NEVADA'S GREATER SAGE-GROUSE CONSERVATION PROJECT

A Strategy and a Plan

In August of 2000, Governor Kenny Guinn appointed a task force representing various interest groups and agencies to develop a plan that would conserve and protect Nevada's sage-grouse and their habitat. In October of 2001, this group completed the **Nevada Sage-grouse Conservation Strategy**. This document identified challenges, offered potential solutions and laid the groundwork for the formation of local working groups (n=7) and Population Management Units (PMUs) while at the same time provided these entities with a roadmap for developing conservation plans.

From 2001 to 2004, this task force (the Governor's Sage-grouse Conservation Team) embarked on an intensive planning effort for the state while local working groups developed plans for their respective areas and PMUs. In June 2004, the 1st Edition of the Greater Sage-grouse Conservation Plan for Nevada and Eastern California (State Plan) was completed. This plan was built on information gathered from local working groups and PMU plans; consisting of 6 chapters that covered the following:

- Planning approach;
- Conservation goals and priorities;
- Risk assessment;

- · Conservation strategies;
- Implementation approach; and
- Monitoring and research

The Risks or Threats

Each local working group (7) completed a local area conservation plan prior to the completion of the State Plan and did their best to complete PMU plans for areas that they deemed priority areas. A total of 7 local working group plans and **32 of 56 PMU plans have been completed** for the entire state. Each of these plans intensively reviewed the following factors affecting sage-grouse:

- Habitat quantity;
- Habitat quality;
- Wildfire;
- Habitat fragmentation;
- Livestock grazing;

- Wild Horses;
- Predation;
- Changing Land Uses;
- Hunting/Poaching;
- Disturbance;

- Disease;
- Pesticides;
- Cycles; and
- Climate/Weather

Of these risk factors, habitat quantity, habitat quality and wildfire have affected Nevada and California sage-grouse populations the most. In an analysis conducted by the Nevada Department of Wildlife (NDOW), wildfires that occurred from 1999-2007 affected approximately 40% (364 of 912) of the active sage-grouse leks in Nevada (see Figure 1). Additionally, these fires burned approximately 2.6 million acres of key sagebrush ecological types within the range of Greater Sagegrouse in Nevada amounting to a 12% loss of habitat over just 9 fire seasons.

Population Trends

Lek counts have been conducted by Nevada's wildlife agency since the 1950's; however, recent work (last 10-15 years) has been much more intensive than historic efforts. Over the last 9 years, NDOW biologists, volunteers, and federal agency personnel have surveyed an average of 737 leks each year of which approximately 314 are classified as active.

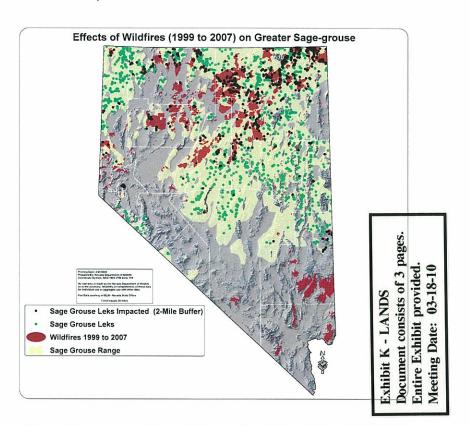


Figure 1. Sage-grouse leks and habitat affected by wildfire (1999-2007).

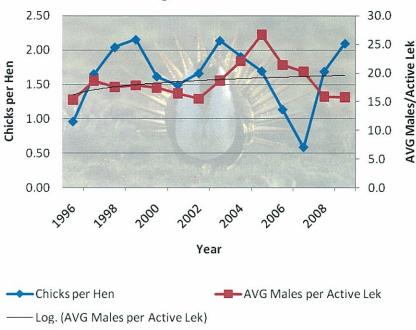
Since 1996, the lek counts show that Nevada has experienced a slight population increase when applying a logarithmic trend (Figure 2). This is largely due to a spike in the number of males attending leks in 2005 and is likely a result of several years of good recruitment.

The "On the Ground" Accomplishments

Over the last decade, several projects have been implemented to restore, enhance and maintain sage-grouse habitat. These projects have been implemented by NDOW, federal agencies and private landowners. However, much more can and needs to be done.

As an example, since fiscal year 2001, NDOW has implemented approximately 28 projects relating to fire restoration, habitat enhancement, research and maintaining existing habitats (Table 1,

Nevada Greater Sage-grouse Production and Average Male Lek Attendance



attached). These projects have totaled approximately **\$2.1 million and have collectively treated about 70,000 acres**. Additional projects have been implemented by federal agencies and private landowners as well.

What's on the Horizon?

At the time that many sage-grouse plans were created, energy development was not foreseen as a critical threat to sage-grouse populations and their habitats; however, as the nation's energy demands increased along with the USA's commitment to reduce reliance on fossil fuel, Nevada became an area of interest because of the amount of public land in the state. The Nevada Governor's Sage-grouse Conservation Team identified energy development (both renewable and non-renewable) as an important threat to sage-grouse and is in the process of developing a guidance document for energy development within sage-grouse habitats. The document, entitled "Energy and Infrastructure Development Standards to Conserve Greater Sage-grouse Populations and their Habitats", is in the final stages of development and is due out in late March or early April 2010. The document will be included as an appendix to the State Plan.

In terms of conservation planning and implementation of sage-grouse habitat improvement projects, NDOW will continue to work with working groups, federal land management agencies and private landowners to reduce threats to the species. Although available funding is limited, the **North American Sagebrush Ecosystem Conservation Act** could provide a substantial amount of funding to western sage-grouse states to implement conservation plans. This act, which is modeled after the North American Wetlands Conservation Act, is currently in bill draft and is supported by the Western Governors' Association.

NDOW has initiated a **Partnership for Resource Conservation and Development (PRCD)** modeled after a successful program in Utah. This partnership is a coordinated, collaborative effort where resource agencies with a vested interest in conserving healthy, native ecosystems will work to accomplish common goals by pooling resources and funding. The simple vision of the PRCD is "a productive Nevada in harmony with a quality environment; Nevada's environmental, economic and social values operate in harmony for sustainable long-term quality of life."



NEVADA SAGE-GROUSE CONSERVATION PROJECTS (NDOW FUNDING PROVIDED)

Table 1. Sage-grouse habitat restoration, enhancement, protection and research projects conducted from 2001 through 2009

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Number	Project Name	Location	Ownership	Contractor	Acres	Cost	Funding Source	FY
1 McDonald Fire Rehabilitation		Merritt Mtn Elko	USFS	NDOW	1,000	\$15,292.00	NDOW	2001
2	South Cricket Fire Rehabilitation	Windermere Hills - Elko	Private	NDOW	2,500	\$45,919.05	NDOW	2001
3	Camp Creek Fire Rehabilitation	Jarbidge Range - Elko	USFS/BLM	NDOW	3,000	\$33,638.00	NDOW	2001
4	Cattle Camp Wash Spring Enhancement	Schell Creek - White Pine	Private/BLM	private	10	\$20,000.00	RMEF,NDOW, private	2004
5	Wilkins Island Burn Rehabilitation Project	Jarbidge Range - Elko/Owyhee	Private/BLM	BLM	400	\$2,950.00	BLM Idaho/NDOW	2004
6	Falcon Gonder Transmission Line Study	Eureka County	BLM	UNR		\$250,000.00	W-64	2004
7	Bear Paw Habitat Restoration Project	Jarbidge Range - Elko	USFS	USFS	40	\$12,755.20	RMEF, NDOW, USFS	2006
8	Esmeralda Fire Rehabilitation	Tuscarora Range - Elko	Private/BLM	NDOW	3,800	\$44,737.20	NDOW/Barrick	2006
. 9	Snow Canyon Fire Rehabilitation	Independence Range - Elko	Private/USFS	NDOW .	5,190	\$89,442.55	Q1, private	2006
10	Raven Predation Research	Northern Elko County	BLM	ISU		\$9,998.00	General Funds	2006
11	Ellison Creek Sage-grouse Habitat Enhancement	White Pine Rng White Pine	USFS	GBI-NCC	43	\$38,534.50	General Funds	2007
12	Lincoln Co Pinyon & Juniper Removal	Hamlin Valley - Lincoln	BLM	NDF	420	\$40,000.00	Upland Game Stamp	2007
13	Lone Willow Road Herbicide Treatment	Montana Mtns Humboldt	BLM	BLM	615	\$10,147.50	General Funds	2007
14	North Washoe Grazing Exclosures	Northern Washoe County	BLM	BLM	631	\$19,300.00	Upland Game Stamp	2007
15	Amazon Fire Rehabilitation	Tuscarora Range - Elko	Private/BLM	NDOW	1,070	\$95,143.00	Q 1, private	2007
16	Little Owyhee Road Herbicide Treatment	Owyhee Desert - Humboldt	BLM	BLM	1,569	\$13,439.00	General Funds	2007
17	Suzie Fire Rehabilitation	Independence Range - Elko	Private	NDOW	3,400	\$81,528.45	Q1/private	2007
18	Winters Fire Rehabilitation	Tuscarora Range - Elko	Private	NDOW	6,834	\$245,822.20	Q1/private	2007
19	Taylor Creek Restoration Project	Jarbidge Range - Elko	USFS/BLM	USFS/BLM	200	\$13,000.00	Heritage/BLM/USFS	2008
20	Susie Creek Weed Treatment	Western Elko County	BLM	BLM	1,500	\$45,000.00	Q-1 and W-64 Grant	2008
21	Roberts Creek Mts. Pinyon & Juniper Removal	Roberts Creek Mts - Eureka	BLM	UNCE	2,000	\$46,851.84	W-64, Q-1 Match	2008
22	Sweetwater Pinyon and Juniper Removal	Sweetwater Summit - Lyon	USFS	USFS	3,200	\$50,000.00	General Funds	2008
23	West Fork Fire Rehabilitation	Delano Range - Elko	Private	NDOW	3,947	\$166,223.56	Q1/private	2008
24	Murphy Fire Rehabilitation	Copper Mountains - Elko	BLM/USFS	NDOW	23,829	\$561,149.80	Q-1 , private	2008
25	North Spring Valley Restoration Project	Antelope Range - White Pine	BLM	BLM	3,000	\$45,000.00	Heritage	2009
26	Roberts Creek Mts. Pinyon & Juniper Removal	Roberts Creek Mts - Eureka	BLM	UNCE		\$33,864.00	W-64, Q-1 Match	2009
27	Virginia Mtns Sage-grouse Habitat Utilization	Virginia Mts - Washoe County	BLM	USGS		\$30,000.00	Wildlife Heritage	2009
28	China Camp Sage-grouse Habitat Enhancement	Aurora - Mineral County	USFS	USFS	700	\$40,180.00	W-64, Q-1 Match	2010





Totals: 68,898 \$2,099,915.85