

The 2015 Greater sage-grouse Listing Decision



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Purpose of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*)

"The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved,..."

ENDANGERED SPECIES ACT OF 1973

AN ACT To provide for the conservation of endangered and threatened species of fish, wildlife, and plants, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Endangered Species Act of 1973".



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Listing Process: Petitions

Petition submission: *Anyone!*

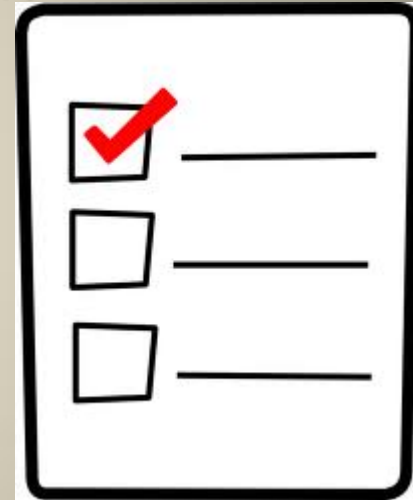
Evaluation :

- Examine adequacy and reliability of information presented
- "Reasonable person" standard



Listing Process:

- For a typical process we first examine adequacy and reliability of information presented in a petition
- Status review evaluates all available scientific and commercial data
- Includes examination of the 5 listing factors identified in the Endangered Species Act



Listing Factors

- A. Present or threatened destruction, modification, or curtailment of habitat or range
- B. Overuse for commercial, recreational, scientific or educational purposes
- C. Disease or predation
- D. Inadequacy of existing regulatory mechanisms
- E. Other natural or manmade factors affecting the species continued existence



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Listing Factors

(continued)

A species need only meet one of the listing criteria to be considered for listing





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Status Review Outcomes

- **Warranted** - Listing proposal will be drafted; species a candidate
- **Warranted, but precluded** - Listing is warranted, but precluded by higher priority actions; species a candidate
- **Not warranted** - Review does not support a listing action; species not a candidate

CURRENT STATUS



In 2010 the Service determined the *Greater Sage grouse* was warranted for listing (but precluded) due to:

- habitat loss and fragmentation
- inadequacy of regulatory mechanisms that govern habitat loss and fragmentation

It is currently a candidate species under the ESA

We will be conducting a new analysis of its status, biological threats and conservation management starting in 2014.

A decision on whether to proceed with a proposed listing or to determine listing is unwarranted will be completed in 2015

Species Overview

Currently, Greater sage-grouse found in:

- WA, OR, ID, MT, ND, CA, NV, UT, W CO, SD and WY and the CAN PROV- ALB and SAS
- Occupy approximately 56 percent of their historical range.



Biological Background -Species

- Sagebrush obligate
 - food, cover, reproduction
- Long-lived, low reproductive rates
- Can be migratory
- High fidelity to seasonal habitats

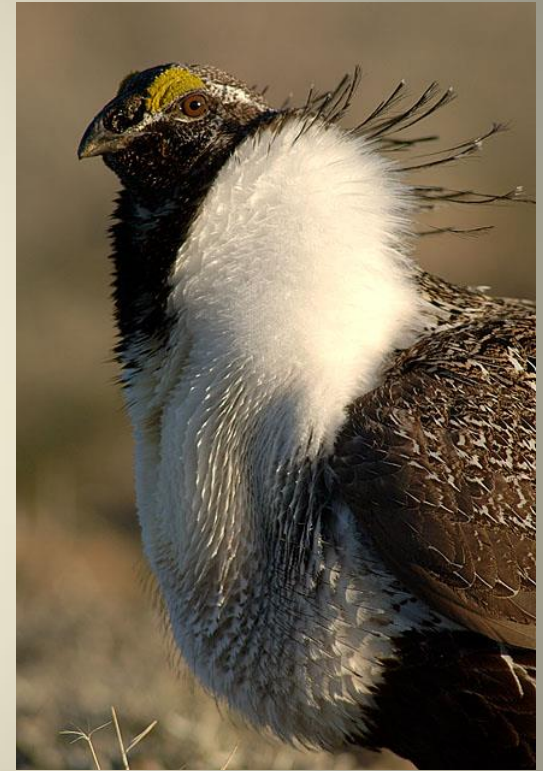
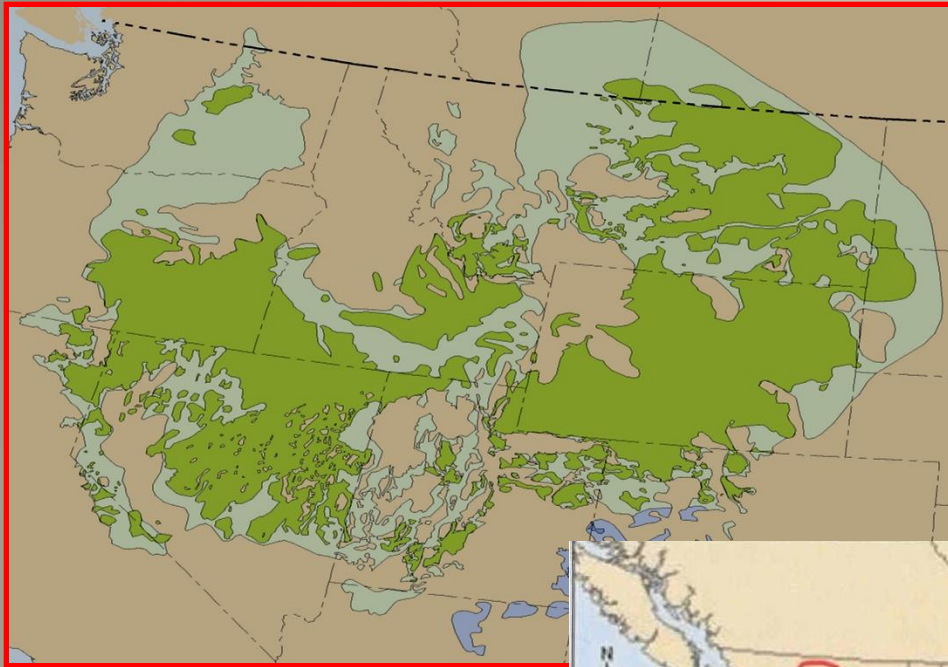


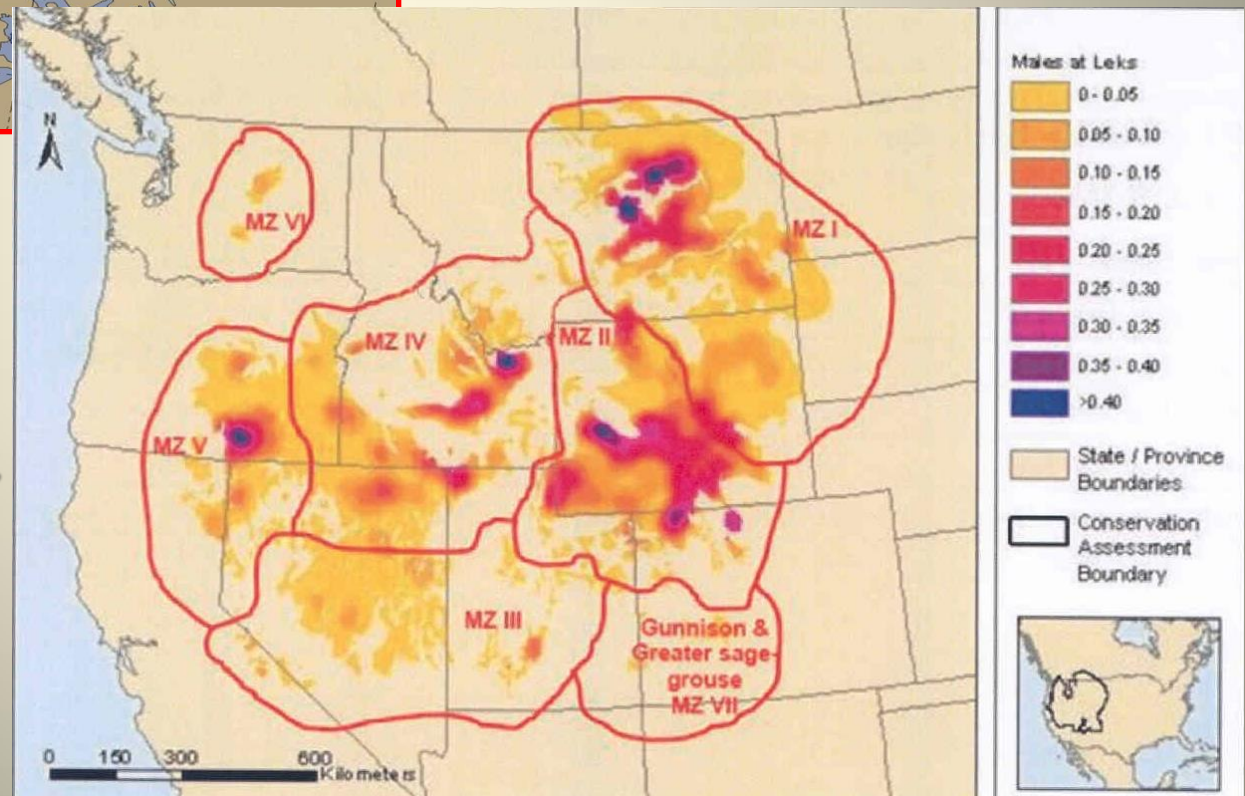
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Landscape scale species

Historic and current range



Sage-grouse distribution

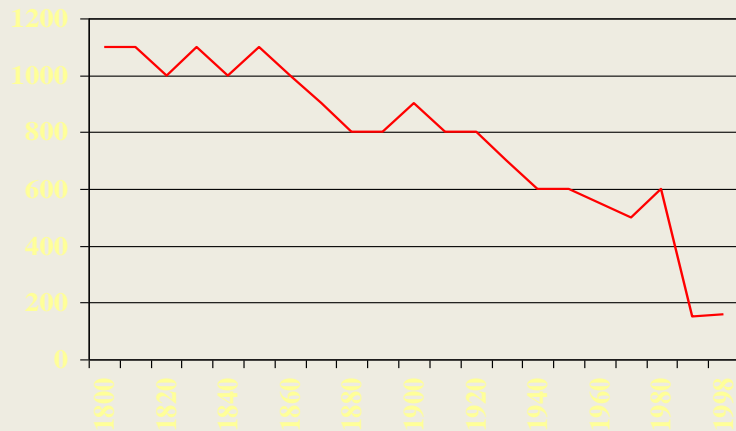


Population Trends

Estimated decline of 80 to 90 % from pre-settlement numbers?

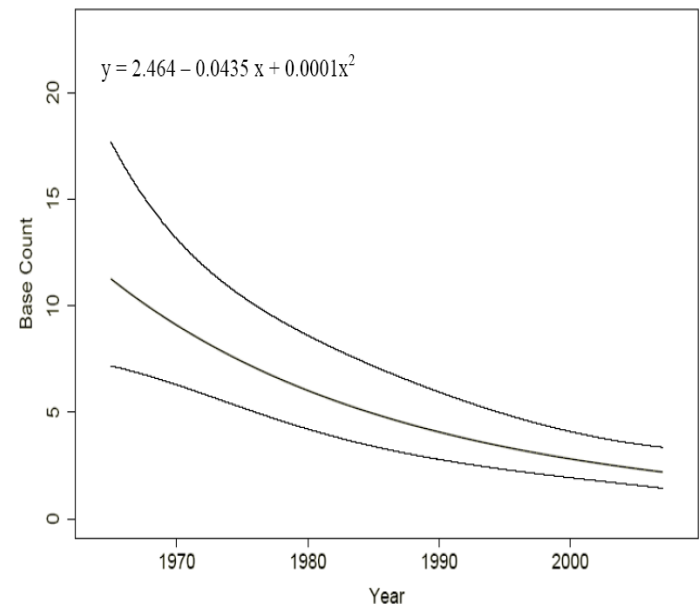
Decline of 30% since 1985

Population in Thousands



Year

WAFWA 1999 (1800 - 1998)



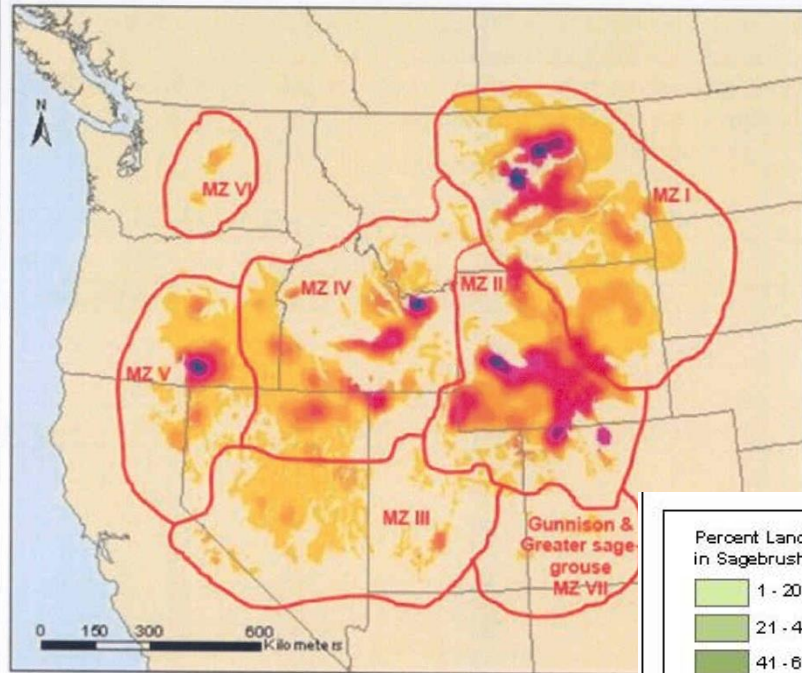
WAFWA 2008 (1965 - 2007)

Biological Background -Habitat

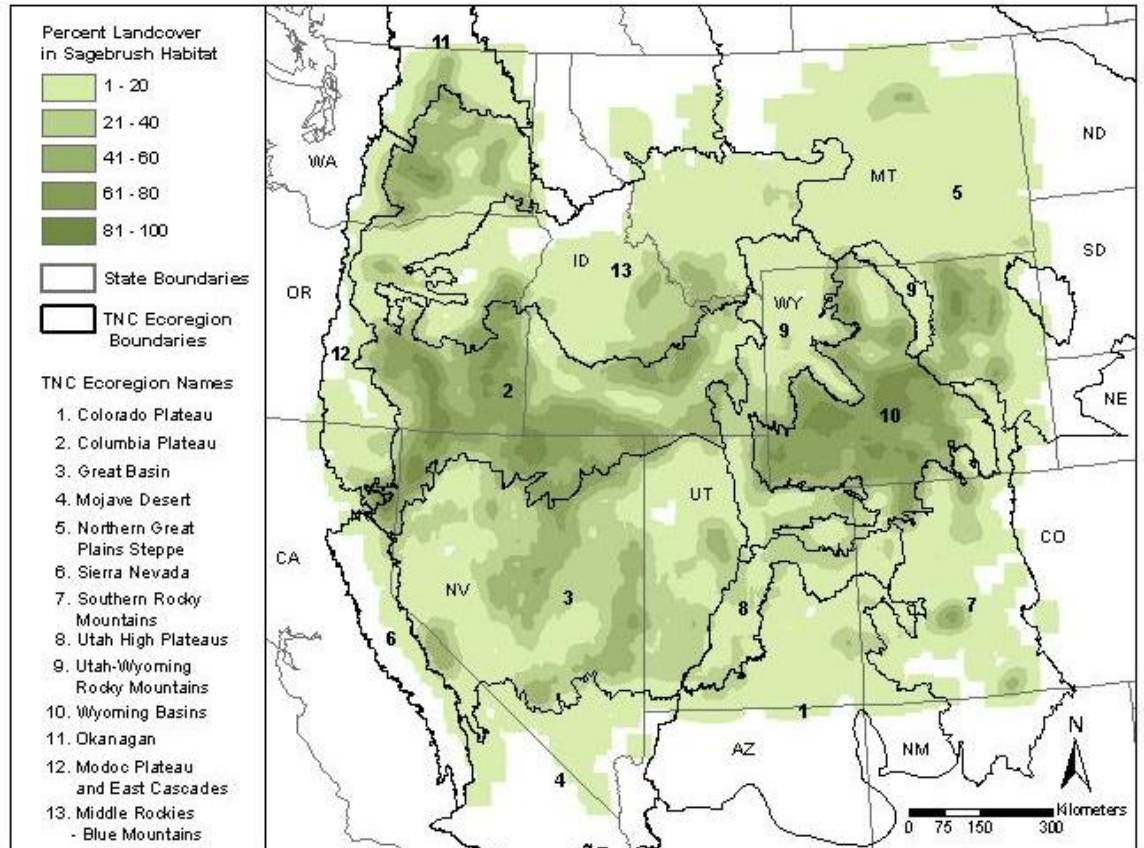


- Sagebrush is essential
 - Not all are provide equal habitat for grouse
 - Also need the healthy understory
- Long restoration times: 20 to > 100 years depending on species and conditions
- Fire kills sagebrush
- Seed banks do not persist
- We don't know how to restore or "fix" it

Sage-grouse distribution



Sagebrush distribution





Primary Threat Habitat Fragmentation

Energy Development

- NE WY: 79% decline in 12 years
- No affect with ≤ 1 well pad per sq mi
Most fields 16-128 pads per sq mi



Invasive Species/Fire

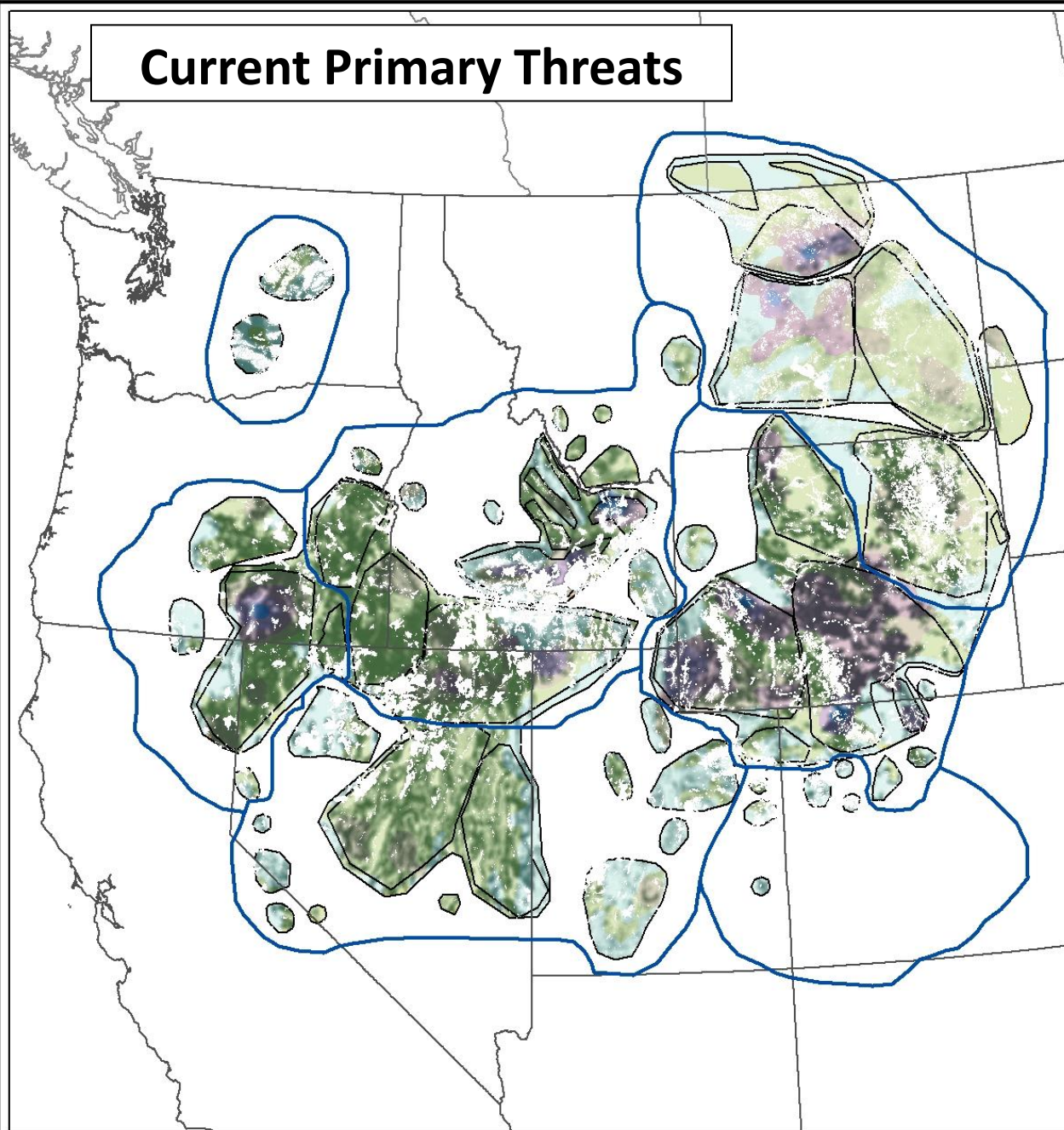
- Historic fire cycle 200-350 years; now 70 to 158 years
- In Great Basin: 27% of sage-grouse habitat has burned since 1980

Agriculture

- 19 % of SB in MT lost to AG
- 84 % of SB in MT affected



Current Primary Threats



 Sage Grouse Mgt. Zones

Percent Sage Brush By Sage Grouse Population

 % High

 % Low

Males at Leks

 High







 Low

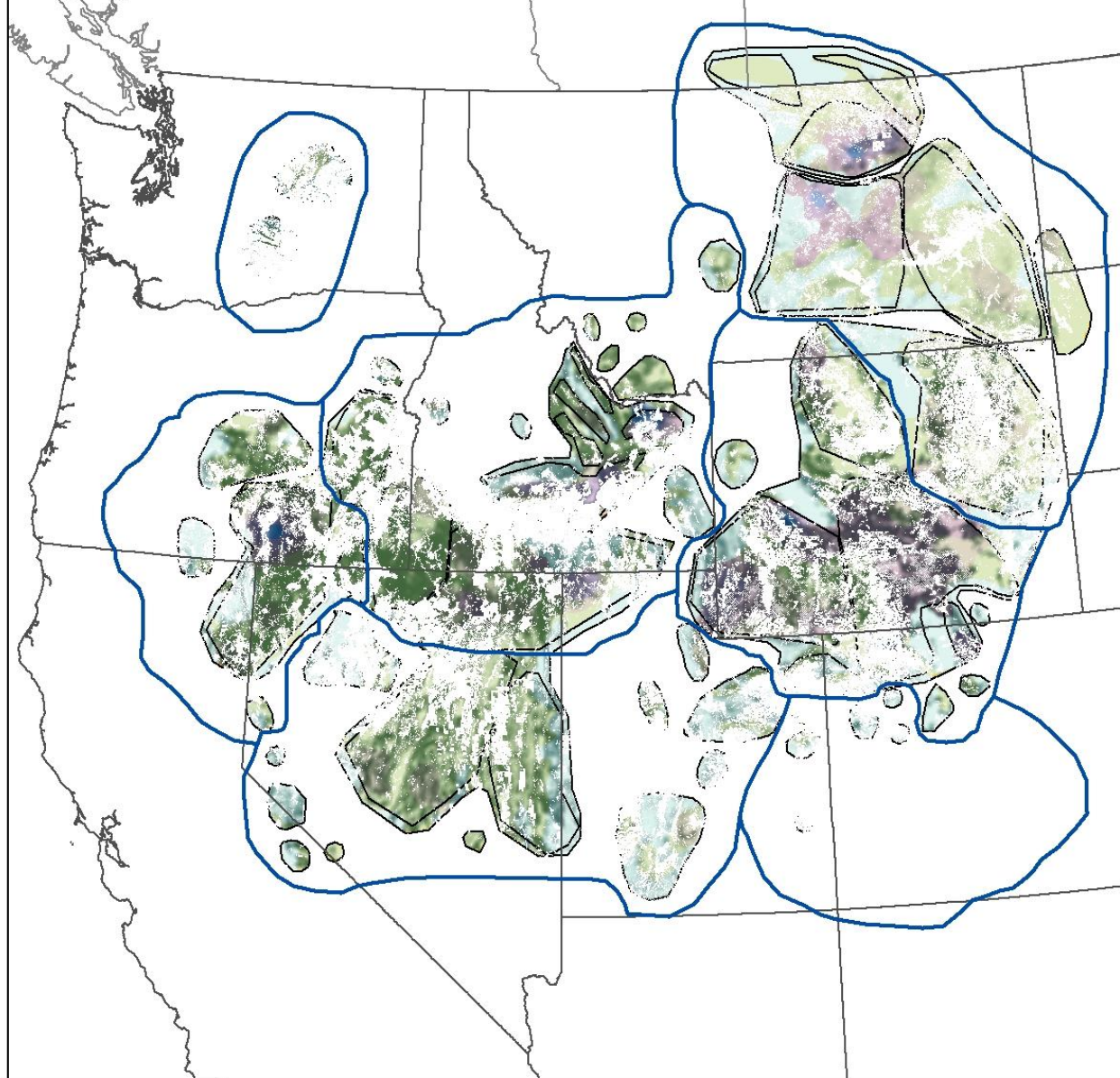
- Fires 1980 to 2008
- Oil and Gas Fields
- Oil and Gas Producing Leases
- Agricultural Land

N 0 75 150 225 300 Miles

Map Date: 10/14/2009

Created by: U.S. Fish and Wildlife Service, WY ES Field Office
Date: 10/14/2009
Source: U.S. Fish and Wildlife Service | Western Association of Fish and Wildlife Agencies' Sage Grouse Conservation Planning Framework Team | U.S. Forest Service | Geospatial Multi-Agency Cooperation | Sam Limerick (Energy Information Administration) | Steve Hansen (USGS-FRISC, Snake River Field Station) | IWA Dept. of Fish and Wildlife, ID Dept. of Fish and Game, National Sage Grouse Conservation Framework Planning Team, USGS Forest and Rangeland Ecosystem Science Center | Bureau of Land Management | U.S. Bureau of the Census | Government of Canada Map
Projection: North American Datum 1927 Albers

Potential Future of Primary Threats



Sage Grouse Mgt. Zones

**Percent Sage Brush
By Sage Grouse Population**

% High

% Low

Males at Leks

High

Low

Low

- Introduced Annual Grass

- Oil and Gas

**Non-Producing Leases
and**

- Fires 1980 to 2008

- Oil and Gas Fields

- Oil and Gas

Producing Leases

- Agricultural Land

N 0 75 150 225 300 Miles

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Steve Hanser (USGS-FRESC, Snake River Field Station) | WVA
Dept. of Fish and Wildlife, ID Dept. of Fish and Game, National
Sage Grouse Conservation Framework Planning Team, USGS
Forest and Rangeland Ecosystem Science Center | Bureau of
Land Management | U.S. Bureau of the Census | Government of
Canada Map
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Current Other Threats

Sage Grouse Threats

 Sage Grouse Mgt. Zones

Percent Sage Brush

By Sage Grouse Population

 % High

 % Low

Males at Leks

 High







 Low

- Pinyon-Juniper
- Other Exotic
- Introduced Annual Grass
- Oil and Gas Non-Producing Leases
- Fires 1980 to 2008
- Oil and Gas Fields
- Oil and Gas Producing Leases
- Agricultural Land

N 0 75 150 225 300 Miles

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Regulatory Mechanisms

(Factor D)

Consider all mechanisms including:

- Federal
- State
- County
- Conservation efforts

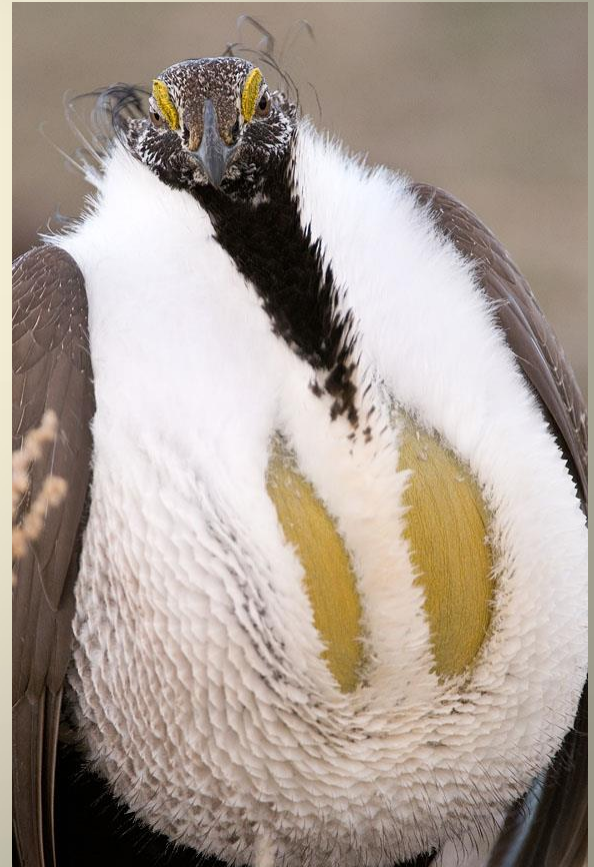


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Regulatory Mechanisms

Are mechanisms addressing populations and individuals sufficient for the conservation of the species ?



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- BLM and FS are currently revising their land management planning documents to address regulatory mechanisms for sage-grouse habitats
- States are also developing plans for addressing sage-grouse habitats



Listing Process



- Consider population status and trends in PACs
- Determine have threats been alleviated?
 - To what degree for each population (PAC)?
- How do regulatory mechanisms address these threats? State strategies, BLM and FS RMP/LRMPs
 - Do they have the ability to regulate/manage threats?
 - Is this information supported by data?
 - Do we have sage grouse population response?

Listing Process

Based on this evaluation of information and in consideration of state and federal conservation strategies . . .

the Service is required to make a determination whether sage grouse meets the definition of **endangered** or **threatened** throughout its range

*...Should sage grouse
be listed under the ESA or not....*



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Questions?