

The Greater Sage-grouse ESA Listing Decision



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Endangered Species Act of 1973

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



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Endangered Species Act of 1973

Threatened Species: Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Endangered Species: Any species which is in danger of extinction throughout all or a significant portion of its range other than a species [except insect pests that present an overwhelming and overriding risk to man].

2 Ways a Species Gets Listed

1. Public petition submission
2. USFWS internal annual review

The Listing Petition Process

Petition submission: Anyone!

- We evaluate the **adequacy** and **reliability** of information
- Apply a “**reasonable person**” standard



“Mega-petitions”

In 2007 we received
Petitions to list **207** species in
Our Mountain-Prairie Region

...and **475** species in our
Southwest Region



In the Office of Endangered Species
U.S. Fish and Wildlife Service
United States Department of Interior



**A Petition to List All Critically Imperiled or Imperiled Species in the Southwest
United States as Threatened or Endangered Under the Endangered Species Act,
16 U.S.C. §§ 1531 et seq.**

June 18, 2007

Petitioner: Forest Guardians, 312 Montezuma Ave. Suite A, Santa Fe, New Mexico
87501, (505) 988-9126

Petition Prepared by: Nicole J. Rosmarino, Ph.D. & James J. Tutchtton, Esq.

What's Next?

- If there is a positive petition finding (90-day finding), move onto a status review (12-month finding)
- 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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Status Review Outcomes

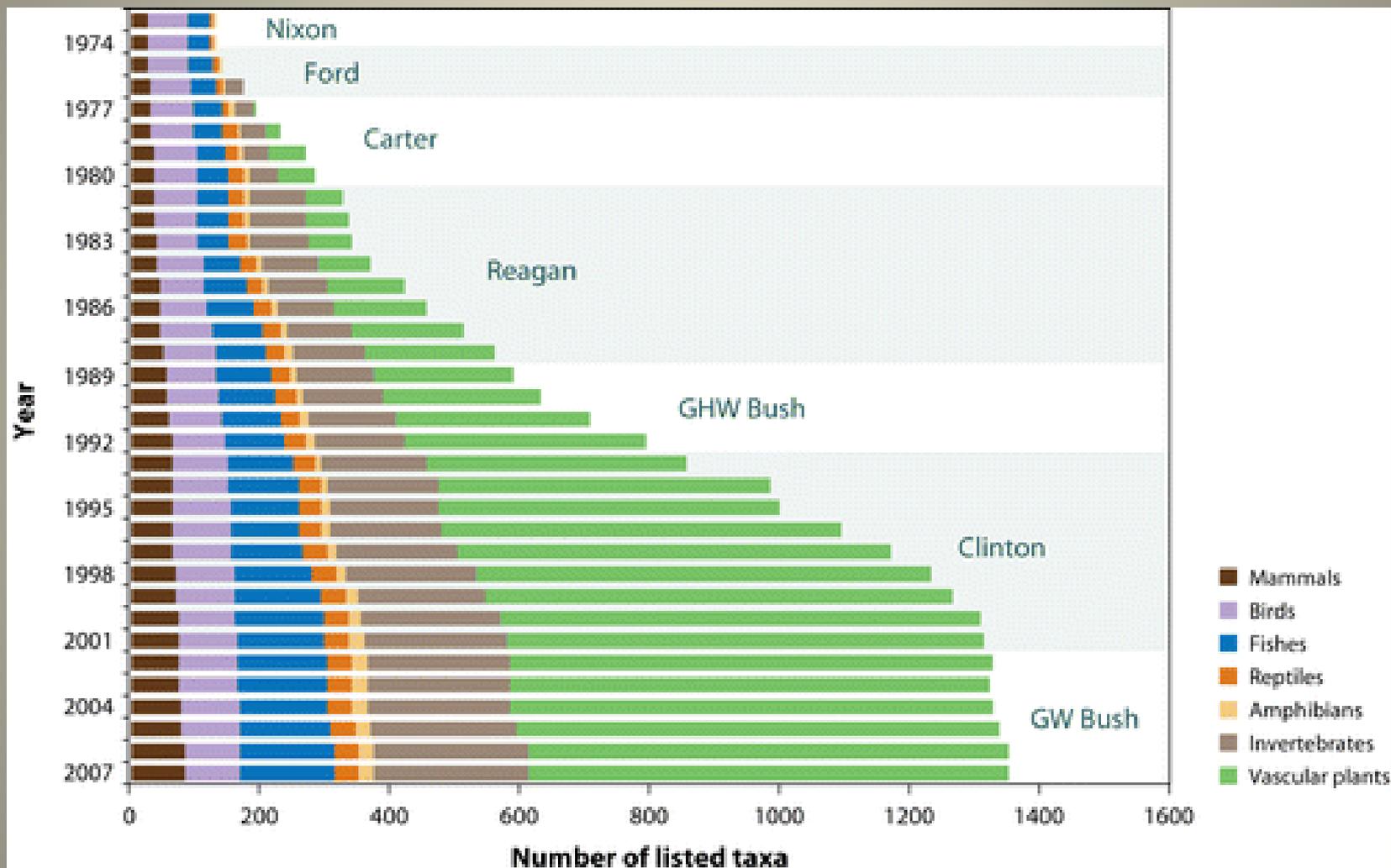
- **Warranted** - Listing proposal drafted; species is listed as *proposed* until final rule enacted.
- **Warranted, but precluded** - Listing is warranted, but precluded by higher priority actions; species a *candidate*
- **Not warranted** - Review does not support a listing action; species not a candidate

Expeditious Progress

A finding of “**Warranted but Precluded**” can only be made when:

1. There are higher priority proposed rules that preclude us from issuing a proposed rule at the time of our finding; AND
2. Expeditious progress is being made to add qualified species to the list.

Number of Listed Species



MDL Settlement

May 10, 2011



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Prompted by litigation on failure to make “expeditious progress” on listing our candidate species (251 at the time of the settlement) – i.e., species we have found warrant listing, but where we lacked the resources to add them to the list of T & E species.

REQUIRES us to make a finding on whether or not to proceed with listing (i.e., issue a proposed rule or withdraw our 12-month finding) by **September 2016** for all Candidates, and specifies earlier dates for some species, including Sage-grouse:

Bi-State Population – **September 2013 (proposed: threatened)**
Greater Sage-grouse and any other DPSs – **September 2015**

Sage-grouse Petition Summary

**1999 – 2005: FWS
received 8 petitions**



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- 1999 – Columbia Basin populations
- 2001 – Mono Basin population (and 2005)
- 2002 – Western subspecies
- 2002 – Greater sage-grouse range-wide
- 2002 – Eastern subspecies
- 2003 - Greater sage-grouse range-wide (2)



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Results :

Columbia Basin DPS

- Warranted but precluded
- Designated a Candidate

3 range-wide petitions

- Combined into one finding
- Not Warranted

Remaining petitions determined to lack sufficient information to warrant further action

Challenges to findings

Bi-State

Settlement agreement
to conduct new finding

Eastern/Western subspecies

- Eastern legal challenges dismissed
- Western legal challenges - remanded decision

Rangewide

- Finding remanded in 2007



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2010 Greater Sage-grouse Listing Decision *Summary*



Species Life History

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

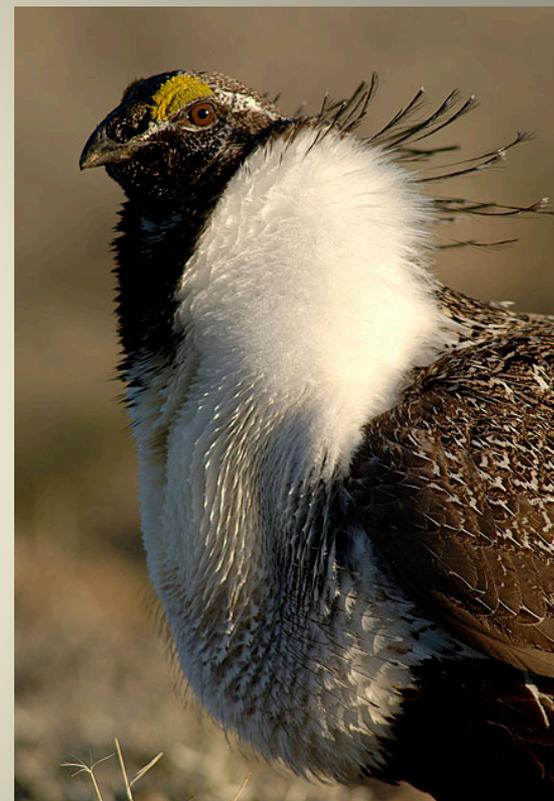
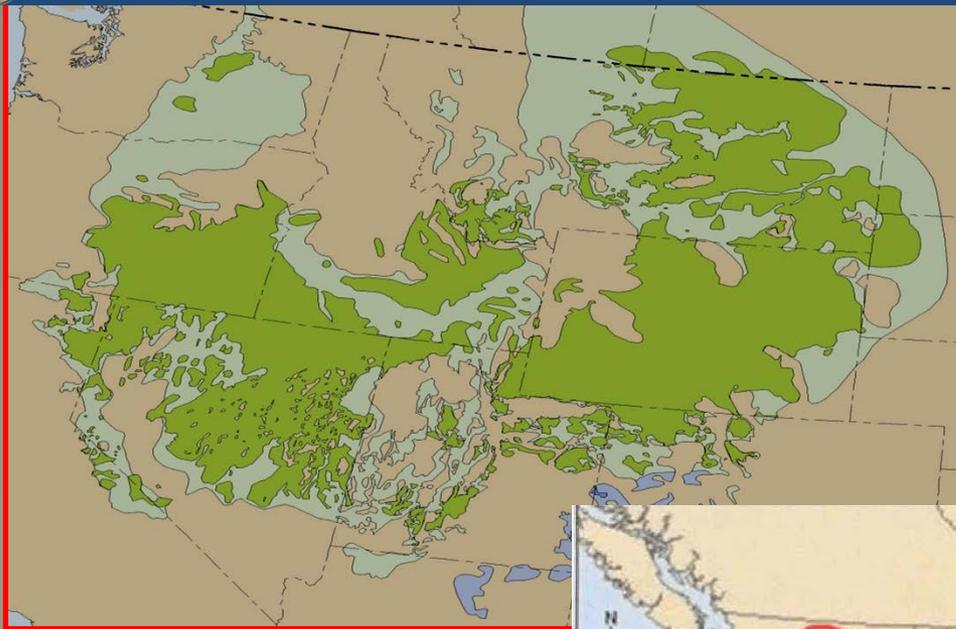


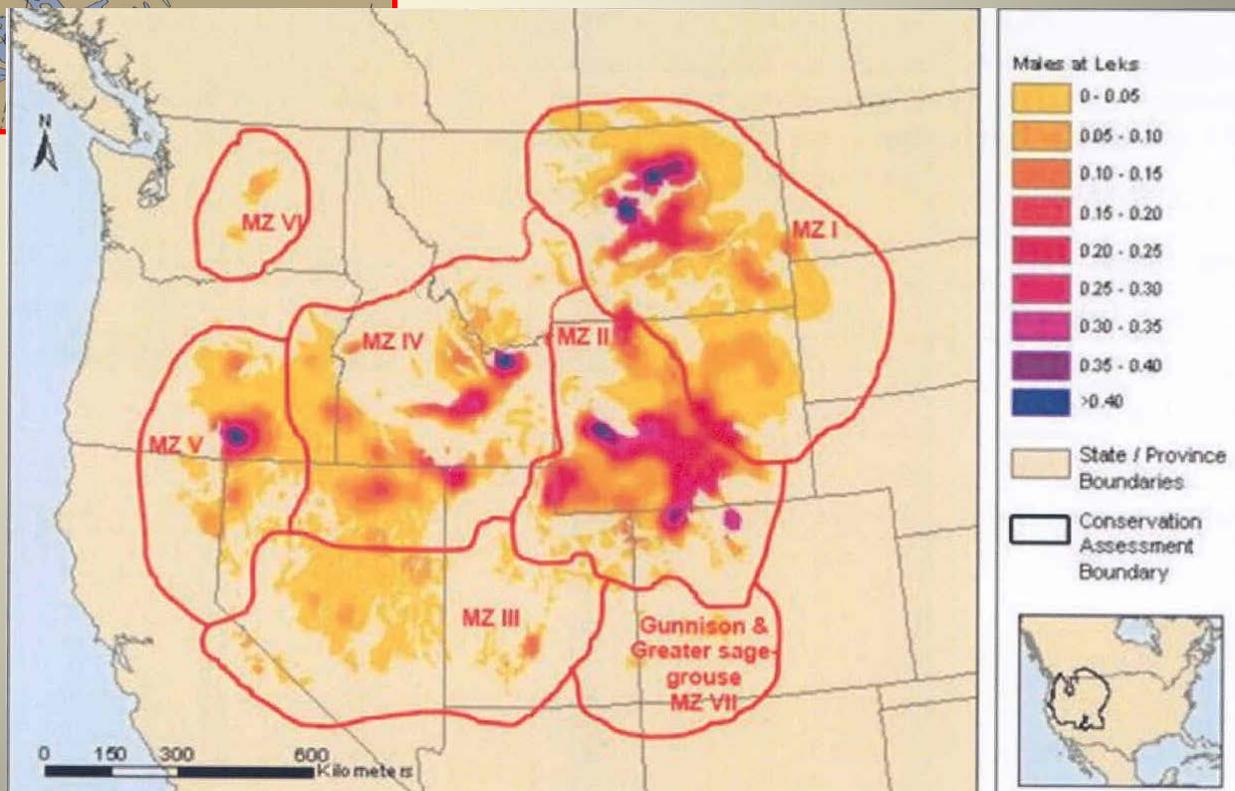
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Landscape scale species



Historic and current range

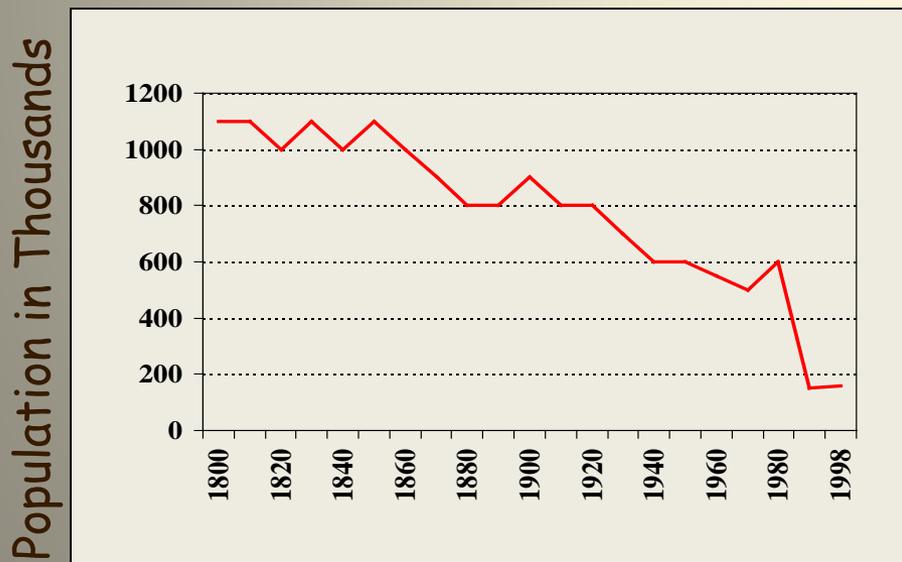
Current Sage-grouse distribution And density



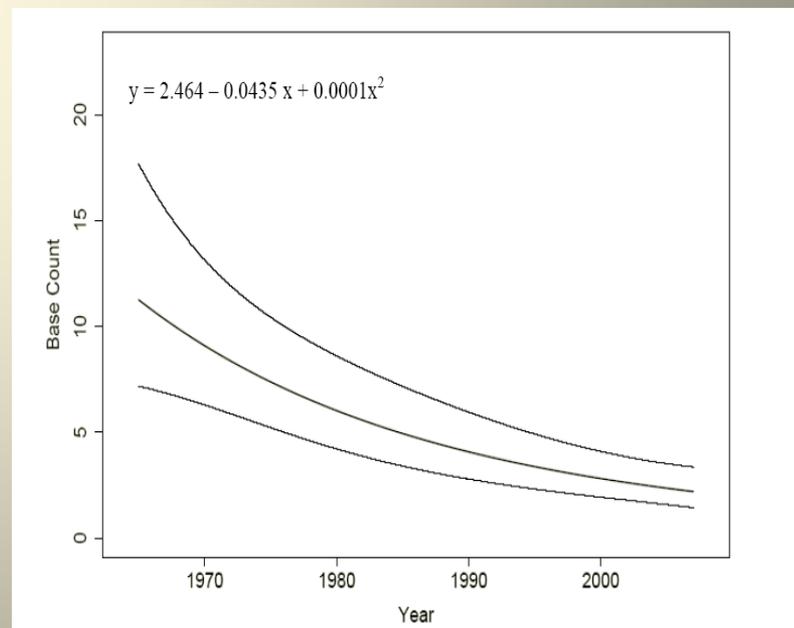
Population Trends

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

Decline of **30%** since 1985



Year
WAFWA 1999 (1800 - 1998)



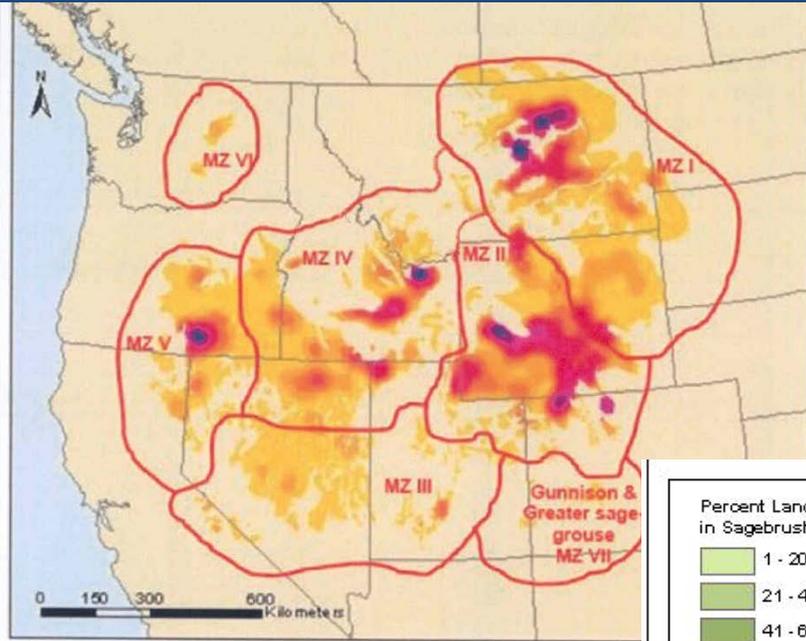
WAFWA 2008 (1965 - 2007)

Biological Background Habitat

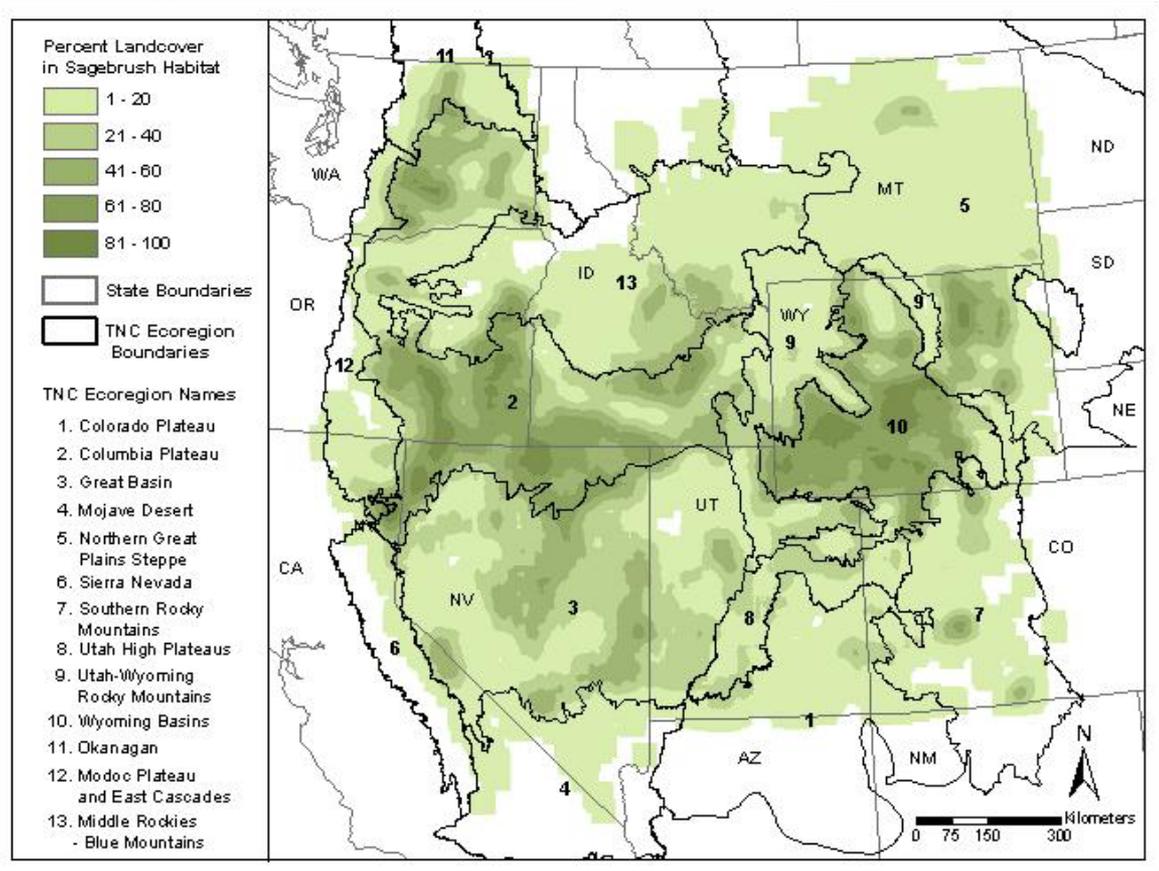


- Sagebrush is essential
 - Not all are equal habitat for grouse
 - Also need the healthy understory
- Long restoration times: 20 to > 100 years depending on species and conditions
- Fire kills sagebrush
- Seed banks do not persist
- We don't know how to restore or "fix" it

Sage-grouse distribution



Percent landcover in sagebrush



Changes since 2005

- Threats identified in 2005 remain but with additional new threats (e.g., wind power and West Nile virus).
- Scale and intensity of 2005 threats have increased and are exacerbated by the synergistic effects: e.g. disease and climate change.
- Much clearer understanding of how threats affect viability.
- Regulatory mechanisms on federal lands (60% of the extant habitat) have not been effective at addressing threats.





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

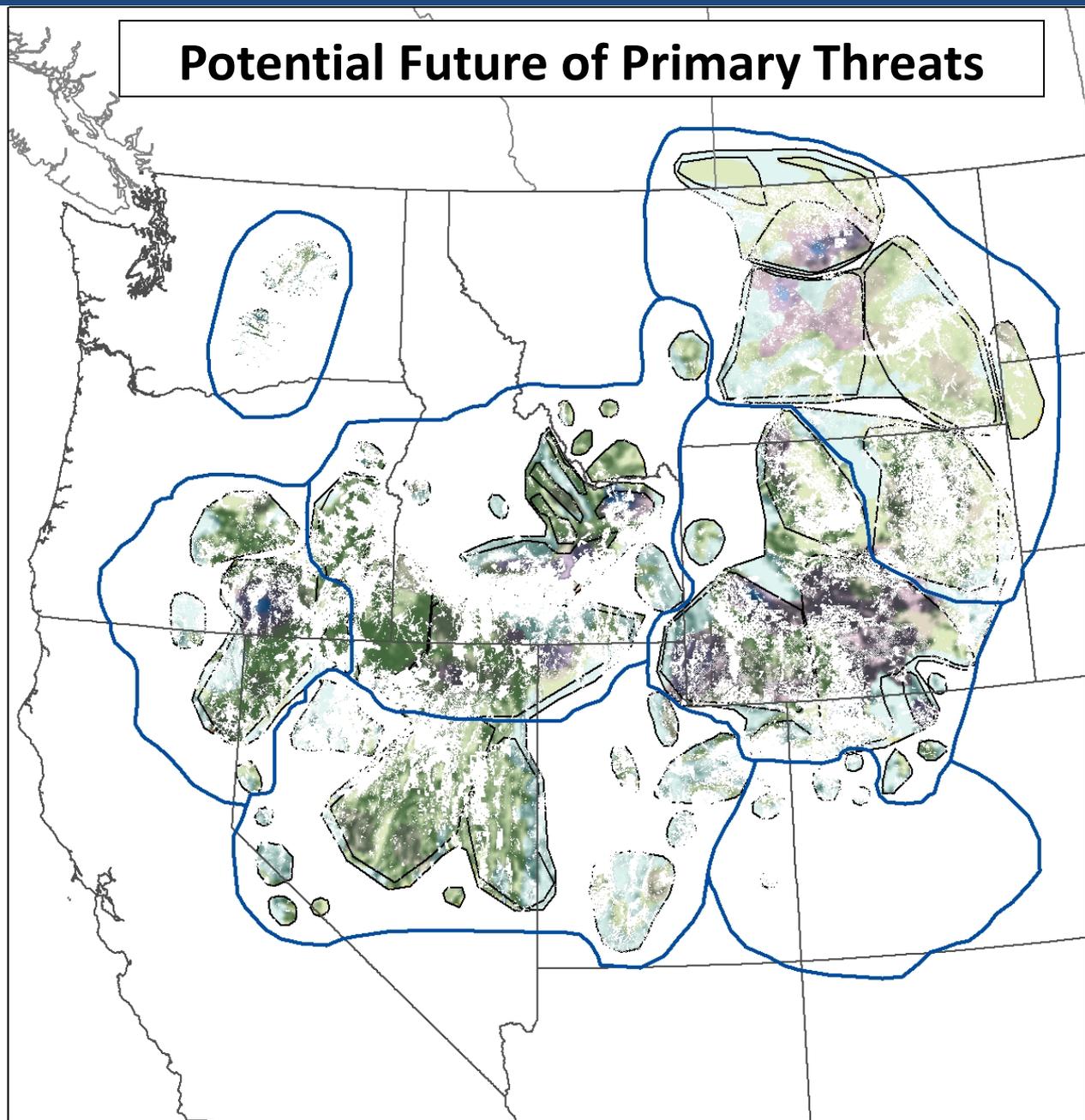
Agriculture

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





Potential Future of Primary Threats



Sage Grouse Mgt. Zones

Percent Sage Brush By Sage Grouse Population



Males at Leks



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

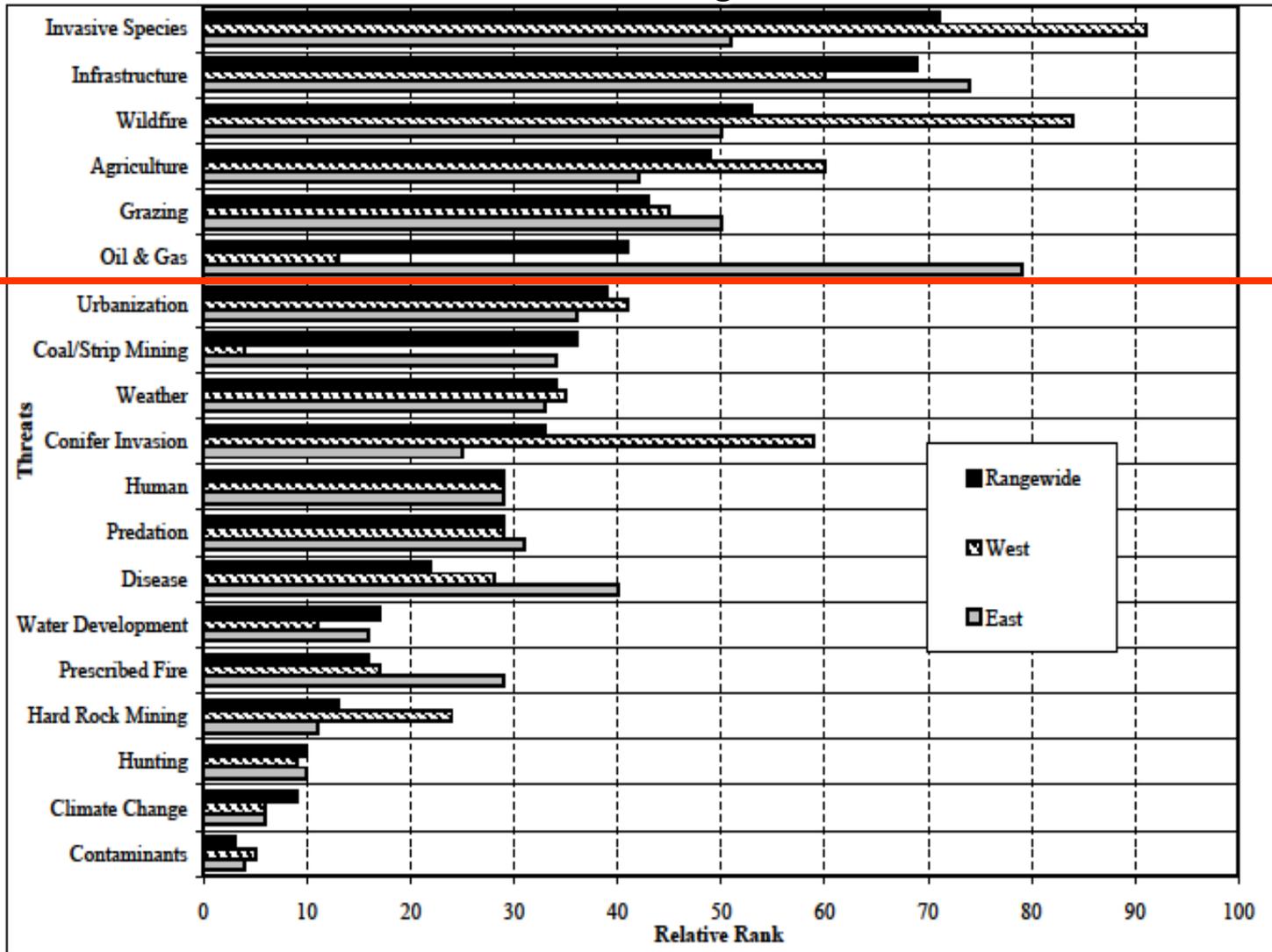


Map Date: 10/14/2009

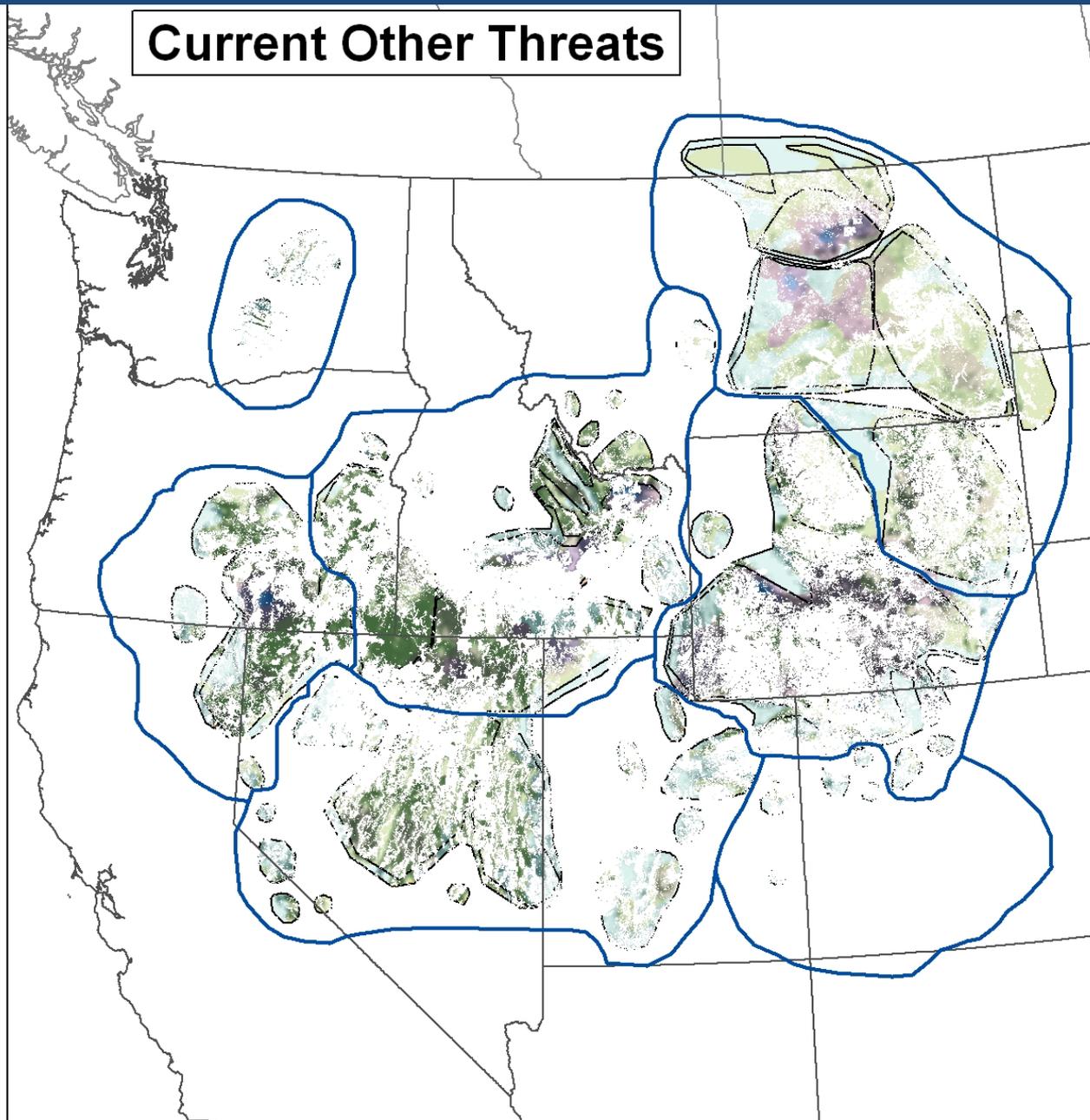
Created by: U.S. Fish and Wildlife Service, WY ES Field Office
 Date: 10/14/2009
 Source: U.S. Fish and Wildlife Service | Western Association of Fish and Wildlife Agencies' Sage Grouse Conservation Planning Framework Team | U.S. Forest Service | Geospatial Multi-Agency Cooperation | Sam Limerick (Energy Information Administration) | Steve Hanser (USGS-FRESC, Snake River Field Station) | WA 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

Secondary/Synergistic Threats

2005 Finding



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



Map Date: 10/14/2009

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Regulatory Mechanisms

Considered all mechanisms including:

- Federal
- State
- County
- other conservation efforts

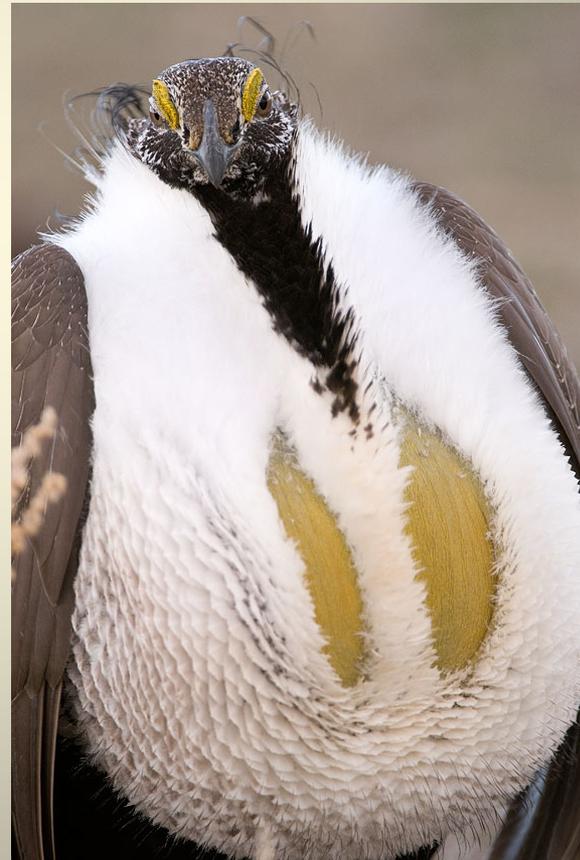


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Regulatory Mechanisms

WAFWA 2006 Conservation Strategy

- Provided framework for long-term conservation of species & ecosystem
- “... and if implemented would have significant positive impacts”
(75 FR 13981)
- Lacks regulatory authority and funding for implementation



Regulatory Mechanisms

Current regulatory mechanisms are inadequate to protect sage-grouse habitats



USFWS Warranted But Precluded Finding

March 23, 2010

- Listing the Greater Sage-grouse is Warranted but precluded by higher priority actions.
- The Bi-State population is a DPS and also warrants listing but is precluded by higher priority actions.
- Primary threats – Habitat destruction/modification and lack of regulatory mechanisms.

A warranted but precluded findings mean that a species becomes a **Candidate species** under the ESA



Summary

- In the foreseeable future habitat fragmentation results in remnant, highly dysfunctional isolated populations.
- Finding is warranted range-wide but is precluded by higher priority actions

“The rapidity with which humans can transform an entire landscape through land use is significantly greater than the natural disturbances that previously influenced dynamics in sagebrush ecosystems”.

Knick et al., in press



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Questions?