

January 11, 2018

Via Overnight Express Mail

U.S. Bureau of Land Management
Montana-Dakotas State Office
Attn. John Raby, Acting State Director
5001 Southgate Drive
Billings, MT 59101
Fax: 406-896-5292

**Re: Protest of DOI-BLM-MT-L002-2017-0002-EA, DOI-BLM-MT-L002-2017-0003-EA,
and DOI-BLM-MT-L002-2017-0004-EA – Billings Field Office, Butte Field Office,
and North Central Montana District Office, March 13, 2018 Oil & Gas Lease Sale**

Dear Acting State Director Raby,

Pursuant to 43 C.F.R. § 3120.1-3, WildEarth Guardians, the Center for Biological Diversity, the Montana Environmental Information Center, Northern Plains Resource Council, Park County Environmental Council, Preserve the Beartooth Front, and 350 Montana (hereinafter “Conservation Groups”) submit the following protest of three Bureau of Land Management (“BLM”) draft environmental assessments (“EAs”) and proposed findings of no significant impact (“FONSI”) in support of the March 13, 2018 competitive oil and gas lease sale for the Billings Field Office,¹ Butte Field Office,² and the North Central Montana District Office³ in Montana.

¹ The Billings FO EA is available on the BLM’s website at: https://eplanning.blm.gov/epl-front-office/projects/nepa/87544/127696/155392/Billings_March13_2018_Oil_and_Gas_Lease_Sale_EA.pdf. The FONSI is available at: https://eplanning.blm.gov/epl-front-office/projects/nepa/87544/127694/155390/BiFO_FONSI_March_13_2018_Oil_and_Gas_Lease_Sale_Unsigned_Draft.pdf.

² The Butte FO EA is available on the BLM’s website at: https://eplanning.blm.gov/epl-front-office/projects/nepa/87528/127752/155448/Butte_Environmental_Assessment_March_13_2018_Oil_and_Gas_Lease_Sale.pdf. The FONSI is available at: https://eplanning.blm.gov/epl-front-office/projects/nepa/87528/127753/155449/Butte_Unsigned_FONSI_March_13_2018_Oil_and_Gas_Lease_Sale.pdf.

³ The North Central Montana District Office EA (hereinafter “Hi-Line EA”) is available on the BLM’s website at: https://eplanning.blm.gov/epl-front-office/projects/nepa/87551/127740/155436/Hiline_Environmental_Analysis_March_13_2018_Oil_and_Gas_Lease_Sale.pdf. The FONSI is available at: https://eplanning.blm.gov/epl-front-office/projects/nepa/87551/127742/155438/Hiline_Unsigned_FONSI_March_13_2018_Oil_and_Gas_Lease_Sale.pdf.

The BLM is proposing to lease 109⁴ parcels comprising 63,495.536 acres in the March 2018 sale. Of these parcels, 76 (52,297 acres) are located in the Billings FO in Carbon, Golden Valley, Musselshell, Sweet Grass, Stillwater, and Wheatland Counties, Montana. Nine of these parcels (4,307 acres) are in the Butte FO in Park County, Montana. 24 of these parcels (6,892 acres) are in the North Central Montana District Office located in the Malta, Havre, and Glasgow FOs in Glacier, Liberty, Hill, Chouteau, Blaine, Phillips, and Valley Counties.

The Conservation Groups protest the following lease parcels:

Lease Parcel #	Lease Parcel #	Acres	Field Office/ Area	County
03-18-01	MTM 108952-GT	488.54	Billings	Sweet Grass
03-18-02	MTM 108952-GR	920.00	Billings	Sweet Grass
03-18-03	MTM 108952-GQ	400.00	Billings	Wheatland
03-18-04	MTM 105431-JM	160.00	Billings	Wheatland
03-18-05	MTM 108952-GP	132.69	Billings	Sweet Grass
03-18-06	MTM 108952-GN	1280.00	Billings	Sweet Grass
03-18-07	MTM 108952-EP	160.00	Billings	Sweet Grass
03-18-08	MTM 108952-GM	240.00	Billings	Sweet Grass
03-18-09	MTM 108952-GL	1388.11	Billings	Sweet Grass
03-18-10	MTM 108952-GJ	300.75	Billings	Sweet Grass
03-18-11	MTM 108952-GK	1080.00	Billings	Sweet Grass
03-18-12	MTM 108952-GH	936.27	Billings	Sweet Grass
03-18-13	MTM 108952-GG	827.03	Billings	Sweet Grass
03-18-14	MTM 108952-EN	470.65	Billings	Sweet Grass
03-18-15	MTM 108952-GF	360.75	Billings	Sweet Grass
03-18-16	MTM 108952-GE	320.00	Billings	Wheatland
03-18-17	MTM 108952-GD	480.00	Billings	Sweet Grass
03-18-18	MTM 108952-GB	445.35	Billings	Sweet Grass
03-18-19	MTM 108952-GC	797.70	Billings	Sweet Grass
03-18-20	MTM 108952-GA	40.00	Billings	Sweet Grass
03-18-21	MTM 108952-F8	307.51	Billings	Sweet Grass
03-18-22	MTM 108952-F9	40.00	Billings	Golden Valley
03-18-23	MTM 108952-F7	280.00	Billings	Stillwater
03-18-24	MTM 108952-DH	480.00	Billings	Musselshell

⁴ The original number of parcels proposed for lease was 110 when the BLM released the draft EA's at the end of September. The BLM is now deferring the only parcel proposed for lease in the North Dakota field office. See <https://eplanning.blm.gov/epl-front-office/projects/nepa/87486/127800/155500/Withdrawn.pdf>.

03-18-25	MTM 108952-DJ	160.00	Billings	Musselshell
03-18-26	MTM 108952-DV	639.05	Billings	Musselshell
03-18-27	MTM 108952-DW	720.00	Billings	Musselshell
03-18-28	MTM 108952-D6	640.00	Billings	Musselshell
03-18-29	MTM 108952-DX	553.17	Billings	Musselshell
03-18-30	MTM 108952-DF	80.00	Billings	Musselshell
03-18-31	MTM 108952-DG	80.00	Billings	Musselshell
03-18-32	MTM 108952-DD	40.00	Billings	Musselshell
03-18-33	MTM 108952-DE	160.00	Billings	Musselshell
03-18-34	MTM 108952-DY	240.00	Billings	Musselshell
03-18-35	MTM 108952-DK	160.00	Billings	Musselshell
03-18-36	MTM 108952-DL	160.00	Billings	Musselshell
03-18-37	MTM 105431-WK	640.00	Billings	Musselshell
03-18-38	MTM 108952-DM	880.00	Billings	Musselshell
03-18-39	MTM 108952-DN	160.00	Billings	Musselshell
03-18-40	MTM 108952-DP	1120.00	Billings	Musselshell
03-18-41	MTM 108952-DQ	160.00	Billings	Musselshell
03-18-42	MTM 108952-DR	800.00	Billings	Musselshell
03-18-43	MTM 108952-F3	240.00	Billings	Sweet Grass
03-18-44	MTM 108952-FQ	80.21	Billings	Sweet Grass
03-18-45	MTM 108952-FX	680.00	Billings	Sweet Grass
03-18-46	MTM 108952-FW	245.08	Billings	Sweet Grass
03-18-47	MTM 108952-EE	642.95	Billings	Sweet Grass
03-18-48	MTM 108952-EF	1320.00	Billings	Sweet Grass
03-18-49	MTM 108952-EC	720.00	Billings	Sweet Grass
03-18-50	MTM 108952-D7	1040.00	Billings	Sweet Grass
03-18-51	MTM 108952-EA	960.00	Billings	Sweet Grass
03-18-52	MTM 108952-D8	1064.42	Billings	Sweet Grass
03-18-53	MTM 108952-D9	1395.73	Billings	Sweet Grass
03-18-54	MTM 108952-ED	600.00	Billings	Sweet Grass
03-18-55	MTM 108952-EB	1722.08	Billings	Sweet Grass
03-18-56	MTM 105431-HW	40.00	Billings	Stillwater
03-18-57	MTM 79010-8R	40.00	Billings	Stillwater
03-18-58	MTM 108952-EG	731.94	Billings	Sweet Grass
03-18-59	MTM 108952-EP	159.98	Billings	Sweet Grass
03-18-60	MTM 108952-EQ	279.36	Billings	Sweet Grass
03-18-61	MTM 108952-ER	911.54	Billings	Sweet Grass
03-18-62	MTM 79010-JJ	1556.04	Billings	Stillwater
03-18-63	MTM 108952-DU	80.00	Billings	Carbon

03-18-64	MTM 108952-FV	596.17	Billings	Stillwater
03-18-65	MTM 108952-FM	154.09	Billings	Stillwater
03-18-66	MTM 108952-FN	520.00	Billings	Stillwater
03-18-67	MTM 108952-FD	2559.56	Billings	Carbon
03-18-68	MTM 108952-FE	2359.70	Billings	Carbon
03-18-69	MTM 105431-KQ	1549.82	Billings	Carbon
03-18-70	MTM 105431-KG	560.00	Billings	Carbon
03-18-71	MTM 108952-FF	1184.33	Billings	Carbon
03-18-72	MTM 108952-FG	1000.00	Billings	Carbon
03-18-73	MTM 108952-FH	880.00	Billings	Carbon
03-18-74	MTM 108952-FJ	2000.00	Billings	Carbon
03-18-75	MTM 108952-FK	2403.08	Billings	Carbon
03-18-76	MTM 108952-FL	2320.00	Billings	Carbon
03-18-77	MTM 108952-G6	240.00	Butte	Park
03-18-78	MTM 108952-EL	320.00	Butte	Park
03-18-79	MTM 108952-G4	400.00	Butte	Park
03-18-80	MTM 108952-EM	640.00	Butte	Park
03-18-81	MTM 108952-EJ	398.46	Butte	Park
03-18-82	MTM 108952-FU	40.00	Butte	Park
03-18-83	MTM 108952-FT	1375.21	Butte	Park
03-18-84	MTM 108952-F4	653.60	Butte	Park
03-18-85	MTM 108952-FR	239.77	Butte	Park
03-18-86	MTM 93069	240.00	Hi-Line	Chouteau
03-18-87	MTM 108952-CR	80.00	Hi-Line	Liberty
03-18-88	MTM 108952-CT	40.00	Hi-Line	Liberty
03-18-89	MTM 108952-FC	120.00	Hi-Line	Hill
03-18-90	MTM 108952-CU	7.28	Hi-Line	Hill
03-18-91	MTM 108952-BQ	200.00	Hi-Line	Blaine
03-18-92	MTM 108952-E6	160.00	Hi-Line	Blaine
03-18-93	MTM 108952-FB	840.00	Hi-Line	Blaine
03-18-94	MTM 108952-E7	440.00	Hi-Line	Blaine
03-18-95	MTM 108952-E8	560.00	Hi-Line	Blaine
03-18-96	MTM 108952-E9	960.00	Hi-Line	Blaine
03-18-97	MTM 108952-FA	400.00	Hi-Line	Blaine
03-18-98	MTM 108952-PX	320.50	Hi-Line	Blaine
03-18-99	MTM 79010-A8	200.43	Hi-Line	Phillips
03-18-100	MTM 79010-B4	120.00	Hi-Line	Phillips
03-18-101	MTM 79010-A4	40.00	Hi-Line	Phillips
03-18-102	MTM 79010-B3	66.03	Hi-Line	Phillips

03-18-103	MTM 79010-B9	360.13	Hi-Line	Phillips
03-18-104	MTM 79010-C1	240.00	Hi-Line	Phillips
03-18-105	MTM 79010-HS	447.669	Hi-Line	Phillips
03-18-106	MTM 79010-HQ	9.807	Hi-Line	Phillips
03-18-107	MTM 105431-HR	600.000	Hi-Line	Valley
03-18-108	MTM 105431-HT	160.000	Hi-Line	Valley
03-18-109	MTM 79010-CI	280.000	Hi-Line	Glacier

This protest is filed on behalf of all of the protestors listed above. The mailing address to which correspondence regarding this protest should be directed is as follows:

Rebecca Fischer
WildEarth Guardians
2590 Walnut Street
Denver, CO 80205

INTEREST OF THE PROTESTING PARTIES

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 and objectively and robustly weighs the costs and benefits of authorizing the release of more pollutants known to cause health impacts and greenhouse gas emissions known to contribute to global warming.

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.

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. **Yellowstone Bend Citizens Council** is Northern Plains' affiliate located in Park County, 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. Northern Plains has members and local affiliates across Montana, including Carbon County Resource Council, Stillwater Protective Association, Cottonwood Resource Council, and Yellowstone Bend Citizens Council located in Carbon, Stillwater, Sweet Grass, and Park Counties, respectively.

Park County Environmental Council is a nonprofit organization based in Livingston, Montana. Park County Environmental Council safeguards and enhances the lands, water and wildlife in Yellowstone's northern gateway through a powerful community-based advocacy network.

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 about the threats from increased fracking.

350 Montana is a nonprofit organization based in Montana. 350 Montana works to reduce atmospheric CO₂ 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.

The Conservation Groups have participated in prior BLM decisionmaking for the March 2018 lease sale in Montana and incorporate by reference our October 30, 2017 Draft Environmental Assessment comments and accompanying exhibits. These incorporated comments and exhibits offer detailed technical information, expert reports, and legal analysis that the agency is required to consider in its decisionmaking process for the proposed action. *See Forest Guardians v. U.S. Fish & Wildlife Serv.*, 611 F.3d 692, 717 (10th Cir. 2010) ("The purpose behind NEPA is to ensure that the agency will only reach a decision on a proposed action after carefully considering the environmental impacts of several alternative courses of action and *after taking public comment into account.*") (emphasis added); *see also W. Watersheds Project v. Kraayenbrink*, 632 F.3d 472, 493 (9th Cir. 2011) ("Public scrutiny is essential to implementing NEPA, and the BLM was required to assess and consider both

individually and collectively the public comments received during the NEPA process and to respond to such in its Final EIS.”) (internal citations and quotations removed).

Conservation Groups’ October 30, 2017 comments on the draft EAs for the March 2018 lease sale were substantive and identified many flaws in the BLM’s NEPA analyses. Although the BLM does include a response to comments matrix as an appendix to each EA, the BLM fails to substantively change its EAs or otherwise address Conservation Groups’ comments. Thus, Conservation Groups protest the oil and gas lease sale scheduled for March 13, 2018 and request that the BLM refrain from offering all of the parcels up for lease until it completes its requirements under 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, *et seq.*, and the Mineral Leasing Act, 30 U.S.C. §§ 181–287.

**STATEMENT OF REASONS
IN SUPPORT OF CONSERVATION GROUPS’ PROTEST OF BLM’S
MARCH 2018 COMPETITIVE OIL & GAS LEASE SALE**

I. The BLM’s Three Environmental Assessments Violate the National Environmental Policy Act.

The BLM’s three environmental assessments fall short of complying with NEPA for six reasons. First, the BLM continues to improperly segment its NEPA analyses into three different EAs which subsequently defer analysis of impacts to the Application Permit to Drill (“APD”) stage. Second, the BLM continues to fail to analyze a reasonable range of alternatives. Third, the BLM fails to fully analyze the impacts from hydraulic fracturing and horizontal drilling in the lease sale EAs or underlying Resource Management Plans (“RMPs”) and Final Environmental Impact Statements (“FEISs”). Fourth, the BLM fails to accurately estimate reasonably foreseeable development for the various lease parcels. Fifth, the BLM fails to analyze the direct and cumulative impacts from the issuance of the lease parcels in conjunction with other BLM lease sales. Finally, the agency fails to assess the significance of greenhouse gas emissions in terms of carbon costs from the lease sale.

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.* at 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.* at 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.* at § 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* 40 C.F.R. § 1508.13; *see also* 43 C.F.R. § 46.325(2).

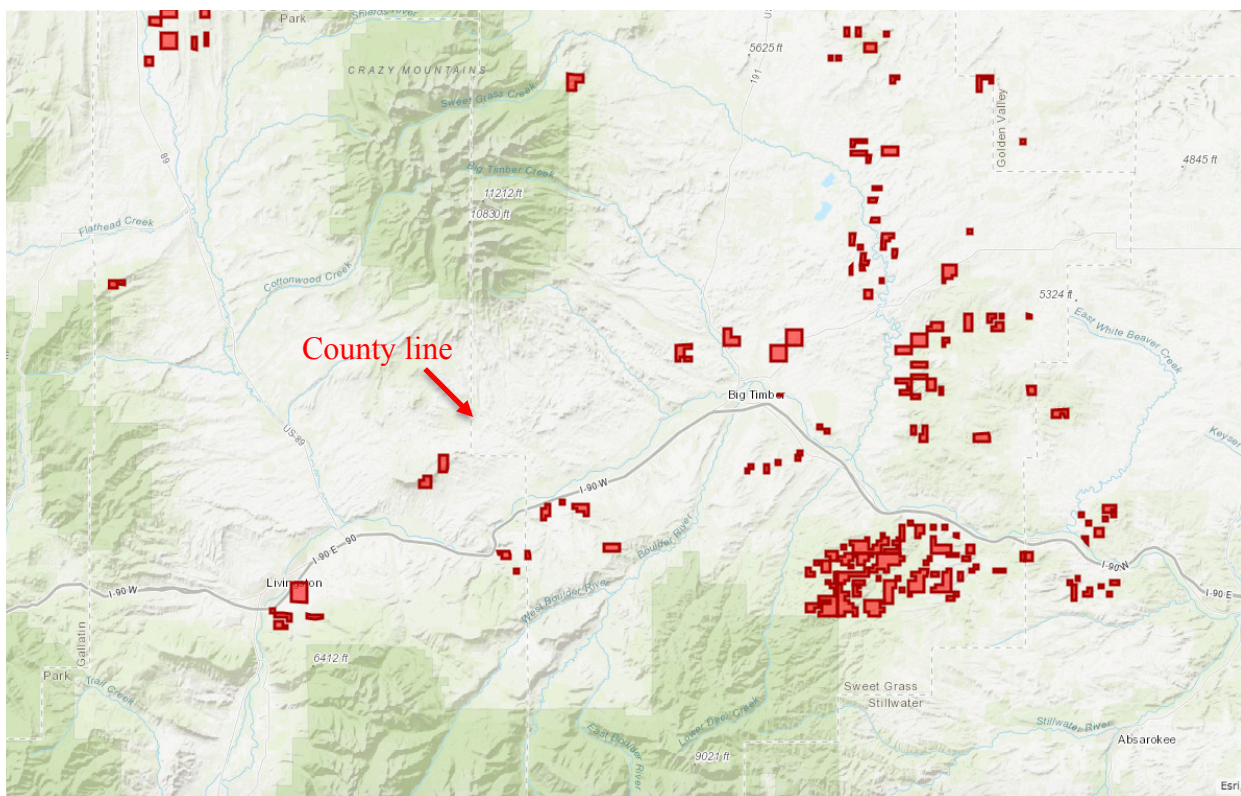
Within an EA or EIS, the scope of the analysis must include “[c]umulative actions” and “[s]imilar actions.” 40 C.F.R. §§ 1508.25(a)(2) and (3). Cumulative actions include action that, “when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the 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.*

A. The BLM Improperly Segments the March 2018 Lease Sale into Three Environmental Assessments.

NEPA mandates that “[a]gencies shall use the criteria for scope (§ 1508.25) to determine which proposal(s) shall be the subject of a particular statement. Proposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement.” *Id.* § 1502.4. In order to adequately assess the scope of the environmental impacts of a proposed action, the BLM must evaluate three types of actions: (1) connected actions, (2) cumulative actions, and (3) similar actions. *Id.* § 1508.25. Connected actions “are closely related and therefore should be discussed in the same impact statement.” *Id.* Actions are connected if they: “(i) Automatically trigger other actions which may require environmental impact statements; (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously; (iii) Are interdependent parts of a larger action and depend on the larger action for their justification.” *Id.* Cumulative actions are those actions that “when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement.” *Id.* Similar actions are those actions that “when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography.” *Id.*

“The purpose of this requirement [40 C.F.R. § 1508.25] is to prevent an agency from dividing a project into multiple actions, each of which individually has an insignificant environmental impact, but which collectively have a substantial impact.” *Great Basin Mine Watch v. Hankins*, 456 F.3d 955, 969 (9th Cir. 2006) (citation and internal quotation marks omitted). Unfortunately, attempting to avoid a finding of significance by dividing the March 2018 lease sale into three EAs is precisely what the BLM does here.

There are a number of reasons why BLM should analyze all of the lease parcels in a single NEPA document. To start, the Butte and Billings Field Office lease sale parcels are directly adjacent to each other geographically, as shown by the map below. *See also*, BLM, *Map of Oil and Gas Parcels Under Review for March 13, 2018 Competitive Lease Sale*, https://eplanning.blm.gov/epl-front-office/projects/nepa/87486/116883/142560/Oil_and_Gas_Parcels_Under_Review_March_2018_BLM_Montana_Competitive_Lease_Sale.pdf. Indeed, the BLM admits in the Butte and Billings EAs that wells from these parcels could be drilled into the same formation—the Crazy Mountain Basin. *See* Billings FO EA at 16–17; Butte FO EA at 12. Thus, at a minimum, the lease parcels for the Butte and Billings FO’s are cumulative, similar actions based on potentially significant on-the-ground impacts, geographic location, and timing.



Case law in the Ninth Circuit also supports the conclusion that the BLM should consider all of the lease parcels together in a single NEPA document. In *Blue Mountains Biodiversity Project v. Blackwood*, the Ninth Circuit held that five potential logging projects in the same watershed were cumulative actions because “all of the proposed [timber] sales were reasonably foreseeable [and] . . . developed as part of a comprehensive forest recovery strategy.” 161 F.3d 1208, 1215 (9th Cir. 1998). The court then noted that “[a]t the very least, these sales raise substantial questions that they will result in significant impacts.” *Id.* Here, the BLM admits that industry could drill a minimum of 8 wells within the Crazy Mountain Basin in the Billings Field Office and a minimum of 4 wells within the Basin in the Butte Field Office. Furthermore, as shown by the map below, at least one of these four wells (MTM 108952-FR, in purple) would occur right on the border between field offices.

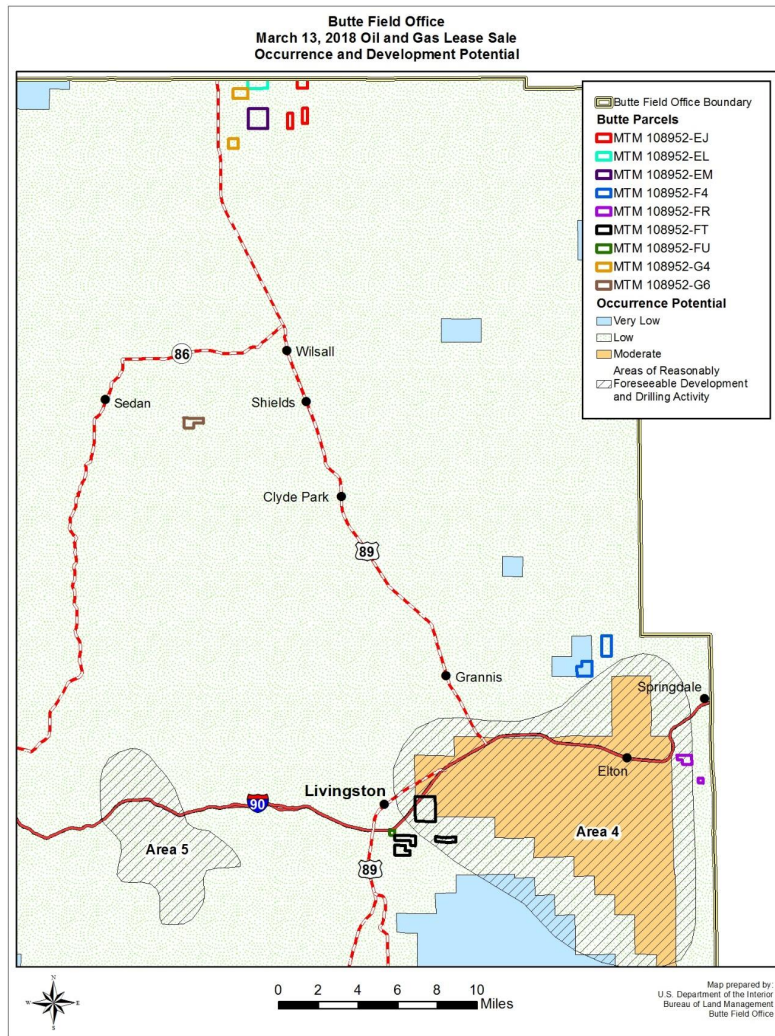


Figure 1: Development Potential for the proposed nine lease parcels, Butte FO EA at 14.

Clearly, development within the same geological formation is reasonably foreseeable, and, a combined total of 12 wells within the same geological formation could reasonably result in cumulative, significant impacts. NEPA is clear. “Significance cannot be avoided by . . . breaking [an action] down into small component parts.” 40 C.F.R. § 1508.27(b)(7).

In response, the BLM argues that it prepared three EAs for the March sale due to workload considerations and that the respective RMPs/FEISs⁵ for each BLM field office contain

⁵ All three of the EAs for the March lease sale tier to broader RMPs and Final EISs. The Billings FO EA tiers to the 2015 Billings Field Office Resource Management Plan Amendment and accompanying FEIS, available at: <https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage¤tPageId=108174>. The Butte FO EA tiers to the 2009 Butte Approved RMP and accompanying FEIS, available at: <https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage¤tPageId=102079>. The Hi-Line EA tiers to the 2016 Hi-Line RMP and accompanying FEIS, available at: <https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage¤tPageId=99399>.

the required cumulative analysis. *See, e.g.*, Billings EA, App'x G at 3–4; Butte EA, App'x D at 3; Hi-Line EA, App'x F at 2. But, this argument fails for a number of reasons. Environmental impacts are not constrained by BLM field office borders, and NEPA does not provide an exemption to section 1508.25 based on agency workload. More importantly, the Ninth Circuit has soundly rejected the BLM's latter argument. As the court stated in *Blue Mountains Biodiversity Project*, “[n]othing 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 or magnitude of a project.” 161 F.3d at 1214. In sum, the BLM cannot rely on the RMPs/FEISs from each field office to meet its requirements under NEPA because the RMPs do not contain site-specific analyses for the lease sale parcels. Moreover, the BLM cannot arbitrarily divide its NEPA analysis for the March lease sale into three separate documents when it is clear that the significant environmental impacts of the parcels could occur within the same geographic location.

Additionally, the need to consider the entire lease sale in one NEPA document extends to all of the lease parcels, not just those in the Butte and Billings FO. As discussed in more detail in section G, there are multiple federal lease sales occurring over the same time period and in similar locations, and these sales will cause significant greenhouse gas emissions. Because of these potentially cumulative, significant impacts, the BLM must look at the March lease sale as one federal action under NEPA.

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

On a similar note, throughout the various EAs for the lease sale, the BLM attempts to further segment its analysis by claiming that it will conduct site-specific NEPA analyses at the Application Permit to Drill (“APD”) stage. *See, e.g.*, Billings EA at 9 (“A detailed site-specific analysis and mitigation of activities associated with any particular lease development would occur when a leaseholder submits an application for permit to drill (APD).”); Butte EA at 7 (“A detailed site-specific analysis and mitigation of activities associated with any particular lease development would occur when a leaseholder submits an application for permit to drill (APD).”); Hi-Line EA at 41 (“Any potential effects on water resources from the sale of lease parcels would occur at the time the leases are developed at the APD stage.”).

“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.”). 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: [a]re interdependent parts of a larger action and depend on the larger action for their justification.” *Id.*

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. Furthermore, NEPA requires that agencies prepare an EIS before there is “any irreversible and irretrievable commitment of resources.” *Conner v. Burford*, 848 F.2d 1441, 1452 (9th Cir. 1988). The Ninth Circuit has held that 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 at issue have a NSO stipulation for the entire parcel. 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 other cumulative impacts. 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.

In response to this argument, BLM argues that because it is tiering to the broader RMP/FEISs for the relevant field offices and that “it is unknown whether or not a particular parcel will be sold and a lease issued and what potential impacts to those resources may occur,” reliance on an analysis at the APD stage is reasonable. Billings EA, App’x G at 5; *see also* Butte EA, App’x D at 4–5; Hi-Line EA, App’x F at 3, 6 (“Analyzing on-the-ground impacts is outside the scope of the leasing EA”). But, as noted above, the Ninth Circuit has directly rejected the first argument regarding the RMP analysis in its decision in *Blue Mountains Biodiversity Project*. 161 F.3d at 1214 (“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 or magnitude of a project.”). The court has resoundingly rejected the second argument as well. *See Conner*, 848 F.2d at 1450.

Appellants also complain that the uncertain and speculative nature of oil exploration makes preparation of an EIS untenable until lessees present precise, site-specific proposals for development. The government’s inability to fully ascertain the precise extent of the effects of mineral leasing in a national forest is not, however, a justification for failing to estimate what those effects might be before irrevocably committing to the activity. *Cf. EDF v. Andrus*, 596 F.2d at 851 (uncertainty about environmental impact of use of water diverted pursuant to option contract “does not obviate the importance of the decision to divert and the necessity to evaluate the environmental consequences of that decision”). *Appellants’ suggestion that we approve now and ask questions later is precisely the type of environmentally blind decision-making NEPA was designed to avoid.*

Id. at 1450–51 (emphasis added).

Finally, the need to do a full NEPA at the lease sale stage is further supported by the fact that the BLM consistently approves APDs without further NEPA analysis. For example, on September 27, 2017, the Billings FO approved an APD for an oil well and pipeline through a categorical exclusion. Exhibit 1 to Conservation Groups’ Oct. 30, 2017 comments, *Vanguard*

EBET2-390 APD, DOI-BLM-MT-A010-2G17-0058-CX, BLM, https://eplanning.blm.gov/epl-front-office/projects/nepa/90806/122881/149937/DOI-BLM-MT-A010-2017-0058-CX_without_signature_page.pdf. Other BLM field offices frequently use categorical exclusions as well, and use of these is very likely to increase under the current administration.⁶

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 Analyze and Assess a Reasonable Range of Alternatives.

The BLM also fails to analyze and assess a reasonable range of 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 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”).

Here, because BLM admits through its Reasonably Foreseeable Development scenarios for the lease parcels that many of the proposed lease parcels may never see development, it appears the proposed leasing would simply be a major giveaway to the oil and gas industry. As it stands, of the 2,101,573 million acres of federal oil and gas under lease in Montana, only 710,617 acres are in production.⁷ 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.

⁶ *See, e.g.*, Dep’t of Interior, *Secretarial Order No. 3354* (July 7, 2016), <https://www.doi.gov/sites/doi.gov/files/uploads/doi-so-3354.pdf>; Office of the White House, *Presidential Executive Order on Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure* (Aug. 15, 2017), <https://www.whitehouse.gov/the-press-office/2017/08/15/presidential-executive-order-establishing-discipline-and-accountability>.

⁷ 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>.

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 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.

In response to this argument, the BLM argues that the proposed alternatives are outside to scope of its analysis and that the RMP/FEIS for each field office designates which lands are available for leasing. *See, e.g., Billings EA, App'x G at 6–7.* But, 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 consider a reasonable range of alternatives. 40 C.F.R. § 1502.14. Simply because the 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.

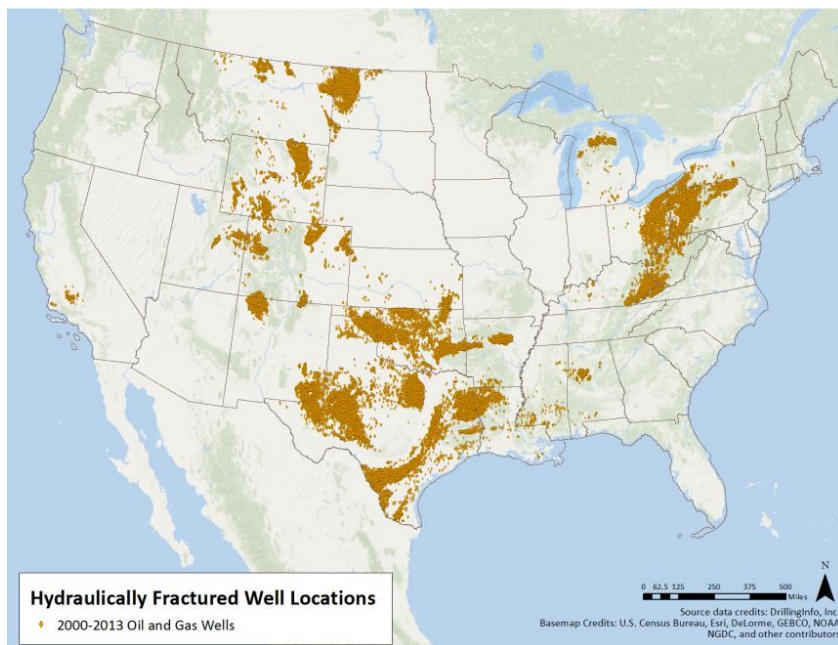
In sum, because the BLM's proposed lease parcels are speculative, risky proposals, the BLM must ensure that the American public is fairly compensated for the costs of the lease sale and development by including alternatives with fiscal safeguards.

D. The BLM Fails to Analyze the Impacts of Hydraulic Fracturing and Horizontal Drilling.

Although the Conservation Groups appreciate the fact that the BLM has added in additional information regarding the *process* of hydraulic fracturing (“fracking”), the BLM still fails to fully analyze the *impacts* fracking in the lease sale EAs or the underlying RMPs/FEISs.

As the BLM acknowledges, 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, and some of the lease parcels are located near these plays. Indeed, the revised Billings EA includes a map that (although small) indicates that wells near the lease parcels have been drilled and fracked.

Figure 2. Locations of the approximately 275,000 wells drilled and hydraulically fractured between 2000 and 2013. (USEPA, 2016)



Source: Billings Field Office EA at 20.

With an increase in fracking and horizontal drilling comes increased impacts to air, climate, water, and land. For example, according to the EPA, between 2002 and 2006, oil and gas “[p]roduction emissions [for VOCs, NO_x, CO, SO₂, and PM₁₀] in Montana increased by almost 75 percent,” and this trend is likely to continue. See 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 2015 to 2012. Env’t America, *Fracking by the Numbers: Key Impacts of Dirty Drilling at the State and National Level* 21 (2013), https://environmentamerica.org/sites/environment/files/reports/EA_FrackingNumbers_scrn.pdf.

Unfortunately, the BLM fails to analyze these increased impacts in either the EAs for the lease sales or the RMP/FEISs for the field offices. As noted above, all of the EAs for the three

field offices tier to broader RMPs and Final EISs. Out of the three RMPs and FEISs referenced above, only the Hi-Line RMP/FEIS comes close to fully analyzing the impacts of fracking coupled with directional drilling. The Billings RMP/FEIS, summarily dismisses the possibility of fracking in its response to comments. *See, e.g.*, Billings RMP/FEIS, Vol. 3, Ch. 5, at 5-87 (“There is no fracking currently occurring in the Billings Field Office and it is unlikely to occur.”) Although the Billings RMP/EIS includes a description of the process of fracking, it fails to include an analysis of the impacts of fracking and horizontal drilling. *See* Billings RMP/FEIS Vol. 1, Ch. 3, at 3-188 to 3-190; *see generally* Chapter 4: Environmental Impacts. This is in spite of evidence that fracking and horizontal drilling has occurred and will likely continue to be used in Carbon County. For example, in July 2016, the Billings Gazette reported that the Carbon County Commissioners had passed setbacks as a result of plans by Energy Corp. of American to “bring the Bakken to the Beartooths.” Tom Lutey, *Carbon County Requires Distance Between Oil Wells, Homes*, Billings Gazette, July 18, 2016, http://billingsgazette.com/news/local/government-and-politics/carbon-county-requires-distance-between-oil-wells-homes/article_2f383c56-1392-566d-989f-a4bf539ada83.html. The Billings FO even acknowledges that “forecast drilling activity would be somewhat higher than the levels of the past 20 years [due to new oil and gas plays],” Billings EA at 16.

The Butte RMP/FEIS is even more devoid of any discussion of impacts from fracking and horizontal drilling. Wells that use hydraulic fracturing and horizontal drilling to stimulate production have been drilled into the Cody Shale formation in the Park County area. *See* Exhibit 2 to Conservation Groups’ Oct. 30, 2017 Comments, Well File for Leviathan (Arthun) 3-6, Bill Barrett Corporation, API-067-21010, available from the Mont. Board of Oil and Gas Online Oil and Gas Info. Sys.; *see also* Linda Halstead-Acharya, *Energy Speculation in Sweet Grass County Stirs Up Big Dreams, Big Questions*, Billings Gazette, Dec. 29, 2008, http://billingsgazette.com/news/state-and-regional/montana/energy-speculation-in-sweet-grass-county-stirs-up-big-dreams/article_485eb01a-0755-5032-8e7f-133d4f91f8ca.html. And, if the price of oil increases, more drilling is likely to occur. But, the Butte RMP/FEIS completely omits any mention of fracking.

The BLM’s EAs for the March sale fail remedy this problem. As noted above, although the BLM includes a new section titled “Oil and Gas Development, including Hydraulic Fracturing” in the Billings EA at 19–24 and the Butte EA at 15–19, this information is simply a recitation of the process of fracking. For example, the BLM includes information on when fracking became widespread, the total number of wells fracked nationwide and in Montana, how wells are fracked, what chemicals are used, and the average water quantity used. Although these latter two issues come closer to constituting a discussion of the impacts of fracking, the EAs still fall short. The BLM does not include any information about the amount of wastewater generated by fracking, the acreage of land that will be disturbed for wastewater and drilling mud impoundments, the increase in truck traffic associated with fracking, the impacts on roads, the socioeconomic impacts on small towns from the influx of oil and gas workers, the air pollutants released from deeper wells, the increase in greenhouse gas emissions such as methane, the impacts to human health, and the impacts to wildlife to name a few. Numerous studies document these impacts. *See, e.g.*, Concerned Health Professionals of New York, *Compendium of Scientific, Medical, And Media Findings Demonstrating Risks and Harms of Fracking (Unconventional Gas and Oil Extraction)* (4th ed. 2016),

http://concernedhealthny.org/wp-content/uploads/2016/12/COMPENDIUM-4.0_FINAL_11_16_16Corrected.pdf; see also Env't America, *Fracking by the Numbers: Key Impacts of Dirty Drilling at the State and National Level* 21 (2013), https://environmentamerica.org/sites/environment/files/reports/EA_FrackingNumbers_scrn.pdf. Further, the Government Accountability Office and the Environmental Protection Agency have issued studies regarding the impacts of fracking. See GAO, *Information on Shale Resources, Development, and Environmental and Public Health Risks* (Oct. 2012), <https://www.gao.gov/products/GAO-12-732>; EPA, *Assessment of the Potential Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources* (Dec. 2016), <https://cfpub.epa.gov/ncea/hfstudy/recordisplay.cfm?deid=332990>. The BLM cannot ignore this readily available information and claim that its duties under NEPA for the March 2018 lease sale are complete.

In sum, none of the RMPs/FEIS or EAs for the lease parcels, come close to fully addressing the impacts of fracking and horizontal drilling despite evidence that such techniques have been used and will be used in the future. As a result, the BLM's three EAs and FONSI for the lease sale cannot stand, and the agency must remove all of the lease parcels from consideration.

E. The BLM's Reasonably Foreseeable Development Scenarios for the Billings, Butte, and Hi-Line Parcels Are Not Accurate.

The BLM must also analyze the reasonably foreseeable development of the lease parcels in context with current, on-the-ground information. See *High Country Conservation Advocates v. U.S. Forest Serv.*, 52 F.Supp. 3d 1174 (D. Colo. 2014) (“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 proposed action and alternatives.”). While we appreciate BLM's attempts to calculate the reasonably foreseeable development scenario for the proposed lease parcels, the agency's numbers appear grossly underestimated and completely unrealistic.

For example, for the Billings FO parcels, the BLM estimates that out of 76 parcels, only 5.4 wells per year (54 wells for the 10-year lease timeframe) will be developed. See Billings FO EA at 16.⁸ BLM's assessment of reasonably foreseeable oil and gas wells is based on an overly simplistic assessment of the percentage of lease acreage within the total acreage of a “potential” development area. This is a bizarre method for assessing reasonably foreseeable wells. Given that the point of leasing is to accommodate industry demands to develop oil and gas wells, it is astonishing that the BLM would project such a small amount of development resulting from the proposed leases. This raises serious questions over whether the BLM should actually be offering most of the lease parcels for sale in the first place.

⁸ Both the Butte FO EA and the Hi-Line EA include a similar analysis. See Butte FO EA at 12-13 (“Based on RFD analysis, an estimate was made that as many as four conventional oil and gas wildcat wells (exploratory wells drilled in an area with no existing production) might be drilled in the Butte Field Office Planning Area 4 in the next 15 to 20 years.”); see Hi-Line EA at 16-17 (“From this table it is estimated that a total of 11 (eleven) wells will be drilled on the 24 parcels that are being offered”).

A more logical approach would be one similar to that taken by the Vernal Field Office in Utah. For example, for the December 2017 sale, the Vernal FO presumed that, at a minimum, one well would be developed on every lease parcel offered for sale. Exhibit 3 to Conservation Groups' Oct. 30, 2017 comments, Vernal Field Office, *December 2017 Competitive Oil and Gas Lease Sale Final Environmental Assessment*, App'x D (Sept. 1, 2017), <https://eplanning.blm.gov/epl-front-office/projects/nepa/80165/119135/145398/FEA.pdf>. The Vernal FO also considered whether the parcel in question was within 2 miles of a well which had produced oil or gas within the past 6 years. *Id.* This approach addresses the fact that industry has nominated the lease parcels and thus, the likelihood of development is higher. This approach also takes into account existing production and ensures that the agency's development assumptions are current based on nearby wells. Neither of these assumptions are incorporated into the BLM's approach for this lease sale. Thus, the BLM's development assumptions are misleading and likely inaccurate, and the EAs are insufficient and fail to demonstrate that the FONSI is appropriate.

The BLM responds to this argument with statewide and field office-wide drilling statistics from 2007-2016. *See* Billings EA, App'x G at 8. But, there is no doubt that the size of federal lease sales has drastically increased since the Trump Administration has taken office.⁹ In addition, industry interest in Montana has increased. For example, 80% (166 out of 204 parcels) in the December 2017 lease sale in Montana sold in either the competitive or noncompetitive sale.¹⁰ With the inclusion of site-specific analyses comes the opportunity to include current, on-the-ground data regarding the specific parcels, and the BLM would be wise to take this opportunity.

The BLM also argues that information from the Vernal Field Office is inapplicable because that office experiences a higher rate of development. But, what is most important about the Vernal Field Office's approach, which the BLM fails to consider, is that it takes into account whether the parcel proposed for lease is within 2 miles of a well which had produced oil or gas within the past 6 years. The Montana BLM's analysis stems from the broad overview provided by the Reasonably Foreseeable Development scenarios developed for each field office's RMPs. It does not consider site specific, on-the-ground data for the particular lease parcels — information which is needed at the lease sale stage in order to fully disclose and analyze the impacts of the proposed action.

F. 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 also fails to assess the direct and indirect impacts from air and greenhouse gas emissions that would result from issuing the proposed lease sale parcels. First, the BLM fails to actually calculate site-specific air emissions that will occur from construction and development

⁹ *See* Rebecca Fischer, *Public Lands Giveaways for Fracking Set to Double in Size in 2018*, <https://climatewest.org/2017/12/13/public-lands-giveaways-for-fracking-set-to-double-in-size-in-2018/>.

¹⁰ Results for the BLM's December 2017 competitive oil and gas lease sale in Montana are available here: https://eplanning.blm.gov/epl-front-office/projects/nepa/78400/128308/156156/12-12-17_Comp_Results.pdf. Results for the noncompetitive sale are available here: https://eplanning.blm.gov/epl-front-office/projects/nepa/78400/128309/156157/12-12-17_Noncomp_Results.pdf.

of the proposed lease parcels. Second, although the BLM calculates downstream greenhouse gas emissions from combustion of any produced oil and gas, the BLM fails to assess the greenhouse gas emissions that will result from construction and production of the proposed leases. *See, e.g.*, Billings FO EA at 36–37; Butte FO EA at 31–32; Hi-Line EA at 31–32.

In response to a similar comment by Northern Plains Resource Council, the BLM claims that it “is not able to predict actual local impacts from the projected level of GHG emissions associated with the proposed lease sale.” Billings EA, App’x G at 17; *see also* Butte EA, App’x D at 13; Hi-Line EA (same), App’x F at 11 (same).

Estimating direct greenhouse gas emissions from leasing is entirely possible and has been done by the BLM in the past. For example, in the Royal Gorge Field Office of Colorado, the BLM contracted with URS Group Inc. to prepare an analysis of air emissions from the development of seven oil and gas lease parcels. *See* Exhibit 4 to Conservation Groups’ Oct. 30, 2017 Comments, URS Group Inc., “Draft Oil and Gas Air Emissions Inventory Report for Seven Lease Parcels in the BLM Royal Gorge Field Office,” Prepared for BLM, Colorado State Office and Royal Gorge Field Office (July 2013). This report estimated greenhouse gas emissions on a per well basis. *See* Exhibit 4 at 3, 5. This report was later supplanted by the Colorado Air Resource Management Modeling Study, or CARMMS, which estimated reasonably foreseeable emissions of greenhouse gases, criteria pollutants, and hazardous air pollutants associated with oil and gas development throughout Colorado, as well as part of New Mexico, and modeled air quality impacts. *See* Exhibit 5 to Conservation Groups’ Oct. 30, 2017 Comments, ENVIRON, “Colorado Air Resource Management Modeling Study (CARMMS) 2021 Modeling Results for the High, Low and Medium Oil and Gas Development Scenarios,” Prepared for BLM Colorado State Office (January 2015) (updated report available at https://www.blm.gov/sites/blm.gov/files/program_natural%20resources_soil%20air%20water_aico_quick%20link_CARMMS.pdf). As part of the CARMMS report, the BLM estimated annual per well emissions, including greenhouse gas emissions, as follows:

Phase	PM ₁₀	PM _{2.5}	VOC	CO	NO _x	SO ₂	CO ₂	CH ₄	N ₂ O	HAP
Conventional Construction	5.21	0.64	0.05	0.23	0.72	0.02	108.1	0.00	0.00	0.01
CBM Construction	3.37	0.44	0.03	0.12	0.36	0.01	56.58	4.06	0.00	0.00
Conventional Production	1.15	0.15	6.67	1.30	0.73	0.00	251.9	17.14	0.00	0.43
CBM Production	2.25	0.25	13.10	1.13	0.62	0.00	181.6	19.05	0.00	1.31

It is notable that, based on this estimate, total CO₂ emissions associated with construction and production of conventional (rather than “CBM” or coalbed methane) wells, could be as much as 360 tons per year. And, to top it off, this number would very likely increase for an unconventional oil or gas well, as shown by the Kleinfelder Report, which estimates emissions for representative oil and gas wells in the Uinta, Upper Green River, San Juan, Williston, and Denver Basins. *See* Exhibit 6 to Conservation Groups’ Oct. 30, 2017 Comments, Kleinfelder, “Air Emissions Inventory Estimates for a Representative Oil and Gas Well in the Western United

States,” Report Prepared for Bureau of Land Management (March 25, 2013). Either way, the BLM has the capability to analyze these emissions and cannot forgo this analysis at the lease sale stage. *See Conner v. Burford*, 848 F.2d 1441, 1450.

G. 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, the BLM’s analyses in all three EAs fail to account for cumulative impacts, including cumulative impacts from greenhouse gas emissions from cumulative and similar actions. More specifically, 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 an agency to 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). Indeed, 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 (2010) (quoting *Lands Council v. Powell*, 395 F.3d 1019, 1027 (9th Cir. 2005)).

Here, the BLM’s analysis is entirely devoid of any consideration of the cumulative impacts from 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 thousands of acres of oil and gas leases, including:

- In Montana/North Dakota, in June 2017 the BLM leased 49 parcels (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¤tPageId=139120>.
- Colorado: On March 9, 2017, the BLM sold 17 parcels covering 16,447.180 acres. *See* <https://eplanning.blm.gov/epl-front->

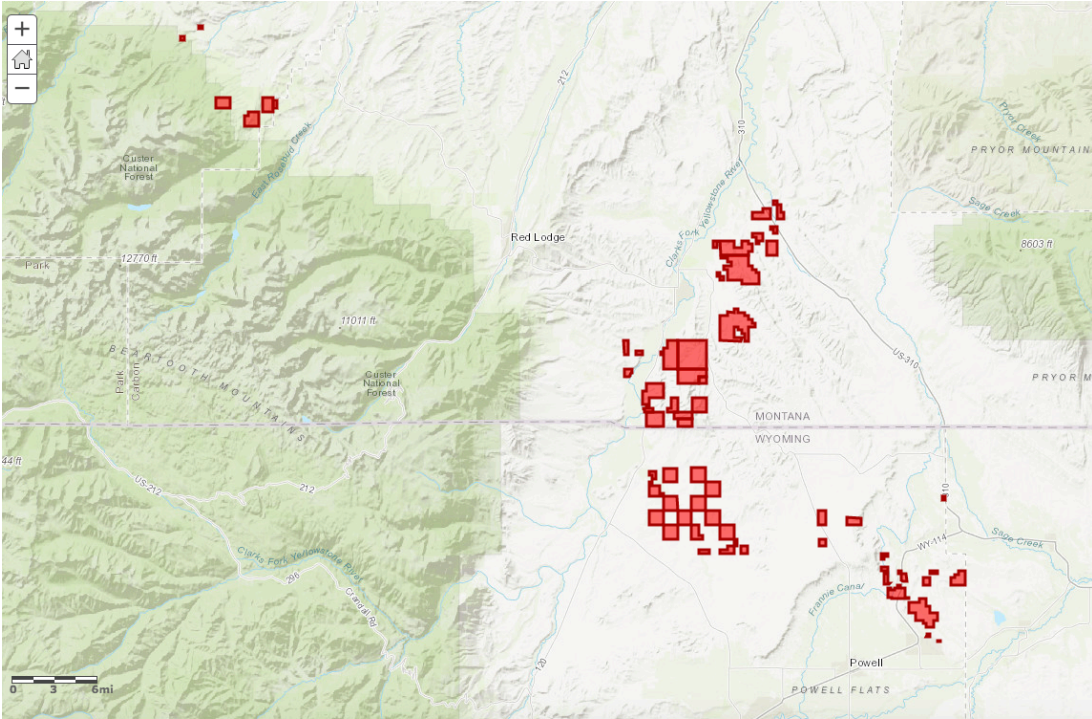
[office/projects/nepa/70207/99188/120209/Sale_Results_March2017.pdf](https://eplanning.blm.gov/epl-front-office/projects/nepa/70207/99188/120209/Sale_Results_March2017.pdf). On June 8, 2017, the BLM sold 70 parcels covering 63,268.120 acres in western Colorado. See https://eplanning.blm.gov/epl-front-office/projects/nepa/70241/109218/133789/Sale_Results_June2017.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, 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 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. 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). 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.
- **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 BLM is also proposing to lease 208 parcels (191,708.13 acres) for the March 2018 sales in Colorado, Montana, and Wyoming.**¹¹

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 proposed in the differing states are. For example, the March 2018 lease parcels for the Billings FO in Montana

¹¹ For the March 2018 lease sale in Montana, the BLM is proposing to lease 110 parcels comprising 63,616 acres. See “2018 Lease Sales,” “March Sale,” at <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing/regional-lease-sales/montana-dakotas>. For the March 2018 lease sale in Wyoming, the BLM is proposing to lease 89 parcels totaling 125,507 acres https://eplanning.blm.gov/epl-front-office/projects/nepa/85072/114241/140062/Press_Release.WRBBD.2017Jul24.b.pdf. And, for the March 2018 lease sale in Colorado, the BLM is proposing 9 parcels containing 2585.130 acres. https://eplanning.blm.gov/epl-front-office/projects/nepa/80672/108369/132690/TRFO_Initial_Parcel_List_Scoping_March2018.pdf.

and the Cody FO in Wyoming are actually geographically adjacent to each other as shown by the map below.¹²



*Map Generated by WildEarth Guardians on ArcGIS.com
Using BLM Geographic Information Services (GIS) Data*

In response to this, the BLM again defers to the analyses provided by the respective RMPs and FEISs. *See, e.g., Billings EA, App’x G at 18.* But, the Ninth Circuit has explicitly rejected this argument, explaining 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 (2010) (quoting *Lands Council v. Powell*, 395 F.3d 1019, 1027 (9th Cir. 2005)); *see also Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989, 994 (9th Cir. 2004) (“A proper consideration of the cumulative impacts of a project requires some quantified or detailed information; general statements about possible effects and some risk do not constitute a hard look absent a justification regarding why more definitive information could not be provided.”) (internal quotations and changes omitted). Specifically, in *Te-Moak*, the BLM had provided a list of reasonably foreseeable federal activities in the cumulative impacts area, but because the BLM “failed to include the required ‘quantified or detailed information,’” the court held that the EA did not adequately address cumulative impacts. *Id.* Although it is arguable what projects are within the cumulative impacts area and reasonably foreseeable, at a minimum, the BLM should have analyzed the March 2018 lease sale in Wyoming because the parcels are directly next to

¹² The parcels for the March 2018 lease sale in Wyoming in the Cody Field Office are discussed in the High Plains EA available at https://eplanning.blm.gov/epl-front-office/projects/nepa/85072/114136/139365/181Q_WRBBD_EA_ver.1.pdf.

parcels for the March 2018 lease in Wyoming. Instead, the BLM relies entirely on the analyses in the field office RMPs/FEISs in direct contradiction to the decision in *Klamath-Siskiyou Wildland Center* as well. 387 F.3d at 997; *see also Conner v. Burford*, 848 F.2d 1441, 1452 (9th Cir. 1988). As the court stated in *Klamath-Siskiyou Wildland Center*,

Tiering to the RMP-EIS cannot save the EAs. We accept the BLM’s argument that the RMP-EIS contains general statements about the cumulative effects of logging across the Medford District. And the EAs at issue here contain general statements about the cumulative effects of logging in the [South Fork Little Butte Creek] watershed. What is missing in the documentation, however, is any *specific* information about the cumulative effects. Neither in the RMP-EIS nor in the EAs does the agency reveal the incremental impact that can be expected on the SFLBC watershed as a result of each of *these* four successive timber sales.

387 F.3d at 997 (emphasis in original).

Finally, the need to take into account “similar” and “cumulative” actions is underscored by the fact that the BLM acknowledges that the proper geographic area for analyzing and assessing the impacts of greenhouse gas emissions is on a national scale. Both the Billings FO EA and Butte FO EA in fact assess the significance of downstream greenhouse gas emissions from the proposed lease sale in the context of statewide and national greenhouse gas emissions. *See, e.g.*, Billings FO EA at 37 (“According to the USEPA, this estimated quantity [of downstream GHG emissions] represents approximately 0.0001% of total U.S. GHG emissions reported in 2015 and 0.018% of Montana GHG emissions reported in 2015.”); *see also* Butte FO EA at 32 (“According to the USEPA, this estimated quantity represents approximately 0.00002% of total U.S. 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 EAs and subsequent FONSIIs invalid.

H. 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 the agency extensively discusses the economic benefits of the proposed leases, Billings FO EA at 91-92, Butte FO EA at 58–60, Hi-Line EA at 79–80, 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 7 to Conservation Groups’ Oct. 30, 2017 Comments, U.S. Environmental Protection Agency (“EPA”), “Fact Sheet: Social Cost of Carbon” (Nov. 2013) at 1, available at https://19january2017snapshot.epa.gov/climatechange/social-cost-carbon_.html. 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 8 to Conservation Groups’ Oct. 30, 2017 Comments, 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 9 to Conservation Groups’ Oct. 30, 2017 Comments, 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 10 to Conservation Groups’ Oct. 30, 2017 Comments, 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 11 to Conservation Groups’ Oct. 30, 2017 Comments, 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 12 to Conservation Groups’ Oct. 30, 2017 Comments, 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 11 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 13 to Conservation Groups’ Oct. 30, 2017 Comments, 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 (95 th 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 11.

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 14 to Conservation Groups’ Oct. 30, 2017 Comments, 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 15 to Conservation Groups’ Oct. 30, 2017 Comments, 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 CO₂e increase. See Exhibit 16 to Conservation Groups’ Oct. 30, 2017 Comments, 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 7 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 17 to Conservation Groups’ Oct. 30, 2017 Comments, 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 7.

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 18 to Conservation Groups’ Oct. 30, 2017 Comments, 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 CO₂ accumulates in the atmosphere, delaying action increases CO₂ concentrations. Thus, if a policy delay leads to higher ultimate CO₂ concentrations, that delay produces persistent economic damages that arise from higher temperatures and higher CO₂ concentrations. Alternatively, if a delayed policy still aims to hit a given climate target, such as limiting CO₂ 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 19 to Conservation Groups’ Oct. 30, 2017 Comments, 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 this 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 20 to Conservation Groups’ Oct. 30, 2017 Comments, William D. Nordhaus, Revisiting the Social Cost of Carbon, PNAS, Feb. 14, 2017, <http://www.pnas.org/content/114/7/1518.full.pdf>.

BLM presents multiple arguments as to why it fails to use the social cost of carbon metric to assess the significance of greenhouse gas emissions from the lease sale. First, BLM argues that the public would not understand the social cost of carbon protocol and that a qualitative discussion about potential impacts is more effective. *See, e.g.*, Billings EA, App’x G at 18–19. But, quantitatively assessing the significance of greenhouse gas emissions within the context of climate change is essential for the public’s understanding of federal oil and gas leasing, and a qualitative analysis fails to do this. Further, the BLM’s decision to not disclose the social cost of carbon results in a more misleading analysis. For example, the BLM includes specific charts in each EA which disclose the expected revenue associated with the March sale (*see, e.g.*, Hi-Line EA, Table 19 below), but fails to include the cost of releasing additional greenhouse gases into the atmosphere. Thus, BLM is creating bias in its NEPA analysis toward approving the proposed action.

Table 19: Estimated Federal Revenue Associated with the March 2018 Lease Sale Federal Revenue

County	Acres	Average Annual (nominal)		One-time Revenue
		Rent-first 5 years	Rent-second 5 years	Bonus Bid
		\$1.50/acre	\$2.00/acre	Min. \$2.00/acre
Blaine	3,880.5	\$5,821	\$7,761	\$7,761
Choteau	240.0	\$360	\$480	\$480
Glacier	280.0	\$420	\$560	\$560
Hill1	127.3	\$191	\$255	\$255
Liberty	120.0	\$180	\$240	\$240
Phillips1	1,484.0	\$2,226	\$2,968	\$2,968
Valley1	760.0	\$7,821	\$10,428	\$10,428
Total	6,891.8	\$10,337.70	\$13,783.60	\$13,783.60

In response to this, BLM argues that revenue chart does not present an “economic benefit,” and that its analysis is therefore not a “cost-benefit analysis” which requires the use of the social cost of carbon to assess the costs. Billings EA, App’x G at 19. This argument is hard to take with a straight face. A quick Google search for the definition of “economic benefit” yields the following result: “[b]enefit quantifiable in terms of money, such as revenue, net cash flow, net income.”¹³ It is common sense that any county in Montana receiving \$10,000 in bonus bid money would treat it as a benefit. Finally, there is no doubt that BLM has the capability to assess the social cost of carbon for a lease sale. As demonstrated by Exhibits 15 and 16 to Conservation Groups’ October 30, 2017 comments on the draft EA, the Montana BLM, including the Billings Field Office, has assessed the social cost of carbon on multiple occasions before. For example, in an EA for the October 2014 oil and gas lease sale, the BLM stated,

The leasing of these minerals by the BLM would generate about \$2,200 in Federal revenue. The redistribution of Federal revenue associated with leasing of these Federal minerals is estimated to generate nearly \$1,000 in State revenue for Montana and approximately \$400 in local public revenue in Yellowstone County. . . . The annual SCC associated with oil and gas development within Yellowstone County is \$662 (in 2011 dollars) based on 2,757 cumulative acres.

¹³ Definition of economic benefit on BusinessDictionary.com, <http://www.businessdictionary.com/definition/economic-benefit.html>.

Exhibit 15 to Conservation Groups' Oct. 30, 2017 Comments, 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.

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 EA (Billings EA at 91-92, Butte EA at 58-60, Hi-Line EA at 79-80) 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 in the Billings and Butte FOs and the North Central Montana District Office Appears to Violate the Mineral Leasing Act.

Finally, the BLM's proposed leasing in the two Montana field offices and North Central District Office in Montana runs afoul of the MLA in two key regards. First, 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 there is any intent of any lessee 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. For example, all of the lease parcels analyzed in the Butte FO EA, are located in areas with very low to low development potential. Butte FO EA at 12.

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 21 to Conservation Groups' Oct. 30, 2017 Comments, BLM, Oil and Gas Noncompetitive Lease Offers Rejected (Oct. 18, 2016). Here, the BLM appears to explicitly acknowledge that there is no explicit intent to develop any of the proposed lease parcels. The agency itself discloses in the various EAs that it is reasonable to presume that most, if not all, of the parcels, will never be developed. For example, out of 76 parcels proposed for the Billings FO EA, the BLM presumes 54 will be developed. Billings FO EA at 17. For the Butte FO, as noted above, all nine proposed lease parcels are in low to very low development areas and the EA estimates that only 4 wells may be drilled from these parcels. Butte FO EA at 12. And, for the parcels located in the northern Montana, the BLM estimates that 11 wells will be drilled on 24 parcels. Hi-Line EA at 17. 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 22 to Conservation Groups' Oct. 30, 2017 Comments, 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 23 to Conservation Groups' Oct. 30, 2017 Comments, 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.

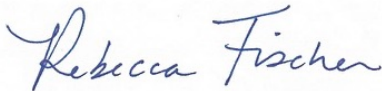
In response to this, the BLM again argues that the RMPs/FEISs for each field office are the source of the proposed development numbers and that "[t]he Montana/Dakotas State Office is unaware of potential lessee intentions to violate the diligent development requirement." *See, e.g.,* Billings EA, App'x G at 62–63. But, as discussed in depth above, 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 (Exhibit 21 to Conservation Groups' Oct. 30, 2017 Comments, BLM, Oil and Gas Noncompetitive Lease Offers Rejected (Oct. 18, 2016)). 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 March 2018 lease sale by continuing to 1) improperly segment its NEPA analyses into three different EAs which subsequently defer analysis of impacts to the Application Permit to Drill (“APD”) stage; 2) failing to analyze a reasonable range of alternatives; 3) failing to fully analyze the impacts from hydraulic fracturing and horizontal drilling; 4) failing to accurately estimate reasonably foreseeable development for the various lease parcels; 5) failing to quantify the direct and cumulative emissions generally, including the impacts from the air and greenhouse gas emissions that would result from issuance of the lease parcels; and 6) failing to assess the economic significance of any greenhouse gas emissions in terms of carbon costs. Furthermore, the BLM’s three 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 until the agency corrects these deficiencies.

Sincerely,



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