

# Sagebrush Ecosystem Program

*Progress Report: December 2014*



**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.*

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





**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

**KACEY KC**

Program Manager

Sagebrush Ecosystem Program  
201 South Roop Street, Suite 101  
Carson City, Nevada 89701-5247  
775.684.8600

**Table of Contents**

Letter from Chairman Goicoechea.....3

Background.....4

Organizational Highlights.....5

Population Status and Trends.....6

**Accomplishments: August – December 2014.....8**

*-Approval of Maps for Universal Use in Sage-grouse Conservation Efforts.....8*

*-Approval of the 2014 Nevada Greater Sage-grouse Conservation Plan..... 10*

*-Approval of the Conservation Credit System (CCS)..... 11*

*-BLM/USFS LUPA/EIS and the State Alternative..... 12*

*-Completion of the USFWS Data Call..... 13*

Program Budget..... 14

Sagebrush Ecosystem Council..... 15

Ex-Officio Members..... 18

Sagebrush Ecosystem Technical Team..... 20

Committees and Working Groups..... 22

SEC Committees..... 22

Working Groups..... 22

Implementers..... 23

Conservation Districts Program..... 23

Local Area Working Groups (LAWG)..... 23

**Sagebrush Ecosystem Program**

201 Roop Street, Suite 101  
Carson City, Nevada 89701  
Telephone (775) 684-8600  
Facsimile (775) 684-8604

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

BRIAN SANDOVAL

*Governor*



**Kacey KC**, Program Manager  
**Vacant**, Forestry/Wildland Fire  
**Melissa Faigeles**, State Lands  
**Kelly McGowan**, Agriculture  
**Lara Niell**, Wildlife

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

Dear Governor Sandoval:

I am proud of the hard work and dedication of all members of the Sagebrush Ecosystem Program (SEP). The Sagebrush Ecosystem Council (SEC), together with the Sagebrush Ecosystem Technical Team (SETT) have accomplished a lot since our last report, dated July 2014. As the Chair of the SEC, the decisions have not always been easy or unanimous but the professionalism and hard work of all the members have brought forth products that truly display a cohesive strategic planning effort and that will help the conservation and preservation of the sagebrush ecosystem in Nevada, and ultimately lead to the desired net benefit for its obligate species. We are currently focused on the Greater Sage-grouse but hope to expand efforts to all obligate species in the future. The process established by the SEC in developing the Nevada Greater Sage- Grouse Conservation Plan, will provide a model for future conservation efforts in our State by identifying Nevada specific threats and approaches to counter those.

To highlight a few of our accomplishments, the SEC unanimously approved the 2014 Nevada Greater Sage-grouse Conservation Plan at the October 1<sup>st</sup> meeting. This plan provides broad goals, objectives, and management actions to ameliorate the primary threats to sage-grouse in Nevada. In future updates, you will also be seeing a completed Nevada Greater Sage-grouse Strategic Action Plan (SAP) which will take the broader based 2014 plan and put it into actionable items for use by land managers and stakeholders. The State Plan and the SAP, will provide great opportunities to not only conserve habitat, but restore habitat loss due to wildfire and invasive species.

One more accomplishment was the approval of the Nevada Conservation Credit System Manual, Version 1.0 and the Nevada Conservation Credit System HQT Methods Document, Version 1.0 officially marking the opening of Nevada's Conservation Credit System for operation. We have 2 approved pilot projects volunteering to be first through the process to help us learn and improve the system, and at least five more we are working on with various stakeholders. Nevada should be very proud to have stepped out in front and taken on the creation and implementation of such an innovative approach for the net gain in habitat. We are working through future challenges, i.e. the future listing decision, the implementation of this robust system on federal lands, and the way this works with important industry partners so we keep a balance of industry and conservation in the state, both of which are so important to the livelihood of the state's economy

We have aligned ourselves with the national federal strategy and plan to work together cohesively and strategically across jurisdictional boundaries. In doing so, we have become a model for other states to follow. Thank you for the direction and the foresight in this matter.

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 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, and renewable and other energy production, transmission, and distribution.

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, 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     Sagebrush Ecosystem Technical Team 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)
- 2014, October      *2014 Nevada Greater Sage-grouse Conservation Plan* is unanimously approved by the SEC.
- 2014, December    SEC approved the *Conservation Credit System Manual Version 1.0* and the *Scientific Methods Document Habitat Quantification Tool (HQT) Version 1.0* marking the official opening of the Conservation Credit System.

## Population Status and Trends

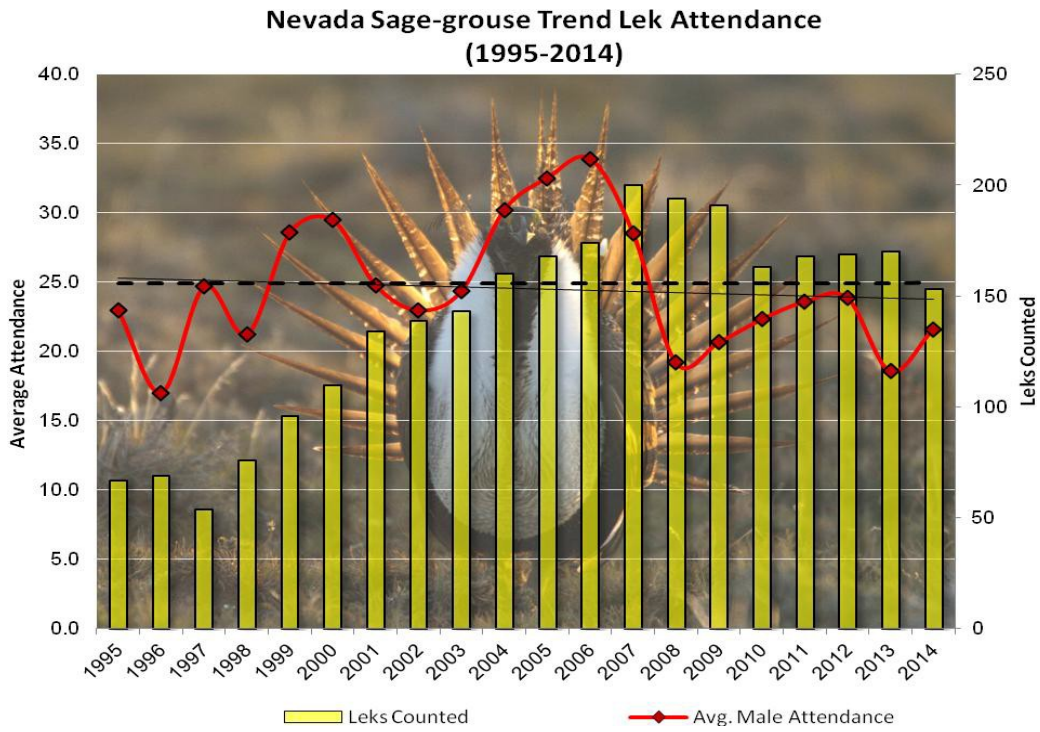
The Nevada Department of Wildlife, in conjunction with federal agency partners including the Bureau of Land Management (BLM), U.S. Forest Service (USFS), U.S. Geological Survey (USGS) and the U.S. Fish and Wildlife Service (USFWS), monitors sage-grouse leks annually. Techniques to monitor leks include traditional ground surveys using accepted protocols and aerial survey utilizing a helicopter, or fixed wing aircraft surveys that are outfitted with cooled infrared camera technology (thermal imaging). The current Nevada Statewide Sage-grouse Lek Database contains 1,865 lek locations of which 612 are considered active, 314 inactive, 572 unknown, 270 pending active, and 96 historic status leks. There are a total of 20,915 lek observations (lek surveys) currently in the database.

In 2014, 1,910 lek observations (lek counts) took place on 929 different leks. Of these, 496 leks had greater than one male and would be considered active for the year. Peak male counts for each active lek surveyed resulted in the observation of 8,869 sage-grouse. In comparison to 2013, there were 479 active leks surveyed with a peak count total of 6,776 males. In terms of analyzing fluctuation in attendance, a subset of leks known as trend leks (n=219) are used to estimate annual variations in attendance. During the 2014 spring breeding season, 153 trend leks were monitored and the average male attendance for these leks was 21.6. Compared to 2013, this represented a 16% increase in attendance, but was 20.5% below the long-term average of 27.2 males per trend lek.

Overall lek attendance increased by approximately 27% in 2014 compared to 2013. However, the 2014 average male attendance was still 7% lower than the 12-year average of 19.3 males per lek. (Table 1). As discussed, trend leks indicated a 16% increase in male attendance over 2013, but were 13.4% lower than the 20-year average of 24.9 males per lek (Figure 1). The increase in male attendance was somewhat surprising considering the extensive drought conditions; however, an improvement in chick recruitment in 2013 compared to the previous two-years likely spurred the bump in attendance.

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
<b>2003-2013 AVG.</b>	<b>7,929</b>	<b>755</b>	<b>415</b>	<b>19.3</b>

Table 1. Lek count summary from 2003 – 2014.



**Figure 1. Trend lek attendance from 1995-2014.**



## Approval of Maps for Universal Use in Sage-grouse Conservation Efforts

In August of 2014, new maps were distributed that were developed by the U.S. Geological Survey (USGS) and the SEP (Coates et al. 2014). This process was necessary to map the areas in the state

that are important to Sage-grouse (seasonal and composite), to identify factors that influence their populations, and to identify management actions and prioritize their locations.

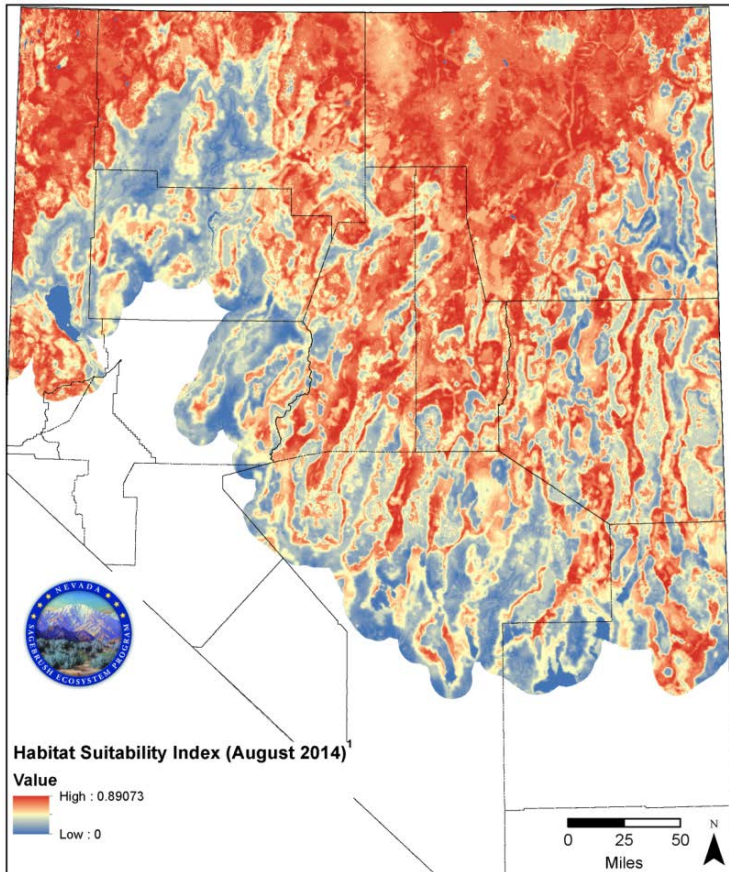


Figure 5. Habitat Suitability Index

### Habitat Suitability Index (HSI) for Greater Sage-grouse in Nevada

This map presents the Nevada Habitat Suitability Index that provides a relative suitability of Greater Sage-grouse habitat in Nevada on a scale of 0 to 1 (excluding the Bi-State Distinct Population Segment), 0 being the lowest suitability and 1 is the greatest suitability. The HSI combined with modeled space use by Greater Sage-grouse led to the creation of a management category map.

1. Coates et al. 2014

### Management Categories for Greater Sage-grouse in Nevada

This map presents the Nevada Sage Grouse Management Area (SGMA) which encompasses the general range of greater sage-grouse in the state of Nevada (excluding the Bi-State DPS). The purpose of this map is to prescribe appropriate management actions based on habitat suitability. Proposed anthropogenic disturbances within the SGMA will trigger consultation with the SETT for assessment of impacts to sage-grouse and their habitat and compliance with SEC and other relevant agency policies. Please note that the express purpose of the SGMA is only to trigger consultation

with the SETT; specific area or project habitat determinations must be conducted in accordance with established scientific protocol.

Within the SGMA are four management categories that are defined below.

- The **Core Management Areas** encompass areas of high estimated sage-grouse use in highly suitable habitat in the State of Nevada. These areas represent the strongholds (or “the best of the best”) for sage-grouse populations in the State of Nevada and support the highest density of breeding populations.
- The **Priority Management Areas** encompass areas that are determined to be highly suitable habitat for sage-grouse that are not contained within the Core Management Areas, as well as non-habitat directly adjacent to Core Management Areas.
- The **General Management Areas** encompass areas determined to be suitable habitat for sage-grouse, though less suitable than Priority Management Areas and are not contained within the Core Management Areas.
- The **Non-Habitat Management Areas** encompass areas determined to be unsuitable for greater sage-grouse.

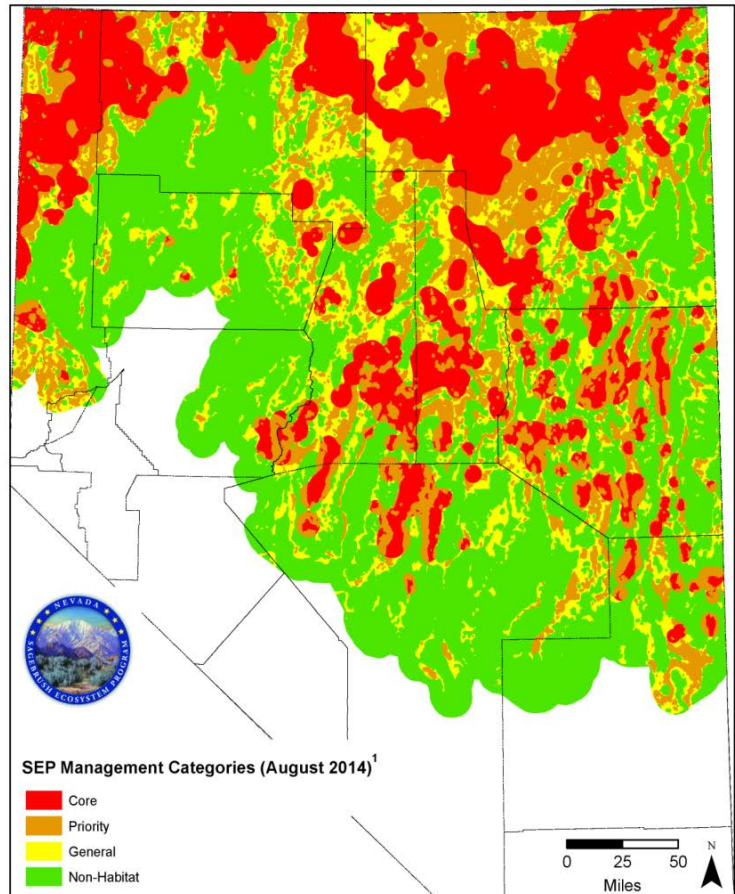


Figure 4. Management Category Map

1. Coates et al. 2014

## Approval of the 2014 Nevada Greater Sage-grouse Conservation Plan



The SEC identified the revision and further development of the “2012 Strategic Plan for Conservation of Greater Sage-grouse in Nevada” (2012 Nevada State Plan) as a priority in developing content for inclusion in the Bureau of Land Management’s Environmental Impact Statement (BLM EIS). The SETT, with the direction of the SEC, presented a plan in chapters and brought them to the SEC for approval as they were completed. The final *2014 Nevada Greater Sage-grouse Conservation Plan* (2014 State Plan)<sup>1</sup> was approved by the SEC at the October 1<sup>st</sup>, 2015 meeting.

This plan provides broad goals, objectives and management actions to ameliorate the primary threats to sage-grouse in Nevada. The State Plan has strong

“avoid, minimize and mitigate” standards and objectives to achieve an overall net benefit for the long-term conservation of the Greater Sage-grouse. This goal will be met through specific conservation objectives for anthropogenic disturbances and acts of nature, primarily large wildland fires and the subsequent invasion or potential domination by non-native species. The State’s goal is to provide the long-term conservation of sage-grouse by protecting the sagebrush ecosystem upon which the species depends.

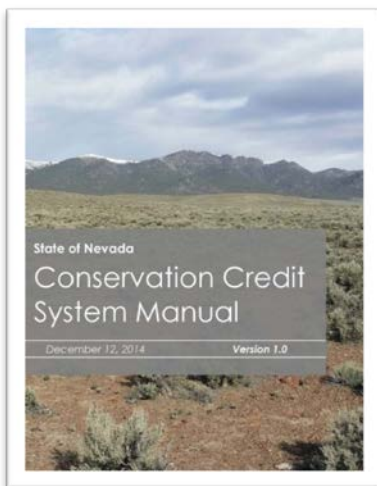
The SETT is developing a *Nevada Strategic Action Plan for Greater Sage-grouse Conservation* (SAP) that will identify projects and actions to achieve the goals and objectives of the State Plan. The SAP will provide spatial delineation and prioritization of goals, objectives and management actions by Biologically Significant Units (BSUs). The SAP will provide guidance in targeting limited resources to those actions that will achieve the greatest net conservation benefit.

<sup>1</sup>[http://sagebrusheco.nv.gov/uploadedFiles/sagebrushconvgov/content/home/features/2014\\_ConsolidatedStatePlan.pdf](http://sagebrusheco.nv.gov/uploadedFiles/sagebrushconvgov/content/home/features/2014_ConsolidatedStatePlan.pdf)

## Approval of the Conservation Credit System (CCS)

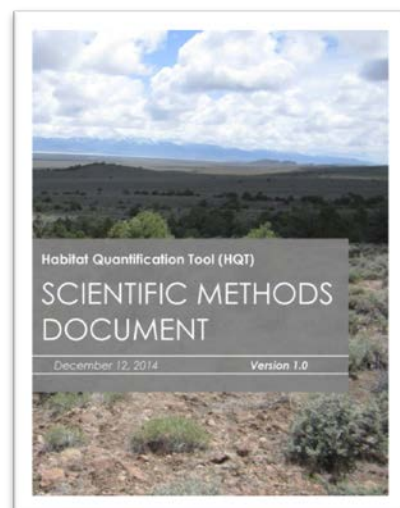
Although anthropogenic disturbances do not pose as significant of a threat when compared to fire and invasive species, nonetheless, Nevada has created and adopted a cutting edge mitigation program referred to as the Conservation Credit System (CCS) which is based on the best available science, provides consistency of application, and is transparent. Nevada's CCS is a market based system designed to ensure a net conservation benefit of Greater Sage-grouse habitat to offset anthropogenic disturbances in Nevada. It is a tool, as addressed in the approved 2014 State Plan, for mitigating the residual effects from anthropogenic disturbances that could not be avoided in the consultation process. The CCS utilizes a Habitat Quantification Tool (HQT) that not only accounts for location but also estimates the functional quality of the habitat. It does this by using a set of metrics, applied at multiple spatial scales, to evaluate vegetation and environmental conditions related to sage-grouse habitat quality and quantity. This model also accounts for the importance of limiting habitat conditions, such as late brood rearing habitat, to offer better protections for this critical habitat type. By quantifying functional acres in the landscape, the CCS creates new and strong incentives for private landowners and public land managers to identify and preserve, enhance, and restore the most valuable habitat areas in the ecosystem. Conversely, the CCS provides strong disincentives for anthropogenic impacts in the most important habitat for sage-grouse. The CCS is changing the way Nevada, across jurisdictional boundaries, implements mitigation strategies for anthropogenic disturbances. A unique attribute of the CCS, in comparison to traditional mitigation banks, is that benefits (credits) to habitat through conservation, preservation, or restoration projects must be achieved prior to anthropogenic disturbances being implemented (debits).

There were two documents approved by the SEC at the December 4<sup>th</sup> meeting that are key to the implementation of this system across the mapped Sage-grouse Management Area<sup>2</sup>.



The first is the *State of Nevada Conservation Credit System Manual, Version 1.0*. This manual provides the necessary information for understanding and participating in the CCS. It contains an overview of the system, policy and technical requirements, and operational protocols. The intended audience for this document is the administrator of the CCS, credit developers and credit buyers, and technical support providers.

The second is the *Habitat Quantification Tool (HQT) Scientific Methods Document, Version 1.0*. This document defines the attributes assessed to measure habitat function for Greater Sage-grouse and documents the rationale for the attributes selected. The intended audience for this document is the administrator of the CCS and science contributors.



<sup>2</sup> <http://sagebrusheco.nv.gov/CCS/ConservationCreditSystem/>

The CCS opened in October 2014 for credit project enrollment and development, and in January 2015 for evaluating debit projects.

The SETT is underway in conducting pilot studies to test the newly created CCS and the HQT under real world scenarios and adaptively manage and revise them as needed. In order to field test the site scale data collection methods and accuracy of site scale HQT scores, the SETT has teamed up with



private landowners and industry. This includes planned habitat enhancement projects funded by Noble Energy on private land owned by ranchers in northeast Elko County and Barrick Gold Corporation in the northwest corner of White Pine County. In August 2014, the SETT, in cooperation with the land owners and federal and state agencies staffs, collected field data that could inform the CCS. Another round of field data will be collected in May 2015 and results of the site scale habitat HQT test will be developed into case studies later that year. Next, the SETT will be using credit and debit projects to test the local and landscape scale HQT methods. Lessons learned from the pilot projects will be incorporated into a revised version of the HQT Scientific Methods Document, anticipated in July 2015. The landowners' willingness to allow staff to use these sites to strengthen the CCS and HQT integrity is sincerely appreciated. This

process also allows the landowners to encounter first-hand, the practicality of these tools and to gauge the potential of these sites as credit projects.

## **BLM/USFS LUPA/EIS and the State Alternative**

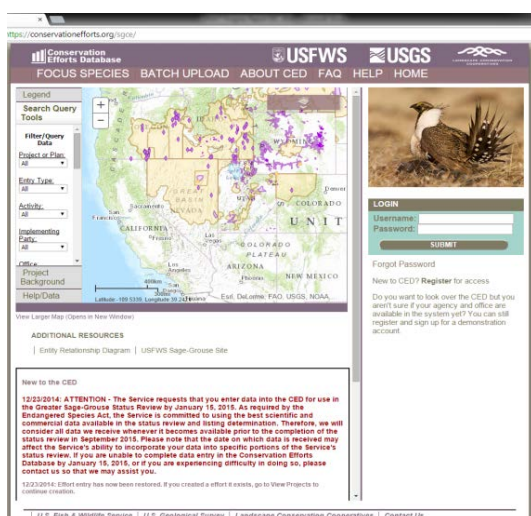
The BLM and U.S. Forest Service (USFS) are well underway in their development process for the Nevada and Northeast California Greater Sage-Grouse Land Use Plan Amendment (LUPA) and Environmental Impact Statement (EIS). The State Alternative, based off the 2012 and 2014 State Plans, submitted to the BLM and USFS by the State of Nevada in March of 2014 for inclusion in the LUPA/ EIS, if fully implemented, will adequately manage the sagebrush ecosystem and protect the Greater Sage-grouse habitat.

The SETT has reviewed several draft versions of the LUPA/ EIS as a Cooperating Agency, focusing on the representation of the State's Alternative. The SETT, BLM, and USFS have worked together to ensure that the State's Alternative has enough specificity for analysis. The BLM and USFS are continuing to develop a proposed final plan for the LUPA/ EIS. The Final EIS is anticipated to be available for public review in late spring of 2015 and the Record of Decision in September 2015.

The SETT will begin developing a Memorandum of Understanding between the BLM, USFS, DCNR, NDOW, and NDA in January 2015, which will provide detail on the implementation of the EIS/ LUPA and 2014 State Plan, including SETT Consultation, the CCS, and general coordination between the agencies.

## Completion of the USFWS Data Call

The USFWS is in the process of evaluating the status of the Greater Sage-grouse and evaluation whether there is a need for listing the species as a threatened or endangered under the ESA. As part of the process, the USFWS recently completed the official “data call” period, in which they gathered scientific and commercial data from the public in order to help inform their determination. The USFWS sent out a letter in July 2014 with two data call submittal deadlines. The first deadline request was for population status and trends information along with updated threat information by October 31, 2014. Nevada Department of Wildlife (NDOW) submitted this information to USFWS for the State of Nevada. This first request included data from 2009-2014 and any information prior to 2009 that was not provided in the 2010 finding. The NDOW reports included a detailed description of population status, trend and numbers, habitat status and trend summarized by various land use activities, and the general extent, in acres, of the decreased suitability for the greater sage-grouse in core, priority, and general management areas.



The second deadline request was for any plans and projects designed to provide conservation benefit to Greater Sage-grouse. The deadline for this entry was originally December 31, 2014 but was extended to January 15, 2015. The SETT worked extensively over this reporting period both in a collaborative role with state and federal partners coordinating data entry, and a data entry role for smaller agencies that did not have the manpower or the technical capacity to enter the data. All data that came to the SETT has been entered into the USFWS's Conservation Efforts Database. The database will remain open for future entries, and the SETT will continue to coordinate and facilitate those entries.

The USFWS is currently evolving and analyzing all information that was submitted through the data call process. Analyses of past, current, and planned activities will be a factor in the listing decision due in September of 2015.

## 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 has submitted the proposed Sagebrush Ecosystem Program Fiscal Year 16-17 budget to the legislature for approval. The Nevada Legislature is currently in session and final budget approvals are anticipated to occur in May or June 2015. The proposed 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.

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 a chairman and 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 discourse 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 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.

Unless listed under the ESA, management of the Greater Sage-grouse is the responsibility of the State of Nevada. Therefore, it is essential to propose a management strategy that the state can enact.



**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.



**Ted Koch**

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

Ted Koch is the State Supervisor for the Nevada Fish and Wildlife Office of the U.S. Fish and Wildlife Service. He has more than 20 years of experience with the Service and in wildlife conservation. Koch has published several articles on a variety of conservation and policy subjects and holds a Bachelor’s degree in Environmental Biology from Southern Connecticut State University and a Master’s degree in Zoology from Idaho State University.



**Amy Leuders**

*State Director, Bureau of Land Management*

Amy Lueders is the Nevada State Office Director for the U. S. Bureau of Land Management. She served as BLM’s Nevada Associate Director from 2004 to 2010. Prior to coming to BLM-Nevada, Lueders served as the BLM’s field manager in Las Cruces, N.M. Amy holds a Bachelor’s degree in Economics from Duke University.



**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.



**Leo Drozdoff**

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

Leo Drozdoff has been the Director at the Department of Conservation and Natural Resources since 2004. He served as NDEP's Administrator, Bureau Chief of Mining Regulations, Bureau Chief of Water Pollution Control and as Deputy Administrator for NDEP's water programs. Drozdoff holds a Bachelor's degree in Civil Engineering from Bucknell University and earned his Master's degree in Business Administration from the University of Nevada, Reno.



**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.

## 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 sage-grouse management areas. The full-time, multi-disciplinary team includes a program manager and representatives from the Nevada Department of Agriculture, the Nevada Department of Conservation and Natural Resources, Divisions of Forestry and State Lands, 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 Resource 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



**Kacey KC**  
***Program Manager***

Prior to being named the Program Manager, KC served as a Conservation Staff Specialist II for the Nevada Division of Forestry (NDF). She held this position for almost 10 years and was primarily responsible for the hazardous fuel reduction program. This program was statewide in scope and directly supervised three Forester positions. KC worked with multiple state, local, and federal partners, and landowners to spread an understanding of the importance of reducing a communities risk of catastrophic loss in the instance of a wildland fire and implementing strategically placed treatments on the landscapes. KC also managed the volunteer fire assistance program, which provided equipment and training to the qualifying volunteer fire departments in the State. KC started with NDF as a seasonal at the state tree nursery in early 2002, then moved into the State Office working for the fire program. Prior to working for the Division of Forestry, KC served a little over two years in Peace Corps, doing community forestry work in the far eastern town of Ilam, Nepal. KC has a B.S. in Forestry (Resource Conservation) from the University of Montana in Missoula.



**Lara Niell—Wildlife**  
***Technical Team***

Named as Wildlife Staff Specialist representing the Nevada Department of Wildlife, Niell holds an M.S. in Biology from the University of Nevada, Reno and has extensive experience with wildlife and environmental issues in the Great Basin and Sierra Nevada, including a strong background related to the National Environmental Policy Act (NEPA). Niell worked since mid-2007 as a biologist for Tetra Tech Inc., in Reno. At Tetra Tech Niell worked on a myriad of projects requiring data collection and field work, preparation of technical reports, review of environmental documents, development of remediation efforts, geographic information system analysis, studies and

monitoring, as well as project management. Niell has also served as a research assistant for the University of Nevada and as a field technician for the U.S. Forest Service in Nevada. Her B.A. is in Environmental Studies from Dartmouth College.



**Melissa Faigeles—State Lands/Watershed Restoration  
Technical Team**

Prior to being named the Environmental Scientist III and Watershed Restoration Specialist representing the Nevada Division of State Lands, Faigeles served as Environmental Manager for the Reno-Sparks Indian Colony, where she administered permits and oversaw the NEPA process for projects on tribal lands, as well as monitored, inventoried and prepared plans to manage tribal natural resources in the sagebrush steppe. She also managed staff, contractors, work plans, and organized and directed environmental projects including air and water quality monitoring. She previously worked as an environmental scientist for the California Tahoe Conservancy, designing, monitoring and assisting with large-scale river restoration projects for the Nature Conservancy in Bend, Oregon, working with multi-stakeholder groups on issues and projects in the sagebrush steppe habitat for the Washoe County/Truckee River Flood Management Authority and the University of Wisconsin. Faigeles has a B.S. in Ecology from the University of Pittsburgh.



**Kelly McGowan—Agriculture  
Technical Team**

Prior to being named as the Conservation Staff Specialist II representing the Nevada Department of Agriculture, 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 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. For seven years prior to working with the state program, McGowan was the district manager for the Mason and Smith Valley Conservation Districts. McGowan has a B.S. in Geography (Land Forms and Climatology) and is a Certified Public Manager.

**Currently Vacant—Forestry/Wildland Fire  
Technical Team**

The recruitment for this position is currently out. We are hoping to fill the position as soon as we find a qualified applicant.

### SEC Committees

The SEC members are interested in, and actively engaged with, the facilitation of the five current focus areas. The Council has established two committees—one to support the establishment of the Conservation Credit System, and a second to assist in the development of monitoring protocols statewide and to provide detailed input on development of the related section of the State Plan.

#### **Conservation Credit System Committee**

The Conservation Credit System Committee has held two meetings and includes Allen Biaggi, Starla Lacy, and Tina Nappe. The fourth position and chair are currently vacant. The committee members are working with Environmental Incentives to develop the guidelines for the program.

#### **Monitoring Committee**

The Monitoring Committee, chaired by Sherm Swanson, is comprised of Steve Boies, Bevan Lister, and Tina Nappe. The committee is tasked with assessing current activity and developing methods to show and track ongoing monitoring efforts across the state. The committee is addressing the possibility of developing self-assessed grazing monitoring protocols that would be acceptable to the federal agencies. The subcommittee has held two meetings to date.

### Working Groups

#### **Science Work Group**

This group identifies the best available science to advise the SETT in expanding the narrative of the Nevada State Plan and works in assisting the SETT with the development of the scientific aspects of the Alternative E. They have assisted the SETT on many issues, always looking to bring the best available science to bear in Nevada. The group has held 10 meetings.

#### **Nevada Cheatgrass Action Team**

This team is comprised of multiple stakeholders and coordinated by the SETT. Its goal is to develop a strategic framework for the landscape scale control of cheatgrass by using the best available science. The forward action is to get projects going on the ground, put together a list of projects on each property, prioritize the projects, decide what the treatment is going to be, make management changes if warranted, apply the treatment, monitor, and apply adaptive management. The team has held six meetings including visits to private lands in Central Nevada, and White Pine and Elko counties.

The committee and working group activities are posted for public viewing and materials are available on the SEP website, <http://sagebrusheco.nv.gov>.

### 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 the Elko at the Department of Agriculture office, demonstrating a real partnership. These positions all work closely with the SETT.

### 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 glossary below contains many of the terms used by the Sagebrush Ecosystem Council and the Sagebrush Ecosystem Technical Team in describing its activities.

<b>Acronym</b>	<b>Term</b>
<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>DCNR</b>	Nevada Department of Conservation and Natural Resources
<b>ESA</b>	Endangered Species Act
<b>GIS</b>	Geographic Information System
<b>GSG</b>	Greater Sage-grouse
<b>GSGAC</b>	Governor's Sage-grouse Advisory Committee
<b>HSM</b>	Habitat Suitability Modeling
<b>LAWG</b>	Local Area Working Groups
<b>LUP</b>	Land Use Plan
<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





## **Sagebrush Ecosystem Council**

### **State of Nevada**

**201 South Roop Street, Suite 101**

**Carson City, Nevada 89701-5247**

**775.684.8600**

**<http://sagebrusheco.nv.gov/>**