

**United States Department of the Interior  
Bureau of Land Management**

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DOI-BLM-MT-0000-2018-0007-EA  
November 20, 2018

**Oil and Gas Lease Parcel Sale  
March 25-27, 2019**

**FINDING OF NO SIGNIFICANT  
IMPACT**

*Location:* **Billings, Glasgow, Havre, Miles City, and South  
Dakota Field Offices**

**see EA Appendix A for list of lease parcels by  
number and legal description**

U.S. Department of the Interior  
Bureau of Land Management  
Montana State Office  
5001 Southgate Drive  
Billings, MT 59101



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Bureau of Land Management  
Montana State Office  
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Billings, MT 59101**

**Finding of No Significant Impact Environmental Assessment  
DOI-BLM-MT-0000-2018-0007-EA  
Montana State Office, March 25-27, 2019, Competitive Oil and Gas Lease Sale**

**Introduction:**

Pursuant to requirements of the Mineral Leasing Act of 1920 (MLA), 30 U.S.C. §§ 181 *et seq.*, as amended by the Federal Onshore Oil and Gas Leasing Reform Act of 1987, Pub. L. No. 100-203, BLM Montana-Dakotas holds competitive oil and gas lease sales, on a quarterly basis, in order to respond to public requests for “nominated” Federal lands to be made available for oil and gas leasing. *See* 30 U.S.C. § 226(b)(1)(A); 43 C.F.R. § 3120.1-1. As provided in sections 102(a)(12) and 103(l) of the Federal Land Policy and Management Act (FLPMA) 43 U.S.C. §§ 1701(a)(12), 1702(l), oil and gas leasing is a “principal use” for the public lands. The BLM issues oil and gas leases on the public lands in order to provide for the orderly development of the fluid mineral resources under its jurisdiction in a manner that is consistent with the multiple use management provided for by FLPMA. *e.g.*, 43 U.S.C. § 1702(c).

For example, Section 102 of FLPMA, 43 U.S.C. § 1701(a)(12) imposes upon the BLM a responsibility to manage the public lands in a manner that “recognizes the Nation’s need for domestic sources of minerals.” In most instances, before oil and/or gas, which could assist in meeting the Nation’s needs for domestic sources of minerals, can be produced from public lands, an oil and gas lease must be issued for the lands. As such, the offering and issuance of oil and gas leases through the Lease Sale meets the purpose and need for action relevant to the responsibilities placed upon the BLM pursuant to the MLA and FLPMA. *See generally* 43 U.S.C. §§ 1701 *et seq.*; *see also* 42 U.S.C. §§ 4321 *et seq.*

The BLM reviewed publically submitted expressions of interest (“EOIs”), and determined that 322 parcels covering approximately 180,366 acres of federal minerals under the jurisdiction of the BLM Billings, Butte, Dillon, Glasgow, Havre, Miles City, and North Dakota Field Offices are located within areas determined to be open to oil and gas leasing in the 2015 Billings, HiLine, Miles City and South Dakota Resource Management Plans (RMPs), the 2009 Butte RMP, the 2006 Dillon RMP, 1988 North Dakota RMP, and 2002 Revised Land and Resource Management Plan for the Nebraska National Forest and Buffalo Gap Grassland.

The BLM prepared an Environmental Assessment (EA) to disclose and analyze the potential environmental consequences from offering 322 parcels in a competitive oil and gas lease sale tentatively scheduled to occur March 25-27, 2019. The 322 parcels are located in seventeen counties in Montana (Beaverhead, Madison, Carbon, Musselshell, Valley, Blaine, Toole, Big Horn, Carter, Custer, Dawson, Fallon, Powder River, Richland Roosevelt, Rosebud, and Wibaux), Bowman County North Dakota, and Fall River and Harding County South Dakota.

The EA was prepared based on available information including inventory and monitoring data files, and considers the effects of a No Action Alternative, the Proposed Action, and Selected Action.

The No Action Alternative (Alternative A) would exclude all 322 lease parcels from the competitive oil and gas lease sale. Surface management would remain the same and any ongoing oil and gas development would continue on surrounding Federal, private, and State leases.

The Proposed Action (Alternative B) would be to offer for sale 322 lease parcels covering approximately 180,366 Federal mineral acres for oil and gas leasing, with standard federal lease terms and conditions, and required stipulations and/or lease notices as identified in Appendix A of the EA. The 322 parcels includes 76 parcels moved from the December 2018 sale and 233 parcels moved from the June 2018 sale due to litigation. The BLM identified applicable lease stipulations (as required by Title 43 Code of Federal Regulations 3131.3) to individual parcels to address specific resource concerns and ensure consistency with the RMPs.

The Selected Action (Alternative C) would be to offer for sale 305 parcels covering approximately 166,885 Federal mineral acres for oil and gas leasing, with standard federal lease terms and conditions, and required stipulations and/or lease notices as identified in Appendix A of the EA. The stipulations assigned for Alternative B were carried forward to Alternative C. The parcels are located in the Billings, Glasgow, Havre, Miles City, and South Dakota Field Offices and within the administrative boundary of the Buffalo Gap National Grassland in Fall River County, South Dakota. Alternative C was developed based upon consideration of public comment submitted during the comment periods described below, and upon further consideration of relevant science and analysis of resource concerns. Compared to Alternative B, Alternative C would defer eleven parcels in Beaverhead County, one parcel in Madison County, one parcel in Bowman County ND, three parcels in Harding County, SD, and one parcel and parts of four others in Valley County, MT.

On October 11, 2018, the BLM initiated a scoping comment period by uploading project information to the BLM's NEPA e-Planning website, and mailing notices to interested parties (including private surface owners), tribes, and local, state, and federal agencies. On November 20, 2018, the BLM posted the EA (DOI-BLM-MT-0000-2018-0007-EA) and a draft unsigned Finding of No Significant Impact (FONSI) to the e-Planning website for a 30-day public review and comment period (November 20-December 21, 2018). The BLM also mailed or emailed a notice to interested parties that the EA was available for review (i.e. people/non-government organizations that commented on scoping, tribes, and local, state, other federal agencies). On January 31, 2019, the BLM posted an updated EA, response to comments, and unsigned FONSI to the e-Planning website to initiate a 30-day protest period.

### **Plan Conformance and Consistency:**

#### **BLM Surface and Split Estate Parcels**

The 302 BLM surface / split estate parcels covering approximately 166,445 acres are located in

areas designated open to oil and gas leasing in the Billings, HiLine, or Miles City RMPs, subject to standard lease terms, moderate constraints such as stipulations that require timing limitations, or major constraints such as stipulations that prohibit surface occupancy and use. The BLM applied stipulations to the 302 lease parcels consistent with management decisions in the applicable RMPs (Appendix A), including the 2015 Billings, HiLine, and Miles City RMPs, and associated Records of Decision and Final Environmental Impact Statements (FEISs).

### **US Forest Service Parcels**

Three parcels in Fall River County, SD comprising 440 acres are private surface within the administrative boundary of the Buffalo Gap National Grassland (SDM 97300-TP, TT, and TN). The BLM applied stipulations to these parcels consistent with the June 13, 2002 Record of Decision for Oil and Gas Leasing on the Nebraska National Forest / Buffalo Gap National Grassland, Fall River County, South Dakota. The BLM was a cooperating agency on the Oil and Gas Leasing FEIS, and the ROD states:

The BLM will offer lands for lease and issue leases for lands within the west half of Fall River County, South Dakota, on the Buffalo Gap National Grassland subject to stipulations required by the Regional Forester in Alternative 3 of the FEIS, in accordance with the regulations at 43, CFR 3101.7-2(a).

The BLM will make all (approximately 58,720 acres) non-federal surface/federal mineral (split estate) lands within the administrative boundary of the previously described study area available for oil and gas leasing. These lands will be offered for lease, and leases will be issued subject to the terms and conditions identified in the selected alternative for the FEIS (Alternative 3) with a slight modification for paleontology resources...

### **Finding of No Significant Impact:**

Based on my review of the updated EA, public comments, the Field Office RMPs, and other applicable laws, regulations, and policy, I have determined that Alternative C is not a major federal action, and will not significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area. Therefore, an environmental impact statement (EIS) is not required. Any future proposed development on lease parcels would be subject additional site-specific NEPA analysis and documentation. I have based my determination upon consideration of the context and intensity of the project as defined by 40 CFR §1508.27 and described below:

### **Context:**

Alternative C would occur within the boundaries of the Billings, Havre, Glasgow, and Miles City BLM planning areas and within the administrative boundary of the Buffalo Gap National Grassland. The project directly involves approximately 166,885 acres of federal minerals administered by the BLM. The purpose of offering parcels for competitive oil and gas leasing is to provide opportunities for private individuals or companies to explore for and develop

federal oil and gas resources after receipt of necessary approvals and to sell the oil and gas in public markets. Oil and gas produced from federal leases would be in addition to oil and gas produced from private and state owned leases.

Impacts to resources would be similar to, and within the scope of those described and considered within the BLM RMPs and their respective FEISs and the June 13, 2002 Record of Decision and FEIS for Oil and Gas Leasing on the Nebraska National Forest / Buffalo Gap National Grassland (Fall River County, South Dakota). The EA that was prepared identifies stipulations and lease notices that avoid and minimize impacts to resources, which would be incorporated up front into any future oil and gas development. No surface disturbance would occur as a result of my decision. The EA that was prepared for the March 2019 oil and gas lease sale considers effects that could occur later in time as a result of subsequent oil or gas development at the Application for Permit to Drill (APD) stage. Additional site-specific NEPA analysis would occur at the APD stage of development, and Conditions of Approval (COAs) and/or additional mitigation could be applied to address site-specific resource concerns. My decision to offer 305 parcels for lease in a competitive bid is consistent with applicable laws, regulations, and policy, and does not cause any known or identified significant impacts of international, national, regional, or state-wide importance.

### **Intensity:**

The following discussion is organized around the Ten Significance Criteria described in 40 CFR § 1508.27 and incorporated into resources and issues considered (includes supplemental authorities Appendix 1, H-1790-1) and supplemental Instruction Memoranda, Acts, regulations and Executive Orders. The following criteria have been considered in evaluating intensity for this proposal:

#### **1. Impacts may be both beneficial and adverse (40 CFR 1508.27(b)(1)).**

There are no direct impacts to resources from the act of leasing. The EA analyzes a project specific reasonably foreseeable development scenario to identify indirect impacts from leasing that may occur as a result of potential future development. Stipulations and lease notices designed to avoid and minimize impacts to the various resources and land uses were incorporated in the design of the Selected Action. None of the environmental effects associated with offering the proposed lease parcels for sale, as discussed in detail in the EA, were determined to be significant, nor do the effects exceed those described in the RMPs and their respective FEISs.

Based upon public comments, the BLM reviewed relevant science and completed additional analysis of sage-grouse resource concerns with respect to a potential impacts on a migratory corridor in Valley County, Montana, and off-site impacts from horizontal drilling on active leks in North and South Dakota. Sage-grouse are a BLM sensitive species. The BLM considered science documenting sage-grouse use of a migratory corridor between Saskatchewan and Valley County, Montana. Tack et. al. 2009, Tack et. al. 2012, and Newton et. al. 2017 documented migratory movements of sage-grouse in the northeastern fringe of their range in Montana and Saskatchewan. These studies formed the basis for the State of Montana to designate and set the boundaries of a Connectivity Area. Under Alternative C, the BLM is deferring all parcels

located within the boundaries of this Connectivity Area because the science clearly demonstrates the conservation importance of the Connectivity Area, the BLM does not have a stipulation to protect the migratory resource values at risk, and the MT EO stipulations are primarily aimed at leks and nesting habitat.

The BLM also reviewed potential locations for off-site horizontal drilling around one parcel in Bowman County, ND and three parcels in Harding County, SD. The parcels are located in BLM designated PHMA habitat and the BLM applied No Surface Occupancy stipulations. However, off-site drill placement would remain within the 3.1 mile lek buffers around active leks, and designated PHMA habitat. Any off-site well placement would negatively affect existing sage-grouse leks. Additional coordination is needed with the states of North and South Dakota to address conservation of sage-grouse habitat across all lands. Therefore, the BLM is deferring these parcels under Alternative C.

Impacts to habitat for other BLM sensitive species are avoided or minimized through stipulations applied to this lease sale and Standard Operating Procedures, BMPs, and Conditions of Approval applied at the APD stage. Refer to additional discussion in the EA and Appendix A and B.

**2. The degree to which the selected alternative will affect public health or safety (40 CFR 1508.27(b)(2)).**

The selected alternative does not authorize any lease exploration or development activities, and is designed to minimize impacts to other resources as well as to public health and safety. Upon receipt of an APD, the BLM will review the proposed location and could, within the extent consistent with lease rights granted, modify the siting of the location by no more than 200 meters. The BLM would then initiate a site-specific NEPA analysis that considers the direct, indirect, and cumulative effects of a specific action.

In all potential exploration and development scenarios, the BLM would require the use of best management practices (BMPs) documented in “Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development” (USDI and USDA 2007), also known as the “Gold Book.” Standard federal lease terms and conditions, and federal regulations would apply to each parcel offered for sale.

For example, spill prevention plans would be required and any drilling operations would be conducted in accordance with the safety requirements of 43 C.F.R. Subpart 3160, the Federal Onshore Oil and Gas Orders (“Onshore Orders”), BMPs recommended by the American Petroleum Institute, and other industry requirements for the protection of worker safety and public health. The BLM could also identify Conditions of Approval (COAs), based on site-specific analysis that could include restricting timing of the project or require other reasonable measures to minimize impacts to other resource values, land uses, or users not addressed in the lease stipulations at the time operations are proposed (43 CFR § 3101.1-2).

**3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farm lands, wetlands, wilderness, wild and scenic rivers, or ecologically critical areas(40 CFR 1508.27(b)(3)).**

Alternative C would have no direct impacts on cultural resources. At the leasing stage, the BLM applied lease terms and cultural resource lease notices (CR 16-1, LN 14-2, LN 14-5, LN 14-14, LN 14-22, LN 14-32, LN 14-33, LN 14-34) to protect cultural resources. The BLM will not approve any ground disturbing activities that may affect such properties or resources until it completes its obligations associated with the stipulations applied to each respective parcel, as well as applicable requirements of the National Historic Preservation Act and any 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.

Prime farmland generally occurs along stream and river valleys and terraces as well as on gently sloping upland areas. To meet the criteria of a prime farmland unit, most soils on BLM lands would require additional moisture, such as dependable irrigation water that is lacking on BLM lands.

Aquatic resources are protected by various stipulations, such as NSO 11-70, which prohibits surface occupancy and use within perennial or intermittent streams, lakes, ponds, reservoirs, 100-year floodplains, wetlands, and riparian areas. By requiring no surface occupancy within floodplains, NSO 11-70 would also afford protection to prime farmland that occurs along stream and river valleys. There are no impacts to designated park lands, wilderness, wild and scenic rivers, or ecologically critical areas in proposed parcels.

**4. The degree to which the effects on the quality of the human environment are likely to be highly controversial (40 CFR 1508.27(b)(4)).**

Alternative C conforms with current land use plan guidance which allocated federal mineral estate administered by the BLM as either available or administratively unavailable for oil and gas leasing. As a factor for determining whether or not to prepare a detailed environmental impact statement (within the meaning of 40 CFR section 1508.27(b) (4)), “controversy does not refer to the existence of opposition to a use.” Rather, a federal action is controversial “if a substantial dispute exists as to [its] size, nature, or effect.” *Northwest Environmental Defense Center v. Bonneville Power Administration*, 117 F.3d 1520, 1536 (9th Cir. 1997).

No anticipated effects have been identified that are highly controversial. The BLM discloses effects to Air Resources, Socio-Economic Conditions, Greater Sage-Grouse and Water Resources in the EA.

During the public scoping and EA comment period, the BLM received and considered comments related to potential effects that hydraulic fracturing and horizontal drilling may have on the environment. Public comments specifically referenced a court case, *Center for Biological Diversity versus BLM* 937 F. Supp. 2d 1440 (2013); Case # C 11-06174 PSG. The BLM reviewed this decision and determined that the facts presented in this case are not the same as those for the Montana / Dakotas BLM March 2019 lease sale. This EA considers the effects of hydraulic fracturing on water resources, and does not discount potential effects due to low development potential. It also provides water resources information specific to the Tongue River watershed, which was identified by the public as a resource issue of concern along the

Montana / Wyoming border. The BLM provided a detailed response to this FONSI consideration in the Response to Comments, Appendix F.

The BLM also considered the Assessment of the March 2018 Lease Sale by Dr. Dominic DiGiulio, which was submitted as Exhibit E from EarthJustice. Dr. DiGiulio reviewed data from nine production wells in Carbon and Stillwater Counties, Montana and concluded that, “based on the shallow depth of the surface casing and apparent lack of cement outside intermediate or production casing at depths in contact with usable water, it does not appear that usable water was protected during production at these wells as required by Onshore Rule #2. Surface casing should have extended through usable water zones or cement and intermediate casing should have extended to surface casing through usable water zones.”

The BLM provided a response to the DiGiulio Assessment in Response to Comments, Appendix F, p. 70-71. Additionally, the BLM considered the DiGiulio Assessment in the Western Environmental Law Center protest response. See BLM response to WELC Statement of Reasons A, pages 4 - 6.

Onshore Order No. 2 III.B states the following:

The casing setting depth shall be calculated to position the casing seat opposite a competent formation, which will contain the maximum pressure to which it will be exposed during normal drilling operations. Determination of casing setting depth shall be based on all relevant factors, including: presence/absence of hydrocarbons; fracture gradients; usable water zones; formation pressures; lost circulation zones; other minerals; or other unusual characteristics. All indications of usable water shall be reported.

Onshore Order No. 2 III.B.1.(c) states the following;

The surface casing shall be cemented back to surface either during the primary cement job or by remedial cementing.

The only casing string required by regulation to be cemented through the annulus between the casing string and the open hole is the surface casing. All four of the federal wells in question in Dr. DiGiulio’s assessment are in compliance with this requirement. For the ECA 1-H well both the surface and intermediate casing strings are cemented to the surface. The other three wells all have their intermediate casing set below the top of the Thermopolis shale and have good cement behind pipe in the annulus between the casing and the open hole to above the Mowry shale. All four of the frontier formation are protected from contamination with good cement above and below in the annulus between the casing and the open hole. The Mowry shale below and the Cody shale above, also confine them structurally. By accounting for these factors and adjusting the water resource protection measures accordingly, the potential for groundwater contamination is significantly reduced. Consequently, there are no anticipated adverse impacts to water resources as a result of leasing these parcels.

The BLM inspects wells prior to production to ensure all federal laws have been followed to

ensure that that potential impacts to water resources are avoided/minimized. Refer to the EA, Appendix F Response to Comments and the BLM response to the Western Environmental Law Center Protest, Statement of Reasons A. All proposed actions must comply with local, State, and Federal regulations, including Onshore Order #2 and Montana water laws.

During the EA comment period, BLM was asked to consider two new reports in its climate change analysis in the EA: Federal Lands Greenhouse Gas Emissions and Sequestration in the United States: Estimates for 2005-14 (USGS 2018) and Fourth National Climate Change Assessment (US Global Change Research Program, 2048). BLM updated the air resources analysis to include information from both these reports (EA, p. 38) and addressed them in response to comments (Exhibit F, p. 34). BLM was also asked to employ specific methodologies in its air resources/climate analysis related to the social cost of carbon, lifecycle emissions, and global carbon budgets. BLM considered the various methodologies raised by the interested parties and addressed their concerns in Response to Comments, Appendix F, pages 34-30. Additionally, the BLM did not receive any comments from other government agencies or subject matter experts that disputed BLM's air resources conclusions.

**5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks (40 CFR 1508.27(b)(5)).**

Selling oil and gas leases is not unique or unusual. States and private mineral owners also sell oil and gas leases. The EA describes typical exploration and development activities that could occur on federal leases along with the potential impacts from those activities as well as mitigation measures and applicable stipulations designed to avoid or minimize impacts. There are no predicted effects on the human environment that are considered to be highly uncertain or involve unique or unknown risks.

Any potential effects on water from the sale of lease parcels would occur at the time the leases are developed at the APD stage. Upon receipt of an APD, the BLM would coordinate with the appropriate Surface Management Agency (SMA) and initiate a site-specific NEPA analysis with public review opportunities to more fully analyze and disclose potential effects of specifically identified activities. All proposed actions must comply with local, State, and Federal regulations. Refer to the discussion in number 4 above.

**6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration (40 CFR 1508.27(b)(6)).**

This proposed action does not establish a precedent for future actions. The Federal oil and gas lease does not authorize any exploration or development activities; however, the lease provides the lessee with the opportunity to explore for and develop oil and gas resources after receipt of necessary approvals. The BLM will prepare an environmental record of review (43 CFR § 3162.5-1(a)) and comply with NEPA to evaluate exploration and development projects before approval of a site-specific project.

**7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)).**

This EA is tiered to the information and analysis and conforms to the decisions contained in the applicable ROD and RMP for each planning area included in this EA (2015 Rocky Mountain and Great Basin Regions Records of Decision (RODs), and 1988 North Dakota ROD, and associated Records of Decision and Final Environmental Impact Statements (FEISs). The RODs and RMPs are in compliance with all Federal laws, regulations, and policy. The direct, indirect, and cumulative effects of oil and gas leasing were considered at the appropriate scale for the full Reasonably Foreseeable Development Scenario (RFD) for the Field Offices in the FEISs for the RMPs. The decisions on what areas to not lease, lease with standard, moderate, or major stipulations is done at the RMP level in order to look at the larger picture of impacts (including cumulative impacts).

During the protest period, Western Law Environmental Center cited Klamath-Siskiyou Wildlands Ctr, 387 F.3d at 993–94 in support of their argument that BLM does not provide quantified or detailed information in their cumulative effects analysis for the March 2019 Lease Sale. In this case, Klamath-Siskiyou Wildlands Center (KS-Wild) challenged two timber sales, proposed by the Bureau of Land Management (BLM) in the Cascade Mountains of Southern Oregon. The facts presented in Klamath-Siskiyou Wildlands Ctr vary from an oil and gas lease sale. In the Oregon case, there was a site specific proposed action, i.e. a timber sale with specific harvest units. In a lease sale EA, a drill site is unknown. It is unknown if the lease will sell, and if it does sell, it is unknown if the parcel would be subsequently developed with an oil or gas well. Refer to the BLM response on the WELC protest, Statement of Reasons B, pages 6-8.

There are no surface-disturbing activities authorized at the leasing stage. Alternative C by itself or in connection with other activities would not have significant impacts. In fact, data from Public Land Statistics indicates that of all the leases offered for sale in Montana in the last 10 years, only one-third of them have approved APDs. If there is no subsequent development on a lease parcel that is authorized at the APD stage, then there are no cumulative effects. BLM would consider site-specific direct, indirect and cumulative effects of exploration and development projects at the APD stage when a specific project is identified, and drill site is known.

However, the EA recognizes that some level of impacts are reasonably foreseeable as a result of subsequent oil or gas development at the APD stage. In the March 2019 Lease Sale EA, the BLM quantified downstream and greenhouse gas (GHG) emissions that could be produced based upon a sale specific Reasonable Foreseeable Development Scenario, which was derived from the applicable RMP. Downstream/indirect GHG emissions were estimated using the 100 year global warming potentials (GWPs) and compared to the estimated emissions using the 20 year GWP. The Air Resources analysis notes that there is a degree of speculation and uncertainty at the leasing stage with regard to the amount of air pollutant emissions (including GHGs) that could occur since specific design details are not yet known and discloses the assumptions BLM made when estimating emissions (EA, p. 30).

The EA incorporates by reference information from the BLM Montana Dakotas State Office

Photochemical Grid Modeling (PGM) Study (BLM 2016). This study analyzed potential impacts from reasonably foreseeable oil and gas development within Montana, and parts of North and South Dakota, and included estimates of criteria air pollutants, hazardous air pollutants, and greenhouse gas emissions from a multitude of oil and gas development sources and scenarios. The emission sources included reasonably foreseeable oil and gas facilities and operations that could be the result of BLM actions within the Montana/Dakotas region over the next 20 years. The RFD for this lease sale is included within the scenarios analyzed in the PGM study. The results show that none of the modeling (emissions and impact) scenarios yielded values in excess of the NAAQS or state ambient air quality standards for ozone, PM2.5, PM10, SO2, NO2 or CO, and impacts to air quality and public health are expected to be minimal in future years at the predicted rate of oil and gas development across the region (EA, p. 37). This lease sale would foreseeably represent only a small fraction of the potential development that was included in the modeling study and would be expected to have little to no impact on air quality, visibility, or atmospheric deposition. (EA, p. 26-27). Small impacts to visibility and deposition were noted and BLM is monitoring pollutants of concern (EA, p. 37).

The Air Resources cumulative effects analysis also considers information from a 2018 USGS report, which produced estimates of the greenhouse gas emissions resulting from the extraction and end-use combustion of fossil fuels produced on Federal lands in the United States, as well as estimates of ecosystem carbon emissions and sequestration on those lands. Compared to nationwide fossil fuel emissions, CO2 from Federal lands account for 23.7%, 7.3% for CH4, and 1.5% for N2O over the ten year period. For example, in 2014 Federal fossil fuel GHG emissions from extraction and combustion in Montana was 42.1 million metric tons (MMT) CO2e, or 3% of total Federal land emissions. Emissions of CO2e in 2014 for North Dakota and South Dakota were 17.0 MMT and 0.073 MMT respectively. In comparison, the estimated GHG emissions for CO2e produced for the Miles City Planning area is 2.027 MMTY (million metric tons per year) and 0.0731 MMTY for the March 2019 oil and gas lease sale (Alternative C, EA, p. 31). These calculations support the conclusion in the EA that this lease sale would represent only a small fraction of the potential development and would be expected to have little to no impact on air quality, visibility, or atmospheric deposition.

**8. The degree to which the action may adversely affect districts, sites, highways, structures, or other objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources (40 CFR 1508.27(b)(8)).**

Alternative C will not adversely affect districts, sites, highways, structures, or other objects listed in or eligible for listing in the National Register of Historic Places. BLM attached Stipulation CR 16-1 to all parcels, which provides:

“This lease may be found to contain historic properties and/or resources protected under the National Historic Preservation Act (NHPA), 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.”

**9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973 (40 CFR 1508.27(b)(9)).**

Alternative C would have no effect to listed threatened/endangered/proposed species. Either habitat is not present for listed species, or suitable habitat is covered with a stipulation. The BLM placed stipulation TES 16-2 (Endangered Species Act Section 7 Consultation) on parcels, which states:

“The BLM may require modifications to or disapprove 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. The BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable 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.”

The BLM completed Section 7 consultation for each of its Resource Management Plans. Additional project specific consultation, if necessary, would occur prior to approval of an APD.

**10. Whether the action threatens a violation of a Federal, State, or local law, or requirements imposed for the protection of the environment (40 CFR 1508.27(b)(10)).**

Alternative B Modified does not violate any known federal, state, local law, or requirements imposed for the protection of the environment. Federal and state agencies, tribes, and local government were given the opportunity to participate in the environmental analysis process. As documented in the EA, the proposed action is consistent with applicable land management plans, policies and programs and 43 C.F.R. S. 3100(d) for drainage protection.

**Recommended by:**

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Mark Albers, District Manager,  
North Central Montana District

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Date

**Recommended by:**

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Diane Friez, District Manager,  
Eastern Montana/Dakotas District

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Date

**Approved by:**

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Joshua F. Alexander, Acting Deputy State Director,  
Division of Energy, Minerals, & Realty

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Date