

Greater Sage-Grouse & BLM Guidance

For Colorado Oil & Gas
Operators

Background

- Greater Sage-Grouse managed as BLM Sensitive Species for years
- USFWS concluded in 2010 listing was warranted but precluded
- 2011 BLM convened the Sage-Grouse National Technical Team (NTT)
- 2011 BLM Issued Instructional Memorandum to develop regulatory mechanisms to conserve & restore populations and habitat
- BLM developed EIS to amend Resource Management Plans across Colorado, in order to help prevent Endangered Species Act listing

More Background

- The BLM signed the Record of Decision (ROD) on 09/15 that implements the provisions in the Final EIS for the Resource Management Plan Amendments
- On 09/22 – USFWS did not list the GSG making a finding of “not warranted” based on the effectiveness of the regional BLM plans (RMPA / FEIS)

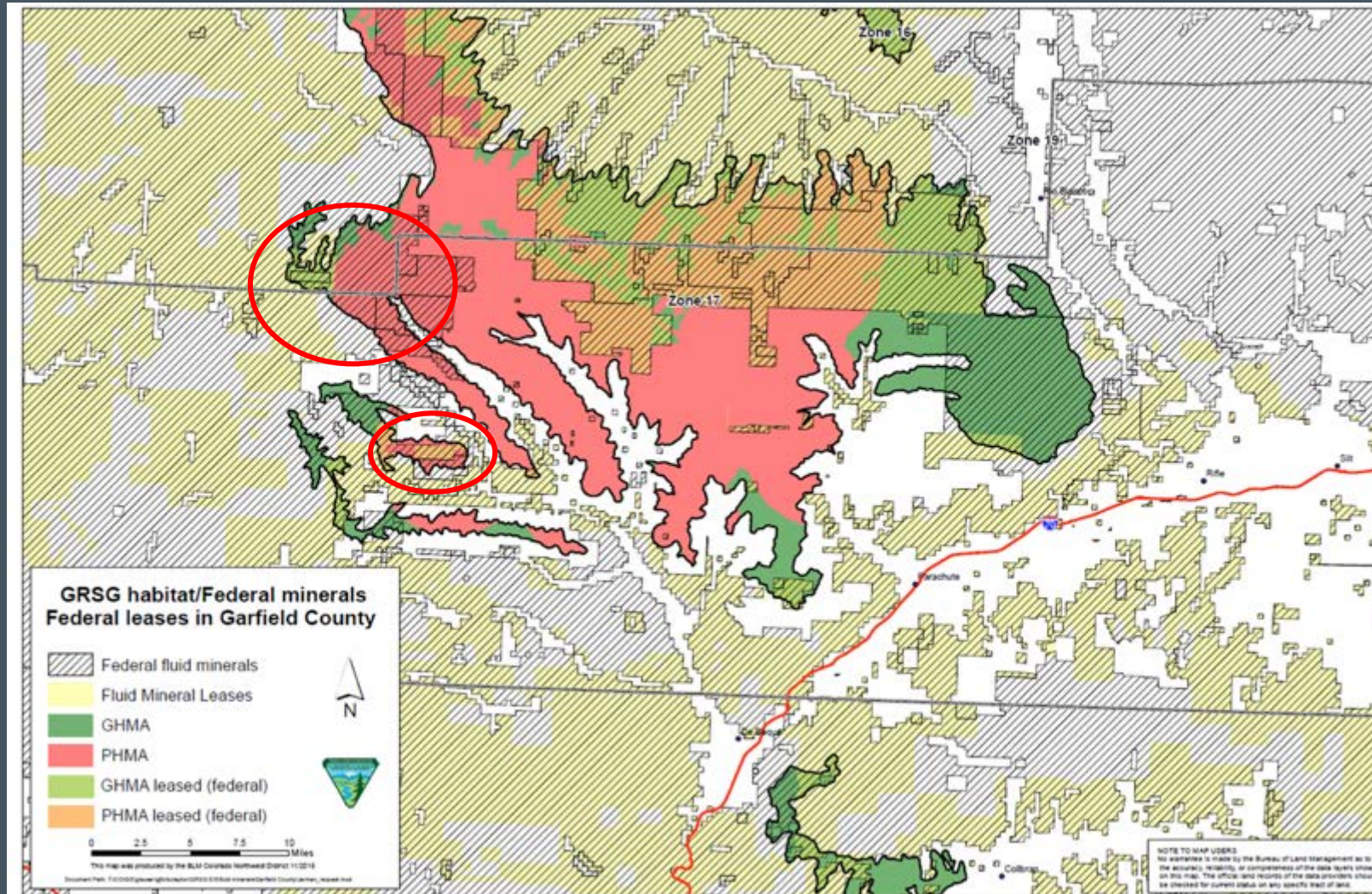
So Now What?

1. BLM hosted a meeting on 10/28 with Cooperating Agencies to present the key pieces of RMPA
2. Key Policy Management Areas:
 - Travel & Transportation
 - Range Management
 - Wild Horse Management
 - Lands & Realty
 - Fluid Minerals (Unleased)
 - Fluid Minerals (Leased)

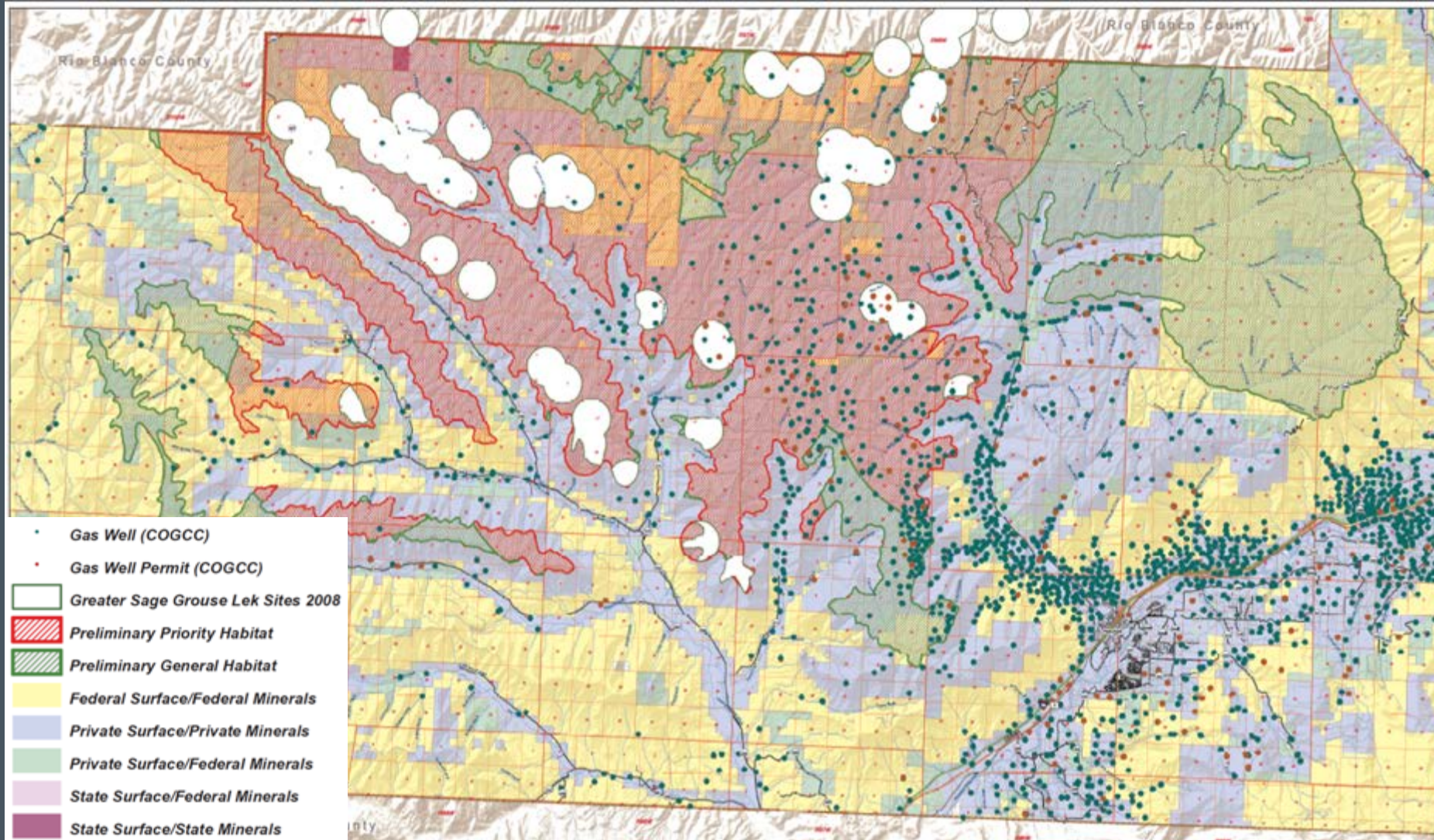
Unleased Fluid Minerals

- No new leasing w/in 1 mile of active lek
- Priority Habitat Management Area (PHMA): No Surface Occupancy (NSO), no waivers or modifications with Exceptions granted only by unanimous panel decision of BLM, CPW and USFWS based on criteria
- General Habitat Management Area (GHMA): NSO w/in 2 miles of active lek (waivers, modifications and exceptions based on criteria)
- Timing Limitations – Prohibits surface occupancy or disturbance in PHMA w/in 4 miles of a lek during lekking, nesting, and early brood-rearing (March 1 to July 15)
- Many lands in western Colorado have been leased; however, they do expire...
- No known GSG leks occur in GHMA

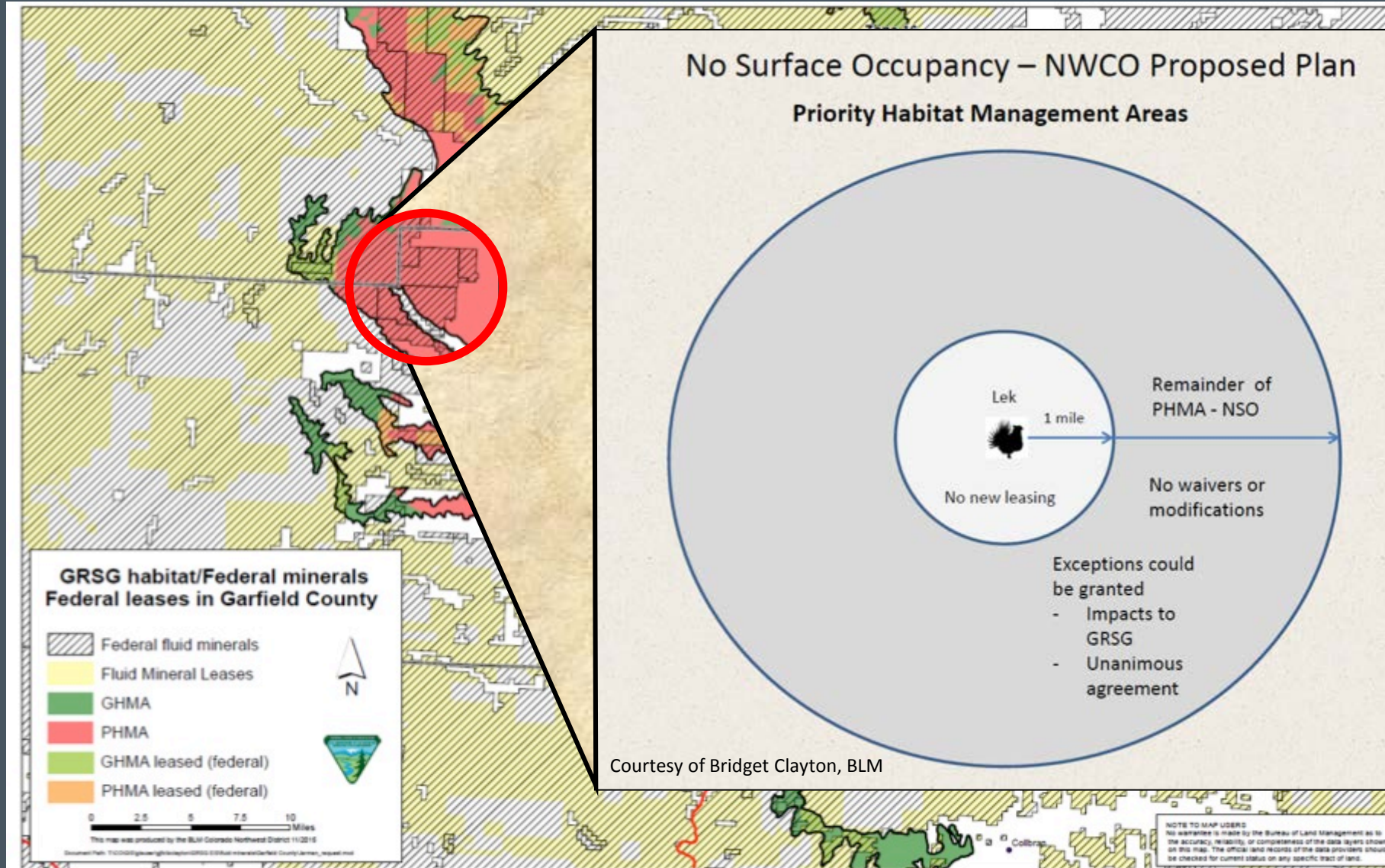
BLM Unleased Fluid Minerals (Roan Plateau/Piceance example)



2008 Sage-Grouse Leks



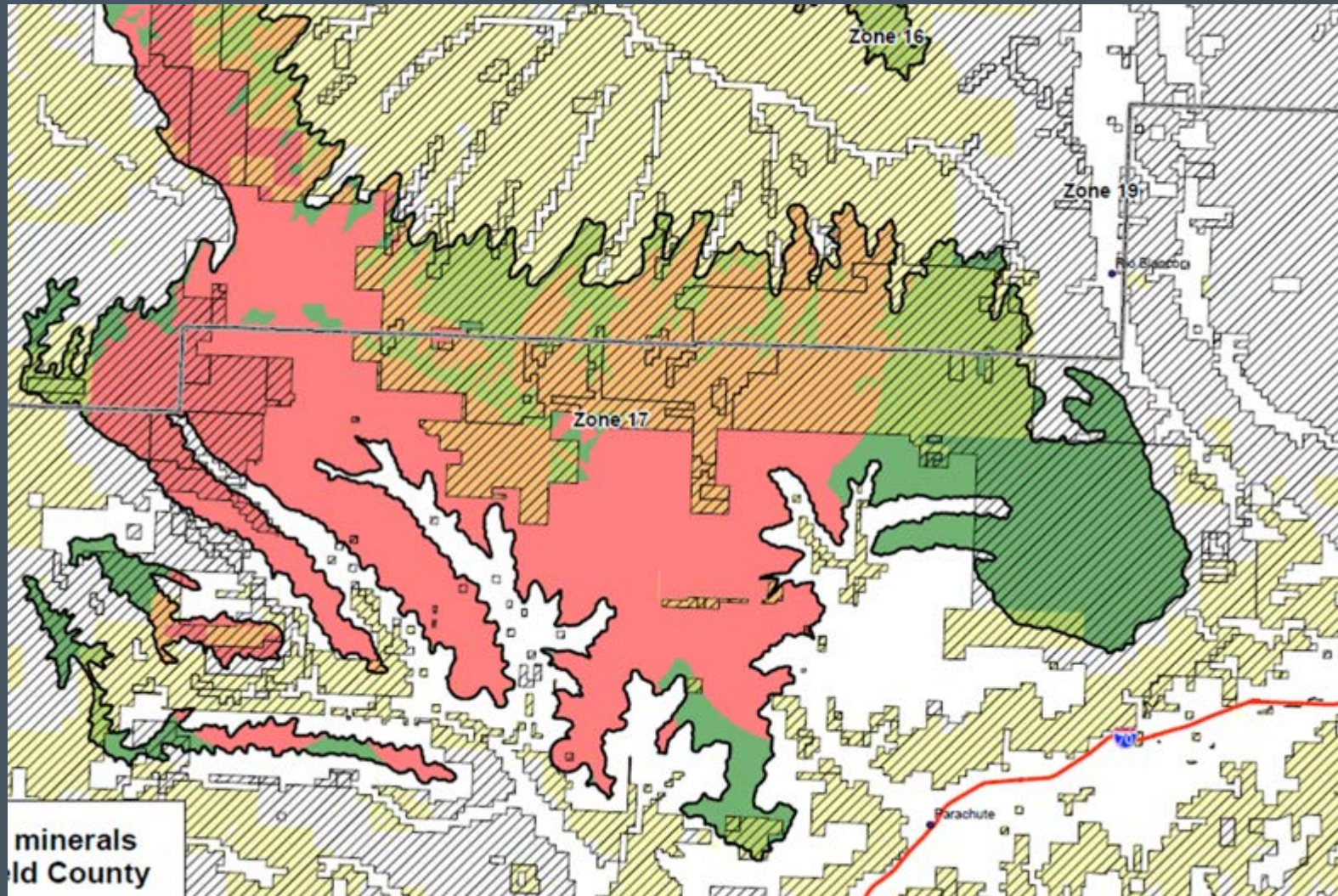
NSO for Unleased Minerals in PHMA



Leased Fluid Minerals

- BLM's approach to recognize "Valid Existing Leases"
- BLM work with Lessees to Avoid, Reduce and Mitigate adverse impacts to extent compatible with Lessee's right to drill in an APD
- Activity "precluded" w/in 1 mile of active lek; however:
 - If this restriction proves "infeasible or uneconomic" or if
 - the disturbance activity exceeds 1 disturbance per 640 and / or
 - exceeds the 3% disturbance cap, then mitigation is required (Appendix F)
- In PHMA and w/in 4 miles of active lek:
 - BLM will use specific criteria to guide development to reduce impacts to GSG;
 - Timing restrictions apply (March 1 to July 15), could be adjusted with CPW

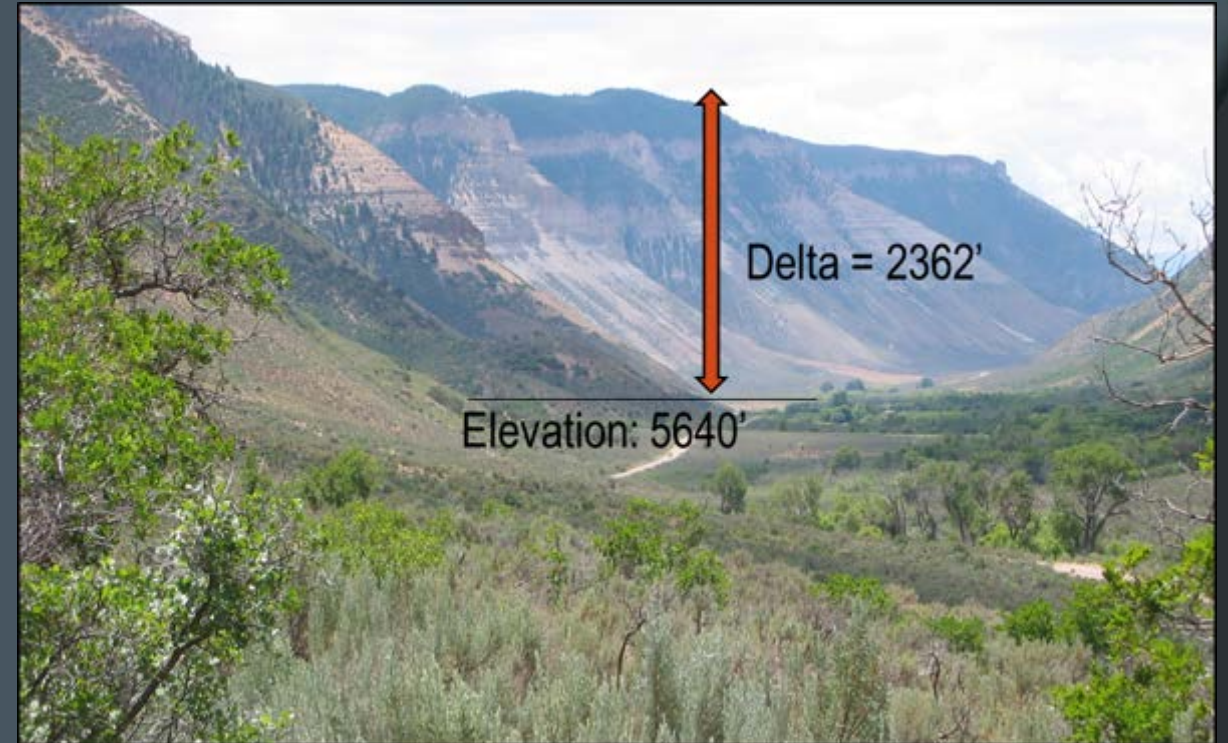
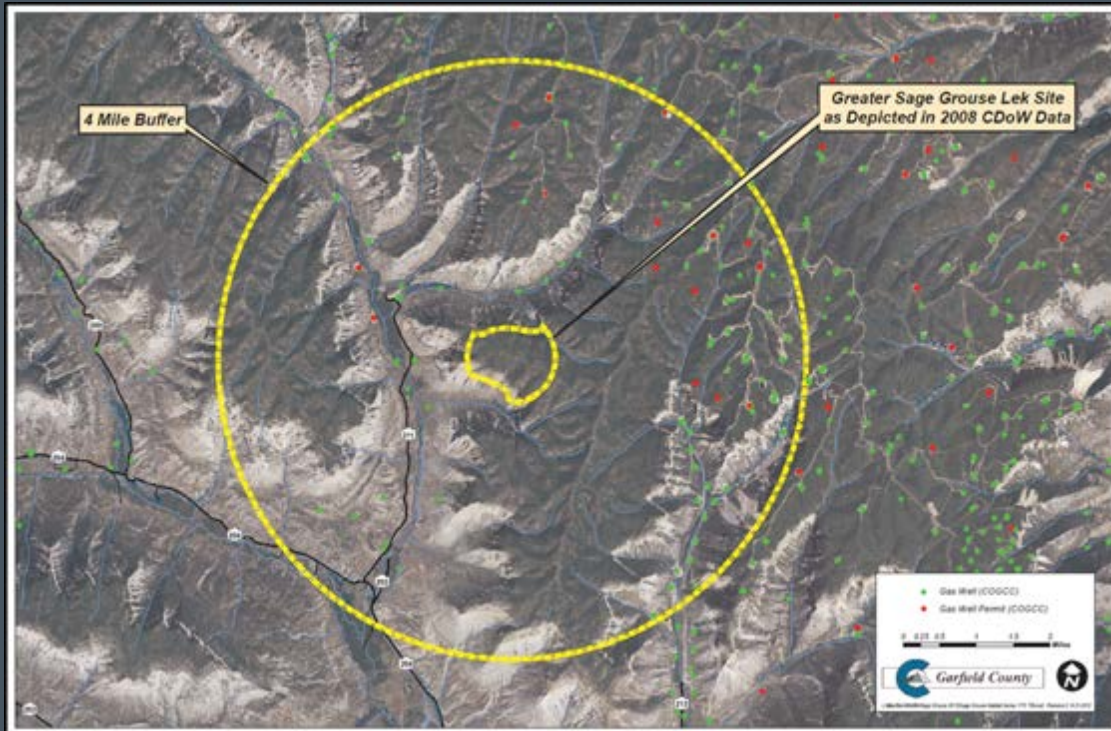
BLM Map of Leased Fluid Minerals



Specific Criteria

- Location of proposed activities in relation to critical GRSG habitat areas as identified by factors, including, but not limited to, average male lek attendance and/or important seasonal habitat;
- An evaluation of the potential threats from proposed lease activities that may affect the local population as compared to benefits that could be accomplished through compensatory or off-site mitigation;
- **Industry/Local Government Suggestions:** An evaluation of the proposed lease activities, including design features, in relation to the site-specific terrain and habitat features. For example, within 4 miles from a lek, local terrain features such as ridges and ravines may reduce the habitat importance and shield nearby habitat from disruptive factors. This is particularly likely in Colorado MZ 17 (Parachute – Piceance – Roan), which has an atypical GRSG habitat featuring benches with GRSG habitat interspersed with steep ravines...Clear Creek example.

Industry/Local Government Suggestions



Disturbance Cap Program

- *Management Zone 17 Example (Piceance – Parachute – Roan)*
- Only applies to disturbances in Priority Habitat Management Areas on:
 - BLM
 - Split-estate (private surface with federal minerals)
 - Private Land
- Zone 17 by the Numbers:

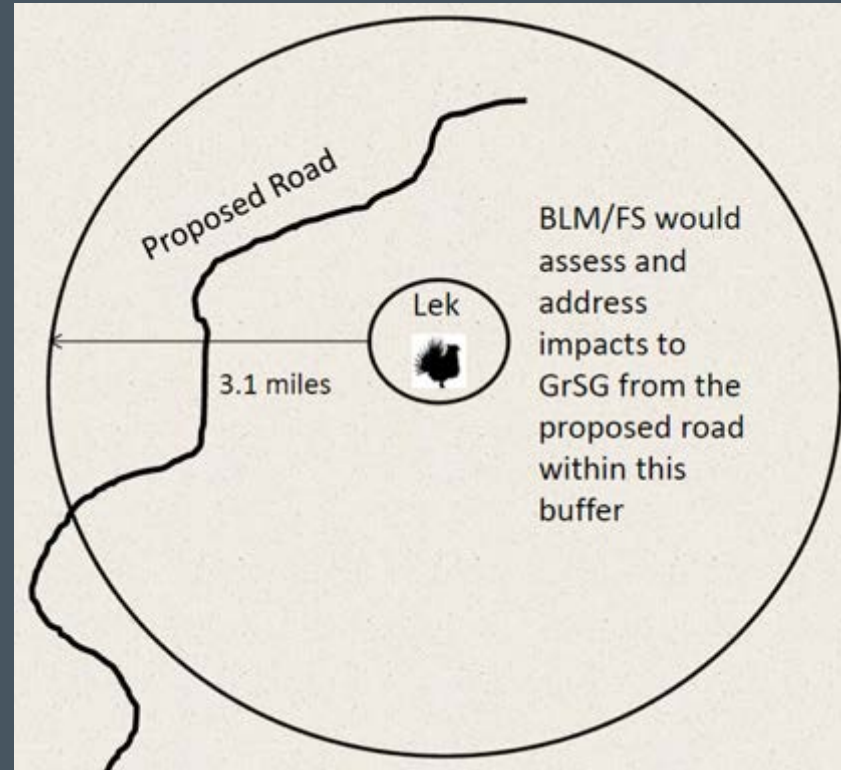
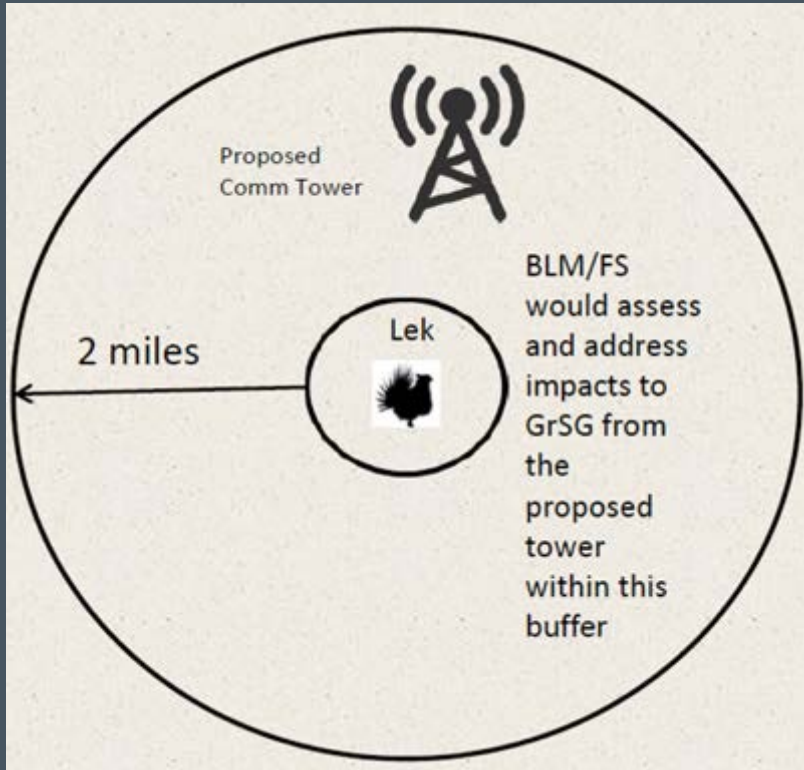
• Total Acres in Zone:	353,297
• Total Acres in PHMA:	212,555
• 3% Cap of Acres in PHMA:	6377
• <u>BLM Disturbance Inventory:</u>	<u>4,523 (or 2.13%)</u>
• Acres left under cap:	1,853
- BLM will track disturbance and reclamation via a national database (SDARTT)

1 per 640 Acres “Disturbance Density” (*Active Disruptions*)

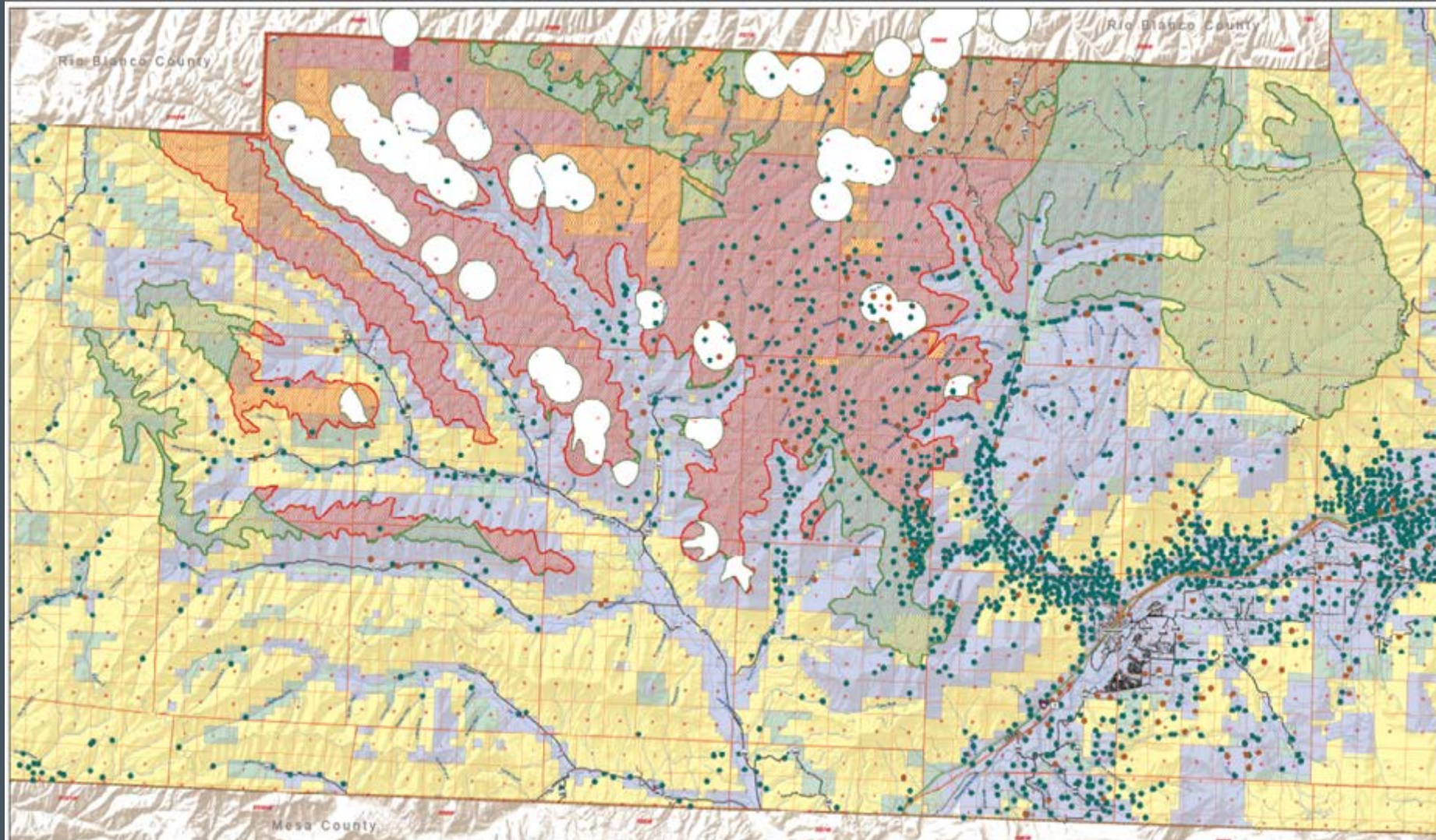
- Applies to energy and mining facilities on BLM and Split-estate lands in PHMA
- The Disturbances counted / considered are “active” on BLM and Split-estate lands in PHMA (not on fee/fee)
- Disturbance Density is calculated by:
 - Total acres in PHMA that fall on BLM and Split-estate divided by 640.
 - For Garfield County: $106,465 \text{ acres} \div 640 = 166$ active disturbances
- While the “3% Cap” monitors and tally total acres disturbed on all lands (public and private) in PHMA for a variety of uses, the disturbance density (1:640) only looks at how many disturbances on BLM and Split-estate lands in Zone 17.

Lek Buffers

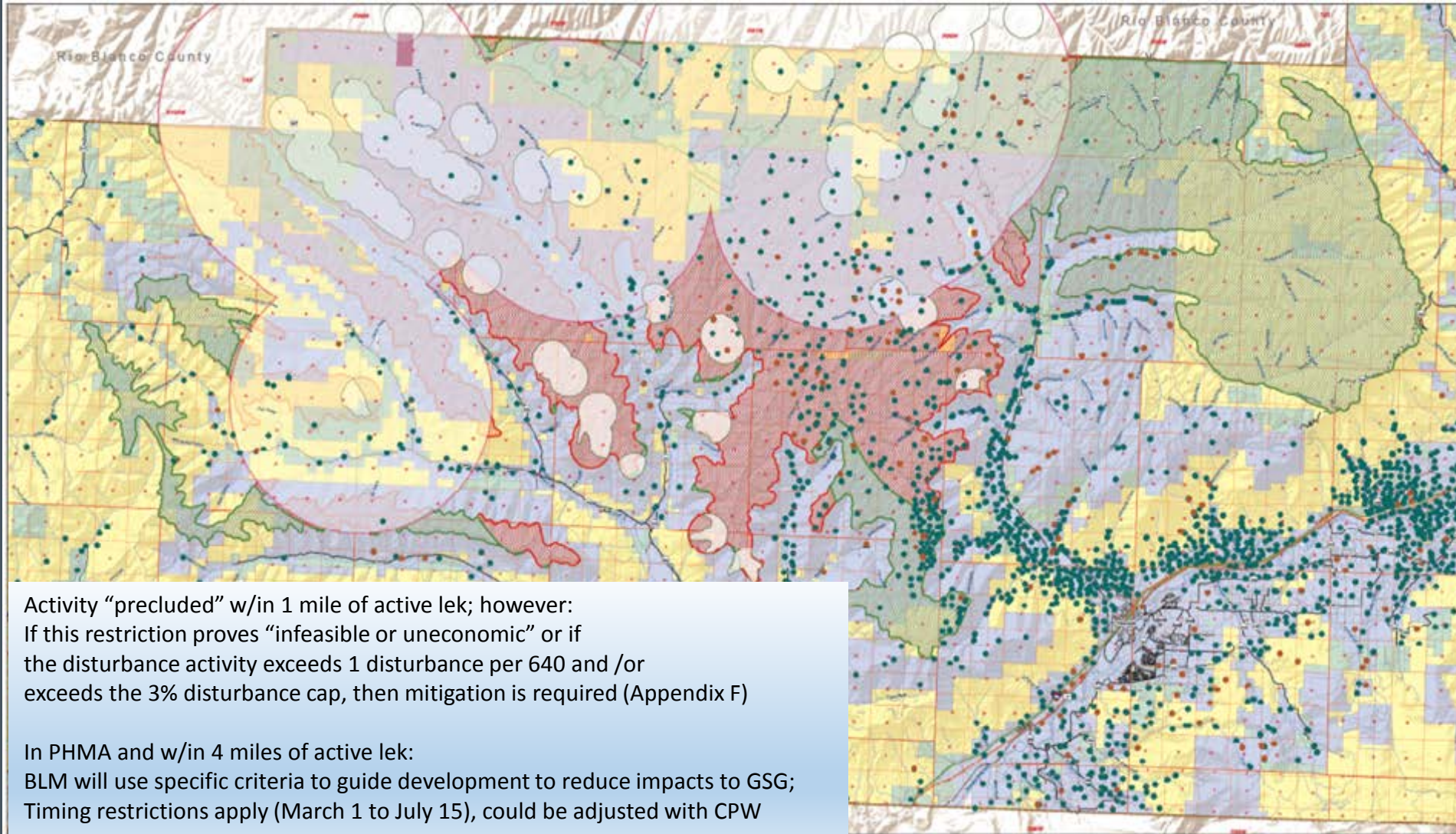
- Much of the approach to the BLM's conservation is geared towards protection of impacts to active leks, thus lek buffers
- CPW will provide the updated lek locations to BLM
- BLM RMPA: Appendix B in Plan provides guidance on how BLM will evaluate activity within established lek buffers: For example (as provided by BLM):



2008 Lek Sites



4-Mile Buffers in BLM & Split Estates



Activity “precluded” w/in 1 mile of active lek; however:
If this restriction proves “infeasible or uneconomic” or if
the disturbance activity exceeds 1 disturbance per 640 and /or
exceeds the 3% disturbance cap, then mitigation is required (Appendix F)

In PHMA and w/in 4 miles of active lek:
BLM will use specific criteria to guide development to reduce impacts to GSG;
Timing restrictions apply (March 1 to July 15), could be adjusted with CPW

The Importance of PHMA/GHMA Maps

- PHMA Unleased:
 - *No Surface Occupancy* (NSO), no waivers or modifications, with Exceptions granted only by unanimous panel decision of BLM, CPW and FWS based on criteria
- PHMA Leased:
 - BLM will use specific criteria to guide development to reduce impacts to GSG;
 - Location of proposed lease activities in relation to critical GRSG habitat areas as identified by factors, including, but not limited to, average male lek attendance and/or important seasonal habitat;
 - An evaluation of the potential threats from proposed lease activities that may affect the local population as compared to benefits that could be accomplished through compensatory or off-site mitigation;
 - An evaluation of the proposed lease activities, including design features, in relation to the site-specific terrain and habitat features. For example, within 4 miles from a lek, local terrain features such as ridges and ravines may reduce the habitat importance and shield nearby habitat from disruptive factors.
 - PHMA Timing Limitations – Prohibits surface occupancy or disturbance in PHMA w/in 4 miles of a lek during lekking, nesting, and early brood-rearing (March 1 to July 15)
 - 3% disturbance cap within PHMA

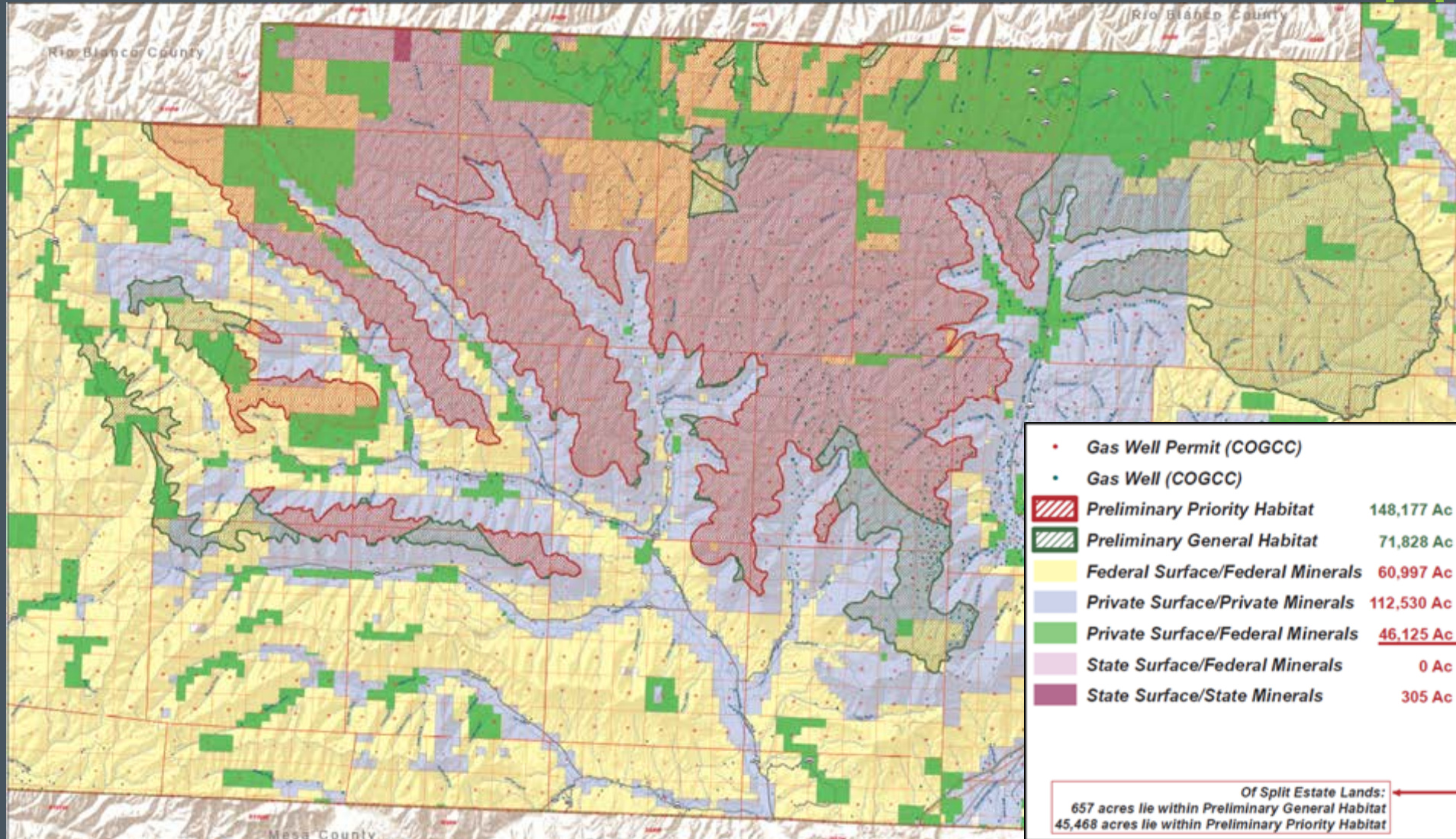
PHMA/GHMA Map Changes

- RMPA Guidance: Only BLM, CPW or USFWS can provide info to change / update maps based on best available scientific information on case-by-case basis.
- This could be done via either:
 - Plan Maintenance; or
 - Plan Amendment
- CPW indicates their initial mapping provided to BLM was for consultation purposes and not as BLM has used it with specific policy implementation
- Associated Governments of Northwest Colorado, Garfield & Moffat Counties:
 - Working with CPW to update PHMA/GHMA in 2016

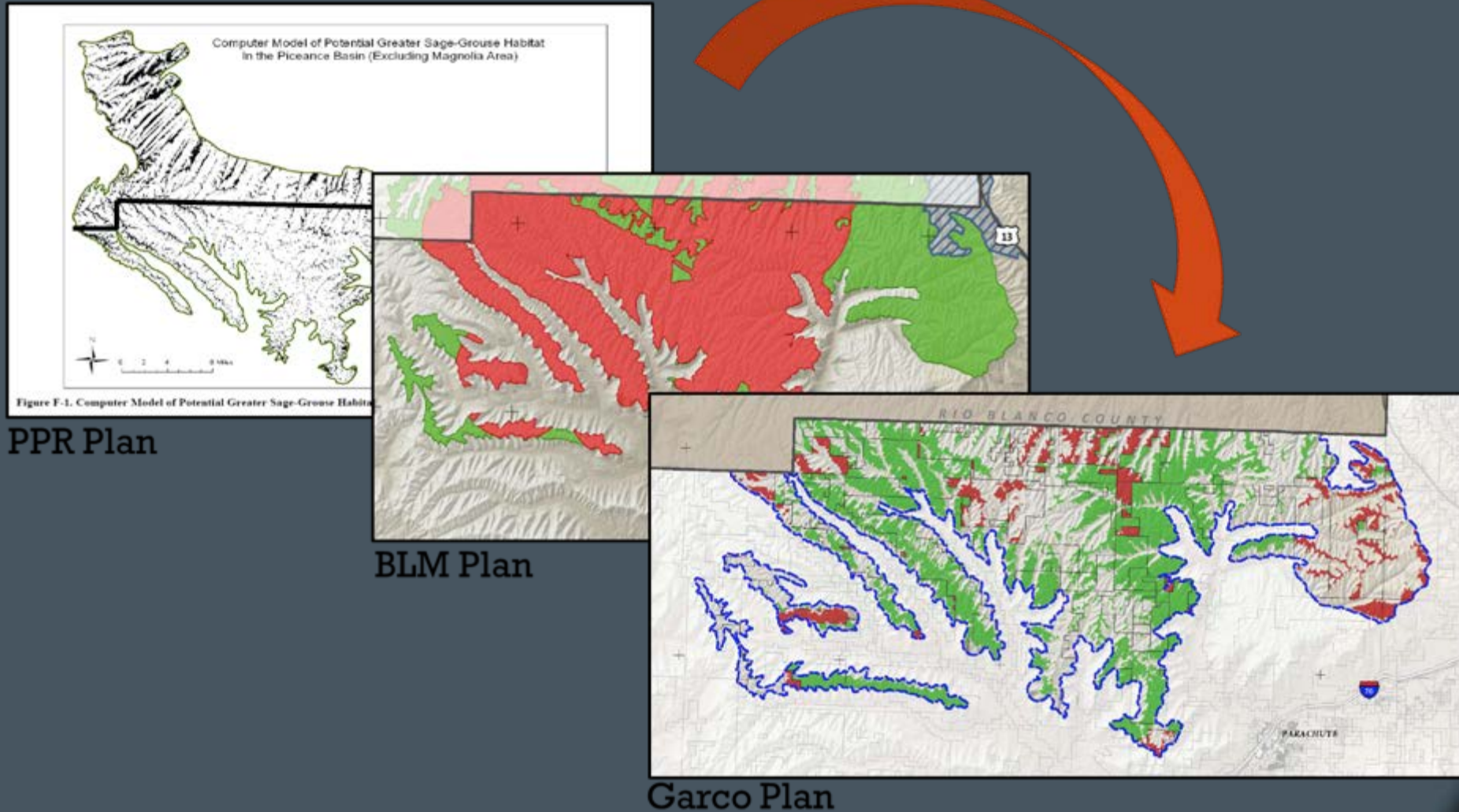
AGNC Sage-Grouse Habitat Mapping

- Rep Rankin – Federal Lands Coordination Bill passed in 2015 Session
- DOLA to administer Grant: \$1M per year for three years
- AGNC awarded Grant to map NW Colorado GSG habitat at finer scale with CPW
- Financial Match Commitments: (DOLA Required \$45,000)
 - Moffatt County: \$15,000
 - Garfield County: \$15,000
 - Rio Blanco County: \$15,000
 - Routt: \$2,500
 - Jackson County: \$500
 - Southwestern Energy: \$5,000
 - TriState: \$5,000
 - Chevron: \$5,000
 - Transwest: \$15,000
- \$78,000
- CPW Supporting with another \$150,000
- Grant has wide support: Congressional support, Governor's Office & CPW

What is the Science Behind Remapping?

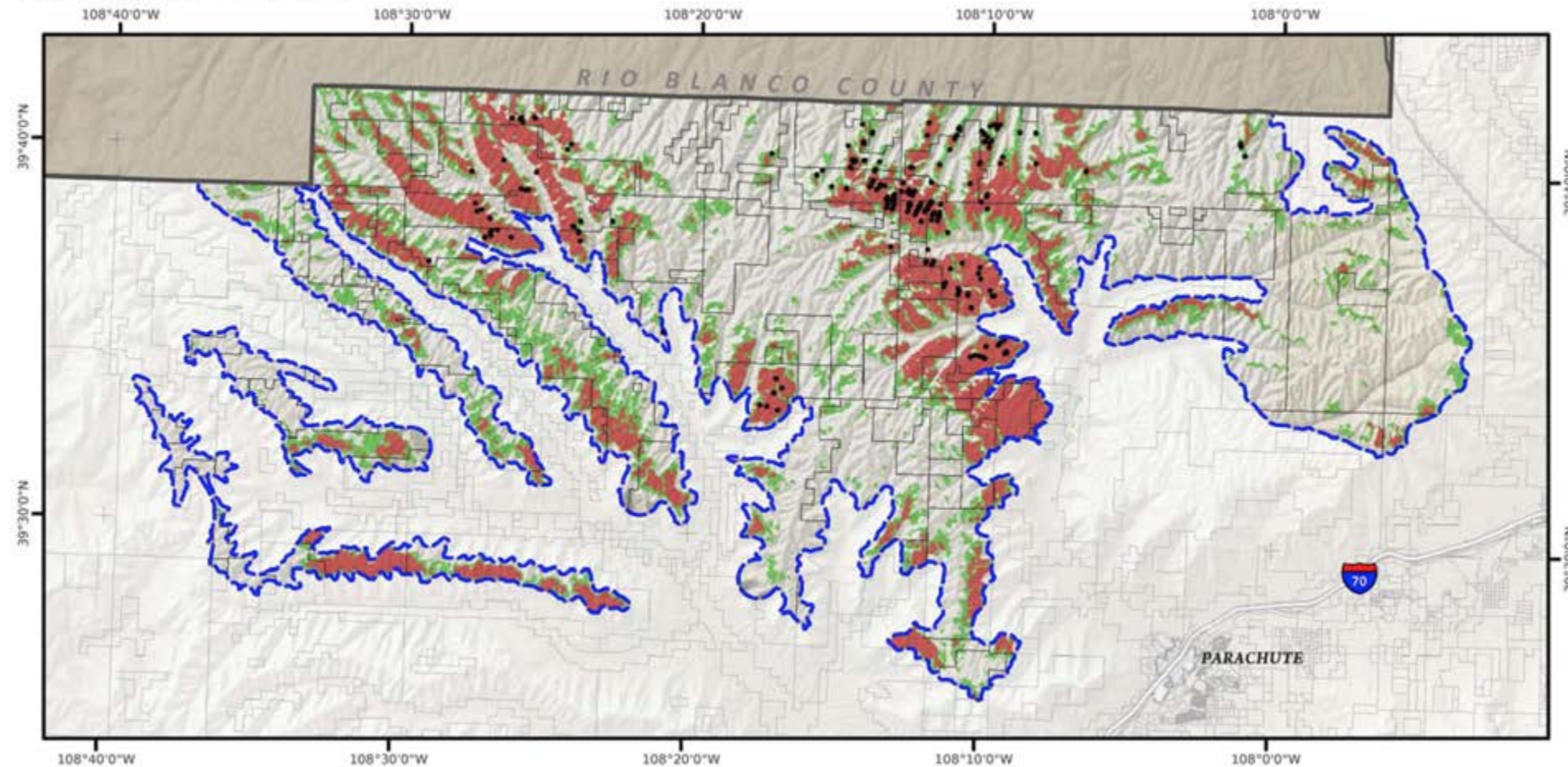


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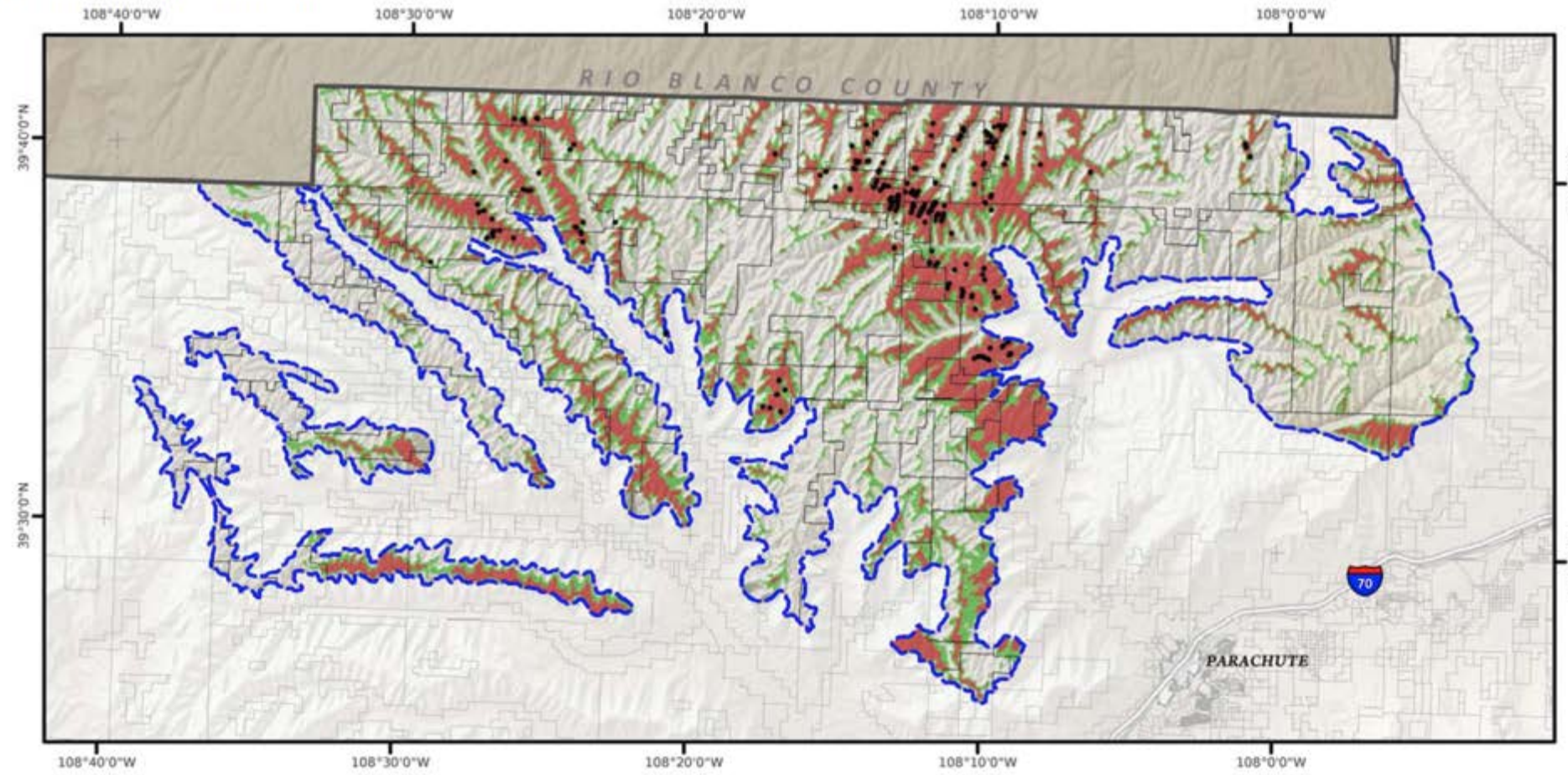
Garfield Mapping Examples

Figure 4: Fuzzy Model Results



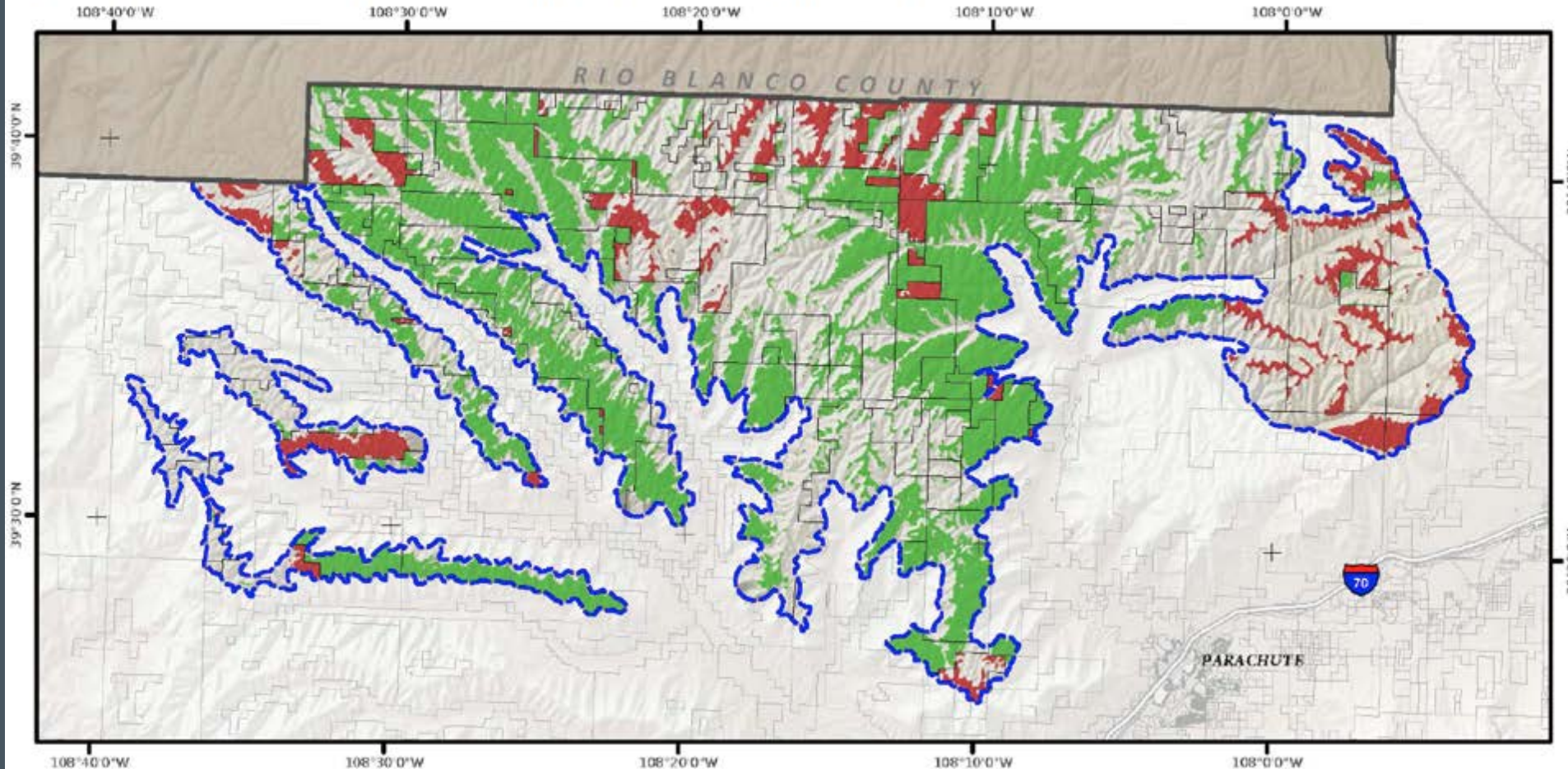
Garfield Mapping Examples

Figure 3: RSF Model Results



Garfield Mapping Examples

Figure 5: Garfield County Greater Sage-Grouse Management Areas



Thank You

Special thanks to:

- Bridget Clayton, NW District BLM
- Fred Jarman, Garfield County Community Development
- Tom Jankovsky, Garfield County Commissioner