

# Sagebrush Ecosystem Program

## *Progress Report: December 2016*



**Sagebrush Ecosystem Council**

**State of Nevada**

**201 South Roop Street, Suite 101**

**Carson City, Nevada 89701-5247**



*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.*

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## Nevada Sagebrush Ecosystem Council

**BRIAN SANDOVAL**

*Governor*

*State of Nevada*

**J. J. GOICOECHEA**

*Chairman*

*Sagebrush Ecosystem Council*



NRS 232.162 § 8—On or before June 30 and December 31 of each year, the Council shall submit a written report to the Governor.



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

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BRIAN SANDOVAL

*Governor*



**Kelly McGowan**, Program Manager

**Katie Andrie**, Wildlife

**Sara McBee**, State Lands

**Dan Huser**, Forestry/Wildland Fire  
Agriculture, Vacant

**STATE OF NEVADA**  
**Sagebrush Ecosystem Program**

Dear Governor Sandoval:

During the past year, the Sagebrush Ecosystem Program (SEP) has continued its progress towards achieving the goals and core concepts of implementing a comprehensive habitat exchange program known as the Nevada Conservation Credit System (CCS), as well as the development of the Strategic Action Plan (SAP). During the first several years of the program, the Sagebrush Ecosystem Council (SEC) and the Sagebrush Ecosystem Technical Team (SETT) have worked diligently with Federal and State agencies, special interest groups and the public in collecting data and information necessary to construct the CCS and the SAP.

I'm pleased to announce that in 2016, the SEP proceeded beyond the constructing phase and has entered into the implementation of the CCS, where manmade disturbances (debits) are offset by conservation practices (credits). The State funding, made available during the 2015 legislative session, has provided opportunities to Nevada landowners to participate in the program to preserve and enhance sagebrush ecosystems and develop credits that, when sold, will enable them to monitor, maintain and enhance those habitats over many decades. This concept is truly unique for a Nevada sponsored program, and it is envisioned to be self-perpetuating.

The SAP provides resources and guidance tools that will be helpful in assisting local planning efforts to identify and prioritize sagebrush ecosystem conservation needs. The SAP calls on many of the involved agencies to play specific roles in the process to assist in the development, update process and implementation of these local plans. The SEC encourages 'grassroots' planning processes to ensure that those participating are connected to the outcomes.

While I have outlined just a few of our major accomplishments within this letter, please find within the body of this report a comprehensive list of the other significant accomplishments and actions taken by the SEP.

I continue to be impressed by the professionalism and dedication of the SEC members. Each member has a true desire to protect, conserve, and enhance the sagebrush ecosystem while also acknowledging the values of Nevada's diverse industries that rely on the wise use of those natural resources and the opportunities those resources provide to our residents and guests.

The SEP would like to thank you for your past and continued leadership and support of this program. The vision you have demonstrated by your actions is a testament to your commitment to the continued conservation and responsible use of Nevada's natural resources.

Sincerely,

J.J. Goicoechea, Chairman  
Sagebrush Ecosystem Council

## Background

With the issuance of Executive Order 2012-09 on April 3, 2012, Governor Brian Sandoval created the Greater Sage-grouse Advisory Committee and tasked its members with planning a course of action providing sufficient measures to preclude the need for the U.S. Fish and Wildlife Service (USFWS) to list the Greater Sage-grouse under the Endangered Species Act (ESA).



The Greater Sage-Grouse Advisory Committee determined that the primary threats to the Greater Sage-grouse and its habitat in Nevada include wildland fires, invasive species, pinyon-juniper encroachment, predation, wild horse and burro management, mineral development, recreation and off-highway vehicle use, renewable and other energy production, and transmission and distribution powerlines. In Nevada, 86% of the land is managed by the federal government, necessitating a coordinated effort among local, State and federal agencies to ensure the successful implementation of prudent land management policy.

In November 2012, recognizing the critical importance of Nevada's sagebrush ecosystems to the Greater Sage-grouse and to the citizens of the Silver State, Governor Sandoval issued Executive Order 2012-19 (later codified in law in 2013 as NRS 232.161 and NRS 232.162) establishing the Nevada Sagebrush Ecosystem Council (SEC). In 2013, Nevada legislators underscored this commitment by formalizing it within statute (NRS 321.592 and NRS 321.594). Governor Sandoval signed AB 461 in June 2013, making Nevada the first state to formalize its commitment to conserve the sagebrush ecosystems within statute. The bill added the key leadership and decision-making capacity of State agency directors representing Wildlife, Conservation & Natural Resources and Agriculture to the SEC. It also provided permanent ex-officio seats on the SEC to three of the state heads of key federal agencies involved with land and wildlife management in Nevada.

Today, the Nevada Sagebrush Ecosystem Program (SEP) is an integrated, multi-disciplinary, inter-agency effort with a shared goal of addressing the threats and challenges to this critical ecosystem for today and into the future. The Nevada SEP is recognized for its open, consistent engagement among State, federal, tribal nations and local government agencies, ranchers, businesses, conservation groups, non-profits and universities in a multi-pronged effort to avoid, minimize and mitigate impacts to Nevada's sagebrush landscapes.

## Organizational Highlights

2012, October	The Nevada Legislative Interim Finance Committee and Board of Examiners approved initial funding to hire and create the Sagebrush Ecosystem Technical Team (SETT).
2012, November	Governor Sandoval issued Executive Order 2012-19 establishing the Sagebrush Ecosystem Council.
2012, December	Nevada submitted State Alternative (E) providing the BLM with geographic information data depicting their preferred management areas, conservation measures that should be applied to these areas and rationale as to why their measures deviate from those outlined in the NTT Report.
2013, January	Governor Sandoval appointed nine members to the Sagebrush Ecosystem Council (SEC) created through Executive Order 2012-19. To date, the SEC has held 20 working meetings in accordance with Nevada Open Meeting Laws.
2013, February	SETT began work as staff to the SEC. First meeting of the SEC held.
2013, March	Nevada Assembly Bill 461 is introduced in the Nevada Legislature, to formalize the Sagebrush Ecosystem Program within statute.
2013, June	Governor Sandoval signed AB 461, making Nevada the first state to formalize its commitment to conserve sagebrush ecosystems within statute. The bill added the key leadership and decision-making capacity of State agency directors representing Wildlife, Conservation & Natural Resources and Agriculture to the SEC. It also provided permanent ex-officio seats on the SEC to three of the state heads of key federal agencies involved with land management in Nevada. This bill was codified in law in the following NRS chapters 232 (.161 and .162), 321 (.592 and .594).

### Instrumental SEC Decisions July 2015 – December 2016

2015, July	SEC approved a letter of specific concerns to be submitted to the Governor's Office for their consideration during their Consistency Review of the Nevada and Northeastern California Greater Sage-Grouse Proposed Land Use Plan Amendment (LUPA). The letter identified specific management actions in the Final LUPA document that were not consistent with the State's Plan.
2015, December	SEC approved nine proposed improvements to the existing Conservation Credit System Manual and Habitat Quantification Tool. They also approved the updated Management Categories map and the Biologically Significant Units (BSU) map to assist in the assessment of "Net Conservation Gain" within the CCS.
2016, April	SEC approved State funding of five sagebrush ecosystem conservation projects that proposed to maintain and enhance Greater Sage-grouse habitats and generate credits within the State's CCS. The Council approved \$1,142,383

towards the five projects located in Elko, Eureka, Washoe and White Pine Counties.

2016, June SEC approved the Collaborative Structure Framework to assist and provide greater collaboration in the implementation of the Records of Decision (ROD) by the BLM and USFS for implementation of the LUPA. The State of Nevada, the USFS and the BLM intend to establish a collaborative network that builds on agency flexibility by empowering participating stakeholders and land managers with the tools and skills to effectively work collaboratively to resolve conflict at the lowest level – and when necessary at the State/Federal level through consensus of the Sagebrush Ecosystem Council.

***2016, November SEC approved the Strategic Action Plan (SAP) developed by the SETT that offers further guidance and necessary tools to assist with the implementation of the 2014 Nevada Greater Sage-Grouse Conservation Plan. The SAP includes maps, resource tools and guidance to assist in local planning efforts to prioritize and maximize limited financial and professional resources to address sagebrush ecosystem conservation projects.***

#### **SETT Activities July 2015 – December 2016**

2015, July SETT met with EP Minerals to discuss the potential of using the CCS to offset disturbances from their proposed mining activities. SETT prepared meeting materials for the SEC meeting July 9.

2015, August SETT attended a BLM sponsored meeting for the roll-out of the LUPA for their Carson City and Battle Mountain field offices. SETT met with Steve and Robyn Boies to review the plans for a pilot project on the Boies' ranch. SETT participated in a BLM sponsored meeting to review limiting disturbance, permitting activities and calculating disturbance. SETT prepared meeting materials for the SEC meeting August 13.

2015, September SETT met with Travis Miller, of the Gund Ranch in Elko, NV, to discuss the potential for credit generation on the ranch. SETT met with NRCS staff to discuss coordination of programs to maximize conservation and ensure compatibility. SETT reviewed grant applications from the CDP to determine that projects are within the SGMA and are conducive to Greater Sage-grouse habitat conservation.

2015, October SETT met with USGS to discuss updating the Management Categories Map. SETT attended the Medusahead Symposium and presented the State Plan and provided information on the CCS at the NV Weed Management Association Meeting in Sparks, NV. SETT prepared meeting materials for the SEC meeting October 15.

2015, November SETT completed the list of potential improvements to the CCS for consideration by the SEC at their December meeting. SETT met with Nevada Department of Agriculture to discuss opportunities to coordinate their noxious weed grant funds to benefit Greater Sage-grouse habitats. SETT met with

	USGS to discuss final modifications to the Management Categories Map and Seasonal Habitat Map development.
2015, December	SETT met with New Nevada Lands to discuss opportunities to develop credits on their private land throughout northern Nevada. SETT presented a PowerPoint presentation to CDP field staff on the fundamentals of the CCS. SETT (ongoing) participated on the targeted grazing group discussions to reduce fine fuels and the associated fire threats as provided in Secretarial Order 3336. SETT prepared meeting materials for the SEC meeting December 10-11.
2016, January	SETT and BLM coordinated a consultation meeting to discuss the Bald Mountain and Gold Rock mine projects, EIS status and potential use of the CCS to offset debits created. SETT participated in the ongoing process to update the Nevada Rangeland Monitoring Handbook. SETT conducted trainings with multiple agencies (NDOW, BLM (Reno, Battle Mountain, Elko, Ely)) and their staff introducing them to the Habitat Quantification Tool (HQT) and all aspects of implementing the CCS.
2016, February	SETT met with Barrick Mining and Squaw Valley Ranch to discuss the potential of using the CCS and running a pilot project on the ranch. SETT met with BLM to discuss the results of running the HQT on the Bald Mountain Mine expansion project and the number of debits generated. SETT met with Executive Director of the Nevada Rural Electric Association to discuss presenting the CCS at their annual meeting in September, 2016. SETT prepared the meeting materials for the SEC meeting February 12.
2016, March	SETT developed training materials for the first Certified Verifier training course. SETT organized and conducted a three-day training to over 45 qualified individuals who were interested in becoming certified verifiers to implement all of the tools and field data collection methods associated with the implementation of the HQT and CCS.
2016, April	SETT submitted an article about the potential benefits to the ranching and agriculture industries who participate in the CCS and produce credits and submitted it to the Progressive Rancher magazine. SETT conducted trainings for NRCS staff introducing them to the HQT and all aspects of implementing the CCS. SETT prepared the meeting materials for the SEC meeting April 7.
2016, May	SETT attended site visits with each of the State funded credit project proponents. SETT reviewed the sites and offered input for ways that enhancement of credits may be achieved and reviewed the agreements with the proponents. SETT conducted trainings for the USFS and their staff introducing them to the HQT and all aspects of implementing the CCS.
2016, June	SETT and NDOW reviewed the USGS Science Support Services contract to develop tools to support efforts to better understand GRSG activities and the use of the tools to better inform decisions for habitat protection. SETT also presented an introduction of the CCS at a Bi-State Sage-grouse Local Area Working Group (LAWG) meeting. It is anticipated that a modified version of the CCS could potentially be developed for use in the Bi-State Sage-grouse planning area. SETT also participated in the annual NV Youth Range Camp



	<p>week-long event near Austin, NV. SETT prepared the meeting materials for the SEC meeting June 29.</p>
2016, July	<p>Nevada Department of Agriculture (host), SEC and SETT were among a panel that presented an introduction of the CCS and implementation of the LUPA to attendees of the Western Association of State Departments of Agriculture during a break in their tour of the Bently Nevada facilities in Minden, NV. SETT participated in a Riparian Grazing Training in Ely, NV.</p>
2016, August	<p>SETT worked with the Governor's Office staff and USFS, BLM and USFWS to develop examples to present to the SEC on how the Collaborative Strategy process would work using realistic scenarios. SETT met with BLM staff to review the Gold Bar and Fire Creek mining proposed projects to discuss the implementation of the CCS at those sites. SETT attended a conservation planning meeting at the UC Ranch near Winnemucca, NV, and presented an introduction to the CCS at that meeting, toured the property, and discussed opportunities for conservation projects with staff from NDOW, CDP, UNR, BLM, K-COE ISOM and the landowners.</p>
2016, September	<p>SETT participated in the Collaborative Ranching meeting in Elko, NV. SETT met with Governor's Office staff and USFS, BLM and USFWS to schedule the collaborative strategy training workshop, Building Consensus and Finding Shared Solutions, to be held on November 29 – December 1. SETT participated in the Regional Mitigation Framework meeting in Lakewood, CO, to develop consistencies with federal agencies and State plans to implement mitigation strategies for GRSG conservation. SETT presented an introduction of the CCS to the NV Rural Electric Association's annual meeting in Henderson, NV. SETT prepared the meeting materials for the SEC meeting September 13.</p>
2016, October	<p>In coordination with the Nevada Cattlemen's Association, the SETT and SEC member Steve Boies, presented an introduction to the CCS at public outreach meetings in Eureka, Elko and Winnemucca and encouraged landowners to consider applying for State funding to improve sagebrush ecosystem habitats and produce conservation credits.</p>
2016, November	<p>SETT and SEC participated in the collaborative strategy training workshop, Building Consensus and Finding Shared Solutions on November 29 – December 1. SETT prepared the meeting materials for the SEC meeting November 10.</p>

## Population Status and Trends

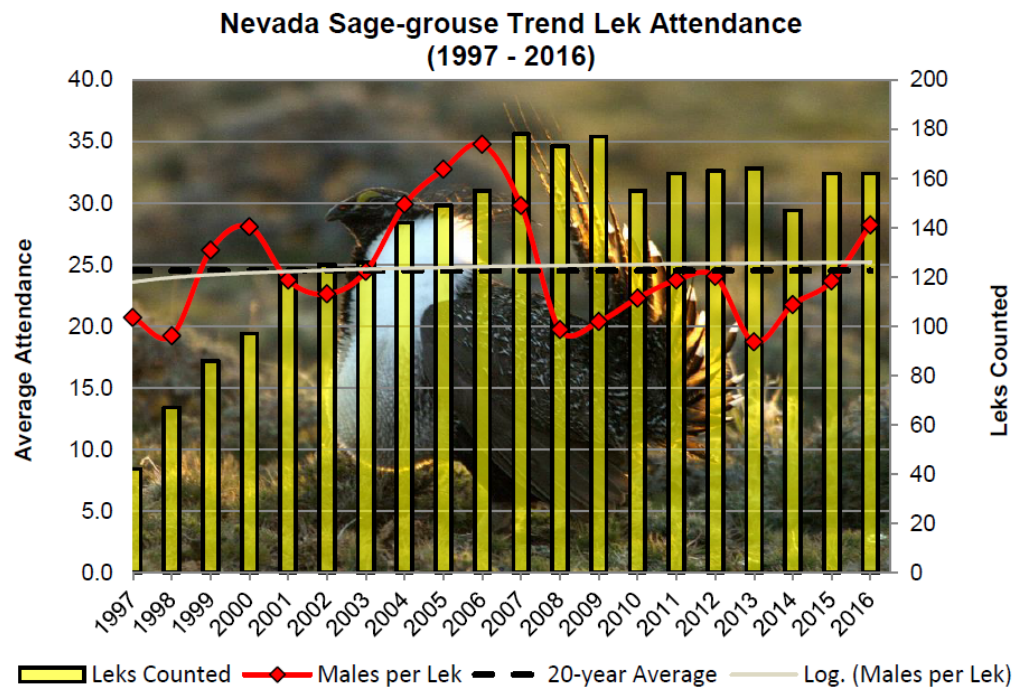
The Nevada Department of Wildlife, in conjunction with federal agency partners including the Bureau of Land Management (BLM), U.S. Forest Service (USFS), U.S. Geological Survey (USGS) and the U.S. Fish and Wildlife Service (USFWS), conducts sage-grouse lek counts and surveys annually. Techniques to monitor 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.

A total of 976 leks were surveyed in Nevada during the 2016 spring breeding season of which 521 were active. Currently, there are 2,177 leks within the Nevada Sage-grouse Lek Database, of which 1,886 leks are located in Nevada. Approximately 52% of known leks were surveyed, achieving above and beyond objective a). Male count totals for surveyed leks was 12,661 yielding an average of 24.3 males per active lek (Table 1), surpassing last year's average of 21.3 by 14%. The 2016 average was the highest since 2005, when an average of 26.6 males per active lek was recorded.

For a more consistent analysis of trend, a subset of leks known as “trend” leks (n=195) have been identified and are used to estimate annual variations in attendance and longer term trends. These leks are normally counted approximately 2 to 3 times each year. In 2016, 162 trend leks were monitored and the average male attendance was 28.2 males per lek. This value represented a 19.3% increase over the prior year and was 15.2% greater than the 20-year average of 24.5 males per lek. The 2016 attendance rate was the highest since 2007 (x=29.8) and the 20-year trend for sage-grouse appears fairly stable when applying a logarithmic trend to the data (Figure 1). Recruitment over the last three years has exceeded 1.5 chicks per hen which has likely contributed to the increases in male attendance.

**Table 1. Lek count summary from 2003 – 2016.**

Year	No. of Males	Leks Surveyed	Active Leks	AVG/active lek
2003	4,624	380	248	18.6
2004	6,813	487	309	22.1
2005	8,843	635	332	26.6
2006	9,580	881	448	21.4
2007	11,040	1,013	545	20.3
2008	7,671	923	483	15.9
2009	7,954	930	505	15.8
2010	7,399	742	420	17.5
2011	8,424	737	427	19.7
2012	9,668	933	517	18.7
2013	6,776	808	479	14.1
2014	8,869	929	496	17.9
2015	11,907	965	559	21.3
2016	12,661	976	521	24.3
2003-2016 AVG.	8,731	810	449	20



**Figure 1. Trend lek attendance from 1997-2016.**

NDOW (2016) Nevada Sage-grouse Conservation Project, Final Performance Report

### Initiation and Implementation of the Nevada Conservation Credit System

In August of 2015, the SETT embarked on initiating a ‘pilot project’ on the Boies Ranch in Elko County, NV. The intent of the pilot project would be to further inform the development and improvement of the CCS. During this pilot project, the SETT implemented all phases of the CCS on private parcels and one small section of a BLM allotment permitted to the Boies’. Field data was collected from each site following the protocols outlined in the CCS, and the information was entered into the CCS calculator to determine the amount of credits. The SETT also worked with the Boies’ to complete a Management Plan and Participant Contract to further inform and improve the entire process.

At the same time, the SETT also implemented two pilot projects to inform the process for calculating debits in the CCS. One of the projects was a projected lithium mine site and the other was a hypothetical gold mining operation. While time did not allow the SETT to collect field data at the two mine sites, they used existing data to help inform the process, but all other protocols for calculating debits were followed by the SETT.

These pilot projects have provided valuable insight to the SETT on how the CCS would function under realistic conditions. The pilot projects have allowed the SETT to make internal improvements to the participant forms used in the process and incorporate additional measures to improve the overall process. One of the most significant values of the pilot projects was the ability to make observations of the overall functionality of the CCS. This provided the SETT with the information needed to present a list of 22 potential improvements that the SEC considered at the December 2015 meeting. This annual process the SEP conducts, follows the internal guidelines established to use adaptive management as a process for continual improvements in the effectiveness of the implementation of the CCS in order to achieve net conservation gains.

In December 2015, the SEP released an announcement encouraging Letters of Interest from landowners to apply for State funding that would be applied toward the enhancement and maintenance of sagebrush ecosystems and the generation of Greater Sage-grouse habitat credits. The announcement was well received as the SEP collected 22 applications. The SETT, with the assistance of NDOW staff, ranked each project and narrowed the list to seven applicants. Two applicants withdrew their application and the remaining five applicants submitted a ‘Full Proposal’. In April 2016, the SEC approved five applicants for funding. It is estimated that the applicants’ conservation projects will generate 5,548 credits within the credit system in early 2017. Two privately funded credit development projects are also underway and the estimated generation of credits for these two projects is 983.

With the previous year’s projects well underway, the SEP announced in November 2016 a second round of State funding to Nevada landowners. We anticipate increased interest this year due to public outreach efforts, made by the SETT at several NGO meetings during 2016, and landowners becoming more familiar with the process and understanding the long-term benefits of becoming a credit developer.

The SEP anticipates awarding funding to successful applicants in February 2017, and that the credits generated by their conservation efforts will be available in the CCS in late 2017 or early 2018.



## Program Budget

Existing state laws require the Department of Conservation and Natural Resources' Division of State Lands to acquire and hold all lands and interests in land owned or acquired by the State of Nevada. Assembly Bill 461 expanded NRS 321 to include the coordination of carrying out a program of projects to improve sagebrush ecosystems in the state.

The Governor approved budget for the Sagebrush Ecosystem Program for Fiscal Years 16-17 are currently in effect. The existing budget can be found on the State of Nevada's website (<http://open.nv.gov/>).

The FY16-17 Biennial Budget builds upon the commitments made last biennium to support a Nevada-based approach to managing the threats to the sagebrush landscape in the state. The importance of this ecosystem in Nevada, and the need to address its decline and the resultant impact on any and all species, is recognized in this proposed budget through dedicated general funds in support of the SEC, the SETT and the Conservation District specialists, as well as additional support for the CCS to fund ongoing adaptive management additions and modifications based on science and experience. Most importantly, included is a major state commitment of \$1 million each year to capitalize the CCS through immediate project work that will both help prevent additional harm, and restore damage already done, to the sagebrush ecosystem. This project work is also bolstered by the addition of the funding necessary to support rapid document development to expedite federal permitting of these landscape scale natural resource projects. Further, the budget contains a commitment to help ensure the state is able to maximize its Conservation Camp Program and the program's use of professional staff that train and supervise inmates in fighting wildland fire and performing natural resource project work on behalf of the state and its citizens.

Department of Conservation and Natural Resources' staff are in the process of developing a budget request for the program for Fiscal Years 18-19. The Department will submit the budget request for consideration during the upcoming legislative session in 2017.

Established by Executive Order 2012-19 under Governor Brian Sandoval, and confirmed in statute during the 2013 Legislative Session, the Sagebrush Ecosystem Council (SEC) is comprised of nine appointed members representing agriculture, conservation and environmental organizations, energy development, local government, mining, ranching, the Board of Wildlife, Tribal Nations and the general public. Mirroring the diversity of the Greater Sage-Grouse Advisory Committee, the SEC continues the blending of diverse constituencies and encourages public involvement at every juncture.



**J.J. Goicoechea, Chair**  
***Local Government Representative***

As a Eureka County Commissioner, J.J. Goicoechea brings his understanding of public lands to the Sagebrush Ecosystem Council. He currently serves on the NACO Public Lands Task Force, and is past president of the Cattlemen's Association. He is a veterinarian specializing in large-animal care and is a fourth generation rancher in Nevada's Newark Valley. Goicoechea attended the University of Nevada, Reno, where he studied Veterinary Sciences, and received his D.V.M. from Colorado State University.



**Chris MacKenzie, Vice-Chair**  
***Board of Wildlife Representative***

Chris MacKenzie, a fourth generation Nevadan, grew up enjoying the bounty that the Nevada outdoors offers—with work experience as a ranch-hand, fishing guide, bar bouncer and other seasonal jobs—until going astray by attending law school after graduating with a finance degree from the University of Nevada, Reno. Today, MacKenzie is a partner in the law firm of Allison, MacKenzie, Pavlakis, Wright & Fagan, Ltd., in Carson City. His areas of focus include business, administrative, estate, real property and water law. MacKenzie served on the Wildlife Commission from 2001-2007 (Chairman, 2005-2007), and is an active member and Vice Chairman of the Nevada Dream Tags Advisory Board since its inception.



**Allen Biaggi**  
***Mining Representative***

Allen Biaggi is a third generation Nevadan. He is a consultant with more than 30 years of experience in conservation and natural resources. Biaggi served on the Bi-State Fire Commission in the wake of the Angora Fire. Biaggi is a graduate of the University of Nevada, Reno with degrees in Hydrology and Architectural Engineering Design.



**Steve Boies**

***Ranching Representative***

A native Nevadan, Steve Boies is a rancher and cattleman with operations near Wells in the northeastern corner of the state. Boies understands the issues family-run cattle ranches face today. In addition to representing ranching on the Sagebrush Ecosystem Council, he serves as N-1 and Central Committee Chair for the State Grazing Board. He has been an active participant in industry and resource issues during the past several decades. Boies attended the University of Nevada, Reno, where he studied Agricultural Science.



**Gerry Emm**

***Tribal Nations Representative***

Gerry Emm is the Deputy Superintendent -Trust Services at the Bureau of Indian Affairs Western Nevada Agency in Carson City. He has more than 20 years of experience working with various Tribes in western Nevada in agriculture, environmental, resource and economic development areas. Emm has worked on water, resource and land issues in western and central Nevada. Emm holds a Bachelor's degree in Agriculture from the University of Nevada, Reno.



**Starla Lacy**

***Energy Representative***

Starla Lacy leads NV Energy's Environmental and Safety Department. She has more than 20 years of experience working in the environmental field. Lacy joined NV Energy in 2006 from Dynegy, an independent power generation company based in Houston, Texas. Lacy holds a Master's degree in Environmental Management and an undergraduate degree in Economics.



**Bevan Lister**

***Agriculture Representative***

Bevan Lister manages his family's farming operations raising Alfalfa hay and beef cattle. Lister is an experienced well driller and contractor. He has served on several boards and commissions dealing with natural resources, including 11 years as volunteer leader with the Farm Bureau. Lister holds a Bachelor's degree in Biological and Irrigation Engineering from Utah State University.



**Tina Nappe**

***Conservation and Environmental Representative***

Tina Nappe worked for the Foresta Institute for Ocean and Mountain Studies on Nevada's endangered species (1967-1971). She has served on the State Board of Wildlife Commissioners (1979-1994), several BLM Advisory Boards, the State Water Planning Advisory Board, the Nevada Land Trust and the Nature Conservancy. Nappe holds a Master's degree in Public Policy from the University of Nevada, Reno.



**Sherm Swanson**

***General Public***

Dr. Sherm Swanson is a range and riparian specialist for the University of Nevada Cooperative Extension Service and associate professor in the Department of Natural Resources and Environmental Science at the University of Nevada, Reno. Swanson holds a Bachelor's degree in Wildlife Resources from the University of Idaho, and earned his Master's and Ph.D. in Resource Geography and Rangeland Resources from Oregon State University.



## Ex-Officio Members

The Sagebrush Ecosystem Council also includes ex-officio members representing the three primary federal land management agencies—U.S. Forest Service, U.S. Fish and Wildlife Service and the Bureau of Land Management as well as three of the State’s key agency directors from Nevada Department of Conservation and Natural Resources, Nevada Department of Agriculture and the Nevada Department of Wildlife. The inclusion of the three directors reinforces the multi-disciplinary, multi-agency dynamics of the SEP.



**Bill Dunkelberger**

***Humboldt-Toiyabe Forest Supervisor, U.S. Forest Service***

Bill Dunkelberger serves as the Forest Supervisor for the Humboldt-Toiyabe National Forest, U.S. Forest Service. He brings extensive experience in building relationships between the Forest Service, other federal land management agencies and communities dependent upon the National Forests. Dunkelberger holds a Bachelor’s degree in Recreation and Park Administration from Washington State University.

**Carolyn Swed**

***Interim State Supervisor, U.S. Fish & Wildlife Service***

Carolyn Swed is the Interim State Supervisor for the Nevada Fish and Wildlife Office of the U.S. Fish and Wildlife Service.



**John Ruhs**

***State Director, Bureau of Land Management***

John Ruhs began his duties as the State Director for the Bureau of Land Management in November 2015. Ruhs previously served as the director of BLM’s eastern states and had been the acting state director for Nevada from April 2015 through September 2015. Ruhs leads the management of 48 million acres of public land in Nevada and 59 million acres of Federal mineral resources. The State Office oversees six district offices in Carson City, Winnemucca, Battle Mountain, Elko, Ely and Las Vegas. Ruhs received his Bachelor of Science degree in Animal Science from the University of Idaho.



**Jim Barbee**

***Director, Nevada Department of Agriculture***

Jim Barbee was appointed to head the Nevada Department of Agriculture in 2011. He holds a certificate as a Certified Public Manager (CPM). Barbee served on the National FFA Board of Directors and Foundation Board of Trustees. He holds a Master's degree in Agriculture Science, Agriculture Education from Cal Poly at San Luis Obispo and a Bachelor's degree in Animal Science from California State University, Chico.

**Jim Lawrence**

***Deputy Director, Nevada Department of Conservation & Natural Resources***

Jim Lawrence has been the Deputy Director at the Department of Conservation and Natural Resources



**Tony Wasley**

***Director, Nevada Department of Wildlife***

Tony Wasley was appointed to head the Nevada Department of Wildlife in 2013. He has managed statewide programs, worked as an area biologist, participated in research, restoration, enhancement and protection projects for species such as the sage-grouse, mule deer, elk and bighorn sheep. Tony holds a Bachelor's degree in Biological Sciences and Wildlife Management from California State University and earned his Master's in Biology from Idaho State University.



**Ray Dotson**

***State Conservationist, USDA-NRCS***

Ray Dotson began his tenure as Nevada State Conservationist for Natural Resources Conservation Service on August 10, 2015. Dotson oversees the agency's 60 employees in 11 offices throughout Nevada. Dotson came to Nevada from Arizona, where he was Assistant State Conservationist for Field Operations. With NRCS experience working in the Southeast, Midwest and West regions, he broadened his agricultural scope and his ability to carry out the agency's mission by working with producers and partners to get more conservation on the ground. He began working with NRCS as an intern, which led to his career with the agency.

## Sagebrush Ecosystem Technical Team

The Sagebrush Ecosystem Technical Team (SETT) draws scientific expertise from state and local entities to administer a well-defined, consistent and transparent process for permitting, prioritizing and managing activities in Greater Sage-grouse management areas. The full-time, multi-disciplinary team includes a program manager and representatives from the Nevada Department of Conservation and Natural Resources, Divisions of Forestry and State Lands, Nevada Department of Agriculture and the Nevada Department of Wildlife. The team works with representatives from the state's Conservation Districts, the Nevada Association of Counties, the BLM Nevada State Office, the Humboldt-Toiyabe National Forest Supervisor's Office, the USFWS, the Nevada Natural Heritage Program and the Natural Resources Conservation Service.

*"I am very pleased that members for the Sagebrush Ecosystem Team have been appointed. The Council this team will assist was created by my executive order and preventing the listing of the Greater Sage-grouse is an on-going effort of the utmost importance. I am confident that the collaborative nature of this team – bringing scientists and range managers together under one roof – will help address this critical issue and make this effort stronger."* – Governor Brian Sandoval



### **Kelly McGowan—Program Manager Technical Team**

Prior to being named as the Program Manager, McGowan served as a Conservation Staff Specialist II representing the Nevada Department of Agriculture on the SETT since 2013. Previously, McGowan served as an environmental scientist for the Nevada Division of Environmental Protection (NDEP) in its Safe Drinking Water Bureau. In that position he worked with drinking water operators throughout the state and reviewed and approved operator certification, as well as conducted meetings of the Nevada Drinking Water and Wastewater Operators Forum. Prior to joining NDEP, McGowan served for more than eight years on the staff for the Nevada Division of Conservation Districts, where he provided technical, environmental and administrative assistance to the state's 28 conservation districts and also served as staff to the State Conservation Commission. For seven years prior to working with the state program, McGowan was the district manager for the Mason and Smith Valley Conservation Districts where he administered several natural resource conservation programs. McGowan has a B.S. in Geography (Land Forms and Climatology), from the University of Nevada, Reno and is also a Certified Public Manager.



### **Katie Andrle- Wildlife Technical Team**

Prior to being named the Wildlife Staff Specialist representing the Nevada Department of Wildlife, Andrle worked with the U.S. Geological Survey for three and a half years as a Wildlife Biologist and Project Manager for a greater sage-grouse research program, based out of Dixon, CA. In this position, she managed multiple USGS sage-grouse field projects across Nevada and California, where research focused on investigating effects of habitat restoration, industrial development and anthropogenic disturbances on population vital rates, habitat selection and

movement patterns of sage-grouse populations. Other previous work experience has primarily centered on avian research, including diurnal raptor, owl and seabird projects in Maine, Sweden and the Intermountain West for non-profits, and state and federal agencies. Andrlé has an M.S. in Biology from the Swedish University of Agricultural Sciences, in Umeå, Sweden, and a B.S. in Wildlife Ecology from the University of Maine, Orono, ME.

**Currently Vacant—Agriculture  
Technical Team**

The recruitment for this position is being developed. This vacancy was created when Kelly McGowan was promoted to Program Manager on October 24, 2016.

**Dan Huser—Forestry/Wildland Fire  
Technical Team**



Prior to serving as the representative of the Nevada Division of Forestry on the Sagebrush Ecosystem Technical Team, Huser most recently spent five years working in Northwest Georgia for an RC&D Council, in which he was eventually promoted to lead. Throughout his tenure, he focused on writing and implementing numerous federal grants focused on watershed planning, water quality improvement and improving conservation on agricultural and other private lands. Previous to this role, Huser worked for various federal and state agencies and other groups across the country

as a forestry, fish and wildlife technician and biologist often conducting research, monitoring and restoration efforts. A native of Tennessee, Huser has an M.S. in Environmental Science with a Resource Ecology concentration from University of Tennessee at Chattanooga, where he also completed his undergraduate degree in Environmental Science.

**Sara McBee—State Lands  
Technical Team**



Prior to being named as the Environmental Scientist III and Watershed Restoration Specialist representing the Nevada Division of State Lands, McBee worked 7 years in natural resources. McBee brings an interdisciplinary background in both research and field experience. She has worked for natural resource consulting and engineering firms, and non-profit organizations in Nevada and California. Her past work history has included; program management/coordination for a multi-state monitoring program in the Great Basin, focusing on land and

riparian health. Additionally, McBee has managed environmental projects which included environmental documentation under NEPA/CEQA, mine reclamation, habitat restoration and botany. McBee is currently finishing her M.S. degree in Hydrology from the University of Nevada, Reno. McBee earned a B.S. degree in Biology from Florida State University.



### Conservation Districts Program

The Conservation Districts Program (CDP) provides administrative support to the State Conservation Commission, which develops policy and regulations for Nevada's 28 locally elected conservation districts.

Conservation Districts work for the conservation and proper development of the state's natural resources by taking available technical, financial and educational resources and coordinating them to meet the needs of landowners and land users.

Locally elected, they often work in cooperation with counties, the USDA Natural Resources Conservation Service (NRCS), as well as other public and private agencies for the conservation of soil, water and related natural resources.

The Conservation Districts Program is housed within the Director's Office of the Department of Conservation and Natural Resources, and works closely with the SETT.

The implementers of SEP projects on the range will be, among others, the Conservation Districts. Assistance on a daily basis will be provided through three conservation specialists based in Winnemucca, Elko and Ely. The Ely and Winnemucca positions are housed at the respective NRCS offices, and in Elko at the Department of Agriculture office, demonstrating a real partnership. These positions all work closely with the SETT.

Each of the three conservation specialist's positions assisted landowners and the SETT in gathering data and running the HQT on two of the four state funded projects that conserve sagebrush ecosystem habitats. Collectively, the two projects are estimated to contribute nearly 1,200 credits into the NV CCS conservation bank.

CDP staff continues to work with, and assist landowners in protecting and enhancing sagebrush ecosystem habitats through their grant program, and by encouraging their involvement in the NV CCS.

### Local Area Working Groups (LAWG)

The LAWGs provide all stakeholders with an opportunity to work together in actively managing and restoring landscapes across boundaries. Even with collaboration there is a realization that to be successful there is a need for more investment from all sources to achieve sage-grouse habitat conservation objectives.

These LAWGs are different than the local Conservation District work groups that coordinate with NRCS for planning and input to the NRCS processes. Those are equally important, but the LAWGs are specifically for planning sagebrush ecosystem restoration and activities focused on benefits for Greater Sage-grouse.

LAWG membership includes representation from private land owners, tribes, federal land management agencies, state and local governments, non-government organizations, sportsmen, mining, energy, off-highway vehicle users, as well as agricultural and environmental groups.

There are currently LAWGs in Elko, White Pine, Lincoln and Washoe Counties addressing Greater Sage-grouse issues. There is also a very active LAWG in the Bi-state Sage-grouse area in Nevada that has been instrumental in development of the plan being used there.

The list of acronyms below contains many of the terms used by the Sagebrush Ecosystem Council and the Sagebrush Ecosystem Technical Team in describing its activities.

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<b>BLM</b>	U.S. Bureau of Land Management
<b>BLM ADEIS</b>	BLM Administrative Draft Environmental Impact Statement (provided to CAs)
<b>BLM DEIS</b>	BLM Draft Environmental Impact Statement
<b>BLM EIS</b>	BLM Environmental Impact Statement
<b>BLM SRMP</b>	BLM Sub-Regional Management Plan
<b>CA</b>	Cooperating Agency
<b>CCS</b>	Nevada Conservation Credit System
<b>CDP</b>	Conservation District Program
<b>DCNR</b>	Nevada Department of Conservation and Natural Resources
<b>ESA</b>	Endangered Species Act
<b>GIS</b>	Geographic Information System
<b>GRSG</b>	Greater Sage-grouse
<b>GSGAC</b>	Governor's Sage-grouse Advisory Committee
<b>HSM</b>	Habitat Suitability Modeling
<b>HQT</b>	Habitat Quantification Tool
<b>LAWG</b>	Local Area Working Groups
<b>LUPA</b>	Greater Sage-grouse Land Use Plan Amendment
<b>MOU</b>	Memorandum of Understanding
<b>NDA</b>	Nevada Department of Agriculture
<b>NDOT</b>	Nevada Department of Transportation
<b>NDOW</b>	Nevada Department of Wildlife
<b>NEPA</b>	National Environmental Policy Act
<b>SEC</b>	Sagebrush Ecosystem Council
<b>SEP</b>	Sagebrush Ecosystem Program
<b>SETT</b>	Sagebrush Ecosystem Technical Team
<b>SGMA</b>	Sage-grouse Management Areas
<b>SWG</b>	Science Work Group
<b>USFS</b>	U.S. Forest Service
<b>USFWS</b>	U.S. Fish & Wildlife Service
<b>USGS</b>	U.S. Geological Survey

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## **Sagebrush Ecosystem Council**

### **State of Nevada**

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