October 10, 2017

Via Hand Delivery

Gregory Shoop
Acting State Director
U.S. Bureau of Land Management
Colorado State Office
2850 Youngfield St.
Lakewood, CO 80215

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

Dear Mr. Shoop:

Pursuant to 43 C.F.R. § 3120.1-3, WildEarth Guardians hereby protests the Bureau of Land Management’s (“BLM’s”) proposal to offer 28 publicly owned oil and gas lease parcels covering 27,283.79 acres of land in the Colorado River Valley and Grand Junction Field Offices of the BLM on December 7, 2017. The specific parcels being protested include the following, as identified by the BLM’s in its Final December 2017 Oil and Gas Sale List:¹

<table>
<thead>
<tr>
<th>Lease Serial Number</th>
<th>Acres</th>
<th>County</th>
<th>Field Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>COC78669</td>
<td>2.79</td>
<td>Mesa</td>
<td>Colorado River Valley</td>
</tr>
<tr>
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<td>117.50</td>
<td>Mesa</td>
<td>Grand Junction</td>
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<td>40.00</td>
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<td>Grand Junction</td>
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<td>821.88</td>
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</tr>
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<td>120.00</td>
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<td>Grand Junction</td>
</tr>
<tr>
<td>COC78677</td>
<td>120.00</td>
<td>Garfield</td>
<td>Grand Junction</td>
</tr>
</tbody>
</table>

¹ This list, which was made available on September 8, 2017, is on the BLM’s website at https://eplanning.blm.gov/epl-front-office/projects/nepa/72396/119652/146009/Dec_2017_Final_Sale_Notice_posting.pdf.
| COC78678 | 600.00 | Mesa | Grand Junction |
| COC78679 | 640.00 | Mesa | Grand Junction |
| COC78680 | 640.00 | Mesa | Grand Junction |
| COC78681 | 2346.73 | Mesa | Grand Junction |
| COC78682 | 1738.97 | Mesa | Grand Junction |
| COC78683 | 598.08 | Garfield | Grand Junction |
| COC78684 | 1574.14 | Mesa | Grand Junction |
| COC78685 | 759.11 | Mesa | Grand Junction |
| COC78686 | 997.47 | Mesa | Grand Junction |
| COC78687 | 1512.09 | Mesa | Grand Junction |
| COC78688 | 2054.03 | Mesa/Garfield | Grand Junction |
| COC78689 | 640.14 | Garfield/Mesa | Grand Junction |
| COC78690 | 599.97 | Garfield/Mesa | Grand Junction |
| COC78691 | 1279.94 | Mesa | Grand Junction |
| COC78692 | 2007.16 | Mesa | Grand Junction |
| COC78693 | 117.05 | Mesa | Grand Junction |
| COC78694 | 2290.79 | Mesa | Grand Junction |
| COC78695 | 1650.92 | Mesa | Grand Junction |
| COC78696 | 962.08 | Mesa | Grand Junction |

In support of its proposed leasing, the BLM did not prepare any analysis or assessment of impacts, or consideration of alternatives, under the National Environmental Policy Environmental Assessment (“NEPA”). Instead, the agency prepared a Determination of Adequacy Under the National Environmental Policy Act (“DNA”), DOI-BLM-CO-N050-2017-0051-DNA.

As will be explained, the BLM’s proposal to lease falls short of ensuring compliance with NEPA, 42 U.S.C. § 4331, et seq. The BLM’s reliance on a DNA fails to satisfy the agency’s obligations to analyze and assess the reasonably foreseeable environmental impacts of oil and gas leasing, and to consider reasonable alternatives.

**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 has extensively commented on, protested, and otherwise engaged the BLM on its oil and gas leasing in Colorado for many years now. Most recently, we protested the BLM’s September 2017 oil and gas lease sale and previous to that the June 2017 oil and gas
lease sale. In all of our prior and ongoing engagement, Guardians’ has raised similar concerns over the agency’s failure to adequately address climate impacts pursuant to NEPA. The BLM is well aware of our concerns.

Neither the BLM’s regulations at 43 C.F.R. § 3120.1-3 nor the September 8, 2017 Notice of Competitive Lease Sale set forth criteria requiring a protesting party to have commented on the sale notice before filing a protest. Rather, the BLM’s Notice imposes only limited requirements on the content of protests and the deadline for filing. It provides that a protest must be timely filed, include a statement of reasons, be filed in hardcopy form or by fax, must be signed, must “state the interest of the protesting party,” must include the name and the address of the protesting party, and must reference the lease parcel number identified in the sale notice. More importantly, the BLM consistently and routinely reviews protests filed by interested parties.

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 May 12, 2016 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 NEPA, 42 U.S.C. § 4331, et seq., and regulations promulgated thereunder by the White House Council on Environmental Quality (“CEQ”), 40 C.F.R. § 1500, et seq.

I. Failure to Comply with NEPA: No Support for Reliance on DNA in Light of Climate Impacts

NEPA is our “basic national charter for protection of the environment.” 40 C.F.R. § 1500.1(a). The law requires that federal agencies to analyze, assess, and disclose the impacts

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3 Notice at 9.
4 For example, the Wyoming State Office of the BLM reviewed protests filed by the City of Casper and Wyoming Land Acquisition Partners over the inclusion of parcels in the agency’s February 2016 Notice of Competitive Lease Sale, even though the BLM acknowledged, “the City of Casper and the WLAP did not submit written comments to the BLM on the EA.” See BLM, Response to Protests of February 7, 2017 Competitive Oil and Gas Lease Sale (Feb. 6, 2017) at 3, available online at https://eplanning.blm.gov/epl-front-office/projects/nepa/65707/96629/116695/0217ProtestDecision.pdf. Although the BLM ultimately dismissed these protests as moot, the agency did not dismiss the protests for a failure to provide written comments or to meet criteria not explicitly set forth at 43 C.F.R. § 3120.3-1 or the Notice of Competitive Lease Sale.
of major federal actions, as well as to consider alternatives to proposed actions. See 42 U.S.C. § 4332(C)(i) and (ii).

Federal agencies must fully consider the environmental implications of their actions and alternatives, 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.

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, as well as in considering alternatives to addressing the climate impacts of the proposed leasing. In support of proposed leasing, the agency did not actually prepare any NEPA analysis. Instead, the BLM relied on previously prepared programmatic NEPA documents, including the March 2015 Final Environmental Impact Statement (“FEIS”) for the Proposed Grand Junction Field Office Resource Management Plan (“RMP”), the August 2015 Record of Decision for the Grand Junction Field Office RMP, the November 2014 FEIS for the Proposed Colorado River Valley Field Office RMP, and the 2015 Record of Decision for the Colorado River Valley Field Office RMP. See DNA at 6. These NEPA documents, however, fail to analyze the reasonably foreseeable greenhouse gas emissions that would result from selling and producing oil and gas from the proposed oil and gas lease parcels, as well as failed to assess the significance of any emissions, particularly in terms of carbon costs. Furthermore, these NEPA documents did not consider alternatives to the proposed leasing that would address the climate impacts of the proposed leasing, including a no leasing alternative.

Although the agency may believe that without definitive development proposals, it cannot project the climate impacts of the proposed oil and gas leasing, the whole point of leasing oil and gas is to facilitate development. The BLM cannot claim that the act of leasing carries with it no intention to foster future development, particularly where, as here, the BLM has acknowledged that leasing will facilitate reasonably foreseeable development that will release greenhouse gas emissions. In fact, in the underlying RMP FEISs, the BLM discloses the overall amount of greenhouse gas emissions expected to result from oil and gas development as the RMPs are implemented. See Colorado River Valley RMP FEIS at 4-48—4-58, Grand Junction RMP FEIS at 4-44.
Yet while the agency may have prepared programmatic, Field Office-wide estimates of reasonably foreseeable greenhouse gas emissions, what the agency has not done is prepare and disclose an estimate of emissions associated with the proposed leasing, which is a project-level action. In fact, even the BLM acknowledges that the RMP FEISs do not present a sufficient analysis and assessment of project-level emissions. In the Colorado River Valley RMP FEIS for example, , the BLM states, “It is not possible at this time to determine whether GHG [greenhouse gas] emissions that would result from the project sources associated with the Proposed RMP would cause a significant impact.” Colorado River Valley RMP at 4-52.

Furthermore, the BLM never analyzed or assessed the impacts of downstream greenhouse gas emissions (i.e., consumption-related emissions) associated with any oil and gas development in either the Colorado River Valley or the Grand Junction RMP FEISs, or the associated RMP Records of Decision. This is a major shortcoming and even the BLM itself has recognized that not only is it important to disclose such emissions, but it’s even reasonable to prepare an analysis and assessment of such emissions. In numerous other oil and gas leasing-related NEPA documents, the agency has disclosed such emissions, including, but not limited to:

- In conjunction with a February 2017 proposal to offer oil and gas lease parcels in the Vernal Office of Utah. See BLM, “Environmental Assessment, November 2016 Competitive Oil and Gas Lease Sale,” EA No. DOI-BLM-UT-G010-2016-033-EA (Feb. 8, 2017) at 42, excerpt attached as Exhibit 1;
- In conjunction with a September 2016 proposal to offer oil and gas lease parcels in the Pecos District Office of New Mexico. See BLM, “Environmental Assessment for September 2017 Competitive Oil and Gas Lease Sale, Carlsbad and Roswell Field Offices,” EA No. DOI-BLM-NM-P020-2017-0001-EA at 48, excerpt attached as Exhibit 2;
- In conjunction with a December 2017 proposal to offer oil and gas lease parcels in the Vernal Field Office of Utah. In this EA, the BLM explained:

  Indirect Downstream GHG emissions are estimated based on an average cumulative production rate of 24,120 barrels of oil, and 421,302 MCF gas over the life of a well, based on the production history for the fields and regions in which the parcels are located. (UDOGM, 2017a). Indirect GHG emissions are also only calculated for carbon dioxide based on combustion of the product. Using the RFD in Appendix D, and an EPA emissions factor of 0.43 Metric tons of CO2 per Barrel (Administration, 2016), and 0.054717 MT of CO2 per MCF of gas (EPA, 2017) indirect GHG emissions can be estimated at 33,423.94 metric tons per well. For total assumed emissions, multiply these numbers by the 135 projected wells. Actual GHG emissions may range from zero (assuming no lease parcels sold or developed) to an indeterminate upper range based on realized production rates, control technology, and physical characteristics of any oil produced.

Even BLM’s own guidance directs the agency to, “Quantify and disclose to the fullest extent possible the reasonably foreseeable direct and indirect GHG emissions when analyzing the direct and indirect effects of [] proposed action[s].” BLM, Permanent Instruction Memorandum No. 2017-003. Absent such an analysis of indirect emissions, reliance upon a DNA to justify the proposed leasing is not supported.

Finally, the inappropriateness of utilizing a DNA in this case is also not warranted given that the BLM has never considered alternatives to leasing the proposed parcels. In the RMP FEIS, every alternative considered in detail contemplated leasing the proposed parcels. The BLM cannot shirk its duty to consider in detail reasonable alternatives to its proposed leasing, especially a No Action alternative. Here, BLM has never considered an actual “no leasing alternative” in relation to the proposed parcels, in complete contravention of NEPA. In considering reasonable alternatives, the BLM must “[i]nclude the alternative of no action.” 40 C.F.R. § 1502.14(d). Thus, reliance on a DNA in this case is unfounded.

While the BLM may claim that future impacts will be analyzed and assessed, and alternatives considered, when drilling proposals are submitted, this does not absolve the agency of its duty to comply with NEPA at the leasing stage. Because leasing conveys a right to develop, absent any stipulations that provide the agency with authority to constrain and even prevent future development to limit greenhouse gas or climate impacts, the BLM has no basis to assert that it is appropriate to wait to conduct its legally required analysis under NEPA, or worse, assert that there would be no reasonably foreseeable emissions associated with its proposed action. Here, no such stipulations have been proposed, rendering invalid BLM’s assertion that the proposed leasing would pose no significant impacts to the human environment.

Regardless, the BLM more often than not does not even analyze and assess the impacts of greenhouse gas emissions at the drilling stage. In fact, in both the Colorado River Valley and the Grand Junction Field Offices, the agency frequently categorically excludes drilling permits from any NEPA analysis, meaning no analysis of environmental impacts even occurs. Some recent examples of the BLM approving drilling proposals through categorical exclusions where no analysis of greenhouse gas emissions occurred include, but are not limited to:

- Approval of six federal wells and 10 fee wells in Mesa County in the Grand Junction Field Office through categorical exclusion DOI-BLM-CO-N040-2017-0106-CX;
- Approval of six new wells in Garfield County in the Colorado River Valley Field Office through categorical exclusion DOI-BLM-CO-N040-2017-0082-CX;
- Approval of five new wells in Garfield County in the Colorado River Valley Field Office through categorical exclusion DOI-BLM-CO-N040-2017-0081-CX;
- Approval of 22 new wells in Garfield County in the Colorado River Valley Field Office through categorical exclusion DOI-BLM-CO-N040-2017-0078-CX;
- Approval of seven wells in Mesa County in the Grand Junction Field Office through categorical exclusion DOI-BLM-CO-N040-2017-000054-CX; and
- Approval of seven wells in Mesa County in the Grand Junction Field Office through categorical exclusion DOI-BLM-CO-N040-2017-0016-CX.
As these categorical exclusions indicate, unless the BLM actually commits, through the imposition of a stipulation or stipulations, to conduct additional NEPA analysis at the drilling stage, it more often than not does not happen. This means any commitment to address the greenhouse gas emissions of 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 environmental impacts under NEPA.

In any case, the BLM has completely failed to provide information and analysis, even brief information and analysis, supporting its determination that no NEPA analysis is necessary for the proposed leases. At a minimum, the BLM must prepare an EA to determine whether an EIS is necessary for the proposed leasing and, if necessary, prepare an EIS before moving forward with the proposed lease sale.

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.

Compounding the BLM’s reliance on a DNA and failure to appropriately analyze and assess greenhouse gas emissions from reasonably foreseeable development of the proposed leases, 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 RMP FEISs and Records of Decision relied upon by the BLM to justify a DNA, the agency completely ignored the cumulative impacts that will result from past and future lease sales in Colorado


- **Nevada:** the BLM sold 20 parcels (35,502.86 acres) at its March sale and 3 parcels (5,760 acres) at its June lease sale. The results for both sales are available under


- **All told, the BLM has leased or is proposing to lease approximately 717 parcels or 579,005.78 acres of publicly 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 statewide, or even national scale. For instance, in the Grand Junction RMP FEIS, the BLM compares Field Office-wide greenhouse gas emissions to statewide greenhouse gas emissions, apparently as a means to compare and assess the relative scale and magnitude of the Field Office-wide impacts. See Grand Junction FEIS at 4-44. In the Colorado River Valley RMP FEIS, the BLM compares Field Office-wide greenhouse gas emissions to national greenhouse gas emissions, also apparently as a means to compare and assess the relative scale and magnitude of the Field Office-wide impacts. See Colorado River Valley FEIS at 4-50. Given this, it is at least necessary for the BLM to account for the similar impacts of other federal oil and gas leasing proposals in Colorado and beyond in order to meet NEPA’s requirement that the impacts of similar actions be accounted for in NEPA documents. Indeed, the BLM cannot claim that emissions have been previously addressed 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 further renders the agency’s reliance on a DNA unsupported.

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 and sufficient justification for a DNA, 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. The BLM’s failure to address social cost of carbon comes in the face of the agency discussing the economic benefits of natural resource development in the Grand Junction and Colorado River Valley Field Offices in the RMP FEISs and Records of Decision.

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 4, U.S. Environmental Protection Agency (“EPA”), “Fact Sheet: Social Cost of Carbon” (Nov. 2013) at 1, formerly available online at https://www.epa.gov/climatechange/social-cost-carbon. The protocol was developed by a working group consisting of several federal agencies.


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

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 8 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 10, Revesz, R. et al. “Best cost estimate of greenhouse gases,” 357 Science 655, 655 (Aug. 18, 2017).


<table>
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<tr>
<th>Year</th>
<th>5% Average</th>
<th>3% Average</th>
<th>2.5% Average</th>
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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 8.

Although often utilized in the context of agency rulemakings, the protocol has been recommended for use and has been used in project-level decisions. For instance, the EPA recommended that an EIS prepared by the U.S. Department of State for the proposed Keystone XL oil pipeline include “an estimate of the ‘social cost of carbon’ associated with potential increases of GHG emissions.” Exhibit 12, EPA, Comments on Supplemental Draft EIS for the Keystone XL Oil Pipeline (June 6, 2011).
More importantly, the BLM 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 for example, the Miles City Field Office estimated “the annual SCC [social cost of carbon] associated with potential development on lease sale parcels.” BLM, “Environmental Assessment for October 21, 2014 Oil and Gas Lease Sale,” DOI-BLM-MT-0010-2014-0091-EA (May 19, 2014) at 76, excerpt attached as Exhibit 13. In conducting its analysis, the BLM used a “3 percent average discount rate and year 2020 values,” presuming social costs of carbon to be $46 per metric ton. Id. Based on its estimate of greenhouse gas emissions, the agency estimated total carbon costs to be “$38,499 (in 2011 dollars).” Id. In Idaho, the BLM also utilized the social cost of carbon protocol to analyze and assess the costs of oil and gas leasing. Using a 3% average discount rate and year 2020 values, the agency estimated the cost of carbon to be $51 per ton of annual CO$_2$e increase. See BLM, “Little Willow Creek Protective Oil and Gas Leasing,” EA No. DOI-BLM-ID-B010-2014-0036-EA at 81 (Feb. 10, 2015), https://eplanning.blm.gov/epl-front-office/projects/nepa/39064/55133/59825/DOI-BLM-ID-B010-2014-0036-EA.UPDATED.02272015.pdf, excerpt attached as Exhibit 14. 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 4 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 15, Moore, C.F. and B.D. Delvane, “Temperature impacts on economic growth warrant stringent mitigation policy,” Nature Climate Change 2 (Jan. 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 4.

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

[D]elaying action to limit the effects of climate change is costly. Because CO$_2$
accumulates in the atmosphere, delaying action increases CO\textsubscript{2} concentrations. Thus, if a policy delay leads to higher ultimate CO\textsubscript{2} concentrations, that delay produces persistent economic damages that arise from higher temperatures and higher CO\textsubscript{2} concentrations. Alternatively, if a delayed policy still aims to hit a given climate target, such as limiting CO\textsubscript{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.

\textit{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. \textit{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. \textit{Id.} at 1199. The agency argued, however, that valuing the costs of carbon emissions was too uncertain. \textit{Id.} at 1200. The court found this argument to be arbitrary and capricious. \textit{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. \textit{Id.} It further noted that other benefits, while also uncertain, were monetized by the agency. \textit{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. \textit{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.” \textit{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. \textit{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. \textit{Id.} Such approval was based on a NEPA analysis with misleading economic assumptions, an approach long disallowed by courts throughout the country. \textit{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 “\textit{justifiable reasons} for not using (or assigning minimal weight to) the social cost of carbon protocol . . . .” \textit{Id.} at 1193 (emphasis added). Just last week, a federal district court in Montana cited to the \textit{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. \textit{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 17, Greenstone, M., “There’s a Formula for Deciding When to Extract Fossil Fuels,” New York Times (Dec. 1, 2015), available at https://www.nytimes.com/2015/12/02/upshot/theres-a-formula-for-deciding-when-to-extract-fossil-fuels.html. Just 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 18, William D. Nordhaus, Revisiting the Social Cost of Carbon, PNAS, Feb. 14, 2017, http://www.pnas.org/content/114/7/1518.full.pdf.

Clearly, the social cost of carbon provides a useful, valid, and meaningful tool for assessing the climate consequences of the proposed development, 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 discussed in the FEIS and Records of Decision relied upon by the BLM in justifying a DNA indicates that costs and benefits are integral for assessing the significance of the proposed leasing. To this end, the BLM cannot move forward with the proposed leasing unless and until it discloses carbon costs in order to fully assess the significance of climate impacts pursuant to NEPA.

Sincerely,

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