The Greater Sage-grouse ESA Listing Decision

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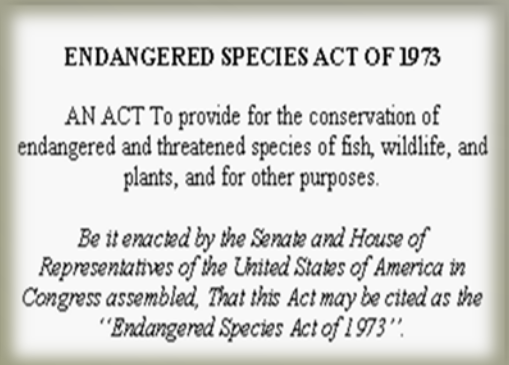
Purpose of the Endangered Species Act

"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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Two Ways a Species Gets Listed

1. Public petition submission

2. USFWS internal annual review

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Listing Petition Process

Petition submission: Anyone!

We evaluate:

- **Adequacy** and **reliability** of information

- Apply a "**reasonable person**" standard

What's Next?

- If 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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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 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

Sage-grouse Petition Summary

1999 – 2003: FWS received 8 petitions

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

Results :

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Columbia Basin DPS

- Warranted but precluded
- Designated a <u>Candidate</u>

3 range-wide petitions

- Combined into one finding
- <u>Not Warranted</u>

Remaining petitions determined to lack sufficient information to warrant further action

Challenges to findings

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Bi-State

- Settlement agreement to conduct new finding

Eastern/Western subspecies

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

Range-wide

- Finding remanded in 2007

2010 Greater Sage-grouse Listing Decision *Summary*

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Species Life History

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

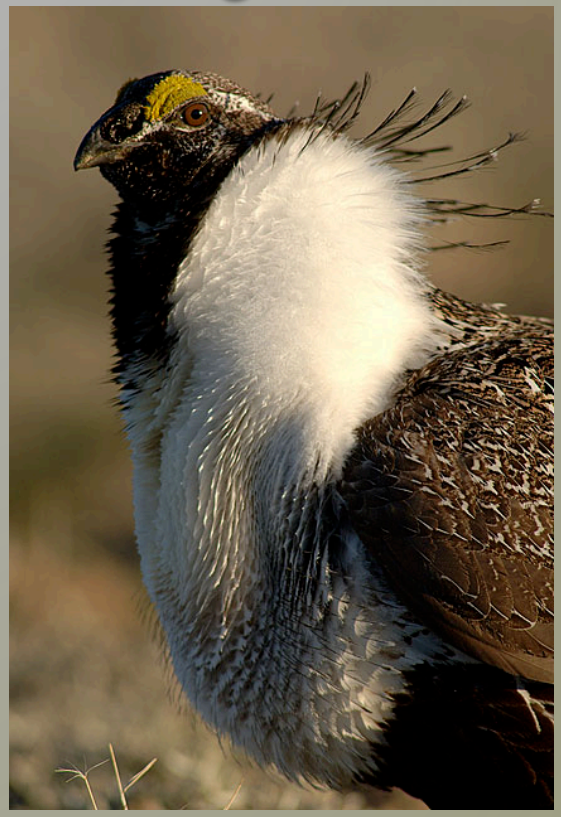

Photo © James Yule
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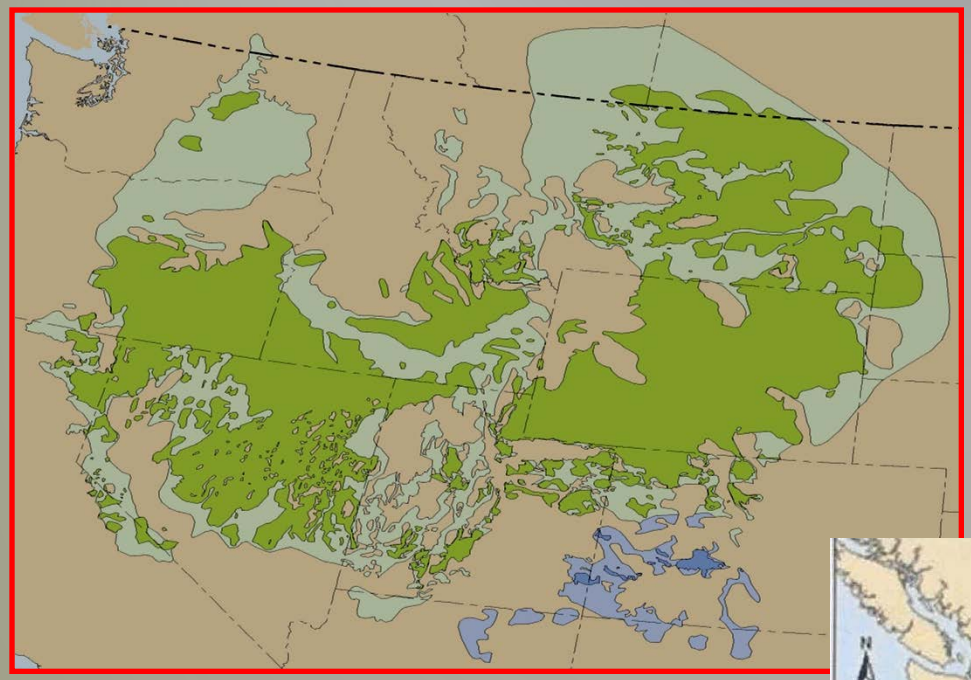
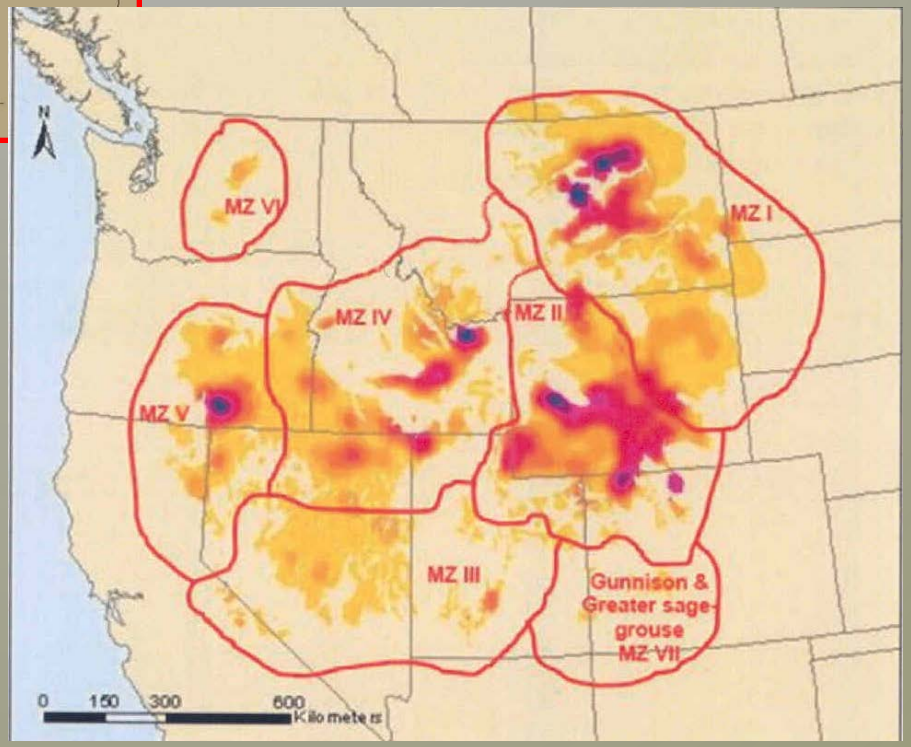
Landscape scale species



Historic and current range

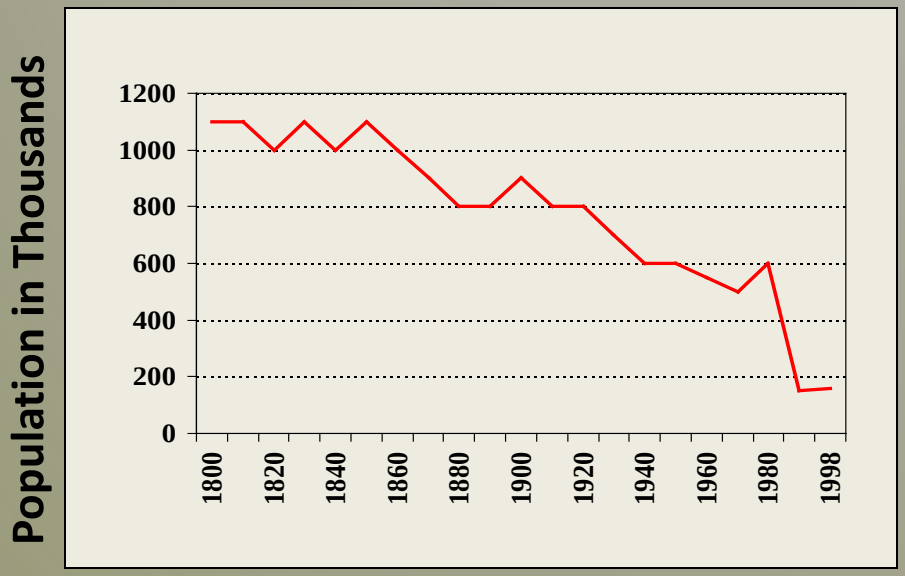


Current sage-grouse distribution and density

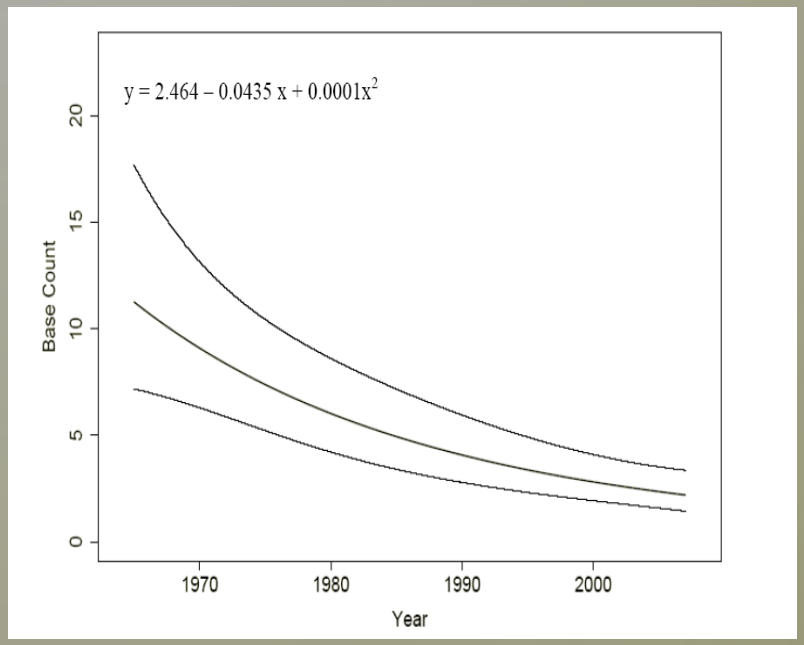
Population Trends

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

Decline of **30%** since 1985



WAFWA 1999 (1800 – 1998)

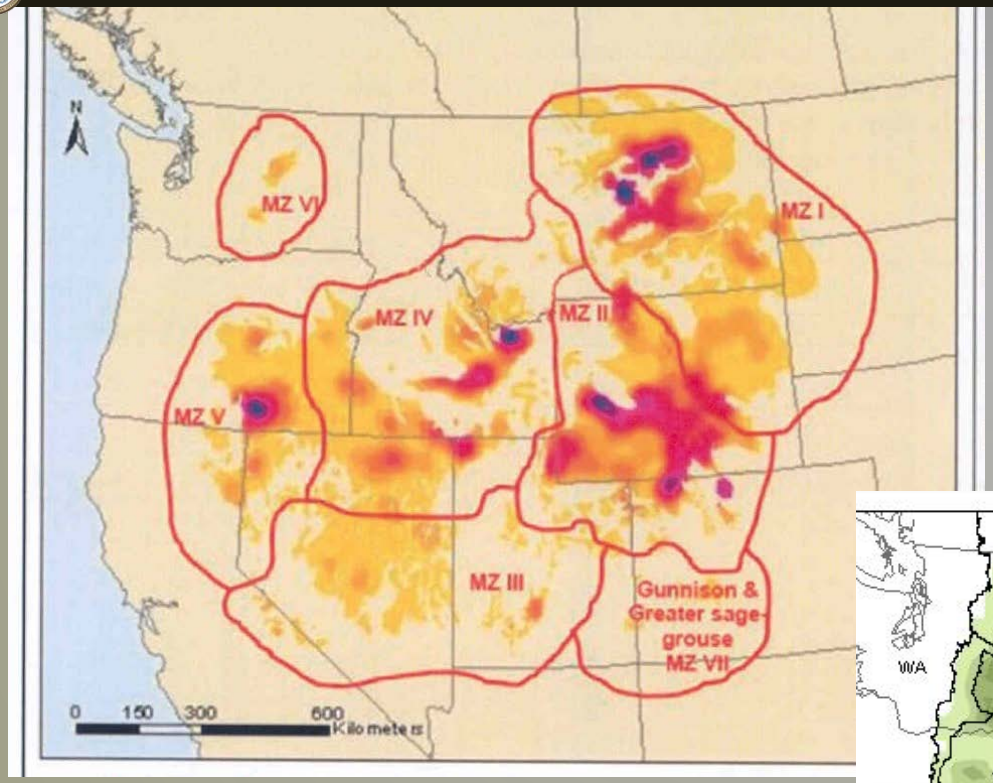


WAFWA 2008 (1965 – 2007)

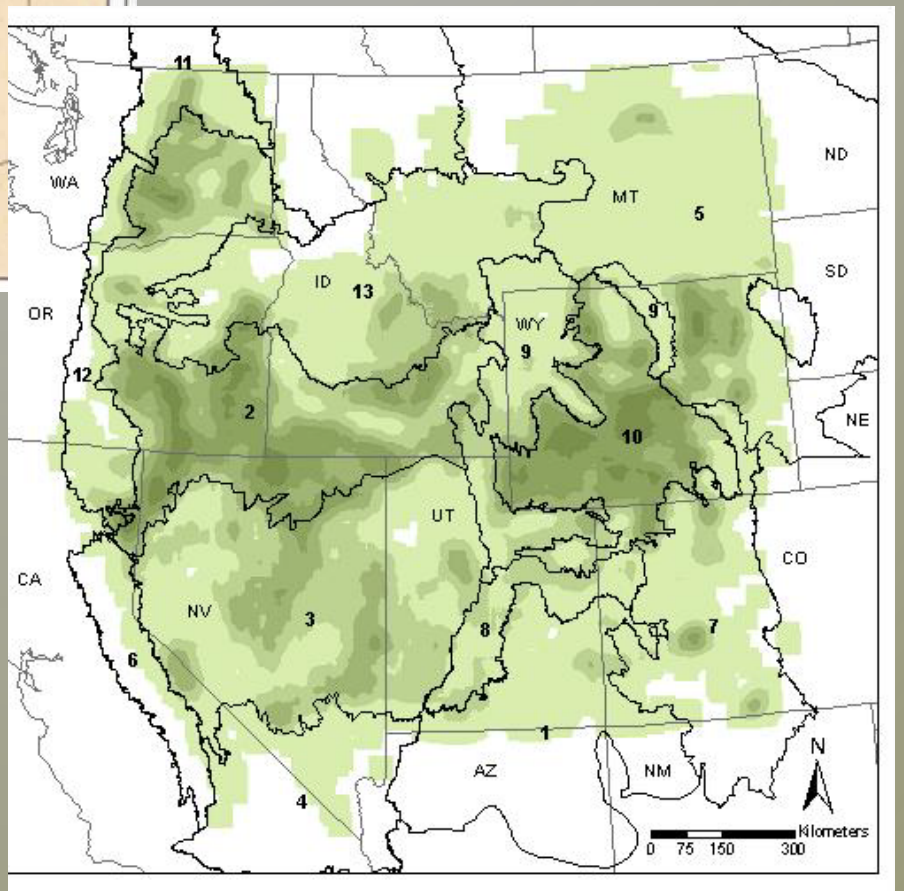
Biological Background Habitat

- 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

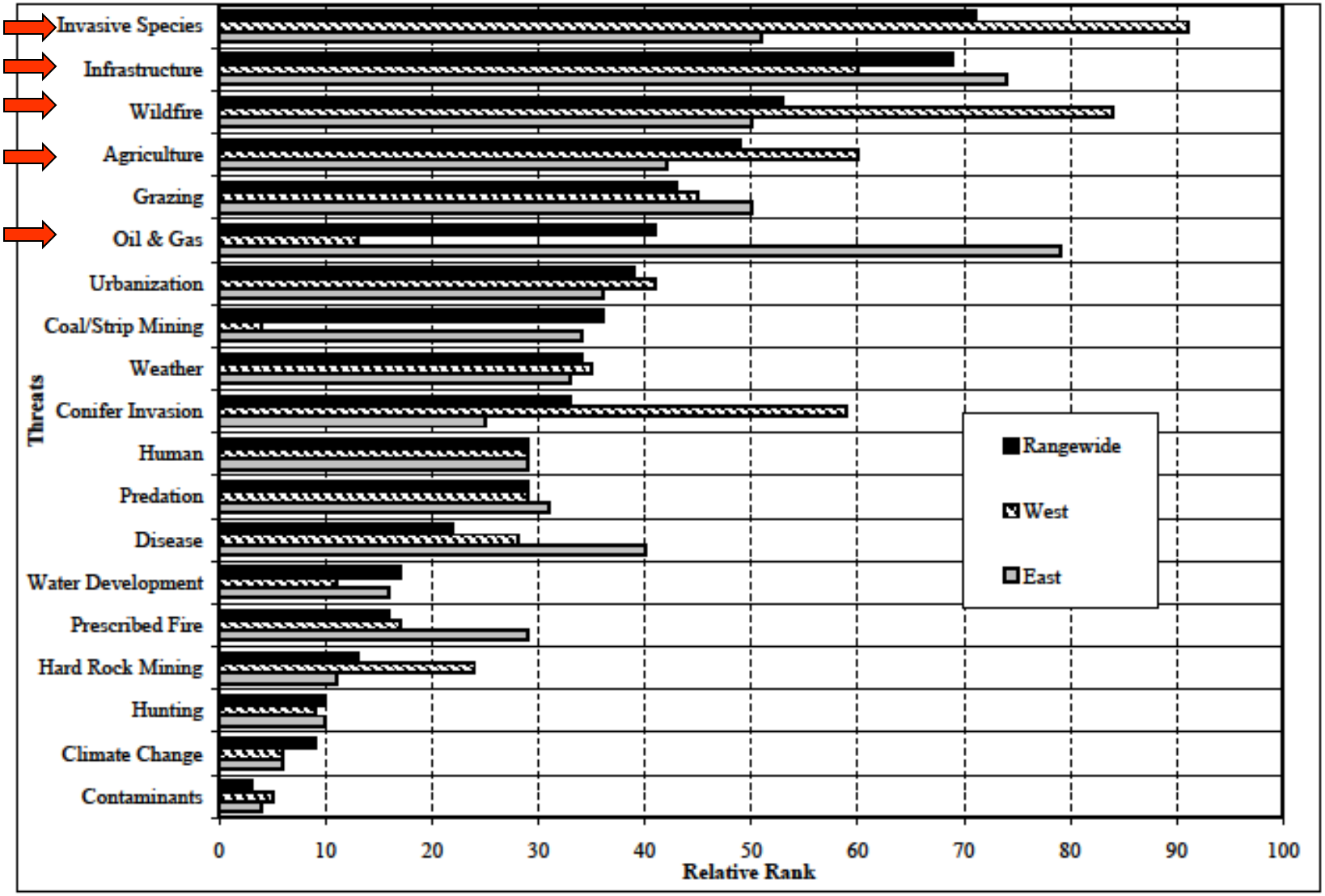
Sage-grouse distribution



Percent landcover in sagebrush



2005 Finding



Changes since 2005

- Threats identified in 2005 remain but with additional new threats;
- Scale and intensity of 2005 threats have increased and are exacerbated by the synergistic effects;
- Much clearer understanding of how threats affect viability;
- Regulatory mechanisms on federal lands (60% of the extant habitat) have not been effective.

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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

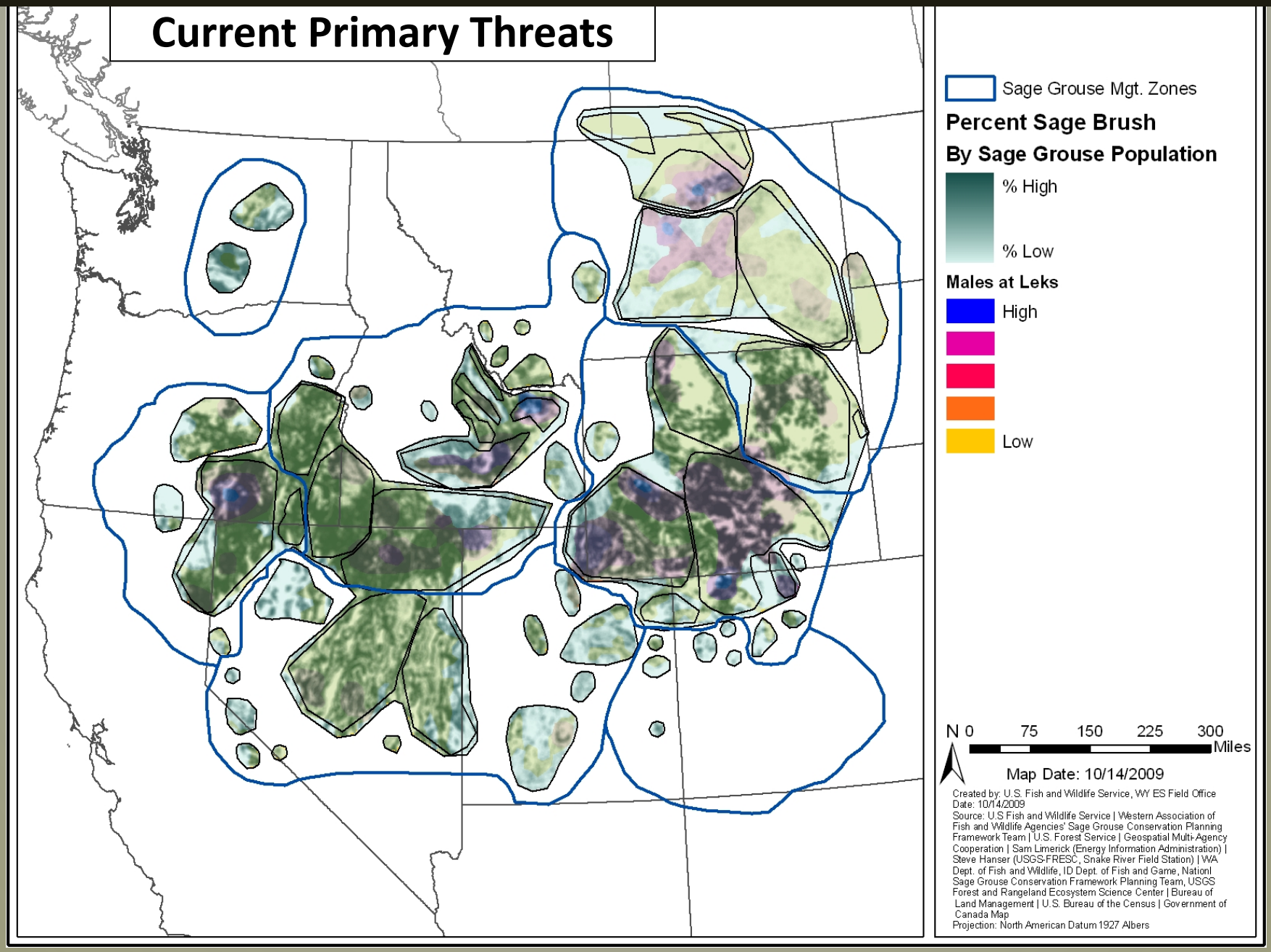
Invasive Species/Fire

- 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



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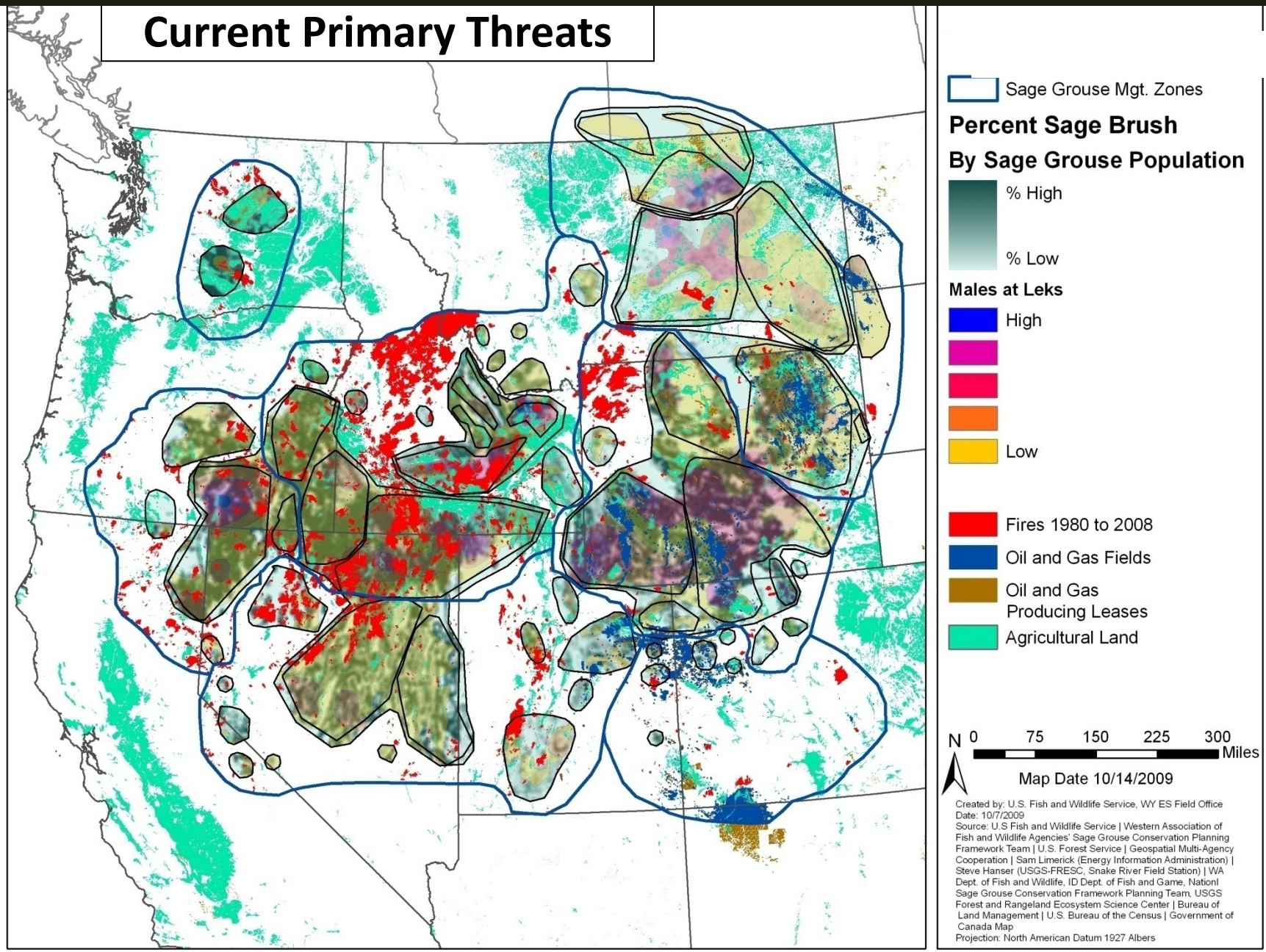

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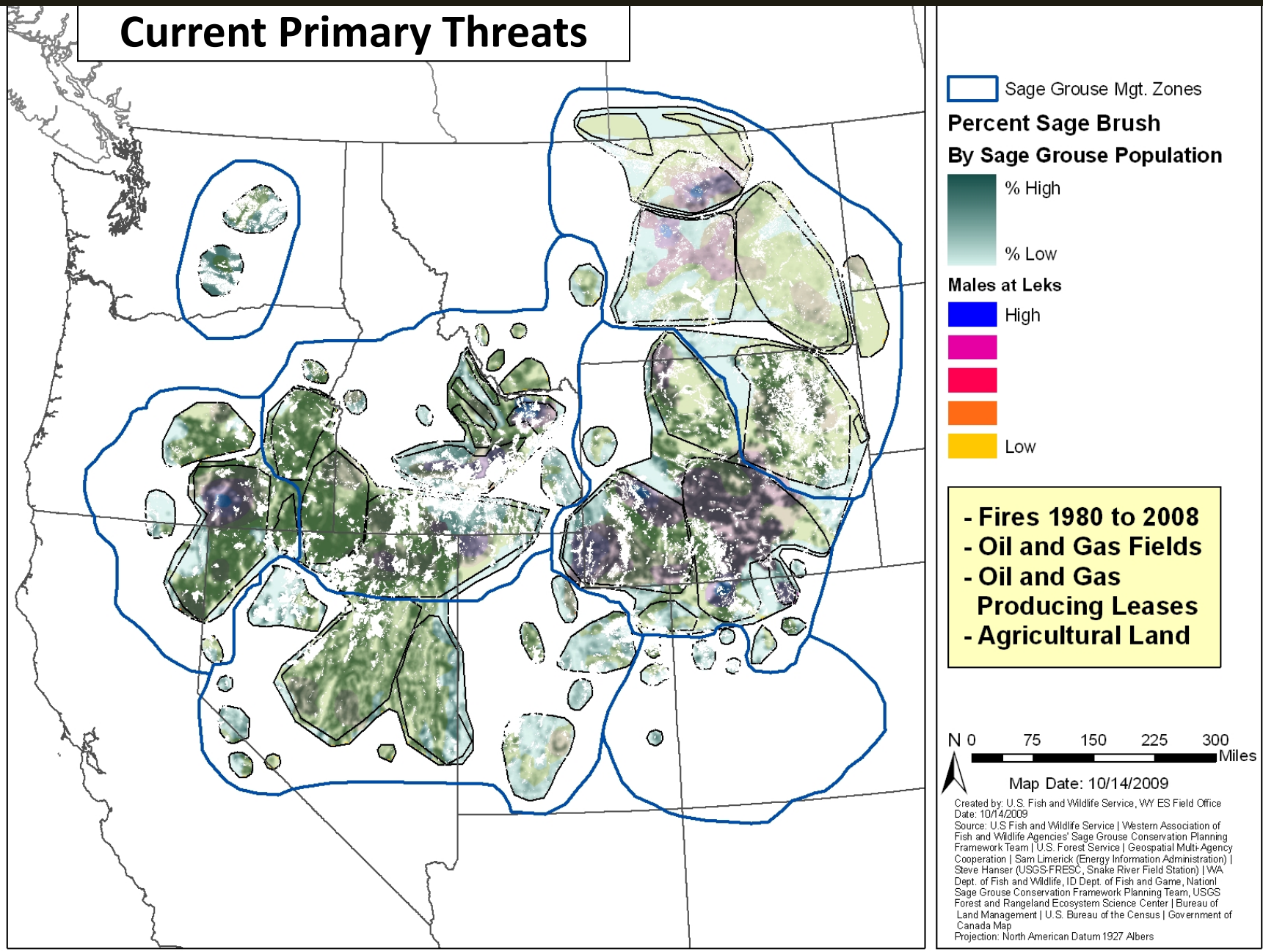
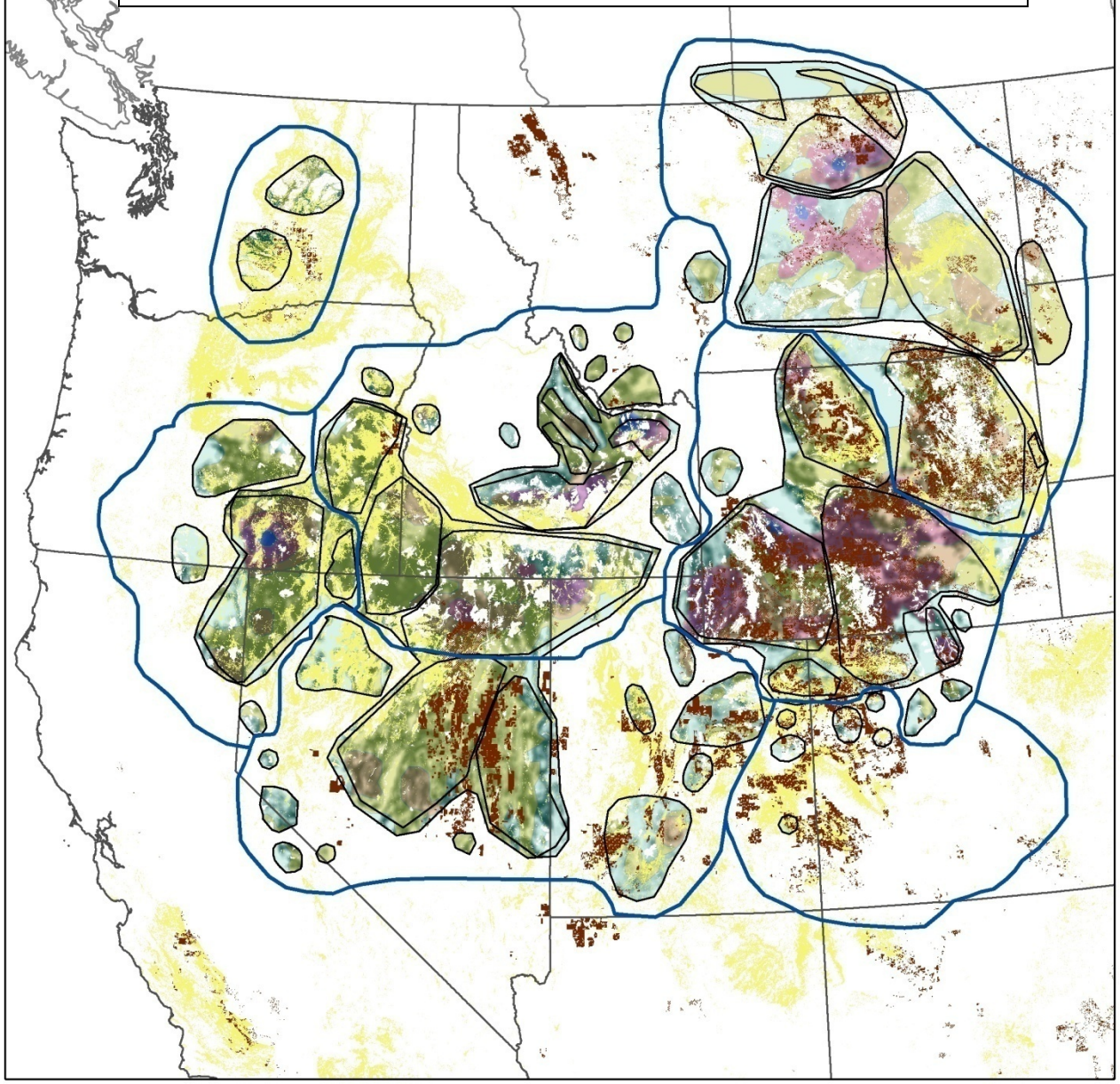


Potential Future of Primary Threats



Sage Grouse Mgt. Zones

Percent Sage Brush

By Sage Grouse Population

% High

% Low

Males at Leks

High

Low

Introduced Annual Grass

Oil and Gas
Non-Producing Leases

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: 10/7/2009
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, Nationl 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

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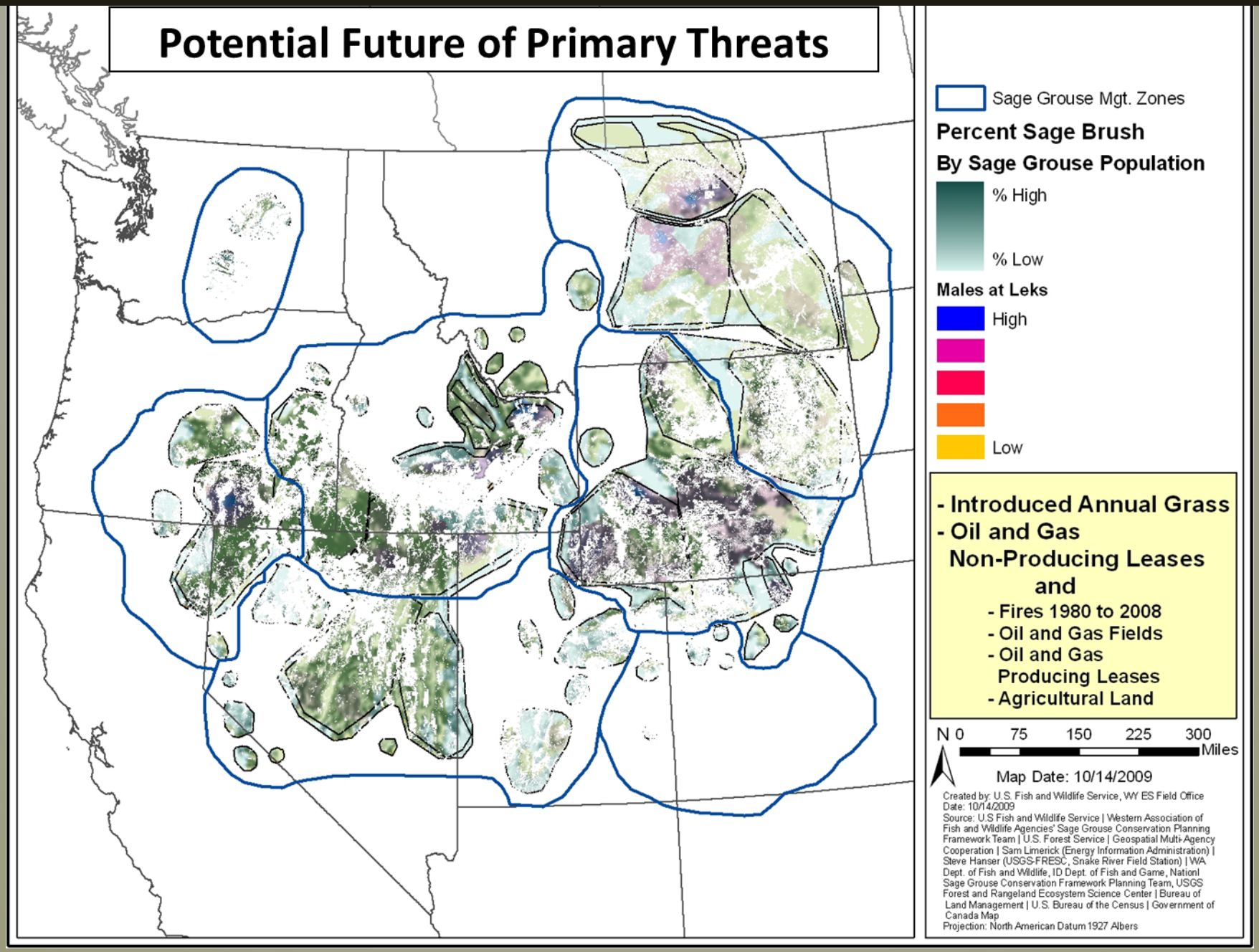
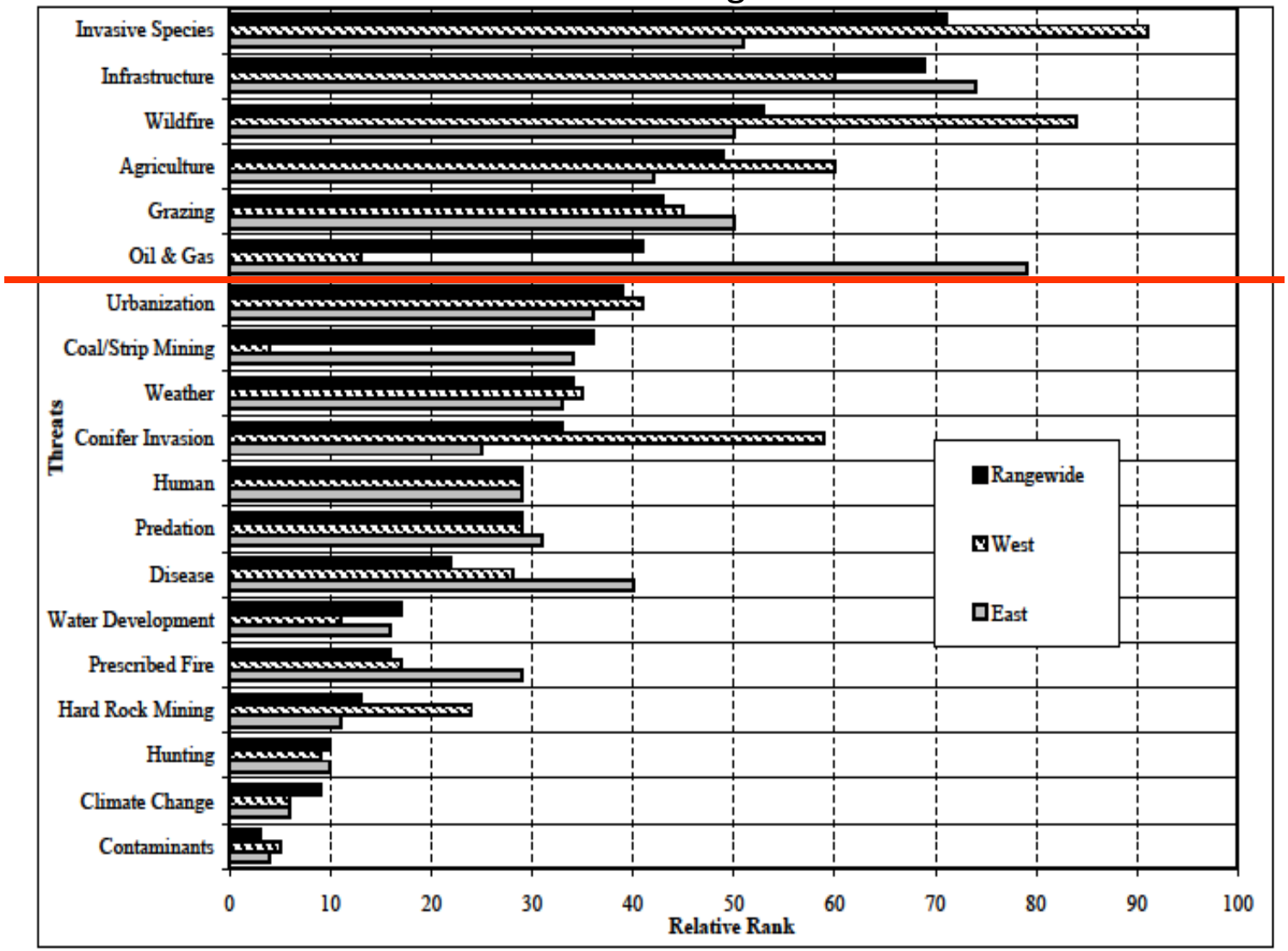
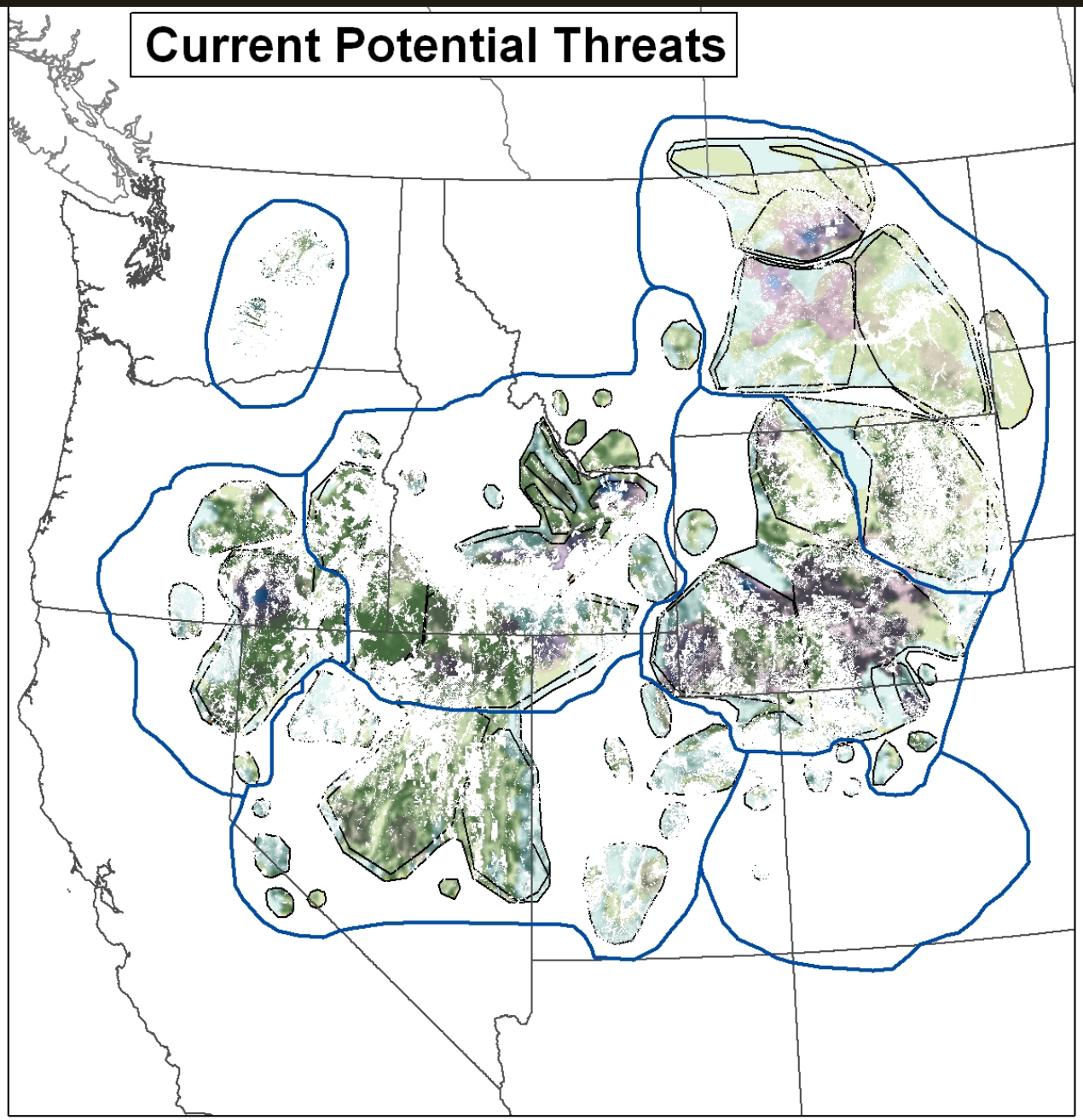


Secondary/Synergistic Threats

2005 Finding



Current Potential Threats



Sage Grouse Threats

Sage Grouse Mgt. Zones

Percent Sage Brush

By Sage Grouse Population

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Males at Leks

High

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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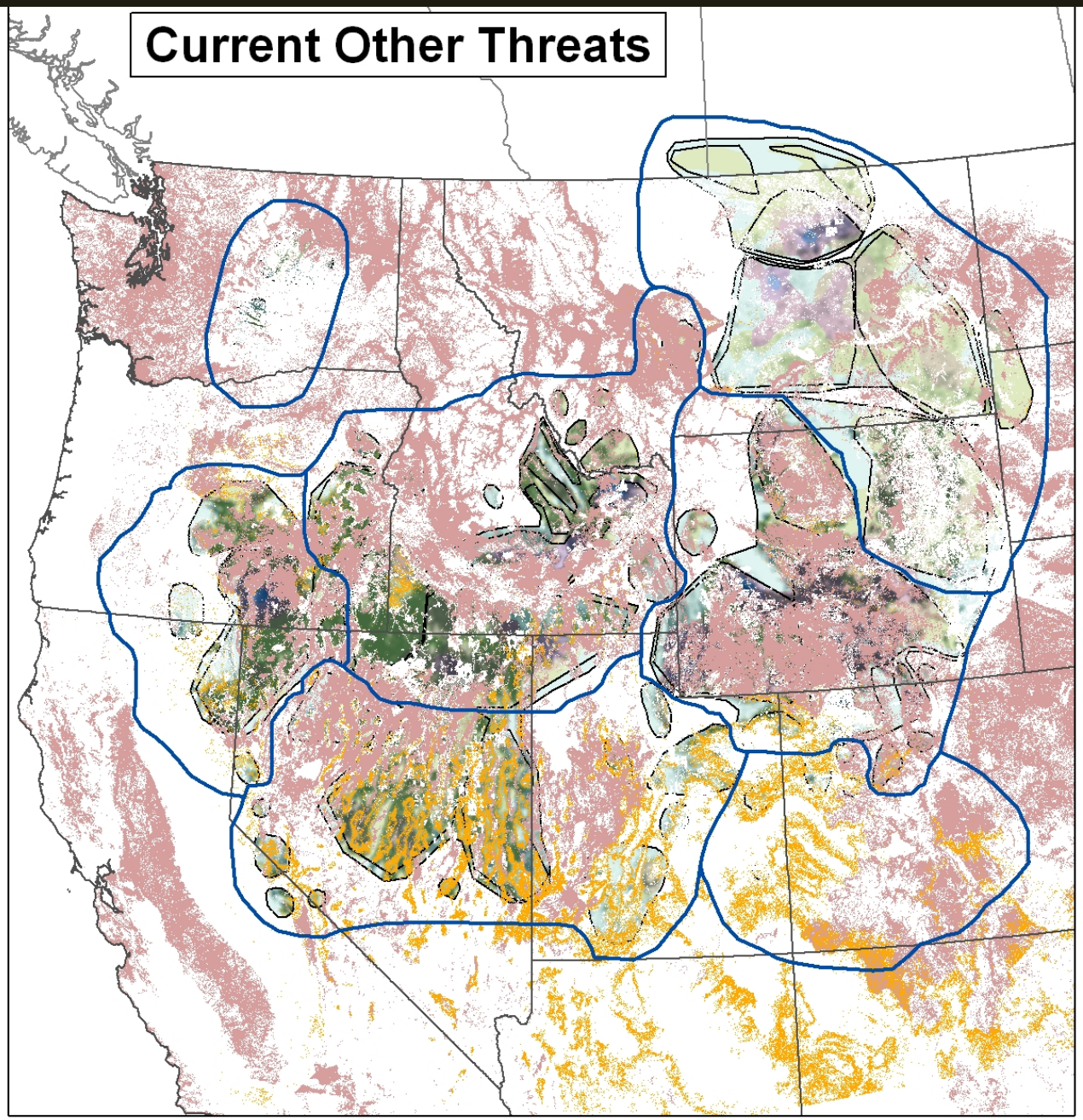
Current Other Threats



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

N 0 75 150 225 300 Miles

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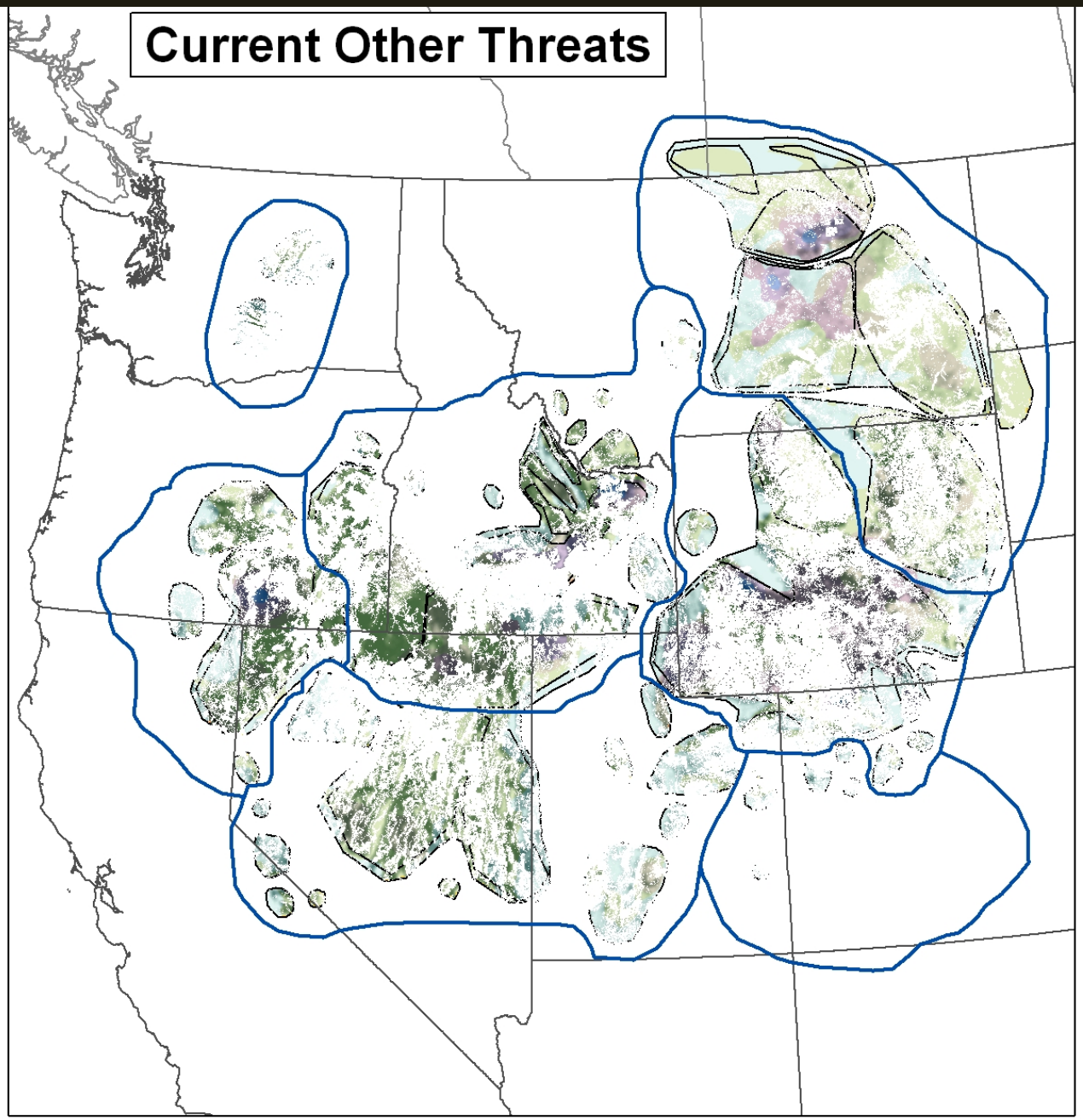

Sage Grouse Threats

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Regulatory Mechanisms

Considered all mechanisms including:

- Federal
- State
- County
- Other conservation efforts

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Regulatory Mechanisms

Current regulatory mechanisms are inadequate to protect sage-grouse habitats

Greater Sage-grouse Finding

March 23, 2010

- Greater Sage-grouse is warranted but precluded; is designated a **Candidate** species under ESA;
- The Bi-State population is a DPS; warranted but precluded
- Primary threats –
  - Habitat destruction/modification
  - Lack of sufficient regulatory mechanisms.

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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.

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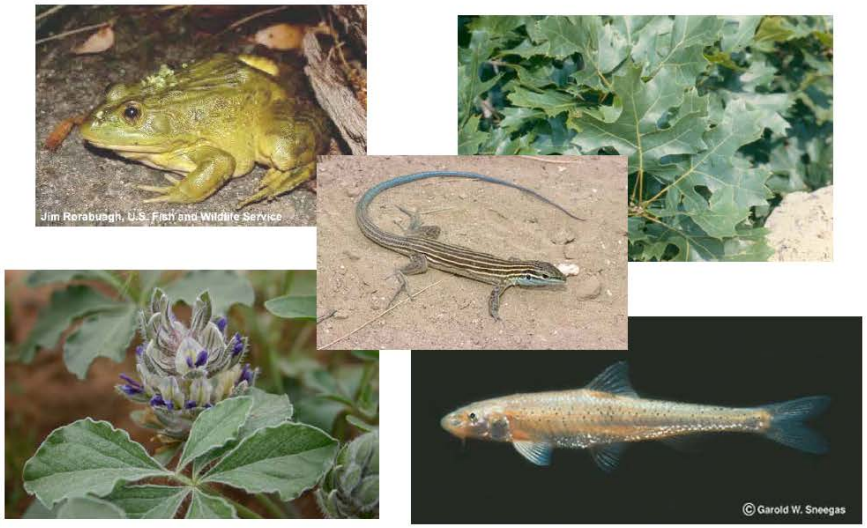
"Mega-petitions"

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

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

FOREST GUARDIANS

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. Tutchton, Esq.

MDL Settlement

May 10, 2011

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Prompted by litigation on failure to make "expeditious progress" on candidate species

REQUIRES us to make a finding by **September 2016** for all candidates (251)

<u>Sage-grouse</u>:

- Bi-State Population – **September 2013**
- Greater Sage-grouse and any other DPSs – **September 2015**

Greater Sage-grouse Conservation Objects Report

All photos credit James Yule

Purpose of the COT

To define the degree to which threats need to be ameliorated to conserve the sage-grouse so that it is no longer in danger of extinction or likely to become in danger of extinction by 2015 for the Greater sage-grouse range-wide.

Photo © Mark Gocke, used by permission

History of the COT

- Governor's sage-grouse task force provided list of actions by Secretary
- Team of state and FWS representatives appointed in March 2012
- Draft report completed on August 1, 2012
- Peer review completed
- Report revised and final report completed in March, 2013

Photo © James Yule, used by permission

General Conservation Objectives

- Stop population declines and habitat loss
- Implement targeted habitat management and restoration
- Develop and implement state and federal conservation strategies and incentive-based conservation actions and regulatory mechanisms

General Conservation Objectives

- Develop and implement proactive, voluntary conservation actions
- Develop and implement monitoring plans
- Prioritize, fund and implement research to address uncertainties

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Threat Amelioration

- Objectives focus on each specific habitat threat
- Specific goals tied to 2006 WAFWA Conservation Strategy:

  ★ Stable to increasing long-term population trends

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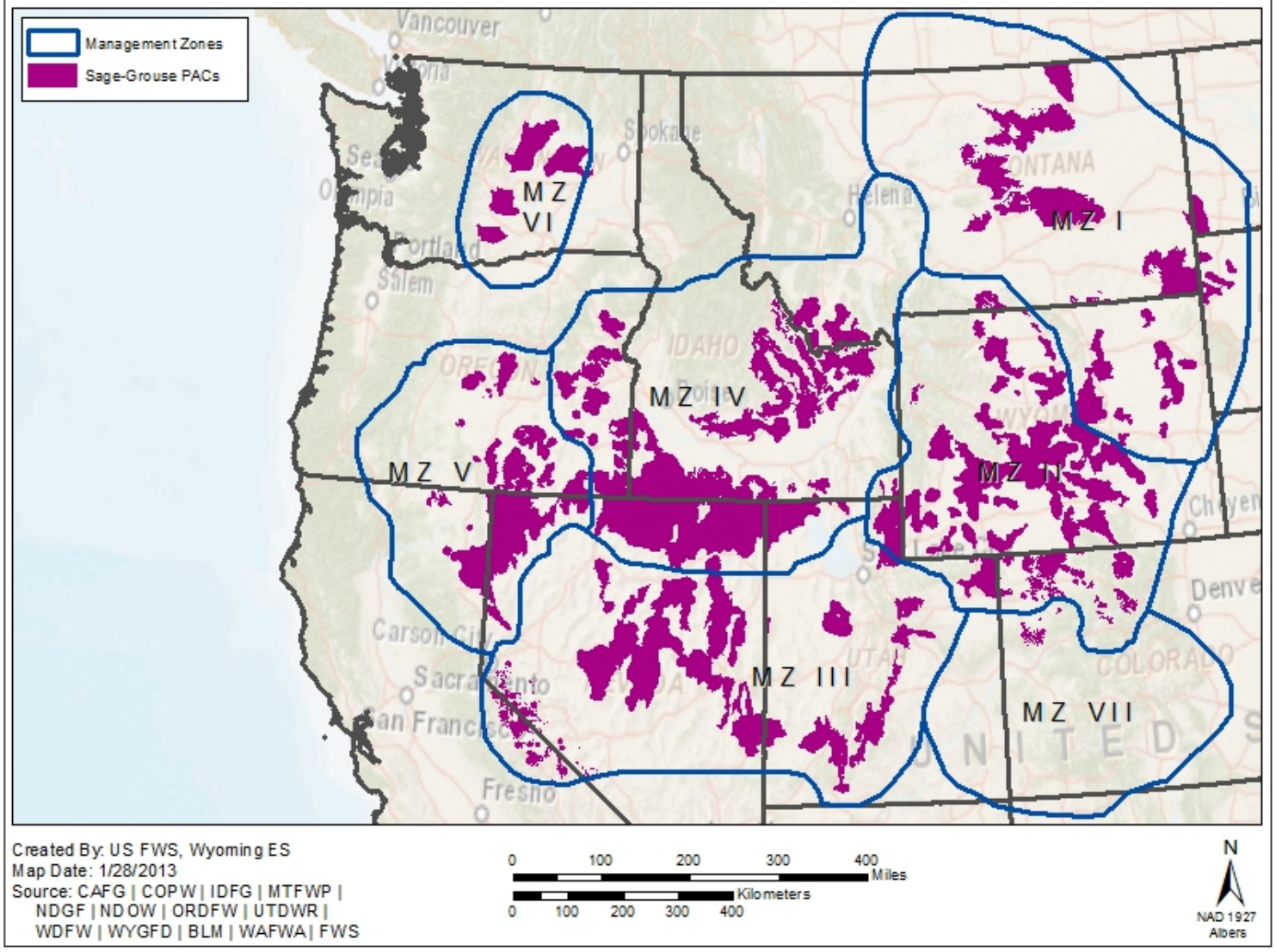
- ***Conservation Objective***: Retain and restore healthy native sagebrush plant communities within the range of sage-grouse.

- ***Conservation Measures***:
  - Restrict or contain fire within the normal range of fire activity (assuming a healthy native perennial sagebrush community), including size and frequency, as defined by the best available science.
  - Eliminate intentional fires in sagebrush habitats, including prescribed burning of breeding and winter habitats.

Priority Areas for Conservation



Application

- Need to achieve the conservation objective
  - May just be a plan in place by the listing determination date
  - Must meet PECE, or its intent

- How should make sense based on local conditions and legal or cultural parameters.

Photo Mark Gocke

Application

- Discussion of some specific conservation objectives also provides options for achieving the objective
  - Not mandatory, but provided as examples of what could be done
- Applies to habitats inside and outside PACs

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Photo © James Yule, used by permission

Questions?