BLM Utah 2023 Fourth Quarter Competitive Oil and Gas Lease Sale
Unsigned Finding of No Significant Impact
DOI-BLM-UT-0000-2023-0003-EA
Uintah County, Utah

Bureau of Land Management:
Utah State Office
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Salt Lake City, Utah 84101
The BLM’s multiple-use mission is to sustain the health and productivity of the public lands for the use and enjoyment of present and future generations. The Bureau accomplishes this by managing such activities as outdoor recreation, livestock grazing, mineral development, and energy production, and by conserving natural, historical, cultural, and other resources on public lands.
Background

The Bureau of Land Management (BLM) prepared an Environmental Assessment (EA) analyzing the effects of leasing of six (6) lease parcels (totaling 8,972.24 acres) nominated for auction in the BLM Utah Fourth Quarter 2023 Competitive Oil and Gas Lease Sale (Lease Sale) on public lands managed by the BLM’s Vernal Field Office (VFO).

Surface ownership

<table>
<thead>
<tr>
<th>County</th>
<th>Parcels</th>
<th>Surface Management Entity (SME)</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uintah</td>
<td>1516, 1517, 7669, 7670, 7671, 7672</td>
<td>BLM</td>
<td>8,972.24</td>
</tr>
</tbody>
</table>

The EA analyzes three action alternatives as well as a No Action Alternative (Alternative D), in which no parcels would be offered for lease and current management would continue. Alternative A (Proposed Action) analyzes the impacts of offering the six nominated lease parcels for competitive leasing, with stipulations and lease notices consistent with the Vernal Resource Management Plan. Alternative B (Greater Sage-Grouse Habitat Avoidance Alternative) analyzes the impacts of offering one of the nominated parcels for competitive leasing with stipulations and lease notices, and Alternative C (Greater Sage-Grouse Prioritization Alternative) analyzes the impacts of offering four of the nominated parcels for competitive leasing with stipulations and lease notices. Under the action alternatives (Alternatives A, B, and C), the BLM Authorized Officer has the authority to selectively lease, or to defer parcels, based on the analysis of potential impacts presented in the lease sale EA. Surface management, the legal land description of the nominated lease parcels (totaling 8,972.24 acres), and lease stipulations and notices attached to the parcels are included in Appendix B of the EA. Appendix C of the EA provides a summary of stipulations and lease notices.

Twenty-three issues identified during the scoping process (See EA Section 1.6 and 1.7) are analyzed in brief in EA Section 3.4. Three issues concerning air quality, greenhouse gases and climate change, and greater sage-grouse are analyzed in detail in EA Section 3.5.

This Finding of No Significant Impact (FONSI) has been prepared for the Proposed Action (Alternative A).

Finding of No Significant Impact Determination

Based upon the review of the analysis in DOI-BLM-UT-0000-2023-0003 EA and the Vernal RMP Environmental Impact Statement (EIS) (BLM, 2008), the BLM UTSO has confirmed that the Proposed Action does not constitute a major federal action that would have significant impacts individually or cumulatively with other actions in the general area beyond those disclosed in the relevant EISs. Therefore, an EIS is not required.

The Proposed Action, to offer for lease parcels for oil and gas development, and its effects have been evaluated in a manner consistent with the CEQ regulations for determining “significance.” In accordance with 40 CFR 1501.3(b), a determination of significance requires consideration of both the “potentially
affected environment” and the “degree” of effects. The affected area refers to the setting in which the action would occur (national, regional, or local) and its resources. Significance varies with the setting of the Proposed Action. The degree of the effects refers to the severity of the impact. The degree of the effects relates to four criteria outlined in 40 CFR 1501.3 (2) i-iv. The affected area and the degree of effects are disclosed in the EA Chapter 3.

Affected Area

Under the Proposed Action, BLM would offer for competitive leasing, six parcels involving 8,972.24 acres of BLM-administered federal minerals underlying BLM-administered surface. The nominated lease parcels are within an area designated as open to oil and gas leasing under standard terms and conditions and special stipulations in the Vernal RMP (BLM, 2008). Parcel specific stipulations and lease notices are attached to the parcels as specified in the EA Appendix B and Appendix C, with the potential impacts of the Proposed Action analyzed accordingly.

Although the act of leasing the nominated lease parcels does not authorize development of the parcels, by leasing the parcels the BLM grants the lessee with the right to use as much of the leased land as is necessary to explore and potentially develop the parcels for oil and gas production, subject to applicable laws, terms, conditions, and stipulations attached to the lease. Therefore, under the Proposed Action, the potential impacts associated with the potential future development of the nominated lease parcels for oil and gas exploration and development are analyzed. Development of a parcel leased by the BLM is not permitted until the BLM approves a completed Application for Permit to Drill (APD) package (Form 3160-3) submitted by the lessee. APDs are subject to additional environmental review under NEPA and CEQ regulations (43 CFR 1500-1508).

In the EA, the future potential development of the nominated lease parcels is projected to result in 54 wells, approximately 211.5 acres of surface disturbance, and total production of an estimated 13,689,270 barrels of oil and 28,482,678 thousand cubic feet of gas (refer to EA Section 3.2.1 for methodology for estimating well numbers, potential production volumes, and surface disturbance associated with the future potential development of the nominated lease parcels).

Degree of Effects

The following have been considered in evaluating the degree of the effects (40 CFR 1501.3(b)(2)), as appropriate to the Proposed action, Alternative A:

Short-and-long-term effects of the selected alternative

Air Quality: *What quantity of air pollutants would result under the assumptions for analysis? How would air pollutant emissions from subsequent development of leased parcels affect air quality and air quality related values?* (EA Section 3.5.1)

Leasing is an administrative action that does not produce any direct emissions or impacts to air quality (EA Section 3.5.1). However, development of the nominate lease parcels has potential to produce emissions of air pollutants as summarized in the following short-term and long-term effects discussion.
Short Term Effects and Significance Conclusions

Short term effects to air quality are considered those that cease after well development (well site construction, well drilling, and well completion) and typically last 30-60 days. Fugitive dust from vehicle traffic and wind erosion in areas of soil disturbance would result in PM$_{10}$ and PM$_{2.5}$ emissions. NO$_2$, SO$_2$, and CO would be emitted from vehicle tailpipes (EA Section 3.5.1).

Based on the reasonably foreseeable development of the six lease parcels, the maximum year emissions are estimated to be 29.3 tons/year of PM$_{10}$, 14.4 tons/year of PM$_{2.5}$, 446.3 tons/year of VOCs, 164.5 tons/year of NO$_x$, 195.6 tons/year of CO, 0.146 tons/year of SO$_2$, and 49.786 tons/year of HAPs (EA Table 17). This represents the maximum increase in pollutant emissions, characteristic of the first year of construction and start of operation and amounts to a temporary increase of less than 1.0% to existing emissions within Uintah County.

Future potential development of the nominated lease parcels would also result in short-term, localized impacts to air quality at nearby residences because of criteria pollutants, VOC, and hazardous air pollutant (HAP) emissions. Construction activities would be one of the primary sources of particulate matter emissions; however, the use of best management practices can reduce off-site effects from fugitive dust.

Long Term Effects and Significance Conclusions

Emissions are anticipated to decline during well production and operations as the need for earth-moving and heavy equipment decreases. Average yearly emissions over the entire production life of wells on the leases is estimated to be 18.5 tons/year of PM$_{10}$, 9.6 tons/year of PM$_{2.5}$, 338.5 tons/year of VOCs, 92.5 tons/year of NO$_x$, 139.5 tons/year of CO, 0.042 tons/year of SO$_2$, and 37.845 tons/year of HAPs (EA Table 17).

Ongoing operations of well sites would be subject to state and federal permitting requirements, which ensure compliance with air quality emission standards.

Long-term impacts to air quality related values are projected to be minimal (EA Section 3.5.1).

Green House Gases and Climate Change: How would future potential development of nominated lease parcels contribute to greenhouse gas (GHG) emissions and climate change? (EA Section 3.5.2)

Leasing is an administrative action that does not produce direct emissions of GHG’s (EA Section 3.5.2), but future potential development may generate GHG emissions.

Short Term Effects and Significance Conclusions

While some GHG emissions occur over a short period, impacts associated with those emissions persist in the atmosphere, therefore all GHG emissions are considered long term effects.

Long Term Effects and Significance Conclusions

This EA has disclosed potential adverse effects to climate change through several methods such as quantifying, as far as practicable, the reasonably foreseeable GHG emissions and social cost of GHG emissions (SC-GHG) as a proxy for assessing climate impacts. If the lease parcels are developed and if
the resulting wells produce oil or gas, GHG emissions are expected to result from the downstream end-use of the fossil fuel. In the EA, BLM assumed that all produced oil and gas would be combusted, and production would follow similar producing fields with respect to the type of oil produced and emission factors expected from future production wells (average annual emissions over the entire life of a well.) The total estimated annual direct and indirect GHG emissions from combustion of produced oil or gas on the lease parcels under the Proposed Action (see EA Section 3.5.2) 10.302 MT CO₂e. The estimated emissions from the life of leases in the Proposed Action are 5.484% of estimated reasonably foreseeable Federal fossil fuel authorization emissions in the state and 0.223% of Federal emissions in the nation over the next 30 years. Using these figures, therefore, the SC-GHG from the Proposed Action is estimated to range from $128,086,000 to $1,448,806,000 (EA Table 23).

The projected annual GHG emissions from future potential development of the nominated lease parcels are equivalent to 56,928 gasoline-fueled passenger vehicles driven for one year, or the emissions that could be avoided by operating 72 wind turbines as an alternative energy source or offset by the carbon sequestration of 314,457 acres of forest land. These emissions and costs do not constitute long-term effects that would result in significant impacts from the selected alternative because continued oil and gas leasing is mandated by the Inflation Reduction Act for the expansion of renewable energy on Federal lands (EA Section 3.5.2).

Greater Sage-Grouse: How would future potential development of the nominated lease parcels impact Greater Sage-grouse (GRSG) and its habitat in the Deadman’s Bench/East Bench/Book Cliffs portion of the Uintah population area? (EA Section 3.5.3)

Any potential effects to GRSG from the sale of lease parcels would occur at such time that any issued leases are developed and not at the leasing stage itself. If leased, drilling of wells on a lease would not be permitted until the BLM approves an APD. Any APD received would be subject to site-specific NEPA review. It is reasonably foreseeable that the leased minerals would be developed, which would result in direct and indirect impacts to GRSG and their habitat within GHMA on BLM-managed lands.

Short Term Effects and Significance Conclusions

Short term effects associated with leasing that leads to development would be increased during increased activity levels associated with development. Influences of oil and gas development on GRSG can include direct mortality from impact with infrastructure or vehicles, short term impacts associated with direct habitat loss and behavioral avoidance (EA Section 3.5.3). Oil and gas development can contribute to declines in lek persistence and male attendance, yearling and adult hen survival, and nest initiation rates miles from the source of disturbance. The effects of leasing would not have significant short-term effects on GRSG and GHMA.

Long Term Effects and Significance Conclusions

Under the Proposed Action, six parcels would be offered for sale, five of which are within GHMA. Collectively, approximately 43.7% of the total lease parcels acreage is within GHMA. Leasing under the Proposed Action could result in direct and indirect impacts to GRSG and their habitat within GHMA on BLM-managed lands. Refer to maps in Appendix A for further detail. The Proposed Action would offer
3,921.85 acres of GHMA for oil and gas leasing. It is reasonably foreseeable that the leased minerals would be developed.

The ROD prepared for the 2015 ARMPA (DOI-BLM-UT-9100-2013-EIS) implemented GRSG management goals and objectives, including amending leasing categories for managing the mineral estate. The Proposed Action is in conformance with the mineral decisions of the Utah Greater Sage Grouse ROD/ARMPA (BLM, 2015). Leasing actions are specifically provided for in the planning decisions (Management Actions for Minerals Resources). Because the lease parcels are within GHMA, the parcels would be offered with lease notices. Fluid mineral stipulations under the 2015 ARMPA (Exceptions, Modifications, and Waiver Criteria, Appendix G) are specific to management in PHMA; however, in GHMA the existing VFO RMP applies (BLM, 2008).

Based on the RFD described in Section 3.2, it is expected that well pad, road construction, and associated production and maintenance operations could occur on parcel, which could lead to direct and indirect impacts to GRSG and their habitat within GHMA. Refer to Appendix A for maps. The effects of oil and gas development and its related infrastructure on GRSG have been thoroughly addressed in land use plan amendments. Impacts from oil and gas development based on the RFD would increase the number of pads or wells developed and would be most pronounced in winter and summer habitat within the GHMA. Long-term impacts on grouse behavior and demographics. Oil and gas development can contribute to declines in lek persistence and male attendance, yearling and adult hen survival, and nest initiation rates miles from the source of disturbance. Oil and gas wells elicit strong avoidance response in yearling age classes, nesting/brooding hens, and wintering birds (GRSG FEIS, 2015). GRSG have continued to maintain population numbers within the lease area albeit with low lek counts and connectivity with other areas may lead to continued persistence.

Lease Notices, Required Design Features, and Stipulations would be evaluated at the APD stage, which would reduce the long-term effects associated with development. Using the disturbance assumptions in Section 3.2.1 and assuming random placement of disturbance within the area in GHMA, approximately 171.5 acres of surface disturbance and 38 wells could be expected. Without considering habitat avoidance, this would represent approximately 4% of the GHMA within the lease parcels. For the Deadman’s Bench, East Bench, and Book Cliffs GHMA, the total surface disturbance under the RFD would be 0.07% of the GHMA that is intersected by the lease parcels.

Impacts that may be both beneficial and adverse.

Air Quality: *What quantity of air pollutants would result under the assumptions for analysis? How would air pollutant emissions from subsequent development of leased parcels affect air quality and air quality related values?* (EA Section 3.5.1)

Impact Summary and Significance Conclusions

Substantial air resource impacts are not anticipated from leasing as it is an administrative action, and no direct emissions would be generated but emissions may occur from potential future development of leases. At the leasing stage it is not possible to accurately estimate potential air quality impacts by modeling due to the variation in emission control technologies as well as construction, drilling, and production technologies applicable to oil versus gas production and utilized by various operators. Should development on the parcels be proposed, and prior to authorizing specific proposed projects on the subject leases, emission inventories would need to be developed. At the permitting stage a precise emissions
inventory can be evaluated to ensure emissions are below de minimis levels or conform to state and Federal implementation plans that are in effect at the time. As identified in notice UT-LN-102 additional analysis or mitigation may be required when parcels are developed to ensure no adverse impacts occur (EA Section 3.5.1.2). The cumulative air quality in the impact analysis area is projected to be maintained at current levels or improve. Atmospheric concentrations for criteria air pollutants are projected to be below the National Ambient Air Quality Standards or show improvement (i.e., decreasing concentrations). Visibility is generally projected to improve at Utah National Parks and deposition is estimated to remain below critical load criteria. Emissions of HAPs are not anticipated to substantially change the cancer and noncancer respiratory risks in the area of analysis (EA Section 3.5.1).

**Green House Gases and Climate Change:** How would future potential development of nominated lease parcels contribute to greenhouse gas (GHG) emissions and climate change? (EA Section 3.5.2)

**Impact Summary and Significance Conclusions**

The reasonably foreseeable lease sale emissions contemplated in the EA (see Table 21 and Table 22) are not expected to substantially affect the rate of change in climate effects, bring forth impacts that are not already identified in existing literature, or cause a change in the magnitude of impacts from climate change at the state, national, or global scales. The entire Federal fossil fuel program, including the projected emissions from the Proposed Action, over the next 30 years is estimated to raise average global surface temperatures by approximately 0.0158 °C., or 1% of the lower carbon budget temperature target. In the future, renewable energy is anticipated to become a larger part of the U.S. energy mix and reducing energy related carbon emissions (EA Section 3.5.2). It has been estimated that with a 35% integration of wind and solar energy into the Western United States electric grid there would be an additional 25-45% reduction in carbon emissions. The U.S. Energy Information Administration International Energy Outlook expects renewable energy consumption to double between 2020 and 2050 and nearly equal liquid fuels consumption by 2050. The Inflation Reduction Act mandates continued oil and gas leasing to occur over the next decade while the U.S. expands renewable energy development (EA Section 3.5.2).

**Greater Sage-Grouse:** How would future potential development of the nominated lease parcels impact GRSG and its habitat in the Deadman’s Bench/East Bench/Book Cliffs portion of the Uintah population area? (EA Section 3.5.3)

**Impact Summary and Significance Conclusions**

As detailed in the Vernal Field Office RMP and associated EIS (VFO RMP/EIS) and the EA, the lease sale would impact various resources. Aside from direct beneficial impacts associated with the lease sale itself, leasing does not directly impact resources or resource uses. However, there are indirect impacts from leasing as a result of potential future impacts from development of those leases at the Application for Permit to Drill (APD) stage. Direct beneficial impacts associated with the lease sale include economic contributions to federal and state governments from both the sale of the individual parcels and from potential future production of the minerals.

These direct economic contributions would also flow to local governments and communities. Adverse impacts to managed resources could result if the six parcels are sold and developed. Protective stipulations and lease notices that would be applied to the parcels notify potential lessees of the resources that are present and the protection measures that would be required if the parcel is developed in the future.
The BLM retains discretion to deny the approval of future drilling/completion activities if they are found to violate a federal or state law, or if the proposal is not in compliance with regulations found at 43 CFR 3160 and various Onshore Orders and Notice to Lessee(s).

Before any surface disturbing operations may be authorized, additional site-specific analysis would be completed through the NEPA process. Further mitigation (if warranted and consistent with standard lease terms, notices, and stipulations) to reduce impacts to the environment and other uses of the public lands could be required through the Application for Permit to Drill (APD) or Right-of-Way processes.

None of the environmental effects associated with offering the nominated lease parcels for sale, would be significant, as discussed in detail in the EA (Sections 3.5.2). Nor do the effects, both beneficial and/or adverse, exceed those described in the VFO RMP/EIS.

**The degree to which the Proposed Action affects public health or safety.**

As discussed in the EA, leasing does not have direct impacts on public health or safety. Standard lease terms, which are contained on the lease form (Bureau of Land Management Form 3100-11), stipulations and notices, as well as additional site-specific NEPA analysis, protections, or mitigation at the APD stage, ensure that development of the lease parcels would occur in a way that protects public health and safety. (see Appendixes B and C in the EA)

Further, spill prevention plans would be required for drilling operations in accordance with the safety requirements of 43 CFR Subpart 3160, the Federal Onshore Oil and Gas Orders (Onshore Orders), best management practices recommended by the American Petroleum Institute, and other industry requirements for the protection of worker safety and public health. (See sections 3.4, AIB-22, and 3.5 in the EA)

Future oil and gas exploration and development, including well pad and road construction, water handling, and well plugging and abandonment, would be conducted in accordance standard operating procedures, guidance, and best management practices (Surface Operating Standards and Guideline for Oil and Gas Exploration and Development, The Gold Book) for ensuring compliance with BLM policies and to encourage safe and efficient operations while minimizing undesirable impacts to the environment.

**Whether the Proposed Action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.**

As noted in detail in the EA, none of the effects associated with the Proposed Action would violate any Federal, State, Tribal, or local law protecting the environment. This lease sale is consistent with applicable laws, land management plans, and policies. The public was given the opportunity to participate in the environmental analysis process during:

- an external public scoping period, 30-day, from December 20, 2022, to January 19, 2023,
- a preliminary EA public review and comment period from June 2, 2023, to July 3, 2023, and;
- a Notice of Competitive Lease Sale will be made available (preliminarily) for a protest period from August 21, 2023, to September 21, 2023.
National Historic Preservation Act

The Proposed Action is in compliance with the National Historic Preservation Act (NHPA) 54 U.S.C. § 306108 (commonly and hereto after referred to as Section 106) process (for details, see EA section 4.3). The BLM is conducting a records review and analysis of the area of potential effect (APE) for the nominated lease parcels. The APE is the nominated lease parcels plus a 0.5-mile buffer. The APE reflects the area in which cultural resources may be affected given foreseeable surface development associated with the nominated lease parcels under current industry standards and horizontal or directional drilling technologies. The NHPA Section 106 review process to determine if the lease sale will have an adverse effect to historic properties is ongoing (see Chapter 4 of the EA) and will conclude before BLM makes a final decision for the lease sale. However, the analysis that supports the Section 106 review and the EA anticipates that there would not be significant adverse impacts to cultural resources due to identified cultural site densities coupled with standard lease terms and conditions, lease notices, and lease stipulations attached to each nominated lease parcel (EA Section AIB-4).

For the purposes of soliciting additional information and to request to consult regarding the presence of and potential impacts to cultural resources, including historic properties listed on or eligible for listing on the National Register of Historic Places within the APE, the BLM is communicating with the Ute Indian Tribe of the Uintah & Ouray Reservation’s Tribal Historic Preservation Office, potentially interested Native American Tribes, and consulting parties.

Additionally, pursuant to BLM Handbook 3120-1 – Competitive Leases (P) (H-3120), the following stipulation is attached to the lease parcels (see section 1.10, Appendix A, and Appendix B in the EA):

This lease may be found to contain historic properties and/or resources protected under the National Historic Preservation Act, American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, E.O. 13007, or other statutes and executive orders. The BLM will not approve any ground disturbing activities that may affect any such properties or resources until it completes its obligations under applicable requirements of the NHPA and other authorities. The BLM may require modification to exploration or development proposals to protect such properties or disapprove any activity that is likely to result in adverse effects that cannot be successfully avoided, minimized or mitigated. (H-3120 at 35).

Endangered Species Act

As detailed in section 4.1 of the EA, leasing of the six parcels is not likely to adversely affect any species, or the critical habitat of any species, listed as threatened or endangered under the Endangered Species Act (ESA), 16 U.S.C. §§ 1531 et seq. Nor is the project likely to adversely affect any species, or the habitat of any species, that is proposed or a candidate for listing as threatened or endangered under the ESA. Leasing of the parcels is also not expected to have an adverse impact on sensitive species, including those species that are neither listed nor proposed/candidates for listing under the ESA.

As also stated in section 1.1, Appendix B, and Appendix C of the EA, the BLM has committed to attach the lease notices that it developed through the consultation with the U.S. Fish and Wildlife Service (USFWS) to the appropriate oil and gas leases at the time of issuance, which will serve to notify oil and gas lessees of the specific ESA-protected species or habitat present or potentially present on the subject
lease parcels and the associated surface protection requirements that may be imposed pursuant to the ESA or other related laws, regulations or policies.

The BLM also coordinated with the USFWS and the Utah Division of Wildlife Resources (UDWR) during the lease parcel review process for the specific purpose of identifying and evaluating the potential impacts that the lease sale might have on plant and animal species, including those species that have been listed as threatened or endangered under the ESA, species that are proposed or candidates for ESA protection, and sensitive species that are neither listed, proposed, nor candidates for protection under the ESA. As part of this coordination during the lease parcel review process, the BLM consulted with the USFWS in order to identify the presence or potential presence of ESA listed, proposed, or candidate species and their habitat within the lease parcels to make determinations as to which of the protective measures available, such as lease stipulations and notices, to attach to each of the lease parcels. The BLM also consulted with the USFWS and the UDWR regarding the adequacy of the protections afforded by the stipulations and lease notices available for attachment to the lease parcels (see section 4.1).

Based on this coordination and consultation with the USFWS and the UDWR, the BLM determined that the reasonably foreseeable impacts from the leasing of these parcels would either be completely avoided or reduced to insignificant levels for animal and plant species that have been listed as threatened or endangered, are candidates or proposed for listing under the ESA, and sensitive species.

Additionally, pursuant to BLM Handbook 3120-1 – Competitive Leases (P) (H-3120), the following stipulation is attached to the lease parcels (see Appendix B and Appendix C in the EA):

*The lease may now and hereafter contain plants, animals, and their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objectives to avoid BLM approved activity that will contribute to a need to list such a species or their habitat. BLM may require modification to or disapprove a proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligation under requirements of the Endangered Species Act, as amended, 16 U. S. C. § 1531 et seq., including completion of any required procedure for conference or consultation.*
Signed

Christina Price  
Deputy State Director  
Division of Lands and Minerals  
BLM Utah State Office