Greater Sage-Grouse Management in Oregon

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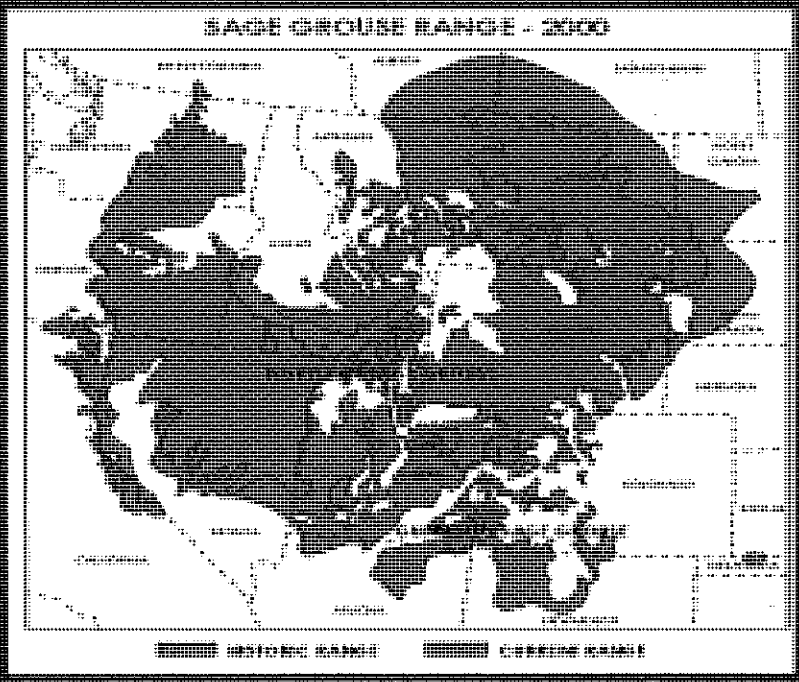
"Sage hens are getting scarcer each year, and their complete extinction can not be a matter of more than a few years"

Report from the Game and Forestry Warden to the Governor of Oregon
1901

Range-wide Distribution

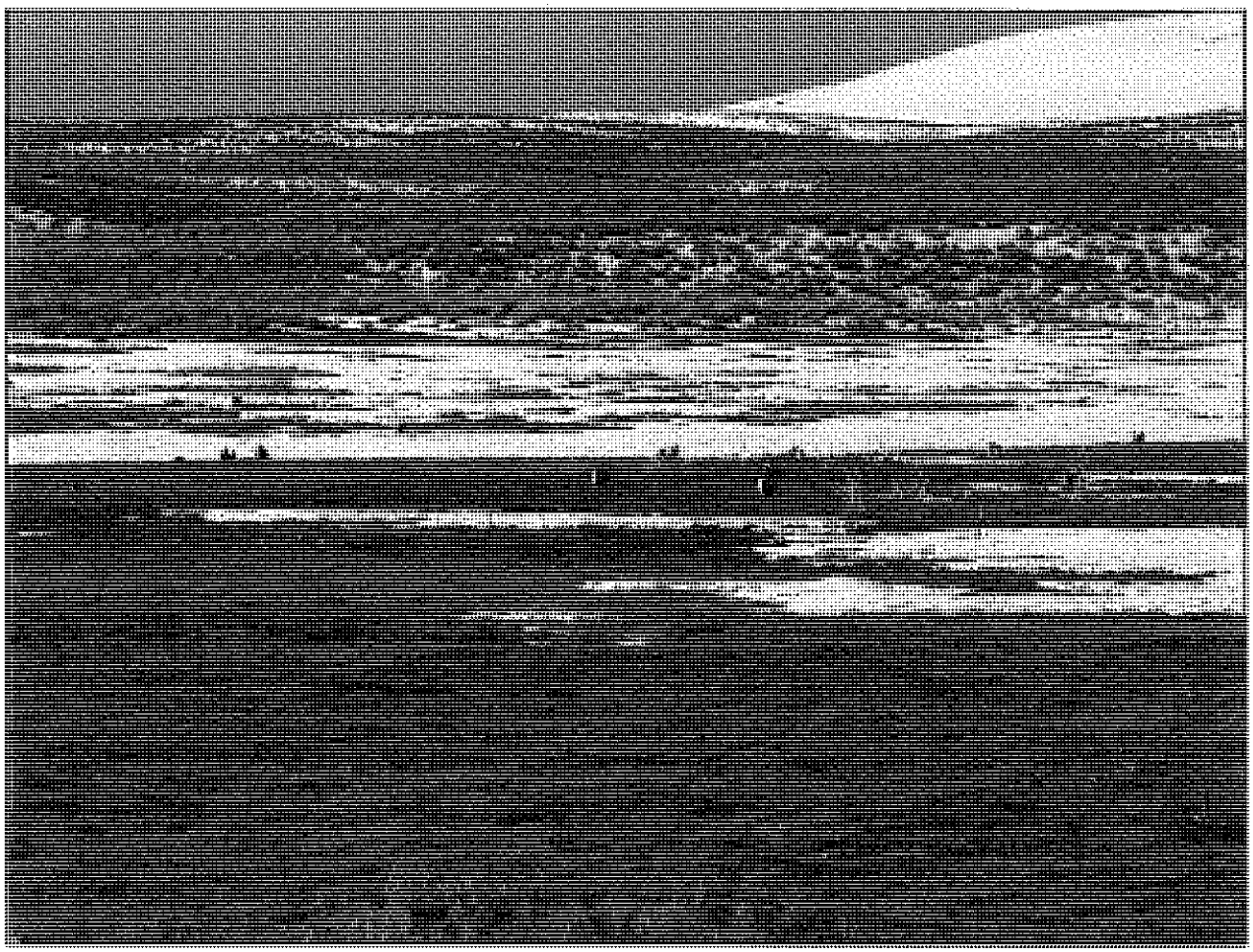


Sage-Grouse and the ESA

- March 2010, USFWS decision to list SG as "Warranted but Precluded"
  - Habitat loss and degradation
    - Eastern (CO, WY, MT, UT) – Oil/gas development
    - Western (OR, NV, ID) – Wildfire, Invasive grasses
  - Lack of regulatory mechanisms
- Court settlement in 2011 requires USFWS to revisit the issue by Sept. 2015
  - Warranted or not Warranted finding

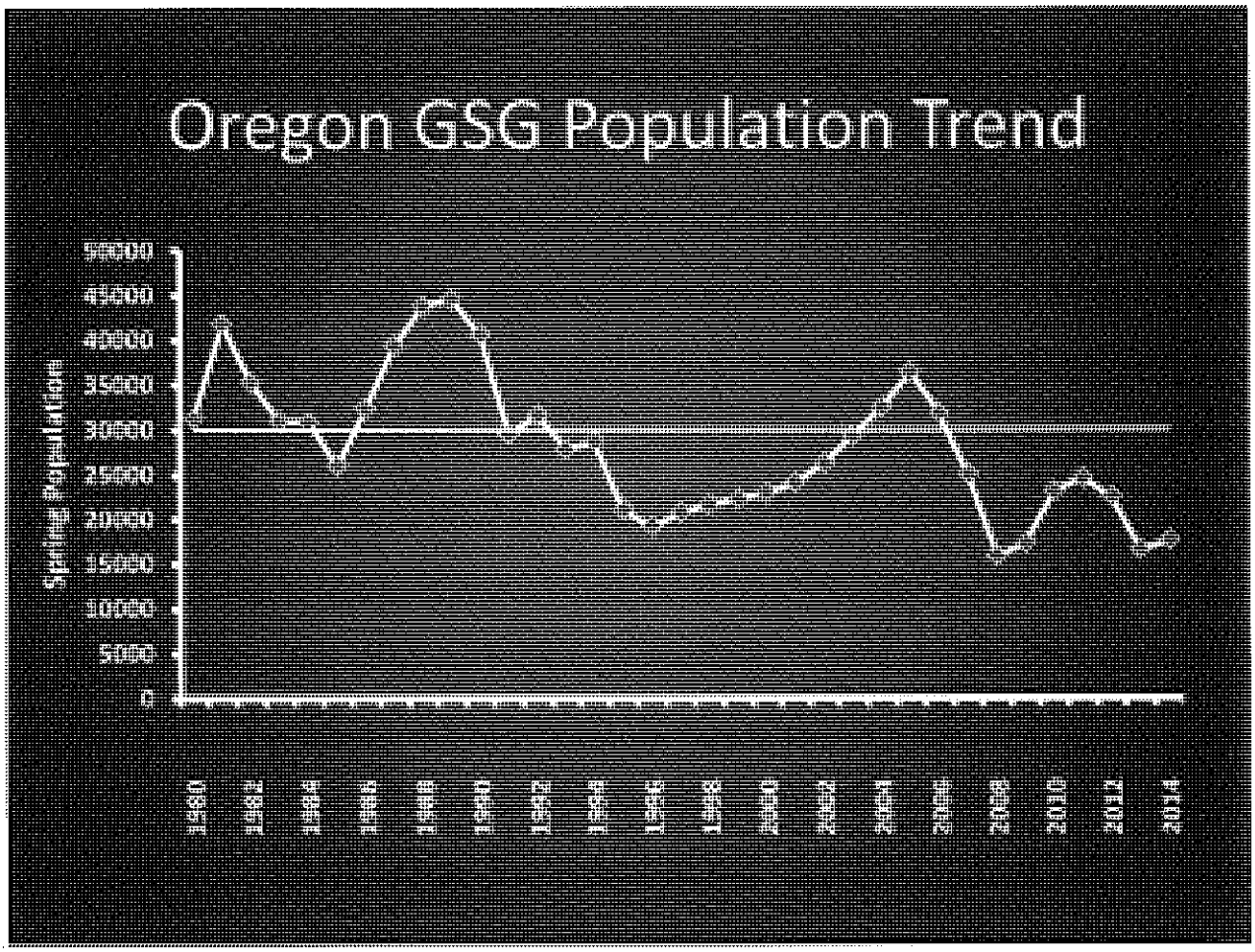
Sage-Grouse Ecology

- Sagebrush obligate
  - Need vast expanses for nesting, brood rearing, winter
    - sole winter food source
- Relatively long-lived – 3-6 years
  - 55%-80% annual survival
- Low productivity
  - < 10 eggs/ clutch; < 2 chicks/hen survive to fall
- Exhibit strong fidelity to breeding areas (leks, nesting)
- Sensitive to disturbance, habitat loss
- *Populations have slow recovery rates after disturbance to their habitats*



Population Monitoring

- 1941 - ODFW biologist Wes Batterson begins monitoring leks in Baker County
- 1980's - Counting of leks expands across their range in Oregon
- ~650 active leks in Oregon, close to 300 are counted each year
  - Multiple counts during March -May
- Brood routes conducted during the summer
  - Provides a snapshot of production (chicks/female)


Oregon GSG Population Trend
50000
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014

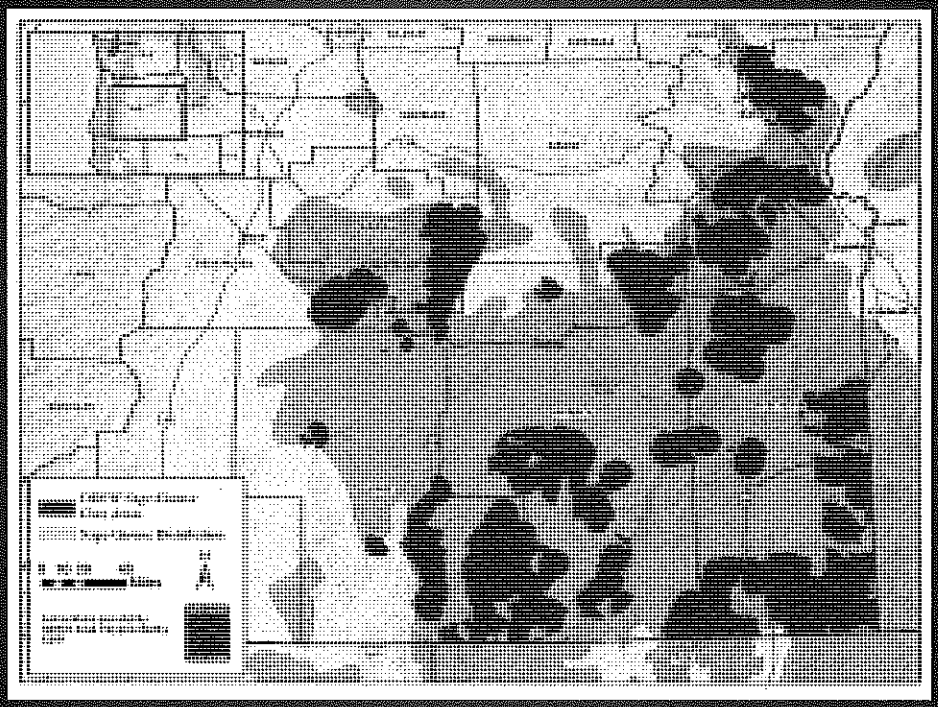
Conservation Approach

- 2005 - First SG plan for Oregon is adopted
  - Avoid impacts within 5 miles of all occupied sagebrush habitats
- 2009 – ODFW White Paper
  - Avoid impacts within 3 miles of all occupied leks (n=672)
- 2011 – SG plan is revised based on Core Area approach
  - Avoid impacts within all Core Areas

Core Area Approach

- Modeling approach (Doherty et al. 2011)
  - Lek densities, connectivity corridors, winter habitat
- Identifies priority populations
- 90% of breeding population
- 37% of the range (6.5 million acres)
- Avoid Impacts in Core Areas
- Identifies areas to focus conservation actions

Sage-Grouse Core Areas

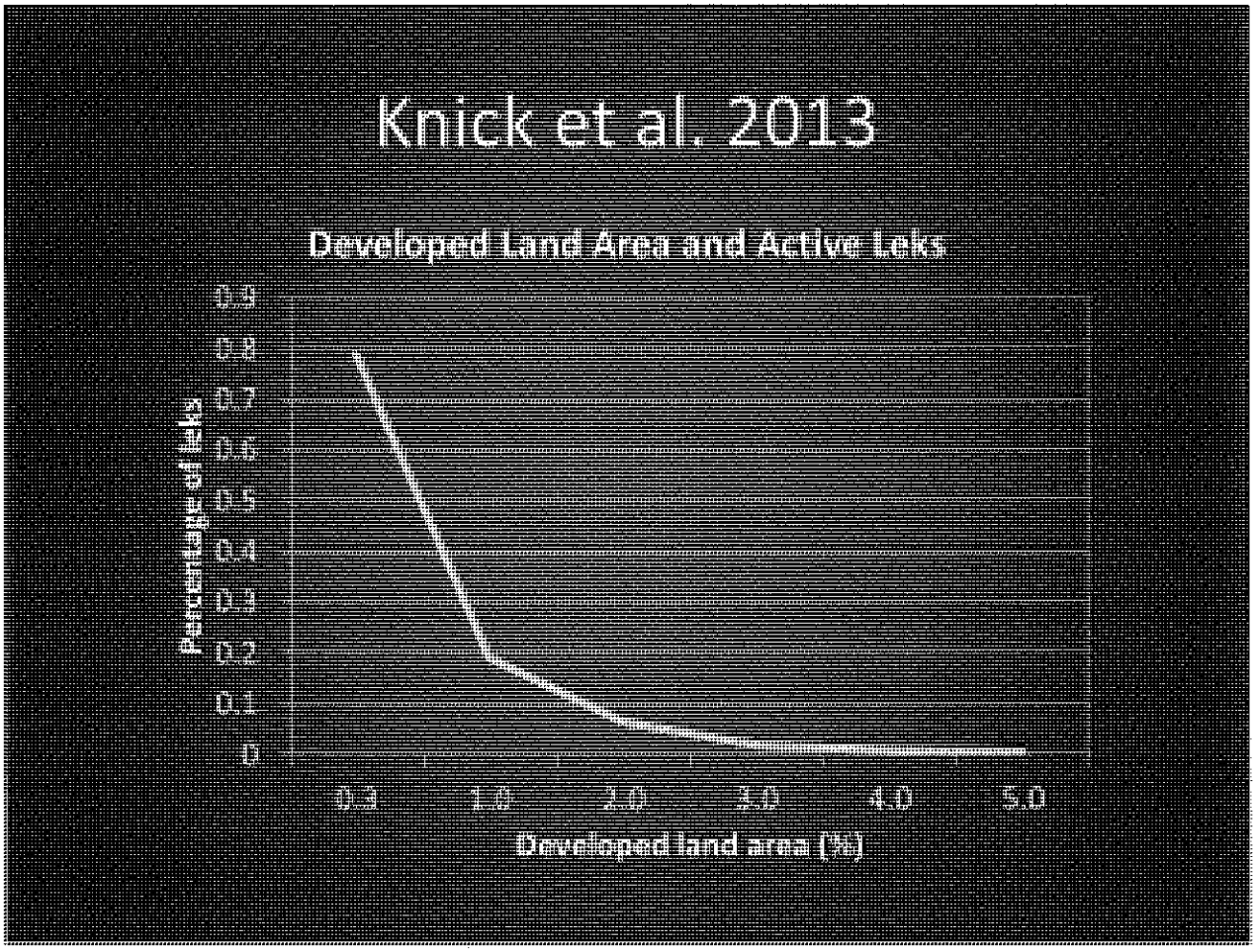


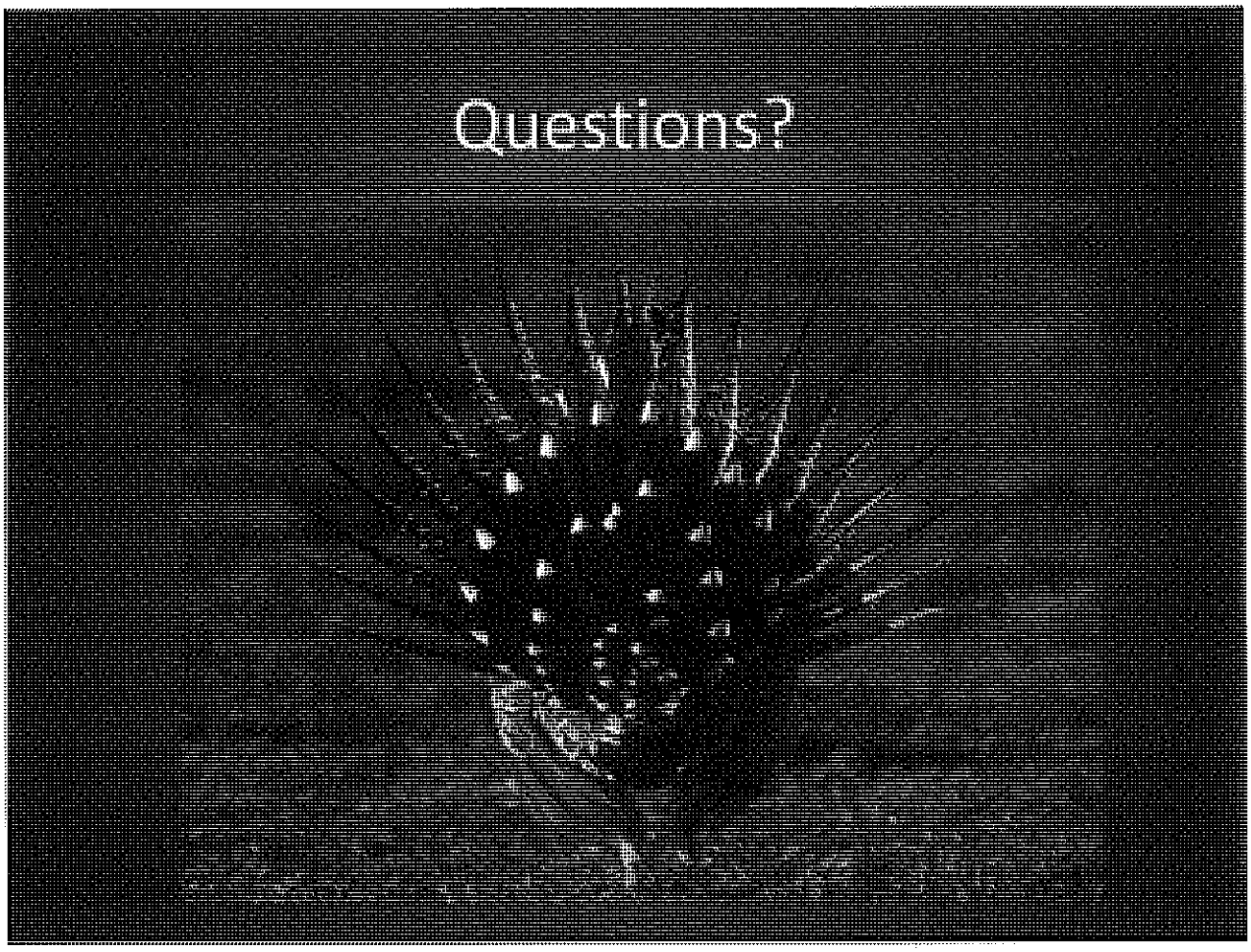
So why another plan?

- ODFW plan considered too restrictive
  - Avoiding all impacts in Core Areas limits economic development opportunities
- ODFW Plan implementation is voluntary
  - Except for EFSC; lacks regulatory mechanisms to satisfy USFWS criteria
- ODFW Plan has a strong biological foundation
  - Identified strongholds with long term monitoring
  - Used as biological reference for State and Federal planning efforts

Wildfires in Oregon

- 2012 – 10 fires on BLM (Miller Homestead, Holloway, and Long Draw) burn ~ 1 million ac.
  - 632,842 ac. (10% of Core habitat)
- 2013 – 115,641 ac. of SG habitat
- 2014 – ~ 455,020 ac. burn
  - 161,458 ac. - Core habitat
- Research on Trout Creeks to determine SG response to fire impacted habitats


Knick et al. 2013
Developed Land Area and Active Leks
Percent of Leks
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0.3
1.0
2.0
3.0
4.0
5.0
Developed land area (%)


Questions?