

Endangered or Not?

Colorado County Approaches to Gunnison & Greater Sage Grouse Protection



Rocky Mountain Land Use Institute Annual Conference

Friday, March 14th

1:15 – 2:45 PM



Panel Members

Jon Waschbusch, AICP

- **Government Affairs Director,
Montrose County**

Mike Pelletier

- **Geographic Information Systems
Manager, Gunnison County**

Jim Cochran

- **Wildlife Conservation
Coordinator, Gunnison County**

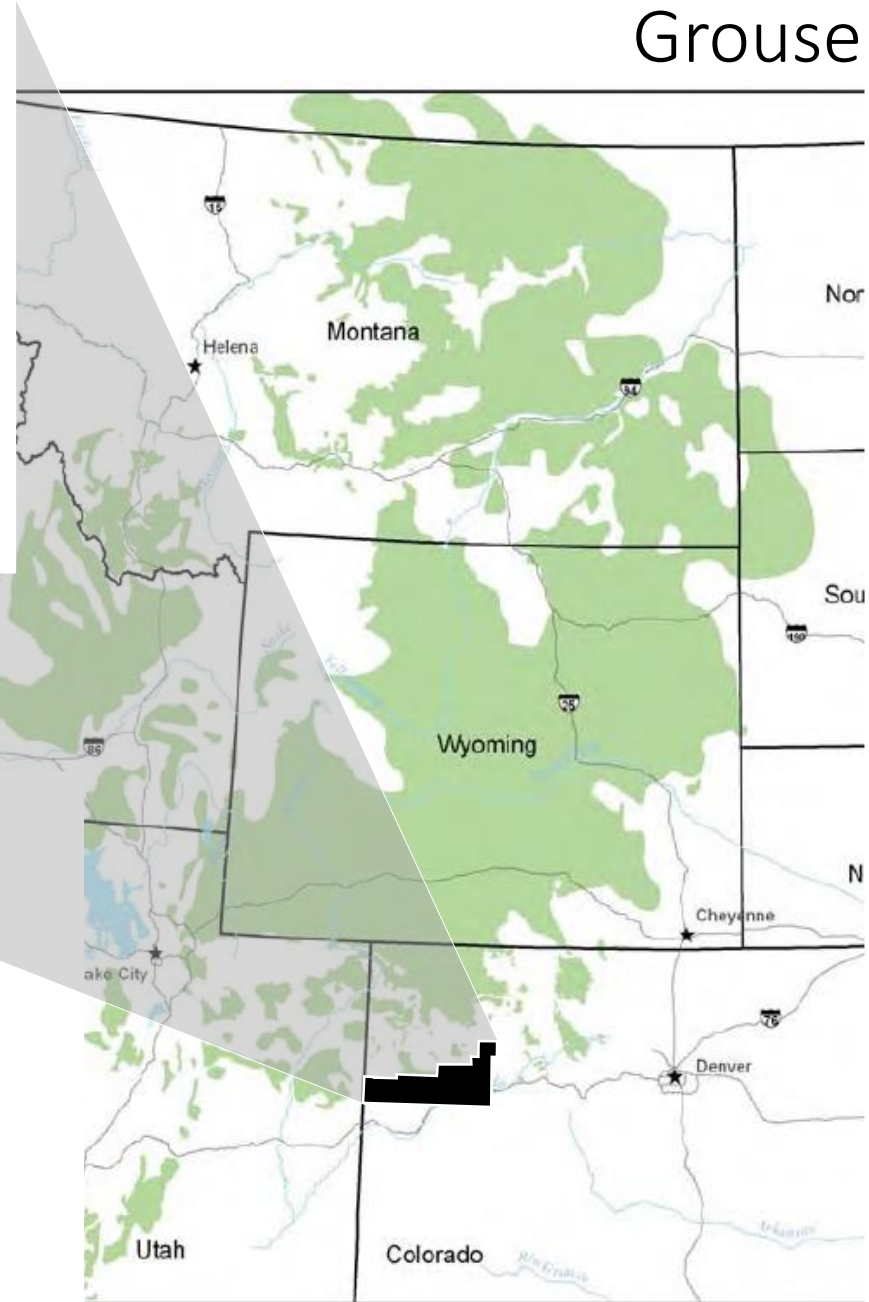
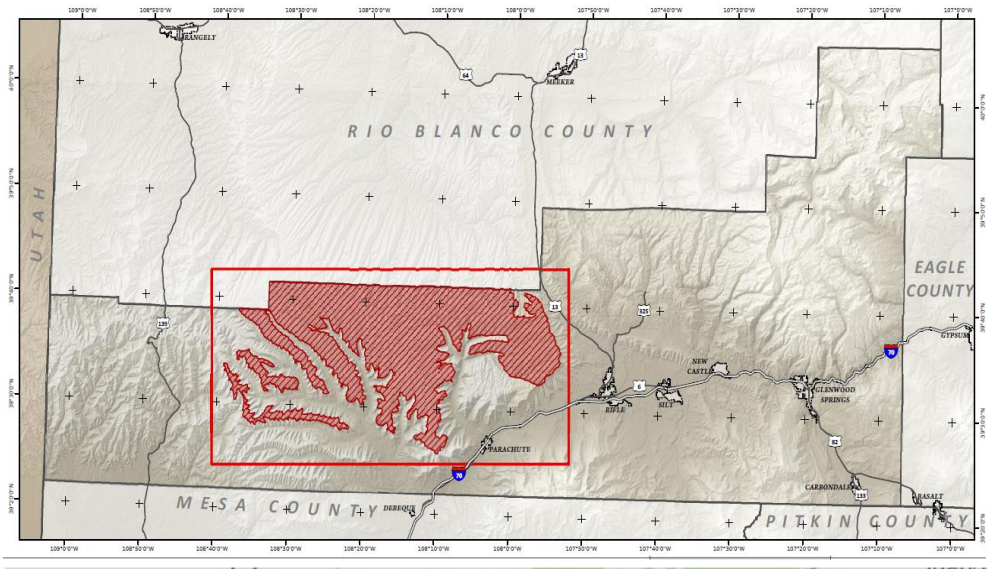
Fred Jarman, AICP (Moderator)

- **Community Development
Director, Garfield County**

Questions to Ponder / Points to Consider:

- 1) What are the implications of federal / state land use decisions on local governments? Why should we pay attention?
- 2) Local approaches are critical – Do the feds / state know best?
- 3) Be specific about properly identifying & addressing threats.
- 4) “Trust but Verify” – Who’s best available science?
- 5) Is an ESA listing really beneficial for the species?
- 6) Importance of private property to conservation.
- 7) Multiple Use v. Species Recovery.
- 8) How to achieve better transparency in Fed/ State held science?
- 9) I am a small Community (zero resources); how do I participate?

Presumed National Range for Greater Sage Grouse



2014 Habitat stats:

National Range: 165 million acres (BLM)

Colorado Habitat (total): 3.9 million acres (BLM)

Garfield County: 220,000 acres or 73K acres?

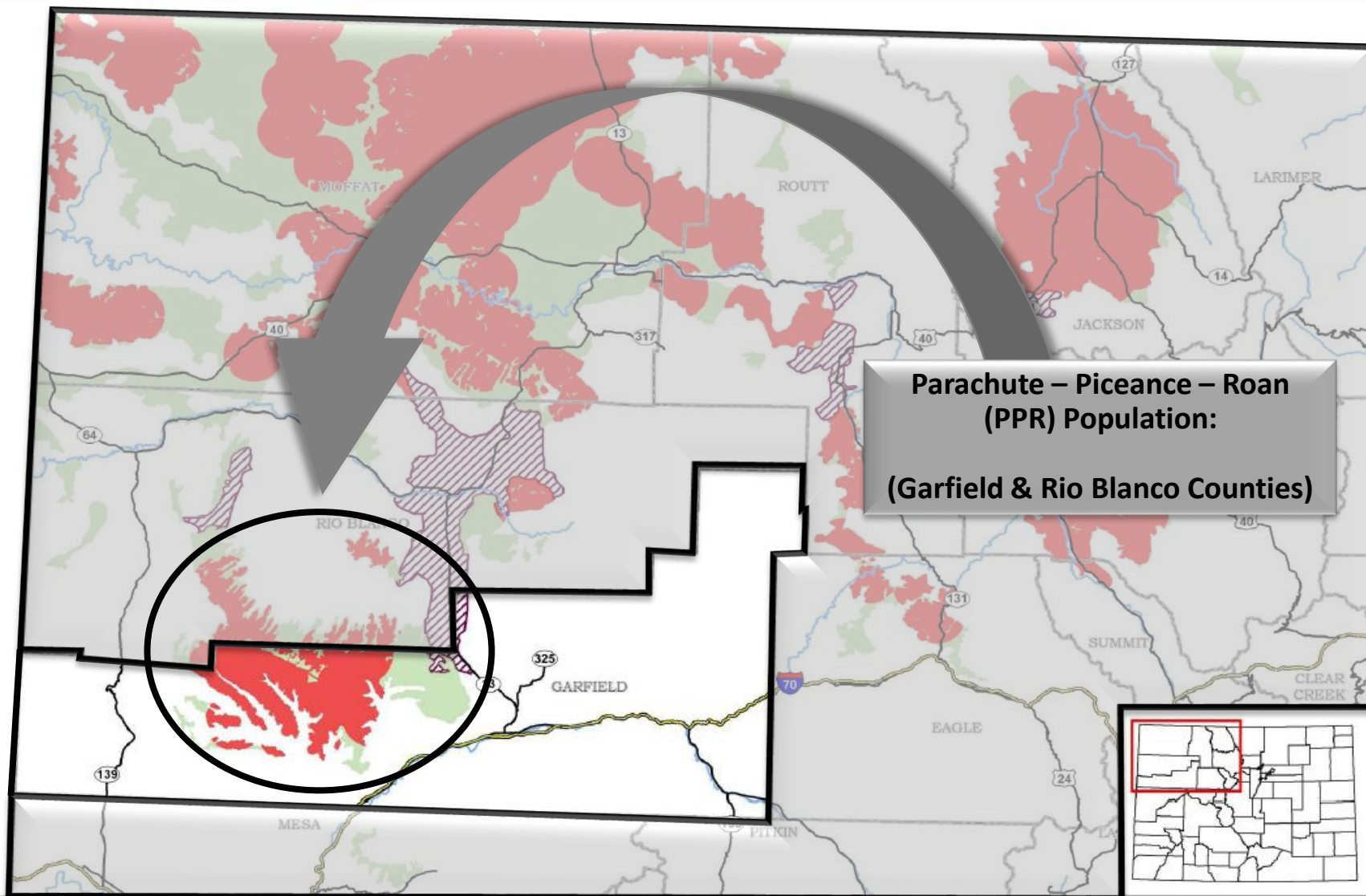
National Bird Count: 535,000 (USFWS)

National Lek Count: 10,000 (Connelly and Knick)

Colorado Bird Count (Males): 4,300 (CPW)

PPR Bird Population (Males): 249 (CPW)

PPR Lek Count: 144 (CPW)



Greater Sage-grouse Priority Map



Linkages



Preliminary Priority Habitat (PPH)

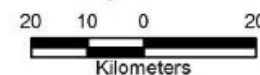
High probability of use
(summer or winter or breeding)
and 4 mi buffer around leks
Active within the last 10 years



Preliminary General Habitat (PGH)

Grouse occupied range
outside of PPH

Map Created: 3/9/12



Greater Sage Grouse: A 1 minute background...

2002 - 2010: Conservation / Environmental groups petitioned USFWS to list the Greater Sage Grouse as Threatened or Endangered?

2010 FWS Decision: found the species was “warranted but precluded” by higher priority listing actions....in other words...”we’ll get to it in due time...”

Not satisfied: Center for Biological Diversity & WildEarth Guardians sued DOI resulting in a settlement forcing a decision by September 30, 2015

BLM Required to Act: 64% of the habitat across 11 western states is located on public lands (managed by the BLM/ USFS), BLM was ordered to strengthen their Resource Master Plans across the west

Colorado / Garfield County? Less than 4% of the national range is located in NW Colorado. 46% (1.8 million acres) managed by the BLM on public lands...(12% of Colorado range) in Garfield County.

Punchline: We (Garfield County, BLM & State of Colorado) hope to get to a “not warranted” decision on September 30, 2015!

A circular frame containing a photograph of two Gunnison Sage-grouse in a field of tall, dry grass. The bird on the left is in the foreground, facing away from the camera, with its tail feathers fanned out, showing a distinctive black and white pattern. The bird on the right is further back, facing right. The background is a hazy, open landscape under a clear sky.

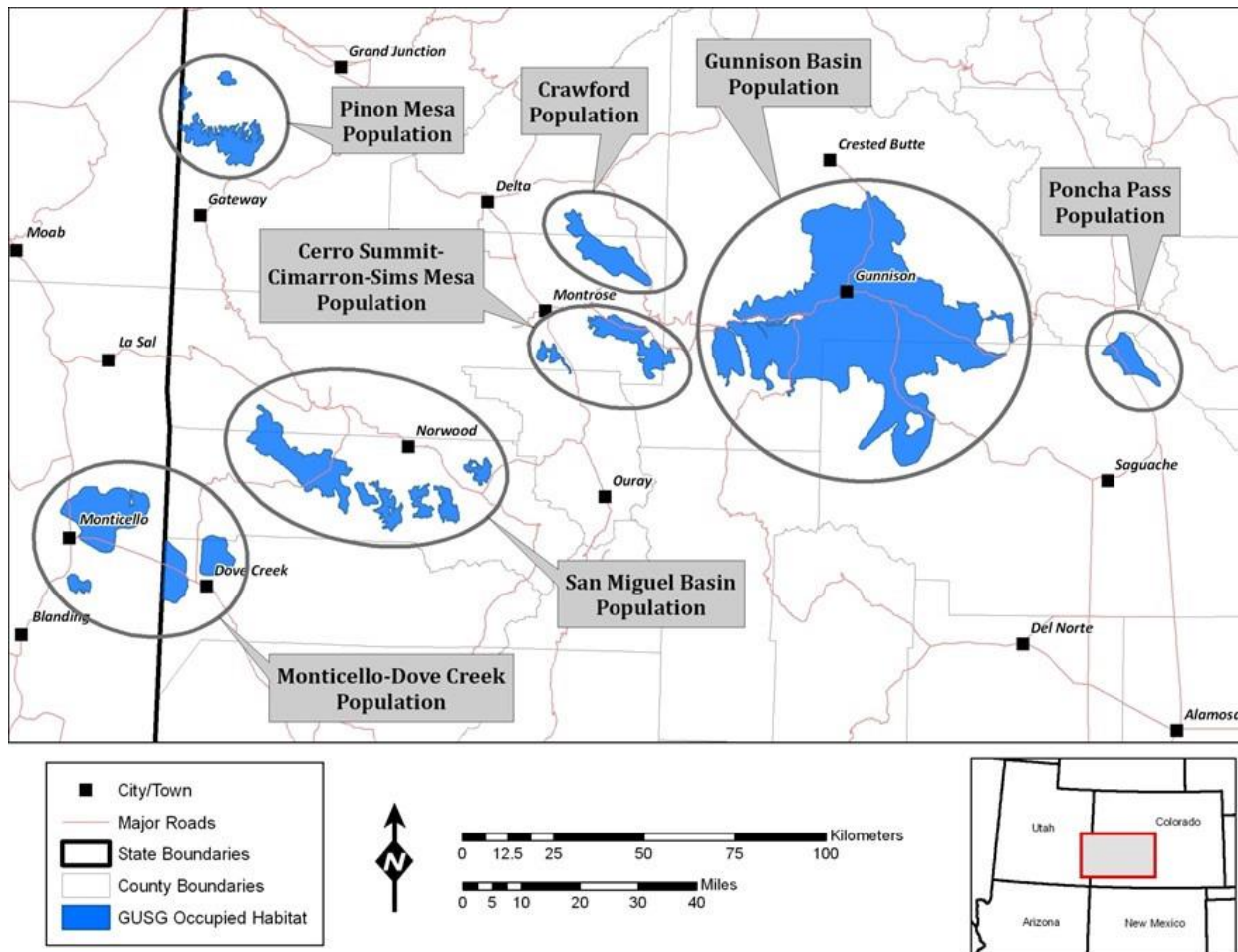
Gunnison Sage-grouse

Centrocercus minimus

Distribution of the Species

Seven populations in Southwest Colorado/Eastern Utah

Largest population is in the Upper Gunnison River Basin (Saguache and Gunnison Counties)



Gunnison Sage-grouse ESA History

Determined to be a separate species in 2000

Listed as a candidate species (**warranted but precluded**) under the Endangered Species Act in 2000

Stipulated settlement in 2005 – USFWS would make a listing determination by
March 31, 2006

April, 2006 Gunnison Sage-grouse found **not-warranted** for protection under the Endangered Species Act

Immediately challenged in court

2009 – another stipulated settlement

2010 – Status Review - Found warranted but precluded

January 11, 2013 Gunnison Sage-grouse proposed for listing as **Endangered**

December 22, 2014, Gunnison sage-grouse listed a **Threatened** with 1.4 million acres of SW Colorado and
SE Utah designated as critical habitat

What Are The Possible Ramifications of Listing the Gunnison Sage-grouse?

- “Take” of the species is a violation of Section 9 of the Endangered Species Act
 - Criminal and civil penalties
 - Agency enforcement
 - Citizen suit provision of the ESA (*16 U.S.C. § 1533. Id. at § 1540(g)(1)(C)*)
- Examples of “take” given in the final rule:
 - Direct take (killing, collecting, trampling, etc.)
 - Actions that would result in loss of sagebrush over-story plant cover or height
 - Actions that would result in the loss or reduction of native herbaceous understory plant cover or height and/or arthropod community
 - Grazing
 - Herbicides, insecticides
 - Burning and fire suppression activities
 - Seeding of non-native plant species
 - Actions that would result in sage-grouse avoiding of an area during one or more seasonal periods
- “Section 10” (incidental take) authorizations
- “Section 7” consultations for all projects with a federal nexus

Why is Garfield County Interested in GSG?

- 1) Garfield County is the leading producer of natural gas in Colorado & 7th in the US: (Over 10,000 wells at 1.75 BCF / day)
 - A. Supports local & regional job base
 - B. 70+ % of land is held in private ownership (Big Jimmy Play)
 - C. Significant Local Tax Revenue supporting local services:
 - i. 88% of property tax revenue for Grand River Hospital
 - ii. 94% of property tax revenue for School District 16
 - iii. 94% of property tax revenue for DeBeque Fire Protection District
- 2) BLM's proposed policies / habitat mapping will greatly impact / prohibit future development on approximately 220,000 acres without being informed by local science...

Montrose & Gunnison County Collectively...

- 5,502 Square Miles = Connecticut
- 77% public lands
- 56,220 people ₁
- 73,609 cows ₂
- ±\$80.7 million annual sales ₂
 - Public lands component to livestock production
- History & culture tied to resource based economies

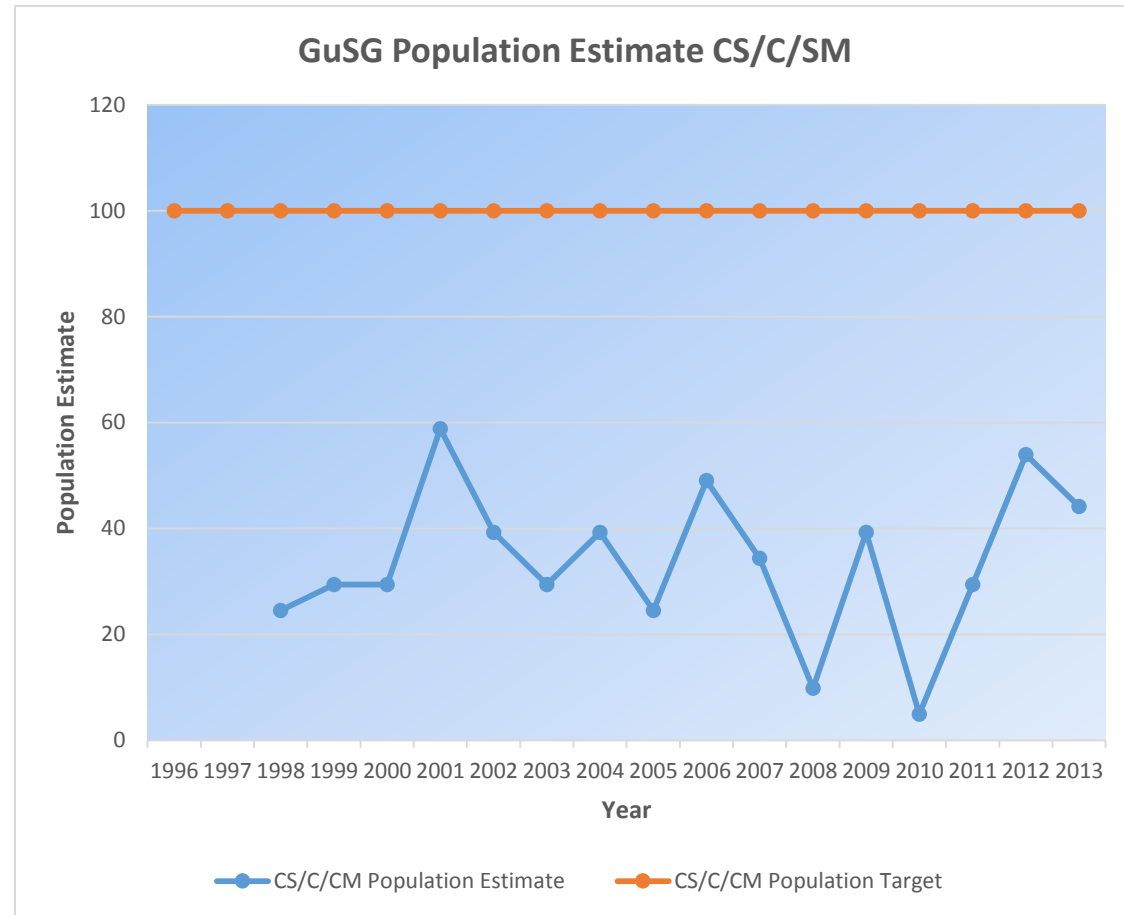


1. 2013 US Census est.
2. 2012 USDA Ag Census

Local Example: Montrose County Critical Habitat

Per January 2013 Proposal:

- 141,000 total acres
- 72,000 acres private
- 5 of 7 GuSG critical habitat areas
- Majority of Crawford & Cerro habitat areas
 - 152 birds – 3.3% of estimated population
 - 159,831 acres = 1,051 acres/bird
- More Acreage = More Birds?



Source: CPW

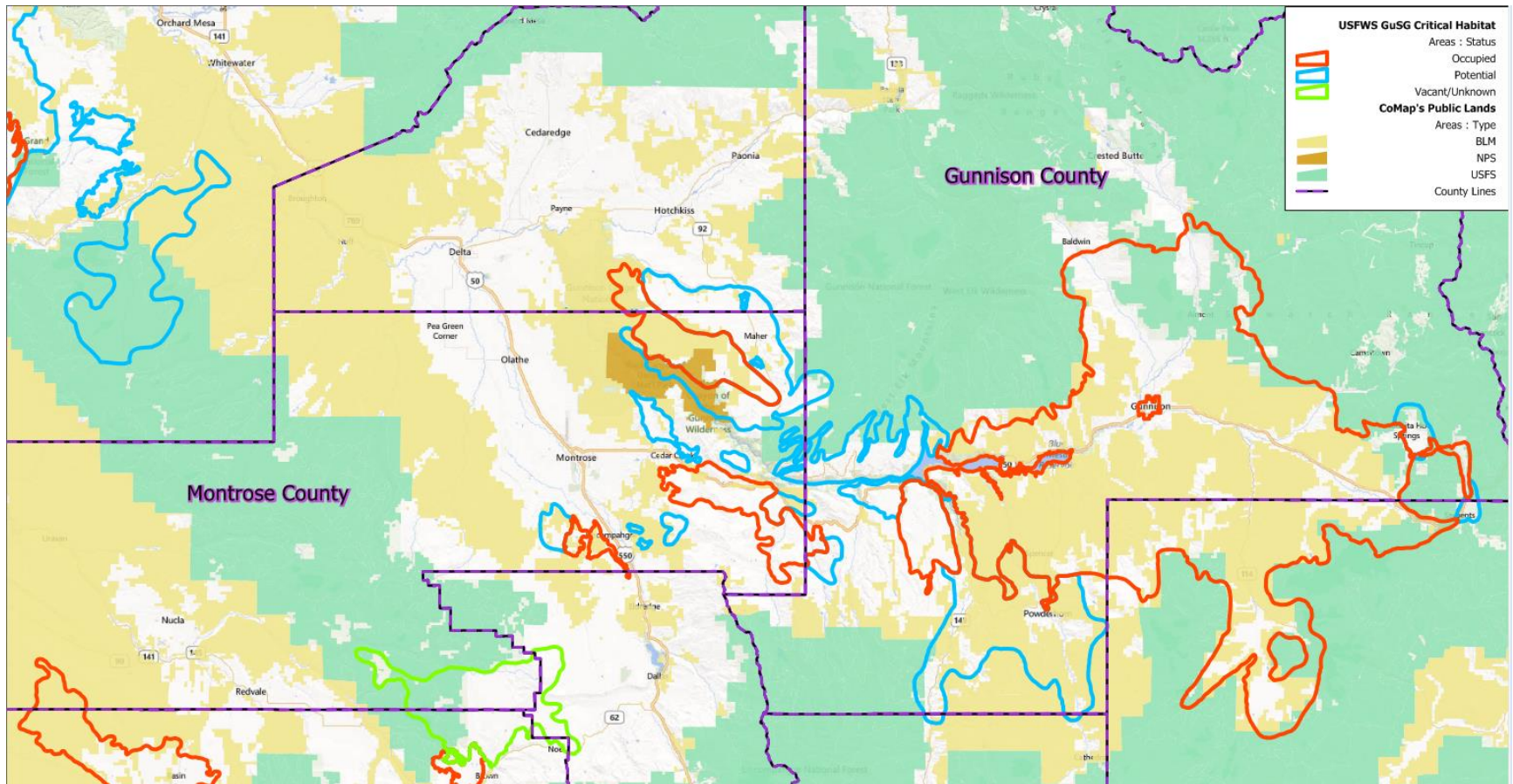
Public/Private Lands & Critical Habitat

✓ 57.2% Public Lands

✓ 54.6% Federal

✓ 2.6% State

✓ 42.8% Private



Threats to the Greater Sage Grouse Habitat

1) Present or threatened destruction, modification or curtailment of habitat or range, and

Fire
Invasive Weeds
Oil & Gas Development
Infrastructure
Fragmentation of Habitat
ExUrban Development

Primary Threats in NW Colorado

Sagebrush Removal
Grazing
Range Management Structures
Free-Roaming Equid Management
Pinyon-Juniper Expansion
Agricultural Conversion
Mining
Recreation
Ex-Urban Development
Fences

Other Serious Threats needing attention:

- 1) Affect of Climate**
- 2) Predation**
- 3) Hunting**

2) The inadequacy of existing regulatory mechanisms...(Regulatory Assurance versus Voluntary Plans)

Identified Threats to Gunnison Sage-grouse

- Residential development
- Roads, powerlines, fences
- Grazing by deer, elk and livestock
- Predation
- Genetic risks
- Drought (indirectly)
- Inadequate regulatory mechanisms at local, state and federal levels



Change The Things You Can

A County can't address...

- Grazing by deer, elk and livestock
- Predation
- Genetic risks
- Drought

A County can address...

- Residential development
- Roads, powerlines, fences
- “Inadequate” regulatory mechanisms at local level

Elk don't read the Federal Register



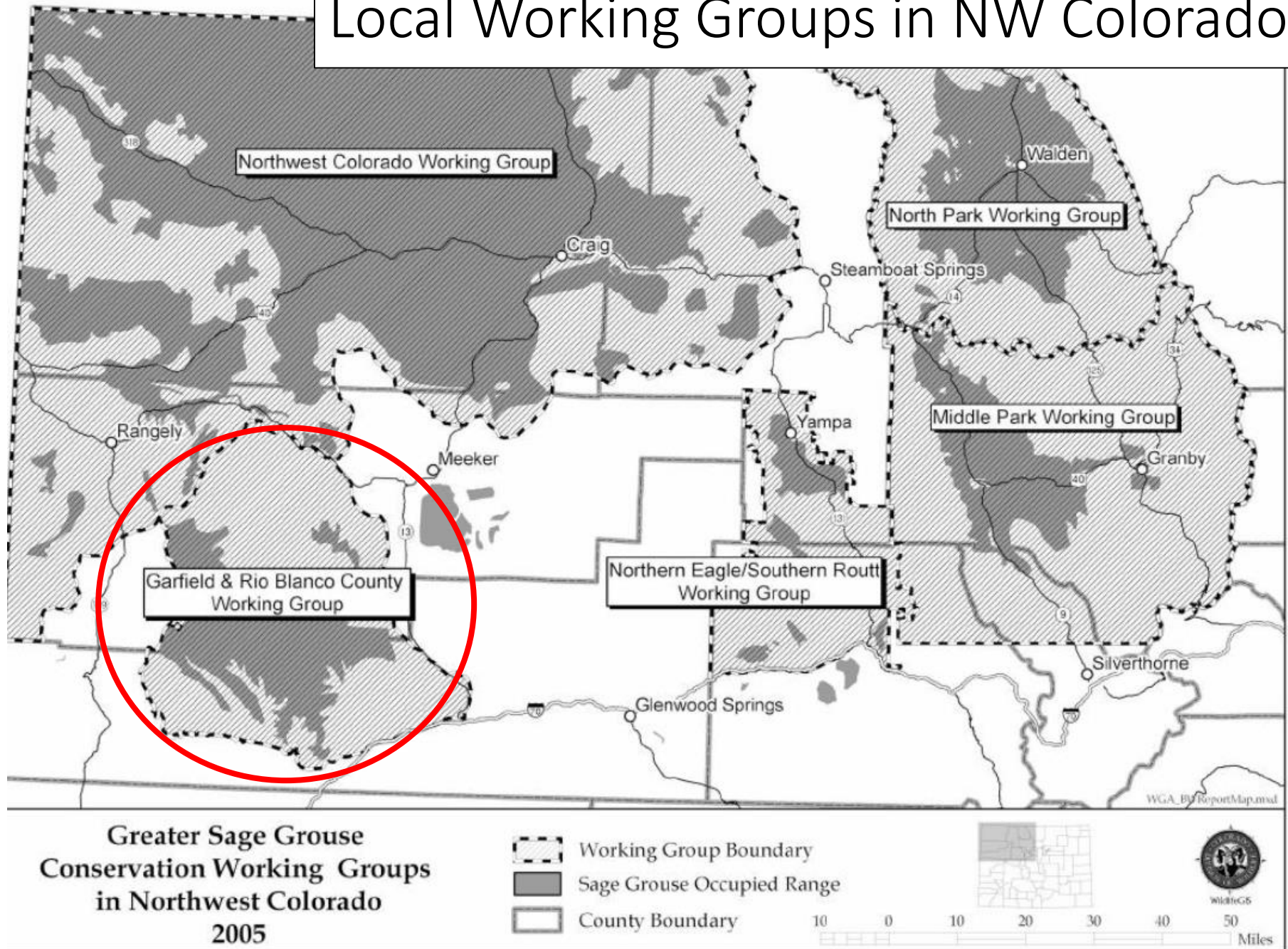
DONT TREAD ON ME



“Regulatory Mechanisms”

- “1041 Regulations” CRS 24-65.1-101 et seq.
 - Counties may designate & administer certain areas of state interest
- Montrose 1041 Regs
 - Applied to GuSG occupied habitat
 - Applied to common land use approvals
 - Onsite review by CPW & contract biologist
 - Mitigation & amendments up to denial of a permit

Local Working Groups in NW Colorado



Garfield County already had a Grouse Plan: PPR

Greater Sage-Grouse Conservation Plan



Colorado Division of Wildlife, Kathleen Tadvick, April 2007

Parachute-Piceance-Roan (PPR)

Final – April 29, 2008

Prepared by Parachute-Piceance-Roan (PPR)
Work Group

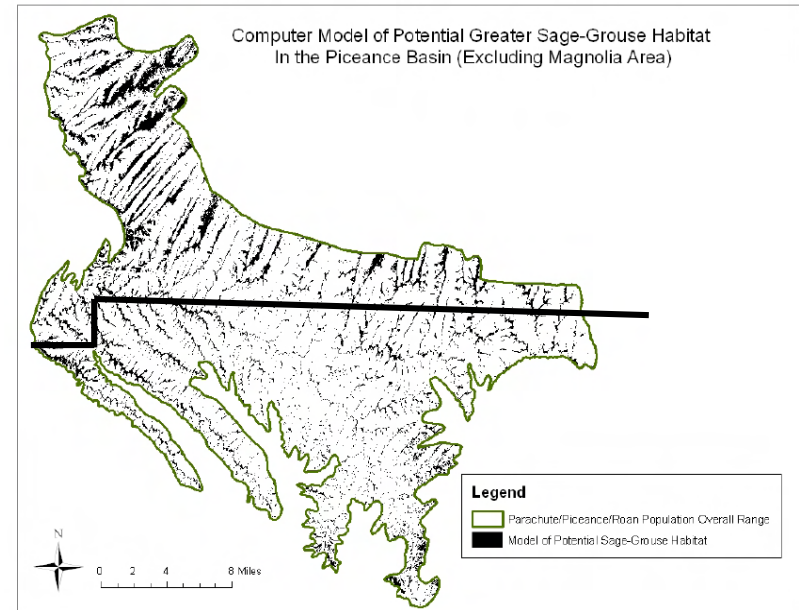
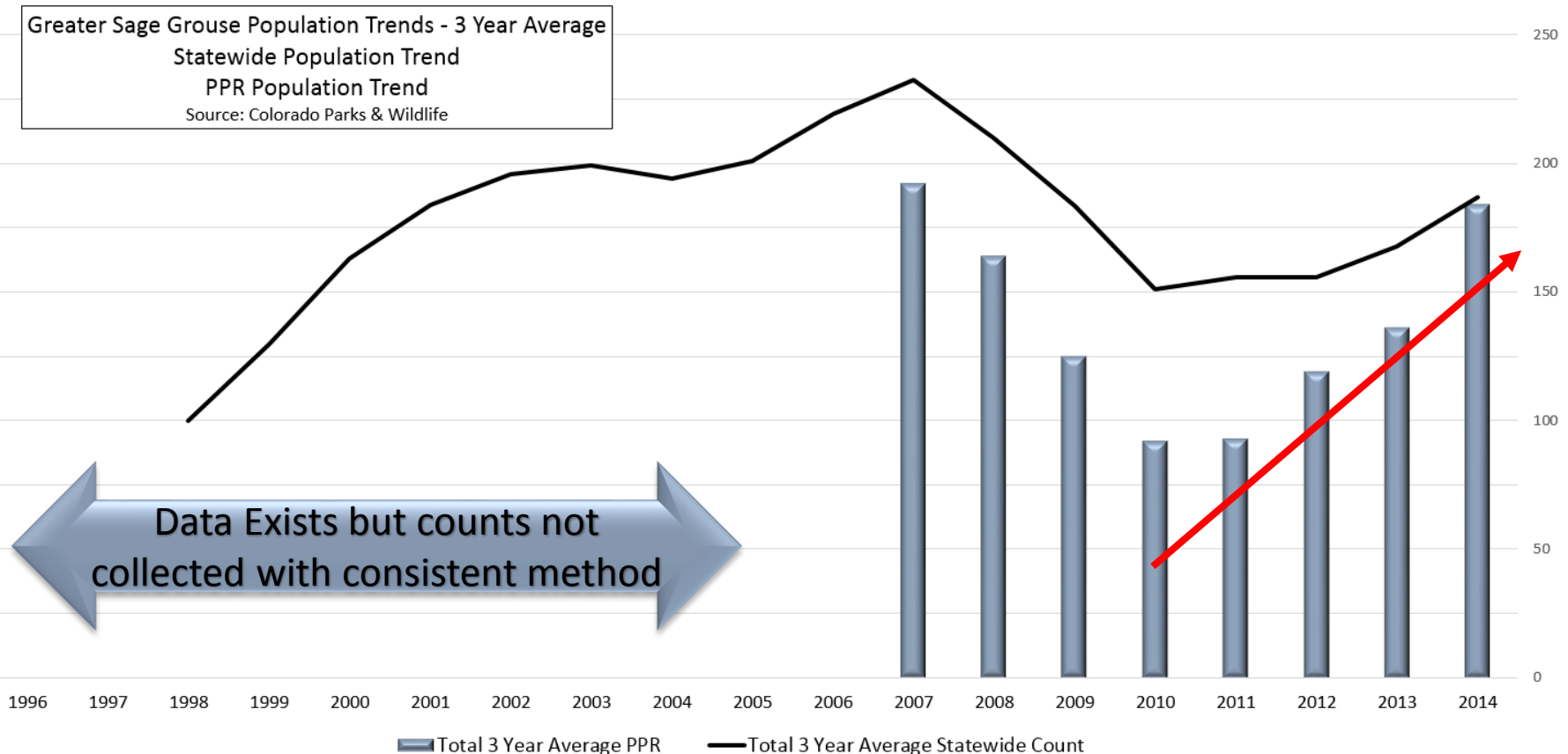


Figure F-1. Computer Model of Potential Greater Sage-Grouse Habitat in the Piceance Basin (Excluding the Magnolia Area)

- A. Mapped Habitat (modeled by CPW / BLM)
- B. Voluntary Plan
- C. Wide range of Support
(environmental, public agencies,
private land owners...)

How are the Greater Sage Grouse doing in Colorado & PPR (Garfield & Rio Blanco Counties)?



- Upward Trend since 2010: **112+% Increase since 2010**
- Largest lek in PPR in 2014: Reclaimed Natural Gas Well Pad: 31 Strutting Males

What Did Garfield County Do?

- 1) Participating as **Cooperating Agency** with BLM on RMP (EIS)
- 2) Enacted **Coordination** (FLPMA & NEPA) with state and federal agencies in order to 'resolve inconsistencies with local plans'.
- 3) **Adopted a GSG Conservation Plan** tailored to local conditions
 - A. Specific threat evaluation (Example: Predation)
 - B. Adaptive management
 - C. Developed highly sophisticated & peer reviewed habitat map at 2-meter scale vegetation map...submitted for publication
- 4) **Testified twice in Congress** on ESA concerns: Sue & Settle Culture / Transparency & Access to Data
- 5) Working with **Governor** / US & State Delegation
- 6) Participated in a recently completed **Data Quality Act Challenge** (NTT, COT & Monograph)...**to be filed / released next week!**

Gunnison Sage-grouse History of Local Involvement

1995 – Local Working Groups Being Created

-State & Federal agencies, Counties, Stockgrowers', private individuals, environmental groups

1997 – 1st Local Conservation Plan completed and signed

**2005 - Gunnison Sage-grouse Rangewide Conservation Plan
State and Federal agency driven**

**2005 – Gunnison County formed the Gunnison Basin Sage-grouse Strategic Committee
All involved agencies, Stockgrowers', HCCA, public, development, recreation, Saguache and
Gunnison Counties**

**2005- Gunnison County Sage-grouse Conservation Program
Professional staff, Action Plan and Goals**

2006, 2007 – Gunnison County adopted sage-grouse specific land use regulations

2012 – Strategic Committee completes Habitat Prioritization Tool

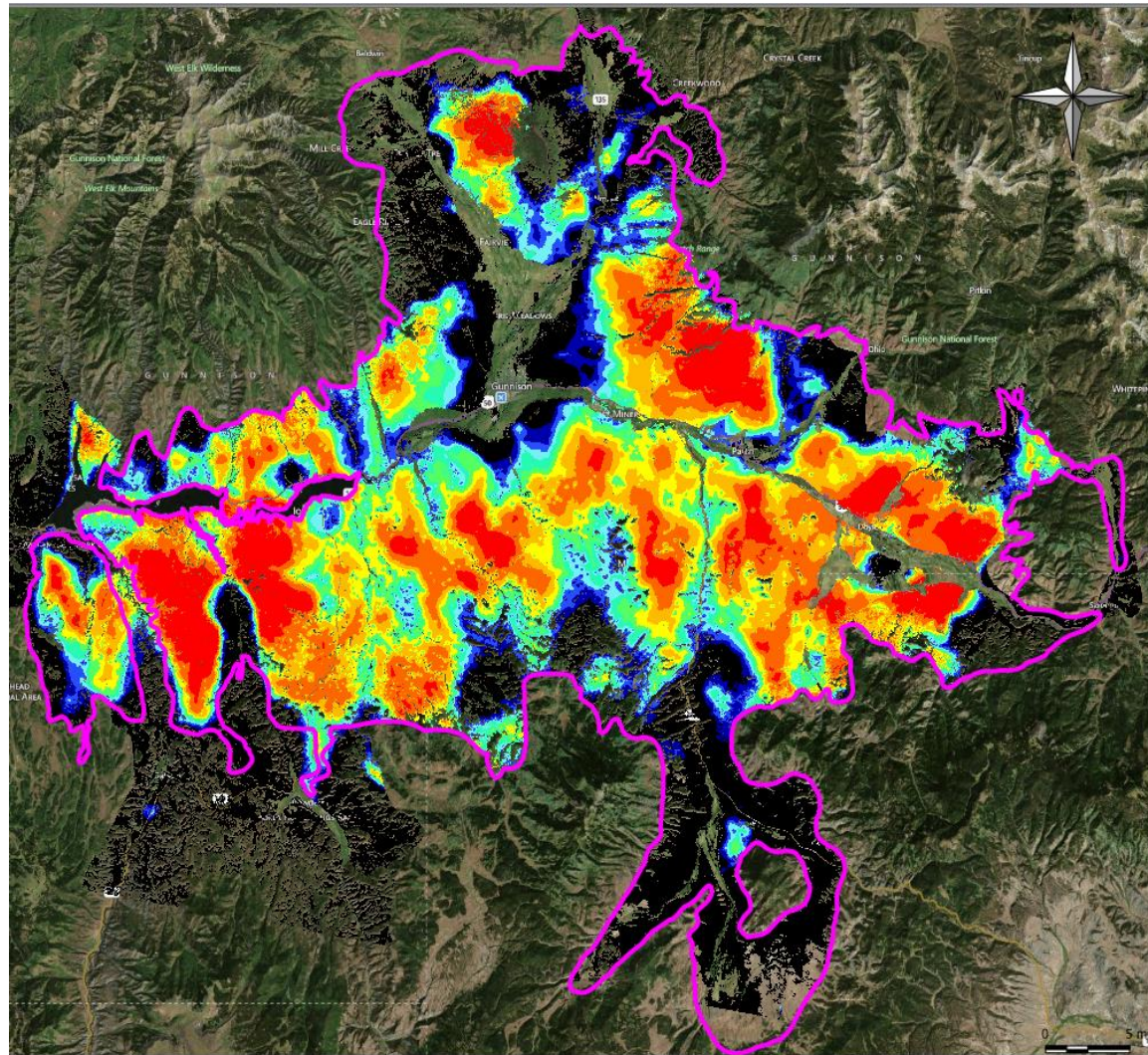
**2013 – Rangewide Gunnison sage-grouse Conservation Agreement
Nine counties with occupied habitat, States of Colorado and Utah**

GuSG Habitat Mapping

- Habitat mapping is a critical element because habitat loss and fragmentation is often the biggest threat to wildlife.
- Often habitat is mapped at landscape scale (i.e., 30 meter pixels), which generally isn't accurate enough for local land managers.
- Best available GuSG mapping was not accurate enough and included some poor assumptions.

GuSG Habitat Mapping

- Bird location model (empirical species occurrence model) relied upon by USFWS - 30 meter pixels
- Challenging the assumptions – bird location data is biased by time of day researchers triangulate location and use locations that are accessible.
- In this case, peer review apparently focused on methods not data suitability.

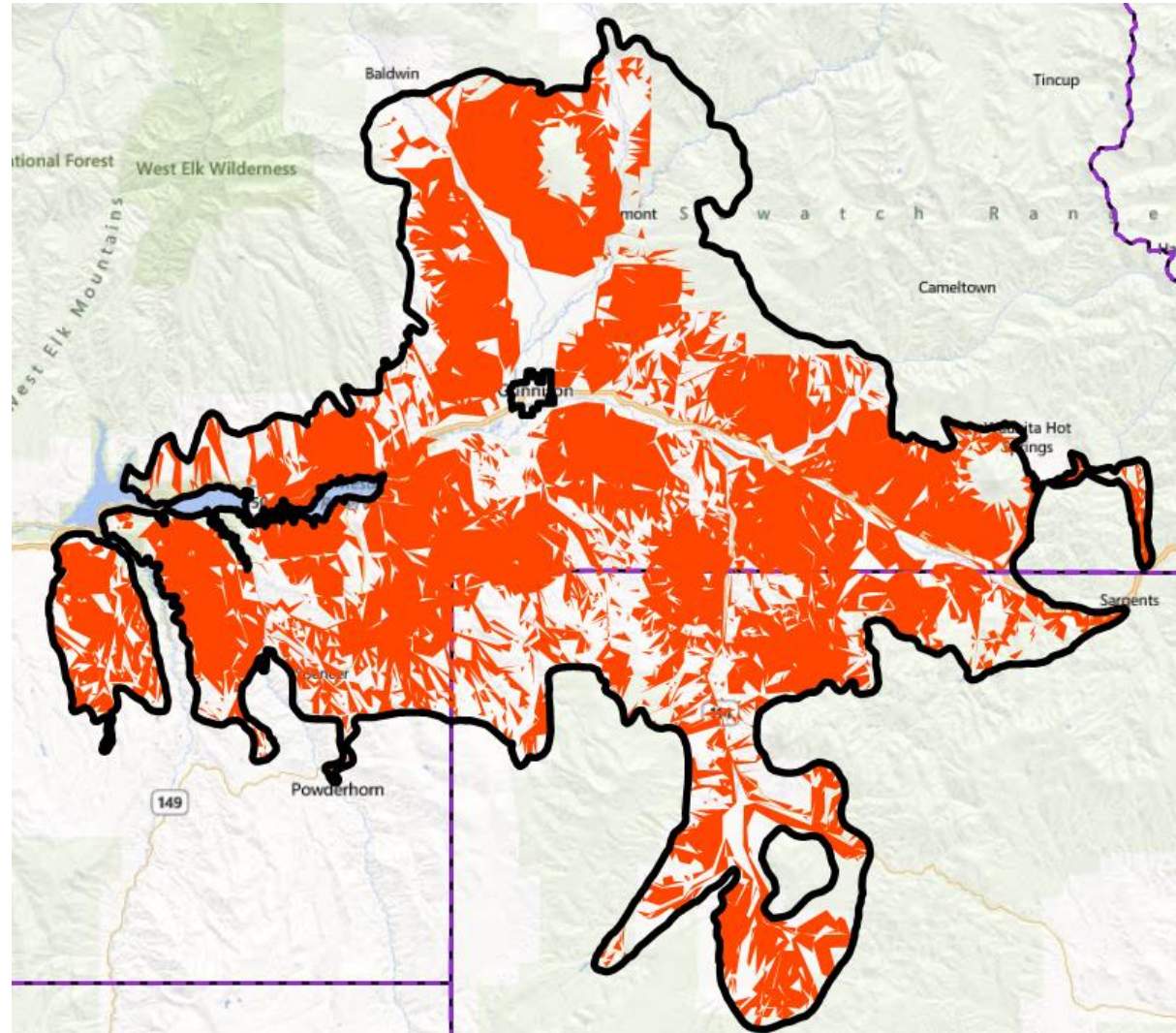


Habitat Mapping Approach: “Habitat Protection Tool”

- Despite 20+ years of research the seasonal habitats of the GuSG is still debated due to lack of scientific corroboration.
- Used expert opinion approach (habitat suitability indices) to overcome scientific uncertainty.
- Committee of experts (Strategic Committee) from CPW, BLM, FS, and NRCS (USFWS participated some) reached consensus on seasonal habitats and constraints to habitat.
- Soils mapping provides more accurate mapping of vegetation (habitat) than available vegetation layers.
- Habitat and constraints were scored by experts using a novel GIS method that allows for real time review of results from applying different scores.
- GIS method maintained accuracy of vectors rather than typical approach of rasterizing, which is a process that reduces accuracy in return for simplifying the analysis process.
- HPT maps habitat potential – what it should be without outside influences (erosion, etc., something not mapped)

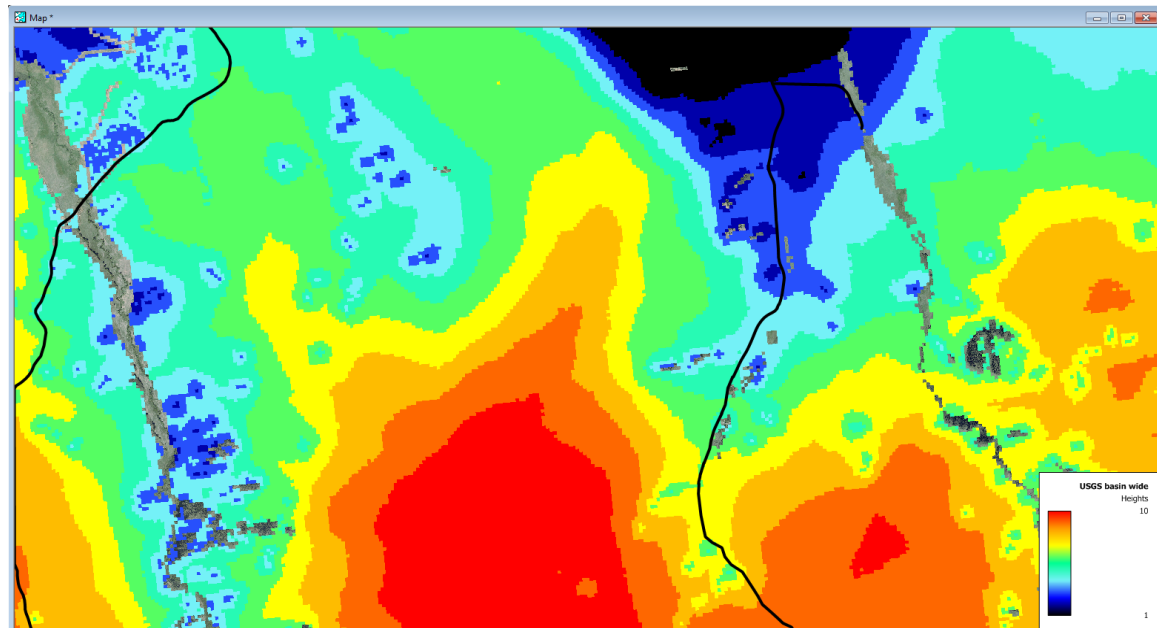
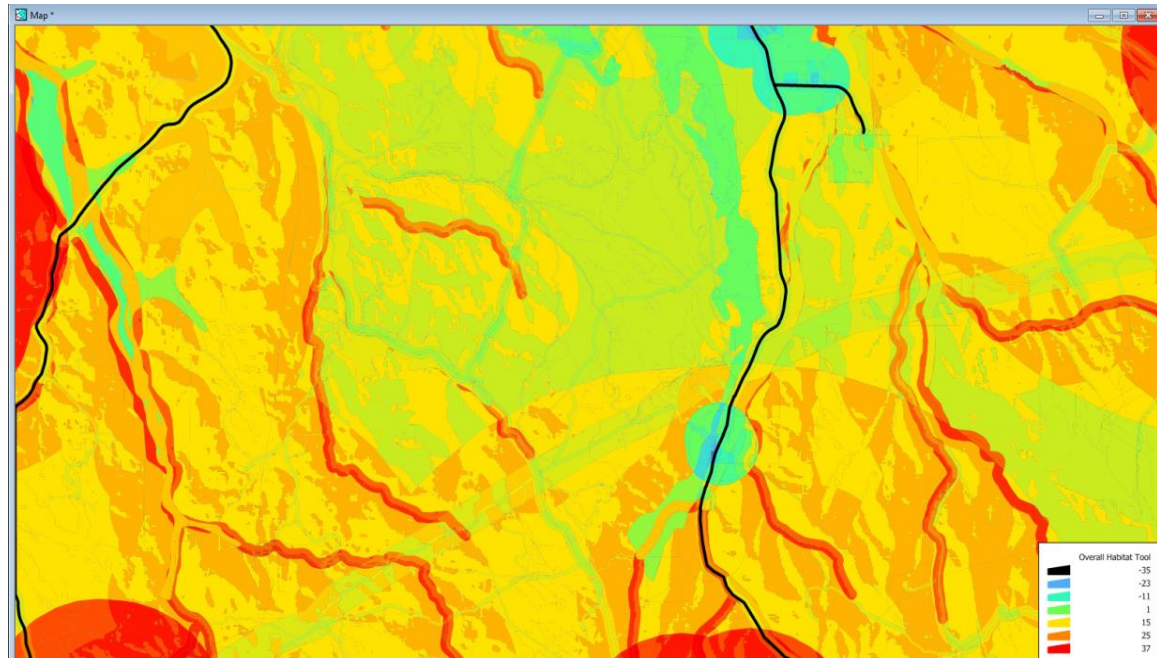
The Result

- 80% of CPW bird location data (8,000 points) lie within Tier1 (scores 15+). (91% of nest locations)
- HPT has been used for BLM's planning, in-house plan reviews, and the USFWS asked that it be replicated in other sub-populations outside Gunnison County.



Comparison: Habitat Prioritization Tool (top) vs. Bird Model (bottom)

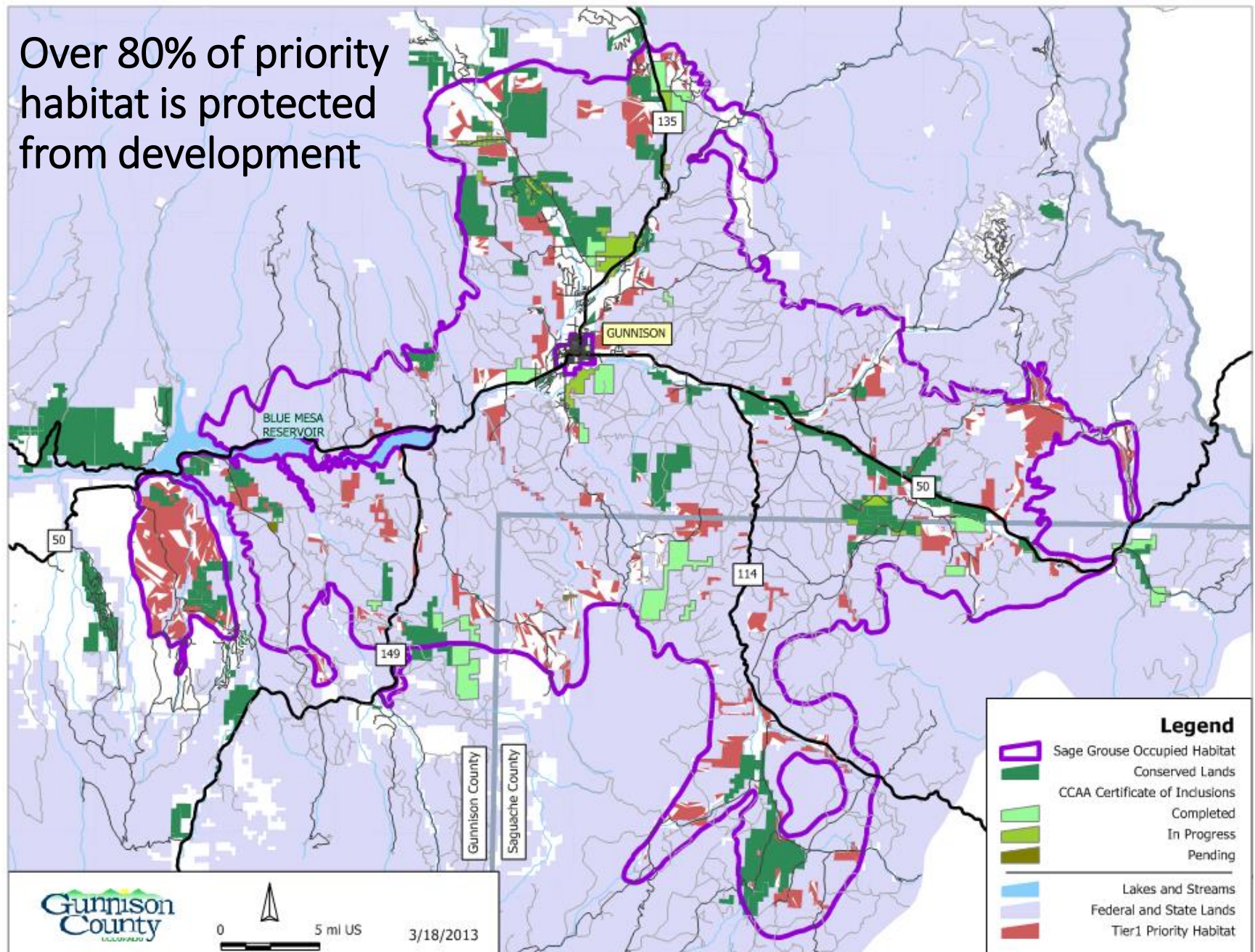
- HPT is far more detailed and shows what influenced the score
- HPT better informs on-site evaluations of habitat
- HPT allows better landscape analysis



USFWS Assumptions in Proposed GuSG Listing Rule

- Using countywide data, USFWS calculated a total number of new homes within occupied habitat by 2050 would be 4,630.
- Using GIS/Assessor data trends since 1997 within occupied habitat, a more accurate prediction is 1,201 ($\frac{1}{4}$ compared to using countywide data).
- USFWS final rule revised their analysis. Development in the Gunnison basin is less of a concern than they previously thought, but still a concern.

Over 80% of priority habitat is protected from development

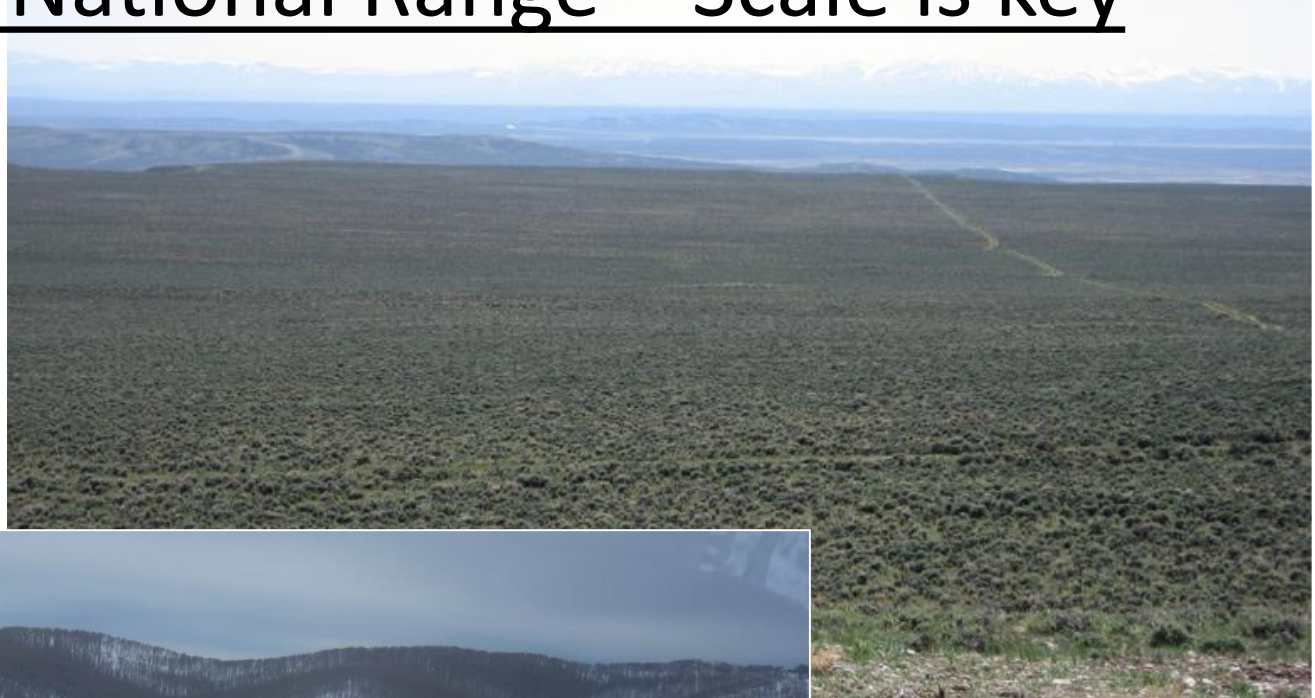


Trends

- Conservation easements are conserving land faster than the amount of land being lost to development.
- It will take 31 years to conserve required land to meet Rangewide Plan goal.
- It will take 178 years for development based on current trends to “use up” the priority habitat that is available beyond the goals set forth in Rangewide Plan.

Local Context is Critical: We Are Different than the National Range – Scale is key

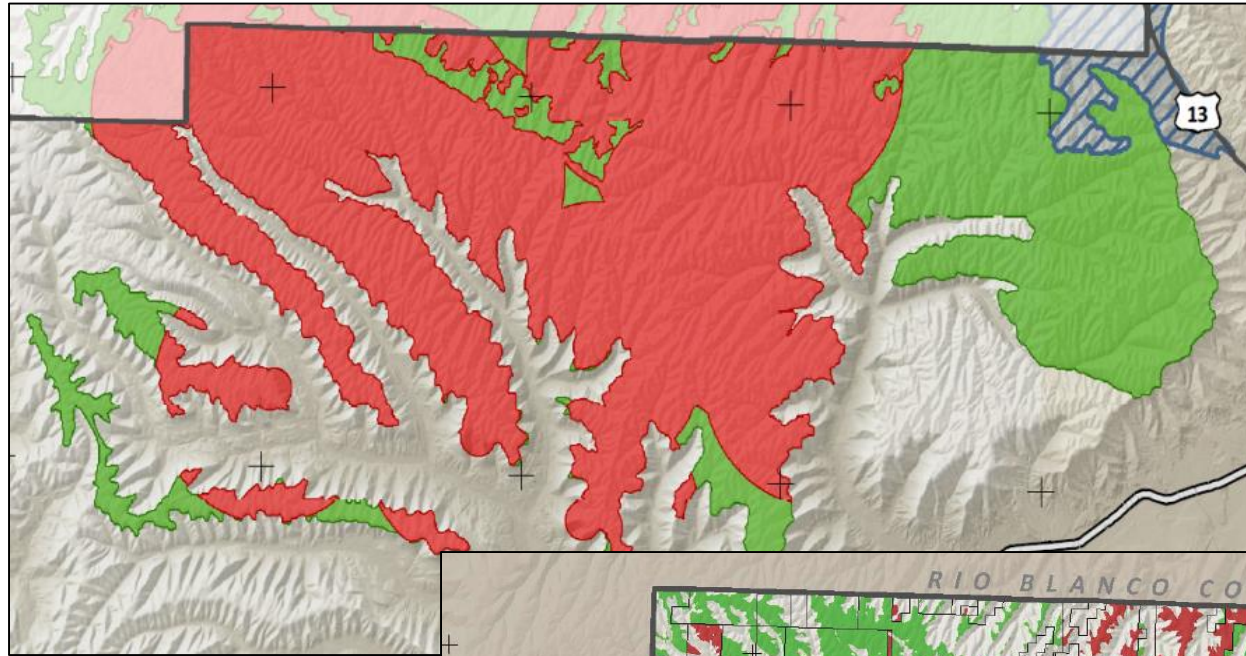
Pinedale Wyoming
Example of Priority
Habitat cited as
basis for the NTT
policy report



Example local
landscape in
Garfield County
mapped as “Priority
Habitat”



The modeled mapping proved the same...

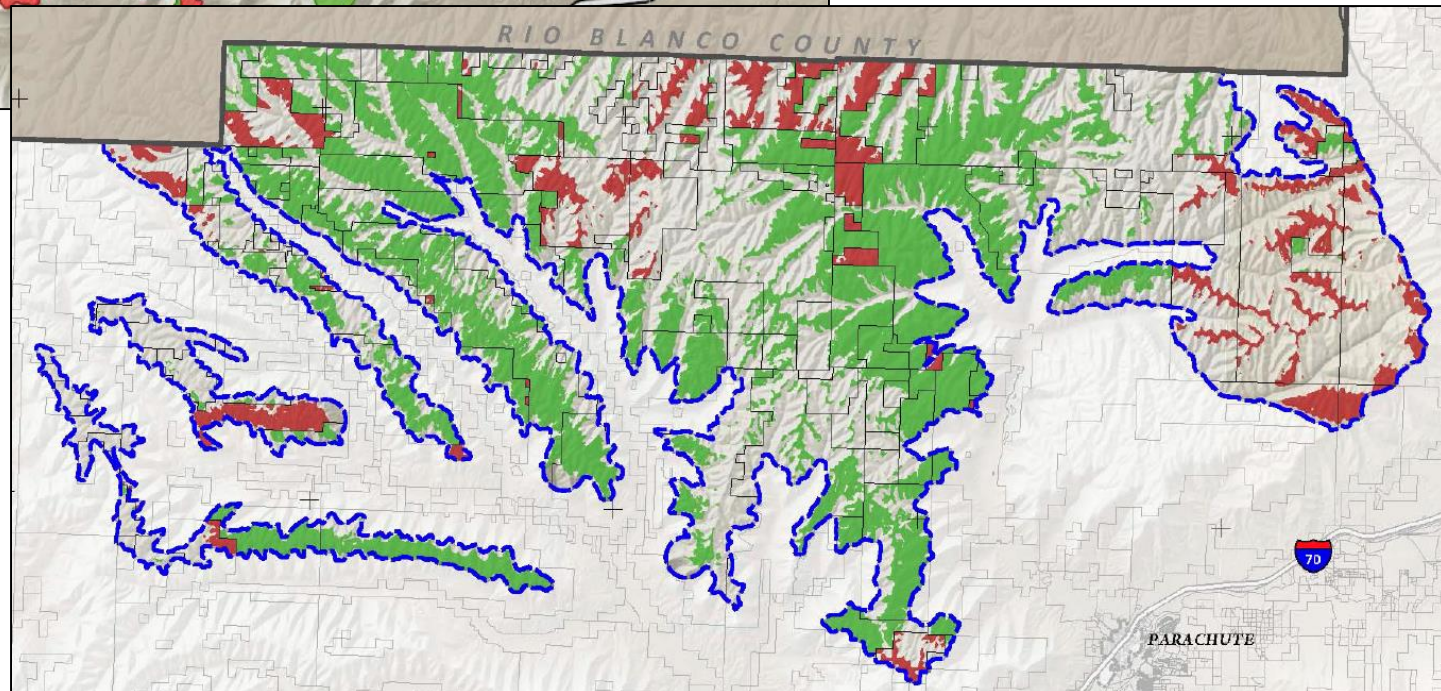


CPW & BLM:
220,000 acres of
Priority & general
habitat



Garfield County:
91,000 acres of
Suitable Habitat

...68% decrease



More Local Conservation Efforts

- Seasonal Road Closures
 - Protect habitat during sensitive times
- Habitat Improvement
 - In-kind contributions
- Area Working Groups
- County Coalition

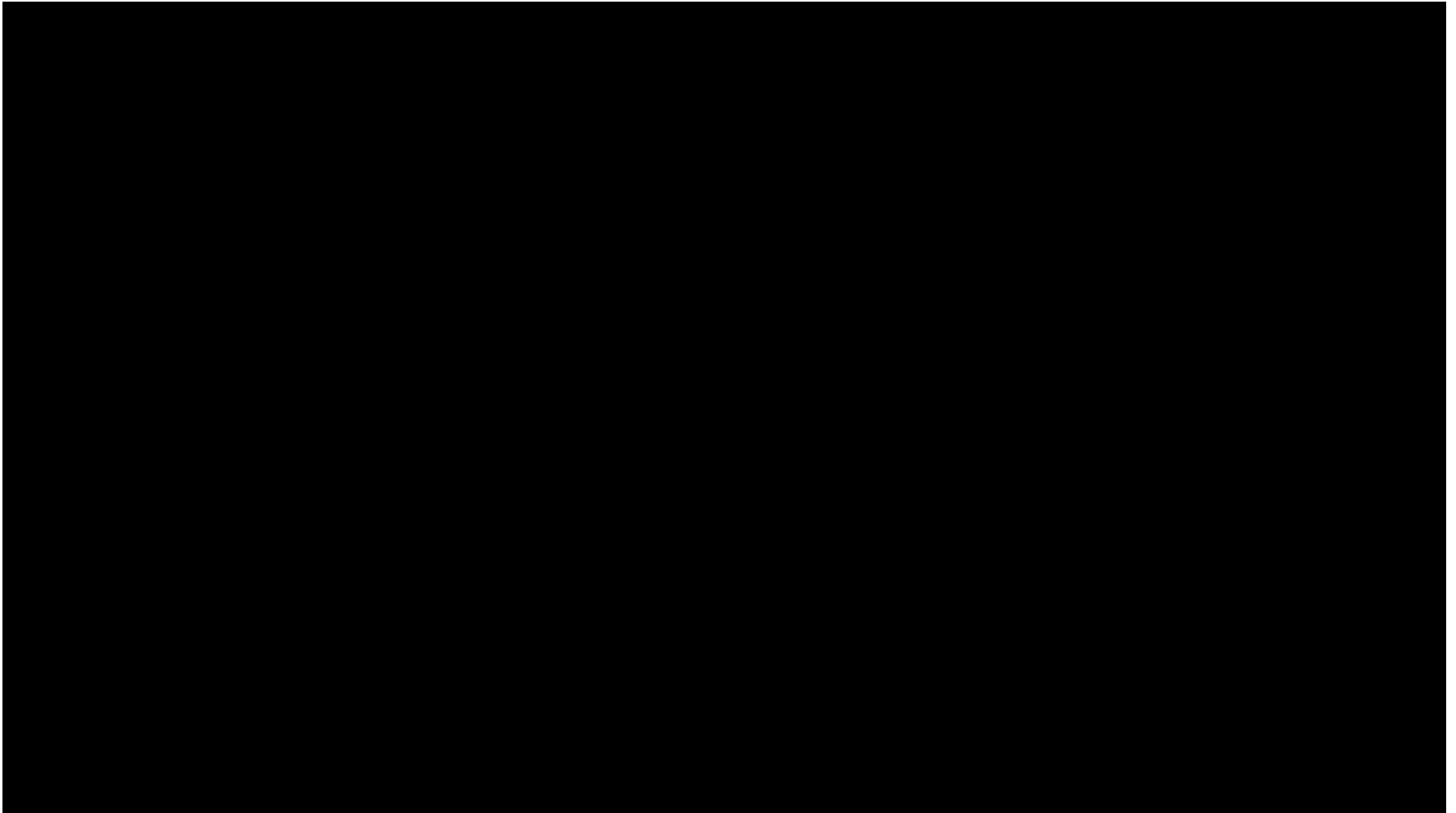


Lessons Learned

- Conservation happens on the ground, not on paper.
- Conservation requires public AND private participation.
- Conservation is ongoing and time consuming.
 - Dedicate staff
 - Pool resources
 - Prepare for the long haul.



Greater Sage Grouse Strutting Video



Published on May 30, 2012

This video was taken at the Mount Biedeman Wilderness Study Area in the Bodie Hills (CA / NV). BLM wildlife crew counted 116 birds the day before. Video by Bob Wick, BLM

Thank You!

Questions /
Comments

