



# State of Nevada Sagebrush Ecosystem Program

## SEMI-ANNUAL REPORT

**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 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.

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*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](http://sagebrusheco.nv.gov)

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*Grumpy Horned Toad. (SETT)*

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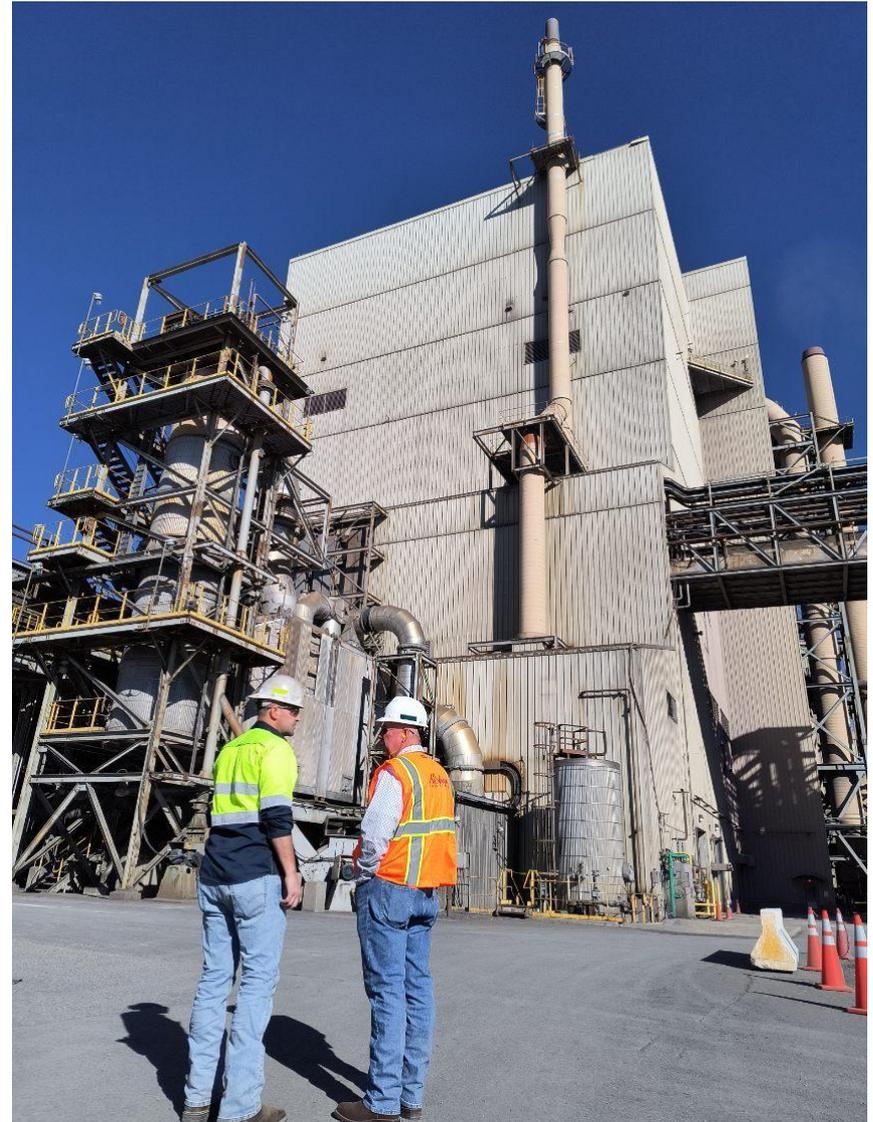
# CONSERVATION CREDIT SYSTEM • BACKGROUND

- As required by the 2013 legislation establishing the SEP, immediately began development of a system to mitigate authorized adverse impacts (disturbances) to sagebrush ecosystems in the State.
- After a year of robust engagement with stakeholders and scientific community, the Council unanimously adopted the Conservation Credit System as the mitigation program in December 2014.
- A primary goal expressed by all stakeholders was to develop a system that, based on best available science, could be used consistently to both quantify authorized adverse impacts to Greater Sage-grouse habitat (debits) and quantify the value of preservation and restoration projects (credits). To achieve this goal, the Habitat Quantification Tool (HQT) was developed and consequently 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 and, in addition, 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 directing that the Bureau of Land Management (BLM) could only require mitigation on federal lands if there was a state regulation requiring it.
- Because the vast majority of 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 answer, the Sagebrush Ecosystem Council immediately began work on a regulation requiring mitigation on public lands. A permanent regulation was passed in 2019.
- 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 is now 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.

# CONSERVATION CREDIT SYSTEM • LATE 2023 UPDATES

## In late 2023:

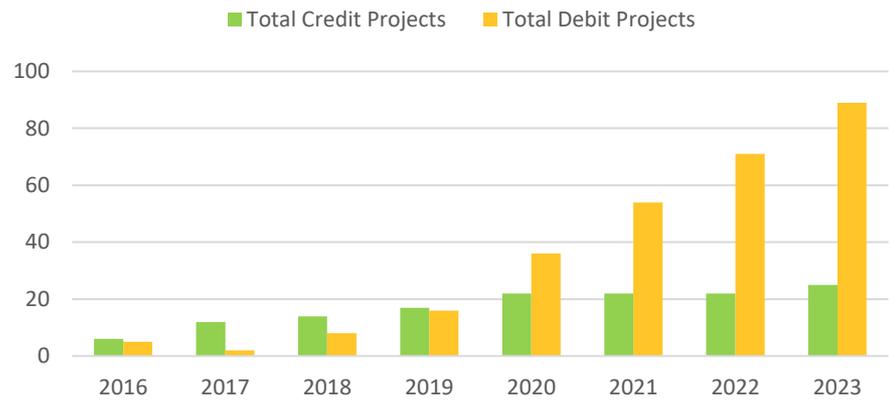
- Five mitigation transactions occurred using the CCS. Forty-six transactions have occurred since 2017.
- These transactions from 2023 involved transfers of over 350 credits from one private land credit developer that encompass over 600 acres of high value sage-grouse habitats to be conserved for 30 years or more.
- All current credit project proponents completed annual monitoring.
- Three new credit projects are near completion and conserve approximately 63,000 acres and account for over 20,000 credits.
- The SETT visited one credit project to discuss the improvement of lands already entered.
- The SETT conducted several desktop assessments on behalf of debit project proponents. Some, if developed, may generate debits in the thousands.
- The SETT participated in several recurring NEPA meetings to ensure proper avoidance, minimization, and mitigation.



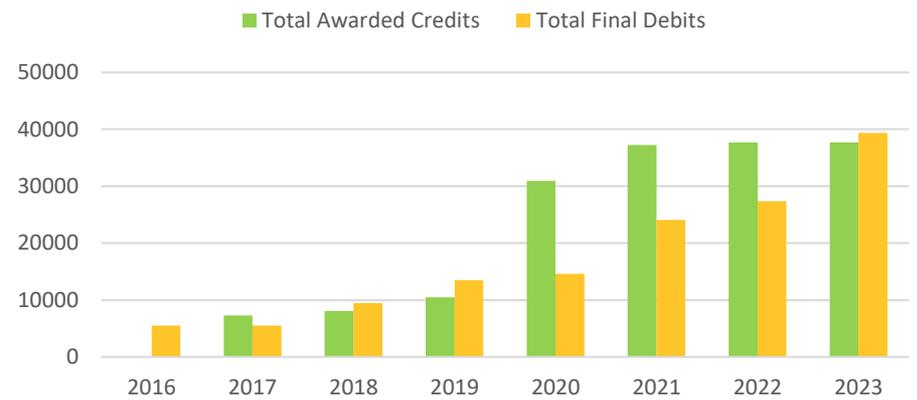
*Nevada Gold Mines Tour. (SETT)*

# CONSERVATION CREDIT SYSTEM • THE CCS THROUGH THE YEARS

### Cumulative Credit vs Debit Projects 2016 - Current\*

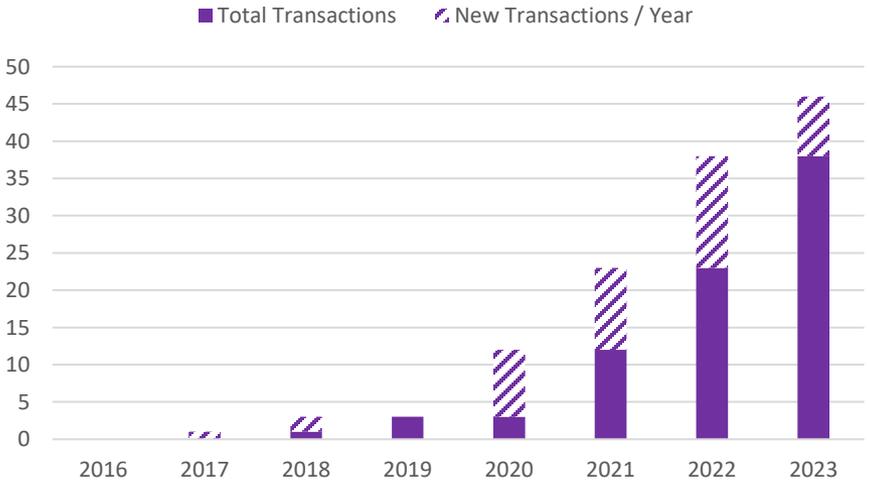


### Cumulative Awarded Credits vs Finalized Debits 2016 - Current



\* 2021 and 2023, a total of three credit projects withdrew; 2017, prior to the regulation, reflects debit projects that entered the system previously, then withdrew.

### Cumulative Transactions 2016 - Current



### Cumulative Debts Offset 2016 - Current

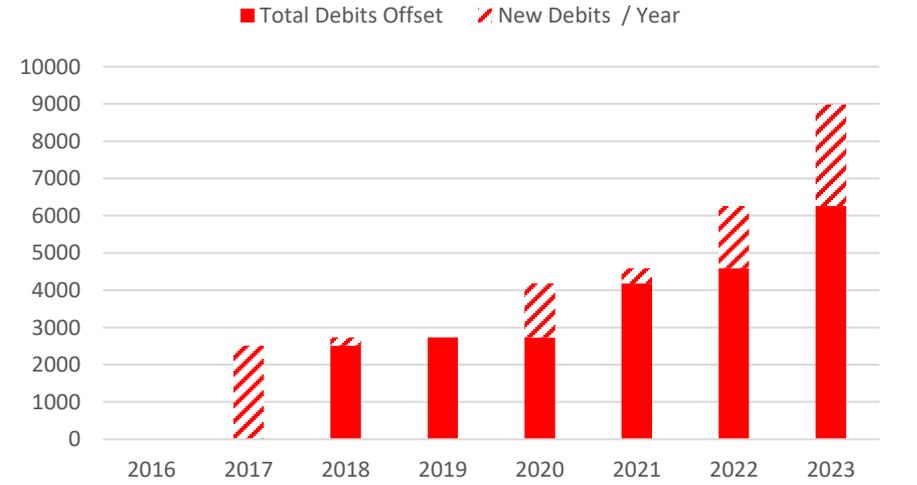


FIGURE 1: Conservation Credit System progress

# CONSERVATION CREDIT SYSTEM • CURRENT MAP OF CCS PROJECTS

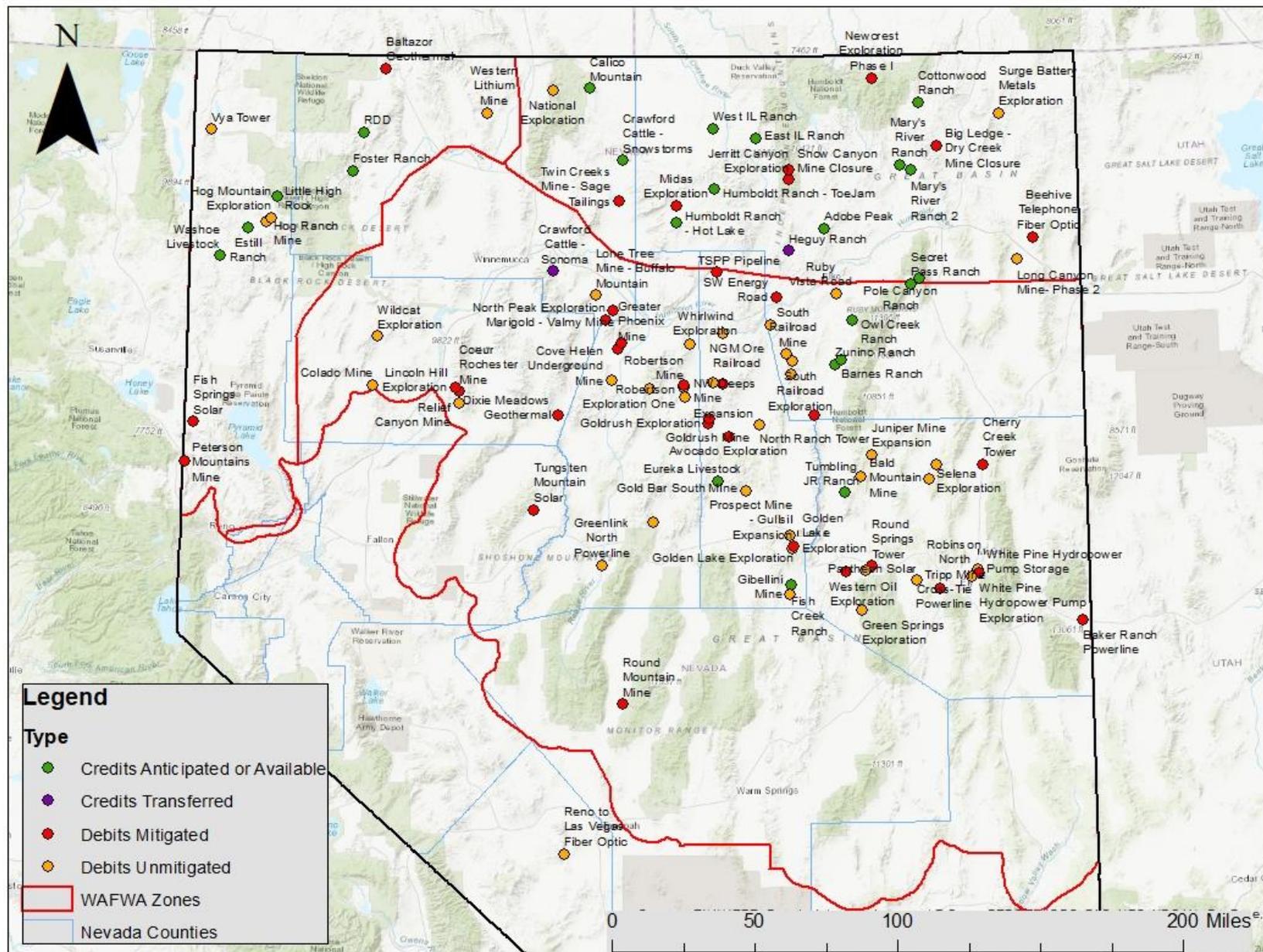


FIGURE 2: Map of the Conservation Credit System Projects

## OTHER PROGRAM EFFORTS • LATE 2023 UPDATES

Other efforts of the Sagebrush Ecosystem Program from July 1 through December of 2023 included:

- Two in-person SEC meetings, one virtual.
- USGS and Environmental Incentives subgrant management for technical tools development and improved application of the CCS.
- Weed maps, prioritization of annual invasive grass treatments, and meetings on Early Detection - Rapid Response.
- Represented the SEP on Nevada's Shared Stewardship Technical Advisory Committee, coordinated meetings to update the SEP Strategic Action Plan and associated "Core" habitat mapping, and participated in the planning effort associated with the NDOW Sagebrush Conservation Framework.
- ROGER (Results Oriented Grazing for Ecological Resiliency) meetings and Nevada Association of Conservation Districts (NvACD) meetings.
- NDA Nevada Native Seed Workshop at Walker River Recreation Area.
- CCS project entries in the GRSG Conservation Efforts Database and the USFS SMART database.
- Conferences, meetings, and webinars related to GRSG, wildfire, invasive plants, mitigation, and mining.

*NDA Native Seed Workshop. (SETT)*



# PLANS FOR THE UPCOMING YEAR • LATE 2023 UPDATES

- 9<sup>th</sup> Annual CCS Verifier Training in January 2024. Last year, 74 individuals participated, and 60 were certified to work on CCS projects.
- CCS credit project, debit project, and transaction management, as well as Cooperating Agency status for multiple NEPA planning processes.
- SEP Strategic Action Plan update.
- Federal land use plan amendments.
- The adaptive management process outlined in the NV Greater Sage-Grouse Conservation Plan, BLM, and USFS land use plans.
- Development of annual conference for credit and debit project participants.
- Discussions on an annual symposium with other Western States involved in sagebrush ecosystem conservation and GRSG mitigation.
- Work more with NRCS and the CDs to implement habitat improvement projects in Greater Sage-Grouse habitat.
- Implementation of additional conservation associated with the CCS and through existing agreements and grant opportunities.



*Nevada Gold Mine Tour. (SETT)*

# GREATER SAGE-GROUSE • SAGEBRUSH ECOSYSTEM & GRSG STATUS

## GREATER SAGE-GROUSE POPULATION OVERVIEW

The Nevada Department of Wildlife, in conjunction with federal agency partners including the Bureau of Land Management (BLM), U.S. Forest Service (USFS), U.S. Geological Survey (USGS) and the U.S. Fish and Wildlife Service (USFWS), conducts sage-grouse lek counts and surveys annually. Techniques to monitor leks include traditional ground surveys using accepted protocols and aerial survey using rotary or fixed wing aircraft. Some fixed wing surveys are outfitted with cooled infrared camera technology (thermal imaging) with telephoto capabilities and flown at altitudes that minimize or negate disturbance to birds. Approximately 39% of the 2,320 known sage-grouse leks and approximately 75% of trend leks identified within the state are surveyed each year. 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.

Year	No. of Males	Leks Surveyed	Active Leks	AVG/active lek
2002	5,093	652	321	15.9
2003	5,010	402	271	18.5
2004	7,472	505	321	23.3
2005	10,144	760	389	26.1
2006	11,229	737	433	25.9
2007	11,317	947	525	21.6
2008	7,550	786	438	17.2
2009	7,398	860	442	16.7
2010	7,395	751	410	18
2011	8,571	810	438	19.6
2012	9,953	935	523	19
2013	7,394	820	454	16.3
2014	9,063	934	512	17.7
2015	12,551	1,003	606	20.7
2016	13,366	1,048	586	22.8
2017	11,030	954	553	19.9
2018	9,200	973	554	16.6
2019	7,140	854	466	15.3
2020	2,456	422	196	12.5
2021	5,095	1,021	420	12.1
2022	5,597	1,072	427	13.1
2023	5,723	889	396	14.6
2002-2023 AVG.	8,170	824	440	18.3

TABLE 1: Lek count summary (2002–2023)

A total of 889 leks were surveyed during 2023, which is approximately 39% of the 2,320 known leks in Nevada. Of the leks surveyed, 396 were considered active (2 or more males). The peak male count for 2023 was 5,723 resulting in an average attendance rate of 14.6 males per active lek and was an 11.5 percent increase over the 2022 attendance rate of 13.1 males per active lek. The 2022 attendance rate represented a lower value during the 2003-2023 period compared to the maximum observed in 2005 (n=26.1). The 2023 attendance rate is still well below (-21 percent) the previous 20-year average of 18.5 males per active lek. The lek count summary from 2003-2023 is provided in Table 1.

Source: Nevada Department of Wildlife, Nevada Sage-grouse Conservation Project Final Performance Report. September 2023

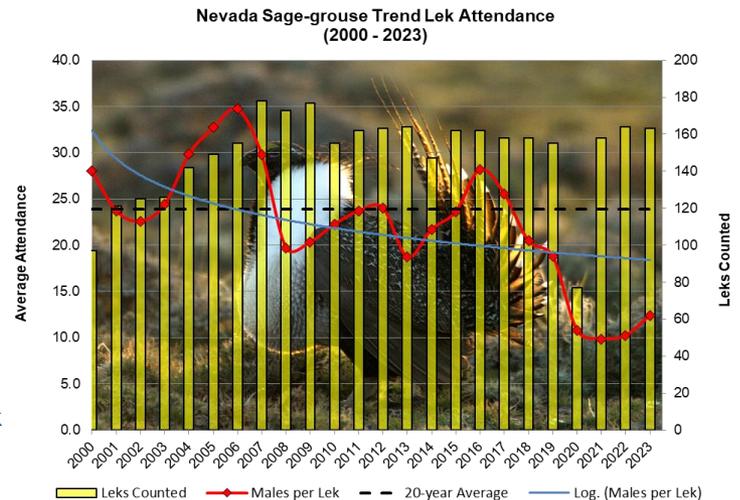


FIGURE 3: Sage-grouse lek attendance (2000–2023).

# GREATER SAGE-GROUSE • THREATS

## THREATS TO THE SAGEBRUSH ECOSYSTEM AND THE GREATER SAGE-GROUSE

Threats to GRSG are numerous but can be placed into categories that all affect GRSG habitat. Direct habitat loss from wildfire and invasive species and habitat fragmentation are the greatest contributing factors to declining populations.

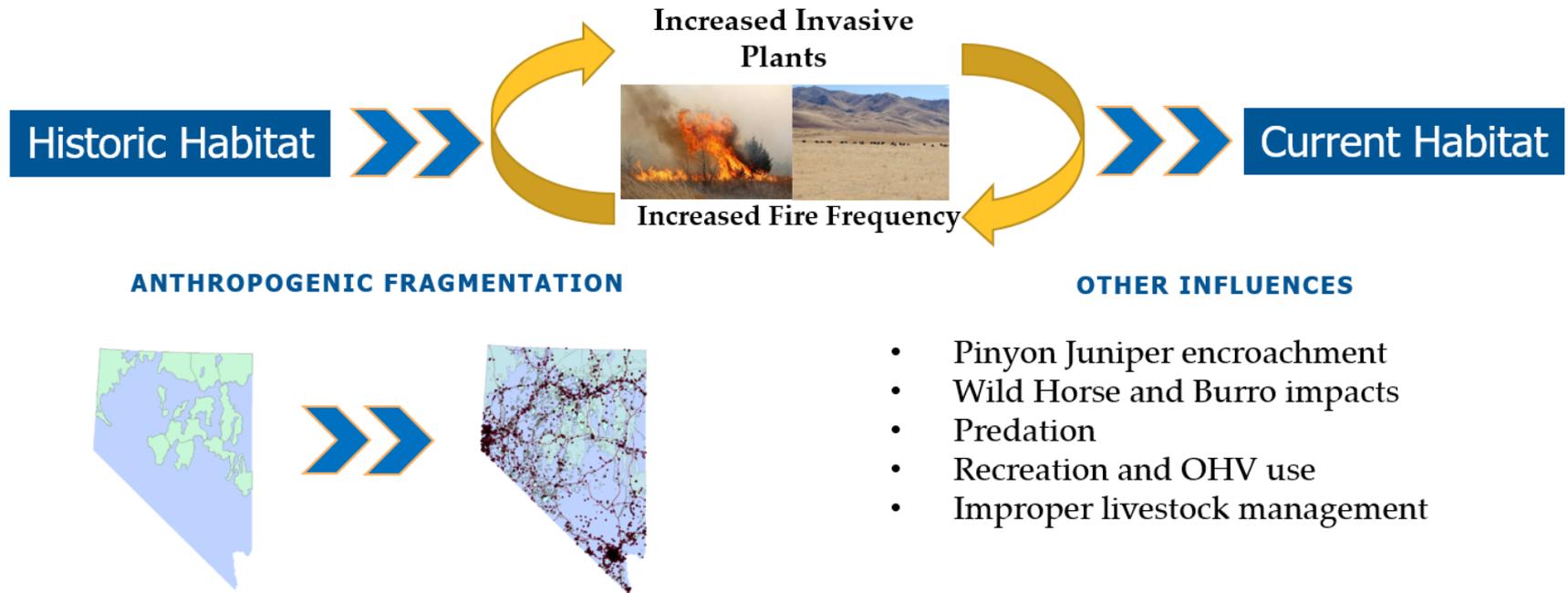
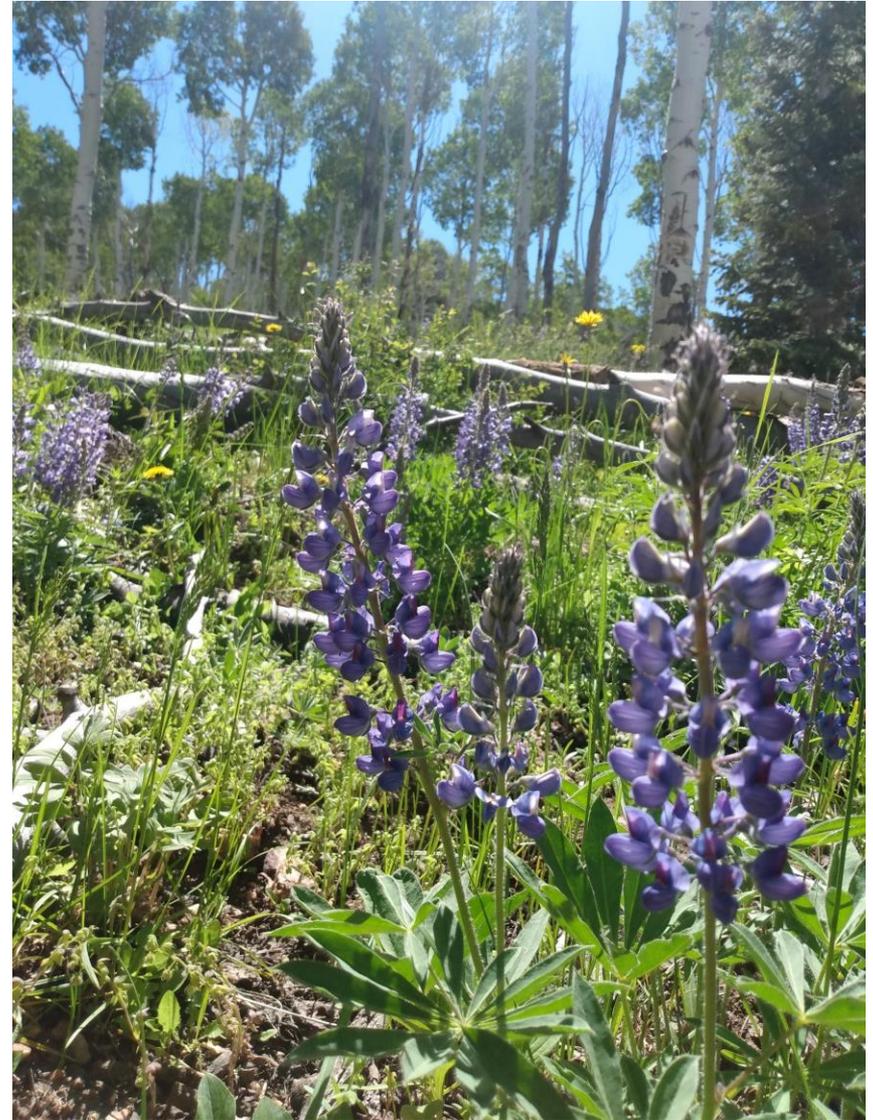


FIGURE 4: Threats to Sagebrush Ecosystems.

As habitat loss from wildfire and cheatgrass continue along with fragmentation, post-fire restoration and pre-suppression actions to reduce wildfire frequency as well as appropriate mitigation of other impacts and preservation of intact landscapes become even more important to conservation of Nevada's sagebrush ecosystems and greater sage-grouse habitats.

# CONTRIBUTIONS OF FEDERAL & STATE PARTNERS

Federal and state partners contribute a great deal toward the accomplishment of our shared goals to improve sagebrush ecosystems across immense landscapes, various management regimes, and diverse habitats. All deserve acknowledgement for their efforts on numerous endeavors in 2023.



Schell Wilderness (SETT)