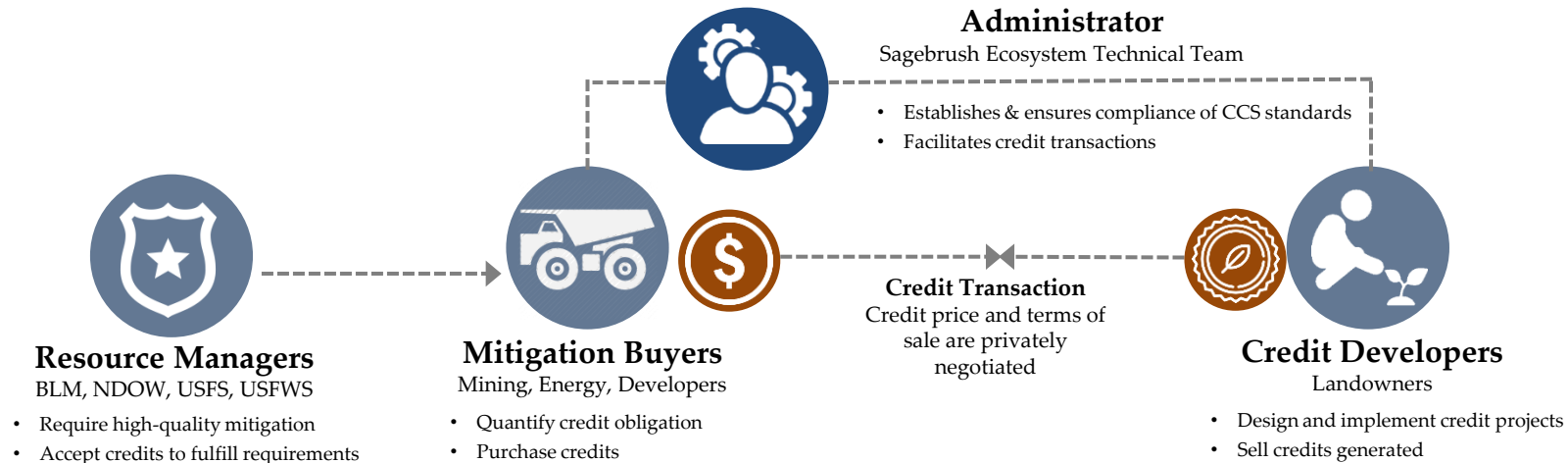


Figure 1. CCS structure



# 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 industry and landowners, and streamlines administrative operations. The standards include consistent ways to measure habitat loss and gain, as well as clearly defined provisions to ensure durability of credits through time. Figure 2 depicts the primary elements of a credit.

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 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 implement approved improvements every year.



Figure 3. CCS Continual Improvement Process

# Program Results: Net Benefit Generated

The goal of the CCS is to offset impacts from certain anthropogenic (man-made) disturbances with habitat enhancements and protections resulting in a net benefit for Greater Sage-grouse habitats in the State of Nevada.

The CCS ensures net benefit to Greater Sage-grouse habitat in multiple ways. The CCS uses a scientifically rigorous Habitat Quantification Tool (HQT) to assess both debit (degradation of habitat) and credit (conservation of habitat) projects. Mitigation ratios applied to the three habitat management zones (Priority, General, and Other) and a five percent factor added to debit projects occurring within any management zone ensures more functional-acres are gained than lost, and standards are used to ensure habitat quality remains for the planned life of credit projects.

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 can increase the credit obligation (i.e., debits) from 0% to 15%. The purpose of the proximity ratio is to encourage mitigation to occur near to where habitat is being displaced or impacted.

The combination of mitigation and proximity ratios results in a net benefit for sage-grouse habitat in Nevada.

Standards that Ensure Net Benefit	
✓	<b>Consistent metrics</b> are used to measure both credits and debits
✓	<b>A mitigation ratio</b> ensures that functional-acres gained are greater than functional-acres lost
✓	<b>A reserve account</b> contribution of 5-14% of credits in excess of the amount needed to offset any disturbance is required at the time of sale/transfer within the CCS. Reserve account credits are maintained to ensure that credits lost (e.g. acts of nature) can be replaced as necessary, and provide durability as well as continued net benefits
✓	<b>Advanced mitigation</b> is required to replace habitat before impacts occur
✓	<b>Additionality provisions</b> that ensure credits are based on habitat enhancement and protection that were not funded by public sector investments



# Program Results: Credit Development

## State of Nevada Seed funding of Credit Projects

The SEP has facilitated successful solicitations for credit project development in 2016, 2017, and 2019 that attracted nearly 40 applications and resulted in seed funding to 13 credit project proponents totaling approximately \$2M. The funding was or will be used to quantify habitat quality, develop management plans, and implement on-the-ground habitat improvements.

The SEP utilized a Pay for Performance procurement strategy to solicit and provide seed funding to credit projects in 2016, 2017, and 2019. 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 by landowners using the funds follows each sale of credits per their funding agreement. 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 credits per dollar of state funds awarded, and minimized financial risk and uncertainty for the state. This procurement strategy also allows for a revolving fund which will continue to fund new projects.

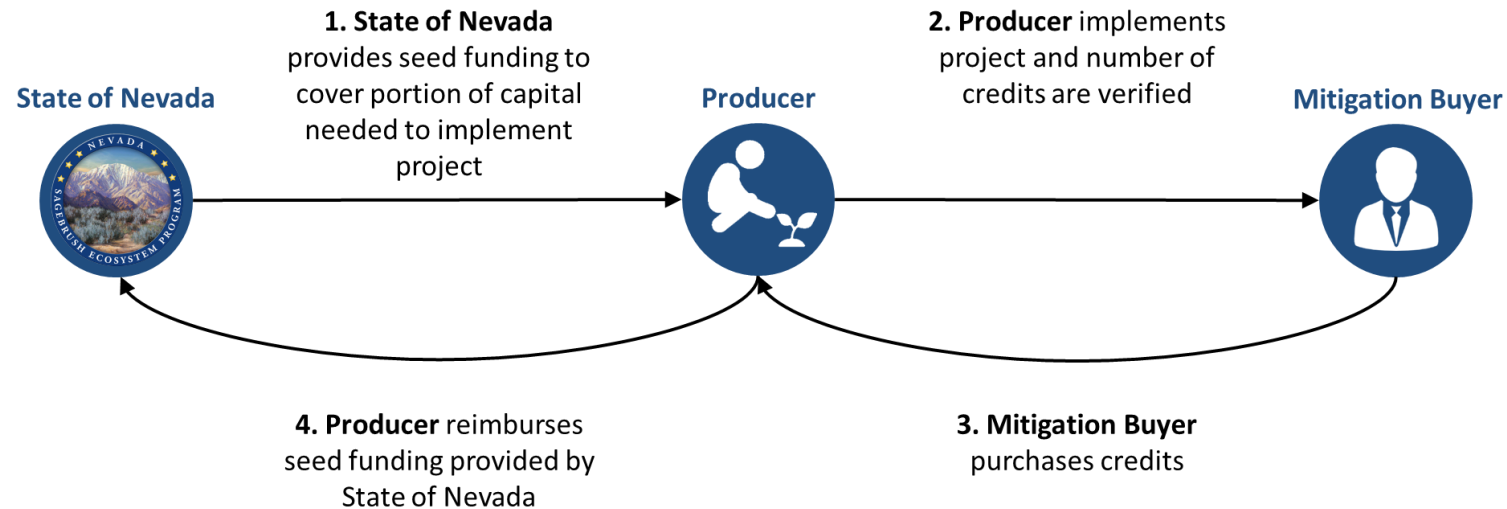



Figure 4. Illustration of the Pay for Performance procurement strategy used by the State of Nevada



# Program Results: Credit Summary



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Nevada Department of  
**CONSERVATION &  
NATURAL RESOURCES**



Nevada  
Department  
of Agriculture





# Program Results: Credit Projects

## Background

Credit development involves quantification of habitat values (credits), enhancement or restoration of habitat, development of a management plan, securement of financial assurances and signing a participant contract. After available credits are determined, the sale price of credits is based on market value and determined through a private negotiation between landowners with credits available and debit project proponents needing credits to offset a disturbance. When credits are sold, the purchaser fulfills a mitigation obligation, and the credit seller commits to maintaining performance standards for the term of the contract. Landowners can continue agricultural and livestock operations compatible with Greater Sage-grouse habitat needs throughout the contract term.

## Credit Types

### Transferred credits

Transferred credits refers to those credits that have been sold or transferred to a debit producer to satisfy their mitigation obligation.

### Available credits

Available credits are based on verified habitat quantifications and have an approved management plan. These credits are “available” for transaction.

### Anticipated credits

Anticipated credits are those credit projects in the initial stages of development that have not finalized a management plan. These credits are not “available” for transaction, yet.

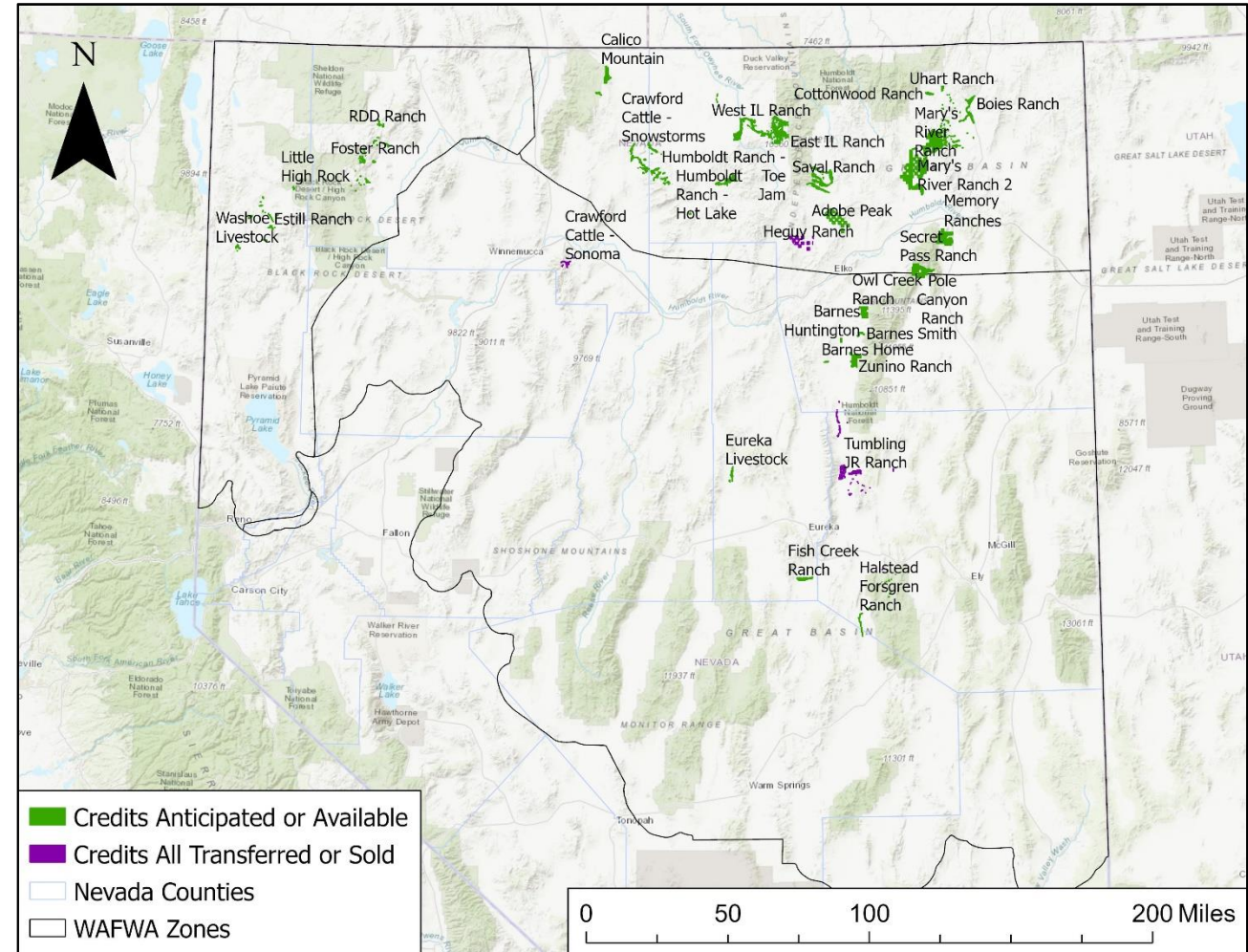


Figure 5. Current credit projects enrolled in the CCS

# Program Results: Transactions

DEBIT PROJECT	CREDITS TRANSFERRED OR SOLD	CREDIT PROJECT	ACRES CONSERVED**	WAFWA MGMT. ZONE
Transactions*				
Bald Mountain Mine	2,514	Tumbling JR Ranch	9,717	III
Greater Phoenix Mine	243	West IL Ranch	6,279	IV
Greater Phoenix Mine - Philadelphia Canyon	5	West IL Ranch	Acres Included in other Transaction	IV
Coeur Rochester Mine	467	Crawford Cattle - Sonoma	1,498	III
Coeur Rochester Mine	186	Crawford Cattle - Snowstorms	1,313	IV
Baltazor Geothermal	292	Crawford Cattle - Snowstorms	1,033	IV
Midas Exploration	22	Estill Ranch	346	V
Avocado Exploration	44	Crawford Cattle - Snowstorms	254	IV
Newcrest Exploration Phase I	3	Cottonwood Ranch	13	IV
Fish Springs Solar	59	Heguy Ranch	26	IV
Western Oil Exploration	5	Crawford Cattle - Snowstorms	Acres Included in other Transaction	IV
Jerritt Canyon Exploration	45	Cottonwood Ranch	103	IV
Snow Canyon Mine Closure	2	Cottonwood Ranch	Acres Included in other Transaction	IV
Twin Creeks Mine - Sage Tailings	35	West IL Ranch	Acres Included in other Transaction	IV
Tungsten Mountain Solar	5	Crawford Cattle - Snowstorms	1,332	IV
Dixie Meadows Geothermal	102	Crawford Cattle - Snowstorms	Acres Included in other Transaction	IV
South Railroad Exploration	9	Heguy Ranch	Acres Included in other Transaction	IV
Peterson Mountains Mine	1	Heguy Ranch	Acres Included in other Transaction	IV
White Pine Hydropower Pump Exploration	9	Secret Pass Ranch	226	III, IV
Cherry Creek Telecommunications Tower	3	Secret Pass Ranch	Acres Included in other Transaction	III, IV
Round Springs Telecommunications Tower	3	Secret Pass Ranch	Acres Included in other Transaction	III, IV
Lincoln Hill Exploration	9	Heguy Ranch	Acres Included in other Transaction	IV
Round Mountain Mine	45	Tumbling JR Ranch	Acres Included in other Transaction	III
SW Energy Road	13	Cottonwood Ranch	Acres Included in other Transaction	IV
Big Ledge - Dry Creek Mine Closure	310	Mary's River Ranch	463	IV
<b>TOTAL</b>	<b>4,431</b>		<b>22,603</b>	

• Reserve account contributions associated with transfers are excluded from this table. Proximity factors associated with the transactions are included.

\*\* "Acres Included in other Transaction" refers to acres already accounted for in a previous transaction, as all credits within a Credit Project map unit are required to be managed in their entirety, regardless of the number of credits transferred within.





# Program Results: Transactions Cont.

DEBIT PROJECT	CREDITS TRANSFERRED OR SOLD	CREDIT PROJECT	ACRES CONSERVED**	WAFWA MGMT. ZONE
Transactions*				
Thacker Pass Mine	550	Estill Ranch	1,901	V
Baker Ranch Powerline	1	Cottonwood Ranch	Acres Included in other Transaction	IV
Gold Bar South Mine	662	Heguy Ranch	3,397	IV
South Railroad Exploration	24	Heguy Ranch	Acres Included in other Transaction	IV
Beehive Telephone Fiber Optic LROW	2	Heguy Ranch	Acres Included in other Transaction	IV
Gold Bar South Mine	127	Cottonwood Ranch	306	IV
White Pine Hydropower Pump Exploration	6	Secret Pass Ranch	Acres Included in other Transaction	III, IV
Bald Mountain Mine	462	Tumbling JR Ranch	Acres Included in other Transaction	III
Robinson North Tripp Mine	201	Owl Creek Ranch	631	III
Marigold - Valmy Mine	59	Owl Creek Ranch	Acres Included in other Transaction	III
Great Basin Diamond 1-27 APD Exploration	5	Owl Creek Ranch	Acres Included in other Transaction	III
Crescent Valley Geothermal Exploration	5	Crawford Cattle - Snowstorms	Acres Included in other Transaction	IV
Robertson Exploration One	7	West IL Ranch	Acres Included in other Transaction	IV
Goldrush Mine	2,037	West IL Ranch	Acres Included in other Transaction	IV
Goldrush Exploration	26	West IL Ranch	Acres Included in other Transaction	IV
Goldrush Mine	601	East IL Ranch	486	IV
Marigold - Valmy Mine	332	Owl Creek Ranch	607	III
Green Springs Exploration	13	Owl Creek Ranch	Acres Included in other Transaction	III
Golden Lake Exploration	6	Owl Creek Ranch	Acres Included in other Transaction	III
Prospect Mine - Gullsil Expansion	12	Owl Creek Ranch	Acres Included in other Transaction	III
North Peak Exploration	1	Owl Creek Ranch	Acres Included in other Transaction	III
Reno to Las Vegas Fiber Optic LROW	24	Zunino Ranch	338	III
Murdock Mountain Phosphate Exploration	1	Zunino Ranch	Acres Included in other Transaction	III
Big Ledge - Dry Creek Mine Closure	2	Mary's River Ranch	Acres Included in other Transaction	IV
Big Ledge - Dry Creek Mine Closure	3	Mary's River Ranch	Acres Included in other Transaction	IV
<b>TOTAL</b>	<b>5,169</b>		<b>7,666</b>	

• Reserve account contributions associated with transfers are excluded from this table. Proximity factors associated with the transactions are included.

\*\* "Acres Included in other Transaction" refers to acres already accounted for in a previous transaction, as all credits within a Credit Project map unit are required to be managed in their entirety, regardless of the number of credits transferred within.



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Nevada  
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# Program Results: Transactions Cont.

DEBIT PROJECT	CREDITS TRANSFERRED OR SOLD	CREDIT PROJECT	ACRES CONSERVED**	WAFWA MGMT. ZONE
<b>Transactions*</b>				
Dodge Flat II Solar	1	Owl Creek Ranch	Acres Included in other Transaction	III
Pony Creek Exploration	44	Zunino Ranch	Included in other Transaction	III
Bald Mountain Mine	1,143	Tumbling JR Ranch	Included in other Transaction	III
Bald Mountain Mine	93	Adobe Peak	4,175	IV
Ruth Water Pipeline LROW	2	Owl Creek Ranch	Included in other Transaction	III
Whirlwind Geothermal Exploration	2	Crawford Cattle - Snowstorms	Included in other Transaction	IV
North Ranch Tower	207	Zunino Ranch	Included in other Transaction	III
Argus Mineral Exploration	1	Cottonwood Ranch	Included in other Transaction	IV
Juniper Mine Expansion	480	Adobe Peak	Included in other Transaction	IV
Jackpot to Wells Fiber Optic LROW	47	Zunino Ranch	Included in other Transaction	III
Jerritt Canyon Exploration	14	Cottonwood Ranch	Included in other Transaction	IV
Juniper Mine Expansion	539	Adobe Peak	Included in other Transaction	IV
Robertson Mine	15	East IL Ranch	Included in other Transaction	IV
Robertson Mine	758	East IL Ranch	5,855	IV
Robertson Mine Exploration	41	East IL Ranch	237	IV
Cedar Gate to Halligan Mesa LROW	32	Secret Pass Ranch	293	III, IV
Wildcat Exploration	24	Secret Pass Ranch	Included in other Transaction	III, IV
<b>TOTAL</b>	<b>3,443</b>		<b>10,559</b>	
<b>ALL TRANSACTIONS TOTAL</b>	<b>13,043</b>		<b>40,828</b>	

• Reserve account contributions associated with transfers are excluded from this table. Proximity factors associated with the transactions are included.

\*\* "Acres Included in other Transaction" refers to acres already accounted for in a previous transaction, as all credits within a Credit Project map unit are required to be managed in their entirety, regardless of the number of credits transferred within.



# Program Results: Transactions Cont.

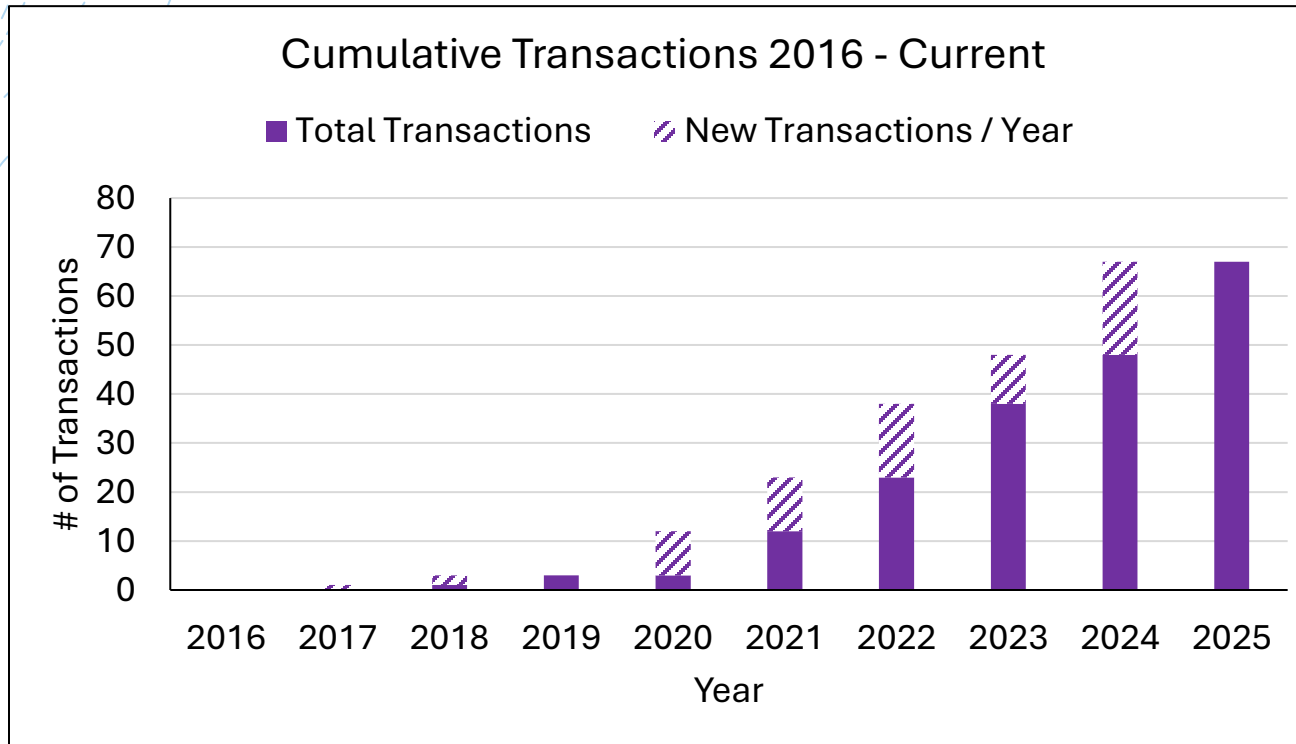


Figure 6. Cumulative transactions in the CCS since inception.

- **Sixty-seven mitigation transactions have been finalized using the CCS since its inception**
  - **13,043 credits have been transferred or sold**
  - **Approximately 41,000 acres have been conserved for at least a 30-year term**

• Reserve account contributions associated with transfers are excluded from this table. Proximity factors associated with the transactions are included.

\*\* "Acres Included in other Transaction" refers to acres already accounted for in a previous transaction, as all credits within a Credit Project map unit are required to be managed in their entirety, regardless of the number of credits transferred within.

# Program Results: Anticipated Credits

At least one credit project anticipates a credit release to occur in 2025. Two other credit projects are conducting fieldwork in 2025, with credit releases anticipated in 2026. Both fall primarily within PHMA and GHMA, and can potentially conserve over 22,000 acres for sage-grouse. Preliminary estimates indicate these projects can add an estimated 3,500 credits to the System. The table below displays all credit projects with anticipated credit releases.

PROJECT NAME	CREDITS	COUNTY	AVAILABLE ACRES	WAFWA MGMT. ZONE	STATE SEED FUNDED***
ANTICIPATED CREDITS*					
East IL Ranch	TBD	Elko	23,721	IV	Privately Funded
Little High Rock	TBD	Washoe	322	V	Privately Funded
Halstead Forsgren Ranch	TBD	Nye, White Pine	2,437	III	Privately Funded
Saval Ranch	TBD	Elko	7,661	IV	Privately Funded
Memory Ranches	TBD	Elko	10,755	IV	Privately Funded
Boies Ranch	TBD	Elko	11,671	IV	Privately Funded
Barnes Smith	TBD	Elko	912	III	Privately Funded
Fish Creek Ranch	TBD	Eureka	1,180	III	Privately Funded
<b>TOTAL</b>	<b>~7,000</b>		<b>58,660</b>		

\* Anticipated credits are estimated, but not finalized or eligible for transfer/sale.

\*\* Available Credits are finalized and eligible for transfer/sale to mitigate for anthropogenic disturbances.

\*\*\* Projects receiving state seed funding also included varying amounts of matching funds from the landowners.



# Program Results: Available Credits

Five credit projects have been awarded credits in 2025, with at least one more anticipated. The following tables show all available credits. Projects that have transferred their entire balance are not included.

PROJECT NAME	CREDITS	COUNTY	AVAILABLE ACRES	WAFWA MGMT. ZONE	STATE SEED FUNDED***
AVAILABLE CREDITS*					
Cottonwood Ranch	637	Elko	685	IV	State Seed Funded
West IL Ranch	539	Elko	All Acres Conserved	IV	Privately Funded
Crawford Cattle - Snowstorms	1,234	Humboldt, Elko	6,598	IV	State Seed Funded
Estill Ranch	68	Washoe	804	V	Privately Funded
Eureka Livestock	1,742	Eureka	1,623	III	State Seed Funded
Adobe Peak	2,506	Elko	6,726	IV	Privately Funded
Humboldt Ranch - Hot Lake	694	Elko	198	IV	Privately Funded
Washoe Livestock	171	Washoe	797	V	Privately Funded
Humboldt Ranch - Toe Jam	1,923	Elko	5,334	IV	Privately Funded
East IL Ranch	7,458	Elko	17,143	IV	Privately Funded
Secret Pass Ranch	3,565	Elko	9,750	III, IV	State Seed Funded
Calico Mountain	3,255	Humboldt	5,120	IV	State Seed Funded
Owl Creek Ranch	2,297	Elko	4,125	III	State Seed Funded
Foster Ranch	1,624	Humboldt	6,170	V	State Seed Funded
Pole Canyon Ranch	435	Elko	2,070	IV	Privately Funded
Mary's River Ranch	1,436	Elko	2,236	IV	Privately Funded
Zunino Ranch	2,771	Elko	2,879	III	Privately Funded
Mary's River Ranch 2	30,476	Elko	53,666	IV	Privately Funded
Uhart Ranch	804	Elko	693	IV	Privately Funded
RDD Ranch	740	Humboldt	1,099	V	State Seed Funded
Barnes Home	956	Elko	690	III	Privately Funded
Barnes Huntington	520	Elko	484	III	Privately Funded
<b>TOTAL</b>	<b>65,851</b>		<b>128,890</b>		

\* Anticipated credits are estimated, but not finalized or eligible for transfer/sale.

\*\* Available Credits are finalized and eligible for transfer/sale to mitigate for anthropogenic disturbances.

\*\*\* Projects receiving state seed funding also included varying amounts of matching funds from the landowners.



# 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 CCS transactions 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 offset invalidated credits until they can be replaced through corrective actions or using credit developer financial assurance funds to purchase replacement credits for the remaining term. Credits can be invalidated either intentionally or unintentionally, such as a willful destruction or acts of nature. The process of generating and using reserve credits is depicted in Figure 7.

Below are the deposits, withdrawals and balance of the reserve account as of June 2025. A positive balance (column 4) confirms there are more credits than debits in the CCS. As of June 2025, no credits have been withdrawn from the reserve account.

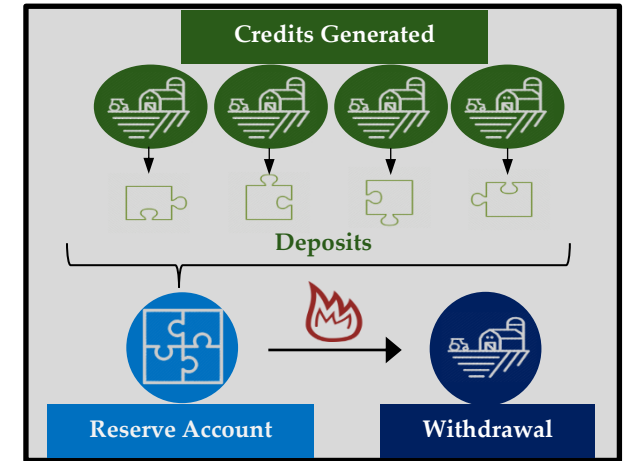


Figure 7. Reserve Account generation and use

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)
Adobe Peak	137	N/A	137	N/A	N/A
Cottonwood Ranch	19	N/A	19	N/A	N/A
Crawford Cattle - Snowstorms	79	N/A	79	N/A	N/A
Crawford Cattle - Sonoma	58	N/A	58	N/A	N/A
East IL Ranch	155	N/A	155	N/A	N/A
Estill Ranch	71	N/A	71	N/A	N/A
Heguy Ranch	87	N/A	87	N/A	N/A
Mary's River Ranch	31	N/A	31	N/A	N/A
Owl Creek Ranch	67	N/A	67	N/A	N/A
Secret Pass Ranch	10	N/A	10	N/A	N/A
Tumbling JR Ranch	412	N/A	412	N/A	N/A
West IL Ranch	357	N/A	357	N/A	N/A
Zunino Ranch	29	N/A	29	N/A	N/A
<b>TOTAL</b>	<b>1,512</b>	<b>N/A</b>	<b>1,512</b>	<b>N/A</b>	<b>N/A</b>



# Featured Credit Project: Mary's River Ranch 2

## Mary's River Ranch 2

Mary's River Ranch is located in Elko County north of Deeth, Nevada. The enrolled parcels account for over 53,000 acres of private land. The land and natural resources known as Mary's River Ranch have been operated as a 3500 to 3000 Animal Unit, year-round cow/calf grazing and hay harvesting enterprise. During the past two decades, wild elk use, and seasonal domestic sheep grazing have been included when calculating that Animal Unit rating. The project area consists of the Mary's River riparian corridor, an adjacent flood-irrigated hay meadows, and portions of sagebrush upland throughout the Snake Range. The current management practices within the upland focus on maintaining sagebrush cover with a perennial understory to provide cover and feed for sagegrouse, other wildlife, and livestock. The flood-irrigated hay meadow is managed specifically for forage production. Hay production varies annually, and these lands are more typically grazed, though may be hayed. The Mary's River riparian corridor is managed to maintain Proper Functioning Condition, as well as wildlife habitat and overall ecological health. Both the livestock and hay operations are certified Organic. The Project area will continue to be used for livestock grazing and forage production with the objective of preserving vegetation diversity and cover for the benefit of wildlife and livestock by using grazing as a management tool. As of 2025, the entire 53,666-acre ranch is contracted to be managed for conservation for the next 30 years. Wright Land Company LP was a project partner in this endeavor.

### Site Description:

- Livestock and Hay Producing Ranch
- Breeding and late brood-rearing habitat over the entirety of the project area.
- Project around of 53,666 acres located in PHMA and GHMA
- Awarded 30,476 credits

### Management Actions:

- Maintain Fencing
- Seeding for Visual Increase of Desirable Perennial Grasses and Forbs.
- Implement Noxious Weed Treatment Strategy
- Willow Plantings
- Implement Livestock Deterrents on Banks





# Program Results: Debit Summary





# Program Results: Debit Projects

The CCS is a mitigation tool used to offset impacts to Greater Sage-grouse from certain anthropogenic (i.e., man-made) 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 uses a mitigation hierarchy (Avoid, Minimize, Mitigate) within or near sage-grouse habitat management areas. Impacts from proposed anthropogenic disturbances are analyzed for potential avoidance first. If avoidance is not possible, then opportunities are examined to aid in minimizing impacts, and finally any residual unavoidable impacts (*debts*) are mitigated using the CCS. The CCS also applies financial incentives that support 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 seek authority to conduct business on federal lands. Once approved, they use the CCS to fulfill their mitigation obligation, if applicable. Project proponents can use the CCS to verify mitigation (*credits*) that they generate themselves or they can acquire credits from other credit developers in Nevada.

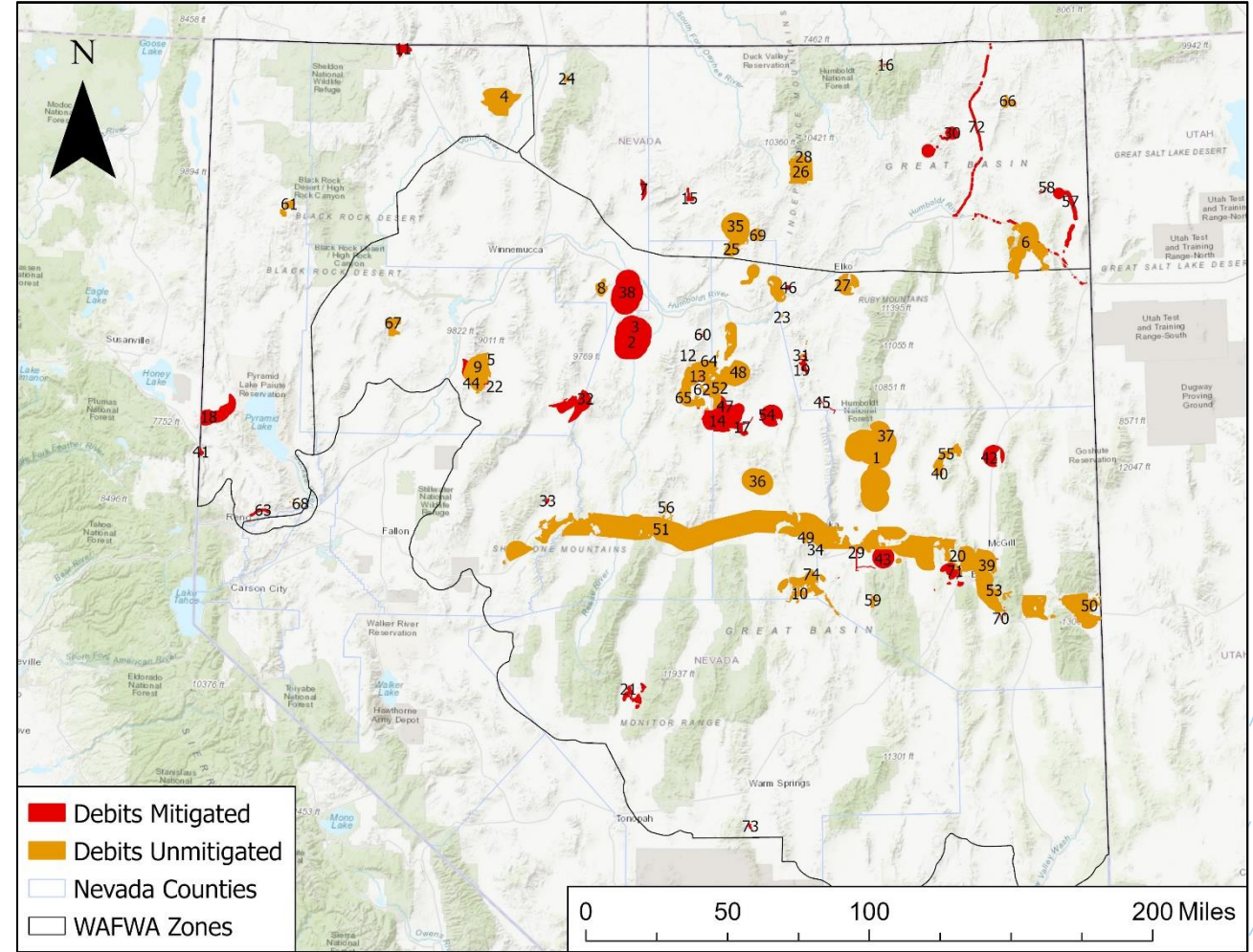


Figure 8. Current debit projects enrolled in the CCS and in the advanced stages of NEPA planning (key on next page)



# Program Results: Debit Project Map Key (for figure 8)

Number	Project Name
1	Bald Mountain Mine
2	Greater Phoenix Mine
3	Greater Phoenix Mine - Philadelphia Canyon
4	Thacker Pass Mine
5	Coeur Rochester Mine
6	Long Canyon Mine- Phase 2
7	Twin Creeks Mine - Sage Tailings
8	Lone Tree Mine - Buffalo Mountain
9	Spring Valley Mine
10	Gibellini Mine
11	Baltazor Geothermal
12	Robertson Mine
13	Robertson Mine Exploration
14	Goldrush Mine
15	Midas Exploration
16	Newcrest Exploration Phase I
17	Avocado Exploration
18	Fish Springs Solar
19	Pony Creek Exploration
20	Robinson North Tripp Mine
21	Round Mountain Mine
22	Relief Canyon Mine
23	Carlin Vanadium Exploration
24	National Exploration
25	TSPP Pipeline
26	Jerritt Canyon Exploration
27	Ruby Vista Road
28	Snow Canyon Mine Closure
29	Western Oil Exploration
30	Big Lodge - Dry Creek Mine Closure

Number	Project Name
31	South Railroad Exploration
32	Dixie Meadows Geothermal
33	Tungsten Mountain Solar
34	Prospect Mine - Gullsil Expansion
35	Rossi Mine
36	Gold Bar South Mine
37	Juniper Mine Expansion
38	Marigold - Valmy Mine
39	White Pine Hydropower Pump Exploration
40	Selena Exploration
41	Peterson Mountains Mine
42	Cherry Creek Telecommunications Tower
43	Round Springs Telecommunications Tower
44	Lincoln Hill Exploration
45	Great Basin Diamond 1-27 APD Exploration
46	SW Energy Road
47	Goldrush Exploration
48	Crescent Valley Geothermal Exploration
49	Golden Lake Exploration
50	Baker Ranch Powerline
51	Greenlink North Powerline
52	NGM Ore Railroad
53	Cross-Tie Powerline
54	North Ranch Tower
55	Limo Butte Exploration
56	McGinness Hills Opt Solar & Geothermal Exploration
57	Beehive Telephone Fiber Optic LROW
58	Murdock Mountain Phosphate Exploration
59	Green Springs Exploration
60	Whirlwind Geothermal Exploration

Number	Project Name
61	Hog Mountain Exploration
62	Robertson Exploration One
63	Reno to Las Vegas Fiber Optic LROW
64	Crescent Valley Geothermal
65	NW Deeps Mine Expansion
66	Northern Nevada Lithium Exploration (Surge)
67	Wildcat Exploration
68	Dodge Flat II Solar Exploration
69	Coyote Mine Expansion
70	Argus Mineral Exploration
71	Ruth Water Pipeline LROW
72	Jackpot to Wells Fiber Optic LROW
73	Cedar Gate to Halligan Mesa LROW
74	Duckwater Fiber LROW



# Program Results: Debits Anticipated/Outstanding

PROJECT NAME	DEBITS*	COUNTY	ACRES OF DIRECT IMPACT**	WAFWA MGMT. ZONE
ANTICIPATED DEBITS***				
Bald Mountain Mine	1,132	White Pine	5,734	III
Thacker Pass Mine	875	Humboldt	5,169	V
Long Canyon Mine- Phase 2	1,676	Elko	815	III, IV
Lone Tree Mine - Buffalo Mountain	271	Humboldt	4	III
Spring Valley Mine	TBD	Pershing	2,483	III
Gibellini Mine	1,961	Eureka, Nye, White Pine	328	III
Robertson Mine	1,341	Lander	2,643	III
Relief Canyon Mine	33	Pershing	0	III
Carlin Vanadium Exploration	15	Elko	22	III
National Exploration	28	Humboldt	37	IV
Jerritt Canyon Exploration	26	Elko	384	IV
Ruby Vista Road	2	Elko	2	III
South Railroad Exploration	41	Elko	126	III
Prospect Mine - Gullsil Expansion	20	Eureka	28	III
Rossi Mine	286	Elko	427	IV
Gold Bar South Mine	1,372	Eureka	210	III
Juniper Mine Expansion	1	Elko, White Pine	2,300	III
Selena Exploration	128	White Pine	200	III
Greenlink North Powerline	TBD	Churchill, White Pine, Eureka	15,190	III
NGM Ore Railroad	2,926	Eureka, Lander, Elko	1,755	III, IV
Cross-Tie Powerline	TBD	White Pine	2,912	III
Limo Butte Exploration	26	White Pine	200	III
McGinness Hills Opt Solar & Geothermal Exploration	13	Lander	235	III
Green Springs Exploration	62	White Pine	137	III
<b>TOTAL</b>	<b>~26,573</b>		<b>41,341</b>	

\* Debits listed are the total of both term and permanent debits

\*\* Direct impact refers to the disturbance footprint associated with a project. It does not account for the indirect impacts to Greater Sage-grouse habitats

\*\*\* Anticipated debits only reflect projects that are in an advanced state of project planning

# Program Results: Debits Anticipated/Outstanding

PROJECT NAME	DEBITS*	COUNTY	ACRES OF DIRECT IMPACT**	WAFWA MGMT. ZONE
<b>ANTICIPATED DEBITS***</b>				
Hog Mountain Exploration	90	Washoe	187	V
Crescent Valley Geothermal	TBD	Eureka, Lander	112	III
NW Deeps Mine Expansion	TBD	Eureka, Lander	156	III
Northern Nevada Lithium Exploration (Surge)	152	Elko	250	IV
Wildcat Exploration	128	Pershing	400	III
Dodge Flat II Solar Exploration	2	Washoe	9	V
Coyote Mine Expansion	38	Elko	10	IV
Duckwater Fiber LROW	6	Nye, White Pine, Eureka	0	III
<b>TOTAL</b>	<b>~2,785</b>		<b>1,123</b>	
<b>ANTICIPATED DEBITS TOTAL</b>	<b>~29,358</b>		<b>42,464</b>	

## 2025 Summary:

- The SETT received 19 pre-field/desktop analysis debit project packages by the March 15<sup>th</sup> submission deadline; Fifteen of the 19 assessments have been completed and transects have been generated for those projects planning to conduct field work during the 2025 season.
- There are currently 12,651 debits in the CCS that have been finalized but have not yet been mitigated by proponents.
- The total unmitigated debit amount is expected to increase by approximately 16,707 as project proponents finalize their NEPA documents and the SETT finalizes debit estimates (e.g., those with TBD as their current debit estimate).
- Projects that are not yet ready for public disclosure are expected to add approximately 61,005 debits to the system as well.

\* Debits listed are the total of both term and permanent debits

\*\* Direct impact refers to the disturbance footprint associated with a project. It does not account for the indirect impacts to Greater Sage-grouse habitats

\*\*\* Anticipated debits only reflect projects that are in an advanced state of project planning



# Program Results: Credit and Debit Comparison

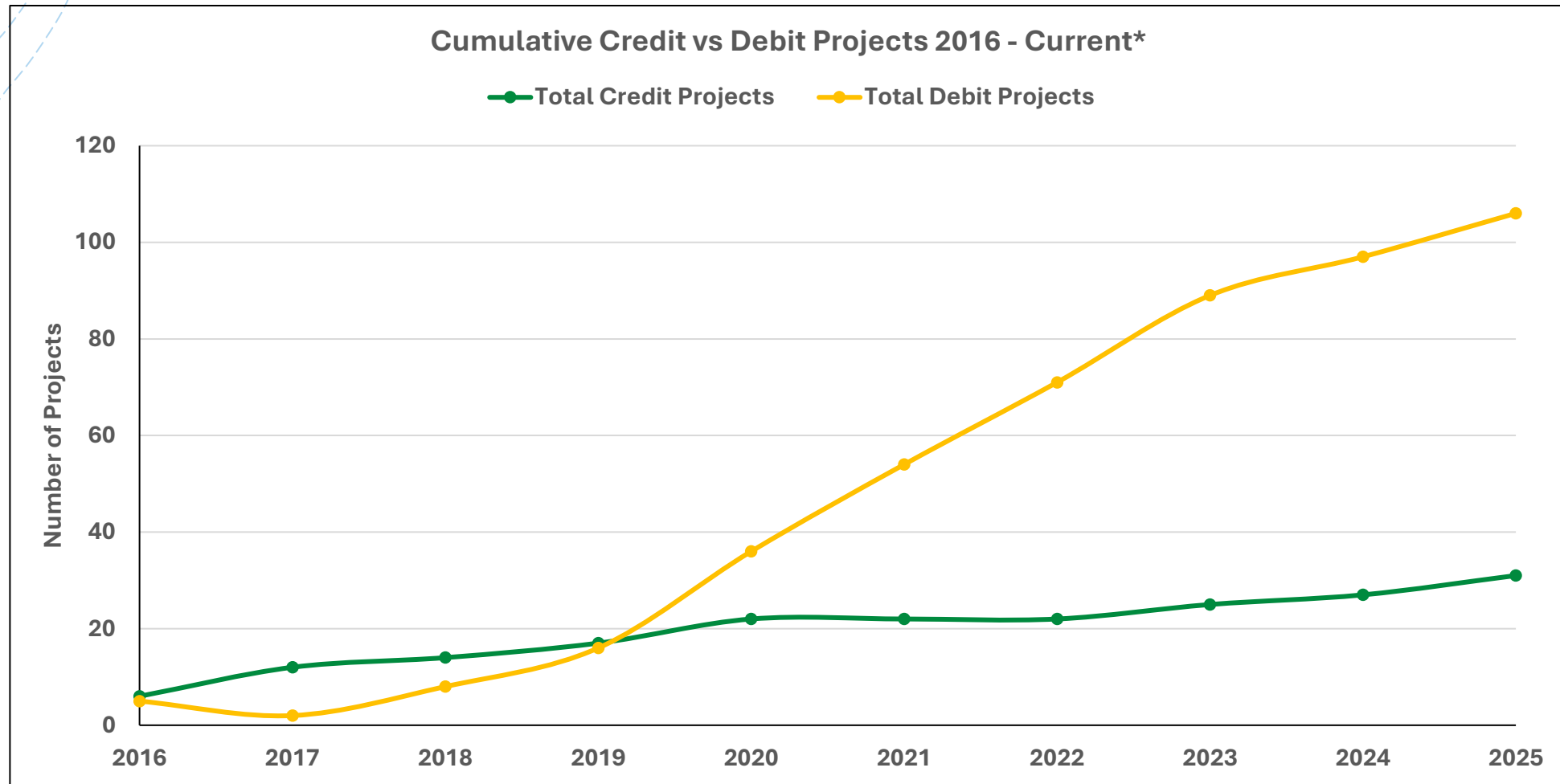


Figure 9. Cumulative credit and debit projects enrolled in the CCS (in various stages of NEPA planning) since inception

# Program Results: Credit and Debit Comparison

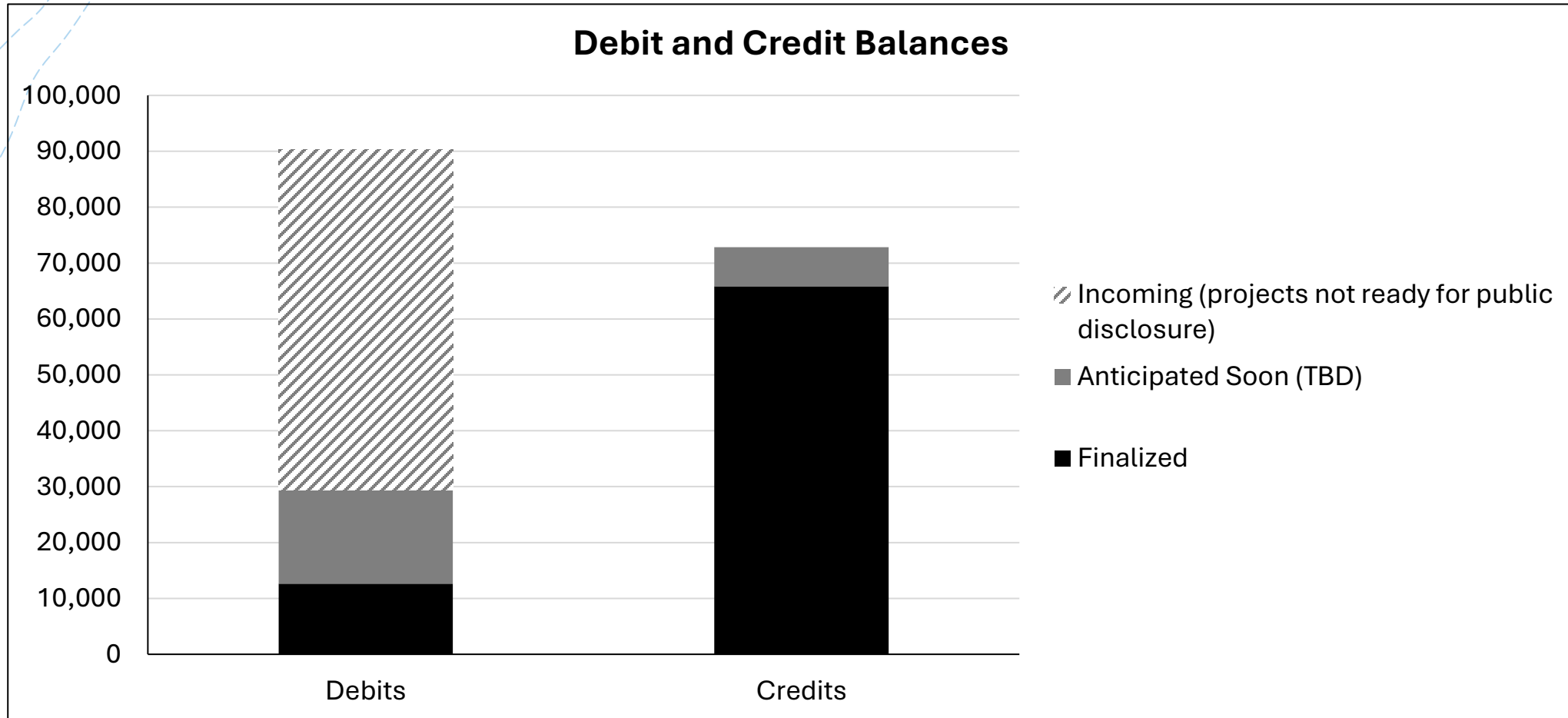


Figure 10. Current credit and debit balances

# Program Results: All Credit and Debit Project Locations

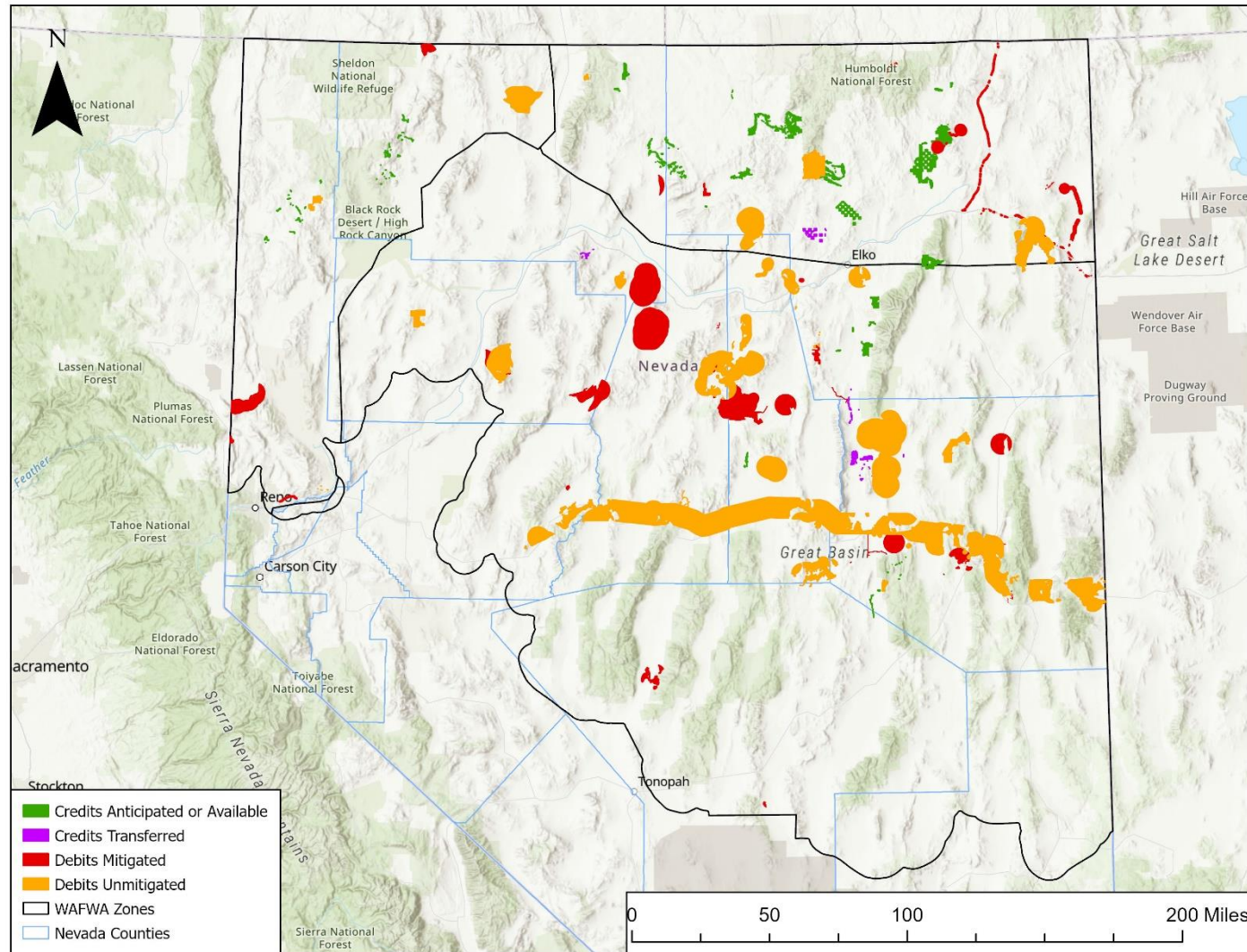


Figure 11. Current credit and debit projects enrolled in the CCS (and in the advanced stages of NEPA planning)

- Most credit projects occur in the NE portion of the state.
- Deficit of credit projects where debit projects concentrated.
- Highlights the importance of recruiting landowners to the system and pursuing public land restoration options (currently in-progress).



# Featured Debit Project: Robertson Mine

## Robertson Mine

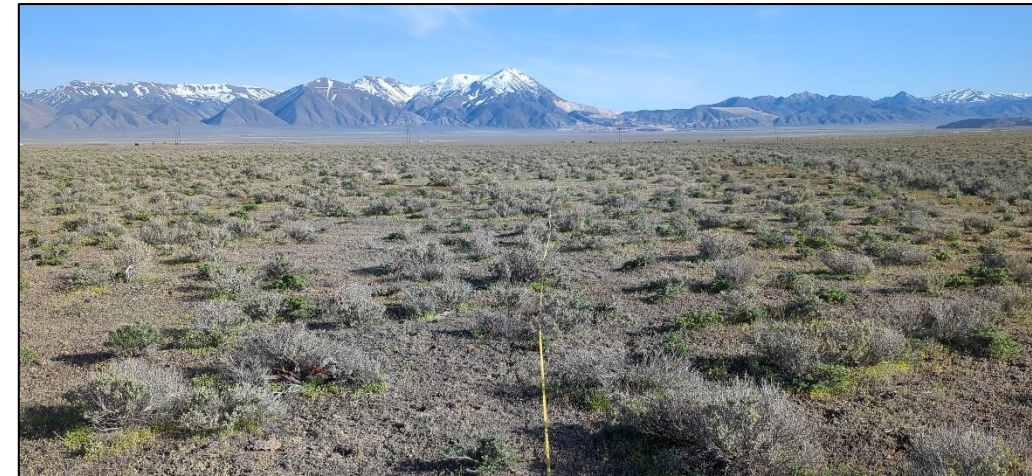
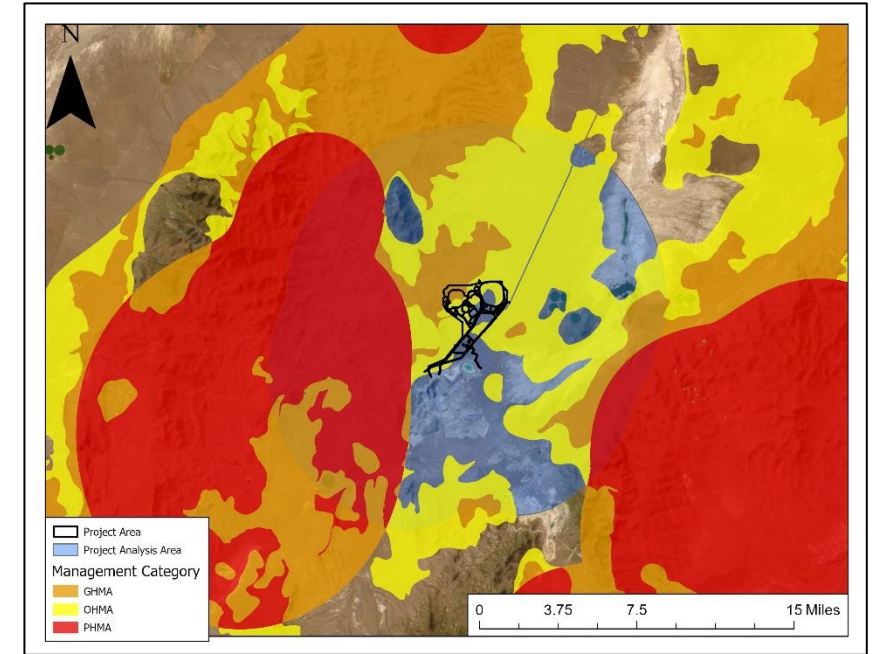
Robertson Mine, operated by Nevada Gold Mines (NGM) is located in Lander County, Nevada, just south of Crescent Valley. It is a proposed open-pit gold mine that will consist of three pits, haul roads, a waste rock facility, a heap leach facility, and other associated mine features. The mine will create approximately 2,640 acres of direct disturbance, and 46,800 acres of indirect disturbance, within mapped Greater Sage-grouse (GRSG) habitat. The project does not impact any active or pending Greater Sage-grouse (GRSG) leks. Nevada Gold Mines finalized the Robertson Mine's debit amount through the CCS in late 2023. The project has generated 1,975 term debits and 38 permanent debits. In 2024, NGM offset the first 1/3 of their term debit obligation (659) and 1/3 of their permanent obligation (13) through an internal credit transfer from East IL Ranch, an NGM-owned credit project located in Elko County.

## Mine Site Description:

- Direct impacts are located in General Habitat Management Area (GHMA), Other Habitat Management Area (OHMA), and non-GRSG habitat.
- Indirect impacts are located in Priority Habitat Management Area (PHMA), General Habitat Management Area (GHMA), Other Habitat Management Area (OHMA), and non-GRSG habitat.

## Project Description:

- Mine consists of 2,643 acres of direct disturbance and 46,799 acres of indirect disturbance
- Generated 1,975 term debits and 38 permanent debits
- Project is in-compliance and has offset 1/3 of its credit obligation
- Next phase of credit obligation is due to be purchased in 2029
- Project term is 30 years





# Status of Greater Sage-Grouse and the Sagebrush Ecosystem



# Status of Greater Sage-Grouse and the Sagebrush Ecosystem

## Greater Sage-Grouse Population Overview

The Nevada Department of Wildlife, along with federal partners such as the Bureau of Land Management (BLM), the U.S. Forest Service (USFS), the U.S. Geological Survey (USGS), and the U.S. Fish and Wildlife Service (USFWS), as well as volunteers and environmental consultants, conducts annual sage-grouse lek counts and surveys. Monitoring methods for leks include traditional ground surveys following established protocols and aerial surveys conducted with rotary or fixed-wing aircraft. Some fixed-wing surveys are equipped with infrared camera technology (thermal imaging) featuring telephoto capabilities and are flown at altitudes that minimize or eliminate bird disturbance.

In 2024, 846 leks were surveyed, representing approximately 37% of the 2,320 known leks in Nevada. Additionally, a total of 143 trend leks were surveyed. Trend leks are a specific subset of the total leks in Nevada that are monitored multiple times each year to provide a more accurate estimate of sage-grouse populations in the state. During the 2024 spring breeding season, the average male attendance was 19.5 males per trend lek. This marks a significant increase compared to the 2023 attendance rate of 12.4 males per trend lek. However, the 2024 attendance remains 20 percent below the 20-year average of 23.9 males per trend lek. Trend lek attendance is displayed in Figure 1 from 2002 to 2024.

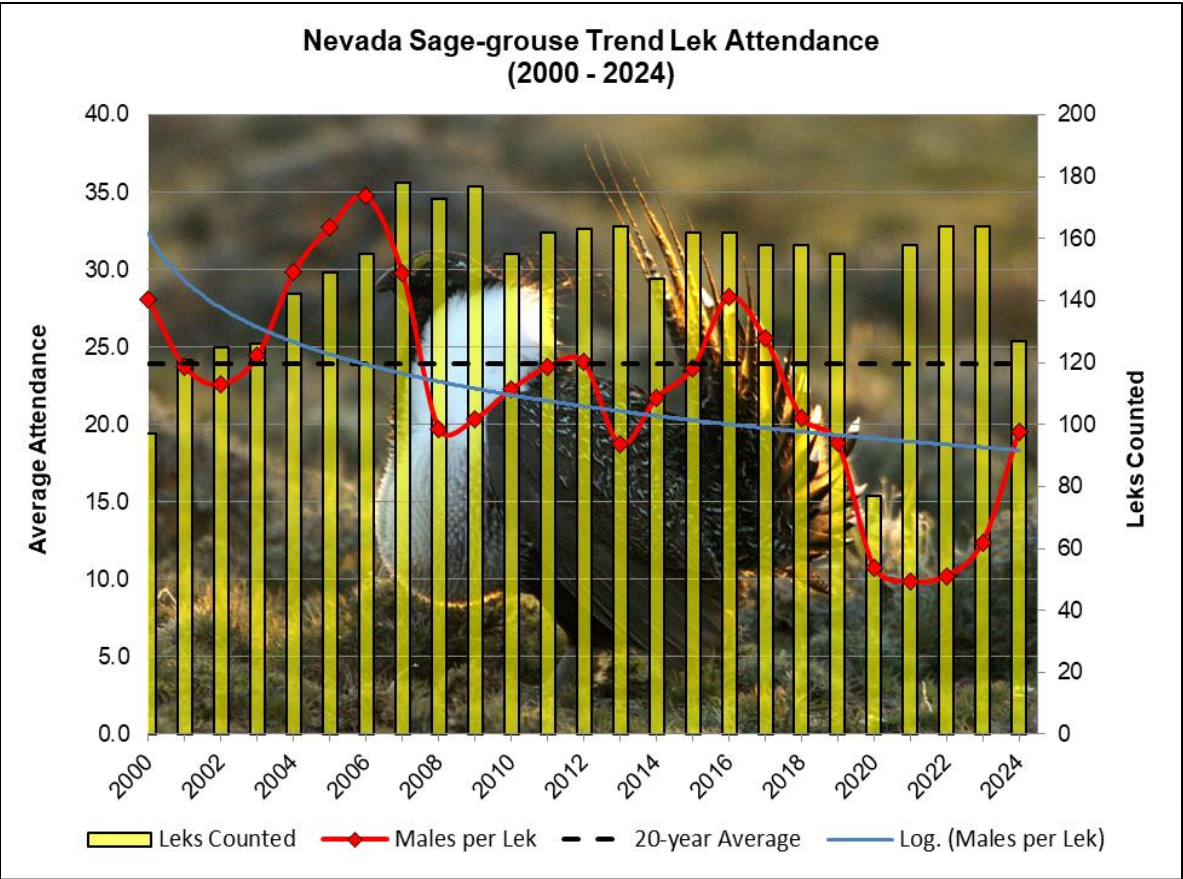


Figure 12. Male sage-grouse lek attendance rates at trend leks from 2000 through 2024.

Source: Nevada Department of Wildlife, Nevada Sage-grouse Conservation Project Final Performance Report. November 2024



# Status of Greater Sage-Grouse and the Sagebrush Ecosystem

## Greater Sage-Grouse Population Overview

During the 2023 sage-grouse hunting season, a total of 723 wings were collected from various open hunt units across Nevada. This sample size represents an increase of 10.2 percent from the number of wings collected during the previous 2022 season, and it marks the third-fewest number of wings collected in the past 25 years. The average sample size over the past 10 years is 1,075 wings collected annually.

The pooled statewide production estimate derived from an analysis of the wings collected in 2023 was 1.81 chicks per hen, which represents a 9.7 percent increase over the previous season’s average of 1.65 chicks per hen (Table 2). The long-term (25-year) average estimated production is 1.59 chicks per hen. Regional differences in productivity were noted during 2023. The Eastern Region (primarily Elko County in northeastern Nevada) had a chick recruitment estimate of 1.34 chicks per hen, while the Western Region (Humboldt and Washoe County) recorded much higher values at 2.38 chicks per hen. From a population management unit (PMU) perspective, sample sizes were generally small, except for the North Fork PMU (n = 215) in the Eastern Region and the Lone Willow PMU (n = 295) in the Western Region.

Nest success was also evaluated by examining the wings and molt pattern of adult females, specifically the progression of replacement through outer primary feathers. Statewide nest success values were estimated at 62.5 percent in 2023, compared to 51.5 percent in 2022. The 2023 nest success value was approximately 36 percent above the long-term (10-year) average of 46.1 percent, but still comparable to the range-wide averages for the species. Of the 216 adult female wings analyzed, 135 nests hatched successfully, and 81 failed to hatch.

Table 1. Wing collection and estimated demographic metrics over the last decade in Nevada.

Year	Total Wings Collected	Chick per Hen	Nest Success
2014	1034	1.54	47.1%
2015	1667	1.52	39.6%
2016	1541	1.56	36.5%
2017	1278	0.98	46.5%
2018	1138	0.89	43.0%
2019	833	1.14	36.9%
2020	1262	1.22	56.3%
2021	616	1.09	39.3%
2022	656	1.65	51.5%
2023	723	1.81	62.5%
10-Year Avg	1075	1.34	45.9%

Source: Nevada Department of Wildlife, Statewide Summaries for upland Game species 2023-2024.

# Threats to Greater Sage-Grouse and the Sagebrush Ecosystem

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.

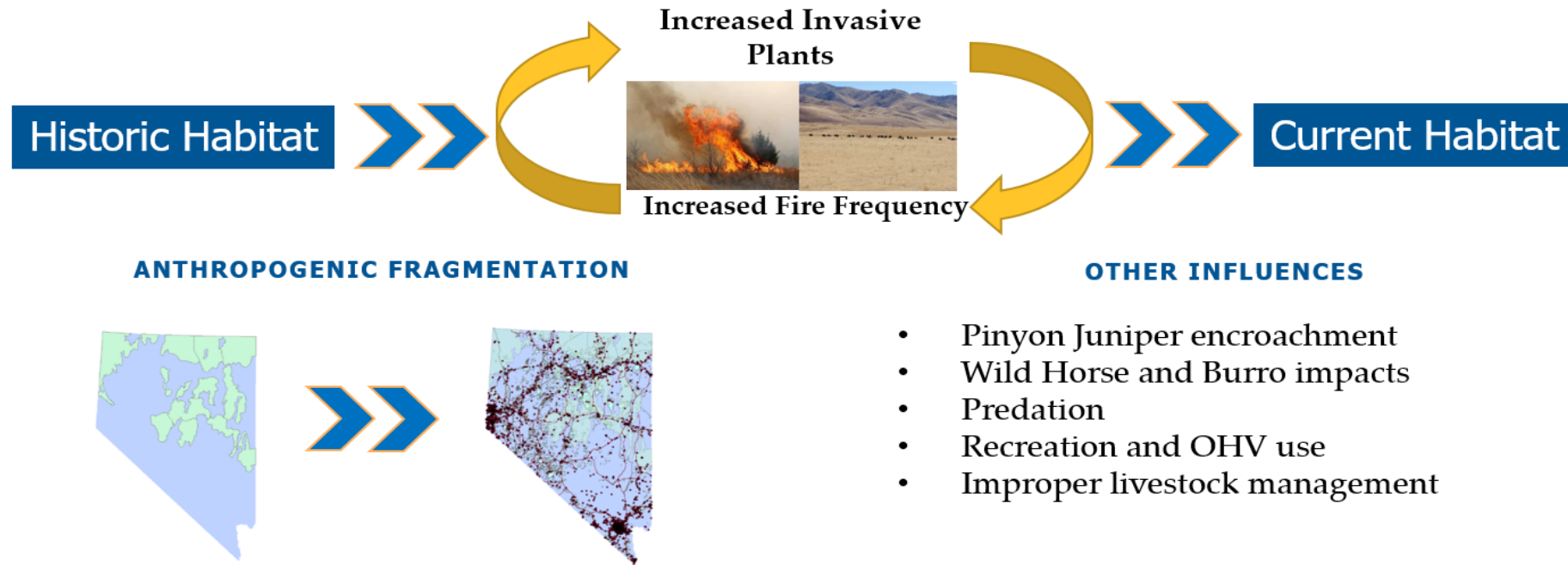


Figure 13. Schematic of threats to sagebrush ecosystems.

Wildfire, cheatgrass invasion, and landscape fragmentation will continue to degrade the sagebrush ecosystem. Proactive measures to prevent catastrophic wildfires, post-fire restoration activities, and the avoid-minimize-mitigate hierarchy will become even more important for reducing threats to Nevada's sagebrush ecosystem and greater sage-grouse habitat.

# 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

- Continue to provide information to the SEC as requested, and to serve as staff to assist them in fulfilling the statutory and regulatory obligations
- 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, work with credit developers to implement corrective actions as necessary, and manage the 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 (61 individuals were certified in 2025)
- Continued participation in collaborative, multi-jurisdictional meetings statewide





# Program Operations:

## Sagebrush Ecosystem Technical Team Activities



**Verifier Training**



**Credit/Debit Proponent Workshop**



**Riparian Restoration Workshop**

# Program Operations: Technical Team Activities

- Held the 10<sup>th</sup> annual CCS Certified Verifier Training in January with 63 attendees, 61 of which received certification.
- Held first multi-state mitigation summit to facilitate collaboration among state sage-grouse mitigation programs
- Held first Credit/Debit proponent workshop and mixer to provide information about the CCS to current and interested proponents, and to allow in-person communication among credit and debit proponents to facilitate credit transfers.
- Held riparian restoration workshop on credit proponent's land in collaboration with Nevada Creeks and Communities
  - Installed various low cost/low-tech structures to help restore degraded meadow
  - Taught interested parties how to build said structures
- Visited one ranch interested in enrolling in the CCS.
- Updated the CCS Manual, User's Guide, and Scientific methods documents to enhance clarity for proponents and verifiers and improve the program.
- Implemented version 2.0 of documents and Habitat Quantification Tool
- Facilitated several Adaptive Management Statewide Technical Team meetings to address priorities for 2025.
- Held several collaborative discussions with agency partners and interested project proponent about a potential public lands restoration project





# Program Operations: Technical Team Activities Cont.

Other efforts of the Sagebrush Ecosystem Technical Team during 2025 included:

- Assisted in the annual Nevada Youth Range Camp in June, teaching plant identification to high-schoolers.
- Held three Sagebrush Ecosystem Council Meetings and one temporary regulation hearing
- Adopted temporary NAC changes that will clarify the SEP's verifier certification and decertification processes.
- Managed subgrant for USGS.
- Completed Sagebrush Ecosystem Program Strategic Action Plan update.
- Collaborated with federal and state agencies to enhance planning and conservation efforts.
- Served as cooperating agency in various stages of NEPA processes for large-scale disturbances.
- Attended Greater Sage-Grouse, wildfire, conservation efforts and tracking, mining, and restoration meetings.
- Worked with the Nevada Creeks and Communities Team to implement, and attend, the virtual Riparian Proper Functioning Condition (PFC) workshop in February. Will also attend and assist with the July and August 2025 workshops.







# Future Initiatives

- Continue to:
  - Implement the CCS and the avoid-minimize-mitigate hierarchy.
  - Work with credit & debit project proponents to help navigate the CCS, address project issues, and maintain productive relationships.
  - Train & assist verifiers in assessing debit project impacts and credit project conservation values.
  - Ensure credit projects that were awarded State seed-funding continue moving forward with ecosystem improvements & management planning.
  - Maintain/improve MOU that allows continued partnership among DCNR, BLM, and NDOW.
  - Participate in meetings with BLM, USFS, USFWS and NDOW staff to foster awareness of the CCS, its legal requirement, and its implementation.
  - Update the SEP Strategic Action Plan as necessary.
  - Take part in land management agency plan amendments.
  - Establish annual meetings in collaboration with other western states to exchange knowledge on sagebrush ecosystem conservation and Greater Sage-Grouse mitigation.
  - Integrate new science/tools into the CCS to achieve more effective mitigation for the Greater Sage-Grouse and its habitats.
  - Increase the level of detail covered during annual verifier training.
- Convene Local Area Working Groups to refine the priorities for the 2025 Adaptive Management Process.

# Thank You

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

