



SHORE LLC

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P.O. Box 173779 • DENVER, CO 80217



July 15, 2013

VIA EMAIL

Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, CO 80203

RE: *Amended Rules, 1307-RM-01 Wildlife Maps (June 14, 2013)*

Dear Sir or Madam:

Pursuant to the Colorado Oil and Gas Conservation Commission's ("COGCC" or "the Commission") request for comments and information regarding the update of sensitive wildlife habitat and restricted surface occupancy (RSO) maps of June 14, 2013,¹ Anadarko Petroleum Corporation ("Anadarko") respectfully submits this letter containing pertinent commercial, factual and scientific information.² This substantial information should be considered in any decision regarding planned or proposed updates to existing mapping.

Anadarko is among the world's largest independent oil and natural gas exploration and production companies. With nearly 25,000 wells operated in the U.S., Anadarko holds fee ownership of mineral rights under nearly eight million net leasehold acres, with a substantial holding located within the State of Colorado in areas which may be directly impacted by the proposed additions and amendments referenced previously. Anadarko is a stakeholder in this rulemaking as the designation of additional areas or amendments therein as sensitive wildlife habitat or RSO may affect Anadarko's ability to develop current and future mineral and lease interests.

With the objective of providing pertinent information to aid the COGCC in the review process, Anadarko analyzed the best available scientific, commercial and factual information by wildlife and biology professionals as it relates to the sensitive wildlife habitat and RSO maps. The analysis is presented below.

¹ On June 14, 2013, the COGCC initiated a review of additions and amendments to the Rule 100 Series (Definitions), Appendix VII (RSO maps), and Appendix VII (Sensitive Wildlife Maps), of the Rules of Practice and Procedure of the Commission, 2 Code Colo. Regs. 404-1 ("Commission Rules"), to update the Commission's Sensitive Wildlife Habitat Maps and Restricted Surface Occupancy Area Maps (http://www.dora.state.co.us/pls/real/SB121_Web.Show_Rule?p_rule_id=5187).

² The scientific information, scientific literature review and analysis contained herein is presented by Nick Owens. Mr. Owens holds a B.Sc. in biology from Eastern Illinois University and specializes in endangered species and wildlife. His experience includes research on rare ecosystems and species across the U.S. in both terrestrial and aquatic environments.

INFORMATION AND ANALYSIS:

Gunnison Sage-Grouse

As it relates to proposed changes to COGCC 100-series rules for Sensitive Wildlife Habitat, the current proposed definition for “production areas” including an area that encompasses a four mile buffer on active lek sites is too broad and does not represent the best available science for this species when specifically reviewing those populations which occur in Dolores and San Miguel Counties. Commons (1997) reported minimal movements year-round for the Gunnison Sage-Grouse (*Centrocercus minimus*) in southwest Colorado. The broad brush approach of considering habitats as sensitive if they are located within four miles of a lek is a flawed approach based on inappropriate analyses as it fails to consider best available science and the specific behaviors exhibited by these populations. The proposed buffer is more appropriate for those populations occurring in the larger Gunnison Basin population where longer distance movements have been recorded. For non-migratory populations such as those in southwest Colorado this proposal is a vast overreach.

Further in review of land cover data (1999-2001) from the United States Geological Survey Gap Analysis Program (USGS, 2004) it is readily apparent that a four mile buffer around lek sites includes a large proportion of non-supportive habitats for *C. minimus*. Consideration of these habitats as “sensitive” or for use as “production areas” by this species would be arbitrary and capricious and not supported by the best available scientific information.

Lastly, clarity on the definition of what is an “active” lek site needs to be further vetted. APC suggests that the COGCC include language which indicates that a non-active lek site is one in which no activity has been recorded for a period of two consecutive years.

Lesser Prairie-Chicken

As it relates to proposed changes to COGCC 100-series rules for Sensitive Wildlife Habitat, as currently drafted, the definition provides sensitive habitat for the Lesser Prairie-Chicken (*Tympanuchus pallidicinctus*) be based on focal areas derived wholly from the current *draft* version of the Western Association of Fish and Wildlife Agencies (WAFWA) Range-Wide Conservation Plan for the Lesser Prairie-Chicken. The “focal area” concept is a conservation strategy for this species and not in itself a quantifiable metric of habitat, especially “sensitive” habitats for this species. Furthermore, the strategy which provides the groundwork by which these focal areas are developed is still an unproven concept that has not been endorsed by the United States Fish and Wildlife Service. To promulgate a change to the sensitive habitat mapping based wholly on a draft document, derived from a conservation strategy and not on specific supportive habitats themselves (based on the *draft* WAFWA document in its current version would include agricultural lands, and other non-supportive habitats), and predicated upon the promise of future implementation is premature at this juncture.

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Anadarko suggests the COGCC instead utilize the Southern Great Plains Crucial Habitat Assessment Tool (CHAT) to characterize those habitats which are supportive and therefore "sensitive" in nature limiting sensitive habitats to those noted as Category 1, "irreplaceable." By utilizing this framework, the COGCC would thereby be relying on a much more scientifically valid metric for sensitive habitats and not upon an unproven conservation strategy which largely overstates potential and future supportive and/or occupied habitats.

Lastly, Anadarko would suggest removal of "core populations and habitat necessary for a viable population" from the definition and replace with "core populations and Category 1 habitats as defined by the Southern Great Plains CHAT." The term "viable population" is largely speculative and current estimates are solely based on opinion; further research and investigation is required to fully quantify this metric.

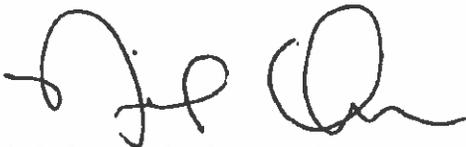
CONCLUSION

Based on the best available scientific information, as summarized herein, the COGCC's updates to sensitive wildlife habitat and RSO maps are deficient both scientifically and legally. Best available science contradicts the application of one-size fits all buffers and focal areas as it relates to *C. minimus* and *T pallidicinctus*, respectively.

Anadarko appreciates this opportunity to provide you with our concerns regarding the proposed rulemaking. Please do not hesitate to contact us if you would like to discuss our comments in greater detail.

Regards,

ANADARKO PETROLEUM CORPORATION

A handwritten signature in black ink, appearing to read 'Nick Owens', written in a cursive style.

Nick Owens, Senior Regulatory Analyst

Colorado Oil and Gas Conservation Commission
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REFERENCES

- Commons, M. L. 1997. Movement and Habitat Use by Gunnison Sage Grouse (*Centrocercus minimus*) in Southwestern Colorado. Thesis, University of Manitoba, Winnipeg, Canada.
- USGS National Gap Analysis Program. 2004. Provisional Digital Land Cover Map for the Southwestern United States. Version 1.0. RS/GIS Laboratory, College of Natural Resources, Utah State University.



DELTA COUNTY, COLORADO

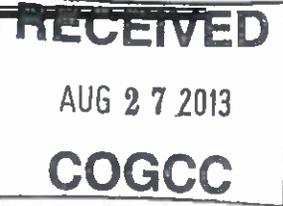
BOARD OF COUNTY COMMISSIONERS

COUNTY COURTHOUSE • 501 PALMER STREET • SUITE 227 • DELTA • COLORADO • 81416-1796

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Dist. 1: C. Douglas Atchley - Dist. 2: C. Bruce Hovde - Dist. 3: J. Mark Roeber



August 23, 2013

Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, CO 80203

RE: Wildlife update rulemaking
Docket No. 1307-RM-01

(e-mail: DNR_COGCC.Rulemaking@state.co.us)

Commissioners:

One of the Gunnison Sage Grouse Lek areas lies just south of Delta County in Montrose County southwest of Crawford on Fruitland Mesa. The proposed changes would place buffer areas close to Delta County and would otherwise impact residents who for their geographic location are more reliant on Delta County for services than Montrose County.

The 2008 Wildlife maps currently in Appendix VII and VIII of the Gunnison Sage Grouse (GUSG) Restricted Surface Occupancy (RSO) and Sensitive Wildlife Habitat (SWH) have proposed changes. The GUSG-RSO (Lek site) areas have been reduced state wide by 9.6 percent, while the GUSG-SWH area has been increased significantly by 63 percent to 1,066,858 acres statewide.

The increased GUSG-SWH area appears to be primarily due to the proposed change in the GUSG production area and surrounding buffer zones. A change in the definition for an impacted area from that currently used; "being an area that contains 80% of the nesting and brood rearing area for" or "the GUSG Range Wide Conservation Plan (May 2005)" to the proposed "being an area that includes a 4 mile buffer on active Lek sites". The Delta County Board of County Commissioners (BOCC) requests the Colorado Oil and Gas Conservation Commission (COGCC) retain the current definition for GUSG. The proposed change applying a specified 4 mile buffer zone would arbitrarily force non-qualified habitat areas (both federally and privately owned) into the COGCC wildlife SWH areas requiring consultation and its associated mitigated conditions for any permit approval. The Board considers this unnecessary and that the proposed 63 % increase in the SWH area reflects these questionable areas that probably would not have qualified under the existing GUSG-SWH definition.

Delta County has and is actively supporting local Gunnison Sage Grouse Working Groups and their efforts to provide coordinated solutions to GUSG issues through private and federal partnerships. These groups have put considerable effort into these projects and have achieved responsible and measurable successes. The Board would recommend the efforts and the GUSG habitat area identifications of these groups also are a stated part of the wildlife consultation process.

1. Winter concentration areas are too broad of definitions and are subject to loose interpretation. These particular definitions need to be clearly defined before being included in sensitive wildlife habitat concern.

2. Specific to Greater sage-grouse and Gunnison sage-grouse, Delta County has similar concerns specific to broad definitions and loose interpretations. U.S. Fish and Wildlife Service and Colorado Parks and Wildlife list habitat for grouse as occupied, critical and historical. The specific populated areas are broken out by breeding, brood rearing, summer, fall and winter habitat areas. Industry currently imposes a 4 mile buffer around active leks, however to expand that to all priority habitat only increases confusion and adds the potential for increased litigation. Our recommendation is that the COGCC use the same habitat designations and state and federal agencies and to limit the restricted surface occupancy to the breeding and brood rearing areas.

The Bureau of Land Management (BLM) also refers to and uses wildlife maps and information generated by the Colorado Parks and Recreation (CPR) division. The BLM Uncompagrhe Field Office which includes federal acreage in Delta County is preparing a revised Resources Management Plan. It appears that the CPR wildlife information will be used differently by the BLM in the RMP revision process than how it proposed by the COGCC in this rulemaking. The BLM RMP will set the standard for their actions with Oil and Gas for the next 20 plus years. The Board would ask the COGCC to coordinate with the BLM to provide common usage of the same wildlife information when dealing with oil and gas operations in the future. The Board understands the BLM can probably use the information in any supporting manner they deem appropriate and the CPR should be the agency to qualify the use of its researched maps and data. The Board also understands the COGCC can strive for that common use of wildlife data and maps by the COGCC and the BLM. The current rulemaking is an opportunity. The Memorandum of Understanding between the COGCC and the BLM, when revisited is another.

The Board thanks you for the opportunity to comment on this rulemaking and your consideration of these comments.

Sincerely,

Board of Delta County Commissioners



C. Douglas Atchley, Chairman



C. Bruce Hovde, Vice Chairman



J. Mark Roeber, Commissioner



Sent via email to: DNR_COGCC.Rulemaking@state.co.us

August 23, 2013

Mr. Robert J. Frick, Hearings Manager
Colorado Oil and Gas Conservation Commission
1120 Lincoln St, Suite 801
Denver, CO 80203

RE: Docket No. 1307-RM-01: Comments to proposed Rulemaking to Update the Colorado Oil & Gas Conservation Commission's Sensitive Wildlife Habitat Maps and Restricted Surface Occupancy Area Maps.

Dear Mr. Frick:

Thank you for the opportunity to provide comments on the proposed Rulemaking to update the Colorado Oil and Gas Conservation Commission's (COGCC) existing fish and wildlife data and maps. These updates include amendments to the Rule 100 Series ("Definitions"), Appendix VII ("Restricted Surface Occupancy Area Maps"), and Appendix VIII ("Sensitive Wildlife Habitat Maps").

Trout Unlimited (TU) believes these maps are a valuable tool for protecting fish, wildlife and the habitat they depend on during the development of oil and gas resources, and coordination with Colorado Parks and Wildlife (CPW) is essential in the COGCC's efforts to foster responsible energy development and mitigate adverse environmental impacts.

TU is generally supportive of the datasets CPW and COGCC is using to apply Restricted Surface Occupancy (RSO) to Cutthroat Trout and Gold Medal Waters in the proposed Rule. TU recommends, however, that CPW be granted discretion to update the RSO maps based on the underlying datasets as changes to those datasets occur.

I. Interested Party Information

Trout Unlimited is a private, non-profit conservation organization that has more than 140,000 members nationwide dedicated to conserving, protecting and restoring North America's trout and salmon fisheries and their watersheds. Since 1959, TU staff and volunteers have dedicated countless hours and financial interests toward the protection of sensitive ecological systems necessary to support robust native and wild trout and salmon populations in their respective range. TU supports responsible energy development that recognizes and protects coldwater fisheries, drinking water and wildlife habitat.

Statewide, Colorado TU has over 10,000 members and 24 local chapters throughout the state. These volunteer members actively utilize and enjoy the resources of the many rivers, lakes and watersheds located in Colorado. Attributes of these lands and watersheds include clean water, clean air, fishing, hunting, and wildlife viewing opportunities. TU participated in the public rule making process in 2008 and will continue to play a role in providing input and collaboration as COGCC moves ahead in these updates.

II. Comments

Importance of RSO Designation for Cutthroat Species.

TU supports the application of the proposed Rule to cutthroat trout waters because of the sensitive nature of Colorado's three species of cutthroat trout (Colorado River cutthroat, Rio Grande cutthroat, and Greenback cutthroat). All three species:

1. Are considered sensitive by state and federal management classifications in Colorado and surrounding states, based on species occupation. All three have been proposed for endangered species listing at one time; currently the Greenback and Rio Grande cutthroat are considered by USFWS as threatened or endangered.
2. Are managed under individual cooperative agreements outlining conservation objectives and include multiple federal and state agencies (*Colorado River Cutthroat Trout Conservation Agreement*, 2006 with Colorado, Utah and Wyoming; *Conservation Agreement for Rio Grande Cutthroat Trout* 2009 in the states of Colorado and New Mexico; and the *Greenback Cutthroat Trout Recovery Plan* (1998 USFWS) coupled with recent research reports in 2012).
3. Are managed by cooperating state wildlife agencies through annual stream surveys and the assignment of management categories (two distinct and equally important components that include the conservation element and the sport or recreational fishery element of cutthroat trout management).

The inclusion of cutthroat trout habitat in the RSO maps under the proposed Rule will help to: alleviate pressures on these sensitive species; avoid listing under the Endangered Species Act; and, increase coordination and cooperation under the Conservation Agreements.

Map and Definition Changes. TU understands that the COGCC is using CPW's "Stocking Restricted Cutthroat Trout Waters" and "Gold Medal Waters" datasets to apply RSO conditions in the proposed Rulemaking. TU is generally supportive of this approach, and we appreciate the effort COGCC is making to update the datasets and maps to reflect current habitat and designations in Colorado.

Dataset Updates. While TU supports the COGCC's efforts to update the RSO maps in this Rulemaking, we note that the RSO maps for Cutthroat and Gold Medal Waters have not been updated in five years. Since CPW's "Stocking Restricted Cutthroat Trout Waters" and "Gold Medal Waters" datasets are updated on a regular basis as dictated by species and habitat assessments, we believe it would be beneficial to include language in the proposed Rule that

allows CPW to update the RSO maps as it updates its datasets. This would ensure that oil and gas developers are conducting appropriate consultations based on actual fisheries data rather than on data that may be up to five years old or older.

For example, when warranted CPW may apply the Gold Medal designation to additional waters in the state. However, without a mechanism to update the RSO maps of this type of change, the necessary consultation between developers and CPW would not take place until the next update. Allowing CPW discretion to update the RSO maps will ensure that developers consult with CPW when proposing a well near a recently designated Gold Medal Water. If CPW does not have discretion to update the RSO maps, this consultation would not occur.

All stakeholders would benefit from a Rule that allowed CPW to update the RSO maps on a real-time basis as new stocking restrictions are applied or lifted, and as new Gold Medal Waters are designated in Colorado. COGCC could retain oversight over these updates by reviewing the framework of the underlying datasets when it updates the SWH/RSO maps through the rulemaking process.

III. Summary

In summary, TU supports the datasets and maps that COGCC is using in the proposed Rule. TU does recommend that COGCC grant CPW discretion to update those maps as changes to the underlying datasets occur.

Should you have any questions, please feel free to contact us.

Sincerely,



Robert Meulengracht
Trout Unlimited
Colorado Energy Coordinator
PO Box 16728
Golden, CO 80402
303-232-3909
RMeulengracht@tu.org

cc: Chad Bishop, Assistant Director, Wildlife and Natural Resources, CPW
(chad.bishop@state.co.us)



August 22, 2013

Robert Frick
Hearing Manager
Docket No. **1307-RM-01**
Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, CO 80203

RE: *Prehearing Statement regarding proposed changes to 100-Series Rules that define reference maps of "Restricted Surface Occupancy Areas" (RSO) and "Sensitive Wildlife Habitat" (SWH) as they pertain to Garfield County*

Dear Mr. Frick:

Pursuant to COGCC's Notice of Rulemaking Hearing, the Garfield County Board of County Commissioners (the Board) is writing to provide our prehearing statement to outline our primary comments and concerns regarding proposed changes to 100-Series Rules that define reference maps of "Restricted Surface Occupancy Areas" (RSO) and "Sensitive Wildlife Habitat" (SWH) as they pertain to Garfield County.

Garfield County (the County) is located in the Piceance Basin, and is host to about a quarter of the current oil and gas development activity in Colorado, based on recent well permit applications and operating drill rigs. As such, rules promulgated by the Colorado Oil and Gas Commission (COGCC) have a significant affect in our county and therefore need to be evaluated thoughtfully in order to avoid any unintended consequences.

As part of the Bureau of Land Management's efforts to revise their Resource Management Plans and the specific Environmental Impact Statement for the Greater Sage Grouse for Northwest Colorado, the Board has been actively engaged in evaluating habitat maps provided by the Colorado Parks and Wildlife (CPW) to better define the habitat for the Greater Sage Grouse on both public and private land. As you are aware, Colorado Parks & Wildlife (CPW) creates the maps to be relied upon by COGCC for their use in their permitting processes and ultimate decision making for a wide variety of species including the Greater Sage Grouse.

We understand CPW intends to recommend its *Preliminary Priority Habitat Map* (Included as *Exhibit A* attached hereto) for the Greater Sage Grouse as the map proposed to COGCC to serve as the Sensitive Wildlife Map for that species. This Preliminary Priority Habitat Map (PPR Map) is essentially a combination of three primary components: 1) a habitat model of NW Colorado completed by Dr. Mindy Rice, 2) the application of a four-mile buffer established around an active lek, and 3) CPW's internal "Occupied Range" Map. As explained to the County by CPW staff on September 5, 2012 in a County Coordination meeting, this PPR Map was generated at a 50,000-foot level as a map to be used in the BLM's recently released Draft NW Colorado Greater Sage Grouse EIS and not intended for specific "on-the-ground" land use management.

The County has analyzed the PPR Map and found it to be problematic if it is used for localized land use decisions. First, the habitat model designed by Dr. Mindy Rice was done so using vegetation data on a 1-kilometer scale (0.6 mile grid cells). In doing so, it inaccurately typed large amounts of vegetation that do not include any vegetation communities known to support Greater Sage Grouse such as juniper-pinon, fir, and aspen groves. Furthermore, numerous other criteria that are known to directly influence suitable greater sage-grouse habitats were excluded from the habitat model, including slope parameters, relevant landforms, percent canopy cover, etc. Again, this model approach is too coarse to be used as an effective local habitat management tool.

Second, in addition to the foregoing, CPW has applied an arbitrary four-mile buffer (eight-mile diameter) around active leks. (The four mile distance is believed to be the distance from the lek where 80% of the hens will nest.) However, this distance also assumes the birds will be in their commonly understood habitat as is commonly found to be true in large expanses of gently rolling sage brush communities in Wyoming, Montana, etc. Garfield County does not have these same expanses of rolling sage brush communities; conversely, the habitat is severely fragmented in a scattered patchwork of sage brush on hill tops intermixed with large areas of non-habitat vegetation communities such as aspen, conifer, pinion-juniper, etc. Moreover, the area in Garfield County also contains slopes (in excess of 30%) that are not known to support Greater Sage Grouse. So, the County opposes an arbitrary application of a four-mile buffer around an active lek because it captures thousands of acres of non-habitat where development and activity could / should occur without requiring any involvement from government agency oversight.

Third, CPW's PPR Map is based on the agency's "Occupied Range" map which appears to be an internal map maintained primarily by research staff and updated based on field-observations over time. This is problematic because the data used to inform this map is specific to individual professional opinion which may vary from time to time depending on individual field personnel and is not reproducible. In recent discussions with CPW staff, it became apparent that these opinions stray far from data that is cited in the literature from CPW biologists as to the accepted criteria for what defines habitat and where the Greater Sage Grouse are commonly located within that habitat.

In response to this, the County recently spent considerable resources to hire a consulting team to produce a highly accurate Suitable Habitat Map which is attached as *Exhibit B* to this letter. This map is a result of creating two distinct models (a weighted overlay model and a fuzzy overlay model). These models were driven by criteria developed from an exhaustive literature search using CPW's own researcher criteria (including slope, distance to forest, canopy cover, landforms and vegetation community). In addition, the Garfield County habitat model utilized a vegetation dataset

that maps existing vegetation communities with a much higher degree of accuracy, based on performing a supervised image classification process on 2-meter cell resolution color-infrared photography. More than that, in recent meetings with CPW to validate our mapping, it became clear that our mapping had a high degree of correlation to relevant / recent bird location data points collected by CPW's Dr. Brett Walker. In doing so, our model captured 92 percent of the bird locations within 100 meters of our habitat model. It should also be understood; the County's Suitable Habitat map was created with a transparent process and is reproducible. To the contrary, after considerable effort, we found that the CPW PPR Map is not reproducible and is based on data that the agency refuses to release to the public in order that it be verified.

The net result proved that CPW's proposed PPR Map has inaccurately mapped large areas of non-habitat (juniper-pinion, fir, and aspen groves) on the Roan Plateau in Garfield County as priority habitat. As understood in terms of acres, while CPW has mapped approximately 220,000 acres as priority habitat in their PPR Map, Garfield County's Suitable Habitat map identifies only 59,093 acres of suitable habitat. This is a 73% reduction in habitat in Garfield County. Put another way, CPW's PPH map was developed with such a broad brush approach, it erroneously captured approximately 160,907 acres of land that does not have Greater Sage Grouse habitat characteristics supported by relevant peer-reviewed literature and 'data-verified' field observations. By doing so, it will have the practical effect of requiring a land owner to consult with CPW on projects that are clearly cited in areas of non-habitat.

The Board requests that the COGCC not include CPW's PPR Map for the Greater Sage-Grouse in the Sensitive Wildlife Map for Garfield County; rather, the COGCC should incorporate Garfield County's Suitable Habitat Map (included as *Exhibit B* attached hereto) as it is based on reproducible best available science as described above for lands within Garfield County. This is precisely the position the Board has taken with the BLM in its drafting of the Northwest Colorado EIS on the Greater Sage Grouse as it also relies on maps provided by CPW. The County wants to remain consistent with its position that no matter what agency (federal or state) that is charged with managing Greater Sage-Grouse and its habitat in Garfield County, it does so using the best possible data and does so consistently.

In recent meetings with high-level agency staff from both CPW and CPGCC, CPW explained that the Wildlife Sensitive Maps are used solely for the purpose of consultation so that specific activity can be reviewed on a 'site-by-site' basis in the field and that the maps are not used as a blanket restriction area or non-surface occupancy (NSO) area. The Board agrees with that approach so long as the COGCC uses Garfield County's Suitable Habitat Map for that purpose rather than CPW's PPR Map.

The proposed red-line definition of Sensitive Wildlife Habitat for Greater Sage Grouse is flawed as it is "lek-centric" using an arbitrary four-mile buffer around leks rather than defining habitat in terms of vegetation types and land form (topography) which are criteria that are commonly cited in peer reviewed and published literature. To be clear, the Board does not support the use of an arbitrary four-mile buffer in Garfield County because it will capture large random areas of non-habitat such as juniper-pinion, dark timber, and aspen stands on slopes that far exceed literature based criteria for habitat where birds do not commonly exist. Garfield County recommends the following definition as a replacement:

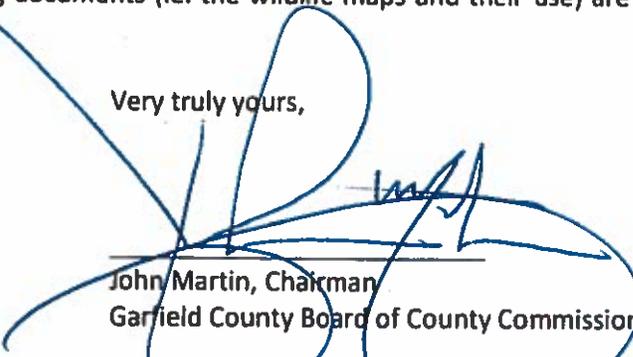
Suitable Habitat. Suitable Habitat includes all seasonal habitats (including lekking, nesting, brood rearing/summer and winter habitats) Specifically, Suitable Habitat includes:

- **Sagebrush cover is strongly selected from 10 to 50%, with suitability diminishing above and below the range**
- **Cover of Mixed Mountain Shrubs is not more than 20%, excluding fringe/transitional habitat zones**
- **Distance to nearest Forest is over 100 meters**
- **Distance to Shrubby Woodlands is over 50 meters**
- **Grass/forb dominated habitats (with >10% sagebrush cover) within 20 meters of sagebrush habitat**
- **Prefer slopes typically less than 20%, but allow for occupation on slopes up to 30%**

In summary, the Board does not support the COGCC using CPW's PPR Map for Greater Sage Grouse in the Sensitive Wildlife Maps for the reasons stated above. Instead, the Board requests that the COGCC use the County's Suitable Habitat Map for Greater Sage Grouse in Garfield County as it is based on reproducible best available science. Additionally, if the County's map is incorporated, the Board supports the use of that map for consultation purposes only. Finally, the Board supports the current way the COGCC uses the Restricted Surface Occupancy Area Map for the areas within Garfield County.

Thank you for the opportunity to provide input to the rulemaking process. We look forward to providing you with testimony during the upcoming hearings in Denver and coordinating our efforts so that your planning documents (ie. the wildlife maps and their use) are consistent with those of Garfield County.

Very truly yours,



John Martin, Chairman
Garfield County Board of County Commissioners



Tom Jankovsky, Commissioner
Garfield County Board of County Commissioners



Mike Samson, Commissioner
Garfield County Board of County Commissioners

Cc: *Andrew Gorgey, Garfield County Manager*
Frank Hutfless, Garfield County Attorney
Representative Bob Rankin
Fred A. Jarman, Director, Community Development Department
Kirby Wynn, Garfield County Local Government Designee

Attachment(s) *Exhibit A: CPW's Preliminary Priority Habitat Map*
Exhibit B: Garfield County Suitable Habitat Map

EXHIBIT A: CPW's Preliminary Priority Habitat Map for the Greater Sage Grouse

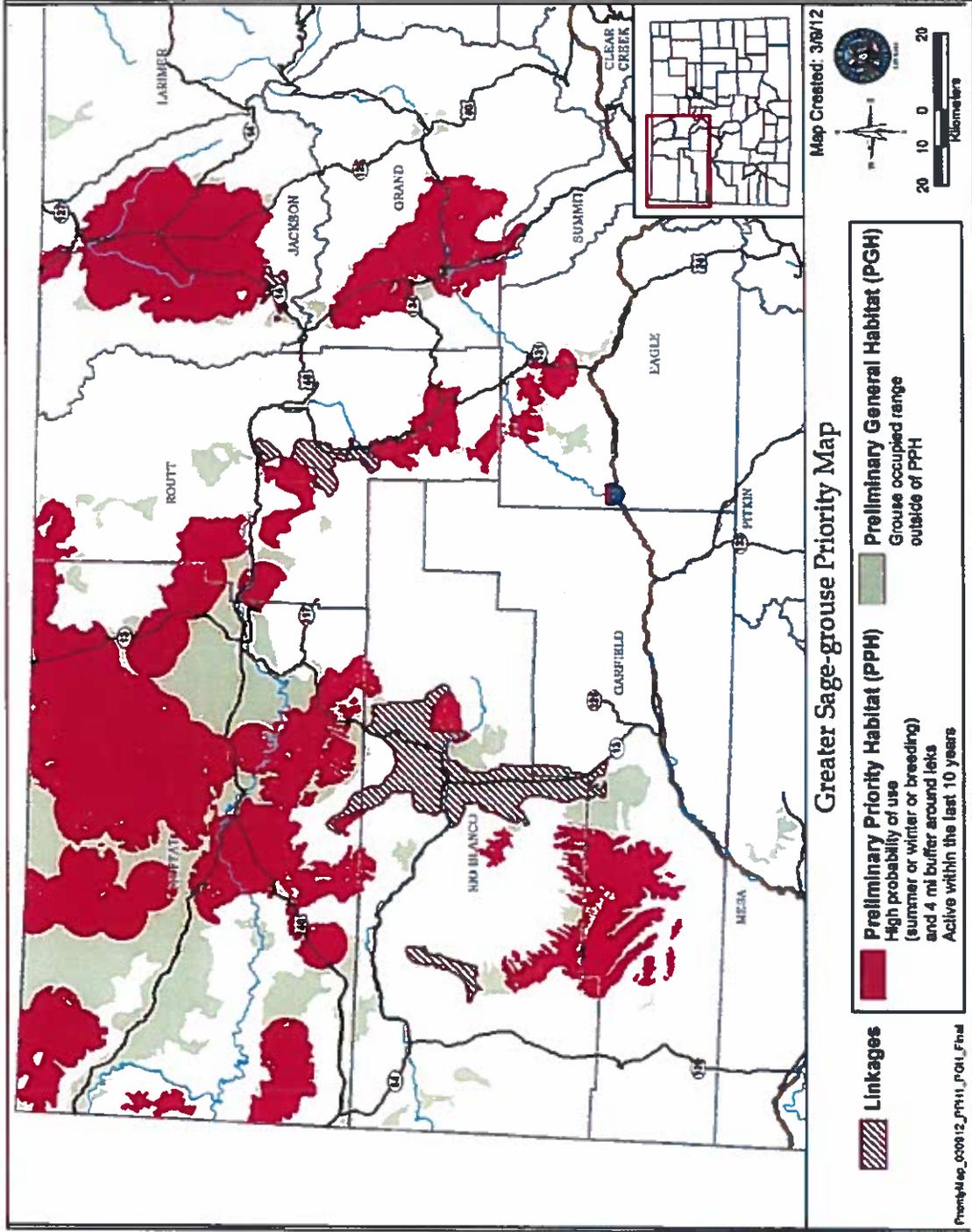
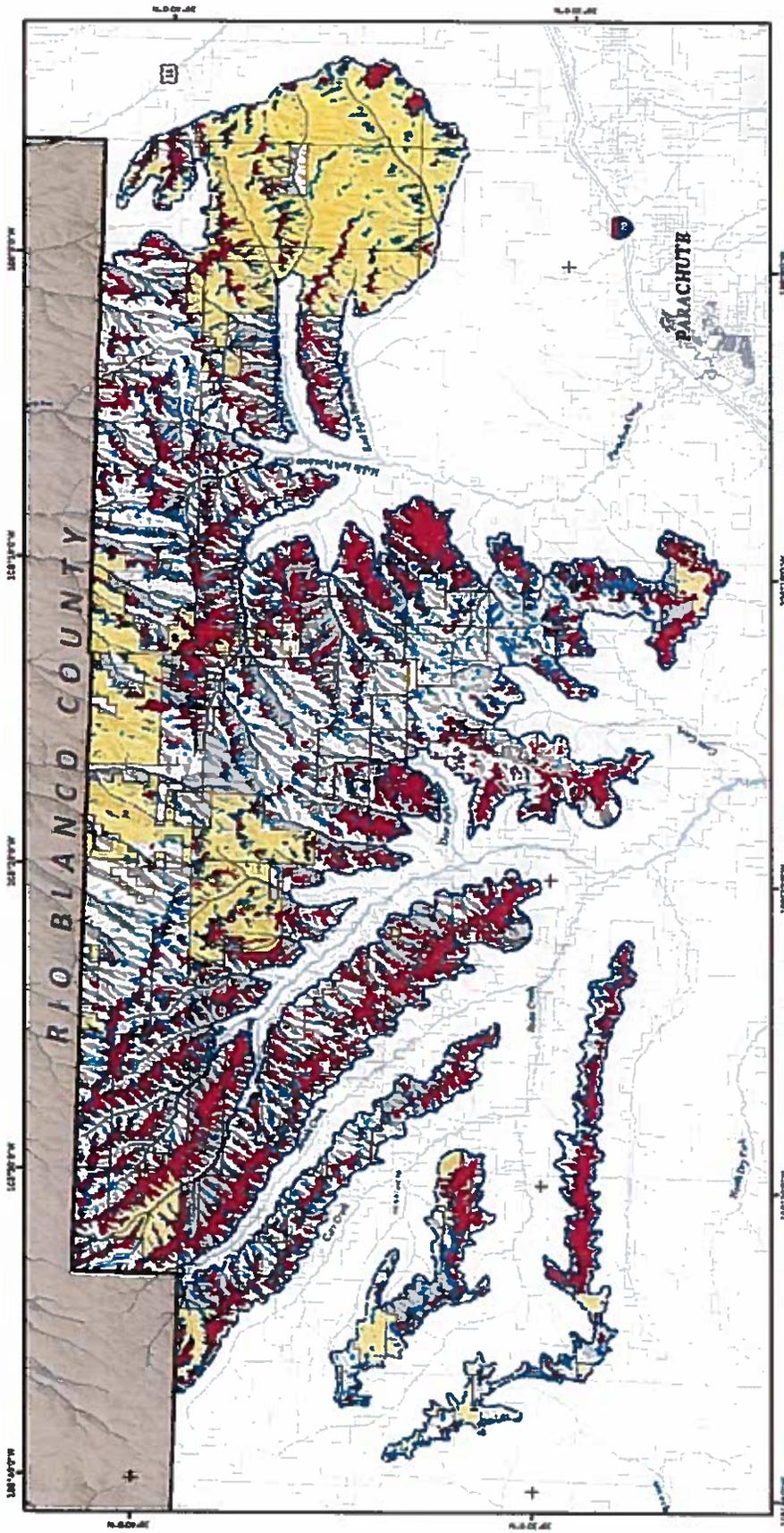


EXHIBIT B: Garfield County Suitable Habitat Map for the Greater Sage Grouse



Garfield County

Modeled Habitats for Greater Sage Grouse

Suitable Habitat Results
[Model v3, Revised Vegetation]

Created July 2013

PENDO 5-30-1111R-31-103

Map products are approximate and do not constitute a warranty for use for any purpose. The user assumes all liability for any use of the information. The user agrees to hold the provider harmless for any use of the information.

Scale: 1 inch = 10,000 feet

North Arrow

Symbol	Description	Area (Acres)
	Analysis Area Boundary	220,867 A.C.
	Priority Habitat	31,070 A.C.
	General Habitat	218,023 A.C.
	BLM Lands	
	USFS Lands	
	Private Lands	
	Municipal Boundary	
	County Boundary	
	Interstate	
	State Highway	



July 15, 2013

VIA EMAIL

Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, CO 80203

RE: *Amended Rules, 1307-RM-01 Wildlife Maps (June 14, 2013)*

Dear Sir or Madam:

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INFORMATION AND ANALYSIS:

Gunnison Sage-Grouse

As it relates to proposed changes to COGCC 100-series rules for Sensitive Wildlife Habitat, the current proposed definition for “production areas” including an area that encompasses a four mile buffer on active lek sites is too broad and does not represent the best available science for this species when specifically reviewing those populations which occur in Dolores and San Miguel Counties. Commons (1997) reported minimal movements year-round for the Gunnison Sage-Grouse (*Centrocercus minimus*) in southwest Colorado. The broad brush approach of considering habitats as sensitive if they are located within four miles of a lek is a flawed approach based on inappropriate analyses as it fails to consider best available science and the specific behaviors exhibited by these populations. The proposed buffer is more appropriate for those populations occurring in the larger Gunnison Basin population where longer distance movements have been recorded. For non-migratory populations such as those in southwest Colorado this proposal is a vast overreach.

Further in review of land cover data (1999-2001) from the United States Geological Survey Gap Analysis Program (USGS, 2004) it is readily apparent that a four mile buffer around lek sites includes a large proportion of non-supportive habitats for *C. minimus*. Consideration of these habitats as “sensitive” or for use as “production areas” by this species would be arbitrary and capricious and not supported by the best available scientific information.

Lastly, clarity on the definition of what is an “active” lek site needs to be further vetted. APC suggests that the COGCC include language which indicates that a non-active lek site is one in which no activity has been recorded for a period of two consecutive years.

Lesser Prairie-Chicken

As it relates to proposed changes to COGCC 100-series rules for Sensitive Wildlife Habitat, as currently drafted, the definition provides sensitive habitat for the Lesser Prairie-Chicken (*Tympanuchus pallidicinctus*) be based on focal areas derived wholly from the current *draft* version of the Western Association of Fish and Wildlife Agencies (WAFWA) Range-Wide Conservation Plan for the Lesser Prairie-Chicken. The “focal area” concept is a conservation strategy for this species and not in itself a quantifiable metric of habitat, especially “sensitive” habitats for this species. Furthermore, the strategy which provides the groundwork by which these focal areas are developed is still an unproven concept that has not been endorsed by the United States Fish and Wildlife Service. To promulgate a change to the sensitive habitat mapping based wholly on a draft document, derived from a conservation strategy and not on specific supportive habitats themselves (based on the *draft* WAFWA document in its current version would include agricultural lands, and other non-supportive habitats), and predicated upon the promise of future implementation is premature at this juncture.

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Anadarko suggests the COGCC instead utilize the Southern Great Plains Crucial Habitat Assessment Tool (CHAT) to characterize those habitats which are supportive and therefore "sensitive" in nature limiting sensitive habitats to those noted as Category 1, "irreplaceable." By utilizing this framework, the COGCC would thereby be relying on a much more scientifically valid metric for sensitive habitats and not upon an unproven conservation strategy which largely overstates potential and future supportive and/or occupied habitats.

Lastly, Anadarko would suggest removal of "core populations and habitat necessary for a viable population" from the definition and replace with "core populations and Category 1 habitats as defined by the Southern Great Plains CHAT." The term "viable population" is largely speculative and current estimates are solely based on opinion; further research and investigation is required to fully quantify this metric.

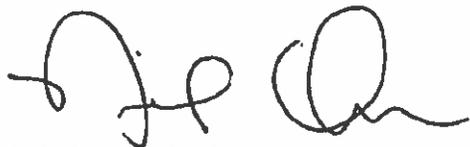
CONCLUSION

Based on the best available scientific information, as summarized herein, the COGCC's updates to sensitive wildlife habitat and RSO maps are deficient both scientifically and legally. Best available science contradicts the application of one-size fits all buffers and focal areas as it relates to *C. minimus* and *T pallidicinctus*, respectively.

Anadarko appreciates this opportunity to provide you with our concerns regarding the proposed rulemaking. Please do not hesitate to contact us if you would like to discuss our comments in greater detail.

Regards,

ANADARKO PETROLEUM CORPORATION

A handwritten signature in black ink, appearing to read "Nick Owens", written in a cursive style.

Nick Owens, Senior Regulatory Analyst

Colorado Oil and Gas Conservation Commission
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REFERENCES

- Commons, M. L. 1997. Movement and Habitat Use by Gunnison Sage Grouse (*Centrocercus minimus*) in Southwestern Colorado. Thesis, University of Manitoba, Winnipeg, Canada.
- USGS National Gap Analysis Program. 2004. Provisional Digital Land Cover Map for the Southwestern United States. Version 1.0. RS/GIS Laboratory, College of Natural Resources, Utah State University.

**BEFORE THE OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF COLORADO**

IN THE MATTER OF CHANGES TO THE RULES)	
OF PRACTICE AND PROCEDURE OF THE OIL)	Cause No. 1R
& GAS CONSERVATION COMMISSION OF THE)	
STATE OF COLORADO)	Docket No. 1307-RM-01

ENCANA OIL & GAS (USA) INC.
COMMENTS TO RULEMAKING

Encana Oil & Gas (USA) Inc. ("Encana"), by and through its undersigned attorneys, respectfully submits the following comments to the Colorado Oil and Gas Conservation Commission's ("COGCC" or "Commission") proposal to update to the configuration of wildlife maps that provide for Restricted Surface Occupancy Areas (RSO), Sensitive Wildlife Habitat (SWH) areas and definitions in the 100-series of the COGCC Rules.

I. General Statement: Overall, Encana supports the Commission's rulemaking and agrees that the current effort to update the wildlife maps that illustrate Restricted Surface Occupancy Areas (RSO), Sensitive Wildlife Habitat areas (SWH) (collectively, "Maps") is necessary. Encana does, however, have concerns with several issues related to the maps and concerns with the lack of data and analysis supporting the maps. Encana requests that the Commission review the following comments and incorporate such comments into the final versions of the Maps and definitions in the 100-series COGCC rules.

II. Statement of Basis for Comments: As set forth in Encana's Pre-Hearing Statement, Encana's identified the following policy, factual, and legal issues:

1. Whether the Rulemaking is properly positioned and/or titled to address the need for consultation by Colorado Parks and Wildlife in additional and/or expanded areas within the State of Colorado
 - a. This factual issue is addressed below in Section III, Part A.
2. Whether the Rulemaking has accounted for the Bureau of Land Management's utilization of the sensitive wildlife habitat, priority habitat, and restricted surface occupancy maps and the potential impact of such utilization on oil and operations within the State of Colorado.
 - a. This factual issue is addressed below in Section III.
3. Whether the Rulemaking is supported by adequate evidence.
 - a. This legal issue is supported by the Administrative Procedure Act which provides, in part, that an agency action will be held unlawful if the action is, among other things, "arbitrary and capricious, a denial of statutory right, contrary to constitutional right...in excess of statutory jurisdiction... [or] unsupported by substantial evidence when the record is considered as a whole, or otherwise contrary to law." C.R.S. § 24-4-106(7). Further, rules that involve scientific or technical issues must be justified on such scientific or technological bases. C.R.S. § 24-4-103(4)(c).

- b. Specifically, Encana requests the following:
 - i. An explanation of the basis for the changes for each species for which updates are proposed.
 - ii. An explanation of the Map Update Metrics table that includes species not specifically addressed in the Executive Summary or Proposed Changes to COGCC 100-series Rules.
 - iii. An explanation and/or definition of the types of habitat that the Maps are based on and what those definitions mean in the context of the Colorado Parks and Wildlife rules, or other applicable federal rules.
 - iv. A description of the new data that has been utilized by the COGCC or the CPW to update the Maps.

- 4. Whether the effective date of the Rules is feasible for compliance.
 - a. This legal issue was raised in order to preserve the question regarding when the rules would go into effect, specifically in light of the upcoming Bureau of Land Management's Northwest Colorado Greater Sage-Grouse Draft Land Use Plan Amendment and Environmental Impact Statement, which Encana respectfully requests that this Commission and Colorado Parks and Wildlife be actively involved with.

Encana believes that these issues, as well as the comments set forth below, could be addressed and resolved prior to the conclusion of the September rulemaking hearing on this matter. Encana, however, reserves its right to challenge the proposed rulemaking and any adopted Maps or Commission rules that may be legally insufficient or otherwise not adopted in accordance with applicable law.

III. Specific Comments

1. Greater Sage-Grouse:

- a. Concern: Encana has several concerns over the Commission's proposed rule change to the definition of "Greater sage-grouse priority habitat." Much of this acreage covers Encana's operations on the western slope and will have a significant impact on those operations.

The Commission's definition is different, and will be used differently, than that of the Bureau of Land Management ("BLM") and the U.S. Fish and Wildlife Service ("USFWS"). While the COGCC's utilization of the Greater sage-grouse priority habitat map requires site-specific consultation and may result in spatial and or temporal avoidances, the BLM and USFWS designated Greater sage-grouse priority habitat may include more rigid surface disturbance thresholds or other prohibitions, without site specific consideration. This distinction is crucial because the BLM will use state wildlife maps in its recently released Northwest Colorado Greater Sage-Grouse Draft Land Use Plan Amendment and Environmental Impact Statement.

Further, significant acreage included in the COGCC's Greater sage-grouse priority habitat map is not actually suitable Greater sage-grouse habitat because of the topography in the Piceance Basin. For example, the identified "priority" habitat includes valley bottoms and forested areas that are not in fact Greater sage-grouse habitat. *Please see attached illustrative*

maps as Exhibit 1. While the proposed map is appropriate for triggering consultation with the state, it would impose significant, unnecessary restrictions if utilized by the BLM or USFWS without flexibility.

The same concern exists as the USFWS considers a potential Greater sage-grouse listing and habitat designation under the Endangered Species Act. If USFWS uses the proposed COGCC consultation map, it would impose protections in areas that are not Greater Sage-grouse habitat.

b. Request: Encana requests that the COGCC amend the Greater sage-grouse definition in the proposed changes to COGCC 100-series rules to "Greater sage-grouse Habitat Consultation Buffer." Encana also recommends that the COGCC explicitly state that the proposed Greater sage-grouse habitat map is used to trigger consultation with CPW and should not be used by other local, state or federal agencies to apply strict restrictions or calculate threshold disturbance because some areas captured are not Greater sage-grouse habitat.¹

c. Proposed Changes:

- i. COGCC Current Proposed Definition: Greater sage-grouse priority habitat (being areas of high probability of use (modeled summer or winter, or breeding) within a 4 mile buffer around leks that have been active within the last 10 years within grouse occupied range. (Colorado Greater Sage-Grouse Priority Habitat map (2012)).
- ii. Encana Proposed Alternative Definition: Greater sage-grouse Habitat Consultation Buffer (being areas of high probability of use (modeled summer or winter, or breeding) within a 4 mile buffer around leks that have been active within the last 10 years within grouse occupied range. (Colorado Greater Sage-Grouse Priority Habitat map (2012)).

2. Bighorn Sheep:

a. Concern: Encana has concerns over the COGCC significantly expanded habitat of bighorn sheep. The expanse of the bighorn sheep habitat significantly impacts Encana's operations in the Piceance Basin. The 2008 mapped RSO and SWH for bighorn sheep was almost completely contained within federally owned surface acreage designated as "No Surface Occupancy" by the BLM or USFS due to greater than 40% slope. (Please see attached illustrative maps as Exhibit

¹ For reference, sage-grouse National Technical Team Report Definition: "Priority sage-grouse habitats are areas that have the highest conservation value to maintaining or increasing sage-grouse populations. These areas would include breeding, late brood-rearing, winter concentration areas, and where known, migration or connectivity corridors. These areas have been, or will be identified by state fish and wildlife agencies in coordination with respective BLM offices. Priority habitat designations must reflect the vision, goals and objectives of this overall plan if the conservation measures are to be effective....Manage priority sage-grouse habitats so that discrete anthropogenic disturbances cover less than 3% of the total sage-grouse habitat regardless of ownership." (page 7)

2.). Due to the thin distribution of the NSO acreage, the minerals under the NSO surface were technically able to be developed with existing technology. The proposed wildlife map for bighorn sheep increases the expanse of the habitat on non-NSO acreage by over 15,000 acres over three of Encana's federal units. This increase has the potential to impact the economics and operational efficiency in this area that was previously not impacted by these possible wildlife limitations.

b. Request: Encana requests that the COGCC and CPW provide specific information regarding how the Maps were generated as they relate to the habitat and winter range of Bighorn Sheep and what the COGCC and CPW determined were the mitigating or aggravating factors that caused such a significant change in the habitat area as shown on the Maps.

IV. Witnesses: If necessary, Encana is prepared to present one or two Encana representatives to testify to the comments set forth herein and the impact of the rulemaking to Encana's operations within the State of Colorado.

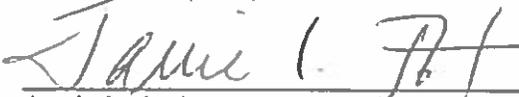
V. Exhibits: If necessary, Encana is prepared to submit any exhibits in support of its position at the September hearing or if specifically requested by the Commission.

VI. Conclusion: Encana requests that many of the points set forth in these comments should be addressed prior to the conclusion of the rulemaking and the formal adoption of any of the COGCC proposed maps illustrating the Sensitive Wildlife Habitat Area, the Restricted Surface Occupancy Area, and the definitions of the 100-series of the COGCC rules. Encana, however, reserves the right to amend, delete and/or supplement the issues and comments identified herein. As an oil and gas operator in the State of Colorado, the Rules will have a direct effect on the activities of Encana. Thus, Encana respectfully requests the Commission not adopt the Maps and revised definitions in the above-captioned rulemaking as presented by the Commission, but adopt revised Maps and definitions that incorporate and utilize Encana's comments submitted in this filing.

DATED this 23rd day of August, 2013.

RESPECTFULLY SUBMITTED,

Encana Oil & Gas (USA) Inc.

By: 

Jamie L. Jost
Gregory J. Nibert
Beatty & Wozniak, P.C.
216 Sixteenth St. - Suite 1100
Denver, Colorado 80202
(303) 407-4499 - Main
(303) 407-4494 - Fax

CERTIFICATE OF SERVICE

I hereby certify that on this 23rd day of August, 2013 the foregoing document entitled **ENCANA OIL & GAS (USA) INC. COMMENTS TO RULEMAKING** was filed and served as follows:

Original and 13 copies delivered for filing to:

Robert Frick, Hearings Manager
Docket No. 1307-RM-01
Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, CO 80203

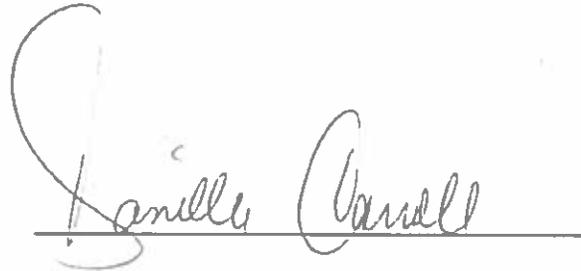
VIA COURIER SERVICE

Electronic copy to Robert Frick:

Robert.Frick@state.co.us

Electronic copy to the COGCC:

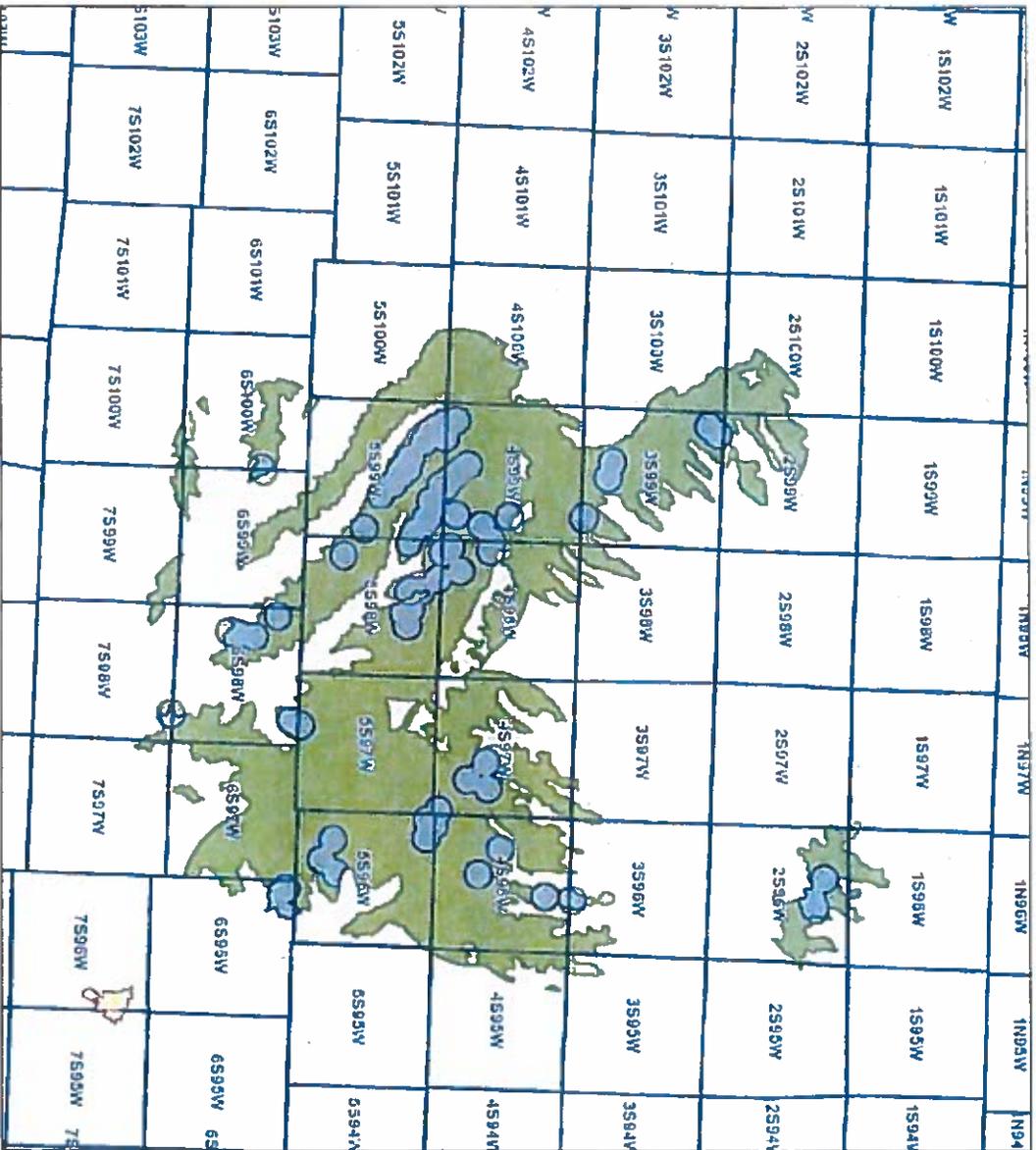
DNR_cogcc.rulemaking@state.co.us



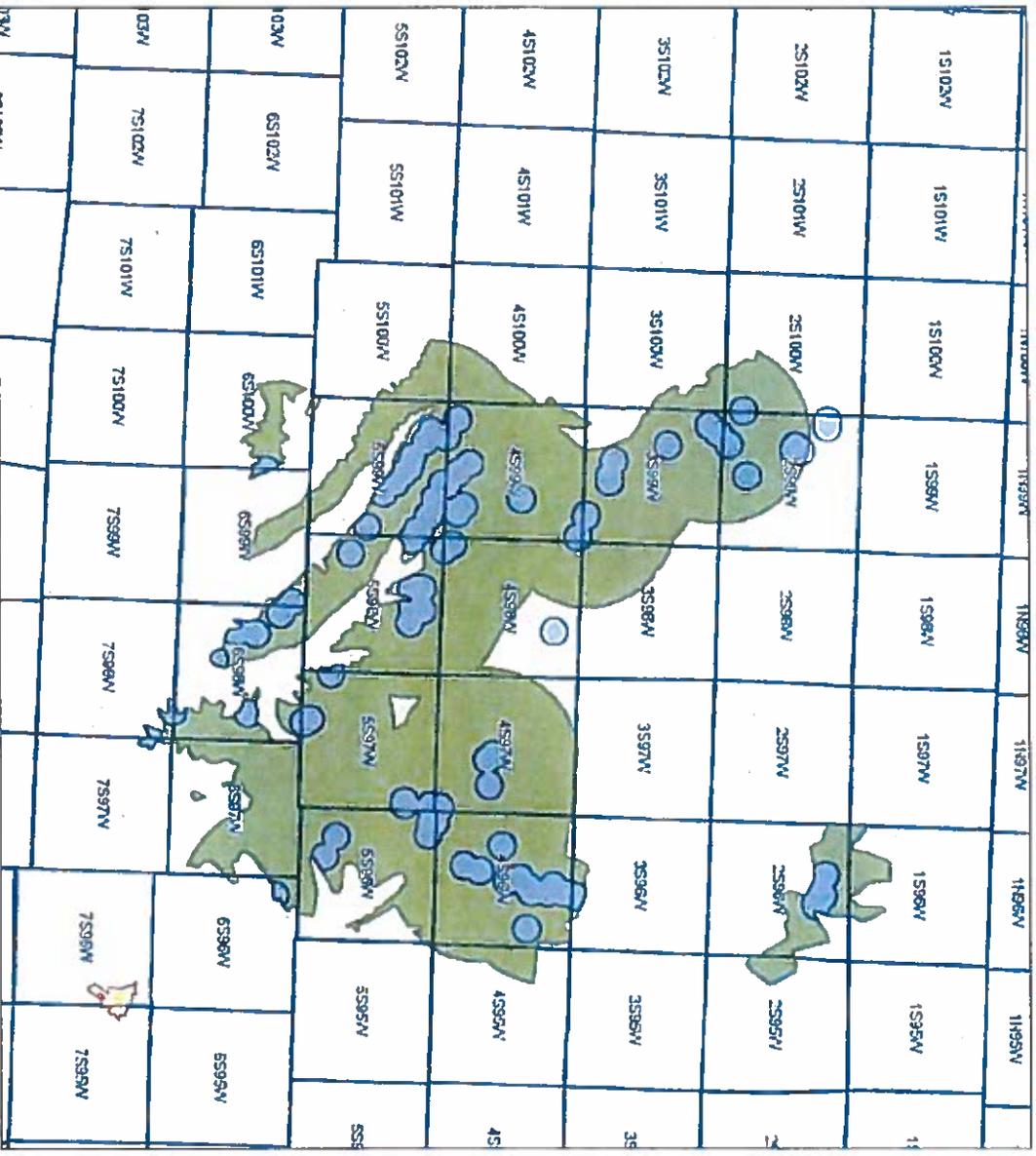
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EXHIBIT 1

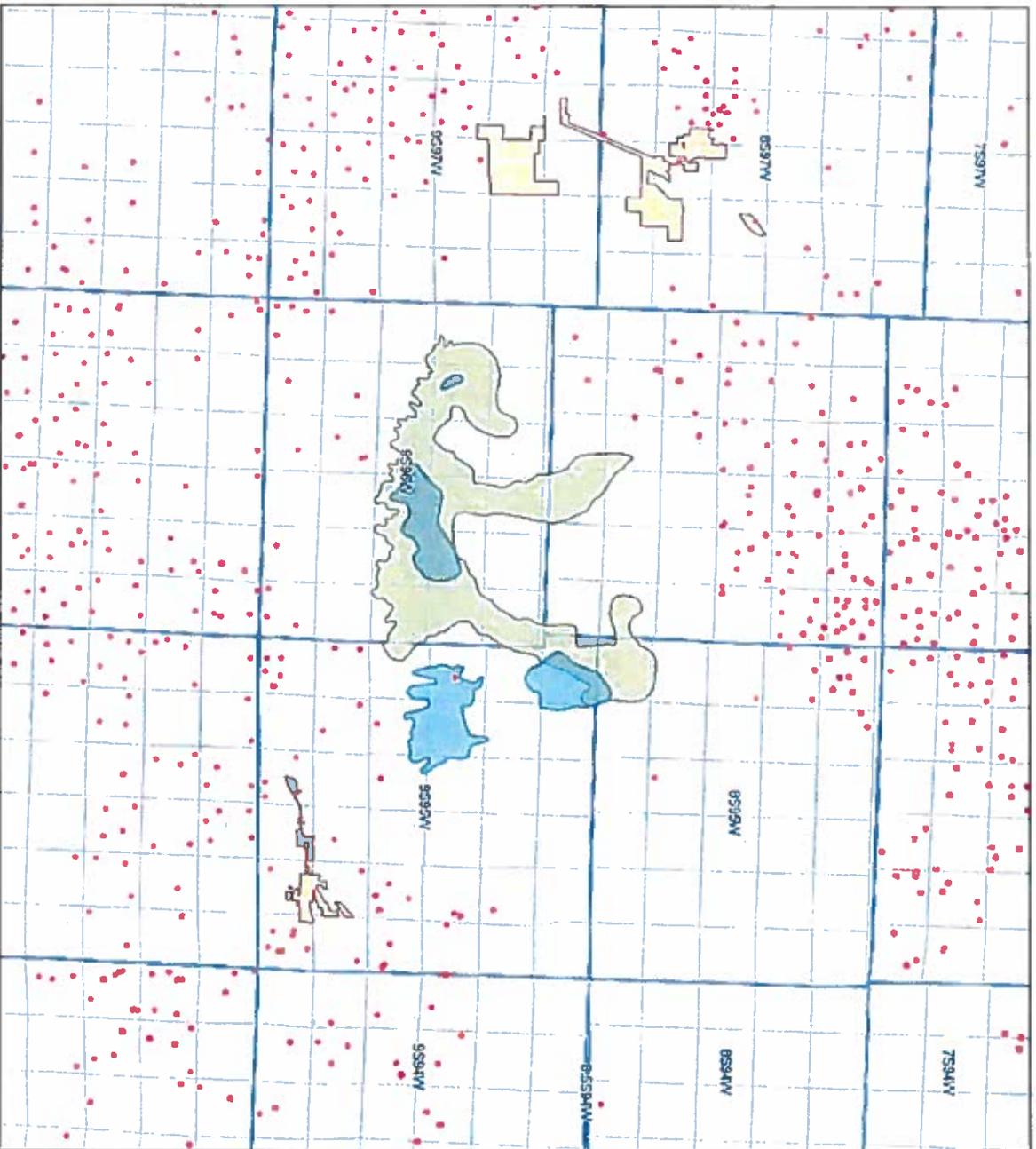
2013 Proposed NW Colorado Greater Sage-grouse Data



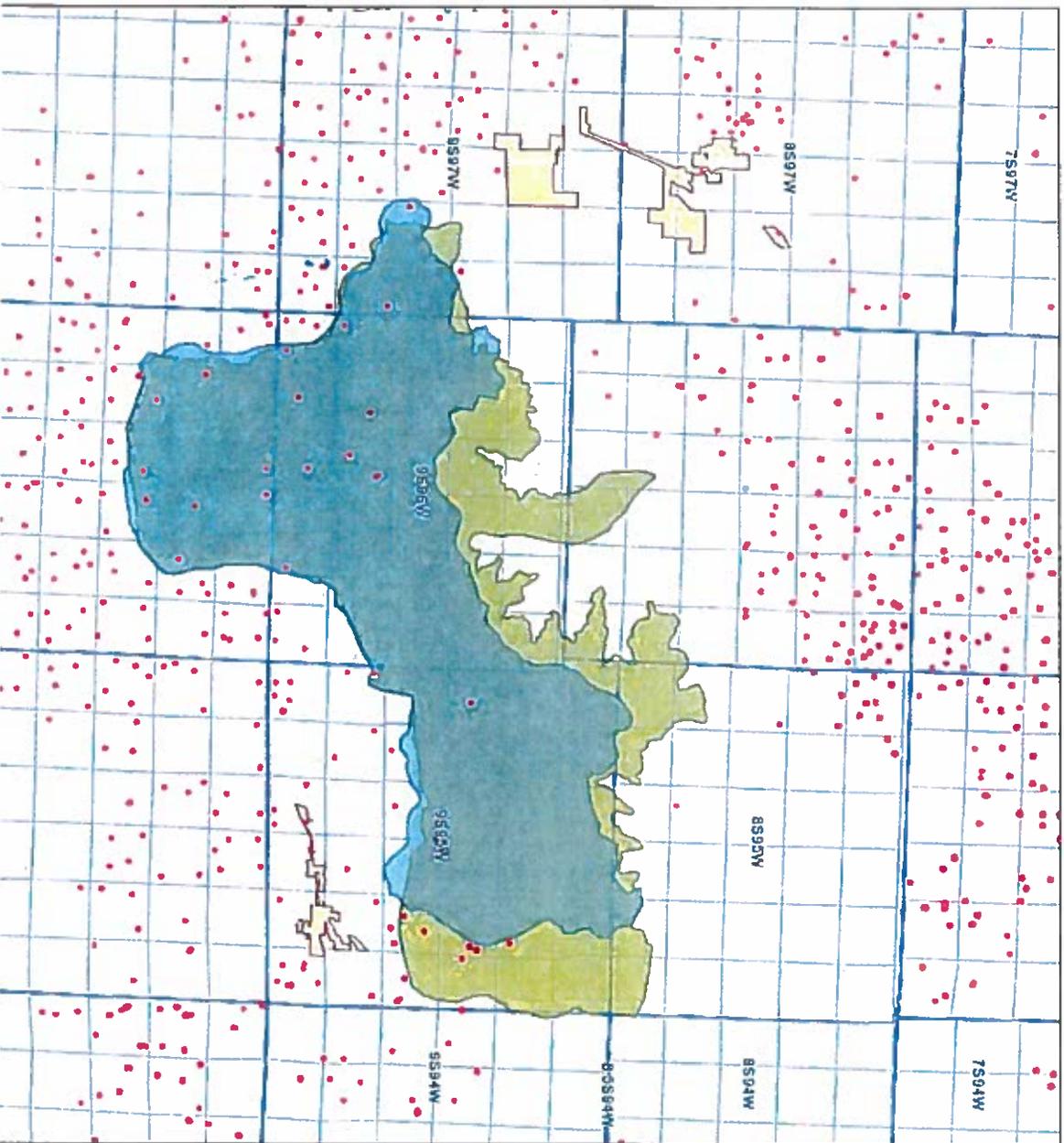
2008 NW Colorado Greater Sage-grouse Data



2008 Bighorn Sheep RSO/SWH (9S96W)

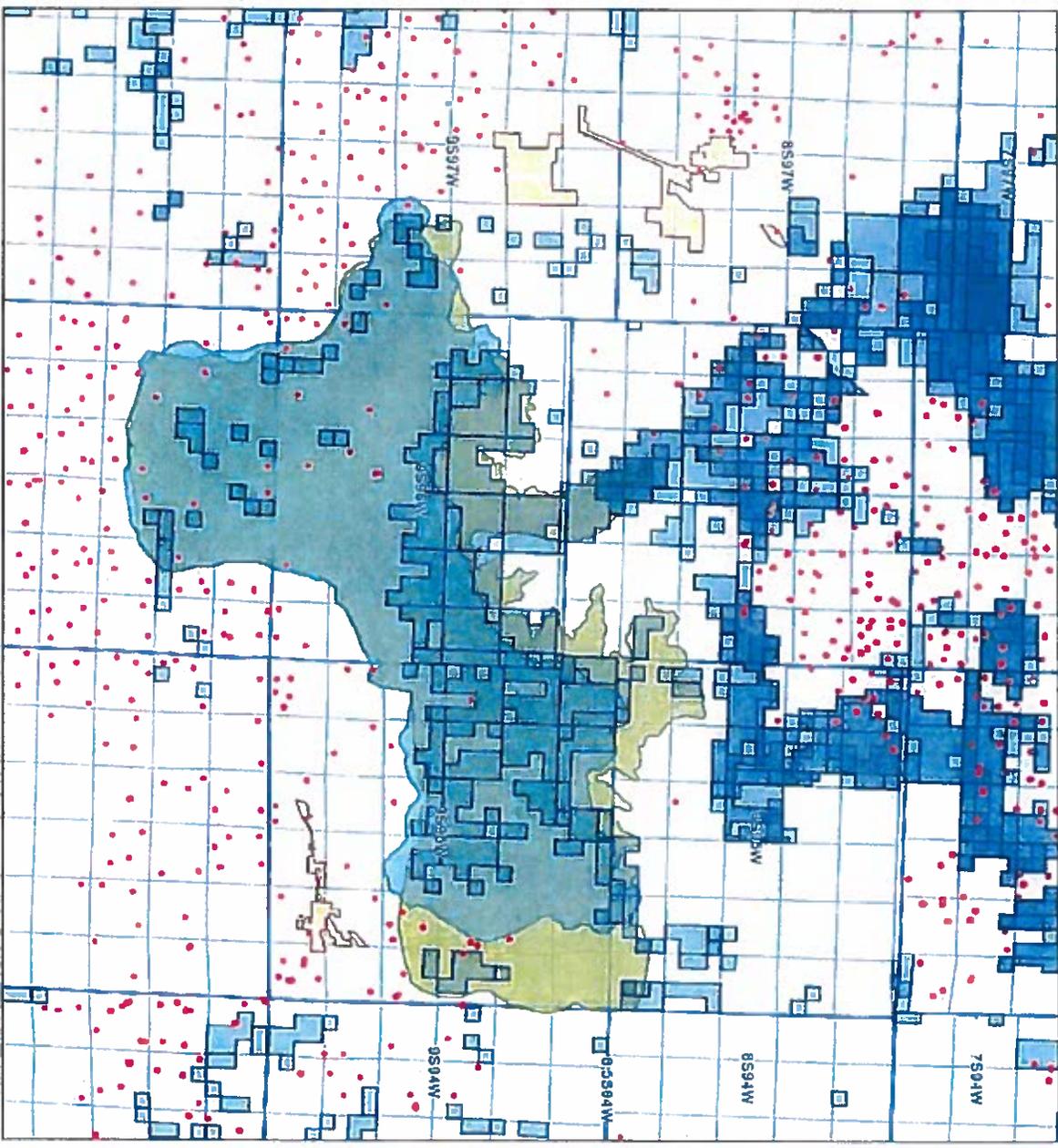


2013 Proposed Bighorn Sheep RSO/SWH (9S96W)

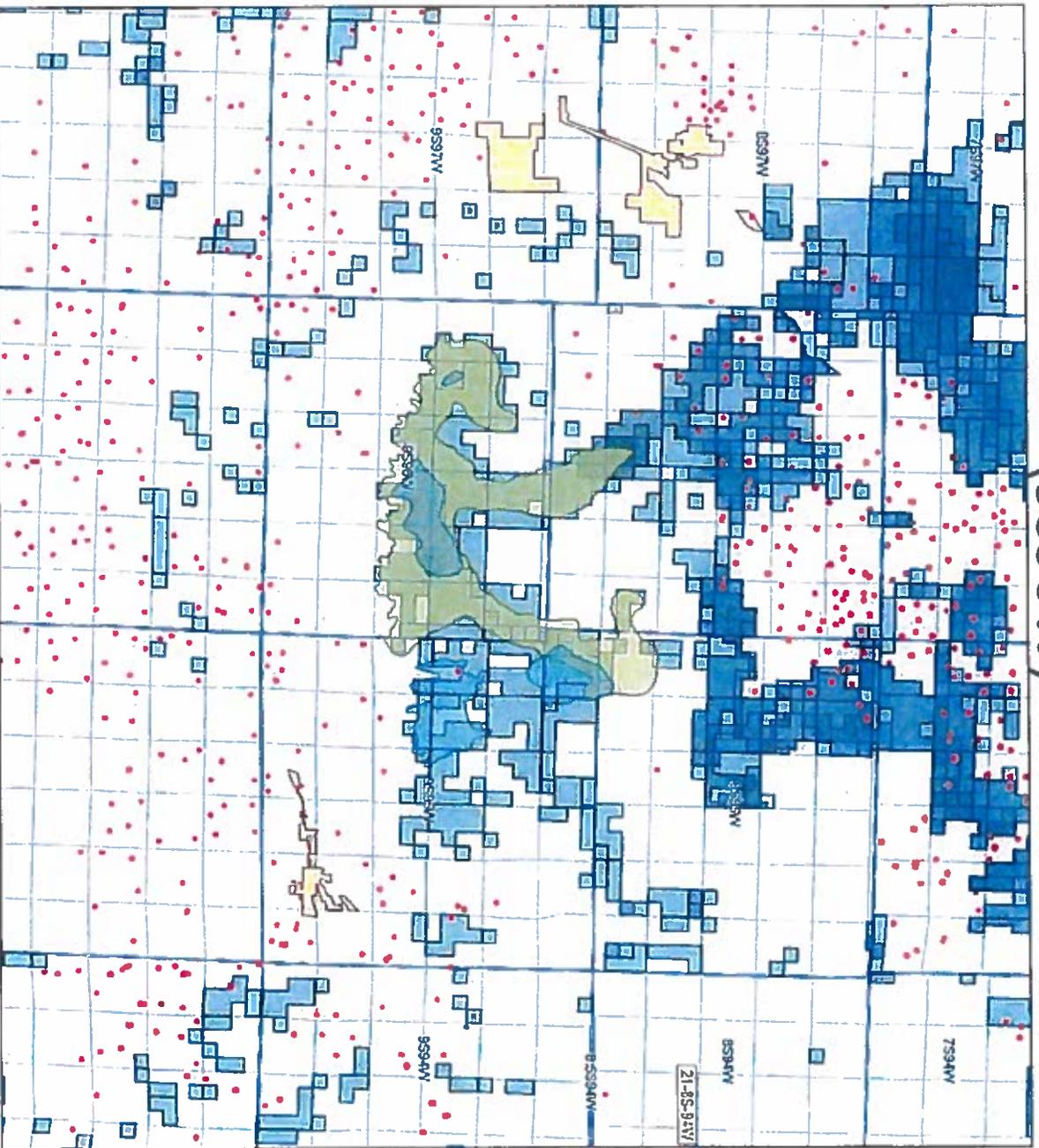


2013 Proposed Bighorn Sheep RSO/SWH with Federal NSO

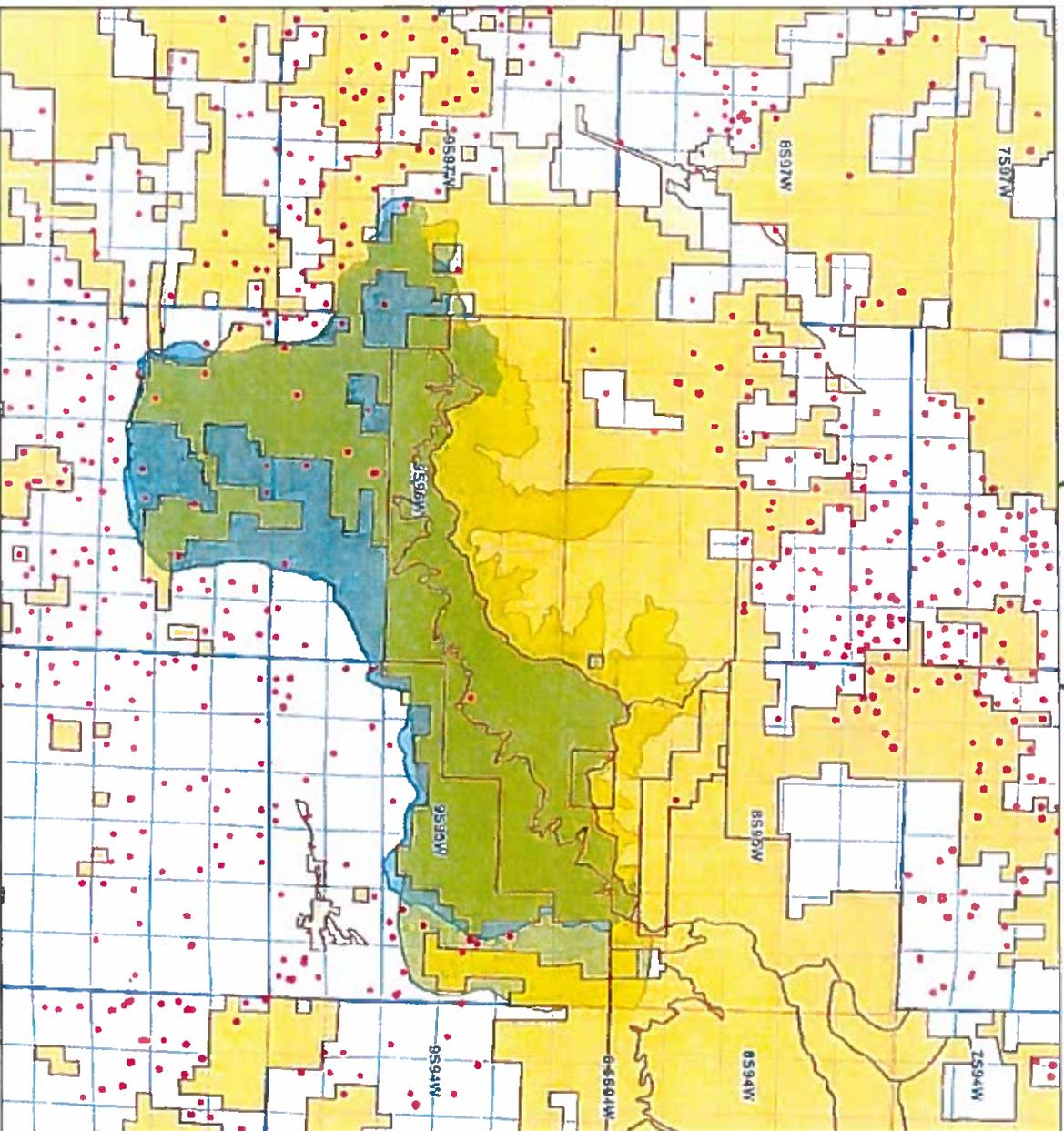
(9S96W)



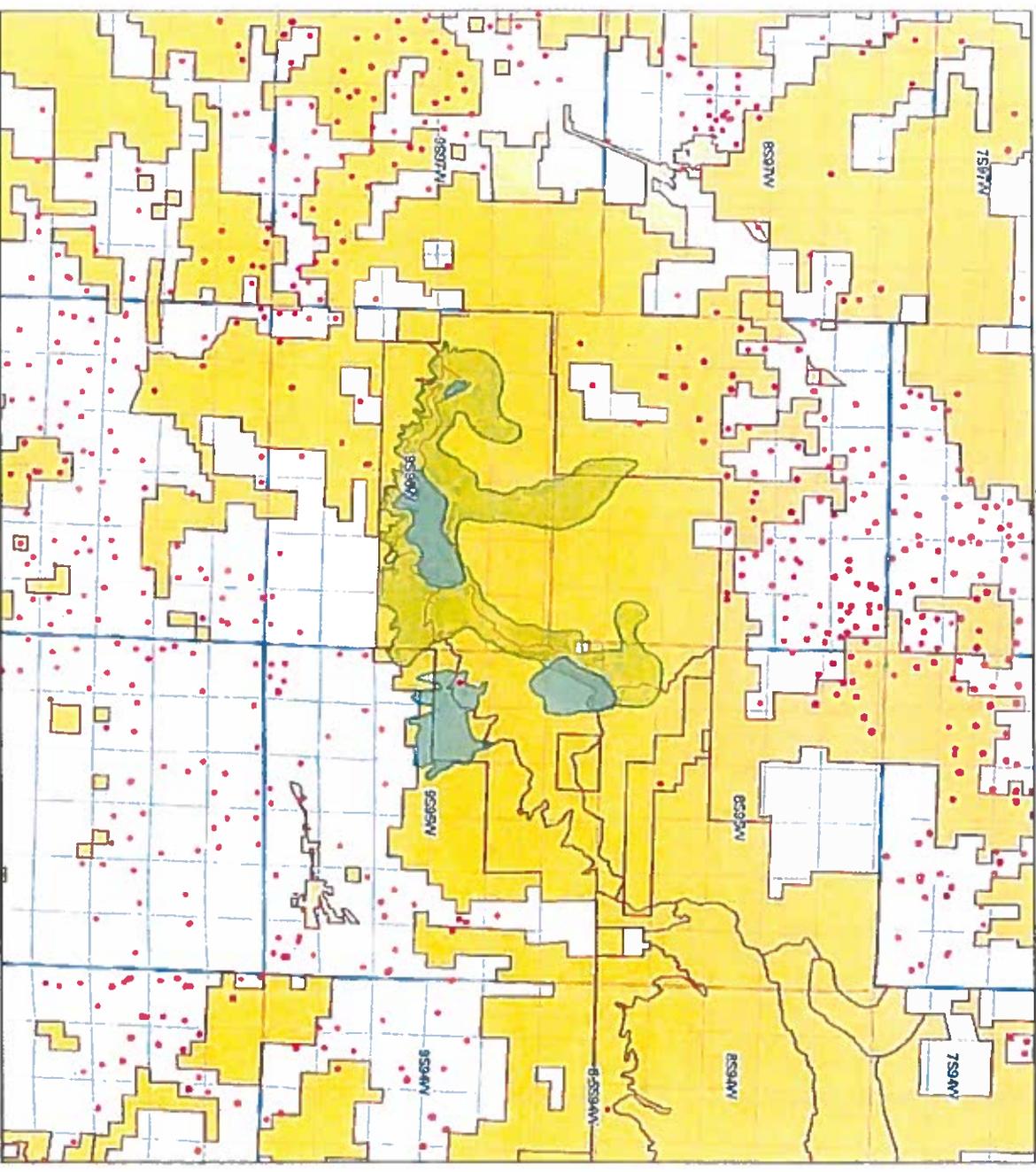
2008 Bighorn Sheep RSO/SWH with Federal NSO (9S96W)



2013 Proposed Bighorn Sheep RSO/SWH with Federal Surface (9S96W)



2008 Bighorn Sheep RSO/SWH with Federal Surface (9S96W)





COLORADO CATTLEMEN'S ASSOCIATION

"Representing the interests of Colorado's beef industry since 1867"

August 20, 2013

VIA EMAIL

Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, CO 80203

RE: *Amended Rules*, 1307-RM-01 Wildlife Maps (June 14, 2013)

Dear Sir or Madam:

Pursuant to the Colorado Oil and Gas Conservation Commission's ("COGCC" or "the Commission") request for comments and information regarding the update of sensitive wildlife habitat and restricted surface occupancy (RSO) maps of June 14, 2013, Colorado Cattlemen's Association (CCA) respectfully submits this letter. This information should be considered in any decision regarding planned or proposed updates to existing mapping.

The Colorado Cattlemen's Association (CCA) is the nation's oldest cattlemen's association formed in 1867, nine years before Colorado received statehood. CCA is the only association in Colorado exclusively representing the needs of cattle ranchers. CCA's membership represents a large majority of private landowners and federal land managers throughout the state. Many of the members of CCA own mineral rights and are also responsible for assisting in managing the state's wildlife; consequently they will be directly impacted by changes to the rules.

CCA supports and encourages COGCC to continue working with landowners and land managers when making decisions related to their property rights. While CCA finds no concern with many of the amendments to the rule, there are a few areas of concern. CCA would agree with other concerns, especially those raised about the Gunnison Sage-Grouse and Lesser Prairie-Chicken, raised by other stakeholders who provided public comments to the commission.

In regards to the Gunnison Sage-Grouse, CCA would agree with the comments submitted by Anadarko Petroleum Corporation, in that the four mile buffer around active lek sites is excessive. CCA would also agree that the definition for what is considered as an "active" lek site should be further vetted and that sites that have not had activity recorded for two years should not be considered "active."

CCA would also agree with the comments submitted by Anadarko Petroleum Corporation in regards to the sensitive wildlife habitat outlined for the Lesser Prairie-Chicken. It makes sense to

utilize the Southern Great Plains Crucial Habitat Assessment Tool as compared to the draft document currently proposed by the commission. Using a document that has been vetted compared to a document that is still in draft form seems more logical.

Overall, CCA finds little concern with the proposed amendments to the rule with changes applied to the Gunnison Sage-Grouse and Lesser Prairie-Chicken sensitive wildlife habitat. CCA also strongly encourages landowner and land manager involvement when making determinations about impact to the resources.

The Colorado Cattlemen's Association appreciates the opportunity to provide you with our concerns regarding the proposed rulemaking. Please feel free to contact the association to discuss these comments in further detail.

Sincerely,

A handwritten signature in cursive script, appearing to read "Gene Manuella".

Gene Manuella
President

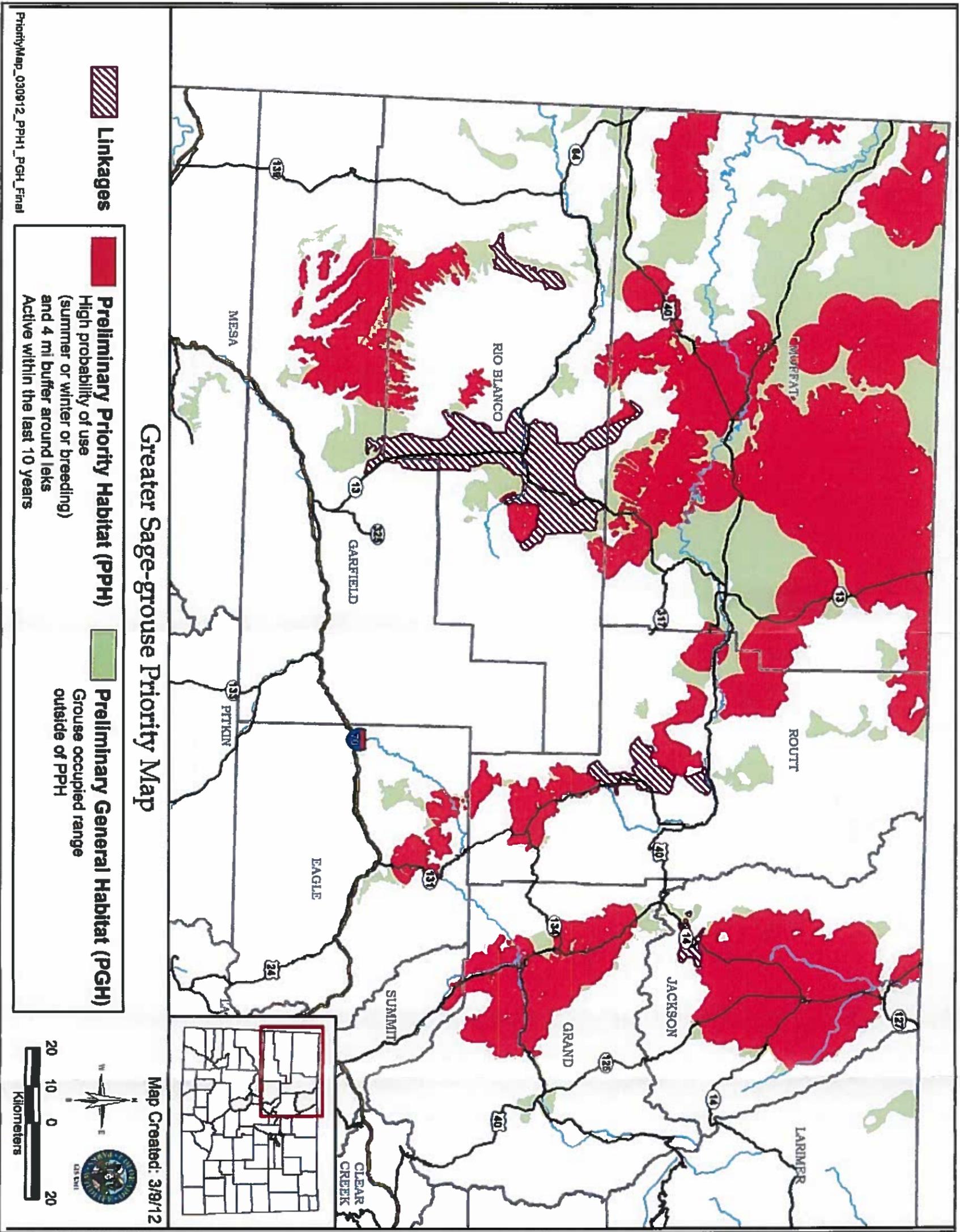
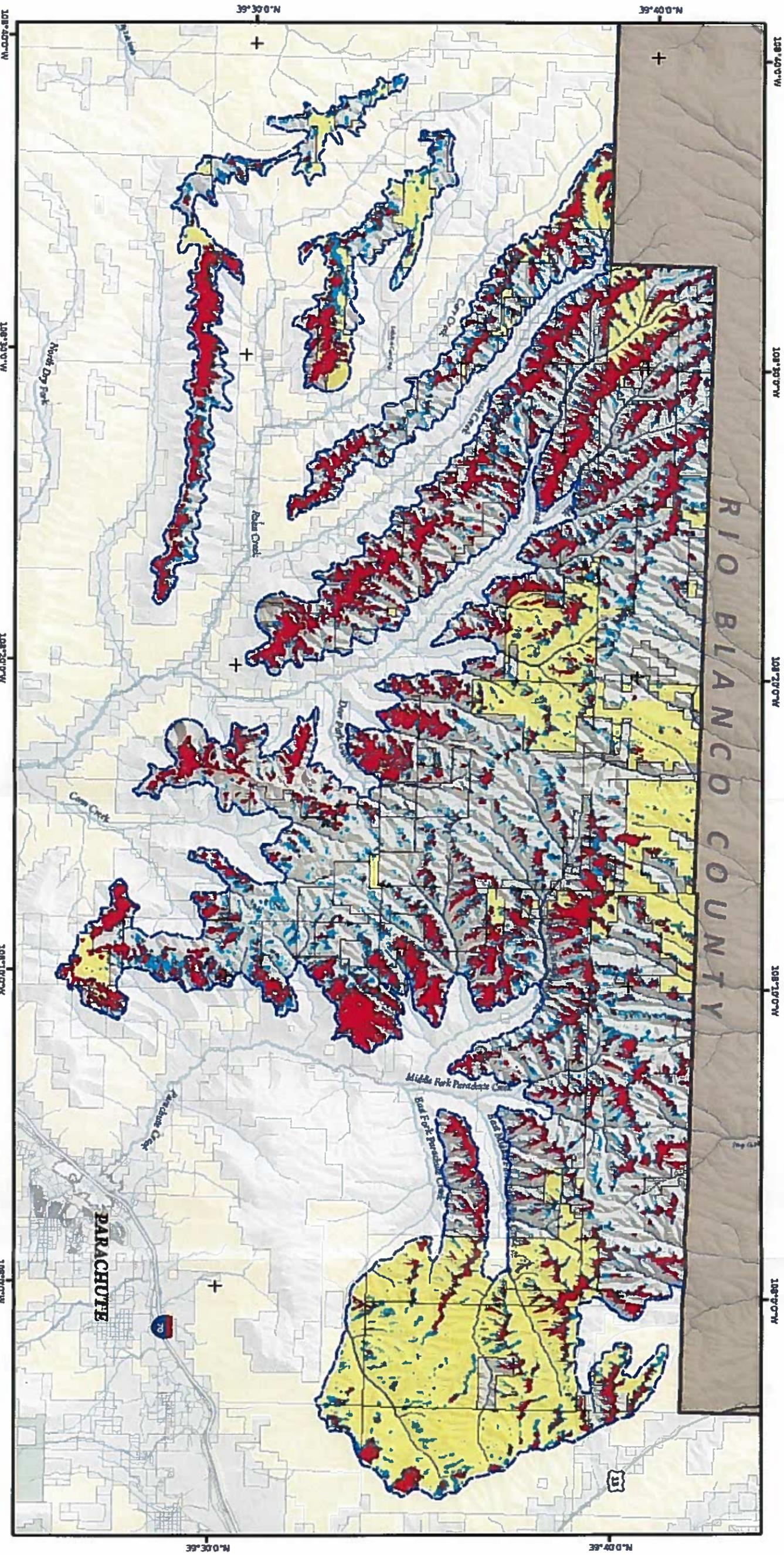


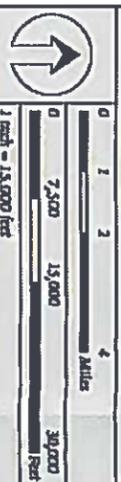
EXHIBIT B: Garfield County Suitable Habitat Map for the Greater Sage Grouse



	Analysis Area Boundary	220,967 Ac.
	Priority Habitat	31,070 Ac.
	General Habitat	28,023 Ac.

	BLM Lands
	USFS Lands
	Private Lands
	Municipal Boundary
	County Boundary
	Interstate
	State Highway

Disclaimer:
 This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and supporting sources to determine the validity of the information. The map is provided "AS IS" without warranty of any kind, either expressed or implied, including but not limited to accuracy of, reliability or completeness.



Date: July 2013
PENDO Solutions



**Modeled Habitats
 for Greater Sage Grouse**
 Suitable Habitat Results
 [Model v1: Revised Vegetation]