

April 10, 2017

<u>Via Hand Delivery</u>

Ruth Welch State Director U.S. Bureau of Land Management Colorado State Office 2850 Youngfield St. Lakewood, CO 80215

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

Dear Ms. Welch:

Pursuant to 43 C.F.R. § 3120.1-3, WildEarth Guardians hereby protests the Bureau of Land Management's ("BLM's") proposal to offer 106 publicly owned oil and gas lease parcels covering 100.815.97 acres of land in the White River, Little Snake, and Kremmling Field Offies of Colorado for competitive sale on June 8, 2017. These parcels include public lands managed by BLM in Grand, Jackson, Routt, Moffat, and Rio Blanco Counties, Colorado. The specific parcels being protested include the following, as identified by the BLM's in its Final June 2017 Oil and Gas Sale List:¹

Lease Parcel	Acres	County	
COC78269	167.82	Routt	
COC78270	722.20	Rio Blanco	
COC78271	400.00	Rio Blanco	
COC78272	600.06	Rio Blanco	
COC78273	1,135.27	Rio Blanco	
COC78274	1,583.82	Rio Blanco	
COC78275	507.32	Rio Blanco	
COC78276	924.26	Rio Blanco	
COC78277	1,683.76	Rio Blanco	
COC78278	192.59	Rio Blanco	
COC78279	160.00	Rio Blanco	
COC78280	40.00	Rio Blanco	

¹ This list, which was made available on March 10, 2017, is on the BLM's website at <u>https://eplanning.blm.gov/epl-front-office/projects/nepa/70241/99316/120339/Sale_Notice_June2017.pdf</u>.

COC78281	80.00	Rio Blanco
COC78282	711.14	Rio Blanco
COC78283	162.22	Rio Blanco
COC78284	1,362.71	Grand
COC78285	2,537.86	Grand
COC78286	1,873.80	Grand
COC78287	360.00	Grand
COC78288	1,626.66	Grand
COC78289	2,212.61	Grand
COC78290	2,390.41	Grand
COC78291	1,258.20	Grand
COC78292	1,239.13	Grand
COC78293	1,512.15	Grand
COC78294	232.87	Grand
COC78295	2,025.76	Grand
COC78296	1,580.23	Grand
COC78297	39.82	Jackson
COC78298	640.00	Jackson
COC78299	280.00	Jackson
COC78300	1,676.04	Grand
COC78301	1,186.20	Grand
COC78302	1,523.49	Grand
COC78303	1,678.48	Grand
COC78304	1,101.92	Grand
COC78305	719.80	Jackson
COC78306	719.68	Jackson
COC78307	1,544.11	Jackson
COC78308	1,160.00 Jackson	
COC78309	1,400.00	Jackson
COC78310	158.80 Jackson	
COC78311	1,347.50 Jackson	
COC78312	825.09	Jackson
COC78313	320.00 Jackson	
COC78314	110.13	Grand
COC78315	40.00	Grand
COC78316	1,007.43	Routt
COC78317	922.85	Routt
COC78318	715.05 Routt	
COC78319	730.15 Routt	
COC78320	1,200.00 Routt	
COC78321	1,440.00 Routt	

COC78322	1,990.86	Routt	
COC78323	160.00 Routt		
COC78324	920.00 Routt		
COC78325	480.00	Routt	
COC78326	120.00 Routt		
COC78327	866.38	38 Routt	
COC78328	240.00	0 Routt	
COC78329	1,477.39 Routt		
COC78330	680.00	Routt	
COC78331	840.00	Routt	
COC78332	125.16	Routt	
COC78333	80.00	0.00 Routt	
COC78334	562.47	Routt	
COC78335	120.00	Routt	
COC78336	80.00	Routt	
COC78337	320.00	Routt	
COC78338	1,080.00	Routt	
COC78339	160.00	Routt	
COC78340	639.54	Routt	
COC78341	748.20	Moffat	
COC78342	542.50	2.50 Moffat	
COC78343	40.00 Rio Blanc		
COC78344	557.75 Moffat		
COC78345	1,240.91	Rio Blanco	
COC78346	1,201.97 Rio Blanc		
COC78347	1,740.50	Rio Blanco	
COC78348	1,787.82	Rio Blanco	
COC78349	1,808.82	Rio Blanco	
COC78350	1,873.26 Rio Blanco		
COC78351	1,917.52	Rio Blanco	
COC78352	1,914.96	Rio Blanco	
COC78353	1,834.59 Rio Blanco		
COC78354	440.00 Rio Blanco		
COC78355	640.00	Rio Blanco	
COC78356	1,440.00	Rio Blanco	
COC78357	2,230.00	Rio Blanco	
COC78358	1,920.40	Rio Blanco	
COC78359	2,164.84	Rio Blanco	
COC78360	1,263.08 Rio Blanco		
COC78361	799.92	Rio Blanco	
COC78362	880.00 Rio Blanco		

COC78363	870.79	Rio Blanco
COC78364	520.00	Rio Blanco
COC78365	880.00	Rio Blanco
COC78366	200.32	Rio Blanco
COC78367	1,400.84	Rio Blanco
COC78368	800.00	Rio Blanco
COC78369	1,274.56	Rio Blanco
COC78370	1,920.00	Rio Blanco
COC78371	460.16	Rio Blanco
COC78372	151.68	Rio Blanco
COC78373	356.03	Rio Blanco
COC78374	283.36	Rio Blanco

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. WildEarth Guardians is headquartered in Santa Fe, New Mexico, but has offices and staff throughout the western United States, including in Denver. 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 BLM's proposed leasing on September 7, 2016 and December 12, 2016.

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 February 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, *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 impacts of oil and gas leasing. In support of its proposed leasing, the agency prepared an EA that failed to analyze the reasonably foreseeable greenhouse gas emissions and climate impacts that would result from selling the oil and gas lease parcels, as well as failed to address potentially significant impacts to sage grouse and other wildlife. The agency's proposed FONSI is therefore unsupported and any decision to sell and issue the aforementioned lease parcels cannot be sustained. Either the BLM must prepare an EIS or it cannot proceed with the lease sale as proposed. Below, we detail how BLM's proposal fails to comply with NEPA.

1. The BLM Failed to Analyze and Assess the Direct, Indirect, and Cumulative Impacts of Greenhouse Gas Emissions that Would Result from Issuing the Proposed Lease Parcels In the EA, the BLM completely rejected analyzing and assessing the potential direct and indirect greenhouse gas emissions, including carbon dioxide and methane, that would result from the reasonably foreseeable development of the proposed leases. Although acknowledging that development of the lease parcels would occur and that greenhouse gas emissions would be produced, no analysis of these emissions was actually prepared.

The BLM appears to assert that estimates of emissions are impossible to determine because it is impossible to determine what reasonably foreseeable development may occur. However, as the agency notes in at least the EA, reasonably foreseeable development scenarios have been analyzed. *See* EA at 49. In this case, although BLM may not know precisely how many wells will be developed, the agency knows that some wells will clearly be developed, and that over the life of the current Resource Management Plans, a certain number of wells are likely to be developed. This cannot support a conclusion that zero wells will be developed, which the BLM appears to advance.

The BLM's position is all the more egregious given that other BLM Field Offices, including, but not limited to, the Vernal Field Office in Utah, Four Rivers Field Office in Idaho, the Billings Field Office in Montana, the Royal Gorge Field Office in Colorado, and others have not only estimated reasonably foreseeable greenhouse gas emissions associated with the development of oil and gas leases, but clearly do not believe that such information is not "impossible" to analyze under NEPA.

Most recently, in the Vernal Field Office of Utah, the BLM developed an estimate of both direct and indirect emissions related to proposed oil and gas leasing. In an EA prepared in October, the agency explained:

Direct greenhouse gas emissions from speculative future oil and gas well production on the proposed lease parcels was calculated assuming one well per parcel. Total Greenhouse Gas Warming Potential (GWP), which includes direct emissions of carbon dioxide, methane, and nitrous oxide from an oil or gas producing well is estimated based on the emissions estimates from the Greater Monument Buttes Final Environmental Impact Statement ([BLM 2016] Table 4.2.1.1.1-1), which is the most recent NEPA calculation of GHG in the lease area. The per-well GWP emissions estimate was made by dividing the Project Total GWP emissions in Table 4.2.1.1.1-1 (3,096,936 tpy) by the total number of producing oil and gas wells used to generate the GWP emissions estimates (5,740 wells). This gives a GWP emissions estimate of approximately 540 tons per year GWP emissions on a per-well, per-parcel basis. Actual emissions may range from zero if a parcel is not leased or not developed after leasing, to an unknown upper range.

Exhibit 2 to Guardians' December 12, 2016 Comments at 39-40, available online at <u>https://eplanning.blm.gov/epl-front-office/projects/nepa/59590/86059/103236/Fianl_for_Posting.pdf</u>. In this EA, the BLM not only analyzed and assessed direct greenhouse gas emissions, but also estimated reasonably foreseeable indirect emissions related to the consumption of oil and gas produced from proposed

leases. In its EA, the BLM presented an estimate of "low," "average," and "high" emissions, reporting that consumption related emissions could be nearly 500,000 metric tons of carbon dioxide equivalent annually. *See id.* at 40.

In the Four Rivers Field Office of Idaho, the BLM utilized an emission calculator developed by air quality specialists at the BLM National Operations Center in Denver to estimate likely greenhouse gases that would result from leasing five parcels. *See* Exhibit 9 to Guardians' September 7, 2016 Scoping Comments at 41. The agency estimated that 2,893.7 tons of carbon dioxide equivalent (" $CO_2e^{"}$) would be released per well. *Id.* at 35. Based on the analyzed alternatives, which projected between 5 and 25 new wells, the BLM estimated that total greenhouse gas emissions would be between 14,468.5 tons and 72,342.5 tons annually. *Id.*

Although the BLM may assert that such information is not possible to analyze, there is no basis for such a claim. Not only has the agency estimated reasonably foreseeable development and disclosed in the EAs that greenhouse gas emissions are a likely reasonably foreseeable consequence of issuing the leases, but using the agency's own logic, this would mean that any analysis of future environmental impacts would be incredibly uncertain. Of course, this would completely undermine NEPA's mandate that significance be based on "uncertain[ty]." 40 C.F.R. § 1508.27(b)(5). Indeed, if the climate impacts of oil and gas leasing are, as the BLM asserts, so uncertain, then an EIS is justified. As CEQ states, whether or not impacts are significant, and therefore trigger the need to prepare an EIS, are based on whether impacts are "highly uncertain or involve unique or unknown risks." *Id*. The BLM cannot summarily dismiss significant issues, such as climate change, on the basis of uncertainty without assessing whether this uncertainty necessitates preparation of an EIS.

Regardless, the agency's arguments in the EAs are belied by the fact that, as just discussed, other BLM Field Offices clearly believe that an analysis of reasonably foreseeable greenhouse gas emissions is not only reasonable, but also possible and useful.

Adding to the shortcomings in the EAs is that the BLM failed to analyze the cumulative impacts of greenhouse gas emissions from past, present, and reasonably foreseeable oil and gas development. As noted above, other BLM Field Offices have analyzed the likely greenhouse gas emissions that would result based on the BLM's own reasonably foreseeable development scenarios. In this case, the BLM has not made any attempt to estimate greenhouse gas emissions that would result from oil and gas development likely to occur under the agency's reasonably foreseeable development scenarios, both for the Field Offices at issue here and for Field Offices undertaking oil and gas leasing elsewhere in Colorado and the American West.

In the EA, the BLM appears to insinuate that greenhouse gas emissions from reasonably foreseeable oil and gas development would simply be insignificant. This assertion, however, defies the required scope of the BLM's analysis. Under 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). Here, the BLM was required to at least take into account the greenhouse gas emissions resulting from other proposed oil and gas leasing in Colorado, if

not beyond, as well as related oil and gas development, and to analyze the impacts of these actions in terms of their direct, indirect, and cumulative impacts.

The failure to address cumulative greenhouse gas emissions is made worse by the fact that the underlying Final EISs prepared for the White River, Little Snake, and Kremmling Field Offices' Resource Management Plans nowhere analyze or assess greenhouse gas emissions associated with oil and gas development. In light of this, the BLM clearly has no basis to conclude that greenhouse gas emissions resulting from the reasonably foreseeable impacts of oil and gas development associated with the proposed leasing would not be significant. Without any analysis of cumulative greenhouse emissions whatsoever, the agency's proposed FONSIs are unsupported under NEPA.

The BLM finally attempts 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, this argument has no merit as the agency has proposed no stipulations that would grant the BLM 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—for the proposed leases is therefore 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 refused to 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' September 7, 2016 Comments. The protocol was developed by a working group consisting of several federal agencies, including the U.S. Department of Agriculture, EPA, CEQ, and others, with the primary aim of implementing Executive Order 12866, which requires that the costs of proposed regulations be taken into account.

In 2009, an Interagency Working Group was formed to develop the protocol and issued final estimates of carbon costs in 2010. These estimates were then revised in 2013 by the Interagency Working Group, which at the time consisted of 13 agencies, including the

Department of Agriculture. This report and the social cost of carbon estimates were again revised in 2015. *See* Exhibit 4 to Guardians' September 8, 2016 Comments. Again, this report and social cost of carbon estimates were revised in 2016. *See* Exhibit 1 to this Protest, 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 2 to this Protest, 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 5 to Guardians' September 7, 2016 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 6 to Guardians' September 7, 2016 Comment of Social Cost of Carbon Estimates," 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.

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

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

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-thanexpected" impacts from climate change. 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 7 to Guardians' September 7, 2016 Comments.

More importantly, the BLM has also utilized the social cost of carbon protocol in the context of oil and gas leasing. In recent Environmental Assessments for oil and gas leasing in Montana, the agency estimated "the annual SCC [social cost of carbon] associated with potential development on lease sale parcels." Exhibit 8 to Guardians' September 7, 2016 Comments at 71. 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.* 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 9 to Guardians' September 7, 2016 Comments at 81. 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' September 7, 2016 Comments. 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 10 to Guardians' September 7, 2016 Comments 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' September 7, 2016 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 11 to Guardians' September 7, 2016 Comments, Executive Office of the President of the United States, "The Cost of Delaying Action to Stem Climate Change" (July 2014), available online at

<u>https://www.whitehouse.gov/sites/default/files/docs/the_cost_of_delaying_action_to_stem_clima</u> te_change.pdf. 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.

Exhibit 11 to Guardians' September 7, 2016 Comments at 1.

The requirement to analyze the social cost of carbon is supported by the general requirements of NEPA and federal case law. As explained, NEPA requires agencies to analyze the consequences of proposed agency actions and consider include direct, indirect, and cumulative consequences. In terms of oil and gas leasing, an analysis of site-specific impacts must take place at the lease stage and cannot be deferred until after receiving applications to drill. *See New Mexico ex rel. Richardson v. Bureau of Land Management*, 565 F.3d 683, 717-18 (10th Cir. 2009); *Conner v. Burford*, 848 F.2d 1441 (9th Cir.1988); *Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1227 (9th Cir.1988).

To this end, 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 12 to Guardians' September 7, 2016 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.

In light of all this, it appears more than reasonable to have expected the BLM to take into account carbon costs as part of its NEPA analyses. The agency did not. In fact, the BLM did not even address carbon costs in its EA.

The fact that the BLM has, in the context of other oil and gas lease sale environmental analyses, clearly acknowledged that social cost of carbon analyses are appropriate, useful, and possible, the refusal of the agency to similarly undertake such analyses in the current context is unsupported under NEPA and cannot stand to support the decision to offer the aforementioned lease parcels for sale and issuance in June 2017.

Sincerely, Jeremy Nichols

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