

The 2015 Greater sage-grouse Listing Decision



Presented by Jodi Bush, Field Supervisor
Montana Ecological Services Office
Helena, Montana

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Presentation Contents

- Part I. Species Overview
 - General biological background
 - Range (Historic and Current)
 - Threats
 - Mitigation Framework
- Part II. Listing Process
 - Status Review and Analysis
 - Potential Outcomes
 - Timing

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

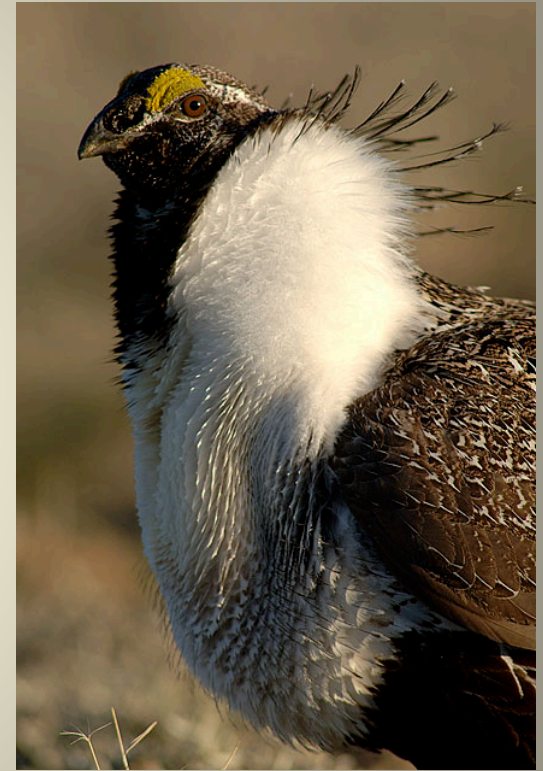


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Landscape scale species

Biological Background -Habitat



- Sagebrush is essential
 - 18 sp; not all provide equal habitat for grouse
 - Also need a healthy understory, mesic areas
- Long restoration periods: 20 to > 50 years depending on species and conditions
- Fire kills most sagebrush
- Seed banks do not persist
- Still trying to learn how to restore or “fix” it

Leks

Form where females are abundant

- Indicative of good nesting habitat
- 85% within 6 mi of wet habitats

Changes in leks reflect changes in:

- Habitat
- Female abundance
- Loss of recruitment
- Health of sagebrush ecosystem

Due to site fidelity, impacts as measured by lek attendance may take 2 to 10 years to be apparent (typically 3 to 4 years)



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Habitat Selection

- Select seasonal habitats at landscape scale
Fine scale habitat selection is secondary
- Once successful, high site fidelity
- Seasonal habitats have different components
(breeding, nesting, brood-rearing, wintering)
- All seasonal habitats are important

Estimated Declines

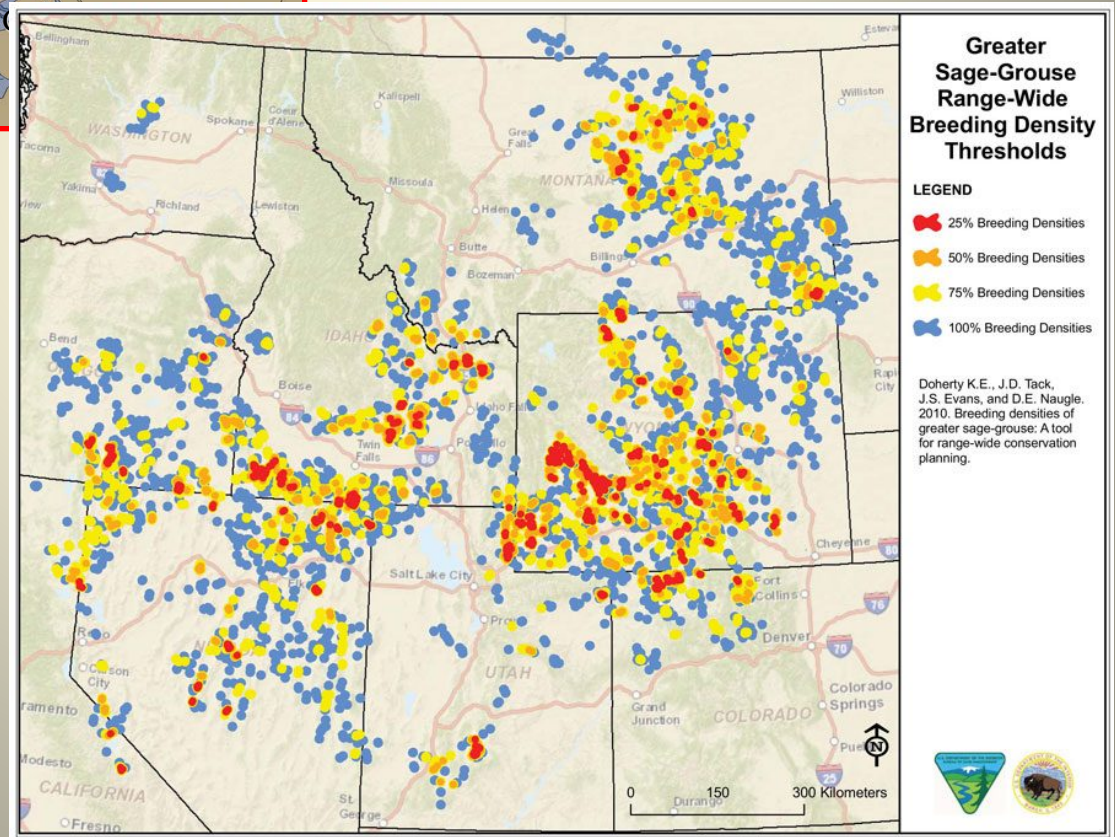
- Estimated decline of 80% + from pre-settlement numbers (?)
- Estimated decline of 30% since 1985
- Occupies 56% of historic range



Historic and current range

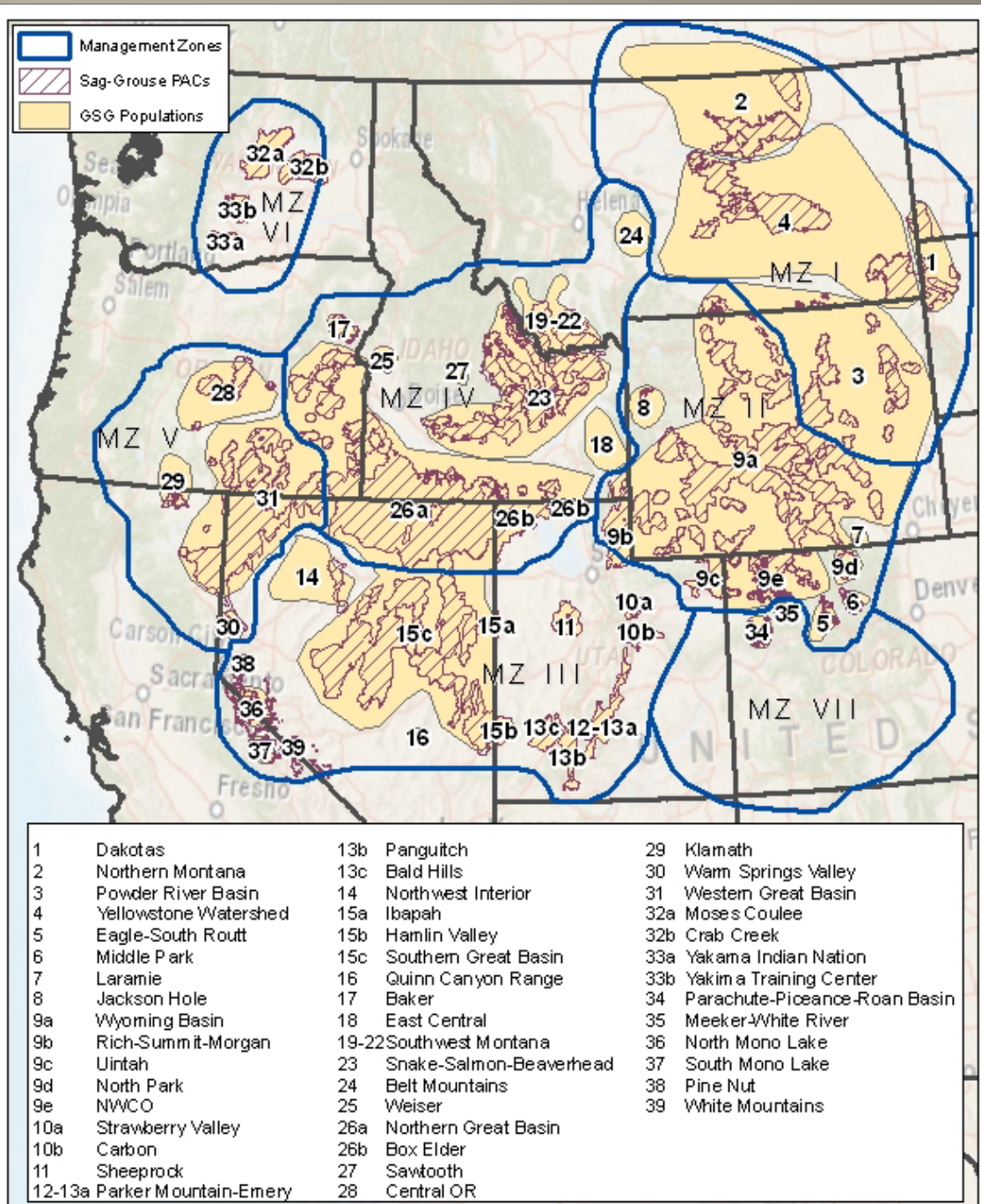


Sage-grouse Breeding density



Sage-Grouse Management Zones and Populations

- 7 Management Zones
- 47 Populations
- MT has 3 MZs (I, II, and IV)
- MT has 7 populations
 - Dakotas
 - Yellowstone Watershed
 - Powder River Basin
 - Wyoming Basin
 - Northern Montana
 - Belt Mountains
 - SW Montana



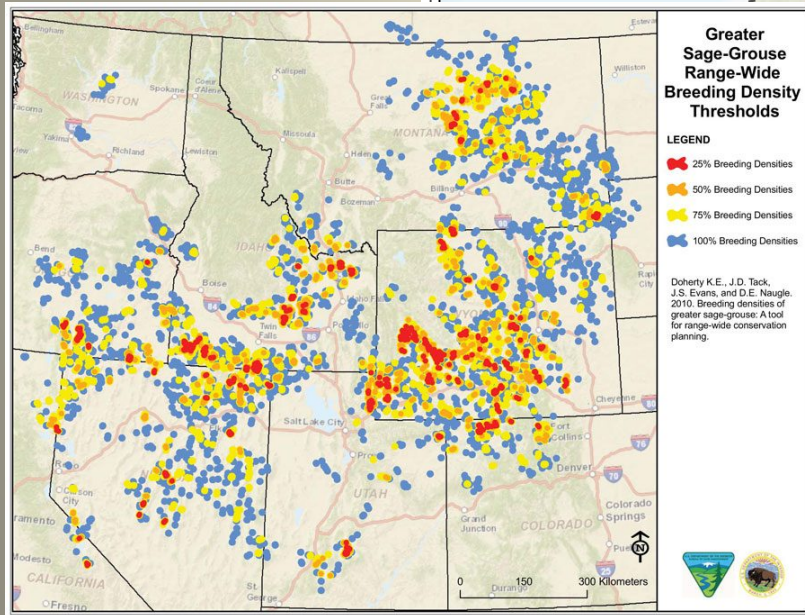
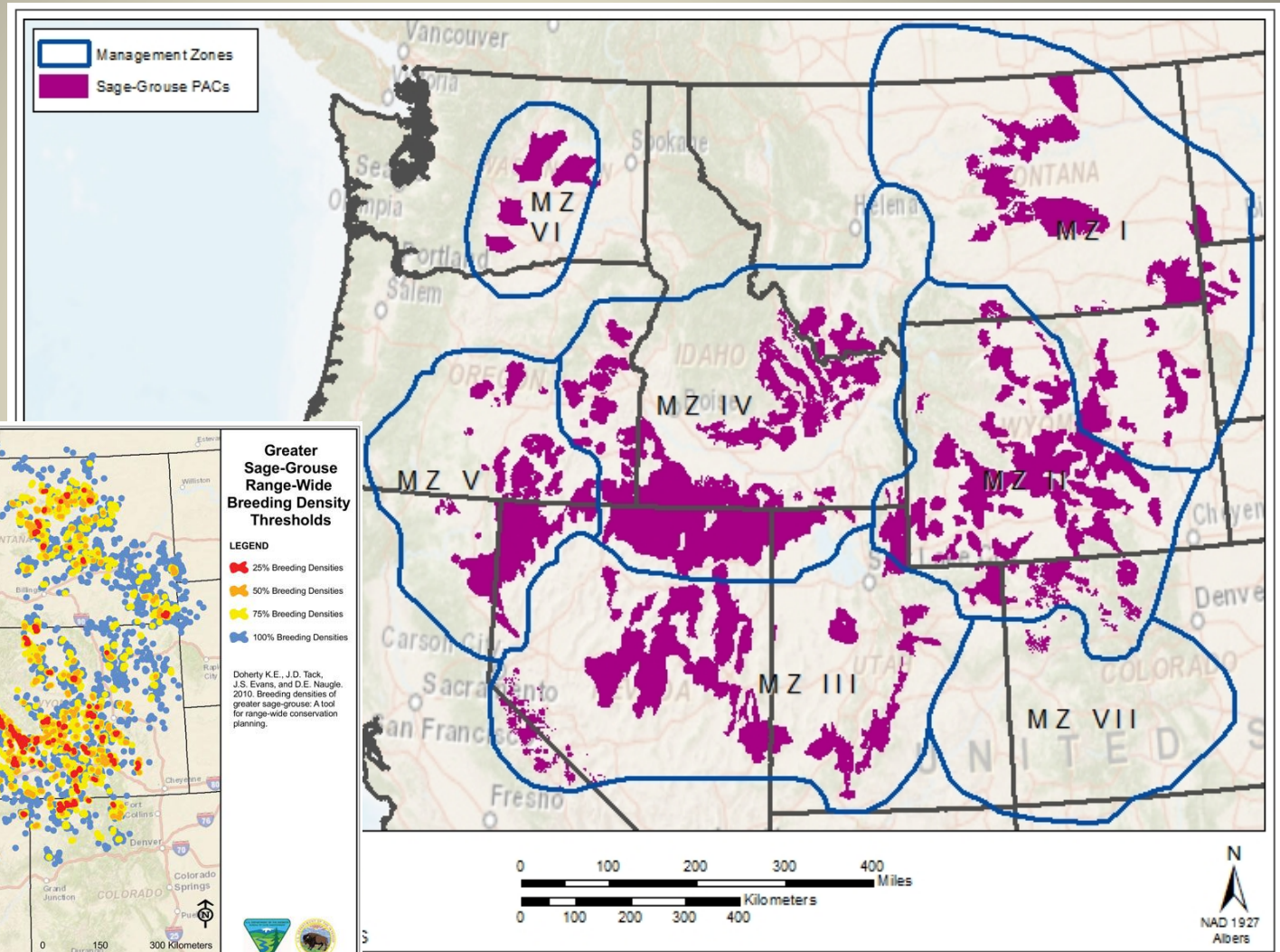
Feb 2013 Conservation Objectives Team (COT) Report

- Identifies Priority Areas for Conservation (PACs)
- Identifies threats by sage-grouse population (7 in MT)
- Threat amelioration strategies within and outside of PACs
 - What has to happen, not how
- Other components for successful conservation

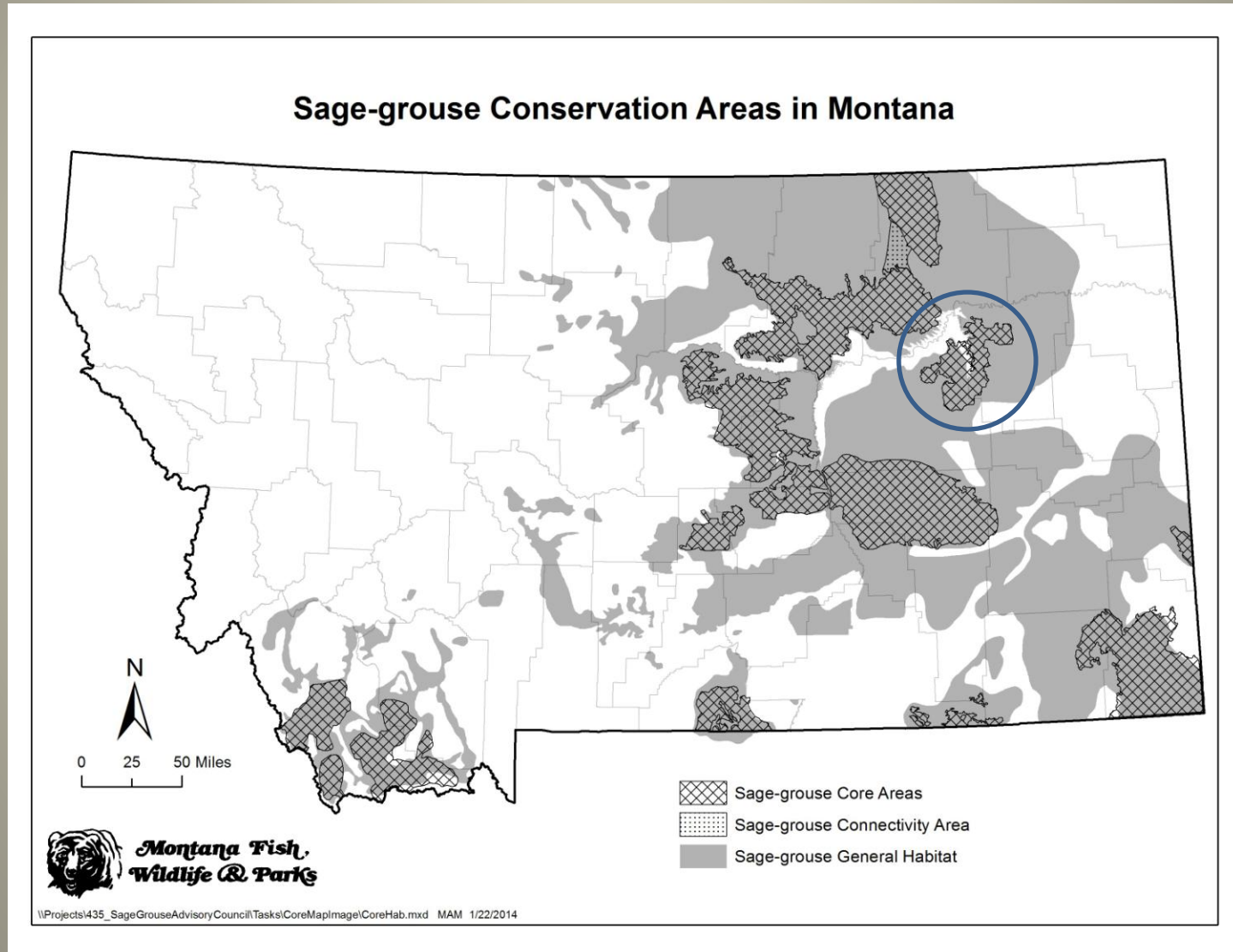


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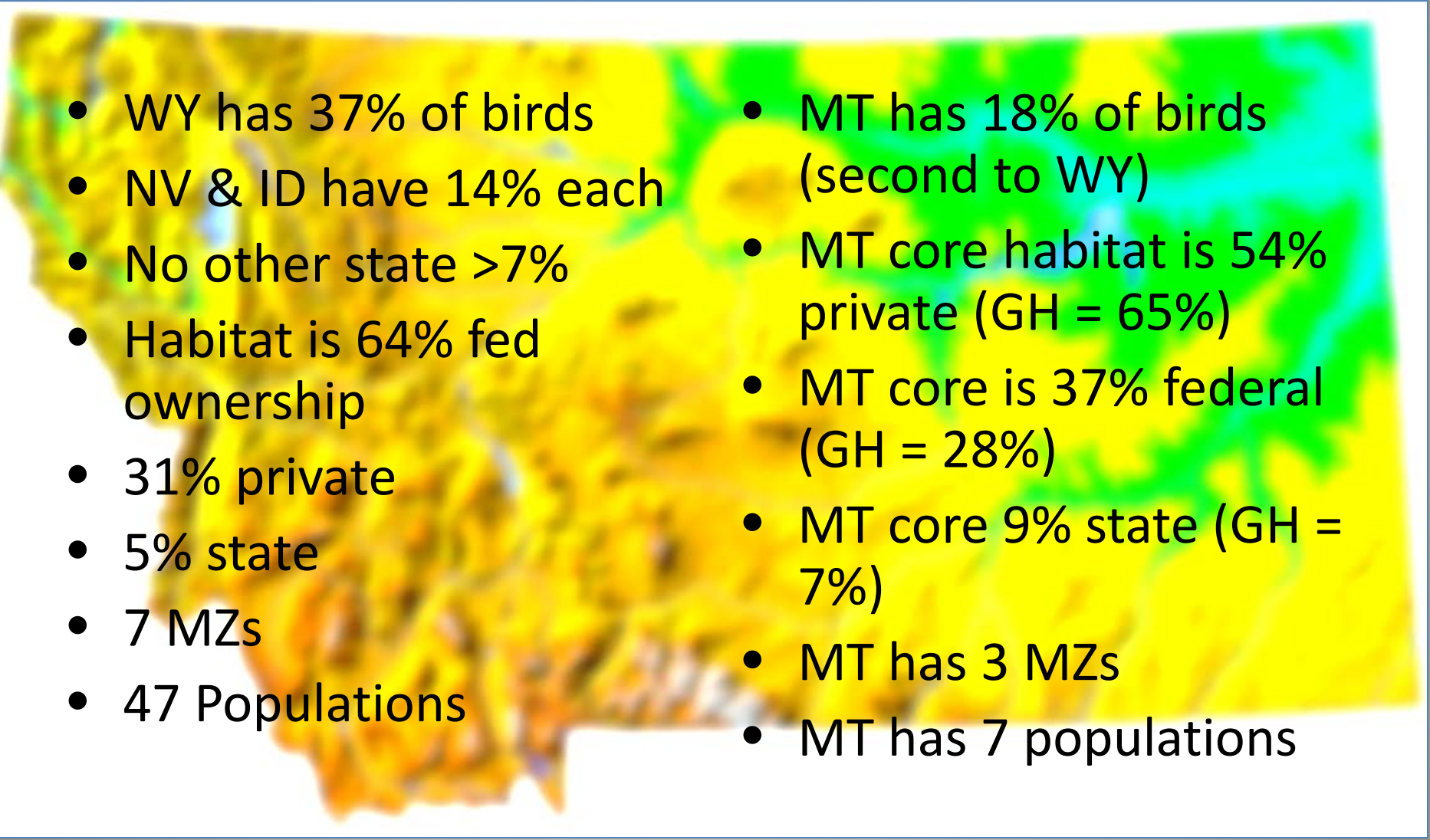
Priority Areas for Conservation



Montana PACs/Core Areas



Montana Context

- 
- WY has 37% of birds
 - NV & ID have 14% each
 - No other state >7%
 - Habitat is 64% fed ownership
 - 31% private
 - 5% state
 - 7 MZs
 - 47 Populations
 - MT has 18% of birds (second to WY)
 - MT core habitat is 54% private (GH = 65%)
 - MT core is 37% federal (GH = 28%)
 - MT core 9% state (GH = 7%)
 - MT has 3 MZs
 - MT has 7 populations



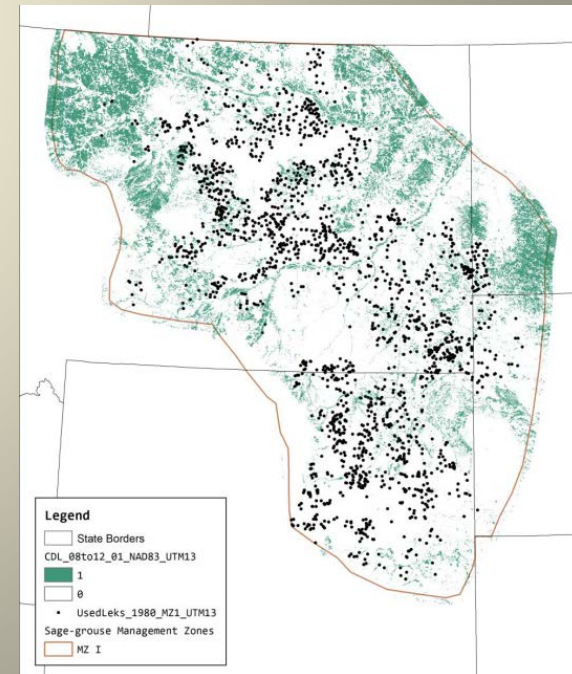
Primary Threat Habitat Fragmentation

“Fragmentation of sagebrush habitats is a key cause, if not the primary cause, of the decline of sage-grouse populations”



Energy Development, Invasive Species/Fire, Infrastructure, and Agricultural Conversion

Loss of habitat, functional habitat loss, reduced productivity and survival, support for secondary impacts, etc.



COT Report Local and Widespread Threats

Range-wide Threats (12):

- Fire
- Invasive Plants
- Energy Development
- Sagebrush Removal
- Improper Grazing
- Wild Equid Management
- Pinyon-Juniper Expansion
- Agricultural Conversion
- Mining
- Recreation
- Ex-Urban Development
- Infrastructure

Primary Montana Threats:

- Energy Development
- Agricultural Conversion
- Infrastructure
- Invasive Plants
- Mining
- Improper Grazing



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Greater Sage-Grouse

Range-Wide Mitigation Framework

Purpose

- Factors FWS is likely to consider when evaluating efficacy of mitigation in reducing threats
- Guidance only
- State & Federal agencies, others



The Listing Process Under the Endangered Species Act



- Under the ESA, required to determine whether any *species* is an *endangered* or *threatened* species because of any of the 5 listing factors...



Listing Factors

- Factors are listed in section 4(a)(1) of the Endangered Species Act but not defined
- Analysis includes a temporal component (present threats and threats anticipated the near future)
- The analysis also considers to what degree factors affect the life history functions of the species at the individual, population or species level
- A species need only meet one of the listing criteria to be considered for listing

Listing Factors (categories of threats)

- 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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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 fall of 2014.

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

Status review includes a threat analysis

Describes the pertinent threat. Explains how a threat affects the species:

- Exposure and response
- Severity and immediacy of the threat
- Temporal evaluation of threats (now or future)
- Consider how conservation efforts are addressing the threat
- One factor by itself may not pose threat, but in combination with other factors, it rises to level of a threat.

Threat Analysis for Regulatory Mechanisms (Factor D)

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



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

Listing Process and Decision Analysis

- Current Status and Trends
- New Scientific Information
- Threats Analysis (factors...)
 - Focus on major threats
 - By appropriate scale (PAC, Population, Range)
 - Using models and expert elicitation
- Assessing Conservation Actions
 - Conservation Efforts Database
 - Qualitative Assessment

Listing Process and Decision Analysis

- 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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Status Review Outcomes

- Endangered
- Threatened
- 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

Timing for Sage Grouse Status Review

October

- Initial Collection: requesting initial data call responses by October 31, 2014

November

December

- “Conservation Efforts Database Closes” Spatial data and narratives related to conservation will be captured in the database until December 2014.

January

February

Spring
2015

- Review and Analysis of Information: We will review literature, submitted information and existing models.

September
2015

- Information Synthesis
- Determination Due: September 30, 2015



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Questions?