

April 10, 2017

Via Fax

Ed Roberson State Director U.S. Bureau of Land Management Utah State Office 440 West 200 South, Suite 500 Salt Lake City, UT 84101

Re: Protest of June 2017 Competitive Oil and Gas Lease Sale

Dear Mr. Roberson:

Pursuant to 43 C.F.R. § 3120.1-3, WildEarth Guardians hereby protests the Bureau of Land Management's ("BLM's") proposal to offer 20 publicly owned oil and gas lease parcels covering 23,733.19 acres of land for competitive sale on June, 2017. The parcels are located in the Richfield Field Office of central Utah. The lease parcels included for sale, as identified by the BLM's in its Final June 2017 Oil and Gas Sale List, include the following:¹

Lease Serial Number	Acres	Field Office	County	
UTU92311	200.00	Richfield	Sevier	
UTU92312	346.74	Richfield	Sevier	
UTU92313	200.00	Richfield	Sevier	
UTU92314	1,482.76	Richfield	Sevier	
UTU92315	2,032.52	Richfield	Sevier	
UTU92316	677.60	Richfield	Sevier	
UTU92317	1,510.92	Richfield	Piute	
UTU92318	1,765.58	Richfield	Piute	
UTU92319	2,358.44	Richfield	Garfield	
UTU92320	847.63	Richfield	Garfield	
UTU92321	1,927.30	Richfield	Piute	
UTU92322	2,480.00	Richfield	Piute	
UTU92323	1,035.00	Richfield	Piute	
UTU92324	1,160.00	Richfield	Piute	
UTU92325	1,609.40	Richfield	Garfield	

¹ This list of lease parcels is available on the BLM's website at https://eplanning.blm.gov/epl-front-office/projects/nepa/68693/99242/120260/FinalSaleList.pdf.

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UTU92326	960.00	Richfield	Garfield
UTU92327	484.24	Richfield	Garfield
UTU92328	1,239.20	Richfield	Sanpete
UTU92329	115.69	Richfield	Sevier
UTU92330	1,300.17	Richfield	Sanpete

In support of its proposed leasing, the agency prepared an Environmental Assessment ("EA"), DOI-BLM-UT-C020-2017-0001-EA.

As will be explained, the BLM's proposal to lease falls short of ensuring compliance with applicable environmental protection laws and is not based on sufficient analysis and assessment of key environmental impacts under the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4331, *et seq*. The agency's EA is therefore deficient and fail to provide sufficient justification for its proposed action and its proposal to issue a FONSI. For the reasons below, we request the BLM refrain from offering the 20 proposed lease parcels for sale and issuance.²

STATEMENT OF INTEREST

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 climate implications of its oil and gas leasing decisions and objectively and robustly weighs the costs and benefits of authorizing the release of more greenhouse gas emissions that are known to contribute to global warming.

WildEarth Guardians submitted comments on the proposed leasing on February 11, 2017 over the BLM's draft EA and proposed leasing. WildEarth Guardians has also extensively commented on BLM's proposed oil and gas leasing in Utah, raising concerns over the agency's failure to adequately address climate impacts.

The mailing address for WildEarth Guardians to which correspondence regarding this protest should be directed is as follows:

WildEarth Guardians 2590 Walnut St. Denver, CO 80205

STATEMENT OF REASONS

WildEarth Guardians protests the BLM's June 2017 oil and gas lease sale over the agency's failure to adequately analyze and assess the climate impacts of the reasonably foreseeable oil and gas development that will result in accordance with NEPA, 42 U.S.C. § 4331,

² For purposes of this protest, we hereby incorporate by reference comments and attachments thereto submitted by WildEarth Guardians in response to the BLM's Draft EA.

et seq., and regulations promulgated thereunder by the White House Council on Environmental Quality ("CEQ"), 40 C.F.R. § 1500, et seq.

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," meaning 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. 40 C.F.R. § 1502.16(d). To this end, the agency must analyze the "direct," "indirect," and "cumulative" effects of its actions, and assess their significance. 40 C.F.R. §§ 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." 40 C.F.R. § 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. 40 C.F.R. § 1508.7.

An agency may prepare an environmental assessment ("EA") to analyze the effects of its actions and assess the significance of impacts. *See* 40 C.F.R. § 1508.9; *see also* 43 C.F.R. § 46.300. Where effects are significant, an Environmental Impact Statement ("EIS") must be prepared. *See* 40 C.F.R. § 1502.3. Where significant 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." 40 C.F.R. § 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." 40 C.F.R. § 1508.25(a)(3). Key indicators of similarities between actions include "common timing or geography." *Id*.

Here, the BLM fell short of complying with NEPA with regards to analyzing and assessing the potentially significant climate impacts of oil and gas leasing. In support of its proposed leasing, the agency prepared an EA. In the EA, however, the BLM failed to analyze the reasonably foreseeable greenhouse gas emissions both from the proposed leasing and from cumulative and similar actions. The agency further failed to assess the significance of any emissions, particularly in terms of carbon costs. Below, we detail how BLM's proposal fails to comply with NEPA.

1. The BLM Failed to Fully Analyze and Assess the Direct, Indirect, and Cumulative Impacts of Greenhouse Gas Emissions that Would Result from Issuing the Proposed Lease Parcels

Although we are pleased to see the BLM finally develop estimates for reasonably foreseeable direct and indirect greenhouse gas emissions associated with the proposed leasing (*see* EA at pp. 26-27), it appears that the agency's analysis fails to fully comply with NEPA and to demonstrate support for a FONSI.

Notably, the BLM's estimates of greenhouse gas emissions fails to account for emissions from cumulative and similar actions. As NEPA requires, an agency must 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). Here, the BLM failed to take into account the greenhouse gas emissions resulting from other proposed oil and gas leasing in Utah and other neighboring states, as well as related oil and gas development, and to analyze the impacts of these actions in terms of their direct, indirect, and cumulative greenhouse gas emissions.

From a cumulative standpoint, it is first and foremost disconcerting that BLM's analysis is entirely devoid of any consideration of greenhouse gas emissions from oil and gas development within the Richfield Field Office, as well as throughout the Rocky Mountain west. On a Field Office level, the underlying Final EIS prepared for the Richfield Field Office's Resource Management Plan nowhere analyzes or assesses greenhouse gas emissions associated with oil and gas development. Regionally, including in other Field Offices in Utah as well as Field Offices in the neighboring states of Colorado, New Mexico, and Wyoming, BLM has never attempted to analyze or assess cumulative greenhouse gas emissions from oil and gas development.

Although the EA generally acknowledges there will be future greenhouse gas emissions from reasonably foreseeable development of the leases, there is no attempt to analyze these emissions in the context of oil and gas development within the actual cumulative impact area. The EA simply remarks that greenhouse gas emissions will be produced in the future (*see* EA at 33-34), yet the BLM makes no effort to quantify these emissions or provide any information that would inform the decisionmaker and the public as to the significance of the reasonably foreseeable greenhouse gas emissions.

In terms of similar actions, we are particularly concerned that the BLM failed to analyze and assess greenhouse gas emissions resulting from oil and gas leasing within Utah and in the neighboring Rocky Mountain States of Colorado, Montana, New Mexico, and Wyoming. 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:

<u>Colorado</u>: In May 2016, the BLM sold six lease parcels covering 6,960.48 acres. See https://www.blm.gov/sites/blm.gov/files/May_2016_Results.pdf. And on December 8, 2016, only five days before Utah's oil and gas lease sale, the BLM sold 31 parcels totaling 20,101 acres. See https://eplanning.blm.gov/epl-front-

office/projects/nepa/69808/92231/111121/December 2016 CO Sale Results.pdf. The BLM also has lease sales scheduled for February, 9, 2017, May 11, 2017, August 10, 2017, and November 9, 2017. See https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing/regional-lease-sales/colorado.

- Montana: In May of 2016, the BLM sold seven lease parcels totaling 913.86 acres. See https://www.blm.gov/sites/blm.gov/files/MT-DAKs%20MCFO%2005-04-16%20Comp%20Results.pdf. And on December 8, 2016, the BLM sold 91 parcels totaling 19,790.175 acres. See https://www.blm.gov/sites/blm.gov/files/MT-DAKs%20Competitive%2012-08-2016%20Sale%20Results%20List%20%281%29_0.pdf. The BLM also has lease sales scheduled for January 24, 2017, May 3, 2017, July 11, 2017, and October 17, 2017. See https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing/regional-lease-sales/montana-dakotas.
- New Mexico: In April of 2016, the BLM sold 43 lease parcels totaling 36,841.03 acres. See https://www.nm.blm.gov/oilGas/leasing/leaseSales/2016/april2016/SALE%20RESULTS.pdf. And in September of 2016, the BLM sold 36 lease parcels totaling 13,876.08 acres. See https://www.nm.blm.gov/oilGas/leasing/leaseSales/2016/july2016/09_01%20SALE%20RESULTS%20FIN.pdf. The BLM also had a lease sale on January 25, 2017, https://eplanning.blm.gov/epl-front-office/projects/nepa/68428/96009/116065/Jan2017_SaleResults.pdf. The agency has sales scheduled for June 8, 2017, and September 4, 2017. See https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing/regional-lease-sales/new-mexico.
- Wyoming: On May 3, 2016, the BLM sold 95 oil and gas lease parcels totaling 86,608.8 acres. See https://eplanning.blm.gov/epl-front-office/projects/nepa/64290/77266/85818/0516results.pdf. And on November 1, 2016, the BLM sold 21 oil and gas lease parcels totaling 32,422.02 acres. See https://eplanning.blm.gov/epl-front-office/projects/nepa/64290/88959/106465/Sale_Results.pdf. The BLM also has lease sales scheduled for February 7, 2017, May 2, 2017, August 1, 2017, and November 1, 2017. See https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage&curre_ntPageId=94042.

And in Utah, the BLM sold numerous oil and gas lease parcels across thousands of acres on February 16, 2016 and May 3, 2016. In 2017, the BLM has lease sales scheduled in Utah for February 21, 2017, May 16, 2017, August 15, 2017, and November 21, 2017. *See* https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing/regional-lease-sales/utah.

Without any analysis of past, present, and reasonably foreseeable greenhouse gas emissions from these similar oil and gas leasing actions, the agency's proposed FONSI is unsupported under NEPA.

The BLM appears to attempt to argue that an analysis of greenhouse gas emissions is more appropriate at the drilling stage. We have yet to see the BLM actually prepare such a site-specific analysis in conjunction with an oil and gas lease development proposal.

What's more, BLM's argument has no merit as the agency has proposed no stipulations that would grant the agency discretion to limit, or outright prevent, development of the proposed leases on the basis of greenhouse gas emissions and/or climate concerns. The BLM is effectively proposing to make an irreversible commitment of resources, which is the hallmark of significance under NEPA. *See* 42 U.S.C. § 4332(c)(v) and 40 C.F.R. § 1502.16. The failure to prepare an EIS—or any analysis for that matter—to address the potentially significant reasonably foreseeable greenhouse gas emissions that would result from the proposed leases is contrary to NEPA.

2. The BLM Failed to Analyze the Costs of Reasonably Foreseeable Carbon Emissions Using Well-Accepted, Valid, Credible, GAO-Endorsed, Interagency Methods for Assessing Carbon Costs that are Supported by the White House

Compounding the failure of the BLM to make any effort to estimate the greenhouse gas emissions that would result from reasonably foreseeable oil and gas development is that the agency also rejected analyzing and assessing these emissions in the context of their costs to society. It is particularly disconcerting that the agency did not analyze and assess costs using 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 1 to Guardians' February 11, 20017 Comments, U.S. Environmental Protection Agency ("EPA"), "Fact Sheet: Social Cost of Carbon" (Nov. 2013) at 1, available online at https://www.epa.gov/climatechange/social-cost-carbon. 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 2 to Guardians' February 11, 20017 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). These estimates were then revised in 2013 by the Interagency Working Group, which at the time consisted of 13 agencies. *See* Exhibit 3 to Guardians' February 11, 20017 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). This report and the social cost of carbon estimates were again revised in 2015. *See* Exhibit 4 to Guardians' February 11, 20017 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 5 to Guardians' February 11, 20017 Comments, Interagency Working Group on Social Cost of Carbon, "Technical Support Document: Technical Update of the Social Cost of Greenhouse Gases for Regulatory Impact Analysis Under Executive Order 12866" (Aug. 2016).

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 6 to Guardians' February 11, 20017 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 its most 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. *See* Exhibit 7 to Guardians' February 11, 20017 Comments, White House, "Estimating the Benefits from Carbon Dioxide Emissions Reductions." 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 8 to Guardians' February 11, 20017 Comments, GAO, "Regulatory Impact Analysis, Development of Social Cost of Carbon Estimates," GAO-14-663 (July 2014), available online at http://www.gao.gov/assets/670/665016.pdf.

Table ES-1: Social Cost of CO₂, 2010 - 2050 (in 2007 dollars per metric ton of CO₂)

Year	5%	3%	2.5%	High Impact
	Average	Average	Average	(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 5 to Guardians' February 11, 20017 Comments.

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 9 to Guardians' February 11, 20017 Comments, EPA, Comments on Supplemental Draft EIS for the Keystone XL Oil Pipeline (June 6, 2011).

More importantly, the BLM has also utilized the social cost of carbon protocol in the context of oil and gas approvals. In other recent Environmental Assessments for oil and gas leasing, the agency estimated "the annual SCC [social cost of carbon] associated with potential development on lease sale parcels." Exhibit 10 to Guardians' February 11, 20017 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, available online at http://www.blm.gov/style/medialib/blm/mt/blm programs/energy/oil and gas/leasing/lease sale s/2014/oct 21 2014/july23posting.Par.25990.File.dat/MCFO%20EA%20October%202014%2 <u>OSale Post%20with%20Sale%20(1).pdf</u>. 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 11 to Guardians' February 11, 20017 Comments, BLM, "Little Willow Creek Protective Oil and Gas Leasing," EA No. DOI-BLM-ID-B010-2014-0036-EA (February 10, 2015) at 81, available online at https://www.blm.gov/epl-frontoffice/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.

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 1 to Guardians' February 11, 20017 Comments. As explained:

The models used to develop [social cost of carbon] estimates, known as integrated assessments, 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 this month 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 12 to Guardians' February 11, 20017 Comments, Moore, C.F. and B.D. Delvane, "Temperature impacts on

economic growth warrant stringent mitigation policy," *Nature Climate Change* (January 12, 2015) at 2. 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 1 to Guardians' February 11, 20017 Comments.

That the economic impacts of climate change, as reflected by an assessment of social cost of carbon, should be a significant consideration in agency decisionmaking, is emphasized by a recent White House report, which warned that delaying carbon reductions would yield significant economic costs. *See* Exhibit 13 to Guardians' February 11, 20017 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 CO_2 accumulates in the atmosphere, delaying action increases CO_2 concentrations. Thus, if a policy delay leads to higher ultimate CO_2 concentrations, that delay produces persistent economic damages that arise from higher temperatures and higher CO_2 concentrations. Alternatively, if a delayed policy still aims to hit a given climate target, such as limiting CO_2 concentration to given level, then that delay means that the policy, when implemented, must be more stringent and thus more costly in subsequent years. In either case, delay is costly.

Id. at 1.

The requirement to analyze the social cost of carbon is supported by the general requirements of NEPA, 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. However, 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.*

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 14 to Guardians' February 11, 20017 Comments, Greenstone, M., "There's a Formula for Deciding When to Extract Fossil Fuels," *New York Times* (Dec. 1, 2015), available online at http://www.nytimes.com/2015/12/02/upshot/theres-a-formula-for-deciding-when-to-extract-fossil-fuels.html? r=0.

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 utilize this method of assessing climate impacts would be wholly inappropriate under NEPA. This is underscored by the fact that the BLM disclosed in the EA numerous monetary economic benefits that would result from the proposed leasing. *See* EA at 29. While we do not suggest that a comprehensive cost-benefit analysis is required, the fact that economic benefits are disclosed in the EA indicates that costs and benefits are useful for assessing the significance of the proposed leasing.

The BLM cannot cherry pick which economic benefits and costs it chooses to disclose. Although the BLM claims that it is reasonable not to disclose carbon costs, the fact that the agency discloses economic benefits in the EA indicates this is an arbitrary position and simply an attempt to avoid providing a reasoned assessment of impacts under NEPA. To this end, the BLM's failure to disclose carbon costs in order to fully assess the significance of climate impacts undermines reliance on a FONSI to justify approval of the proposed leasing.

Sincerely,

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