



Submitted electronically to:

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Ms. Patricia Deibert
Bureau of Land Management
Utah State Office
440 West 200 South, Suite 500
Salt Lake City, UT 84101

RE: Scoping Comments in Response to BLM's Notice of Intent to Amend Land Use Plans for Greater Sage-Grouse Conservation and Prepare Associated Environmental Impact Statements, Federal Register Vol. 86 No. 222 PP 666331-663333

Dear Ms. Deibert:

I. Introduction

This letter responds to the Bureau of Land Management's (BLM's) request for comments (Federal Register/Vol. 86, No. 222, November 22, 2021, Pages 66633 - 663333 seeking public scoping comments for the Environmental Impact Statement (EIS) documents and Greater Sage-Grouse (GRSG) Land Use Plans (LUPs) that BLM is preparing to amend the 2015 GRSG Land Use Plan Amendments (LUPAs). The EIS documents and LUPAs will cover the following western states: California, Colorado, Idaho, Montana, Nevada, North Dakota, Utah, and Wyoming. The Women's Mining Coalition (WMC) welcomes this opportunity to provide the following scoping comments.

Background

In 2017, the United States District Court for the District of Nevada remanded the 2015 LUPAs for NEPA violations. In response to this remand order, BLM published a Final EIS and a proposed Resource Management Plan Amendment in late 2018. In March 2019, BLM issued a Record of Decision (ROD) for the Approved Resource Management Plan Amendment (ARMPA).

Shortly after issuance of the 2019 ROD, the United States District Court for the District of Idaho issued a preliminary injunction to halt implementation of the 2019 ROD and ARMPA. To address the Idaho Court's concerns outlined in its preliminary injunction, BLM completed a Supplemental EIS and signed a subsequent ROD in 2020 (2020 ROD). Although the 2020 ROD is legally effective, the BLM is not implementing it and has not presented it to the Idaho District Court to update the Court that it completed a Supplemental EIS and has a new ROD in effect that post-dates the 2019 ROD that is preliminarily enjoined.

Because BLM's 2020 ROD is the final agency decision, it must be considered in BLM's current planning effort. WMC notes that the above-referenced Notice of Intent does not mention the 2020



ROD. BLM cannot ignore the existence of the 2020 ROD. It must be thoroughly evaluated in the upcoming planning effort and future EIS documents and LUPAs. In fact, the No Action Alternative in the future EIS documents should evaluate implementation of the 2020 ROD as BLM's final decision because it is currently in effect and not specifically enjoined by the Court.

BLM's 2015 LUPA is based on a landscape-scale planning process and concepts embodied in BLM's Planning 2.0 Rule that BLM adopted in 2016 to change the agency's planning process to shift to landscape-level management approaches that transcended traditional administrative and local boundaries¹. Local governments expressed concerns that BLM's Planning 2.0 Rule shifted land management decisions away from local officials who have on-the-ground knowledge and expertise, to officials on a national level who lack these insights.

These concerns resulted in litigation challenging the rule, which the plaintiffs claimed violated the multiple land use mandates in the Federal Land Policy and Management Act of 1976 (FLPMA) and other federal laws.² The state representatives who were plaintiffs in this case asserted the rule would "dramatically shift planning away from local communities to the BLM headquarters, opening the door for special interests in Washington D.C. to have greater influence on the BLM's planning process than those who live near and rely on public lands."³

On March 27, 2017, Congress overturned the Planning 2.0 Rule pursuant to the Congressional Review Act.⁴ Consequently, the landscape-scale land use planning concepts upon which the 2015 LUPAs are based is no longer allowable. Therefore, the EIS and LUPA documents BLM will be preparing as part of this new planning effort must focus on local decision making.

About WMC

WMC is a grassroots organization with members nationwide. Our members work in all sectors of the mining industry including hardrock, industrial minerals, and coal; energy generation and mining-related distribution, manufacturing, transportation, and service industries. We endeavor to meet regularly with members of Congress and their staff, and federal land management and regulatory agencies to discuss issues of importance to both the hardrock and coal mining sectors.

Starting with public scoping in 2012, WMC has a long history of involvement with the GRSG EIS and land use planning processes. We provided numerous comments during the preparation of the 2015 EIS documents and LUPAs. We submitted comments on the 2016 Draft EIS BLM prepared to evaluate the proposed withdrawal of the 10-million acre Sagebrush Focal Areas (SFA) from mineral entry. We also submitted comments during the EIS process and development of the 2019

¹ The 2015 LUPA was, as described by USFWS, "a significant shift from management focused within administrative boundaries to managing at a landscape scale." 80 Fed. Reg. 59858, at 59874 (Oct. 2, 2015).

² *Kane County, et al. v. U.S.*, Case No. 2:16-cv-01245-BCW (D. Utah Dec. 2016).

³ State Perspectives on BLM's Draft Planning 2.0 Rule: Hearing before the H. Subcomm. on Oversight and Investigations, 114th Cong. (July 7, 2016) (Hearing Memorandum from the Chairman for the Subcommittee on Oversight and Investigations, Committee on Natural Resources for the United States House of Representatives).

⁴ On March 27, 2017, H.J. Res. 44 was signed into law, overturning Planning 2.0 under the Congressional Review Act.



LUPAs.

The comments we are submitting below are consistent with our previously filed comments, which are incorporated by reference as if fully set forth herein. They reflect our ongoing support for responsible mineral exploration and development across the eight-state GRSG planning area and our dire concerns about the adverse impacts that many of the GRSG land management actions in the 2015 and 2019 LUPAs are having on mineral activities. Finally, as previously stated in our comments on the 2015 EIS documents and LUPAs, and on the 2016 Draft SFA Withdrawal EIS, WMC strongly opposes withdrawing the SFA from operation of the U.S. Mining Law (30 U.S.C. § 21 *a et seq*), which would put nearly 10 million acres off-limits to mineral exploration and development. As discussed below, withdrawing lands from mineral entry and imposing land use management restrictions in the name of GRSG conservation that adversely affect mineral exploration and development would be inconsistent with the Biden Administration's objectives to increase domestic mineral production – especially of the critical minerals needed to build clean energy infrastructure.

II. BLM Should Not Segment the SFA Withdrawal Proposal and the Land Planning Effort into Two EIS Processes and Documents

BLM's current plan to prepare separate EIS documents – one to analyze the impacts of the proposed SFA mineral withdrawal and the other to evaluate GRSG management actions – is ill advised, impractical, and will create confusion. Artificially splitting the analysis of the impacts to minerals into different EIS documents will render both documents incomplete. Additionally, preparing two closely related EIS documents may not comply with the Council on Environmental Quality's regulations for the National Environmental Policy Act (NEPA) that prohibit segmenting connected projects into separate NEPA documents. The CEQ implementing regulations, in fact, require that agencies evaluate proposals that are closely related enough to be effectively a single course of action, in one EIS.

As a practical matter, most of the alternatives evaluated in the 2015 EIS documents include the proposed withdrawal of the SFAs from mineral entry. It is therefore not appropriate to separate this aspect of the 2015 LUPAs from the current planning process. Moreover, the evaluation of impacts to mineral resources that would result from withdrawing the SFAs is directly relevant to the analysis of indirect and cumulative impacts on locatable minerals as well as to the socioeconomic impacts resulting from the simultaneous withdrawal of the SFAs and the implementation of restrictions on mineral activities due to the GRSG land management restrictions.

Withdrawing the SFA from mineral entry and contemporaneously restricting mineral activities throughout the remaining GRSG planning area would create significant cumulative impacts to minerals that need to be evaluated in the same NEPA document. For example, withdrawing the 10-million acre SFAs could obviate the need for stringent restrictions on mineral activities throughout the rest of the planning area – especially considering the very small footprint that mineral exploration and development have on the overall landscape.



The current EIS process must prepare one document that evaluates the following range of SFA alternatives:

1. Withdrawing the SFA from mineral entry;
2. Keeping the SFA lands open to mineral entry;
3. Reconfiguring the SFA to reflect newly available on-the-ground habitat and mineral potential data; and
4. Excluding areas with high mineral potential from the SFA withdrawal, as in the HMP Alternative included in the 2016 Draft SFA Withdrawal EIS.

Because the impact analysis for the proposed SFA mineral withdrawal and the GRSG conservation measures that impose spatial and temporal restrictions on mineral activities should not be separated into two different EIS documents, many of the comments below focus on both issues.

III. The EIS Must Analyze the Findings of the USGS 2016 Mineral Potential Report and Include Information from an Updated USGS MPR

In 2016, the U.S. Geological Survey (USGS) prepared a Mineral Potential Report (MPR) that assessed the mineral potential of that the SFAs.⁵ The MPR evaluated the minerals present in the SFAs and the potential for development of these minerals into mining operations. Appendix 1 of the MPR, “Mineral Potential Classification System,” states a mineral area has to have permissive host rocks and at least two of the following characteristics in order to qualify for the highest ranking, H/D. The H/D ranking also considers the “Level of Resources Potential” and the “Level of Certainty.” Appendix 1 lists the additional criteria required for mineralized areas to be ranked as H/D:

- Current production/significant inventory;
- Significant past production;
- Active or pending notices or mine plans;
- Numerous active claims;
- USMIN active exploration;
- Prospects, geochemical anomaly, geophysical anomaly; and/or
- Related deposit type

The 2016 MPR is comprised of Chapters A through E, which evaluate specific areas in Idaho, Montana, Nevada, Oregon, Utah, and Wyoming where the SFAs are located. Each MPR chapter

⁵ Mineral resources of the Sagebrush Focal Areas of Idaho, Montana, Nevada, Oregon, Utah and Wyoming, Scientific Investigations Report 2016-5089, <https://pubs.er.usgs.gov/publication/sir20165089>



includes maps that show the locations of areas with high and moderate mineral development potential as well as the locations of the proposed SFA withdrawal areas.

Before BLM can develop draft EIS documents and LUPAs, the USGS needs to prepare an updated MPR to incorporate new post-2016 private-sector and academic studies of the mineral potential of the SFAs. Additionally, the updated MPR needs to focus on the potential for critical minerals including but not limited to lithium, rare earths, cobalt, and nickel that would be put off limits if the SFAs were withdrawn from mineral entry.

IV. The EIS Should Analyze the Mineral Potential of the Entire GRSG Planning Area Based on Updated Mineral Exploration and Development Data

In addition to considering the mineral potential data in an updated MPR for the SFA, BLM must also carefully consider the mineral potential for the entire GRSG planning area before the impacts of imposing GRSG land management restrictions can be assessed on mineral resources. The 2016 USGS MPR for the SFAs should serve as a model for this evaluation. However, the MPR analysis area needs to be expanded to evaluate the entire GRSG planning area.

The scope and caliber of the mineral potential analyses in the 2015 EIS documents vary considerably. Several of the 2015 Final EIS documents include data on the locations of high and moderate potential mineral areas superimposed on the GRSG habitat classification maps. However, the Oregon Final EIS and the Nevada and Northeastern California Final EIS (NV/CA FEIS) are deficient.

The NV/CA FEIS does not include a discussion of mineral potential, which is a serious omission because Nevada is the state with the most locatable minerals exploration and development activity, as measured by the number of unpatented mining claims, Notices, and Plans of Operation documented in Tables 3-22 and 3-23 in BLM's 2020 Public Lands Statistics report.⁶ The mineral potential discussion in the NV/CA FEIS provides an incomplete and perfunctory analysis of locatable minerals. Table 3-54 in this document presents the number of Notices and Plans of Operations that the Nevada and California BLM evaluated during the period 2004 through 2013 in each state. Unfortunately, this table is for the entirety of the both states and thus includes Notices and Plans of Operation in both states that are outside of the GRSG habitat planning areas. Therefore, Table 3-54 provides no meaningful information about the number of Notices and Plans of Operation that have the potential to impact GRSG habitat – or, just as importantly – where and how GRSG land management restrictions could impact mineral exploration and development activities.

The minerals potential analysis in the BLM's 2015 Oregon Final EIS is also seriously deficient because it relies on a cursory evaluation that did not adequately consider the mineral potential of the SFAs or of the GRSG Oregon planning area. Moreover, the limited discussion of mineral

⁶ BLM Public Land Statistics 2020, June 2021, <https://www.blm.gov/about/data/public-land-statistics>



potential in the Oregon Final EIS is now out of date and needs to be updated to reflect recent mineral activities that have discovered a promising lithium deposit.⁷

The Affected Environment section for locatable minerals (Section 3.13)⁸ in the 2015 Oregon Final EIS does not recognize the lithium potential in the Oregon GRSG planning area. Moreover, as illustrated in the following excerpts from Section 3.13, BLM acknowledged the shortcomings in the locatable mineral data presented in the Final EIS:

All locatable minerals have potential to exist within the planning area but exploration efforts have been minimal so potential is unknown. Mineral Potential Reports completed for past RMP efforts are out of date because new technologies, techniques, and developments could make what was once identified as low potential now high...A Mineral Potential Report was not completed for this RMPA/EIS. All estimates are based on broad scaled "trends" review, which is an opinion as opposed to a methodological approach...There is potential for economic development of locatable minerals. The planning area consists of geology preferential to the formation of precious and semi-precious locatable minerals, as well as uncommon variety. However the area is under-utilized and under-analyzed.

As examples of the Final EIS documents that do assess mineral potential, Figure 3-11 in the Idaho/Southwestern Montana Final EIS (ID/MT FEIS) shows areas of high and moderate mineral potential superimposed on the GRSG habitat management areas; Figure 3-12 shows areas with then-current Notices and Plans of Operation in the ID/MT planning area. Similarly, Map 3.21-8 in the Utah FEIS shows areas with high and moderate mineral potential, GRSG population areas and occupied habitat areas. The Wyoming Final EIS also includes detailed discussions of the mineral potential and impacts to mineral resources. These maps and discussions need to be updated in the future EIS documents with information on mineral exploration and development activities since 2015.

The new EIS documents must include information similar to the maps and discussion in the 2015 ID/MT, Utah, and Wyoming FEIS documents and provide a complete and thorough analysis of locatable minerals. This analysis must analyze two things:

1. How mineral exploration and development activities could impact GRSG habitat management areas; and
2. How GRSG management restrictions could impact locatable mineral activities.

⁷ See Jindalee Resources news releases regarding the Company's lithium discovery at its McDermitt Lithium Project in southeastern Oregon at: <https://www.jindalee.net/site/PDF/fa7156cf-5e55-4234-8847-3b678827962e/StrongfirstresultsreceivedforMcDermittLithiumProject>

⁸ https://eplanning.blm.gov/public_projects/lup/103348/143730/176966/ORGRSG_Ch3_508.pdf



As discussed in Section VII below, the 2015 EIS documents and LUPAs acknowledge that the GRSG management restrictions will adversely affect locatable mineral activities, but do not adequately discuss the socioeconomic impacts of reduced mineral activities on stakeholders including local and state governments, or how reduced mineral activities will impact the Nation's need for domestic minerals and the vulnerability of critical minerals supply chains.

V. The EIS Must Include Data that Show Mineral Activities Have Minimal Impact on GRSG Habitat

In 2016, BLM used the findings in the USGS' 2016 MPR to prepare a Draft SFA Withdrawal EIS (2016 Draft EIS) that found that if the SFA lands were not withdrawn and remained open to mineral exploration and development, the forecast footprint of mineral activities for the next 20 years was miniscule and would affect only 9,554 acres within the proposed 10-million acre SFA. In other words, if mineral activities were allowed in the SFAs, mineral exploration and mining would impact less than 0.1 percent of the SFA during the 20-year evaluation period. (See 2016 Draft EIS, Table 2-1.)

The 2016 Draft EIS projected that if the SFA lands were withdrawn, 1,084,109 acres of lands with high and moderate mineral potential would be put off-limits to mineral development. As shown in Table 1, Nevada would lose the most lands with high and moderate mineral potential due to the SFA withdrawals, followed by Idaho, Wyoming, and Montana.

**Table 1⁹
Acres of High and Moderate Mineral Potential in the SFAs**

State	Mineral Potential	Acres within SFA	Total High and Moderate Mineral Potential Acres to be Withdrawn
Idaho	High:	25,988	242,460
	Moderate:	216,472	
Montana	High:	57,761	101,227
	Moderate:	43,466	
Nevada	High:	403,808	504,179
	Moderate:	100,371	
Oregon	High:	66,581	87,714
	Moderate:	21,133	
Utah	High:	3,452	37,477
	Moderate:	34,025	
Wyoming	High:	1,328	111,051
	Moderate:	109,723	
Total Proposed Withdrawal of Lands with High and Moderate Mineral Potential			1,084,109

⁹ Modified after Table 2-2 in the 2016 SFS Withdrawal DEIS



Table 2-1 in the 2016 Draft EIS also forecasted that if the SFA lands remained open to mining, 26 mines and 114 exploration projects would be developed throughout the SFA that would cumulatively disturb the above-mentioned 9,554 acres during the course of 20 years in the six SFA states shown in Table 1. The 2016 Draft EIS predicts five large mines and 21 small mines would be developed.

BLM's November 2018 Greater Sage-Grouse Proposed Resource Management Plans and Final EIS documents clearly explain why withdrawing the SFAs from mineral entry is not warranted because prohibiting mineral activities in the SFA is not necessary to protect GRSG and GRSG habitat:

Under the Management Alignment Alternative, the recommendation to withdraw sagebrush focal areas (SFA) from location and entry under the Mining Law of 1872 would be removed, as the EIS process considering the proposed withdrawal was canceled on October 11, 2017. In its 2016 SFA Withdrawal EIS, the BLM quantified the possible adverse effects from locatable mineral exploration and mining on the approximately 10 million acres of SFAs proposed for withdrawal, finding that they would be limited to approximately 9,000 acres rangewide of surface disturbance over 20 years, with approximately 0.58 percent of Greater Sage-Grouse male birds possibly affected per year. The other action alternatives evaluated in the 2016 SFA Withdrawal Draft EIS similarly demonstrated negligible benefit of the proposed withdrawal to Greater Sage-Grouse and its habitat. (See for example, Oregon Final EIS, Page 4-24; Idaho Final EIS, Page 4-8; and Nevada Final EIS, Page 4-25.)

VI. The EIS Should Include the High Mineral Potential Alternative Evaluated in BLM's 2016 Draft SFA Withdrawal EIS

As shown in Table 1-1 in the 2016 Draft EIS, the proposed SFA withdrawal would cover nearly 10 million acres (9,948,477 acres) in the six SFA states as follows:

Idaho:	3,961,824 acres
Montana:	877,633 acres
Nevada:	2,766,939 acres
Oregon:	1,843,405 acres
Utah:	233,590 acres
Wyoming:	265,085 acres

Section 2.3.4 of BLM's 2016 Draft EIS evaluates an HMP Alternative that proposed to exclude the HMP lands identified in the USGS 2016 MPR from the SFA mineral withdrawal. Under the HMP Alternative, the SFA lands with HMP would remain open to mineral activities, subject to the land use management restrictions applicable to Priority Habitat Management Areas (PHMA).

Figures 2-2 through 2-7 in the 2016 Draft EIS show the locations of the lands in each SFA state to



be eliminated from the SFA proposed mineral withdrawal under the HMP Alternative.

WMC vehemently opposes withdrawing the SFAs from mineral entry, as proposed in the 2015 LUPAs. However, if BLM decides to continue to recommend withdrawing the SFA from mineral entry, WMC strongly supports excluding the HMP lands from the future SFA withdrawal. BLM should include the HMP Alternative from the 2016 Draft EIS and incorporate the HMP Alternative into the Proposed Action in the new EIS documents.

VII. The EIS Should Present a Detailed Analysis of the Socioeconomic Impacts of Eliminating or Restricting Range-wide Mineral Development

The EIS documents must disclose and quantify how many of the GRSG conservation management actions will adversely impact mineral exploration and development throughout the GRSG planning area, especially areas classified as PHMA. The 2015 EIS documents generally acknowledge that the GRSG land management actions and restrictions will adversely impact mineral resources. For example, the NV/CA FEIS states:

The Proposed Plan would apply RDFs consistent with applicable law to all GRSG habitat as additional conservation measures. Impacts from the RDFs would likely result in higher costs and longer time frames for developing locatable minerals. RDFs include placing operations and facilities as close together as possible, minimizing site disturbance through site analysis and planning, and phasing development with concurrent reclamation. (NV/CA FEIS, Page 4-311)

The ID/MT FEIS includes a more detailed and informative discussion of how GRSG land management actions will impede mineral activities (Pages 4-249 and 4-250):

Indicators of impacts on locatable minerals are as follows:

- Acres withdrawn from locatable mineral entry
- Acres recommended for withdrawal from locatable mineral entry
- Acres over which restrictions, such as RDFs (Required Design Features) and management actions, are placed on locatable mineral development activities to prevent unnecessary or undue degradation of GRSG habitat as the law allows

Each of these (indicators) is considered to be an impediment to locatable mineral discovery and development, to varying degrees.

For each area proposed for withdrawal, a detailed mineral potential analysis must be prepared by a geologist or mining engineer that includes an evaluation of the area's present and potential market demands...The need to perform mineral potential reports in areas proposed to be withdrawn from locatable mineral entry

would greatly increase the burden on the BLM and Forest Service.

Applying mitigation measures required to prevent unnecessary or undue degradation as defined in 43 CFR 3809.415, as well as reasonable and appropriate RDFs consistent with applicable law (see **Appendix B**), and management actions outlined in **Chapter 2** to plans of operations could directly impact locatable mineral operations by increasing costs, causing delays, and frustrating attempts to develop the resource. These RDFs include such standards as noise restrictions, height limitations on structures, design requirements, water development standards, remote monitoring requirements, and reclamation standards. Applying these requirements may impact locatable mineral operations by increasing costs, causing delays, and frustrating attempts to develop the resource.

Despite these admissions that the GRSG management measures will adversely impact locatable mineral exploration and development, the 2015 EIS documents and LUPAs do not adequately assess the negative socioeconomic impacts stemming from the spatial, temporal, and access restrictions applicable to locatable minerals.

In contrast, the 2016 Draft EIS does quantify the negative economic impacts associated with withdrawing the SFAs from mineral entry, stating the proposed SFA withdrawal would dramatically reduce economic output in the six SFA states, estimating that withdrawing the SFA would result in approximately \$700 million less annual output, \$120 million less in labor compensation, and about 1,700 fewer jobs than the No Action Alternative, which would keep the SFA open to mineral entry and development. (See Page 4-26, 2016 Draft EIS.)

The EIS documents that BLM will be preparing should include a similar assessment of the economic hardships associated with withdrawing the SFAs. The documents should also evaluate how the higher costs, longer time frames, and measures that have delayed and impeded development of locatable minerals have reduced mineral exploration and development in the GRSG planning area since 2015. Additionally, this analysis should examine the extent to which these restrictions have chilled investment in the minerals sector, making it more difficult for mineral exploration and development project proponents to secure the funds needed to advance their projects.

Reduced mineral exploration and development adversely affects numerous stakeholders besides project proponents. Therefore, the future EIS documents should evaluate the adverse socioeconomic impacts of delayed mineral activities to local communities that would have otherwise benefitted from more timely and robust economic contributions if mineral exploration and development projects had not been constrained by the RDFs and GRSG management restrictions.

Similarly, the EIS should assess the adverse fiscal impacts to the states where the GRSG RDFs and other GRSG land management restrictions affecting locatable minerals have been applied. Higher costs and delays influence the amount and flow of taxes, royalty payments, fees, and other mineral-related revenue streams to the mining communities and states in the planning area. The

EIS documents should assess how the GRSG RDFs and other land management restrictions have slowed the pace of mineral discovery and development of projects and how that has impacted the states where mineral project proponents pay state taxes, advanced royalties, production royalties and other fees.

VIII. The EIS Must Consider an Alternative that Responds to the Country's Urgent Need for Minerals to Reduce Mineral Imports and to Build Clean Energy Infrastructure

The 2015 EIS documents do not analyze how reduced mining due to the proposed SFA mineral withdrawals and the GRSG land management restrictions affect the Nation's minerals supply. This shortcoming needs to be addressed in the new EIS documents that BLM will be preparing.

The country's current reliance on foreign minerals – including critical minerals – will be exacerbated by further reducing mineral activities in the GRSG planning area where important deposits of the minerals needed for all aspects of our lives including but not limited to our economy, national defense, conventional and renewable energy infrastructure, manufacturing, communications, technology, etc. are located.

Minerals like copper, lithium, antimony, vanadium, nickel, cobalt, silver, and gold are needed to achieve the Biden Administration's clean energy and carbon emission reduction goals. Domestic sources of these and other minerals are needed to respond to President Biden's goals to strengthen domestic mineral supply chains, to achieve nationwide electrification, to significantly increase the use of electric vehicles, and to dramatically reduce carbon emissions.

Achieving these goals will be impossible without domestic minerals. The 2021 International Energy Agency Report entitled "*The Role of Critical Minerals in Clean Energy Transitions*"¹⁰ summarizes the need for minerals to support the transition from fossil fuels to clean energy as follows:

“An energy system powered by clean energy technologies differs profoundly from one fueled by traditional hydrocarbon resources. Solar photovoltaic (PV) plants, wind farms and electric vehicles (EVs) generally require more minerals to build than their fossil fuel-based counterparts. A typical electric car requires six times the mineral inputs of a conventional car and an onshore wind plant requires nine times more mineral resources than a gas-fired plant. Since 2010 the average amount of minerals needed for a new unit of power generation capacity has increased by 50% as the share of renewables in new investment has risen.

The types of mineral resources used vary by technology. Lithium, nickel, cobalt, manganese and graphite are crucial to battery performance, longevity and energy density. Rare earth elements are essential for permanent magnets that are vital for wind turbines and EV motors. Electricity networks need a huge amount of copper

¹⁰ <https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions/executive-summary>



and aluminum, with copper being a cornerstone for all electricity-related technologies.

The shift to a clean energy system is set to drive a huge increase in the requirements for these minerals...In a scenario that meets the Paris Agreement goals...total [minerals] demand rises significantly over the next two decades to over 40% for copper and rare earth elements, 60-70% for nickel and cobalt, and almost 90% for lithium. EVs and battery storage have already displaced consumer electronics to become the largest consumer of lithium and are set to take over from stainless steel as the largest end user of nickel by 2040.”

In response to the Administration’s focus on clean energy, the new GRSG EIS documents must carefully assess GRSG land management restrictions that impede mineral exploration and development and consider one or more alternatives to minimize adverse impacts to mineral activities.

The current land management restrictions for minerals do not achieve an appropriate balance between responding to the Nation’s need for domestic minerals and GRSG habitat conservation. As such, they are not consistent with the directive in the Federal Land Policy and Management Act of 1976 (FLPMA) pertaining to the need for minerals mined from public lands:

The Congress declares that it is the policy of the United States that –

(12) the public lands be managed in a manner which recognizes the Nation’s need for domestic sources of minerals, food, timber and fiber from the public lands including implementation of the Mining and Minerals Policy Act of 1970 (84 Stat. 1876, 30 U.S.C. 21a), FLPMA, Section 102(a)(12)

FLPMA does not authorize BLM to subordinate mineral activities in favor of GRSG habitat conservation. Rather, FLPMA directs BLM to find the right balance between the two – and all other uses of the public lands.

In finding the right balance, the future EIS documents should focus on the very limited footprint that mining has on public lands. BLM must carefully consider the finding in BLM’s 2016 Draft EIS that if the SFAs were not withdrawn from mineral entry and these lands remained open to mining, that mineral activities would impact a mere 9,554 acres over a period of 20 years within the proposed 10-million acre SFA – less than 0.1 percent of the SFAs. (See 2016 Draft EIS, Table 2-1.)

The need for finding a better balance between mineral activities and GRSG conservation is underscored by the fact that the GRSG restrictions applied to mineral activities and many other public land uses have not been successful in protecting GRSG or its habitat. As discussed in the following section, a recent USGS publication documents alarming GRSG population and habitat declines.

IX. The EIS Should Use the March 2021 USGS Open File Report as Best Available Science

Most of the GRSG management actions in the 2015 EIS documents and LUPAs are based on the recommended conservation measures described in the 2011 National Technical Team's Report on National Greater Sage-grouse Conservation Measures (NTT Report). The 2015 Record of Decision (ROD) and Approved Resource Management Plan Amendment (ARMPA) for the Great Basin sub-region describe the NTT Report as follows:

In 2011, the BLM established the GRSG National Technical Team (NTT), comprised of BLM, USGS, NRCS, and State specialists. The NTT's charge was to identify science-based conservation measures for the GRSG to promote sustainable populations. These measures would be focused on the threats identified in the FWS listing determination...The NTT produced *A Report on National Greater Sage-grouse Conservation Measures* (NTT Report; NTT 2011) in which it proposed conservation measures based on habitat and other life history requirements for GRSG. The NTT Report described the scientific basis for the conservation measures proposed for each program area. (Great Basin ROD and ARMPA, Page 1-7)

In March 2021, the USGS and co-authors BLM and the Western Association of Fish and Wildlife Agencies published an important GRSG scientific study entitled "*Range-wide Greater Sage-Grouse Hierarchical Monitoring Framework: Implications for Defining Population Boundaries, Trend Estimation, and a Targeted Annual Warning System,*" Open File Report 2020-1154¹¹ (USGS OFR), that documents the significant declines in GRSG populations and habitat conditions that have occurred since the 2015/2019 LUPAs have been in place. The USGS OFR abstract presents the following key findings:

- An estimated 37.0-, 65.2-, and 80.7-percent decline in abundance range-wide during short (17 years), medium (33 years), and long (53 years) temporal scales, respectively;
- Models predicted 12.3, 19.2, and 29.6 percent of populations (defined as clusters of neighboring leks) consisted of over 50-percent probability of extirpation at 19, 38, and 56-year projections from 2019, respectively, based on averaged annual rate of change in apparent abundance across two, four, and six oscillations (average period of oscillation is 9.4 years).
- Models predicted 45.7, 60.1, and 78.0 percent of leks with over 50-percent extirpation probabilities over the same time periods, respectively, mostly located on the periphery of the species' range.

¹¹ <https://pubs.er.usgs.gov/publication/ofr20201154>

- The targeted annual warning system automates annual identification of local populations exhibiting asynchronous decline relative to regional population patterns using simulated management actions and an optimization algorithm for evaluating range-wide stabilization of population abundance.
- In 2019, approximately 3.2 percent of leks and 2.0 percent of populations were identified by the targeted annual warning system for management intervention range-wide.

The four major causes of GRSG population and habitat declines discussed in the USGS OFR are: 1) the cycle of wildfires and invasive non-native grass species; 2) predation (especially raven predation) on GRSG eggs and chicks; 3) an explosion in wild horse populations that exceed recommended herd management levels (Appropriate Management Levels, AMLs); and 4) drought.

According to the USGS OFR:

- The raven population has increased by 350% since 1970;
- There is a 15% reduction in GRSG population growth for every raven per square kilometer;
- Feral horse populations are over 4 times the recommended herd management levels in Nevada;
- For every 50% increase in horse abundance over AML, the model predicts an annual decline in sage-grouse abundance by 2.6%; and
- Within horse occupied areas, the model predicts a 70% decline in GRSG over 15 years if horse populations continue to grow unabated.

The findings in the 2021 USGS OFR suggest that the GRSG land management and conservation measures in the 2015/2019 LUPAs have not been as successful as hoped for in preventing and reversing habitat and population declines. The range-wide declines in abundance and lek extirpation data are especially alarming.

Ten years have passed since the NTT Report was written. This report is now out of date and eclipsed by newer information. In preparing the new EIS documents, BLM, which helped coauthor the 2021 USGS OFR, must now consider the 2021 USGS OFR it as Best Available Science in identifying the principal threats to GRSG habitat and populations and in evaluating appropriate GRSG conservation and management actions.

The GRSG land management actions in the 2015/2019 LUPAs impose extensive and harsh



restrictions on locatable minerals and most other public land uses that do not appear to be having the desired outcome in improving GRSG habitats or strengthening GRSG populations. This lack of success strongly suggests that perceived threats to GRSG and GRSG habitat identified in the NTT Report are localized and pale in comparison to the range-wide threats identified in the 2021 USGS OFR (e.g., the wildfire-invasive species cycle, raven predation, wild horses, and drought.)

Additionally, BLM has six years of experience implementing the land management decisions in the 2015/2019 LUPAs. Because the land management actions and restrictions in the 2015/2019 LUPAs have not been optimally effective in improving GRSG habitats or populations, they are no longer justifiable in light of the multiple use mandate in FLPMA. Consequently, the new EIS documents and LUPAs must focus much more attention on addressing the range-wide threats identified in the USGS OFR by evaluating one or more alternatives designed to abate the threats from wildfire and invasive species, raven predation, and wild horse populations that exceed identified AMLs for the land.

X. The EIS Should Analyze a Voluntary Compensatory Mitigation Alternative that Focuses on GRSG Habitat Remediation Rather than Creating Conservation Easements

The 2021 USGS OFR includes a Targeted Annual Warning System (TAWs) that identifies GRSG habitat areas that need remediation. BLM should evaluate an alternative that uses the TAWs to target damaged habitat areas that could be improved using compensatory mitigation. For projects where compensatory mitigation is consistent with valid existing rights and applicable law, project-proponent-sponsored voluntary compensatory mitigation measures and funds should be used to improve habitat areas where management intervention could benefit the lands and the species.

Additionally, the EIS should evaluate whether compensatory mitigation programs that mainly focus on creating GRSG habitat conservation easements are an effective form of compensatory mitigation. Based on the habitat and population declines described in the USGS OFR, it appears that conservation easements have not successfully mitigated impacts to GRSG or GRSG habitat. Compensatory mitigation projects designed to improve degraded habitat or prevent the destruction of existing habitat due to wildfire would create more long-term benefits to GRSG habitat than compensatory mitigation measures that establish local conservation easements, which protect smaller habitat areas, do not necessarily reduce the primary causes of GRSG decline and habitat loss, or help restore lands with damaged habitat.

XI. The EIS Should Include an Alternative to Facilitate Regularly Updating the Habitat Classification Maps with New Site-Specific, On-the-Ground Habitat Data



As discussed in Nevada Governor Brian Sandoval's July 2015 Consistency Review letter¹² on the 2015 NV/CA Final EIS and LUPA, the 2015 habitat classification maps are incorrect and create numerous land management problems:

“7. Habitat Maps Are Inaccurate And Fail to Include Best Available Information

We have major concerns about the adequacy and accuracy of the maps used to identify and designate GSG habitat, namely PHMA, GHMA, and SFA. While we appreciate the pairing of the LUPA habitat maps with the Nevada habitat map, even a cursory review of the maps with some local, on-the-ground knowledge, highlights the huge areas of discrepancy between actual and mapped GSG habitat.

As a specific example, there is a large area in southern Eureka County designated as PHMA and would be subsequently held to the disturbance caps. This area includes the Town of Eureka, US Highway 50, State Route 278, the Eureka County landfill, the Falcon-to-Gondor major distribution power line, multiple ancillary power lines, multiple subdivisions with homes, paved roads and gravel roads, farms with alfalfa fields and irrigation systems, and hay barns, among other infrastructure. It is beyond puzzling how this area can be not only GSG habitat, but “core” GSG habitat. This example provides a perfect example of how the lek buffers are arbitrary and not applicable in many circumstances as we note elsewhere in this Protest letter. GSG do not use the LUPA defined space around each lek uniformly, and some spaces in this buffer are used not at all. Just in Eureka County, we can point out many discrepancies between what is mapped as habitat versus what is on the ground that cannot be refuted as being non-GSG habitat.”

To minimize future problems with the habitat classification maps, the new EIS documents should evaluate an alternative that facilitates efficient and ongoing incorporation of newly available on-the-ground GRS habitat data into its management decisions – especially project level-decisions.

As part of the permitting process for mineral exploration and development and other regulated multiple uses of public lands, project proponents must provide environmental baseline data that is collected by qualified professionals following BLM data-collection protocols. Project proponent-collected data typically include information on GRS habitat characteristics in their proposed project areas. The EIS should evaluate the best ways to capitalize on this information, including mechanisms for upgrading or downgrading the habitat management classification currently in use throughout the planning area as shown on the habitat classification maps in the 2015 and 2019 EIS documents. Because the habitat classification maps are based mainly on remote sensing and modeling data rather than site-specific “boots-on-the-ground” data, they only approximate actual habitat conditions. Field-verified habitat data should always be considered in lieu of the habitat management classification maps wherever field data are available.

¹²

<https://sagebrushco.nv.gov/uploadedFiles/sagebrushconvgov/content/Resources/News/2015/FinalGovConsRevWa ttachments.pdf>



Updating the habitat classification maps to incorporate newly available site-specific data is necessary to comply with BLM's commitment in the 2015 Great Basin ROD and ARMPA (Page 1-42) to use Best Available Data. For the purpose of making project-level decisions, the site-specific data should always supersede the habitat classification maps and inform project-level decisionmaking if the site data show the habitat conditions are different (better or worse) than the habitat classification maps in the EIS documents and LUPAs. The management actions should be adjusted accordingly and require GRSG management actions that reflect actual site conditions.

XII. Conclusions


The new EIS documents and amended LUPAs represent an opportunity to respond to the major range-wide threats (e.g., wildfire and invasive annual grasses, predation, out-of-control feral horse populations and drought) that are currently having a profoundly adverse effect on GRSG and GRSG habitat. The 2015 EIS documents and LUPAs include burdensome restrictions that have negatively impacted public land users, communities, and states in the GRSG planning area, and have not done enough to protect GRSG or improve GRSG habitats.

WMC very much appreciates this opportunity to provide these scoping comments. We look forward to participating in the remainder of the NEPA process to prepare new EIS documents and amend the GRSG LUPAs.

Respectfully,

INSERT SARA'S SIGNATURE

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