

The 2015 Greater sage-grouse Listing Decision



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Presentation Contents

- Species Overview
- General biological background
- Range (Historic and Current)
- Threats
- Listing Process (why, what, how and when)
- Take
- Consultation
- Non Federal Programs for Conservation
- Critical Habitat

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

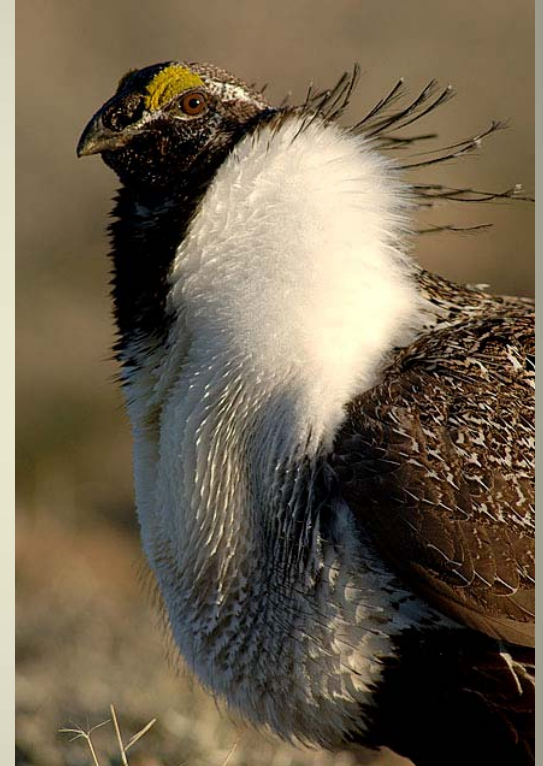


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Landscape scale species

Biological Background -Habitat



- Sagebrush is essential
 - 18 sp; not all provide equal habitat for grouse
 - Also need the healthy understory
- Long restoration times: 20 to > 100 years depending on species and conditions
- Fire kills 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

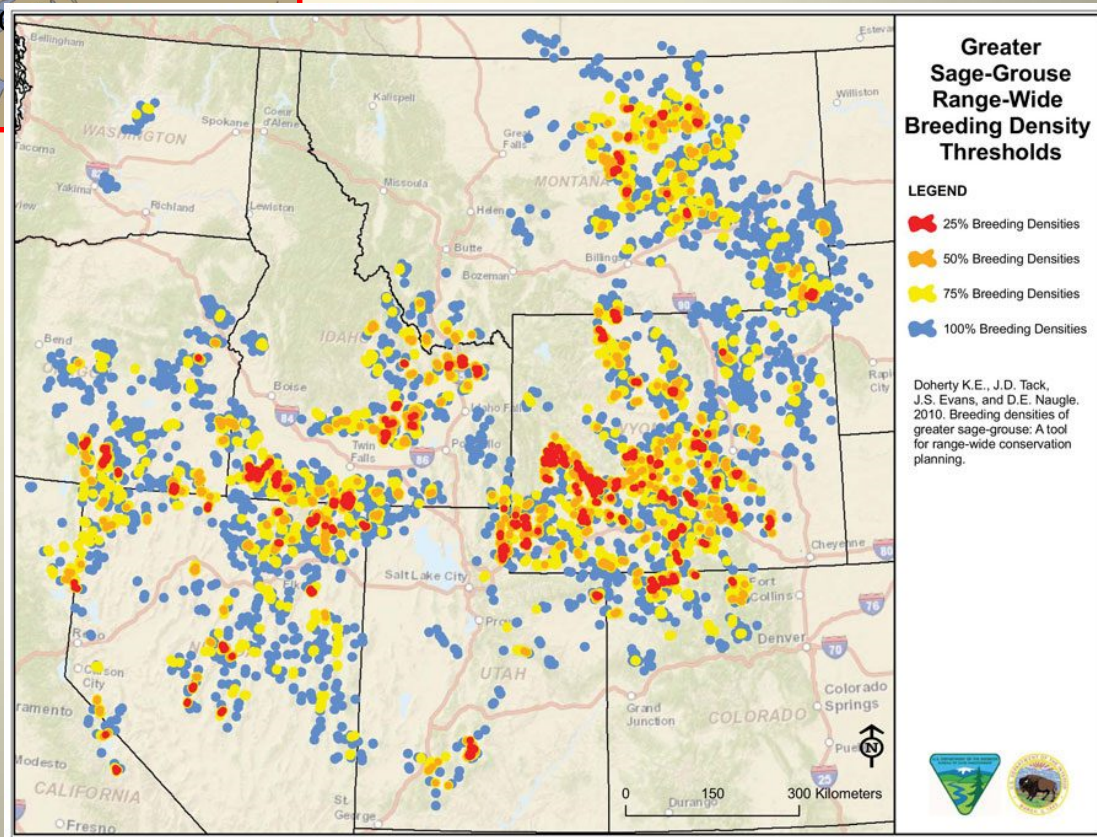
- Estimated decline of 80% + from pre-settlement numbers (?)
- Estimated decline of 30% since 1985
- Loss of 56% from historic range





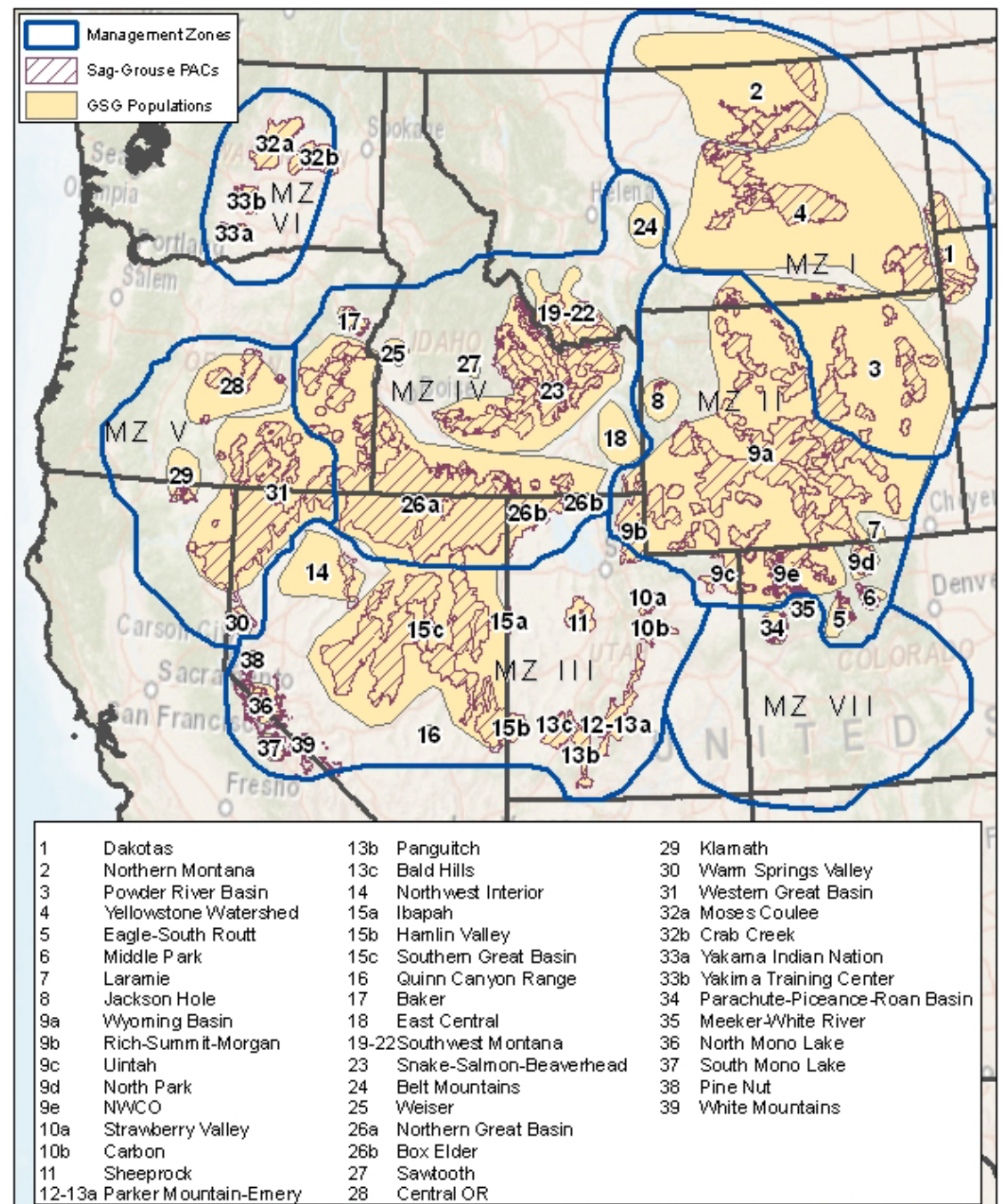
Historic and
current range

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



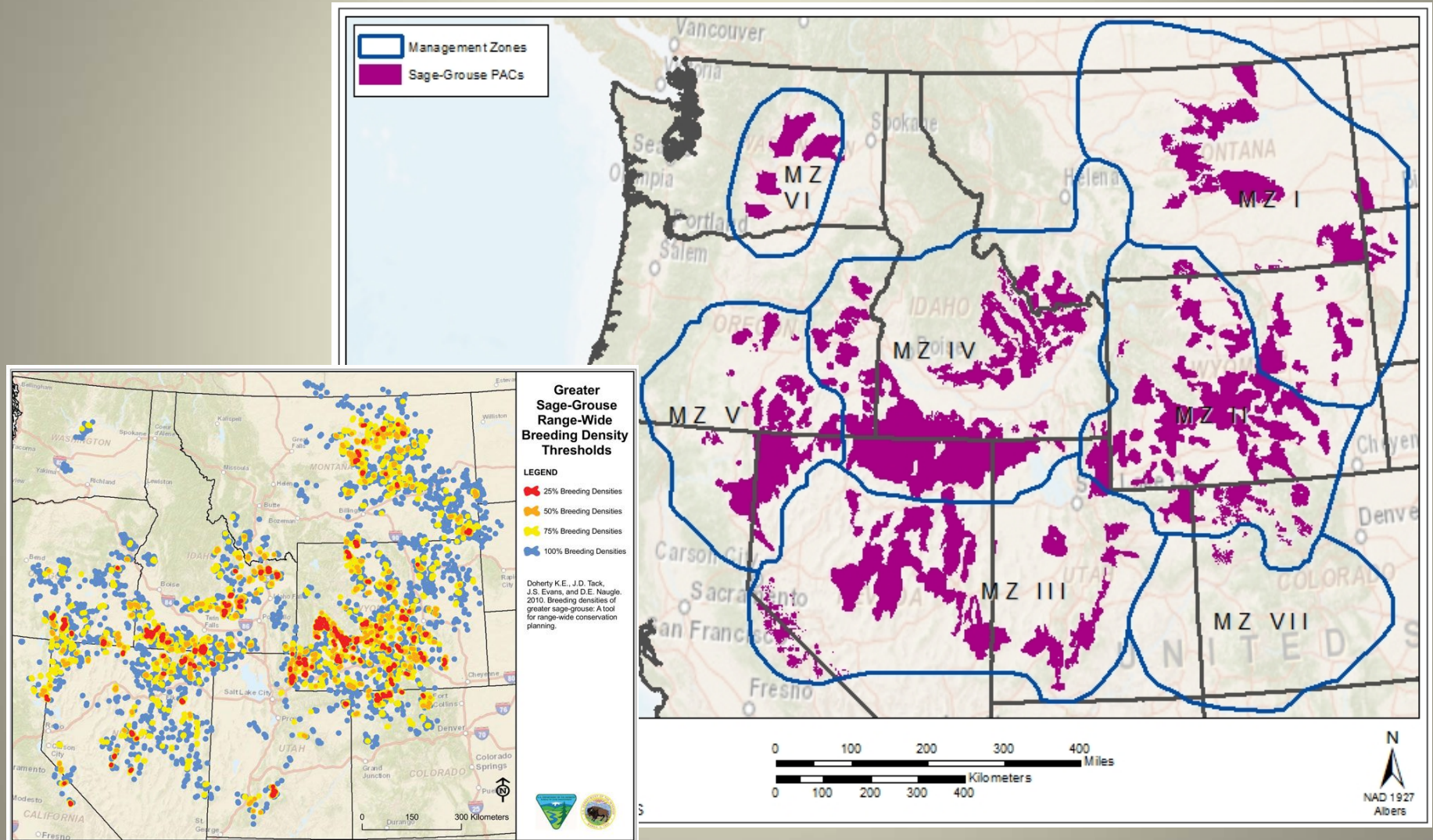
Feb 2013 Conservation Objectives Team (COT) Report

- 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

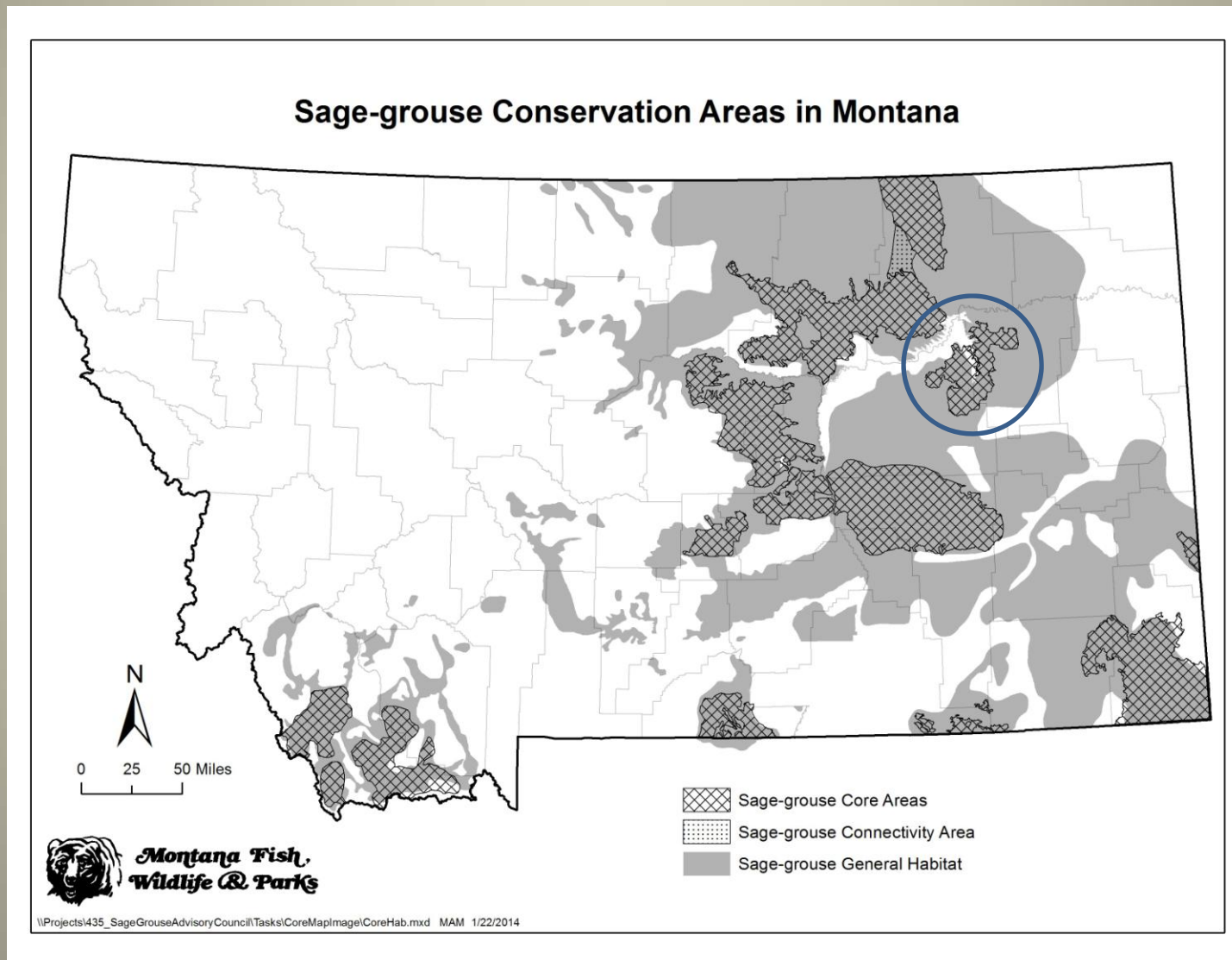


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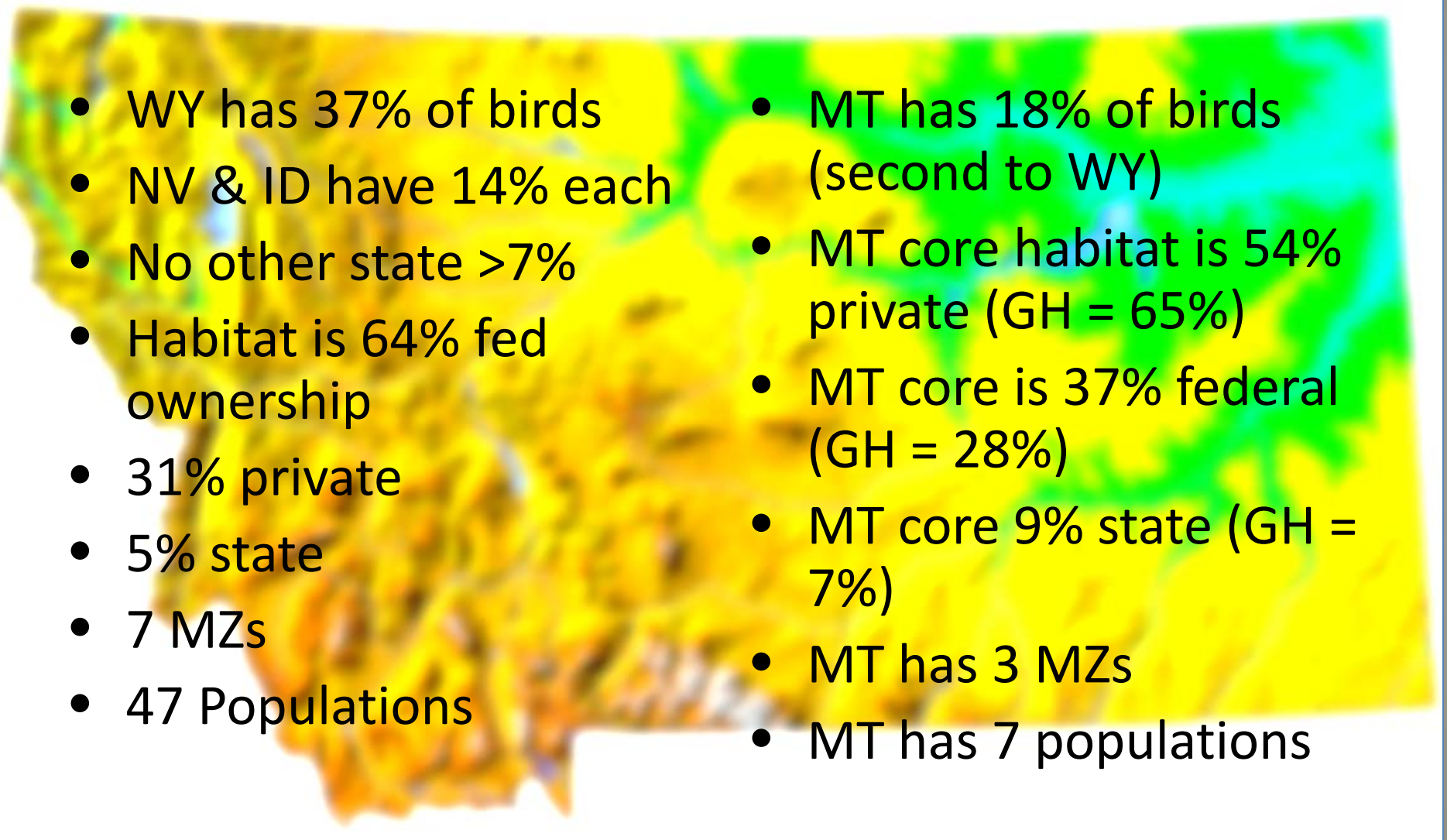
Priority Areas for Conservation



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

Energy Development (& infrastructure)

Most effects with >1 well pad per sq mi
Most fields 16-128 pads per sq mi



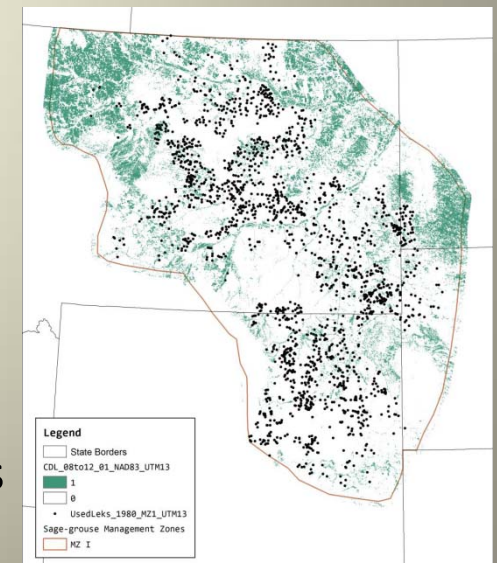
Invasive Species/Fire

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

Cropland Agriculture (& infrastructure)

19% cropland in MZ 1
50-75% lek persistence drop at 24-36%
cropland w/in 4 mi of leks

*loss of habitat, functional habitat loss, reduced
productivity and survival, support for secondary impacts



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

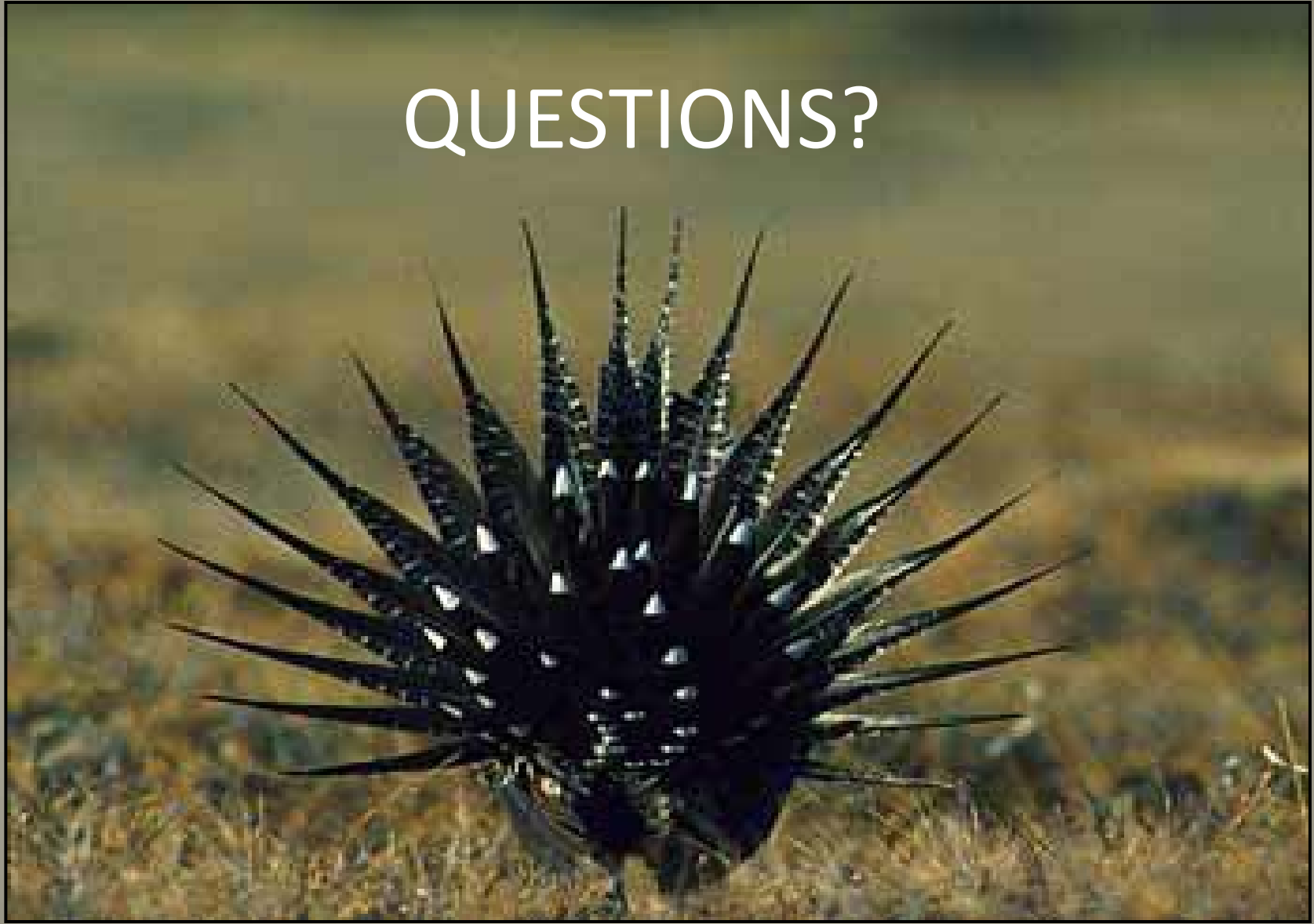
Primary Montana Threats:

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



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QUESTIONS?



The Listing Process Under the Endangered Species Act

Why, What, How, and When

WHY?

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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WHAT?

- Shall determine whether any species is an endangered or threatened species because of any of the 5 listing factors...



DEFINITIONS

Species - (ESA Section 3(15)) includes any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish and wildlife.



Definitions (more)

- Endangered Species - any “species” which is in danger of extinction throughout all or a significant portion of its range.
- 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.
- Not Warranted - not defined by the ESA; functionally not threatened or endangered

“Foreseeable future” is not defined in the ESA or regulations

HOW?

Listing Process

- Three ways a species is listed
 - Grandfathered from pre-1973 lists
 - USFWS initiative
 - Petition



Listing Process: Petitions

Petition submission: *Anyone!*

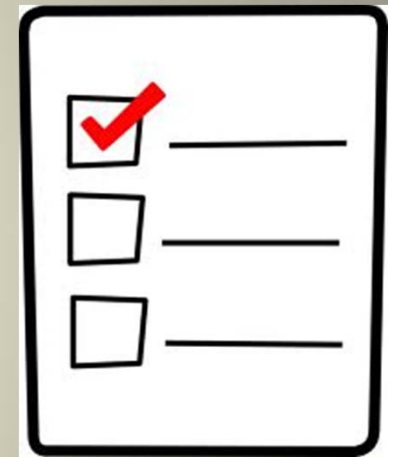
Evaluation :



- 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

- 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

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



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.



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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

MDL Settlement

May 10, 2011



- REQUIRES findings 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.
- Specifies earlier dates for some species, including Sage-grouse:
 - Bi-State Population – **September 2013**
 - Greater Sage-grouse and any other DPSs – **September 2015**

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

Regulatory Mechanisms

(Factor D)

Consider all mechanisms including:

- Federal
- State
- County
- Conservation efforts

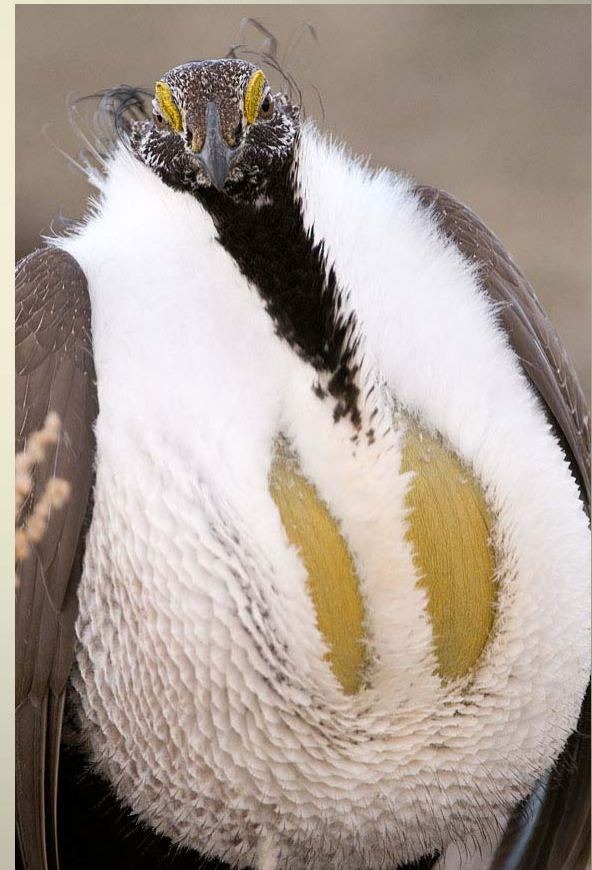


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Regulatory Mechanisms

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

- 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
- Assessing Threats
 - 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

- 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

Questions from the RAC:

- What is the timeline of a status review for potential listing?
- What constitutes take of a listed species?
- What does implementation of listing require for federal actions?
- For private actions?
- What is critical habitat?

WHEN?

Timelines Under the ESA

Listing/Status Review Process

START

**Petition Received
or
Status Review Started**



90-day Finding



90days

**Not Substantial
Information**

**Substantial
Information**



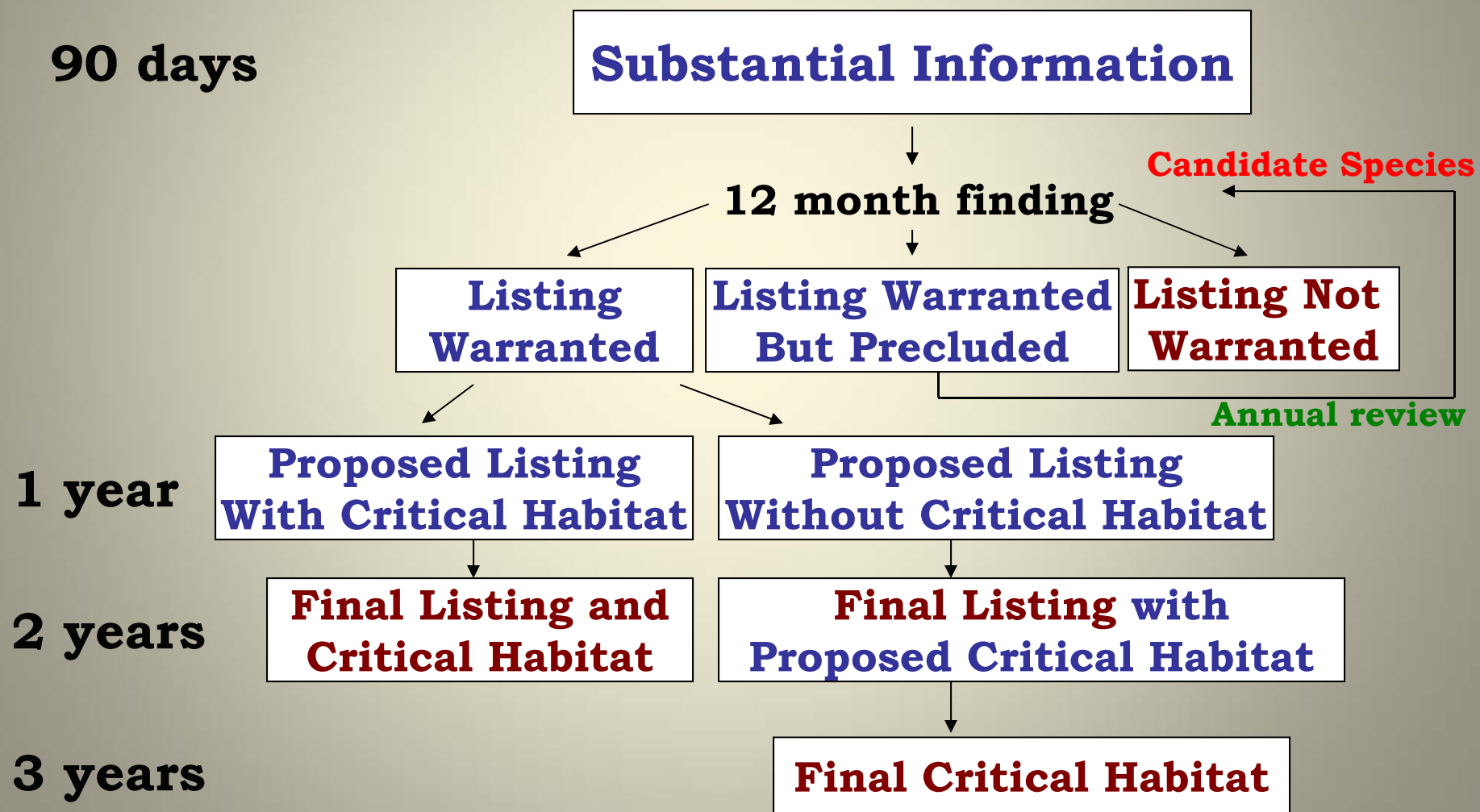
STOP



NEXT SLIDE

Timelines Under the ESA

Listing/Status Review Process



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.

- Information Synthesis

September
2015

- Determination Due: September 30, 2015

Take Under the ESA

- The ESA prohibits the taking (by anyone) of any federally endangered or threatened animal species, except under federal permit (through section 7 consultation or a section 10 permit).
- **Take** is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.



Harm, Harass and Take under ESA

- **Harm** includes significant **habitat modification or degradation** that results in death or injury to listed wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.
- **Harass** is defined as **intentional or negligent actions** that create the likelihood of injury to listed wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering.

Consultation with the Service

Section 7(a)(2)

- Each **Federal agency** must, in **consultation** with the Service, ensure that any action **funded**, authorized, or carried out by the agency ***is not likely to jeopardize*** the continued existence of any endangered or threatened **species** or result in the destruction or adverse modification of critical habitat.
- In brief, Federal action agencies must ensure their actions don't cause listed species to become endangered or go extinct . . .



What activities could a listing affect?

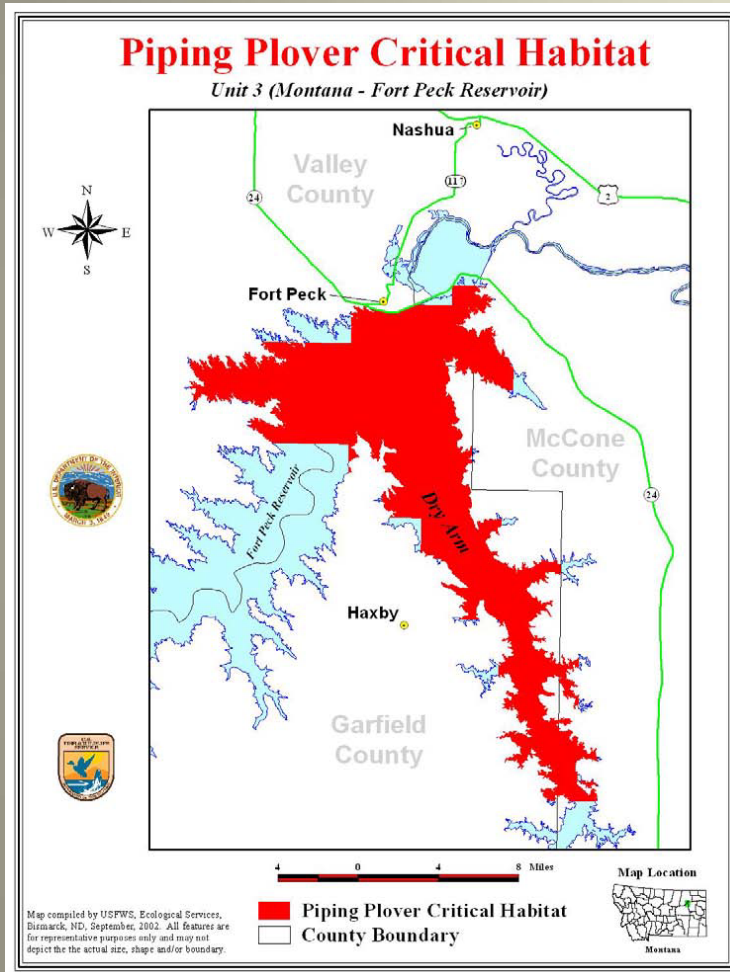
- *Any activity by anyone* with the potential to **take** a species listed under the ESA may be impacted.
- Possible activities include:
 - development,
 - infrastructure construction,
 - recreational activities,
 - grazing,
 - energy development,
 - vegetation control/management, and
 - land-use changes or conversions



Non-Federal Lands Programs

- **Safe Harbor Agreements** encourage *voluntary conservation* for *listed species* to promote recovery on non-Federal lands. Includes take authorization for routine land uses and assurances that no additional commitments or restrictions will be required.
- **Habitat Conservation Plans** (HCP) can be developed to obtain permits to *authorize incidental “take”* from *non-Federal activities*. HCPs specify measures required to minimize and offset the impacts of such “take”.
- **Candidate Conservation Agreements** with Assurances provide incentives for *non-Federal property owners* to conserve *candidate species*, with the goal of reducing the need to list a species. These include assurances that no commitments or restrictions will be required even if the species becomes listed. It also provides “take” authorization for routine land uses if the species becomes listed.

Critical Habitat



- Act requires designation of any habitat of a listed species considered to be “critical”
- Identifies geographic areas essential for the conservation (eventual recovery) of a threatened or endangered species.
- Federal agencies are required to consult with FWS for their actions that may affect critical habitat.
- No requirements are imposed on state or private actions on state or private lands where no federal funding, permits or approvals are required.



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Questions?