WildEarth Guardians • Center for Biological Diversity •
Indian People's Action • Montana Environmental Information Center •
Northern Plains Resource Council • Preserve the Beartooth Front •
Western Environmental Law Center • 350 Montana

February 7, 2018

*Submitted via ePlanning and email*

U.S. Bureau of Land Management
Miles City Field Office
Attention: Irma Nansel
111 Garryowen Road
Miles City, MT 59301-7000

**Re: Comments on the Draft DNA for the Miles City Field Office June 12, 2018 Competitive Oil and Gas Lease Sale**

Dear Ms. Nansel:

WildEarth Guardians, the Center for Biological Diversity, Indian People's Action, Montana Environmental Information Center, Northern Plains Resource Council, Preserve the Beartooth Front, Western Environmental Law Center, and 350 Montana (collectively the "Conservation Groups"), submit the following comments on the U.S. Bureau of Land Management's ("BLM's") draft Determination of NEPA Adequacy ("DNA"), DOI-BLM-MT-C020-2018-0005-DNA,[1] in support of the June 12, 2018 competitive oil and gas lease sale. The agency is proposing to lease 217 publicly-owned federal mineral parcels totaling approximately 102,814 acres in Big Horn, Carter, Custer, Fallon, Powder River, Richland, Roosevelt, and Wibaux Counties within the Miles City Field Office in Montana.[2]

**WildEarth Guardians** is a nonprofit environmental advocacy organization dedicated to protecting the wildlife, wild places, wild rivers, and health of the American West. On behalf of our members, Guardians has an interest in ensuring the BLM fully protects public lands and resources as it conveys the right for the oil and gas industry to develop publicly-owned minerals. More specifically, Guardians has an interest in ensuring the BLM meaningfully and genuinely takes into account the air, water, and climate implications of its oil and gas leasing decisions.

The **Center for Biological Diversity** is a non-profit environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center also works to reduce greenhouse gas emissions to protect biological diversity, our environment, and public health. The Center has over 850,000 members and activists, including those living in Montana who have visited these public lands for recreational, scientific, educational, and other pursuits and intend to continue to do so in the future, and are particularly interested in protecting the many native, imperiled, and sensitive species and their habitats that may be affected by the proposed oil and gas leasing.

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[1] The draft DNA is available on the BLM's website at: https://eplanning.blm.gov/epl-front-office/projects/nepa/93141/130231/158377/June_2018_DNA_Post_for_30day_Public_Comment.pdf.

[2] The preliminary parcel list is available on BLM's website at: https://eplanning.blm.gov/epl-front-office/projects/nepa/93141/124866/152259/MCFO_June_12_2018_Preliminary_Parcel_Worksheet.pdf.

**Indian People's Action** works in urban areas to reach out and empower Native Americans to address the social, economic, environmental and racial inequities that shape their lives. Indian People's Action is a Montana-based organization working on multiple fronts: native rights, anti-discrimination, the injustice in the justice system. Native people make up a little over 6 percent of the population of the state of the Montana, but over 30 percent of the incarcerated population.

The **Montana Environmental Information Center** ("MEIC") is a nonprofit organization founded in 1973 with approximately 5,000 members and supporters throughout the United States and the State of Montana. MEIC is dedicated to the preservation and enhancement of the natural resources and natural environment of Montana and to the gathering and disseminating of information concerning the protection and preservation of the human environment through education of its members and the general public concerning their rights and obligations under local, state, and federal environmental protection laws and regulations. MEIC is also dedicated to assuring that federal officials comply with and fully uphold the laws of the United States that are designed to protect the environment from pollution. MEIC and its members have intensive, long-standing recreational, aesthetic, scientific, professional, and spiritual interests in the responsible production and use of energy, the reduction of greenhouse gas pollution as a means to ameliorate our climate crisis, and the land, air, water, and communities impacted by fossil fuel development. MEIC members live, work, and recreate in areas affected by this lease sale. MEIC protests this action on its own behalf and on behalf of its members.

**Northern Plains Resource Council** is a grassroots conservation and family agricultural group based in Billings, Montana. Our membership works to protect Montana's water quality, family farms and ranches, and unique quality of life. Northern Plains and its affiliates work for responsible energy development that does not harm the land, air, water, and social and economic fabric of Montana.

**Preserve the Beartooth Front** is a blog run by David Katz and his family. Preserve the Beartooth strives to inform the community along the Beartooth Front and the broader Montanan community about the threats from increased fracking.

The **Western Environmental Law Center** ("WELC") uses the power of the law to defend and protect the American West's treasured landscapes, iconic wildlife and rural communities. WELC combines legal skills with sound conservation biology and environmental science to address major environmental issues in the West in the most strategic and effective manner. WELC works at the national, regional, state, and local levels; and in all three branches of government. WELC integrates national policies and regional perspective with the local knowledge of our 100+ partner groups to implement smart and appropriate place-based actions.

**350 Montana** is a nonprofit organization based in Montana. 350 Montana works to reduce atmospheric $CO_2$ concentrations to 350 parts per million by implementing strategic actions and advocating policies to end fossil fuel burning with the greatest urgency. 350 Montana envisions a rapid conversion to a 100% renewable global energy system using wind, water, and

solar. 350 Montana also works with the global grassroots climate movement to achieve these goals and safeguard Earth's life-support systems.

As discussed in more depth below, the Conservation Groups request that BLM refrain from approving the proposed action unless and until the agency complies with the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321–4370h, NEPA regulations promulgated thereunder by the White House Council on Environmental Quality ("CEQ"), 40 C.F.R. § 1500, and the Mineral Leasing Act ("MLA"), 30 U.S.C. §§ 181–287.

## I. The BLM's Environmental Assessment Violates the National Environmental Policy Act.

The BLM falls short of complying with NEPA for seven reasons. First, the BLM fails to take a hard look at the impacts from the sale or otherwise assess the significance of the sale. Second, the BLM improperly defers its site-specific analysis to the Application Permit to Drill ("APD") stage. Third, the BLM fails to fully analyze the impacts of multi-stage hydraulic fracturing and horizontal drilling in the Big Horn County area. Fourth, the BLM fails to analyze a reasonable range of alternatives for the proposed action. Fifth, the BLM fails to analyze the direct and indirect impacts of the sale including the air and greenhouse gas emissions that will result the specific parcels nominated for the June 2018 sale. Sixth, the BLM fails to analyze the general cumulative impacts from the proposed action as well as the reasonably foreseeable greenhouse gas emissions from cumulative and similar actions in the surrounding area. Finally, the agency fails to assess the economic significance of any greenhouse gas emissions in terms of carbon costs.

NEPA is our "basic national charter for protection of the environment." 40 C.F.R. § 1500.1(a). The law requires federal agencies to fully consider the environmental implications of their actions, taking into account "high quality" information, "accurate scientific analysis," "expert agency comments," and "public scrutiny," prior to making decisions. *Id*. § 1500.1(b). This consideration is meant to "foster excellent action," resulting in decisions that are well informed and that "protect, restore, and enhance the environment." *Id*. § 1500.1(c).

To fulfill the goals of NEPA, federal agencies are required to analyze the "effects," or impacts, of their actions to the human environment prior to undertaking their actions. *Id.* § 1502.16(d). To this end, the agency must analyze the "direct," "indirect," and "cumulative" effects of its actions, and assess their significance. *Id.* §§ 1502.16(a), (b), and (d). Direct effects include all impacts that are "caused by the action and occur at the same time and place." *Id.* § 1508.8(a). Indirect effects are "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." *Id*. § 1508.8(b). Cumulative effects include the impacts of all past, present, and reasonably foreseeable actions, regardless of what entity or entities undertake the actions. *Id.* § 1508.7.

An agency may prepare an environmental assessment ("EA") to analyze the effects of its actions and assess the significance of impacts. *See id.* § 1508.9; *see also* 43 C.F.R. § 46.300. Where effects are significant, an agency must prepare an Environmental Impact Statement. *See* 40 C.F.R. § 1502.3. Where impacts are not significant, an agency may issue a Finding of No

Significant Impact ("FONSI") and implement its action. *See id.* § 1508.13; *see also* 43 C.F.R. § 46.325(2).

Within an EA or EIS, the scope of the analysis must include "[c]umulative actions" and "[s]imilar actions." 40 C.F.R. §§ 1508.25(a)(2) and (3). Cumulative actions include action that, "when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement." *Id.* § 1508.25(a)(2). Similar actions include actions that, "when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together." *Id.* § 1508.25(a)(3). Key indicators of similarities between actions include "common timing or geography." *Id*.

Beyond the statutory and regulatory provisions, the BLM has developed a handbook to help the agency comply with NEPA. *See* BLM, *NEPA Handbook H-1790-1*, 22 (Jan. 2008), https://www.blm.gov/sites/blm.gov/files/uploads/Media_Library_BLM_Policy_Handbook_h1790-1.pdf. In it, the BLM outlines the circumstances under which the agency can rely on a DNA. In general, the BLM must examine whether an existing NEPA document such as the EIS for a Resource Management Plan ("RMP") "adequately cover[s] a proposed action." *Id.* at 23. The BLM does this by looking at four factors, including 1) whether the proposed action is "a feature of, or essentially similar to, an alternative analyzed in an existing NEPA document . . . [and] within the same analysis area," 2) whether "the range of alternatives analyzed in the existing NEPA documents [are] appropriate with respect to the new proposed action, given current environmental concerns, interests, and resource values," 3) whether "the existing analysis is valid in light of any new information or circumstances (such as rangeland health standard assessments, recent endangered species listings . . .) [including whether] you can reasonably conclude that new information and new circumstances would not substantially change the analysis," and 4) whether "the direct, indirect, and cumulative effects that would result from the implementation of the new proposed action [are] similar . . . to those analyzed in the existing NEPA document." *Id.*

For the June 2018 lease sale, the BLM prepares five-page DNA to assess compliance with NEPA. The DNA tiers to the Miles City Field Office Resource Management Plan ("Miles City RMP"),[3] the December 12, 2017 Competitive Oil and Gas Lease Sale EA, DOI-BLM-MT-C020-2017-0051-EA,[4] and the June 13, 2017 Competitive Oil and Gas Lease Sale EA DOI-BLM-MT-C020-2016-0134-EA.[5] But, as discussed in more detail below, the BLM's cursory DNA fails to meet the requirements of NEPA for a variety of reasons.

### A. The BLM Fails to Take a "Hard Look" at the Potential Environmental Impacts of the Proposed Leasing.

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[3] The Miles City RMP is available on the BLM's website at: https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage&currentPageId=79235.

[4] The December 2017 lease sale EA is available on the BLM's website at: https://eplanning.blm.gov/epl-front-office/projects/nepa/78400/120092/146548/MCFO_EA_December_2017_Sale_Post_with_Sale_List.pdf.

[5] The June 2017 lease sale EA is available on the BLM's website at: https://eplanning.blm.gov/epl-front-office/projects/nepa/67148/99704/120833/MCFO_EA_June_2017_Sale_Post_with_Sale_List_(4).pdf.

Pursuant to NEPA, "[i]f an agency decides not to prepare an EIS, it must supply a 'convincing statement of reasons' to explain why a project's impacts are insignificant." *Blue Mountains Biodiversity Proj. v. Blackwood*, 161 F.3d 1208, 1215 (9th Cir. 1998) (citing *Save the Yaak Committee v. Block*, 840 F.2d 714, 717 (9th Cir. 1988)). "The statement of reasons is crucial to determining whether the agency took a 'hard look' at the potential environmental impact of a project." *Id.* "[T]he significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. For site-specific actions, significance usually depends on the impact of the action on the locale rather than the world as whole." *Center for Biological Diversity v. Bureau of Land Mgmt.*, 937 F.Supp.2d 1140, 1154 (N.D Cal. 2013). Here, because the BLM does not prepare an environmental assessment or otherwise issue a statement of reasons as to why the proposed action is insignificant, the agency fails to take a "hard look" at the potential environmental impacts of the proposed leasing.

The Tenth Circuit has criticized the BLM's use of DNAs to fulfill its NEPA obligations. *See Pennaco Energy v. U.S. Dep't of Interior*, 377 F.3d 1147, 1162 (10th Cir. 2004). In *Pennaco*, the Tenth Circuit upheld an Interior Board of Land Appeals' ("IBLA") decision that the DNAs for 49 lease parcels, which tiered to two underlying RMPs, "fail[ed] to even identify, much less independently address, any of the relevant areas of environmental concern or reasonable alternatives to the proposed action and thus do not satisfy BLM's NEPA obligations in this case." *Id.* at 1154 (quoting *Wyoming Outdoor Council*, 156 I.B.L.A. 347, 359 (Dep't Interior Apr. 26, 2002)). The court noted that unlike in *Park County Resource Council, Inc. v. United States Department of Agriculture*, 817 F.2d 609, 620 (10th Cir. 1987) where the BLM prepared an "extensive" EA, the BLM in *Pennaco* "did not issue a FONSI, and did not prepare any environmental analysis that considered not issuing the leases in question." *Id.* at 1162. This lack of a thorough analysis led the court to conclude that the IBLA properly held that the DNAs in question were arbitrary and capricious. *Id.*

The BLM's approach for the proposed leases for the June 2018 sale is directly similar to the approach rejected by the Tenth Circuit in *Pennaco*. Here, BLM does not analyze any of the site-specific impacts for the June 2018 parcels and instead relies on a five-page DNA which tiers to the underlying Miles City RMP and two previous lease sale EA for *different* parcels. DNA at 4. The pitfalls in the BLM's approach are highlighted by the fact that neither the underlying Miles City RMP nor the EAs for the June 2017 and December 2017 lease sales consider a "no leasing alternative" for the particular parcels nominated for the June 2018 sale. *See* Miles City RMP Ch. 2 at 2-77 to 2-78; June 2017 EA at 5; December 2017 EA at 10. Further, the advent of the use of new drilling technology and well stimulation techniques within the Big Horn County area underscores the argument that the BLM cannot rely on these other NEPA documents to meet its legal obligations. *See* BLM, NEPA Handbook, H-1790-1 at 22 (noting that the BLM must determine whether the analyses in existing NEPA documents are "valid in light of new information or circumstances"). Different parcels may present different resource concerns, especially should BLM approve hydraulic fracturing and horizontal drilling on some parcels and coal bed methane drilling on other parcels. Put simply, the BLM's reliance on a DNA for the June 2018 sale cannot meet the requirements of NEPA because no analysis of the site-specific impacts for June 2018 parcels has occurred.

The Ninth Circuit has also addressed the use of DNAs, explaining that use of a DNA is allowed only where the agency "takes the requisite 'hard look' and 'determines that the new impacts will not be significant (or not significantly different from those already considered)." *Summit Lake Paiute Tribe of Nevada v. U.S. Bureau of Land Mgmt.*, 496 Fed. App'x 712, 716 (9th Cir. 2012) (quoting *North Idaho Community Action Network v. U.S. Dept. of Transp.,* 545 F.3d 1147, 1154–55 (9th Cir. 2008)); *see also Friends of Animals v. U.S. Bureau of Land Mgmt.*, 2015 WL 555980, at *3 (D. Nev. Feb. 11, 2015) (deciding on a motion for a preliminary injunction that the BLM cannot rely on the analysis in a prior EA where the proposed action in the DNA exceeds the scope of impacts analyzed in the underlying EA). But, here, BLM fails to assess whether leasing the June 2018 parcels would result in significant impacts because no analysis of the impacts that may result from the specific lease parcels exists, and the other NEPA documents that BLM tiers to do not suffice because none of them analyze the June 2018 lease parcels. Thus, BLM is failing to take a hard look at the environmental impacts of the project in violation of NEPA.

### B. The BLM Improperly Defers Its Site-Specific NEPA Analyses to the Application Permit to Drill Stage.

The BLM also improperly defers any site-specific analysis of the June 2018 parcels to the APD stage. *See* DNA[6] at 3 ("Detailed site-specific analysis and mitigation of activities associated with any particular lease would occur when a lease holder submits an application permit to drill [APD]."); *see also id.* at 5 ("Any potential effects on resources from the sale of leases would occur during lease exploration and development activities, which would be subject to future BLM decision-making and NEPA analysis upon receipt of an APD or Sundry Notice."). This approach violates the requirements of NEPA and Ninth Circuit case law.

Federal agencies are required to analyze the site-specific impacts of a proposed action even if a programmatic analysis exists. *Blue Mountains Biodiversity Proj.*, 161 F.3d at 1215 ("Nothing in the tiering regulations suggests that the existence of a programmatic EIS for a forest plan obviates the need for any future project-specific EIS, without regard to the nature of magnitude of a project."). Perhaps more importantly, "NEPA is not designed to postpone analysis of an environmental consequence to the last possible moment." *U.S. Bureau of Land Mgmt. v. Kern*, 284 F.3d 1062, 1072 (9th Cir. 2002); *see also* 40 C.F.R. § 1500.1(b) ("NEPA procedures must insure that environmental information is available to public officials and citizens *before decisions are made* and before actions are taken.") (emphasis added). This is especially the case if postponing analysis results in a piecemeal look at the impacts. *See* 40 C.F.R. § 1508.27 ("Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts."). Finally, as noted above, NEPA provides that the BLM must assess three types of actions: (1) connected actions, (2) cumulative actions, and (3) similar actions. 40 C.F.R. § 1508.25. Connected actions "are closely related and therefore should be discussed in the same impact statement." Actions are connected if they, among other things:

[6] The BLM does not provide page numbers for the DNA, so the Conservation Groups' citations are based on the .pdf page numbers.

"[a]re interdependent parts of a larger action and depend on the larger action for their justification." *Id.*

All of the above requirements support the conclusion that the BLM must analyze the impacts from federal oil and gas at the leasing stage. First, because drilling cannot occur without the BLM first leasing the minerals, leasing and drilling are interdependent, connected actions. Thus, the BLM must estimate the impacts of drilling these wells at the lease sale stage. Second, the Ninth Circuit has explicitly held that NEPA requires that agencies prepare an EIS before there is "any irreversible and irretrievable commitment of resources." *Connor v. Burford*, 848 F.2d 1441, 1452 (9th Cir. 1988). Issuing leases without a no surface occupancy ("NSO'") stipulation conveys a right to develop and is thus considered an irretrievable commitment of resources. *Id.* ("[U]nless surface-disturbing activities may be absolutely precluded, the government must complete an EIS before it makes an irretrievable commitment of resources by selling non-NSO leases."). None of the parcels for the June 2018 sale have NSO stipulations for the entire parcel. *See generally* DNA at Attachment 1. This means that the leases are irretrievable commitments of resources, and once BLM reaches the APD stage, the agency cannot include additional lease stipulations to stop drilling and the impacts that will result. *See* 43 C.F.R. § 3101.1-2; *see also Burford*, 848 F.2d at 1449. Thus, further analysis at the APD stage would be in many cases, too little, too late, and the agency must complete a full NEPA analysis at the lease sale stage.

The need to do a full NEPA at the lease sale stage is further supported by the fact that the BLM has approved APDs in the past without additional NEPA analysis. For example, the Miles City Field Office approved a permit to drill a horizontal well on the Fort Peck Indian Reservation on September, 23, 2016 through a categorical exclusion. Exhibit 1, BLM, Categorical Exclusion for the Fort Worth Operating Company LLC Permit to Drill the Clark Farms #29-10 (Sept 26, 2016), https://eplanning.blm.gov/epl-front-office/projects/nepa/67755/86866/104072/CX_FortWorth__Indian_29-10___29N_50E_APD.pdf.

In sum, unless the BLM actually commits, through the imposition of a lease stipulation or stipulations, to conduct additional NEPA analysis at the drilling stage, it more often than not does not happen. This means that any commitment to address the impacts development of the proposed leases through subsequent NEPA is, at best, hollow, and at worst, a deliberate attempt to avoid accountability to addressing potentially significant, connected environmental impacts under NEPA.

### C. The BLM Fails to Fully Analyze the Impacts of Hydraulic Fracturing and Horizontal Drilling.

The BLM also fails to analyze the increased magnitude of impacts that will occur because of hydraulic fracturing and horizontal drilling. Where a programmatic RMP and FEIS fail to analyze the "risks and concerns" associated with fracking, further environmental analysis at the lease sale stage is required, including an analysis of the significance of the proposed action. *See Center for Biological Diversity v. Bureau of Land Mgmt.*, 937 F.Supp.2d 1140, 1154 (N.D Cal. 2013). Significance is evaluated by looking at both the context and intensity of the proposed

action. 40 C.F.R. § 1508.27. Context "means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality." *Id.* § 1508.27(a). Intensity is determined by looking at ten factors, including the "unique characteristics of the geographic area," "the degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks," and "[w]hether the action is related to other actions with individually insignificant but cumulatively significant impacts." *Id.* § 1508.27(a).

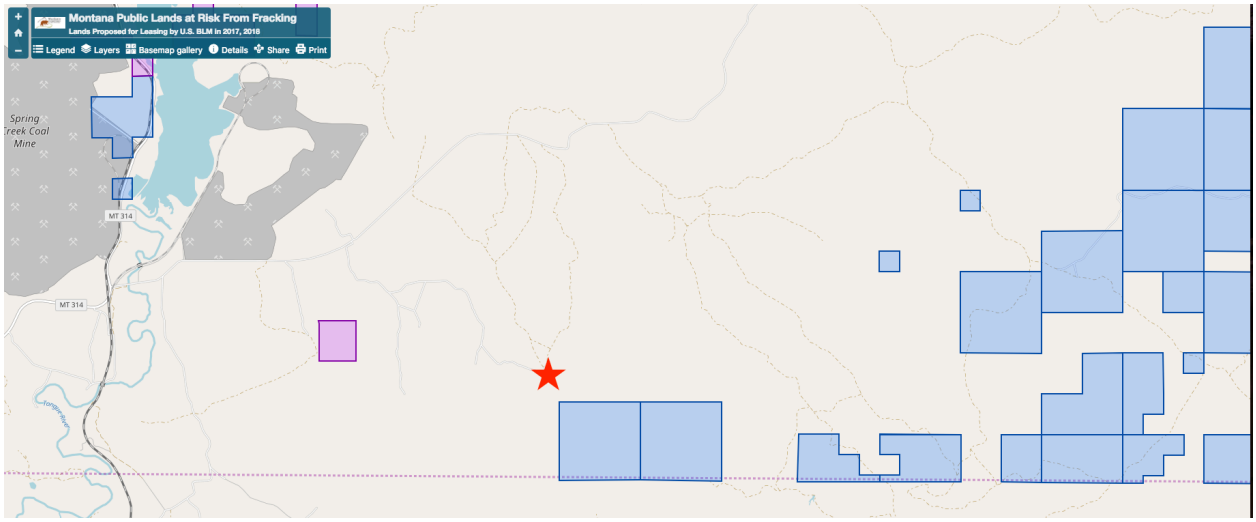
Fracking coupled with horizontal drilling is now used in the majority of new oil and gas wells in the U.S. As of 2015, 67% of the U.S.'s natural gas and 50% of the U.S.'s oil came from wells that used fracking. U.S. Energy Information Administration ("EIA"), *Hydraulically Fractured Wells Provide Two-Thirds of U.S. Natural Gas Production* (2015), https://www.eia.gov/todayinenergy/detail.php?id=26112; EIA, *Hydraulic Fracturing Accounts for About Half of Current U.S. Crude Oil Production* (2015), https://www.eia.gov/todayinenergy/detail.php?id=25372. A number of shale oil and gas plays exist in Montana.

With an increase in fracking and horizontal drilling comes increased impacts to air, water, climate, and land. For example, according to the EPA, between 2002 and 2006, oil and gas "[p]roduction emissions [for VOCs, NOx, CO, $SO_2$, and $PM_{10}$] in Montana increased by almost 75 percent," and this trend is likely to continue. *See* Exhibit 2, EPA Region 8, *An Assessment of the Environmental Implications of Oil and Gas Production: A Regional Case Study* at 3-6 (2008), https://archive.epa.gov/sectors/web/pdf/oil-gas-report.pdf. Fracking has also consumed 450 million gallons of water in Montana from 2005 to 2013, and generated 300,000 metric tons of carbon dioxide equivalent between 2005 and 2012. Exhibit 3, Env't America, *Fracking by the Numbers: Key Impacts of Dirty Drilling at the State and National Level* 21, 24 (2013), https://environmentamerica.org/sites/environment/files/reports/EA_FrackingNumbers_scrn.pdf.

Unfortunately, in the documents that the BLM tiers to, the agency does not anticipate that fracking and horizontal drilling development will occur in Big Horn County or otherwise analyze the impacts from drilling in the Thermopolis Shale. *See, e.g.*, Miles City RMP Minerals App'x, MIN-14 ("The majority of the currently producing horizontal wells in the planning area are producing oil from the Ordovician Red River Formation and the Upper Devonian-Lower Mississippian Bakken Formation, a horizontal play in North Dakota, Montana, and Saskatchewan that recently has been the focus of drilling in the area."). The BLM cannot assume that the impacts from drilling this new shale formation (at 12,000+ feet) will be the same as the impacts of drilling the Bakken which extends down to a maximum depth of 10,000 feet.

The flaws in the BLM's approach are even more apparent when one looks at the numbers predicted by the RMP versus the numbers on the ground. Specifically, the Miles City RMP includes a reasonably foreseeable development scenario ("RFD") quantifying the proposed number of wells for each county. The RFD categorizes Big Horn County as an area with medium development potential, and predicts that the county will see 36 oil wells drilled between 2011 and 2030. *See* Miles City RMP, Minerals App'x at MIN-259, MIN-91. However, the BLM has approved five APDs in Big Horn County in the last six months, all of which have used or will

use hydraulic fracturing and horizontal drilling to reach a shale oil formation at 12,000+ feet. *See* Exhibit 4, *Comment Letter from WildEarth Guardians re: APDs for Shale Oil in Big Horn County and Other Adjacent Areas* (Oct. 6, 2017) (commenting on the Slaughterville 1H well approved through DOI-BLM-MT-C020-2016-0133-EA[7] and the Doc Holiday 1H and Hickock 1H wells approved through DOI-BLM-MT-C020-2017-0077-DNA[8]); *see also* BLM, Decision Record for Alta Vista Oil Corporation Doc Holliday 2-H; Bullock 1-H, DOI-BLM-MT-C020-2018-0010-DNA.[9] Clearly, the pace and magnitude of development in the Big Horn County area is increasing, and the BLM needs to assess this.




*The map shows the December 2017 parcels in purple, the June 2018 parcels in blue, and the approximate location of the five Alta Vista APDs at the red star.*

The June 2017 and December 2017 lease sale EAs also do not mention the five new APDs in Big Horn County despite the fact that these documents allow extensive leasing in the area. Thus, tiering to these documents cannot cure BLM's faulty analysis, the BLM's DNA cannot stand, and the agency must analyze the increased on-the-ground impacts from developing any parcels in Big Horn County and adjacent areas which may contain this formation in an EIS.

**D. The BLM Fails to Analyze a Reasonable Range of Alternatives.**

The BLM also fails to analyze and assess a reasonable range of alternatives or otherwise consider alternatives to ensure that leasing and development are not speculative. "The EA, while typically a more concise analysis than an EIS, must still evaluate the need for the proposal, alternatives as required by NEPA section 102(2)(E), and the environmental impacts of the

[7] The EA for the Slaughterville 1H well is available online at https://eplanning.blm.gov/epl-front-office/projects/nepa/66656/90809/109165/Alta_Vista_Staughterville-1H.pdf.

[8] Links to the DNA and decision record for the Doc Holiday 1H and Hickock 1H wells are available online at https://eplanning.blm.gov/epl-front-office/eplanning/projectSummary.do?methodName=renderDefaultProjectSummary&projectId=89313.

[9] Links to the DNA and decision record for the Doc Holiday 2H and Bullock 1H wells are available online at https://eplanning.blm.gov/epl-front-office/eplanning/projectSummary.do?methodName=renderDefaultProjectSummary&projectId=95350.

proposed action and alternatives." *See High Country Conservation Advocates v. U.S. Forest Serv.*, 52 F.Supp. 3d 1174 (D. Colo. 2014); *see also* 42 U.S.C. § 4332(E) (requiring agencies to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources").

Because the BLM's DNA tiers the Miles City RMP, the December 2017 competitive lease sale EA, and the June 2017 lease sale EA to satisfy its alternatives analysis, *see* DNA at 4, the BLM fails to analyze any alternatives specific to the June 2018 lease sale. This means that neither the underlying Miles City RMP nor the EAs for the June 2017 and December 2017 lease sales consider a "no leasing alternative" for the particular parcels nominated in the June 2018 sale. *See* Miles City RMP Ch. 2 at 2-77 to 2-78; June 2017 EA at 5; December 2017 EA at 10. The BLM cannot shirk its duty to consider in detail reasonable alternatives to its proposed leasing, especially a "no leasing" alternative.

BLM also has a duty to consider other reasonable alternatives relevant to the June 2018 parcels. To the extent that the BLM relies on the June 2017 and December 2017 EAs, the BLM is essentially admitting through its RFD scenarios for the lease parcels that many of the proposed lease parcels may never see development. As a result, it appears the proposed leasing would simply be a major giveaway to the oil and gas industry. Of the 2,101,573 million acres of federal oil and gas under lease in Montana, only 710,617 acres are in production.[10] Put another way, only a little more than 34% of all leased federal oil and gas acres in Montana are actually producing oil and gas. This raises serious questions over whether the proposed oil and gas leasing would simply allow industry to hoard more leases to strengthen their balance sheet while generating minimal, if not negative, revenue to the American public. With companies allowed to bid as low $2.00 per acre for oil and gas leases and to pay only a nominal rental of $1.50 per acre per year, it would seem that industry is poised to secure leases for rock bottom prices and use these leases to inflate their assets. All the while, taxpayers will have to pay the cost of BLM administration of the leases, any inspections and enforcement, and lose the opportunity for these public lands to be dedicated to higher and better uses.

While we object to the BLM's proposal to lease, given the situation, we at least request the agency give detailed consideration to alternatives that address the likelihood that industry is only seeking the proposed leases in order to stockpile reserves and not actually produce oil and gas. We request the BLM give detailed consideration to the following alternative actions:

- An alternative that imposes a minimum bonus bid higher than $2.00 per acre. Under 43 C.F.R. § 3120.1-2(c), BLM is prohibited from accepting a competitive oil and gas leasing bid that is less than $2.00 per acre. However, there is nothing that prohibits the BLM from establishing a minimum bid that is higher than $2.00 per acre. Here, we request the agency give detailed consideration to an alternative that requires a minimum bonus bid higher than $2.00 per acre as a condition of selling the lease

[10] This is according to BLM oil and gas leasing statistics as of the end of FY 2016, available at: https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/oil-and-gas-statistics.

parcels. This will ensure that only serious industry interest in the proposed oil and gas leasing parcels and help to prevent companies from stockpiling federal oil and gas leases as a means to increase their assets and enhance their own financial bottomline.

- An alternative that defers offering the proposed lease parcels for sale until at least 50% of all leased federal oil and gas acres in Montana are put into production. This could happen as a result of leases expiring before being put into production, by industry relinquishing leases that have not produced for many years, or by leases being put into production by companies. This alternative would help to incentivize industry to start producing and generating revenue or to give up their ownership of federal oil and gas leases. This alternative would be a reasonable measure for the BLM to impose as a means for protecting the public interest and maximizing revenue for the American public where leases have already been issued.

The Mineral Leasing Act makes clear that the BLM, through the Secretary of Interior, has a duty to ensure the best return for the Federal taxpayer. *See* 30 U.S.C. § 226. Further, NEPA mandates that the BLM conduct site-specific, project-level analyses and that the agency considers a reasonable range of alternatives. 40 C.F.R. § 1502.14. Simply because the Miles City RMP designates certain lands as available for lease, does not mean that the BLM has to lease these lands without further thought or consideration of conditions and alternatives when a site-specific project is proposed.

In sum, because the BLM's proposed lease parcels are speculative, risky proposals, the BLM must ensure that the American public is fairly compensated for the costs of the lease sale and development by including alternatives with fiscal safeguards.

### E. The BLM Fails to Assess the Direct and Indirect Impacts of Air and Greenhouse Gas Emissions that Would Result from Issuing the Proposed Lease Sale Parcels.

The BLM's reliance on a DNA also means that the agency fails to assess the direct and indirect impacts from the June 2018 lease sale parcels generally, including failing to assess the air and greenhouse gas emissions that would result.

There is no doubt that BLM has the ability to analyze both the direct and indirect impacts from air and greenhouse gas emissions. Indeed, the December 2017 EA includes a table with "Estimated Air Emissions from Well Development and Production," and a table with "Estimated Downstream GHG Emissions Due to Fossil Fuel Combustion." *See* December EA at 48–50. But, BLM cannot rely on these calculations to assess the direct and indirect emissions for the June 2018. For example, none of the tables presented in the December 2017 EA assess emissions in Roosevelt or Wibaux County. The June 2017 EA contains a similarly inapplicable analysis. Indeed, the June 2017 EA does not include any analysis of the direct emissions from development and production of the proposed leases, and the table with downstream greenhouse gas emissions again does not include emissions estimates for Roosevelt or Wibaux Counties. *See* June 2017 EA at 39–40. These omissions are particularly egregious when one considers that Roosevelt County is in a high development area and Wibaux County is in a medium development area. *See* Map 5 in Section II. Thus, estimated emissions are likely to be significant.

These gaps also demonstrate why the BLM cannot use the DNA for the June 2018 sale to meet its requirements under NEPA. Site-specific information on the June 2018 sale simply does not exist, and courts cannot defer to a void. *Oregon Nat. Desert Ass'n v. Bureau of Land Mgmt.*, 625 F.3d 1092, 1121 (9th Cir. 2010).

### F. The BLM Fails to Fully Analyze and Assess Cumulative Impacts Generally, Including the Cumulative Impacts from Greenhouse Gas Emissions that Would Result from Issuing the Proposed Lease Parcels.

Similarly, because the BLM relies on a DNA to meet its NEPA requirements for the June 2018 lease sale, the BLM fails to account for the cumulative impacts that will result from the sale generally as well as cumulative impacts from greenhouse gas emissions from cumulative and similar actions. For example, the BLM fails to take into account the greenhouse gas emissions resulting from other proposed BLM lease sales in Montana, North Dakota, and surrounding Western states.

NEPA requires that an agency analyze the impacts of "similar" and "cumulative" actions in the same NEPA document in order to adequately disclose impacts in an EIS or provide sufficient justification for a FONSI in an EA. *See* 40 C.F.R. §§ 1508.25(a)(2) and (3). More specifically, the Ninth Circuit has held that "[a]n EA's analysis of cumulative impacts 'must give a sufficiently detailed catalogue of past, present, and future projects, and provide adequate analysis about how these projects, and differences between the projects, are thought to have impacted the environment.'" *Te-Moak Tribe v. U.S. Dep't of Interior*, 608 F.3d 592, 603 (9th Cir. 2010) (quoting *Lands Council v. Powell*, 395 F.3d 1019, 1027 (9th Cir. 2005)); *see also Blue Mountains Biodiversity Proj.*, 161 F.3d at 1215 (holding that the Forest Service must analyze the cumulative impacts of five timber sales within the same watershed in one NEPA document).

Here, the BLM's analyses are entirely devoid of any consideration of the general cumulative impacts or the cumulative impacts of greenhouse gas emissions from oil and gas development and lease sales within Montana or North Dakota, as well as throughout the Rocky Mountain West. Yet, it is notable that at the same time and in this same region, the BLM has sold, is selling, and will be selling millions of acres of oil and gas leases, including:

- In Montana/North Dakota, in June 2017 the BLM leased 49 parcels in southeastern Montana (15,611.47 acres). *See* https://www.blm.gov/sites/blm.gov/files/MTDAKs%206-13-17%20Comp%20Results.pdf. In September, the BLM sold 15 parcels totaling 4,438.07 acres in South and North Dakota, *see* https://www.blm.gov/sites/blm.gov/files/MTDAKs%2009_12_17_07_11_17_Comp%20Stats_Combined.pdf. And, in December, the BLM sold 166 parcels (totaling 98,865 acres) in southeastern Montana, https://eplanning.blm.gov/epl-front-office/projects/nepa/78400/128308/156156/12-12-17_Comp_Results.pdf; https://eplanning.blm.gov/epl-front-office/projects/nepa/78400/128309/156157/12-12-17_Noncomp_Results.pdf. The BLM is planning to sell 217 parcels in the June 2018 sale (104,071.00 acres) in southeastern Montana, https://eplanning.blm.gov/epl-front-

office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage&currentPageId=139120.

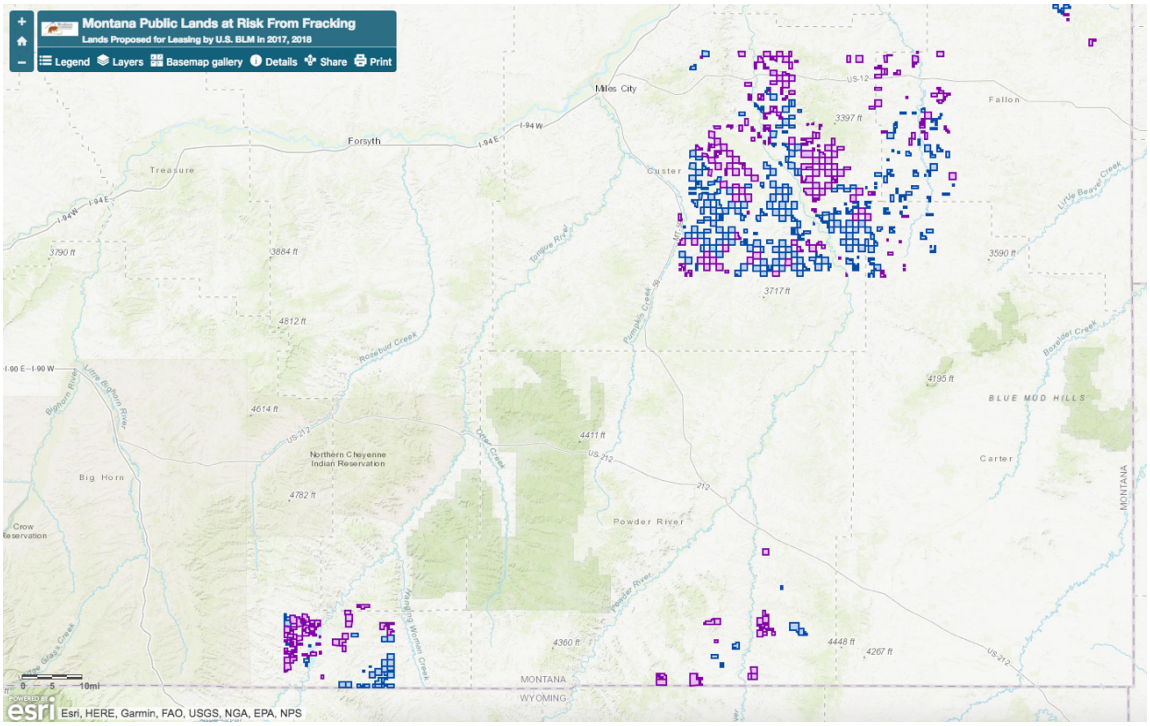
- Colorado: On March 9, 2017, the BLM sold 17 parcels covering 16,447.180 acres in southwestern Colorado. *See* https://eplanning.blm.gov/epl-front-office/projects/nepa/70207/99188/120209/Sale_Results_March2017.pdf. On June 8, 2017, the BLM sold 70 parcels covering 63,268.120 acres in western Colorado. *See* https://eplanning.blm.gov/epl-front-office/projects/nepa/70241/109218/133789/Sale_Results_June2017.pdf. In December of 2017, the BLM sold 23 parcels covering 22,073.110 acres in western Colorado. *See* https://eplanning.blm.gov/epl-front-office/projects/nepa/72396/126871/154522/Sale_Results_December_2017.pdf. In March 2018, the BLM is planning to sell 8 parcels totaling 2,545.13 acres in southwestern Colorado, https://eplanning.blm.gov/epl-front-office/projects/nepa/80672/126974/154621/Sale_Notice_March2018.pdf, and 64 parcels (58,893.95 acres) in June 2018, https://eplanning.blm.gov/epl-front-office/projects/nepa/89119/119327/145632/Initial_Parcel_List_Scoping_June2018.pdf.

- Wyoming: In June 2017, the BLM sold 26 parcels covering 31,924.77 acres in the High Desert District Office. *See* https://eplanning.blm.gov/epl-front-office/projects/nepa/65707/110941/135810/SALERESULTS.pdf. In September 2017, BLM sold 127 parcels totaling 106,687 acres in northeastern Wyoming. *See* https://eplanning.blm.gov/epl-front-office/projects/nepa/65707/121307/148154/SALE_RESULTS_3rd_Qtr_2017.v3.pdf. This December, the agency sold 41 parcels (68,818.92 acres) in southwestern Wyoming. *See* https://eplanning.blm.gov/epl-front-office/projects/nepa/65707/128297/156143/SALERESULTS.pdf. In March 2018, the BLM is proposing to lease 170 parcels (170,509.65 acres) in the High Plains and Wind River-Bighorn Basin Districts, https://eplanning.blm.gov/epl-front-office/projects/nepa/85072/125831/153379/Sale_Notice.pdf. And, in June 2018, the agency is offering 163 parcels (199,298.57 acres) in the High Desert and Wind River-Big Horn Basin Districts. https://eplanning.blm.gov/epl-front-office/projects/nepa/85072/132080/161176/WY-183Q_Lease_Sale_EA_(News_Release,_WRBBD,_012318.pdf; https://eplanning.blm.gov/epl-front-office/projects/nepa/85072/131838/160884/18-14_WY-183Q_Lease_Sale_EA_HPD.pdf.

- **All told, the BLM has leased or is proposing to lease approximately 1,265 parcels or 1,026,947.476 acres of publically-owned land in the states listed above in 2017 and 2018.**

The need for the BLM to analyze cumulative impacts from the proposed lease sales is further supported by a demonstration of how close many of the lease parcels are. For example, as shown by the map below, many of the parcels from the December 2017 lease sale in Montana are

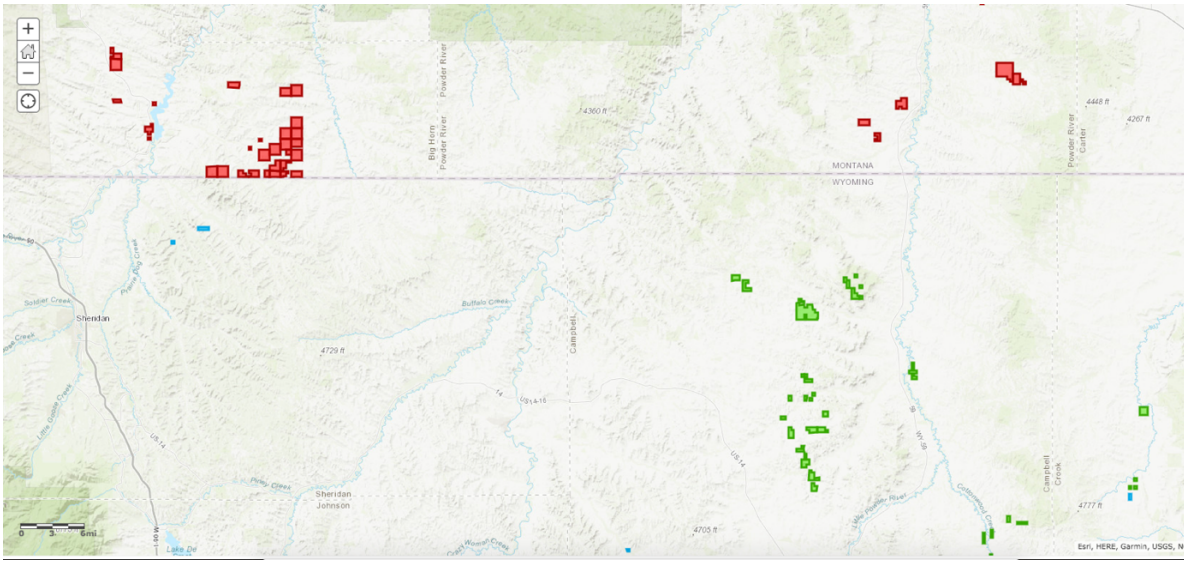
directly adjacent to parcels for the June 2018 lease sale.[11] Unfortunately, because the BLM relies on a DNA, the agency fails to include any analysis of this dynamic. Not only will the leases from these two sales tie up huge swaths of land within the Miles City Field Office, development of these parcels will cause cumulative impacts to the air quality of the area, deplete and potentially contaminate water in the Tongue and Powder River Basins, and cause significant greenhouse gas emissions.




*The map shows the December 2017 parcels in purple and the June 2018 parcels in blue.*

To top it off, many of the June 2018 parcels in Montana are less than 10 miles from the March 2018 and September 2018 lease sale parcels in Wyoming, as shown by the map below. NEPA bars federal agencies from piecemealing analyses in order to avoid a finding of significance. *See* 40 C.F.R. § 1508.27; *U.S. Bureau of Land Management v. Kern*, 284 F.3d 1062, 1075 (9th Cir. 2002); *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1214–15 (9th Cir. 1998). But, this is exactly what the BLM is doing here at the expense of transparency and the valuable public participation process NEPA requires.

[11] Compare the December 2017 lease sale parcels map, https://eplanning.blm.gov/epl-front-office/projects/nepa/78400/121247/148011/BLM_Montana_Oil_and_Gas_Lease_Sale_December_2017.pdf, with the June 2018 lease sale parcels map, https://eplanning.blm.gov/epl-front-office/projects/nepa/93141/124867/152260/Oil_and_Gas_Parcels_Under_Review_June_2018_BLM_Montana_Competitive_Lease_Sale.pdf.




*The Montana June 2018 parcels are in red, the Wyoming March 2018 parcels are in green, and the Wyoming September 2018 parcels are in blue.*

The need to take into account "similar" and "cumulative" actions is underscored by the fact that the BLM generally acknowledges in its lease sale EAs that the proper geographic area for analyzing and assessing the impacts of greenhouse gas emissions is on a national scale. *See, e.g.*, December 2017 EA at 47 ("The total projected increase in downstream GHG emissions is estimated to be 0.0167 million metric tons (MMT) per year of carbon dioxide equivalents (CO2eq) if the lease parcels were sold and if they are developed and if the number of wells projected in the RFD produce oil and gas at a production rate similar to other wells in the associated fields. . . . According to the USEPA, this estimated quantity represents approximately 0.0005% of total U.S. GHG emissions reported in 2015 and 0.07% of Montana GHG emissions reported in 2015[.]").

Although this assessment was apparently prepared to try to mislead the public into believing that emissions from the proposed leasing are not significant, it actually emphasizes the need for the BLM to not simply account for emissions from the proposed leasing, but likely for all greenhouse gas emissions associated with BLM-approved oil and gas leasing nationwide. Indeed, the BLM cannot claim that emissions are insignificant in the context of state or national emissions, but then fail to disclose the direct, indirect, and cumulative greenhouse gases that would result from all other "similar" and "cumulative" actions within a statewide or national scope. The BLM's failure to discuss or acknowledge the lease sales occurring within Montana and in neighboring Rocky Mountain states is a clear violation of NEPA which renders the DNA for the June 2018 lease sale invalid.

### G. The BLM Fails to Analyze the Costs of Reasonably Foreseeable Carbon Emissions Using Well-Accepted, Valid, Credible, GAO-Endorsed, Interagency Methods for Assessing Carbon Costs.

In addition to the lack of cumulative impacts analysis for greenhouse gas emissions, it is particularly disconcerting that BLM extensively discusses the economic benefits of leasing in the

Miles City RMP and June and December 2017 EAs, *see* Miles City RMP at 4-374 to 4-375; June 2017 EA at 47–48; December 2017 EA at 58, but completely omits a discussion of the social cost of carbon protocol, a valid, well-accepted, credible, and interagency-endorsed method of calculating the costs of greenhouse gas emissions and understanding the potential significance of such emissions.

The social cost of carbon protocol for assessing climate impacts is a method for "estimat[ing] the economic damages associated with a small increase in carbon dioxide (CO2) emissions, conventionally one metric ton, in a given year [and] represents the value of damages avoided for a small emission reduction (i.e. the benefit of a CO2 reduction)." Exhibit 5, U.S. Environmental Protection Agency ("EPA"), "Fact Sheet: Social Cost of Carbon" (Nov. 2013) at 1, https://www.epa.gov/sites/production/files/2016-12/documents/social_cost_of_carbon_fact_sheet.pdf. The protocol was developed by a working group consisting of several federal agencies.

In 2009, an Interagency Working Group was formed to develop the protocol and issued final estimates of carbon costs in 2010. *See* Exhibit 6, Interagency Working Group on Social Cost of Carbon, "Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866" (Feb. 2010), available online at https://www.epa.gov/sites/production/files/2016-12/documents/scc_tsd_2010.pdf. These estimates were then revised in 2013 by the Interagency Working Group, which at the time consisted of 13 agencies. *See* Exhibit 7, Interagency Working Group on Social Cost of Carbon, "Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866" (May 2013), available online at https://obamawhitehouse.archives.gov/sites/default/files/omb/assets/inforeg/technical-update-social-cost-of-carbon-for-regulator-impact-analysis.pdf. This report and the social cost of carbon estimates were again revised in 2015. *See* Exhibit 8, Interagency Working Group on Social Cost of Carbon, "Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866" (July 2015). Again, this report and social cost of carbon estimates were revised in 2016. *See* Exhibit 9, Interagency Working Group on Social Cost of Greenhouse Gases, "Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis – Under Executive Order 12866" (Aug. 2016), available online at https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/scc_tsd_final_clean_8_26_16.pdf.

Most recently, as an addendum to previous Technical Support Documents regarding the social cost of carbon, the Department of the Interior joined numerous other agencies in preparing estimates of the social cost of methane and other greenhouse gases. *See* Exhibit 10, Interagency Working Group on Social Cost of Greenhouse Gases, United States Government, "Addendum to Technical Support Document on Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866: Application of the Methodology to Estimate the Social Cost of Methane and the Social Cost of Nitrous Oxide" (Aug. 2016).

Depending on the discount rate and the year during which the carbon emissions are produced, the Interagency Working Group estimates the cost of carbon emissions, and therefore

the benefits of reducing carbon emissions, to range from $10 to $212 per metric ton of carbon dioxide. *See* Chart Below. In one of its more recent update to the Social Cost of Carbon Technical Support Document, the White House's central estimate was reported to be $36 per metric ton. Exhibit 10 at 4. In July 2014, the U.S. Government Accountability Office ("GAO") confirmed that the Interagency Working Group's estimates were based on sound procedures and methodology. *See* Exhibit 11, GAO, "Regulatory Impact Analysis, Development of Social Cost of Carbon Estimates," GAO-14-663 (July 2014), http://www.gao.gov/assets/670/665016.pdf.

| Year | 5% Average | **3% Average** | 2.5% Average | High Impact (95th Pct at 3%) |
|---|---|---|---|---|
| 2010 | 10 | **31** | 50 | 86 |
| 2015 | 11 | **36** | 56 | 105 |
| 2020 | 12 | **42** | 62 | 123 |
| 2025 | 14 | **46** | 68 | 138 |
| 2030 | 16 | **50** | 73 | 152 |
| 2035 | 18 | **55** | 78 | 168 |
| 2040 | 21 | **60** | 84 | 183 |
| 2045 | 23 | **64** | 89 | 197 |
| 2050 | 26 | **69** | 95 | 212 |

*Most recent social cost of carbon estimates presented by Interagency Working Group on Social Cost of Carbon. The 95th percentile value is meant to represent "higher-than-expected" impacts from climate change. See Exhibit 10.*

Although often utilized in the context of agency rulemakings, the protocol has been recommended for use and has been used in project-level decisions. For instance, the EPA recommended that an EIS prepared by the U.S. Department of State for the proposed Keystone XL oil pipeline include "an estimate of the 'social cost of carbon' associated with potential increases of GHG emissions." Exhibit 12, EPA Comments on Supplemental Draft EIS for the Keystone XL Oil Pipeline (June 6, 2011).

More importantly, the BLM, including the neighboring Billings Field Office, has also utilized the social cost of carbon protocol in the context of oil and gas approvals. In past Environmental Assessments for oil and gas leasing in Montana, the Billings Field Office estimated "the annual SCC [social cost of carbon] associated with potential development on lease sale parcels." Exhibit 13, BLM, "Environmental Assessment for October 21, 2014 Oil and Gas Lease Sale," DOI-BLM-MT-0010-2014-0011-EA (May 19, 2014) at 76, https://www.blm.gov/sites/blm.gov/files/MT-DAKs%20BillingsFinal%20EA_Oct_21_2014_.pdf. In conducting its analysis, the BLM used a "3 percent average discount rate and year 2020 values," presuming social costs of carbon to be $46 per metric ton. *Id*. Based on its estimate of greenhouse gas emissions, the agency estimated total carbon costs to be "$38,499 (in 2011 dollars)." *Id*. In Idaho, the BLM also utilized the social cost of carbon protocol to analyze and assess the costs of oil and gas leasing. Using a 3% average discount rate and year 2020 values, the agency estimated the cost of carbon to be $51 per ton of annual $CO_2e$ increase. *See* Exhibit 14, BLM, "Little Willow Creek Protective Oil and Gas Leasing," EA No. DOI-BLM-ID-B010-2014-0036-EA (February 10, 2015) at 81, https://eplanning.blm.gov/epl-front-office/projects/nepa/39064/55133/59825/DOI-BLM-ID-B010-2014-0036-EA_UPDATED_02272015.pdf. Based on this estimate, the agency estimated

that the total carbon cost of developing 25 wells on five lease parcels to be $3,689,442 annually. *Id*. at 83.

Economists have also specifically calculated the costs of climate change on the Montana economy. For example, a study completed by Power Consulting, concludes that economic losses to Montana's tourism industry could result in a loss of 10,922 jobs and $281 million in earnings if no public policy steps are taken to reduce greenhouse gas emissions. Power Consulting Inc., *Impact of Climate Change on MT Outdoor Economy* vii (2015), http://montanawildlife.org/wp-content/uploads/2015/12/Impact-of-Climate-Change-on-the-Montana-Outdoor-Economy-Dec-2015-Final-Report.pdf. A summary of the results from this study are highlighted in the table below.

**Table 5.**

| Projected Economic Losses Due to Climate Change in Components of the Montana Recreation and Tourism Activities | | |
|---|---|---|
| | Jobs | Labor Earnings ($millions) |
| Glacier-Yellowstone NP Visitation | 3,331 | $94 |
| Wildlife Watching & Sight-Seeing | 2,775 | $61 |
| Hunting | 1,560 | $39 |
| Sport Fishing | 1,792 | $49 |
| Skiing, Snowboarding, Snowmobiling | 1,465 | $37 |
| **Total Economic Losses in Recreation and Tourism** | **10,922** | **$281** |

Sources: See Tables 6 through 10 below.

*Source: Power Consulting Inc.*

Power Consulting has also completed a similar study on the climate impacts on agriculture in Montana. This study concluded that "the total impact on employment is the loss of about 25,000 jobs and the $736 million in labor earnings by 2055." This information is summarized in the table below. Power Consulting Inc., *The Impact of Climate Change on Montana's Agriculture Economy* 17 (2016), http://montanafarmersunion.com/wp-content/uploads/2016/02/FINAL_Impact_Climate_Change_MT_Ag_Econ_Power_Consulting_2-24-2016.pdf.

**Table 3.**

| Projected Economic Losses Due to Climate Change on Montana Agriculture | | |
|---|---|---|
| **Agricultural Activities** | **Jobs** | **Labor Earnings ($millions)** |
| Cattle Raising | 12,167 | $364 |
| Crops | 12,457 | $372 |
| **Total** | **24,624** | **$736** |

*Source: Power Consulting Inc.*

To be certain, the social cost of carbon protocol presents a conservative estimate of economic damages associated with the environmental impacts climate change. As the EPA has

noted, the protocol "does not currently include all important [climate change] damages." Exhibit 5 at 1. As explained:

> The models used to develop [social cost of carbon] estimates do not currently include all of the important physical, ecological, and economic impacts of climate change recognized in the climate change literature because of a lack of precise information on the nature of damages and because the science incorporated into these models naturally lags behind the most recent research.

*Id*. In fact, more recent studies have reported significantly higher carbon costs. For instance, a report published last fall found that current estimates for the social cost of carbon should be increased six times for a mid-range value of $220 per ton. *See* Exhibit 15, Moore, C.F. and B.D. Delvane, "Temperature impacts on economic growth warrant stringent mitigation policy," Nature Climate Change 2 (January 12, 2015). In spite of uncertainty and likely underestimation of carbon costs, nevertheless, "the SCC is a useful measure to assess the benefits of CO2 reductions," and thus a useful measure to assess the costs of CO2 increases. Exhibit 5.

That the economic impacts of climate change, as reflected by an assessment of social cost of carbon, should be a significant consideration in agency decision making, is emphasized by a recent White House report, which warned that delaying carbon reductions would yield significant economic costs. *See* Exhibit 16, Executive Office of the President of the United States, "The Cost of Delaying Action to Stem Climate Change," (July 2014). As the report states:

> [D]elaying action to limit the effects of climate change is costly. Because $CO_2$ accumulates in the atmosphere, delaying action increases $CO_2$ concentrations. Thus, if a policy delay leads to higher ultimate $CO_2$ concentrations, that delay produces persistent economic damages that arise from higher temperatures and higher $CO_2$ concentrations. Alternatively, if a delayed policy still aims to hit a given climate target, such as limiting $CO_2$ concentration to given level, then that delay means that the policy, when implemented, must be more stringent and thus more costly in subsequent years. In either case, delay is costly.

*Id.* at 1.

The requirement to analyze the social cost of carbon is supported by the general requirements of NEPA and is specifically supported in federal case law. Courts have ordered agencies to assess the social cost of carbon pollution, even before a federal protocol for such analysis was adopted. In 2008, the U.S. Court of Appeals for the Ninth Circuit ordered the National Highway Traffic Safety Administration to include a monetized benefit for carbon emissions reductions in an Environmental Assessment prepared under NEPA. *Center for Biological Diversity v. National Highway Traffic Safety Administration*, 538 F.3d 1172, 1203 (9th Cir. 2008). The Highway Traffic Safety Administration had proposed a rule setting corporate average fuel economy standards for light trucks. A number of states and public interest groups challenged the rule for, among other things, failing to monetize the benefits that would accrue from a decision that led to lower carbon dioxide emissions. The Administration had monetized the employment and sales impacts of the proposed action. *Id*. at 1199. The

agency argued, however, that valuing the costs of carbon emissions was too uncertain. *Id*. at 1200. The court found this argument to be arbitrary and capricious. *Id*. The court noted that while estimates of the value of carbon emissions reductions occupied a wide range of values, the correct value was certainly not zero. *Id.* It further noted that other benefits, while also uncertain, were monetized by the agency. *Id*. at 1202.

More recently, a federal court has done likewise for a federally-approved coal lease. That court began its analysis by recognizing that a monetary cost-benefit analysis is not universally required by NEPA. *See High Country Conservation Advocates v. U.S. Forest Service*, 52 F.Supp. 3d 1174 (D. Colo. 2014) (citing 40 C.F.R. § 1502.23). However, when an agency prepares a cost-benefit analysis, "it cannot be misleading." *Id*. at 1182 (citations omitted). In that case, the NEPA analysis included a quantification of benefits of the project, but, the quantification of the social cost of carbon, although included in earlier analyses, was omitted in the final NEPA analysis. *Id*. at 1196. The agencies then relied on the stated benefits of the project to justify project approval. This, the court explained, was arbitrary and capricious. *Id*. Such approval was based on a NEPA analysis with misleading economic assumptions, an approach long disallowed by courts throughout the country. *Id*. Furthermore, the court reasoned that even if the agency had decided that the social cost of carbon was irrelevant, the agency must still provide "*justifiable reasons* for not using (or assigning minimal weight to) the social cost of carbon protocol . . . ." *Id.* at 1193 (emphasis added).

A federal court recently reaffirmed this reasoning, as well. In August 2017, a district court in Montana cited to the *High Country* decision and concurred with it. *See Montana Envtl. Info. Ctr. v. U.S. Office of Surface Mining*, No. CV 15-106-M-DWM, 2017 WL 3480262, at *14 (D. Mont. Aug. 14, 2017). The court then rejected a NEPA analysis for a coal mine expansion that touted the economic benefits of the expansion without assessing the carbon costs that would result from the development. *Id.*

A recent op-ed in the New York Times from Michael Greenstone, the former chief economist for the President's Council of Economic Advisers, confirms that it is appropriate and acceptable to calculate the social cost of carbon when reviewing whether to approve fossil fuel extraction. *See* Exhibit 17, Greenstone, M., "There's a Formula for Deciding When to Extract Fossil Fuels," New York Times (Dec. 1, 2015), available at https://www.nytimes.com/2015/12/02/upshot/theres-a-formula-for-deciding-when-to-extract-fossil-fuels.html. Just last year, the Proceedings of the National Academy of Sciences of the United States of America ("PNAS"), acknowledged in a peer-reviewed article from February of this year that the social cost of carbon analysis is "[t]he most important single economic concept in the economics of climate change," and that "federal regulations with estimated benefits of over $1 trillion have used the SCC." Exhibit 18, William D. Nordhaus, Revisiting the Social Cost of Carbon, PNAS, Feb. 14, 2017, http://www.pnas.org/content/114/7/1518.full.pdf.

Clearly, the social cost of carbon provides a useful, valid, and meaningful tool for assessing the climate consequences of the proposed leasing, and the BLM's failure to discuss it while simultaneously discussing the benefits of oil and gas development is arbitrary and capricious. While we do not suggest that a comprehensive cost-benefit analysis is required, the fact that economic benefits are disclosed in the Miles City RMP and June 2017 and December

2017 EAs indicates that costs and benefits are useful for assessing the significance of the proposed leasing. To this end, the BLM must disclose carbon costs in order to fully assess the significance of climate impacts and support any FONSI.

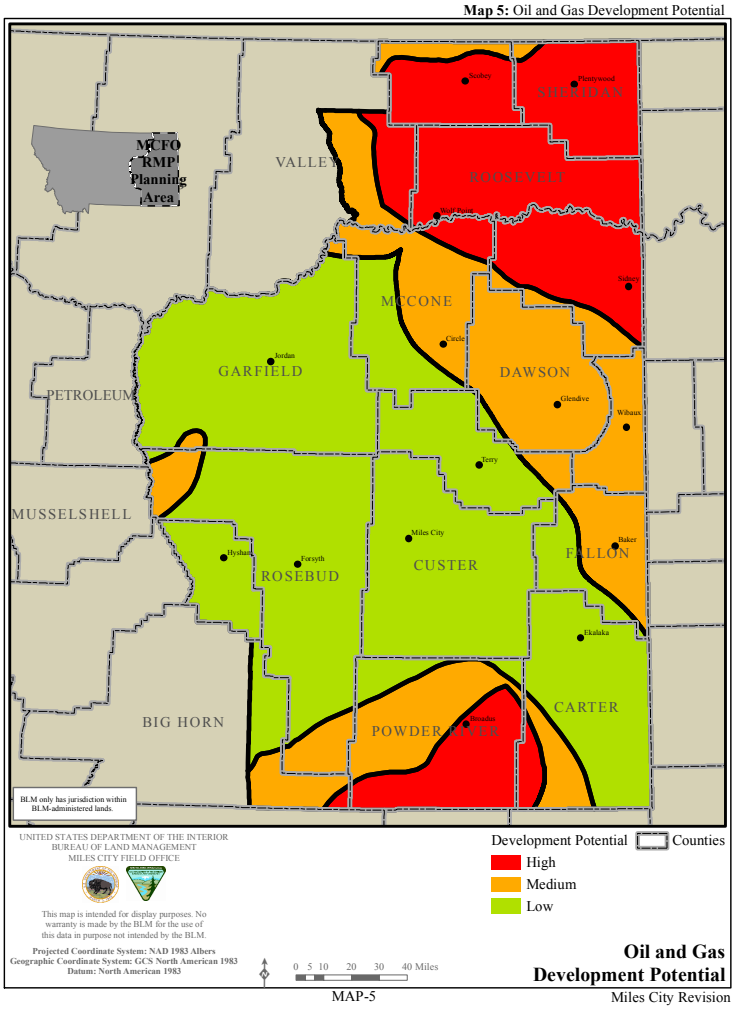
## II. **The Proposed Leasing Appears to Violate the Mineral Leasing Act.**

Finally, the BLM's proposed leasing runs afoul of the MLA in two key regards. First, aside from the current activity in the Big Horn County area, it does not appear that most of the lease parcels contain lands that are known or believed to contain oil or gas deposits. Second, it does not appear that BLM has examined whether any lessee has the intent to diligently develop many of the proposed parcels.

On the first matter, the Mineral Leasing Act allows leasing only where there are lands that are "known or believed to contain oil or gas deposits." 30 U.S.C. § 226(a). Here, it unclear whether all of the lease parcels include lands that are known or believed to contain oil and gas deposits. The Miles City RMP includes a map of development potential[12] which indicates that all of the leases in Custer county have low development potential.

[12] Map 5 is available on the BLM's website at: https://eplanning.blm.gov/epl-front-office/projects/lup/59042/98284/118667/16Map_05_OG_Dvpt_Potential_8x11.pdf.

**Map 5:** Oil and Gas Development Potential




MAP-5

Miles City Revision

At a minimum, the BLM has a duty to confirm where lands proposed for leasing are known or believed to contain oil and gas deposits. Here, the agency appears to have undertaken no such diligence in confirming whether the oil and gas industry's supposed interest in the proposed lease parcels is rooted in the existence or believed existence of oil and gas deposits.

On the second matter, the BLM cannot lease lands for oil and gas development if there is no intent to diligently develop. The agency confirmed this in a recent decision denying the issuance of an oil and gas lease to a lessee, explaining:

> A fundamental requirement of every oil and gas lease, as stated in Section 4 on page 3 of Form 3100-1, is the requirement that the "Lessee must exercise reasonable diligence in developing and producing, and must prevent unnecessary damage to, loss of, or waste of leased resources." This diligent development requirement has its basis in the Mineral Leasing Act of 1920, as amended. See 30 U.S.C. § 187. Thus, an expressed intent by a person offering to purchase a lease to not develop and produce the oil and gas resources on the leasehold would

> directly conflict with the diligent development requirement and require that the offer be rejected.

Exhibit 19, BLM, Oil and Gas Noncompetitive Lease Offers Rejected (Oct. 18, 2016). Here, the BLM appears to acknowledge that there is no explicit intent to develop any of the proposed lease parcels. Although the DNA does not estimate proposed development, the agency discloses in the June and December 2017 EAs that it is reasonable to presume that most, if not all, of the parcels, will never be developed. *See* June 2017 EA at 39 (estimating development of 14 wells out of 156 proposed lease parcels); December 2017 EA at 50 (estimating development of 35 wells out of 204 proposed lease parcels). These admissions explicitly indicate that a large number of the leases will have no wells developed upon them and no wells developed to access their minerals. Given this, it is completely evident that any lessee would have no intent to diligently develop many of the proposed lease parcels and that the BLM is not legally justified in proceeding to offer them for sale.

The BLM has recently confirmed that leasing in areas with low development potential and little to no industry interest warrants removing parcels from proposed sales. In Colorado, the agency recently removed 20 parcels totaling 27,529 acres in Grand County from a proposed lease sale, citing "low energy potential and reduced industry interest in the geographic area[.]" Exhibit 20, BLM, "BLM modifies parcel list for June 2017 oil and gas lease sale" (April 17, 2017). At a minimum, the BLM cannot proceed to lease the proposed lands without conducting some kind of verification that there is intent to develop. Here, the agency appears to have undertaken no such verification. In fact, in response to a Freedom of Information Act request in which WildEarth Guardians requested records pertaining to any instance in which the BLM evaluated the likelihood of development of oil and gas leases in Montana, the agency responded that "there are no records responsive[.]" Exhibit 21, Final Response to FOIA No. BLM-2017-00678 (July 7, 2017). The BLM cannot blindly offer to lease public lands for oil and gas development without undertaking some steps to confirm that there exists reasonable development potential. If the agency does not, then it is failing to verify that potential lessees will exercise diligent development in accordance with the Mineral Leasing Act.

The BLM has a duty to analyze site-specific impacts for the proposed action, and an affirmative duty to assess the due diligence of each potential lessee as it did in the case of Ms. Tempest-Williams. *See* Exhibit 19. The BLM must apply equal treatment to all potential lessees, especially because the agency has a duty to the American people to ensure a fair return on public minerals. As it stands, there is no basis for concluding that the lands proposed for leasing are known or believed to contain oil and gas deposits, or that there is any intent to diligently develop any of the proposed leases. Accordingly, the BLM is not legally justified under the Mineral Leasing Act in proceeding with the proposed leasing and the March 2018 lease sale must be canceled.

## III. Conclusion

In sum, the Montana BLM fails to comply with the requirements of NEPA for the June 2018 lease sale by continuing to 1) failing to take a "hard look" at the site-specific impacts of the June 2018 parcels; 2) improperly deferring analysis of impacts to the Application Permit to Drill ("APD") stage; 3) failing to fully analyze the impacts from hydraulic fracturing and horizontal

drilling; 4) failing to analyze a reasonable range of alternatives; 5) failing to assess the direct and indirect impacts of the sale, 6) failing to quantify cumulative impacts generally, including the impacts from the air and greenhouse gas emissions that would result from issuance of the lease parcels; and 7) failing to assess the economic significance of any greenhouse gas emissions in terms of carbon costs. Furthermore, the BLM's DNA, the underlying Miles City RMP, and the 2017 EAs also fail to comply with the "due diligence" requirements of the Mineral Leasing Act. As a result, the Conservation Groups request that the BLM defer leasing any of the nominated parcels unless and until the agency corrects these deficiencies.

Sincerely,

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