

# Nevada Strategic Action Plan

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*For Implementation of the  
2014 Nevada Greater Sage-grouse Conservation Plan  
And For  
Sagebrush Ecosystem Conservation*

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Prepared by the Nevada Sagebrush Ecosystem Technical Team

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# Draft

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## 1. INTRODUCTION

The 2014 Nevada Greater Sage-Grouse Conservation Plan (2014 State Plan) sets the direction for management, uses, and restoration of sagebrush ecosystems. The guiding principles from the 2014 State Plan are to create a balanced foundation and vision for a coordinated management approach to conserve greater sage-grouse and the sagebrush ecosystems in Nevada. The following goals are taken from the 2014 State Plan:

*Due to the broad reach of sage-grouse habitat, effective management and implementation of sage-grouse conservation actions must be conducted through a collaborative, interagency approach that engages private, non-governmental, local, state, Tribal and federal stakeholders to achieve sufficient conservation of sage-grouse and their habitat.*

*Monitoring and adaptive management will be employed at all levels of management in order to acknowledge potential uncertainty upfront and establish a sequential framework in which decision making will occur in order to learn from previous management actions.*

This Strategic Action Plan<sup>1</sup> is a companion document to the 2014 State Plan that informs how the plan will be implemented in terms of:

1. Focus areas for conservation efforts.
2. Prioritized areas on public and private lands to implement a landscape scale restoration effort.
3. Identification of where the primary threats to sage-grouse habitat are located throughout the State.
4. Guidelines for where efforts can be prioritized in order to achieve landscape-scale conservation of sage-grouse and the sagebrush ecosystem based on localized threats and local area conditions including resistance and resilience regimes, and ecological state.
5. Funding sources for implementation of conservation treatments and projects.

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<sup>1</sup> Note from 2014 Plan:

- The planning efforts of the Bi-State Distinct Population Segment Great Sage-grouse will serve as a general template for the SAP in terms of the level of specificity needed for project planning and commitment to funding (Bi-state Technical Advisory Committee Nevada and California 2012, Bi-State Executive Oversight Committee 2014).

## 2. DESIRED OUTCOMES OF THE STRATEGIC ACTION PLAN

Four overarching actions were derived from the 2014 State Plan that frame the goals of the Strategic Action Plan.

**GOAL 1:** Execute an MOU with the BLM and USFS to collaborate and cooperate on decisions and practices to prioritize conservation of sagebrush ecosystems for the benefit of greater sage-grouse and other species in accordance with the principles of sustainability, multiple use, and adaptive management. Include measures in the MOU that allow development of develop conservation credit projects on public land.

**GOAL 2:** Engage all stakeholders to participate in site and local scale threat identification, specification of treatment alternatives to reduce threats to greater sage-grouse, monitoring, and adaptive management.

**GOAL 3:** Empower local planning groups, such as CDs and LAWGs, to make informed decisions and science-based analyses of local conditions with the assistance of the Sagebrush Ecosystem Program (SEP).

**GOAL 4:** Identify and prioritize landscape-scale enhancement, restoration, fuel reduction, and mitigation projects based upon ecological site potential, state and transition models, and other data that will contribute to decision making informed by science to increase resiliency following wildfire

### Adaptive Management

2014 Nevada Greater Sage-grouse Conservation Plan will be implemented through an adaptive management framework.

**ADAPTIVE MANAGEMENT Strategy 1:** Define a process of structured decision making, with an emphasis on uncertainty about resource responses to management actions and the value of reducing uncertainty to improve management (*DOI 2009*). Incorporate a process for maintaining current scientific findings and management implications.

### Responsible Parties: SEC

**Action AM 1-1:** Work collaboratively with federal, state, tribal and local governments, and other stakeholders to predict outcomes of land use decisions based on the current state of knowledge. Design specific monitoring protocols to inform success of actions and decisions. Implement projects and actions

and monitor responses to actions to assess and use the results to update the state of knowledge and adjust actions as needed.

## Stakeholder Involvement

The Sagebrush Ecosystem Program and 2014 State Plan are based on a collaborative, multi-stakeholder approach. The 2014 State Plan instructs the SEP to carry out programs that conserve, restore, and enhance sagebrush ecosystems in the State of Nevada. Effective implementation of sage-grouse conservation actions will be conducted at both the state and local levels through a collaborative, interagency approach that engages private, non-governmental, local, state, Tribal, and federal stakeholders.

**STAKEHOLDER INVOLVEMENT Strategy 1:** State and Federal agency and industry leaders will continue to meet on a regular basis to facilitate coordination among stakeholders. The outcome will be clear direction to state agencies to collaborate on conservation strategies, programs, grant funding, and projects carried out pursuant to the State Plan and resolve any conflict with any direction given by another state board, commission, or department with that board, commission, or department as applicable.

**State Level Responsible Parties:** SEP, BLM, USFS, USFWS, NRCS, USGS, NDOW, NDF, NDA, Nevada Congressional Delegation, Governor's Office, Cooperative Extension, Tribes, DOD, University of Nevada System.

**Action SI-1:** The Directors and Administrators of state and federal resource agencies will meet semi-annually, or as needed to facilitate information sharing and agency updates, review and interpret monitoring data, develop annual work plans, make adaptive management decisions, and maintain accountability for implementation of the State Plan.

**Action SI-1:** The SEP will participate in developing and executing a MOU between the appropriate state and federal stakeholders that allows for collaboration and cooperation in moving forward with implementation of the State Plan including developing conservation credit projects on public land.

**Action SI-2:** To maximize conservation efforts in an efficient manner, the SEC will evaluate the potential for development of a *Service First Agreement* as authorized by USC 43, Chapter 35, Subchapter I §1703 which allows the Secretaries of the Interior and Agriculture the authority to establish programs involving certain land management agencies to conduct activities jointly or on behalf of one another; make reciprocal delegations of their respective authorities, duties, and responsibilities; and transfer funds and reimburse funds on an annual basis, including transfers and reimbursements for multi-year projects. (See details in Attachment A and the example from the Bi-State Executive Oversight Committee.)

**Local Level Responsible Parties:** SETT, Conservation Districts, Counties, Cooperative Extension, Tribes, Counties, Local Area Working Groups.

**Action SI-3** The SETT will work to incentivize and empower Local Area Working Groups (LAWGs) and Conservation Districts with baseline data and guidelines to facilitate local involvement to develop and implement on-the-ground sage-grouse and sagebrush ecosystem conservation efforts that address site and local scale risks. Local plans will include detailed schedules, monitoring protocols, and adaptive management triggers specific to individual project areas.

**Action SI-4** The SEP will provide local governments baseline data and guidelines to avoid conflicts with sage-grouse habitat such as urbanization, land subdivision, road construction, utilities, etc.

### Local Area Working Groups

The SETT is charged with working with LAWGs and Conservation Districts (CDs) to help identify and implement on-the-ground sage-grouse and sagebrush ecosystem conservation efforts. LAWGs may be established at the county, CD, or rural ranch community level where local stakeholders are dedicated to collaboratively implementing local actions to reduce threats to the sagebrush ecosystem.

**Action LAWG-1** The SETT will provide technical expertise to LAWGs and CDs to help identify and prioritize landscape-scale enhancement, restoration, fuel reduction, and mitigation projects based upon ecological site potential, state and transition models, resilience and resistance, and other data that will contribute to local decision making informed by science.

**Action LAWG-2** The SETT will work with the LAWGs and CDs to develop and implement site-specific plans and appropriate monitoring to accomplish habitat enhancement and restoration projects in areas that are identified by the SETT and the LAWGs as important areas for sage-grouse conservation.

**Action LAWG-3** The SETT will assist LAWGs and CDs with pursuing grant and other funding opportunities for implementation and monitoring conservation and restoration projects.

### Research and Continuing Education

A fundamental component of the adaptive management process is to provide the public opportunities and a forum to provide suggestions and exchange information to expand the scientific knowledge of sagebrush ecosystems.

**RESEARCH Strategy 1:** Continue to refine our knowledge of rangeland ecology and conservation biology to provide the best available science for informing management and permitting decisions in sage-grouse habitat that will conserve sage-grouse in Nevada while maintaining the economic vitality of the State.

**Responsible Parties: Cooperative Extension, University of Nevada CABNR, Tribes, BLM, USFS, Private Land Owners**

---to be completed---

**Education Strategy 1:** Coordinate and facilitate discussions among private industry, federal and state agencies, and local governments concerning the maintenance of sagebrush ecosystems, the appropriate use of the conservation credit system, and the status of sage-grouse conservation.

**Action Education 1:** The SETT will create and deliver informational media and programs such as brochures, manuals, and group presentations to explain the CCS, the HQT, and the policies and assumptions used in the credit/debit calculations.

## Conservation Credit System

---insert strategies and actions that will be taken to implement the CCS---for example:

Administrative Fees

Additionality Policy

Other

### 3. STATE-LEVEL STRATEGIES AND ACTIONS TO ADDRESS IDENTIFIED THREATS

The following recommendations and actions from the 2014 State Plan are provided to substantially reduce or eliminate potential risks to greater sage-grouse populations and sagebrush ecosystems at the site and local levels.

#### Wildfire

The 2014 State Plan is consistent with and will prioritize actions to reduce the greatest risk to GRSG in accordance with the tenants of the *National Cohesive Wildland Fire Management Strategy* for collaboration among stakeholders across all landscapes, using best science to make meaningful progress toward 1) Resilient landscapes; 2) Fire adapted communities; and 3) Safe and effective wildfire response (Attachment 2).

**Strategy FIRE 1.** Coordinate with State and Federal fire agencies and local stakeholders to design, implement, and maintain effective fuel reduction treatments and fuel breaks based on best available science to protect sage-grouse habitat in Core and Priority Management Areas and other areas with low resistance and resilience. Require monitoring and reporting on all fires and rehabilitation projects to inform future project planning and implementation.[Action 1.1.1c, 1.1.1d]

#### Responsible Parties: NDF, BLM, USFS, UNR Cooperative Extension, SEC, SETT

**Action FIRE 1-1:** The SEP will convene and sponsor an annual forum in conjunction with *Action SI 1-1* to present updates on the status of wildfire risks in Nevada, the success of fire rehabilitation, and the effectiveness of the FIAT model and other models. The forum will facilitate interagency agreement updates, wildfire workshops, demonstration projects, and public service announcements on wildfire and sage-grouse habitat to maintain and improve interagency wildfire prevention activities and education statewide. [1.1.2b]

**Strategy FIRE 2.** Encourage state and federal fire agencies to strategically use prescribed burning and beneficial fire use as an optional tool to accomplish resource management objectives when a detailed burn plan has been reviewed and approved by NDF that incorporates objectives for sage-grouse habitat improvement. [Action 1.1.2d]

**Action FIRE 2-2:** The SETT will provide input to fire agencies with clear definitions of the conditions and general locations where pre-planned burning should be allowed or avoided.

**Strategy FIRE 3:** Maintain innovative, coordinated, and rapid fire suppression capabilities using a diversity of agencies, including federal, state, tribal, and local government and empower Fire



Management Officers to incorporate habitat priorities for conservation into fire suppression strategies and plans.

### **Responsible Parties: NDF, BLM, USFS, Counties, Local Area Working Groups**

**Action Fire 3-1:** Use the concepts of resistance and resilience [and the Fire and Invasives Assessment Tool \(FIAT\)](#) to determine if post-fire restoration treatments are necessary to achieve sage-grouse habitat objectives. [Action 1.1.3c]

**Action Fire 3-2:** Develop educational and informational apps for accessing current geographic information, maps, and shapefiles of Core and Priority Management Areas where suppression of wildland fire is a priority. Provide this information to all Fire Management Officers and Resource Management Officers and Specialists annually prior to the start of fire season.

**Action Fire 3-3:** Create short training videos and U-tube flicks for transferring information on basic sage-grouse biology and habitat characteristics for National Fire Suppression Teams, Rural Fire Associations, Rural Fire Protection Districts, Wildfire Support Groups, and the public. [1.1.2a]

**Strategy FIRE 4:** Consider the use of native plant materials for fire rehabilitation based on availability and probability of success. When native plant materials are not available or the probability of success is low, use non-native, adapted species that will best meet habitat functions. [Action 1.1.3f]

### **Responsible Parties: NDF, NRCS, BLM, USFS, Tribes**

**Action Fire 4-1:** Determine annual availability of suitable species of seed and nursery stock to enhance and rehabilitate season habitats utilized by greater sage-grouse.

**Action Fire 4-2:** Develop state nursery programs to produce native forb and shrub seed for restoration projects in sage-grouse habitat.

**Action Fire 3-2:** Pre-plan basic fire restoration treatments in Core, Priority, and General habitat areas where low resilience vegetation communities have been documented. [FIAT?](#) Plans may be modified on a case-by-case basis as necessary to incorporate site specific conditions or in response to seed and plant material availability. [Action 1.1.3f]

**Action Fire 3-2:** Establish or update MOUs or other agreements to allow collaboration between federal, state, county and local agencies, tribes, and private landowners in developing and implementing timely fire pre-suppression, suppression, and rehabilitation plan to meet sage-grouse habitat objectives. [1.1.3f, 1.1.3e]

## **Invasive Species**

...to be completed...

**Strategy INVASIVE 1:** Prioritize prevention of invasive plant establishment in sage-grouse habitat. Implement and document practices for detection, control, restoration, and monitoring across all land ownerships and jurisdictions using the best available science. [1.1.4a, 1.1.4e]

**Responsible Parties: BLM, USFS, NDF, NDA, NDOW, Counties, Private Land Owners, Conservation Districts, LAWGs, [All Stakeholders]**

**Action Invasive 1-1.** Incorporate systematic and strategic detection surveys and mapping of invasive species into pre-project baseline surveys and other ongoing monitoring and survey efforts. Utilize the NDA EDDMaps database as a central repository to maintain all records of invasive plant occurrences and treatment records including herbicide names and rates, follow-up treatments, and treatment results.

Review maps and treatment results annually and distribute updated treatment recommendations at the annual coordination meeting to resource management agencies, CWMAs, Counties, and Conservation Districts. [1.1.4a]

**Action Invasive 1-2.** Require all credit and debit projects to apply design features specified in Appendix A of the 2014 State Plan to permitted anthropogenic disturbances to minimize the disturbed surface area and prevent the spread of invasive plants. [Action 1.1.4b]

**Action Invasive 1-3.** Require project proponents of land disturbing activities to monitor for invasive plants annually and report all findings to the NV EDDMaps database. [1.1.4c]

**Strategy INVASIVE 2:** Maintain sagebrush ecosystems that are resistant to invasion of non-native species and resilient after disturbances such as wildfire. [Action 1.1.4g, Objective 2a]

**Responsible Parties: BLM, USFS, NRCS, Private Land Owners, Stockmen, LAWGs**

**Action Invasive 2-1:** Create and distribute maps that identify priority areas for restoration and/or resiliency enhancement in sage-grouse habitat based on best science for ecological sites with state and transition models to identify areas for resiliency enhancement or restoration. **FIAT?** Prioritize implementation of rehabilitation treatments in sage-grouse habitat where the risk of transition to an annual dominated plant community is greatest and the potential to meet or move toward desired habitat conditions is highest. [Action 1.1.4g]

## **Pinyon-juniper Encroachment**

Encroachment of pinyon and/or juniper into sagebrush communities is ranked as the third greatest risk to greater sage-grouse in Nevada. The continuing expansion of trees contributes to the loss of important seasonal habitats. It also increases raptor presence and predation associated with coniferous trees (Commons 3t al. 1999). Several studies demonstrate that sage-grouse avoid areas encroached by P-J, show that P-J removal will increase sage-grouse habitat quality, and provide some evidence that sage-grouse will return to an area once P-J is removed.

**Strategy P-J 1:** Control and reverse expansion of P-J into sage-grouse habitat.

**Responsible Parties:** BLM, USFS, NDF, NRCS, Private Land Owners, Wood Products Industry

**Action PJ 1-1:** Inventory, map, and prioritize Phase I and Phase II P-J encroachment treatments based on ecological site potential and soil map units within and adjacent to Core, Priority, and General Habitat Management Areas to achieve desired habitat conditions. [Action 1.1.1]

**Action PJ 1-2:** Implement Phase III encroachment treatments to reduce the threat of severe wildfire conditions and extreme fire behavior, to create movement corridors, or to provide habitat connectivity. Do not remove old growth trees on true woodland sites. [Action 1.1.2, Action 1.1.3, Action 1.1.10]

**Strategy PJ 2:** Support and incorporate other state initiatives such as the PJ Partnership that incentivize and assist with development of bio-fuels and other commercial uses of pinyon and juniper biomass from treatment projects to restore sagebrush ecosystems. [Action 1.1.7]

**Responsible Parties:** BLM, USFS

**Action PJ 2-1.** Authorize stewardship contracts for up to 20 years to increase the incentives for private industry investment in biomass removal, land restoration, and renewable energy development. [Action 1.1.8] [What has to happen here to make this a reality?](#)

**Action PJ 2-2.** Treat at least 100,000 acres of encroached habitat annually. Monitor, evaluate results, and adjust treatment acreage or methods as new science develops. [Action 1.1.9]

## 4. FUNDING

**Funding Strategy Fund 1:** Develop and provide sustainable , predictable federal, state, and local funding sources for pre-suppression activities (including maintenance) separate from funding for suppression and post-fire rehabilitation activities. [Action 1.1.1a, Action 1.2.1]

**Responsible Parties: Congressional delegation; Governor’s Office; NGO’s, SETT, NDF, BLM, USFS,**

**Action Fund 1-1:** Work with federal, tribal, and local governments to develop dedicated funding sources that allow for up to five years of post-fire restoration treatment, when necessary, to increase restoration success in important habitats, to improve initial attack for wildfire suppressions, and to commit to invasive species containment. [Action 1.1.3a, Action 1.2.1]

**Action Fund 2:** Dedicate funding to plan and implement cost effective pre-suppression activities with an emphasis on strategic, scalable, cooperative projects informed by best available science; utilize cost efficient methods and tools; and follow up with effective, repeatable monitoring. [Action 1.1.1b]

**Grants, LSR, RCPP, 319,**

**SIG**

**FWS Partners**

**NDOW**

**SEP**

**OTHER**

## 5. CRITERIA FOR PRIORITIZATION

To Be Determined....

## 6. BACKGROUND FOR BIOLOGICAL SIGNIFICANT UNITS (BSU)

Greater sage-grouse Population Management Units (PMU) were designated by the Nevada Department of Wildlife in 2001 based on sage-grouse distribution, available telemetry data, and personal knowledge of Nevada Biologists. Years later, in 2015, the Nevada Sagebrush Ecosystem Program combined PMUs into 16 distinct areas based upon further knowledge of how the birds interact with the landscape and with one another. These larger geographic management and planning units, known as *Biological Significant Units* (BSU), consolidate PMUs for use by land managers, private land owners, and state resource management agencies.

The 2014 State Plan identifies one purpose of the Strategic Action Plans as providing available information needed for defining and prioritizing goals, objectives, and management actions at the local level. This section of the SAP summarizes existing data relative to sage-grouse BSUs and PMUs, and identifies management agencies and resources at a level suitable for local area planning. LAPGs can use the compiled information to conduct site-level risk assessments, develop local-level goals and objectives, and identify conservation actions that can be prioritized for each BSU in Nevada. BSU plans can be scaled down to the PMU level as needed to address specific circumstances.

Insert Figure 1. Map showing 16- 18 BSUs

### 6.4 Central Great Basin BSU

The Central Great Basin BSU is located in Lander and Eureka Counties and is the largest BSU in Nevada and encompasses 4,025,560 acres.<sup>2</sup>

--insert brief description of existing environment --, veg, elevation, climate

Table Mountain Wilderness Area and Alta Toquima Wilderness Area are located within the CGB BSU.

The Central Great Basin BSU lies within WAFWA Management Zone III. There are approximately 1,279,610 acres of Core Habitat, 1,001,965 acres of Priority Habitat, and 824, 670 acres of General Habitat for greater sage-grouse in the CGB BSU. Approximately 815, 876 acres are Non-Habitat.

Public land within the CGB BSU is managed by the Bureau of Land Management Battle Mountain District Office. Approximately 33 percent (1,322,542 acres) of the BSU is designated as Priority Habitat Management Area (PHMA) by the BLM. National Forest lands are part of the Humboldt-Toiyabe National Forest.

--insert general private land statistics and description. Include list of CDs and County government

-- insert description of sage-grouse management categories and land ownership for each.

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<sup>2</sup> BLM 2015 Wildlife Habitat Spatial Lab, GRSG Monitoring Framework

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**FIRE AND INVASIVES***Table 6.4.1 Fire History Through 2013*

<b>Fire Name</b>	<b>General Location</b>	<b>Year</b>	<b>Acres</b>	<b>PMU</b>
Fire Number 1746	Antelope Valley; also burned into Desatoya PMU	1999	140,277	Toiyabe
Trail Canyon	Simpson Park Mtn; also burned into Three Bar PMU	1999	106,616	Toiyabe
Raven	Shoshone Range	2007	40,012 acres	Toiyabe
Antelope 2		2012	3589	Toiyabe
Hall		2006,	4673 acres	Toiyabe
Berndt		2000	2840	Toiyabe
Carico		2007	3283	Toiyabe
Whirlwind	Shoshone Range	1986	4,102	Shoshone
Cottonwood	Upper Reese River Valley	1985	16,432	Shoshone
Cottonwood	Re-burned	1999	9,283	Shoshone
Slaven 2	Shoshone Range	1996	39 688	Shoshone
Elephant Head Fire		2007	40,012	Shoshone
Mule	Shoshone Range	1999	17,989	Shoshone
Moon Valley 2		2006	2757	Shoshone
Elephant		2007	2188	Shoshone
Goat peak	Shoshone range	2013	1998	Shoshone
Indian Creek	Shoshone range	2012	2553	Shoshone
Bens Peak		2001	103	Shoshone
9 <sup>th</sup> Street		2011	112	Shoshone
Fire Creek	Shoshone range	2011	1445	Shoshone
Sansinena	Shoshone range	2007	29,034	Shoshone
Crescent	Crescent Valley	1985	17,693	Cortez
Frenchie 1	Dry Hills	1995	3,911	Cortez
Dann	Crescent Valley	1995	22,929	Cortez
Buckhorn 2	Cortez Mountains	1996	3,366	Cortez
Frenchie	Dry Hills	1996,	30,238	Cortez
Frenchie	Dry Hills	1999	54,679	Cortez
Dunphy	Re-burned in 2007 Sansinena Fire	2005	3823	Cortex-Tuscarora
Beowawe		2000	1350	Cortez
Buckhorn		2001	754	Cortez
Linka		2000	2383	Cortez
BooHoo		2007	27,132	Cortez
Frenchie		2006	3020	Cortez
Well		2006	250	Cortez
Four Tanks		2012	1015	Cortez
Lynn		2013	232	Cortez
Closet		2007	963	Cortez
Dry Hill		2002	152	Cortez
Sheep Creek		2008	296	Cortez
Bob's Flat 3	(re-burned in 2011 Griswald)	2007	13,457	Cortez
Griswald		2011	2051	Cortez

Bobs Flat		2001	581	Cortez
Barth		2007	10098	Cortez
Barth 1		2006	2214	Cortez
Chukar Canyon		2011	48,671	Cortez-Tuscarora, North Fork
Carlin		2005	4802	Cortez
Party		2007	4871	Cortez
Scapegoat		2005	2014	Cortez
Pallisade		2012	1435	Cortez
Sadler Complex	Sulfur Spring Mountains; majority in the South Fork PMU south of Elko	1999	199,180	Three Bar, Cortez, Toiyabe
JD	Garden Valley	1985	1,127	Three Bar
Alpha		1998	2,515	Three Bar
Trail Canyon		1999	106,616	Three Bar
Grass Valley	Simpson Park	2010	1208	Three Bar
Tonkin Fire	Simpson PARK	2012	12091	Three Bar
JD		2006	210	Three Bar
JD Ranch		2007	658	Three Bar
Frasier	Roberts Mountain	2012	12091	Three Bar
Table		2006	627	Three Bar
Table		2005	175	Three Bar
Fluffy Flat		2008	181	Three Bar
Ferguson		2013	1092	Three Bar
Pinto		2012	2879	Diamond
Unidentified		2000	1603	Diamond
Diamond 2		2001	185	Diamond

**PINYON-JUNIPER**

Maps showing PJ encroachment, output of FIAT process

Summary of level of this threat



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**WILD AND FREE ROAMING HORSES AND BURROS**

Maps showing HMA/WHBTs

*Table 6.4.2 BLM Herd Management Areas and Appropriate Management Levels*

HMA	PMU	Herd Type	Acres	AML LOW	AML HIGH	Current population	survey date	Gather date
South Shoshone	Shoshone Toiyabe	Horse	133,093	60	100	336	Nov, 2012	Jan, 2008
Bald Mountain	Shoshone Toiyabe	Horse	139,875	129	215	236	Aug, 2012	Dec, 2010
Rocky Hills	Three Bar	Horse	83,988	86	143	109	Aug, 2012	Dec, 2010
New Pass-Ravenswood	Toiyabe	Horse	182,727	545	566	577	Aug, 2012	Jan, 2011
Callaghan	Toiyabe	Horse	156,156	134	237	361	Aug, 2012	Jan, 2011
Whistler Mountain	Three Bar Diamond	Horse	43,246	14	24	17	Nov, 2012	Jan, 2008
Roberts Mountain	Three Bar	Horse	99,989	0	150	369	Nov, 2012	Jan, 2008
Fish Creek	Diamond	Horse	167,629	107	180	461	Mar, 2014	Feb, 2006
Hickison	Toiyabe	Burro Horse	36,219	16 0	45 0	38 25	Mar, 2014	none
Triple B	Diamond	Horse	25,816					
Diamond	Diamond	Horse	165,329	0	151	209	Nov, 2012	Feb, 2013
Pancake	Diamond	Horse	42,185	No data				
Diamond Hills South	Diamond	Horse	1,532	No data				

Insert WHT for National Forest (USFS)

**LIVESTOCK GRAZING**

Maps showing allotments, Table showing seasons of use from Dept of Ag database

*Table 6.4.3 Livestock Grazing Allotments, Permitted AUMs, and Season of Use*

Allotment Name	Permittee	Permit AUMs	Season of Use		

Anthropogenic disturbances

Insert summary and map? From BLM

**Sage-grouse Populations.**

Three Bar PMU ..... general location

Toiyabe PMU: Toiyabe Range, Reese River Valley, , Simpson Park Mountains east boundary, Town of Austin, to Belmont Road in Monitor Valley

Shoshone PMU: Stone Cabin Basin, Carrico Lake Valley, Crescent Valley, across I-80

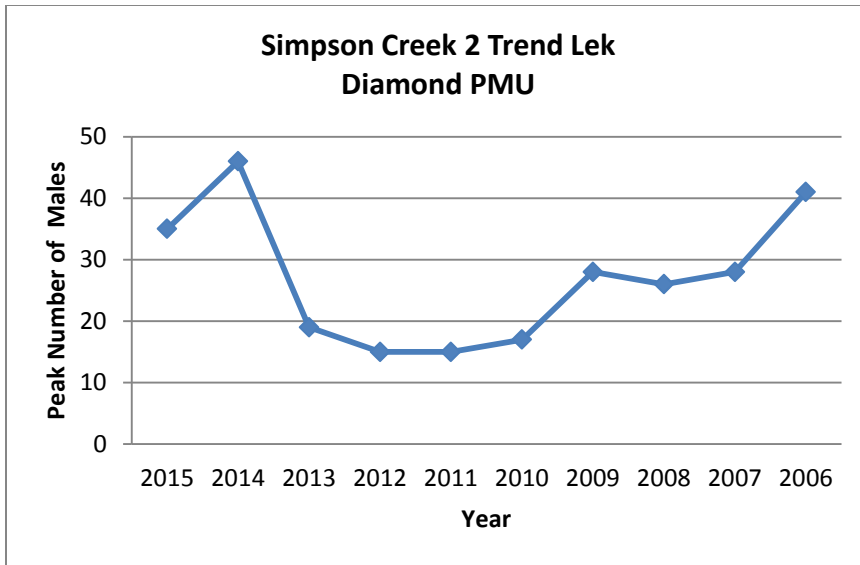
Cortez PMU north to I-80 at Carlin

Diamond PMU Eureka, Fish Creek Valley.....

The Shoshone, Cortez, Three Bar, Diamond, and Toiyabe PMU are located within the NDOW South Central Planning Area. Toiyabe and Three Bar are among the largest sage-grouse population within the planning unit. Overall the trend lek attendance rate in the South Central planning area has exceeded the long term average of 28.3 males/lek in 8 out of 11 years between 1995 and 2014. The Three Bar and Toiyabe PMU (along with Monitor and Reese River in the xx BSU) have driven trends upward and do not seem to be as negatively affected by extended drought conditions as in other portions of the state. The South Central and White Pine planning areas are the only ones to exhibit a positive population trend over the last 20 years (NDOW 20014).

The Diamond PMU has one trend lek, Simpson Creek 2, that has been monitored for more than 10 years.

---insert summary from federal aid report.



TO BE CONTINUED.....

**Site and Local Recommendations for Local Area Planning**

1. Focus areas for conservation efforts.
2. Prioritized areas on public and private lands to implement a landscape scale restoration effort.
3. Identification of where the primary threats to sage-grouse habitat are located throughout the BSU.
4. Guidelines for where efforts can be prioritized in order to achieve landscape-scale conservation of sage-grouse and the sagebrush ecosystem based on localized threats and local area conditions including resistance and resilience regimes, and ecological state.

Add other trend lek summaries.