The Greater Sage-grouse ESA Listing Decision
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...”

Photo © Mark Gocke, Used by permission
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

---

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

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
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
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

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

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)
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
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
Current Sage-grouse distribution and density
Population Trends

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

Decline of 30% since 1985
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
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

- 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

Map Date: 10/14/2009

Created by U.S. Fish and Wildlife Service, WY ES Field Office
Date: 10/14/2009


Projection: North American Datum 1927 Albers
Secondary/Synergistic Threats

2005 Finding

- Invasive Species
- Infrastructure
- Wildfire
- Agriculture
- Grazing
- Oil & Gas
- Urbanization
- Coal/Strip Mining
- Weather
- Conifer Invasion
- Human
- Predation
- Disease
- Water Development
- Prescribed Fire
- Hard Rock Mining
- Hunting
- Climate Change
- Contaminants

- Rangewide
- West
- East

Relative Rank
Regulatory Mechanisms

Considered all mechanisms including:

- Federal
- State
- County
- other conservation efforts
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
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
Questions?