

A photograph of two Greater Sage-grouse in a natural, grassy field. The bird in the foreground is a female, shown in profile facing right, with mottled brown and grey feathers. Behind it is a male, shown in profile facing right, with its large, dark, fan-shaped tail feathers fanned out. The background is a soft-focus field of green and brown vegetation under warm, golden light.

# NDOW Actions to Avoid ESA Listing of Greater Sage-grouse

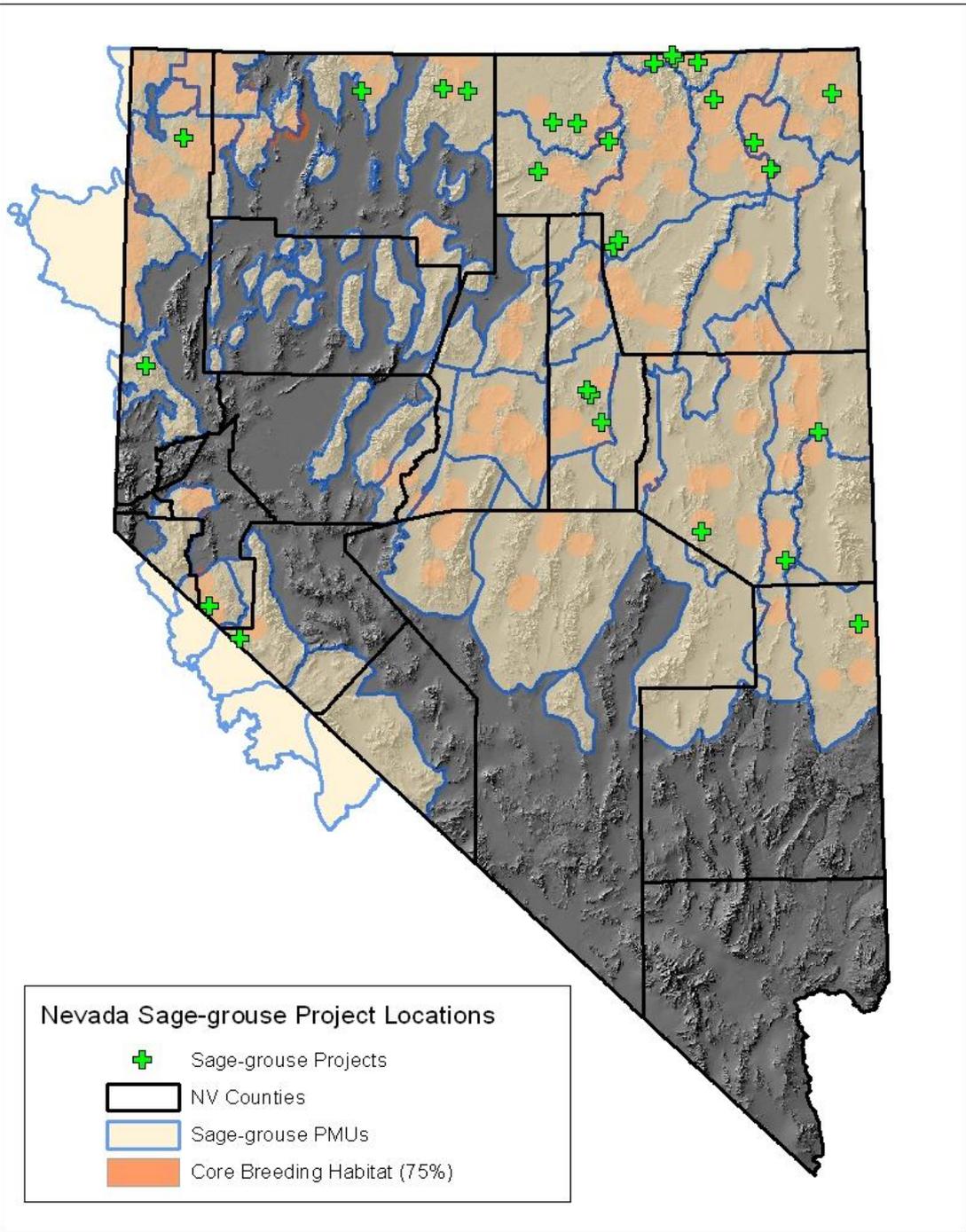
Nevada Board of Wildlife  
Commissioners Meeting  
August 13, 2011

# Conservation Planning

- Completed Nevada Sage-grouse Conservation Strategy in 2001
- Completed Nevada and Eastern California Greater Sage-grouse Conservation Plan in 2004
- Completed Nevada Energy and Infrastructure Standards to Conserve Greater Sage-grouse and Their Habitats in 2010.

# Project Implementation

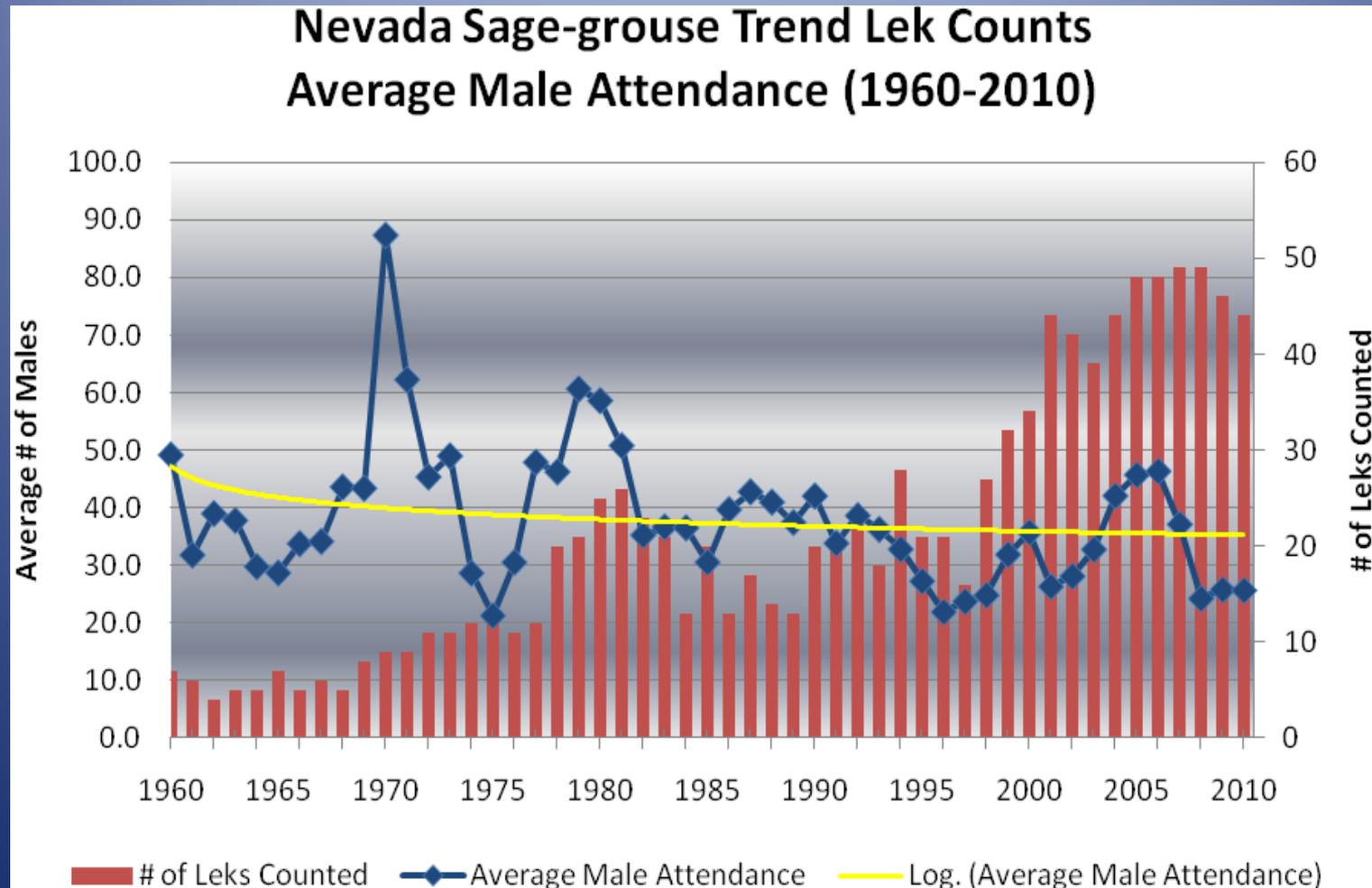
- Since 2001, NDOW has implemented, or been a major contributor to approximately 27 sage-grouse habitat improvement or restoration project.
- These projects include 11 fire restoration projects, 14 brood rearing or nesting habitat improvement projects and two habitat protection projects.
- During this period, NDOW has also established 2 long term research projects
- The total acreage treated = 71,348 acres at a cost of \$2.3 million dollars.



**Nevada Sage-grouse Project Locations**

-  Sage-grouse Projects
-  NV Counties
-  Sage-grouse PMUs
-  Core Breeding Habitat (75%)

# Continued Population Monitoring

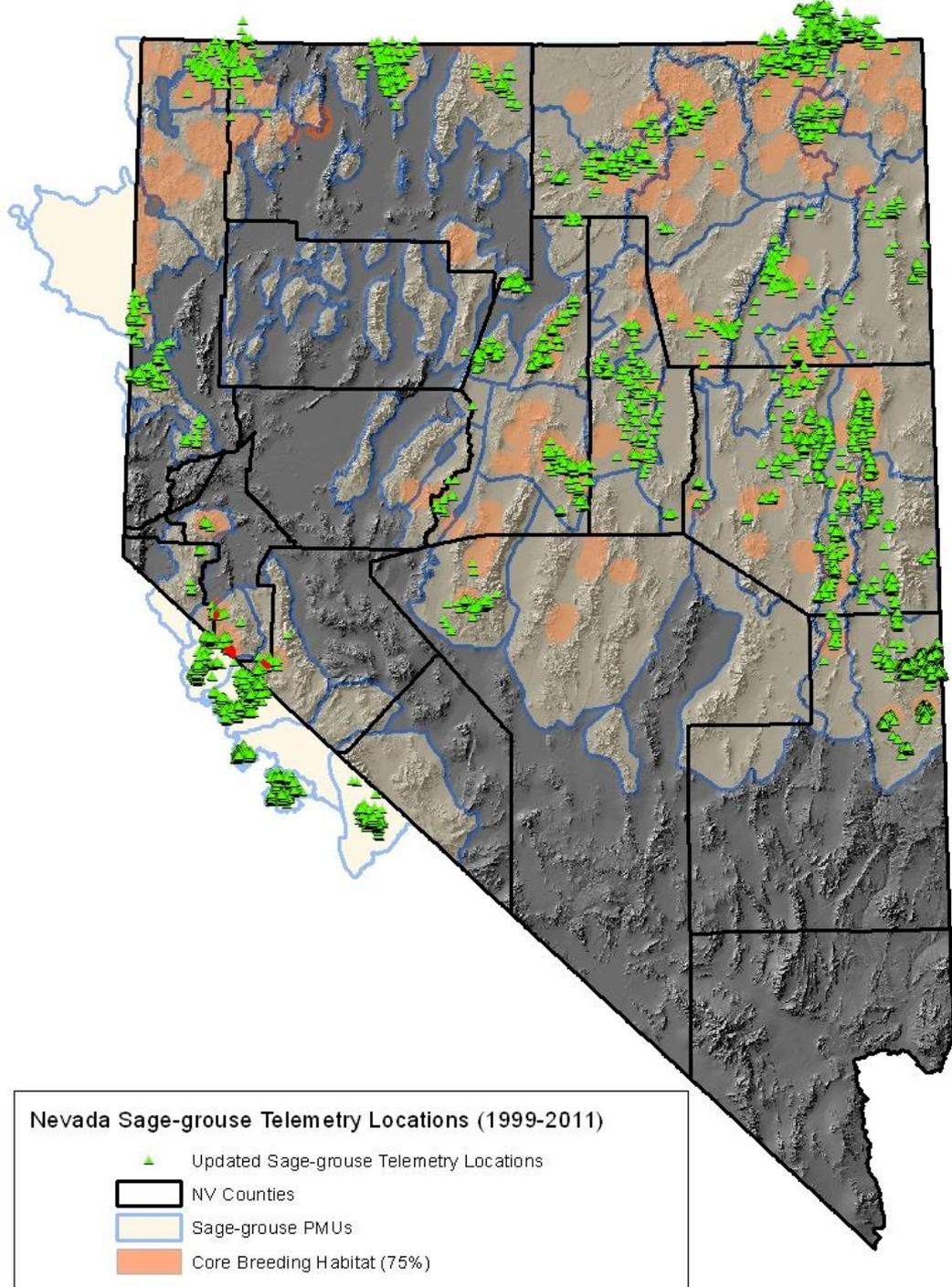


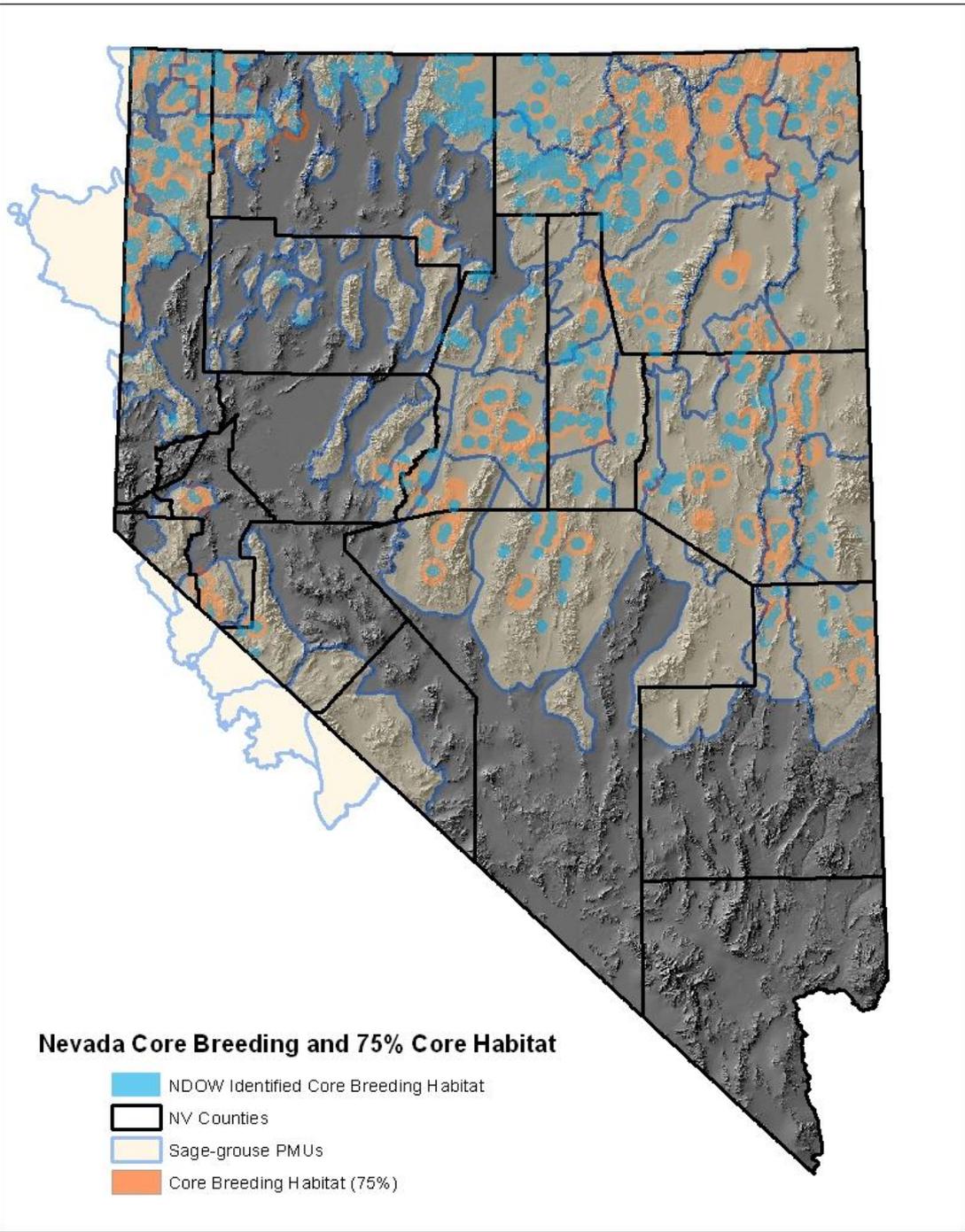
# Review of Leasing, ROWs and EA or EIS

- Habitat and Game Division spend a tremendous amount of time reviewing Environmental Assessments and Environmental Impact Statements to try and secure important sage-grouse habitats or minimize impacts as much as possible through mitigation.
- Leasing sales and Right of Way development are also monitored to ensure that leases are not placed within priority sage-grouse habitats.

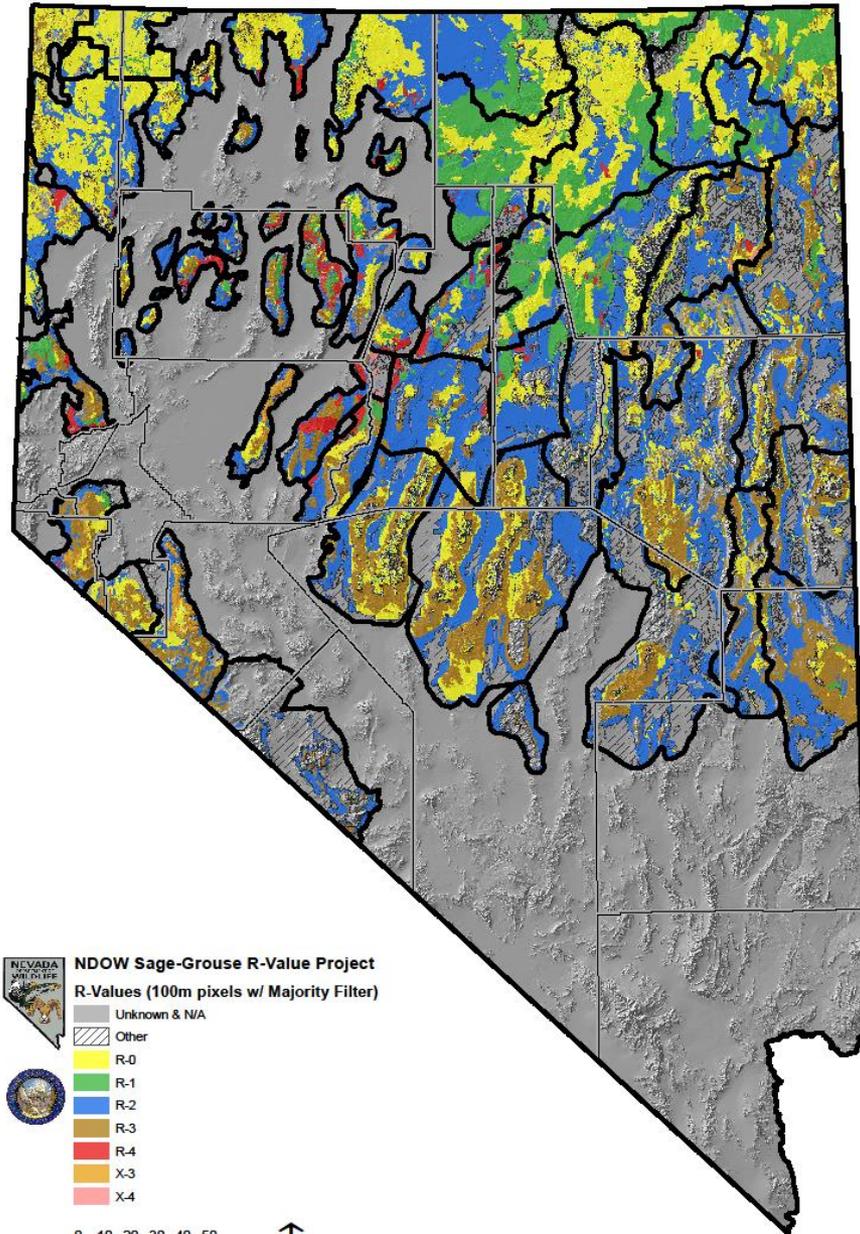
# Mapping Products

- Seasonal Sage-grouse Habitat Delineations
- Statewide Lek Database and Lek Map
- Statewide Telemetry Location Database and Map
- NDOW Core Breeding Habitat Delineation
- Rangewide, Management Zone and Statewide Core Breeding Density Models
- Statewide Restoration (R) -value Map
- Habitat Categorization Map (Priority Habitat Map) – to be completed.





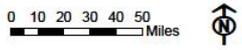
# Nevada Sagebrush R-Values (BLM)



**NEVADA WILDLIFE**  
**SAGE-GROUSE R-VALUE PROJECT**

**NDOW Sage-Grouse R-Value Project**  
**R-Values (100m pixels w/ Majority Filter)**

- Unknown & N/A
- Other
- R-0
- R-1
- R-2
- R-3
- R-4
- X-3
- X-4



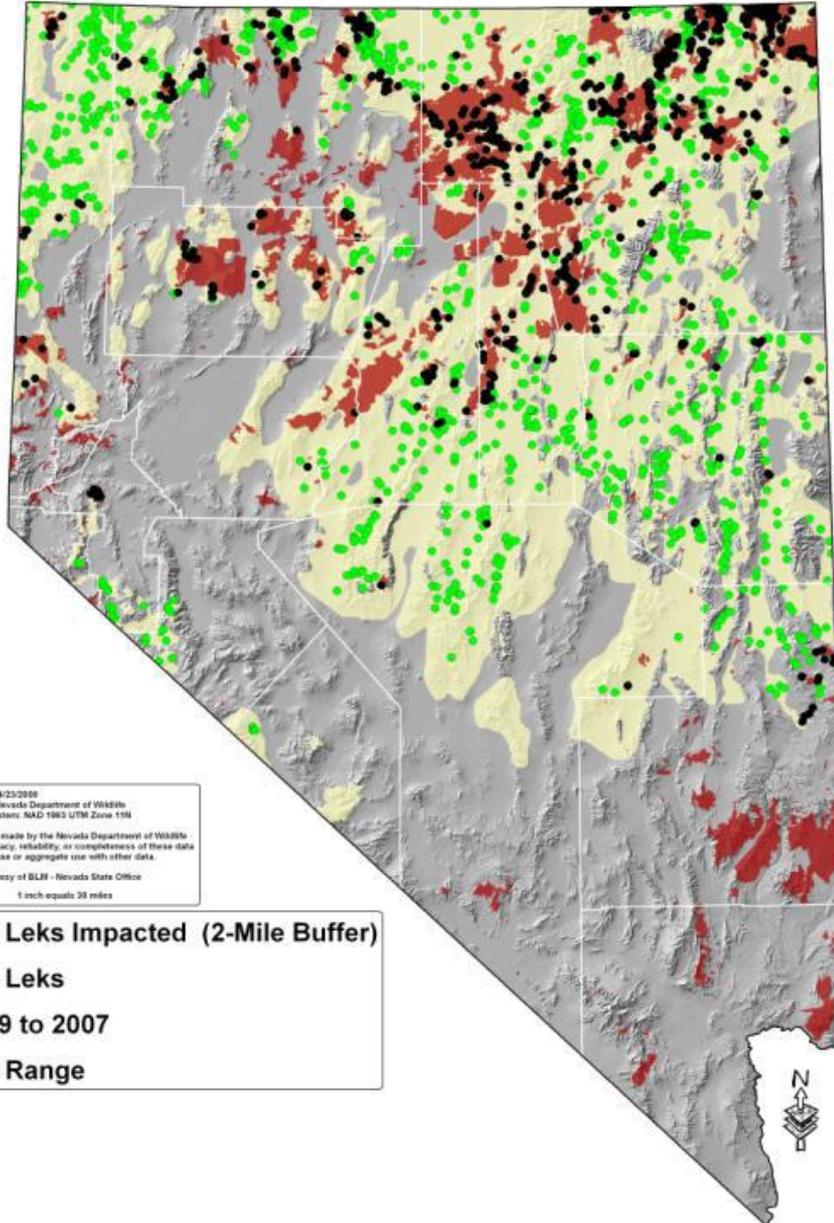
# Threats

- Wildfire
- Pinyon and Juniper Encroachment
- Intensive development in the form of renewable or non-renewable energy development and mining
- Improper Livestock Grazing Practices
- Disease (West Nile Virus)
- Subsidized Predation (Ravens)

# Wildfire

- From 1999-2007, wildfires affected approximately 40% (364 of 912) of the active sage-grouse leks in Nevada.
- These fires burned approximately 2.6 million acres of key sagebrush ecological types within the range of Greater Sage-grouse in Nevada.
- This amounted to a 12% loss of habitat over just 9 fire seasons.

# Effects of Wildfires (1999 to 2007) on Greater Sage-grouse



Printing Date: 4/23/2008  
Prepared By: Nevada Department of Wildlife  
Coordinate System: NAD 1983 UTM Zone 11N  
No warranty is made by the Nevada Department of Wildlife  
as to the accuracy, reliability, or completeness of these data  
for individual use or aggregate use with other data.  
Fire Data courtesy of BLN - Nevada State Office  
1 inch equals 33 miles

- Sage Grouse Leks Impacted (2-Mile Buffer)
- Sage Grouse Leks
- Wildfires 1999 to 2007
- Sage Grouse Range

# Cumulative Energy Development

- A total of 135 active leks are within the immediate rights of way of energy development in some form or fashion.
- When added to the leks affected by fire we arrive at an estimated total of 464 leks. This equates to 51% of the total known active leks within Nevada. But remember, it is the associated habitat that we are really concerned with. Leks are simply a way of easily quantifying the impacts, but most likely under-representing them.

### Map 9: Sage-grouse Leks within Cumulative Energy Right-of-Ways and Leases

