October 6, 2017

Via Fax

Aden Seidlitz
Acting State Director
U.S. Bureau of Land Management
New Mexico State Office
P.O. Box 27115
Santa Fe, NM 87502
Fax: (505) 954-2010

Re: Protest of December 7, 2017 Competitive Oil and Gas Lease Sale

Dear Mr. Seidlitz:

Pursuant to 43 C.F.R. § 3120.1-3, WildEarth Guardians hereby protests the Bureau of Land Management’s (“BLM’s”) proposal to offer 7 publicly-owned oil and gas lease parcels covering approximately 2,104.15 acres of land for competitive sale on December 7, 2017. The parcels are located in the Carlsbad Field Office in Eddy and Lea Counties, New Mexico. The lease parcels for sale, as identified by the BLM’s in its Final December 2017 Oil and Gas Sale List, include the following:

<table>
<thead>
<tr>
<th>Lease Serial Number</th>
<th>Acres</th>
<th>Field Office</th>
<th>County</th>
</tr>
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<tbody>
<tr>
<td>NM-201712-001</td>
<td>40.000</td>
<td>Carlsbad</td>
<td>Eddy</td>
</tr>
<tr>
<td>NM-201712-002</td>
<td>160.000</td>
<td>Carlsbad</td>
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<td>Lea</td>
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1 This list of lease parcels is available on the BLM’s website at https://eplanning.blm.gov/epl-front-office/projects/nepa/80914/119523/145878/Final_Sale_Notice_12072017.pdf.
In support of its proposed leasing, the agency prepared an Environmental Assessment ("EA"), DOI-BLM-NM-0000-2017-0005-EA. As will be explained below, the BLM’s EA and proposal to lease falls short of ensuring compliance with applicable environmental protection laws, including the Federal Land Policy and Management Act ("FLPMA"), 43 U.S.C. §§ 1701–1787, and the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321–4370h. The agency’s EA is therefore deficient and fails to provide sufficient justification for the proposed action and the decision to issue a FONSI. Thus, we request the BLM refrain from offering the 7 proposed lease parcels for sale and issuance, unless and until the BLM corrects these deficiencies.

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 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 greenhouse gas emissions that are known to contribute to global warming.

WildEarth Guardians has submitted extensive comments on oil and gas lease sales in New Mexico, including this lease sale.² WildEarth Guardians has also consistently and extensively protested the New Mexico BLM’s proposed oil and gas leasing over the years, including raising concerns over the agency’s failure to adequately address climate impacts.³

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 December 7, 2017 oil and gas lease sale because the agency, through the EA, the underlying Resource Management Plans ("RMPs"), and the accompanying Environmental Impact Statements ("EISs") to the RMPs, fails to adequately

² For the purposes of this protest, Guardians hereby incorporates by reference its August 7, 2017 comments and exhibits submitted in response to BLM’s draft EA for the Carlsbad Field Office December 2017 lease sale.

analyze the impacts of hydraulic fracturing and horizontal drilling as required by FLPMA and NEPA. Furthermore, the agency fails to adequately analyze and assess the climate impacts of the reasonably foreseeable oil and gas development that will result, contrary to the requirements of NEPA, and its regulations promulgated thereunder by the White House Council on Environmental Quality (“CEQ”), 40 C.F.R. § 1500–1508.

I. Legal Background

Requirements of FLPMA and NEPA

According to the BLM, “[l]and use planning forms the basis of, and is essential to, everything that the [BLM] does in caring for America’s public lands.” Resource Management Planning Final Rule, 81 Fed. Reg. 89,580, 89,580 (Dec. 12, 2016), https://www.gpo.gov/fdsys/pkg/FR-2016-12-12/pdf/2016-28724.pdf. The duty to develop land use plans stems from FLPMA, which requires that “[t]he Secretary [of the Interior] shall, with public involvement and consistent with the terms and conditions of this Act, develop, maintain, and, when appropriate, revise land use plans which provide by tracts or areas for the use of the public lands.” 43 U.S.C. § 1712(a).

The BLM fulfills this mandate by developing Resource Management Plans (“RMPs”). When the BLM issues a new RMP or amends a RMP, the agency must also comply with the requirements of NEPA. See 43 C.F.R. §§ 1601.0–6. Thus, the BLM is required to issue an Environmental Impact Statement (“EIS”) with each RMP. Id.

The BLM may tier its project-level analyses to a broader NEPA document, such as the EIS accompanying the RMP. Id. § 46.140. But, “[a] NEPA document that tiers to another broader NEPA document . . . must include a finding that the conditions and environmental effects described in the broader NEPA document are still valid or address any exceptions.” Id. Put another way, “[t]o the extent that any relevant analysis in the broader NEPA document is not sufficiently comprehensive or adequate to support further decisions, the tiered NEPA document must explain this and provide any necessary analysis.” Id. § 46.140(b).

Requirements of NEPA

Beyond the RMP process, BLM is also required to comply with the general requirements of NEPA for each proposed action. 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. 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. *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. Federal agencies are required to “integrate the NEPA process with other planning at the earliest possible time . . . to head off potential conflicts.” *Id.* at § 1501.2.

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 (“EIS”). 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 *id.* § 1508.13; see also 43 C.F.R. § 46.325(2).

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

I. **The BLM Should Defer Offering the Leases Until the RMP Revision is Complete Because Neither the “Current” RMP and EIS Nor the EA Fully Analyze the Impacts of Fracking in Violation of FLPMA and NEPA.**

As noted above, FLPMA requires BLM to develop a RMP to designate land management strategies. Development of an RMP always occurs with the development of an EIS. See 43 C.F.R. §§ 1601.0–6. The BLM may tier its project-level analyses to a broader NEPA document, such as the EIS accompanying the RMP. *Id.* § 46.140. But, “[t]o the extent that any relevant analysis in the broader NEPA document is not sufficiently comprehensive or adequate to support further decisions, the tiered NEPA document must explain this and provide any necessary analysis.” *Id.* § 46.140(b). Here, neither the underlying RMPs and accompanying EISs for the RMPs nor the EA for the lease sale fully address the impacts of hydraulic fracturing, a well stimulation technique used on more than 90% of oil and gas wells, which the industry is using in combination with horizontal drilling to open up vast areas of previously uneconomical oil and gas formations.4 In addition, the BLM cannot rely on a future RMP revision to approve the current lease sale parcels. Thus, the BLM’s lease sale violates the requirements of FLPMA and NEPA.

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First, although the BLM argues that it need not amend the “current” RMP in order to approve the lease sale, EA at 71, this argument runs contrary to the agency’s own guidance and violates FLPMA. The agency’s Land Use Planning Handbook states that, “[RMP] revisions are necessary if monitoring and evaluation findings, new data, new or revised policy, or changes in circumstances indicate that decisions for an entire plan or a major portion of the plan no longer serve as a useful guide for resource management.” BLM Land Use Planning Handbook, H-1610-1, Section VII.C at 46. Furthermore, the Handbook states that amendments are needed whenever there is a need to “[c]onsider a proposal or action that does not conform to the plan,” “implement new or revised policy that changes land use plan decisions,” “respond to new, intensified, or changed uses on public land,” or “consider significant new information from resource assessments, monitoring, or scientific studies that change land use plan decisions.” Id. Section VII.B at 45 (emphasis added). Because 90% of oil and gas wells drilled today use hydraulic fracturing in combination with horizontal drilling, and the existing RMP completely fails to discuss this development, an RMP revision or amendment is warranted. Indeed, the advent of horizontal drilling combined with fracking has opened up vast areas of land, including the Permian Basin where the leases are located, to oil and gas development.

Second, the decision to move forward with the lease sale violates BLM guidance on RMP revisions which preclude certain alternatives. The BLM acknowledges in its EA, “[t]he Carlsbad RMP is currently undergoing a revision with a draft EIS anticipated in late 2017.” EA at 3. The BLM also notes that “[g]uidance found in the BLM’s Land Use Planning Handbook (H-1601-1) directs the agency to carefully consider approving ongoing actions that may limit the choice of reasonable alternatives being considered in the RMP revisions.” Id. (emphasis added). Despite this legal framework, the BLM simply concludes without explanation that “leasing the nominated parcels, would not limit the choice of reasonable alternatives being considered in the draft EIS.” Id. But it most certainly would. BLM could not seriously consider an alternative that limits or precludes the use of fracking if it has already issued leases allowing it.

The decision to move forward with the lease sale also violates NEPA because the underlying RMPs and EISs completely fail to address fracking and horizontal drilling. The applicable land use plans for Carlsbad Field Office and this lease sale are the Carlsbad RMP and Final EIS from 1988 and the Carlsbad RMP Amendment and Final EIS for Oil and Gas Resources from 1997. EA at 3. There is no discussion of the impacts of fracking in any of these documents. The only use of the phrase hydraulic fracturing occurs in Appendix 4 in a section outlining conditions of approval for oil and gas rights-of-way. See generally, Carlsbad RMP 1988, Carlsbad RMP Amendment 1997, available at https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage&currentPageId=90928; Carlsbad Proposed RMP Amendment/Final Impact Statement, App’x 4 at AP4-11, provision 58 (“The holder agrees to secure prior to approval of the Authorized Office before commencing any operations such as... perforating (using explosive or hydraulic fracturing).”), available at https://archive.org/details/proposedresource13unit. An omission of the impacts of fracking is not surprising because fracking in combination with horizontal drilling did not become a common extraction technique until 2005. See, e.g., U.S.G.S., Trends in Hydraulic Fracturing Distributions and Treatment Fluids, Additives, Proppants, and Water Volumes Applied to Wells
But, this fact does not excuse the BLM from its duty to analyze this issue.

The EA for the lease sale does not correct the deficiencies of the RMPs and EISs. Indeed, the BLM fails to even acknowledge that the 1988 and 1997 RMPs do not discuss fracking when it tiers to these documents. See generally, EA and EA at 3. Instead, the BLM seems to rely on the upcoming RMP update to correct this issue. See EA at 3. Although the new RMP likely will include an analysis of the increased impacts of fracking used in combination with horizontal drilling, the agency has not even released a draft document and cannot rely on it to address the agency’s failure to disclose these impacts.

Furthermore, BLM’s brief addition of language discussing some of the impacts of fracking and horizontal drilling to the Final EA do not provide sufficient detail to fill this gap. While Guardians appreciates that BLM includes a more robust discussion of the water quality and quantity impacts in the Final EA, see EA at 37, the agency still completely fails to discuss increased air quality and public health impacts from the chemicals used during fracking, includes only one sentence on the dust impacts from increased truck traffic, and fails to discuss increased surface disturbance from larger well pads, among other issues. See generally, EA from 29 to 49.

More importantly, the BLM fails to discuss the increased scale of development that will occur now that previous areas of land are open to a more intense type of development.

The language in Appendix 2 and 3 also does not fulfill the BLM’s duty to analyze the impacts of its proposed action. Appendix 2 is merely an explanation of the process of fracking, as opposed to a discussion of the impacts. Appendix 3’s dry explanation of what chemicals may be used in fracking falls into a similar category. Information on the process simply does not suffice to fulfill NEPA’s mandate to fully consider the environmental implications of an agency action by taking into account “high quality” information, “accurate scientific analysis,” “expert agency comments,” and “public scrutiny,” prior to making decisions. 40 C.F.R. § 1500.1(b).

A recent court decision supports this conclusion. In Center for Biological Diversity v. U.S. Bureau of Land Management, a California federal court examined whether the BLM properly approved a lease sale where the underlying RMP and EA excluded an analysis of the impacts of fracking. 937 F. Supp. 2d 1140, 1156 (N.D. Cal. 2013). There, BLM had issued an RMP in 2006. Id. at 1148. The RMP proposed little to no oil and gas development. Id. The agency then proposed a lease sale in 2011 based on expressions of interest (“EOIs”) received by industry. Id. In the EA for the lease sale, the BLM failed to discuss the impacts of hydraulic fracturing because the RMP predicted little to no development and BLM believed this still to be true. Id. Environmental groups challenged this conclusion, arguing that the BLM was required to assess the impacts of fracking because development was more certain and would be more intense than the agency believed. See id. at 1149. The court agreed with this argument and invalidated the lease sale because “the emergence of fracking raises potential concerns that were not considered by the 2006 PRMP/FEIS [and] [i]n fact, the PRMP/FEIS makes no explicit mention of fracking at all.” Id. The EA similarly failed to include this analysis. Id.
The situation here is substantially similar. None of the RMPs or EISs relied upon by the BLM come even close to addressing the impacts of fracking and horizontal drilling, and the EA fails to include a full analysis of the impacts. Yet, the reasonably foreseeable development scenarios for the area developed in 2008 propose an average of 320 new wells on federal land per year, all of which will use fracking and horizontal drilling to maximize production. See Engler, T.W., R. Balch, and M. Cather, “Reasonably Foreseeable Development Scenario for the B.L.M, New Mexico Pecos District,” Final Report Submitted to BLM at 30 (2016), https://eplanning.blm.gov/epl-front-office/projects/lup/64444/77502/86228/Final_Report-BLM-NMT-RFD.pdf. Clearly, the BLM must consider the impacts of fracking and horizontal drilling at some point, and the underlying RMPs, EISs, and the lease sale EA do not provide this analysis. Therefore, the BLM cannot move forward with the lease sale.

Finally, the BLM cannot rely on future NEPA analyses through the Application Permit to Drill (“APD”) stage to address the impacts of fracking. See, e.g., EA at 37, 38, 43, 44. 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 hydraulic fracturing concerns and impacts. 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); 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 on-the-ground impacts from fracking that would result from the proposed leases is contrary to NEPA and should not stand. Thus, based on the many deficiencies discussed above, the BLM must defer offering these leases until the Carlsbad RMP is complete or the agency completes a full analysis of the impacts of fracking in a revised EA.

II. The BLM Fails to Fully Analyze and Assess the Cumulative Impacts of Greenhouse Gas Emissions that Would Result from Issuing the Proposed Lease Parcels.

Although the BLM acknowledges that the decision to develop the lease parcels could result in greenhouse gas emissions and goes on to estimate emissions under the Reasonably Foreseeable Development report from 2008, see EA at 31–32, the agency completely fails to discuss the cumulative climate impacts from the similar actions occurring from BLM lease sales in the Rocky Mountain region as required by NEPA.

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). In the EA for the December lease sale, the agency completely ignores the cumulative impacts that will result from the past and future lease sales in New Mexico and surrounding states identified below.


• **Utah**: In March, 2017, the BLM sold 4 parcels covering 4,174.46 acres in the Canyon Country District of Utah. See [https://www.blm.gov/sites/blm.gov/files/Programs_OilandGas_Leasing_RegionalLeaseSales_Utah_2017_SaleResults.pdf](https://www.blm.gov/sites/blm.gov/files/Programs_OilandGas_Leasing_RegionalLeaseSales_Utah_2017_SaleResults.pdf). And on June 15, 2017, the agency sold 8 parcels, totaling 7,479 acres in the Color Country District Office for sale. See [https://www.blm.gov/sites/blm.gov/files/Programs_EnergyandMinerals_OilandGas_Leasing_RegionalLeaseSales_Utah_2017_SaleResults.pdf](https://www.blm.gov/sites/blm.gov/files/Programs_EnergyandMinerals_OilandGas_Leasing_RegionalLeaseSales_Utah_2017_SaleResults.pdf). In September, the BLM sold 9 parcels containing 4,101.7 acres for sale in the West Desert District. See [https://www.blm.gov/sites/blm.gov/files/Programs_OilandGas_Leasing_RegionalLeaseSales_Utah_2017_SALERESULTS.pdf](https://www.blm.gov/sites/blm.gov/files/Programs_OilandGas_Leasing_RegionalLeaseSales_Utah_2017_SALERESULTS.pdf).


• **All told**, the BLM has leased or is proposing to lease approximately 717 parcels or 579,005.78 acres of publically-owned land in the states listed above in 2017.
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. See EA at 31, 33. 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 failure to do so renders the EA inadequate and fails to provide support for a FONSI.

III. 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, it is particularly disconcerting that the agency fails to discuss, analyze, and assess the costs of the lease sales 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, see EA at 72, while simultaneously discussing the economic benefits of natural resource development on Lea and Eddy Counties. See EA at 25–26.

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 WildEarth Guardians’ August 7, 2017 Comments. 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 WildEarth Guardians’ August 7, 2017 Comments. These estimates were then revised in 2013 by the Interagency Working Group, which at the time consisted of 13 agencies. See Exhibit 3, to WildEarth Guardians’ August 7, 2017 Comments. This report and the social cost of carbon estimates were again revised in 2015. See Exhibit 4, to WildEarth Guardians’ August 7, 2017 Comments. Again, this report and social cost of carbon estimates were revised in 2016. See Exhibit 5, to WildEarth Guardians’ August 7, 2017 Comments.

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 WildEarth Guardians’ August 7, 2017 Comments.

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 7 at 4. Currently, however, the central estimate is reported to be $50 per
metric ton, a value that experts have found to be the “best estimate of the social cost of
greenhouse gases” and that experts have urged government officials to consider in their analyses.
See Exhibit 7, to WildEarth Guardians’ August 7, 2017 Comments.

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 WildEarth Guardians’ August 7, 2017 Comments.

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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 6.

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 WildEarth Guardians’ August 7, 2017 Comments.

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 other recent
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 10, to WildEarth Guardians’ August 7, 2017 Comments. In
conducting its analysis, the BLM used a “3 percent average discount rate and year 2020 values,”
assuming 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 WildEarth Guardians’ August 7, 2017 Comments. 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 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 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 WildEarth Guardians’ August 7, 2017 Comments.* 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.*

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 13, to WildEarth Guardians’ August 7, 2017 Comments.* 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). Just last week, a federal district court in Montana cited to the *High Country* decision and reaffirmed its reasoning, rejecting 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. *See Mont. Envtl. Info. Ctr. v. U.S. Office of Surface Mining*, No. CV 15-106-M-DWM (D. Mont. Aug. 14, 2017).

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 WildEarth Guardians’ August 7, 2017 Comments. 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 15*, to WildEarth Guardians’ August 7, 2017 Comments.

Clearly, the social cost of carbon provides a useful, valid, and meaningful tool for assessing the climate consequences of the proposed development, and the BLM’s dismissal of the value of this protocol 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 touted in the EA indicates that costs and benefits are useful for assessing the significance of the proposed development. To this
end, the BLM must disclose carbon costs in order to fully assess the significance of climate impacts and support any FONSI.

**IV. Conclusion**

In sum, WildEarth Guardians requests that the BLM withhold all of the parcels scheduled for the December 2017 lease sale until the agency completes its obligations under FLPMA and NEPA as discussed above.

Sincerely,

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