



State of Nevada Sagebrush Ecosystem Program

SEMI-ANNUAL REPORT

June 2022

**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 Sagegrouse 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

JUNE 2022 PROGRAM UPDATES



Beetle on a desert peach. (SETT)

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CONSERVATION CREDIT SYSTEM • BACKGROUND

- As required by the 2013 legislation establishing the SEP, we 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 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 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 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.

JUNE 2022 CCS UPDATES • EARLY 2022 MITIGATION TRANSACTIONS

- Coeur Rochester offset 8 debits from their Lincoln Hill Exploration Debit Project, with credits from the Heguy Ranch Credit Project.
- SW Energy mitigated their 12 debits from the SW Energy Road Debit Project with credits from the Cottonwood Ranch Credit Project.
- National Oilwell Varco offset their 310 debits from the Big Ledge – Dry Creek Mine Closure Debit Project with credits from the Mary’s River Ranch Credit Project. This action results in conservation of 463 acres of sage-grouse habitats.
- Lithium Nevada offset their 1/3 up front obligation of 500 debits from Western Lithium Mine Debit Project with credits from the Estill Ranch Credit Project. This action results in conservation of 1,901 acres of sage-grouse habitats.
- Mt. Wheeler Power offset 1 debit from the Baker Ranch Powerline Debit Project with a credit from Cottonwood Ranch Credit Project. Long-term commitments of these credit projects include:
 - Improve creek/meadow complexes through various actions, annual monitoring, periodic assessment & verification, financial assurances & additional credits contributed to the reserve account, and all actions in the management plan including maintenance of grazing management infrastructure, weed treatment actions, & grazing as described in their management plans.



Sage grouse on a lek. (SETT)

JUNE 2022 CCS UPDATES • OTHER CCS IMPLEMENTATION NEWS

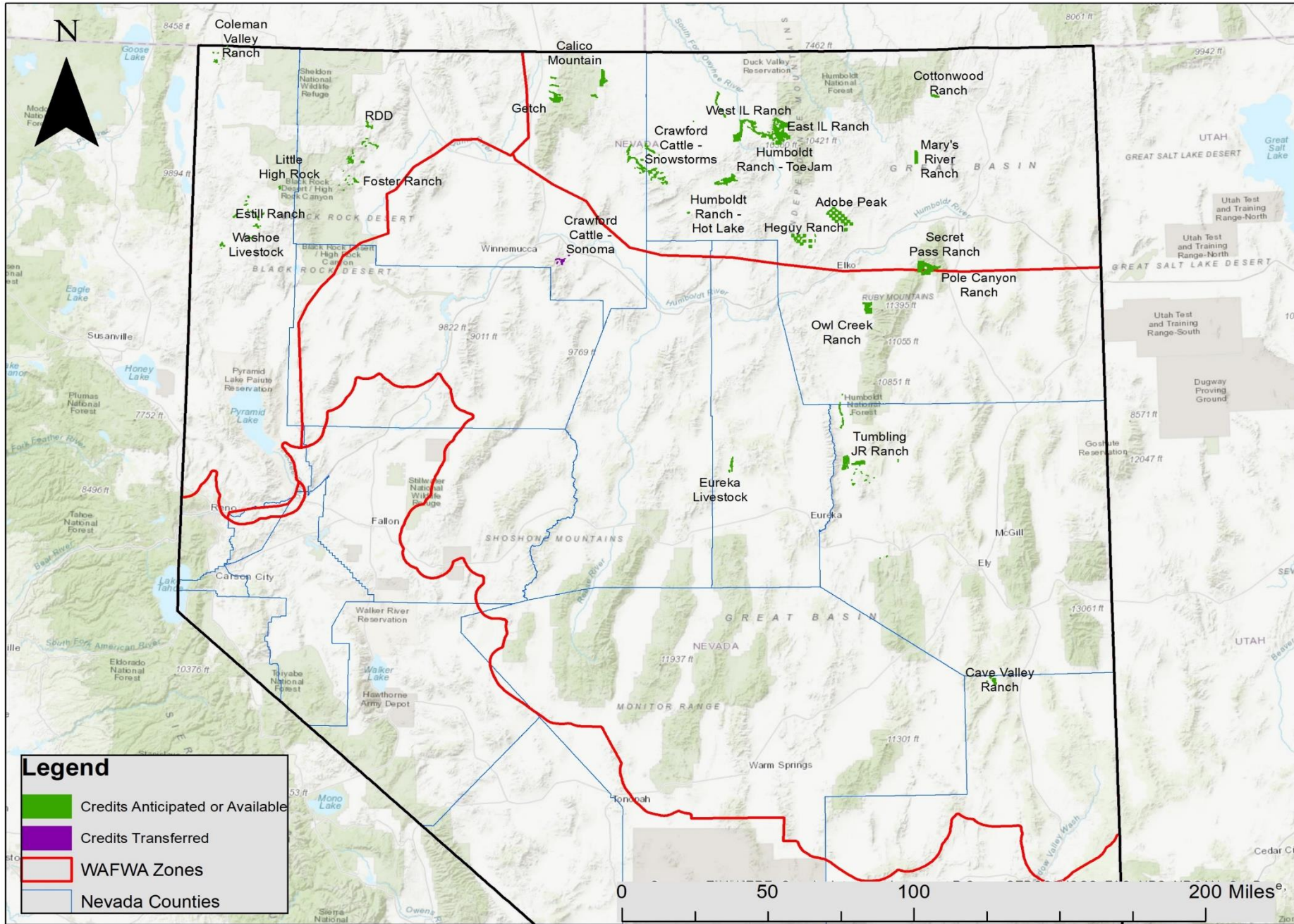
As of 6/17/22:

- In total, since inception of the program, 26 mitigation transactions have been finalized using the CCS.
- The five mitigation transactions previously described were finalized using the CCS in early 2022. These five transactions account for 883 credits and 2,364 acres of high value sage-grouse habitats to be conserved a minimum of 30 years.
- Additionally, five more transactions are in process but are not yet finalized.
- Seven more credit project proponents are working toward completion of their CCS management plans that conserve more than 21,000 acres with more 7,700 credits anticipated.
- The SETT visited seven credit projects in 2022 mostly as part of the Five-Year Qualitative Assessments. They will also assist credit producers in planning conservation treatments.
- To date, over 40 debit projects representing various industries have used the Habitat Quantification Tool (HQT) to quantify their debits & more than 15 potential debit projects will use the HQT this year with at least six planning field implementation.
- The 7th Annual CCS Certified Verifier Training was held by the SETT in January of 2022. Over 70 consultants attended, and 53 were certified.



Redwing Blackbird in a meadow at the Crawford Sonoma Ranch. (SETT)

JUNE 2022 CCS UPDATES • MAP OF CREDIT PROJECTS AS OF 6/17/22



Coleman Valley Ranch

Calico Mountain

Cottonwood Ranch

RDD

Getch

West IL Ranch

East IL Ranch

Little High Rock

Foster Ranch

Crawford Cattle - Snowstorms

Humboldt Ranch - ToeJam

Mary's River Ranch

Estill Ranch

Washoe Livestock

Crawford Cattle - Sonoma

Humboldt Ranch - Hot Lake

Adobe Peak

Secret Pass Ranch

Winnemucca

Heguy Ranch

Pole Canyon Ranch

Owl Creek Ranch

Tumbling JR Ranch

Eureka Livestock

McGill

Ely

Reno

Fallon

Eureka

Carson City

Walker River Reservation

GREAT BASIN

Cave Valley Ranch

Warm Springs

Fernandah

Mono Lake

Cedar City

JUNE 2022 CCS UPDATES • STATUS OF TRANSACTIONS AS OF 6/17/22

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	11	V
Avocado Exploration	44	Crawford Cattle - Snowstorms	254	IV
Newcrest Exploration Phase I	3	Cottonwood Ranch	6	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	109	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 Tower	3	Secret Pass Ranch	Acres Included in other Transaction	III, IV
Round Springs Tower	3	Secret Pass Ranch	Acres Included in other Transaction	III, IV
Lincoln Hill Exploration	9	Heguy Ranch	Acres Included in other Transaction	IV
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
Western Lithium Mine	550	Estill Ranch	1,901	V
Baker Ranch Powerline	1	Cottonwood Ranch	Acres Included in other Transaction	IV
TOTAL	4,944		24,504	

* 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.

JUNE 2022 CCS UPDATES • STATUS OF CREDIT PROJECTS AS OF 6/17/22

PROJECT NAME	CREDITS	COUNTY	ACRES	WAFWA MGMT. ZONE	STATE SEED FUNDED***
ANTICIPATED CREDITS*					
Eureka Livestock	24	Eureka	Acres to be Improved, Not Added	III	State Seed Funded
Cave Valley Ranch	548	Lincoln	1,769	III	Other
Washoe Livestock	179	Washoe	799	V	Privately Funded
Humboldt Ranch - Toejam	1,941	Elko	5,330	IV	Privately Funded
East IL Ranch	23	Elko	Acres to be Improved, Not Added	IV	Privately Funded
Calico Mountain	2,970	Humboldt	5,120	IV	State Seed Funded
Getch	1,641	Humboldt	6,229	IV	Privately Funded
Little High Rock	64	Washoe	322	V	Privately Funded
Pole Canyon Ranch	382	Elko	2,068	IV	Privately Funded
TOTAL	~7750		21,637		

PROJECT NAME	CREDITS	COUNTY	ACRES	WAFWA MGMT. ZONE	STATE SEED FUNDED***
AVAILABLE CREDITS**					
Tumbling JR Ranch	1,663	Elko, White Pine	All Acres Conserved	III	State Seed Funded
Coleman Valley Ranch	341	Washoe	1,137	V	State Seed Funded
Cottonwood Ranch	765	Elko	991	IV	State Seed Funded
West IL Ranch	2,609	Elko	All Acres Conserved	IV	Privately Funded
Heguy Ranch	688	Elko	6,464	IV	State Seed Funded
Crawford Cattle - Snowstorms	1,234	Humboldt, Elko	6,598	IV	State Seed Funded
Estill Ranch	68	Washoe	804	V	Privately Funded
RDD	740	Humboldt	1,094	V	State Seed Funded
Eureka Livestock	1,718	Eureka	1,623	III	State Seed Funded
Adobe Peak	3,618	Elko	10,901	IV	Privately Funded
Humboldt Ranch - Hot Lake	694	Elko	198	IV	Privately Funded
East IL Ranch	8,873	Elko	23,721	IV	Privately Funded
Secret Pass Ranch	3,627	Elko	10,043	III, IV	State Seed Funded
Owl Creek Ranch	2,929	Elko	5,363	III	State Seed Funded
Foster Ranch	1,624	Humboldt	6,170	V	State Seed Funded
Mary's River Ranch	1,441	Elko	2,236	IV	Privately Funded
TOTAL	32,632		77,343		

* 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.

JUNE 2022 CCS UPDATES • STATUS OF DEBIT PROJECTS AS OF 6/17/22

PROJECT NAME	DEBITS	COUNTY	ACRES OF DIRECT IMPACT*	WAFWA MGMT. ZONE
ANTICIPATED DEBITS**				
Bald Mountain Mine	2,737	White Pine	5,734	III
Western Lithium Mine	875	Humboldt	5,169	V
Long Canyon Mine- Phase 2	1,676	Elko	815	III, IV
Lone Tree Mine - Buffalo Mountain	675	Humboldt	284	III
Gibellini Mine	1,932	Eureka, Nye, White Pine	328	III
Goldrush Mine	2,197	Eureka, Lander	1,341	III
Pony Creek Exploration	131	Elko	150	III
Robinson Mine	183	White Pine	51	III
Relief Canyon Mine	33	Pershing	0	III
Carlin Vanadium Exploration	71	Elko	85	III
National Exploration	28	Humboldt	40	IV
TSP Pipeline	4	Elko, Eureka	1	IV
Jerritt Canyon Exploration	39	Elko	384	IV
Ruby Vista Road	1	Elko	2	III
South Railroad Exploration	61	Elko	122	III
Prospect Mine - Gullsil Expansion	152	Eureka	28	III
Rossi Mine	410	Elko	1,094	IV
Gold Bar South Mine	1,372	Eureka	210	III
Juniper Mine Expansion	863	Elko, White Pine	2,300	III
Marigold - Valmy Mine	339	Humboldt, Lander	542	III
White Pine Hydropower Pump Storage	295	White Pine	860	III
Selena Exploration	39	White Pine	100	III
Hog Ranch Mine	6,050	Washoe	456	V
Great Basin Diamond 1-27 APD Exploration Only	16	Elko	25	III
Goldrush Exploration	27	Eureka, Lander	210	III
Crescent Valley Exploration	13	Eureka	28	III
Greenlink North Powerline	4,466	Churchill, White Pine, Eureka	599	III
Beck Cottonwood Powerline	21	Eureka	1	III
TOTAL	24,706		20,968	

• 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.

JUNE 2022 PROGRAM UPDATES • OTHER PROGRAM EFFORTS

Other efforts of the Sagebrush Ecosystem Technical Team through June of 2022 included:

- Held three Sagebrush Ecosystem Council Meetings including a tour and meeting in Elko in June.
- Coordinated and participated in two Science Work Group meetings to review new science to potentially incorporate more population modeling into the CCS which could provide a more surgical approach to mitigation..
- Conducted efforts related to managing subgrants to USGS and Environmental Incentives.
- Began working on Sagebrush Ecosystem Program Strategic Action Plan update.
- Continued collaborative efforts with federal and state agencies to improve and coordinate planning and conservation efforts.
- Served as collaborating agency in various stages of more than a dozen NEPA processes for large-scale disturbances.
- Assessed the values to sage-grouse of various public lands improvement efforts that could be implemented to achieve mitigation.
- Took part in various meetings, webinars, etc. related to sage-grouse, wildfire, conservation efforts and tracking, mining, etc.
- Worked with the Nevada Creeks and Communities Team to put together and implement PFC Workshops.
- Participated and presented as a guest speaker at the National Mitigation and Ecosystem Banking Conference.
- Assisted in the annual Nevada Youth Nevada Range Camp in June.



Views of the Crawford Snowstorms (Left) and West IL (Right) Ranches. (SETT)

JUNE 2022 PROGRAM UPDATES • PLANS FOR THE COMING YEAR

- Continue to implement the CCS and work with credit & debit project proponents navigating the CCS, train & assist verifiers to assess the planned disturbances & impacts of debit projects and the conservation values of credit projects, as well as implement mitigation offsets.
- Ensure credit projects that were awarded seed funding continue move forward with habitat improvements & management planning.
- Conduct site visits as part of Five-Year Qualitative Assessment for 2018 credit projects in 2023 Spring and for prospective credit projects.
- Participate in meetings with BLM, USFS, USFWS and NDOW staff to foster greater awareness of the CCS and the mitigation regulation and its implementation.
- Draft update of SEP Strategic Action Plan.
- Take part in land management agency plan amendments.
- Aim to restart and better implement and streamline the adaptive management process now defined in the Nevada Greater Sage-Grouse Conservation Plan, BLM, and USFS plans.
- Continue to update FWS/USGS Conservation Efforts Database & USFS SMART Database on CCS credit projects.
- Coordinate with other western states to establish an annual meeting to share knowledge on sagebrush ecosystem conservation and Greater Sage-Grouse mitigation.
- Integrate new population-based science into the CCS.



Visiting the Heguy Ranch. (SETT)

NEW RESEARCH • GRSG DECLINES & A ROADMAP TO CONSERVATION

Fire

- Anthony et al. published an open access report on 12. 24. 2021 entitled “Acute and lagged fitness consequence for a sagebrush obligate in a post mega-wildlife landscape”, available at <https://doi.org/10.1002/ece3.8488>.
- This study documented demographic responses by sage-grouse from 2013 to 2018 after the Holloway fire in 2012 burned 462,000 acres in northwestern Nevada and southeastern Oregon’s Trout Creek Mountains. Results showed sage-grouse expressed a 75% lower annual growth rate for the study site compared to other non-fire effected areas across the Great Basin during the same time period. Furthermore, female (both yearling and adult) survival and chick survival were low compared to other studies without broadscale fire disturbance.
- Sage-grouse population variation and instability post large-scale fire disturbance could largely be driven by early establishment of cheatgrass and loss of native plant community structure (across space and time), which reduces primary production and ecological potential of the landscape for species at regional and local scales.
- Coates et al. (2021) Range-wide Greater Sage-Grouse Hierarchical Monitoring Framework developed a Targeted Annual Warning System that could be appropriately leveraged to best predict and interpret early demographic signaling by local or regional sage-grouse populations after a large-scale fire has occurred.
- With the positive feedback relationship between fire and invasive annual grasses and the increase in megafire frequency in the last 35 years across the Great Basin, conservation tools that prioritize where to direct finite funding sources will improve land managers' ability to offset negative consequences for sage-grouse and other sagebrush associated species after broad scale fire disturbance.



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 40% of the 1,981 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.

In 2021, NDOW and partners counted 157 trend leks, which exceeded the previous 20-year average of 152 trend leks counted per year. Average male attendance at trend leks was 9.9 during the 2021 spring breeding season, which was 47.2% below the 2019 average of 18.8 males per trend lek and 61.5% lower than the long-term average of 25.8 males per trend lek. Data from 2020 were not used for comparison due to low sample sizes. The 2021 trend lek attendance rate represents the lowest attendance rate ever recorded. Trend lek attendance is provided in Figure 3 from 2000-2021.

Source: Nevada Department of Wildlife. Nevada Sage-grouse Conservation Project Final Performance Report. September 2021

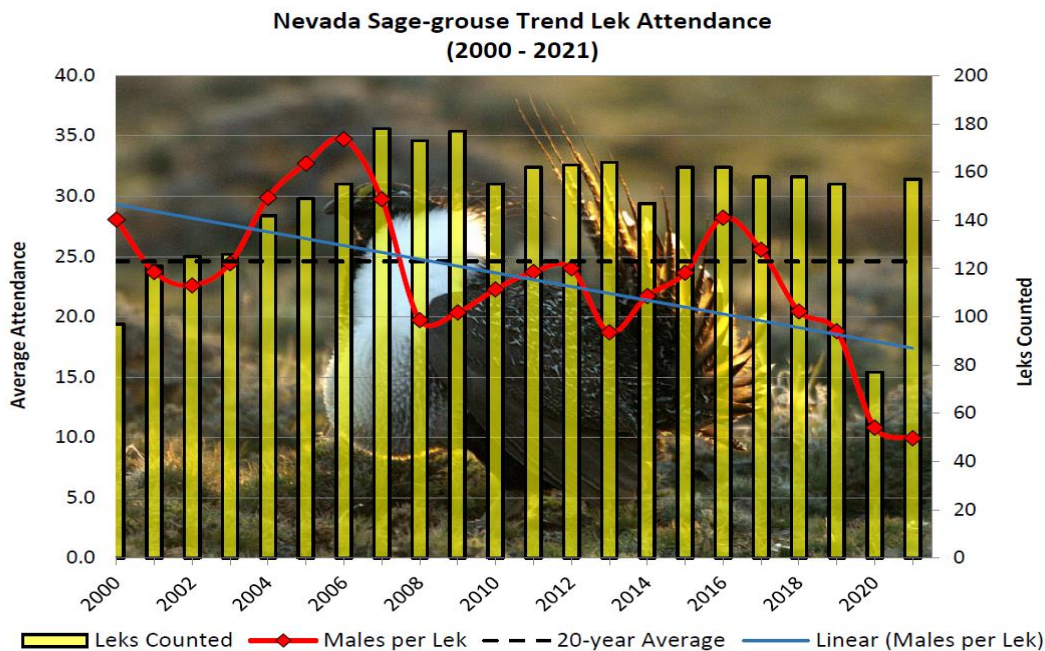


FIGURE 1: Sage-grouse lek attendance (2000–2021).

GREATER SAGE-GROUSE • SAGEBRUSH ECOSYSTEM & GRSG STATUS

GREATER SAGE-GROUSE POPULATION OVERVIEW

During the 2020 sage-grouse hunting season, 1,262 wings were collected from various open hunt units across Nevada. Sample size was up 51.5 percent over the previous year’s collection of 833 wings but was just 68.8 percent of the long-term annual average of 1,834 wings.

Production was estimated at 1.22 chicks per hen, which was an improvement over the previous three years (Table 1), but well below the long-term average of 1.51 chicks per hen. Production values have averaged 1.34 chicks per hen over the last 10-year period. To maintain a stable sage-grouse population, it is estimated that 1.56 chicks per hen are necessary (population growth rate = 1.0). This level of recruitment was essentially realized between 2013-2016; however, the last four years have been well below those levels and likely explains recent male lek attendance trends.

Nest success values were also estimated from the examination of adult female wings and the molt pattern (progression of replacement through outer primary feathers). Statewide nest success values were estimated at 56.3 percent in 2020 compared to 37 percent in 2019. This is a relatively high nest success rate compared to the long-term average of 44.2%. Unfortunately, the high nest success did not culminate in improved recruitment, which may have been due to the extremely dry conditions observed at the end of the 2020 summer.

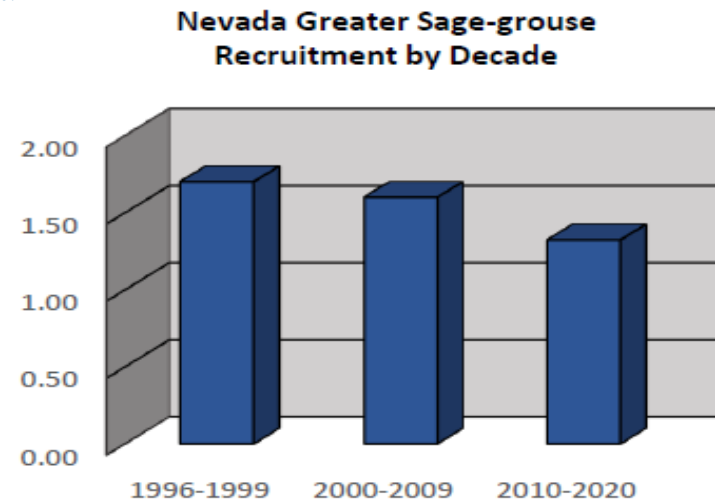
When binned by decade, average juvenile recruitment values indicate an overall decline in productivity from sage-grouse. Recruitment values during the late 1990s and during the 2000s likely contributed to some population sustainability; however, sage-grouse productivity values during the last decade are at levels that will not likely support population sustainability over time (Figure 1).

Source: Shawn Espinosa, Nevada Department of Wildlife, Nevada Sage-grouse Conservation Project Final Performance Report. September 2021.

TABLE 5. Wing collection and estimated demographic metrics over the last decade in Nevada.

Year	Total Wings Collected	Chicks per Hen	Nest Success
2011	2,023	1.44	52.4%
2012	1,121	0.73	48.4%
2013	855	1.67	45.7%
2014	1,034	1.54	47.1%
2015	1,667	1.52	39.6%
2016	1,541	1.56	36.5%
2017	1,278	0.98	46.5%
2018	1,138	0.89	43.0%
2019	833	1.14	36.9%
2020	1,262	1.22	56.3%
10-year Avg.	1,369	1.34	45.6%

FIGURE 2. Average recruitment of sage-grouse juveniles in Nevada per decade.



GREATER SAGE-GROUSE • SAGEBRUSH ECOSYSTEM & GRSG STATUS

GREATER SAGE-GROUSE POPULATION OVERVIEW

U.S. Geological Survey developed a range-wide hierarchical population monitoring framework for the 11 western states with sage-grouse populations (Coates et al., 2021). The study used lek count data from 1960 – 2019 and had four main study objectives:

1. Create a range-wide database for sage-grouse lek counts;
2. Develop nested population lek clusters;
3. Estimate spatiotemporal trends in population abundance; and
4. Develop a targeted annual warning system (TAWAS) to signal declining leks and lek clusters

Lek data were split into short (17 years), medium (33 years), and long (53 years) temporal scales to derive population trends and estimate extinction probabilities for leks and lek clusters. Over the past 17, 34 and 52 years, sage-grouse populations have declined by 42, 59 and 78% respectively in the Great Basin Climate Cluster. In Nevada during 1990-2019, the TAWAS activated a total of 290 and 179 leks as watches and warnings, respectively, and activated 33 and 22 neighborhood (lek) clusters as watches and warnings, respectively (Figure 2). At the lek level range-wide, models predicted 46%, 60%, and 78% of leks have over 50% probability of extirpation over 19, 38, and 56-year projections from 2019.

Coates, P.S., Prochazka, B.G., O'Donnell, M.S., Aldridge, C.L., Edmunds, D.R., Monroe, A.P., Ricca, M.A., Wann, G.T., Hanser, S.E., Wiechman, L.A., and Chenaille, M.P., 2021. Range-wide greater sage-grouse hierarchical monitoring framework – Implications for defining population boundaries, trend estimation, and a targeted annual warning system: U.S. Geological Survey Open-File Report 2020–1154, 243 p., <https://doi.org/10.3133/ofr20201154>.

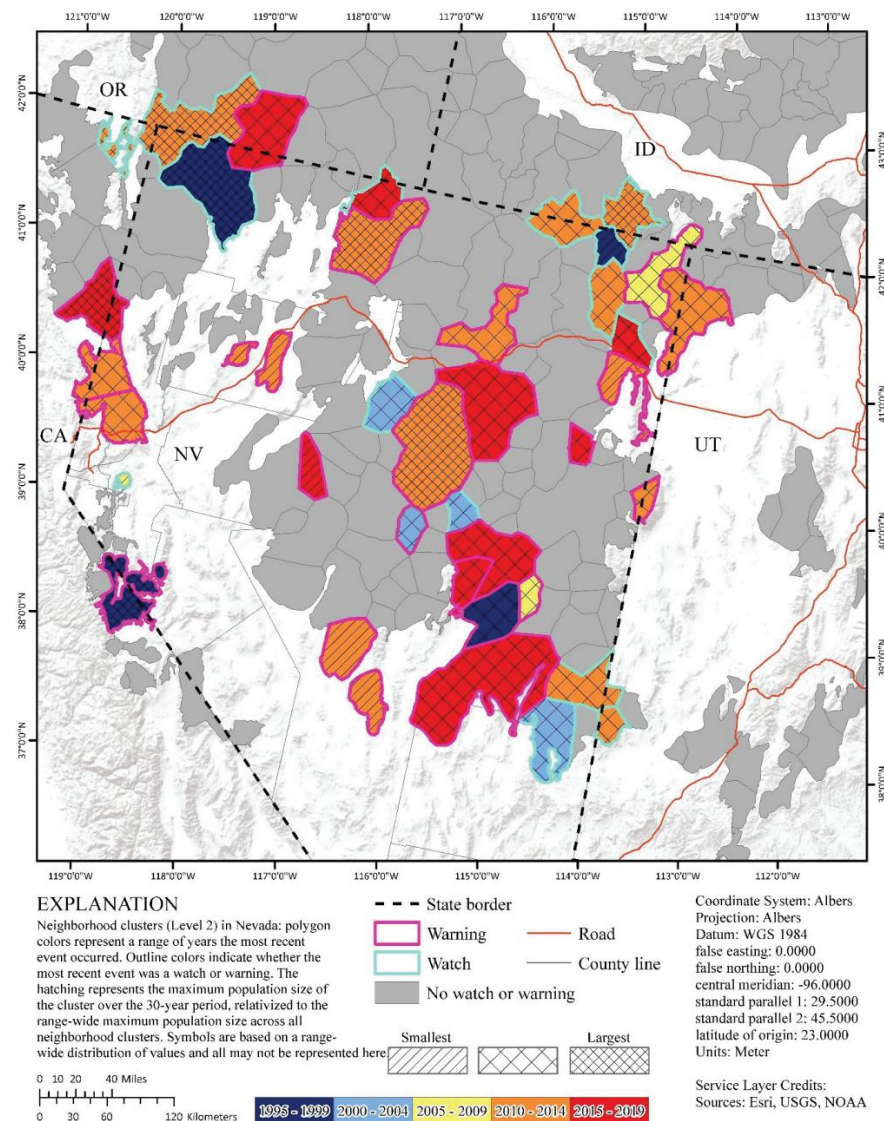


FIGURE 3. Spatial and temporal depiction of watches and warnings of greater sage-grouse population declines at neighborhood clusters in Nevada from 1990-2019. 17

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.

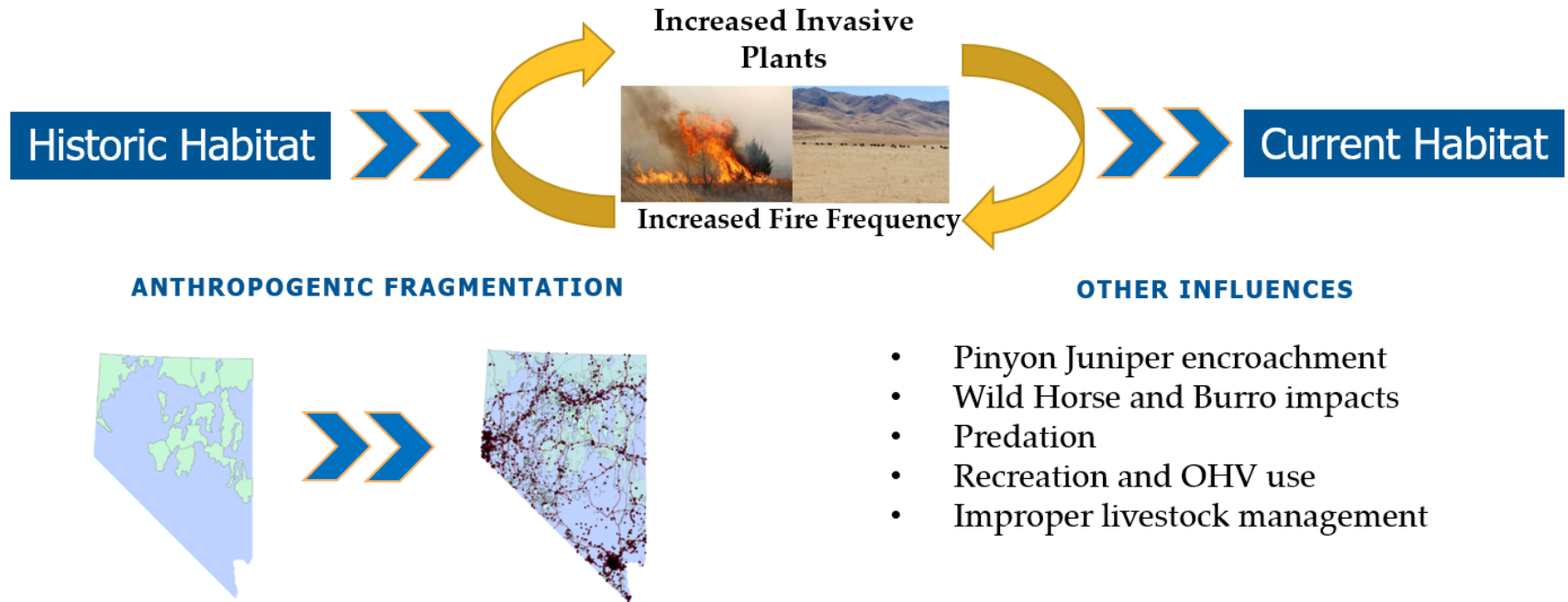


FIGURE 4: Threats to Sagebrush Ecosystems.

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.

EARLY 2022 • GRSG LOCAL AREA WORKING GROUP (LAWG) UPDATES

Bi-State LAWG:

- Recent Projects: 2,748 acres of conifer treatment, 1,210 acres of post-fire restoration and rehabilitation, 15 acres of invasive annual grass removal, 2,094 acres entered into conservation easements, 26 acres of habitat restoration.
- Future Goals: Update the Bi-State Sage-Grouse Conservation Action Plan, continue monitoring BSSG populations, develop strategies to inventory and assess meadows, develop strategies to map and treat invasive annual grasses, solidify future funding commitments to continue implementing the Action Plan.
- Resource Needs: Increased capacity and increased staff to fill agency vacancies, plan, and implement on the ground projects.

Buffalo- Skedaddle LAWG:

- Recent projects: Installation of over 1 mile of pipe fence around a riparian area on a CDFW parcel is in progress. Research continues on aerial herbicide sprays to monitor success of the annual grass control treatments. We are also working on extensive out-planning for landscape scale juniper removal in high priority sage-grouse habitat.
- Future goals: Wild horse and burro gather planned for summer 2022, seeding aerial herbicide sprays, continue spring/stream enhancements.
- Resource needs: Capacity for project implementation and/or contract management.

Elko Stewardship LAWG:

- Recent projects: Research continued at leks across northern and central Nevada to investigate potential effects of anthropogenic sound on sage-grouse. In 2022, in addition to lek counts, acoustic data was recorded at 45 leks statewide, 38 in NDOW's Eastern Region. Held 7th Annual Sage-Grouse Experience – this year virtually via Facebook, which was not broadcast as widely as hoped. Continued to do invasive annual grass control on South Sugarloaf Fire. Extensively mapped weed infestations along the Ruby Mountains. Gathered Wild Horses to get closer to AML. Overseeded on Cherry and Corta Fires but HUGE IMPACT of south railroad mine exploration in South Fork PMU may negate benefit. Pinyon-juniper treatment conducted on many acres to restore rangeland conditions. Added many acres to CCS and monitored existing CCS Projects.
- Future goals: Continue to meet on the second Tuesday of every month throughout the year.
- Resource needs: The CDs-LAWG would appreciate receiving greater support and guidance in addressing Habitat and Population triggers and through the adaptive management planning and implementation process.

Lincoln LAWG:

- Recent projects: There have been several projects, primarily focused on pinyon-juniper removal.
- Future goals: Has not met since Covid, so meeting again is a near-term goal.
- Resource needs: Greater support and capacity.

North Central LAWG:

- – No updates received.

EARLY 2022 • GRSG LOCAL AREA WORKING GROUP (LAWG) UPDATES

NVCCN (Nevada Collaborative Conservation Network):

- – No updates received, though a meeting is planned for the near future.

SANE (Stewardship Alliance of Northeastern Nevada):

- – No updates received.

South Central LAWG, Eureka CD reporting for their portion of that area:

- Recent projects: In the last year, ECD and Eureka County worked with BLM to implement 2020 AMRT recommendation to address population trigger at Pony Express 2. 100 % of trees (mostly J) encroaching on lek were removed through a contractor and BLM fire crew. Serving as Eureka County Weed District Board of Directors, ECD directed work under the Weed District and continued partnerships with landowners to control noxious weeds. Eureka County Commissioners hired a full-time weed/resource technician who has completed significant weed control efforts, and weed treatments are also being completed by contractors. Much is done in coordination with Battle Mountain BLM and Elko BLM through assistance agreements and nearly all weed control actions benefit sage grouse habitat. ECD and Eureka County are working closely with BLM to implement projects that benefit and/or protect GRSG habitat through the 3 Bars Landscape and Ecosystem Restoration Project and roadside fuel breaks. ECD just received \$18,000 in grant funding through the CD Program that will be leveraged with cash and in-kind match to complete new PJ treatments and maintain treated areas where small trees have returned. Some treatments will occur on BLM managed lands under the 3 Bars Project.
- Future goals: Continue to work with BLM and landowners to complete additional treatments in sage-grouse habitat where authorizations and permissions are granted. Complete Conservation Action Plan (building on previously completed Resource Needs Assessment) to focus projects in the right places with the right partners. Assist in facilitating formal SCLAWG meeting in next year to build partnerships and leverage projects across jurisdictional boundaries.
- Resource needs: Synergize efforts through CDs rather than having so many entities competing on funding and duplicating efforts. Give CDs the capacity to lead on sage-grouse efforts. Full time LAWG coordinator helping in getting AMRT recommendations developed and implemented. USGS must be urged and provided the capacity to make the Adaptive Management process streamlined, timely, and effective. ECD and the South Central LAWG had some frustration with working on triggers from a few years ago knowing other triggers may have been met in recent years, including last year, and we were not addressing these at the same time.

ROGER (Results Oriented Grazing for Ecological Resilience):

- Recent projects: ROGER is continuing to focus on Outcome Based Grazing, LCT, and GRSG management, and responding to this year's drought conditions. The group met in person for the first time since COVID-19 during the second week of April, which was a wonderful change of pace for members after two years of virtual meetings. Additionally, the ROGER STM Science Work Group research project is progressing well, the Targeted Grazing for Fine Fuels Demo continues, and the group is currently working on new areas of focus that will continue to evolve in near future.
- Future goals: Continue to foster open communication and coordination between partners as we navigate the challenges currently facing land management. The group is hoping that 2022 will continue to offer more opportunities for in-person meetings as well, specifically for the July field tour.
- Resource needs: Ongoing support, participation, and commitment is necessary and appreciated from all parties, including the Governor and Congressional Offices.