



September 4, 2015

Via Hand Delivery

Mary Jo Rugwell
Acting State Director
U.S. Bureau of Land Management
Wyoming State Office
5353 Yellowstone Road
Cheyenne, WY 82003

Re: Protest of August 2015 Competitive Oil and Gas Lease Sale

Dear Ms. Rugwell:

Pursuant to 43 C.F.R. § 3120.1-3, WildEarth Guardians hereby protests the Bureau of Land Management's ("BLM's") proposal to offer 42 publicly owned oil and gas lease parcels covering 66,820.1 acres of land in the High Desert District Office of Wyoming for competitive sale on November 3, 2015. These lease parcels include the following, as identified by the BLM's in its Final November 2015 Oil and Gas Sale List:¹

Lease Number	Acres	Field Office	County
WY-1511-001	2395.82	Rawlins	Carbon
WY-1511-002	1107.44	Rawlins	Carbon
WY-1511-003	1650.87	Rawlins	Carbon
WY-1511-004	1093.75	Rawlins	Carbon
WY-1511-005	2390.85	Rawlins	Carbon
WY-1511-006	640.00	Rawlins	Carbon
WY-1511-007	840.00	Rawlins	Sweetwater
WY-1511-008	622.64	Rawlins	Sweetwater
WY-1511-009	398.62	Rawlins	Sweetwater
WY-1511-010	1280.00	Rawlins	Sweetwater
WY-1511-011	947.34	Rawlins	Sweetwater
WY-1511-012	266.07	Rock Springs	Sweetwater
WY-1511-013	1280.00	Rawlins	Sweetwater

¹ This list is available on the BLM's website at <http://www.blm.gov/style/medialib/blm/wy/programs/energy/og/leasing/2015.Par.3655.File.dat/115sale.pdf>.

WY-1511-014	2353.80	Rock Springs	Sweetwater
WY-1511-015	2556.68	Rock Springs	Sweetwater
WY-1511-018	1597.28	Kemmerer	Lincoln
WY-1511-019	2466.42	Kemmerer	Lincoln
WY-1511-020	2513.48	Kemmerer	Lincoln
WY-1511-021	2514.52	Kemmerer	Lincoln
WY-1511-022	1871.44	Kemmerer	Lincoln
WY-1511-023	876.73	Kemmerer	Lincoln
WY-1511-024	1801.56	Kemmerer	Lincoln
WY-1511-025	40.00	Kemmerer	Lincoln
WY-1511-026	400.00	Kemmerer	Uinta
WY-1511-027	2013.16	Kemmerer	Uinta
WY-1511-028	2153.48	Kemmerer	Lincoln
WY-1511-029	1995.32	Kemmerer	Lincoln
WY-1511-030	2505.47	Kemmerer	Lincoln
WY-1511-031	1258.25	Kemmerer	Lincoln
WY-1511-032	280.00	Kemmerer	Lincoln
WY-1511-033	680.00	Kemmerer	Lincoln
WY-1511-034	2360.00	Kemmerer	Lincoln
WY-1511-035	2548.76	Kemmerer	Lincoln
WY-1511-036	2560.00	Kemmerer	Lincoln
WY-1511-037	2538.84	Kemmerer	Lincoln
WY-1511-038	1747.49	Kemmerer	Lincoln
WY-1511-039	1915.44	Kemmerer	Lincoln
WY-1511-040	2560.00	Kemmerer	Uinta
WY-1511-041	2558.88	Kemmerer	Uinta
WY-1511-042	520.00	Kemmerer	Lincoln

STATEMENT OF INTEREST

WildEarth Guardians is a nonprofit environmental advocacy organization dedicated to protecting the wildlife, wild places, wild rivers, and health of the American West. On behalf of our members, Guardians has an interest in ensuring the BLM fully protects public lands and resources as it conveys the right for the oil and gas industry to develop publicly owned minerals. More specifically, Guardians has an interest in ensuring the BLM meaningfully and genuinely takes into account the climate implications of its oil and gas leasing decisions and objectively and robustly weighs the costs and benefits of authorizing the release of more greenhouse gas emissions that are known to contribute to global warming.

WildEarth Guardians submitted comments on the BLM's proposed leasing on May 22, 2015. These flagged concerns over the BLM's failure to adequately address the climate impacts of the proposed leasing. As part of these comments, Guardians referenced and attached 17 exhibits. For purposes of this protest, our comments and exhibits are hereby incorporated by reference.

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

WildEarth Guardians
1536 Wynkoop, Suite 310
Denver, CO 80202

STATEMENT OF REASONS

WildEarth Guardians protests the BLM's November 3, 2015 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 the National Environmental Policy Act ("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).

Here, the BLM fell short of complying with NEPA with regards to analyzing and assessing the potentially significant climate impacts of oil and gas leasing. In support of its

proposed leasing, the agency prepared an EA (EA No. DOI-BLM-WY-040-EA15-70).² In the EA, however, the BLM failed to analyze the reasonably foreseeable greenhouse gas emissions that would result from selling the oil and gas lease parcels, as well as failed to assess the significance of any emissions, particularly in terms of carbon costs.

In the EA, the BLM acknowledged that climate change is a very serious issue and that it is being fueled by the release of human-produced greenhouse gas emissions. *See* EA at 47-52. The BLM acknowledged findings by the Intergovernmental Panel on Climate Change (“IPCC”), stating:

The Intergovernmental Panel on Climate Change...recently concluded that ‘warming of the climate system is unequivocal’ and “it is extremely likely that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG [greenhouse gas] concentrations and other anthropogenic forcings together.’

EA at 49. Unfortunately, in spite of recognizing these serious climate consequences, the BLM made no effort in the EA to analyze and assess the potential greenhouse gas emissions that would result from oil and gas development and the likely climate consequences.

The EA fails to analyze the reasonably foreseeable greenhouse gas emissions that would result from development of the proposed leases. Instead of using readily available information and methods, including analyses that other BLM offices have been perfectly capable of preparing, the agency instead asserts that it is simply impossible to estimate such emissions. *See* EA at 69. The issue, however, is not that it is impossible to estimate emissions, but that BLM believes it cannot estimate emissions as precisely as it prefers to. This is not allowed under NEPA. Although the agency may believe that without definitive development proposals, it cannot project impacts, 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. Regardless, because leasing conveys a right to develop, absent any stipulations that provide the agency with authority to constrain or even prevent future development to limit greenhouse gas or climate impacts, the BLM has 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.

In any case, the BLM has completely failed to provide information and analysis, even brief information and analysis, supporting a FONSI and any decision to sell and issue the aforementioned lease parcels. 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.

² The EA is available on the BLM’s website at http://www.blm.gov/style/medialib/blm/wy/information/NEPA/og/2015/11nov/ver2.Par.43985.File.dat/v2_EA.pdf.

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 determinate what reasonably foreseeable development may occur. However, as the agency notes in the EA, reasonably foreseeable development scenarios have been analyzed for the High Desert District. The EA explains:

The Reasonably Foreseeable Development (RFD) in the Rawlins RMP assumes that 3,711 federal wells would be put into production over a 20-year life of project assumption (LOP), which equates to approximately 186 wells per year. The RFD was derived for analysis purposes on a field office-wide basis and is not intended to be a development cap. The RFD document for the Kemmerer RMP estimated that approximately 120 wells would be drilled/completed annually for Federal minerals. The RFD for Pinedale RMP is 9,150 wells (457/year) and the Green River RMP is 2,400 (120/year)...Current APD permitting trends within the field offices confirm that these assumptions are still accurate.

EA at 69. 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 Four Rivers Field Office in Idaho, the Billings Field Office in Montana, the Miles City 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.

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 6 to Guardians' May 22, 2015 EA Comments at 41. Relying on a report prepared in 2013 for the BLM by Kleinfelder, which was attached as Exhibit 8 to Guardians' May 22, 2015 Comments, the agency estimated that 2,893.7 tons of carbon dioxide equivalent ("CO₂e") 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.*

In both the Billings and Miles City Field Offices of Montana, the BLM estimated likely greenhouse gas emissions from development of oil and gas leases. To do so, the agency first calculated annual greenhouse gas emissions from oil and gas activity within the Field Offices. *See* Exhibit 8 to Guardians' May 22, 2015 Comments on the EA at 51 and Exhibit 9 to Guardians' May 22, 2015 Comments on the Ea at 47. The BLM then calculated total greenhouse gases by assuming that the percentage of acres to be leased within the federal mineral estate of the Field Offices would equal the percentage of emissions. *Id.* Although we have concerns over the validity of this approach to estimate emissions (an "acre-based" estimate of emissions is akin to estimating automobile emissions by including junked cars, which has the misleading effect of reducing the overall "per car" emissions), nevertheless it demonstrates that the BLM has the ability to estimate reasonably foreseeable greenhouse gas emissions associated with oil and gas leasing and that such estimates are valuable for ensuring a well-informed decision.³

In the Royal Gorge Field Office of Colorado, the BLM contracted with URS Group Inc. to prepare an analysis of air emissions from the development of seven oil and gas lease parcels. *See* Exhibit 1, URS Group Inc., "Draft Oil and Gas Air Emissions Inventory Report for Seven Lease Parcels in the BLM Royal Gorge Field Office," Prepared for BLM, Colorado State Office and Royal Gorge Field Office (July 2013). This report estimated emissions of carbon dioxide and methane on a per-well basis and estimated the total number of wells that could be developed in these seven parcels. *See* Exhibit 1 at 3 and 5. This report was later supplanted by the Colorado Air Resource Management Modeling Study, or CARMMS, which estimated reasonably foreseeable emissions of greenhouse gases, criteria pollutants, and hazardous air pollutants associated with oil and gas development throughout Colorado, as well as part of New Mexico, and modeled air quality impacts. *See* Exhibit 2, ENVIRON, "Colorado Air Resource Management Modeling Study (CARMMS) 2021 Modeling Results for the High, Low and Medium Oil and Gas Development Scenarios," Prepared for BLM Colorado State Office (January 2015), available online at http://www.blm.gov/style/medialib/blm/co/information/nepa/air_quality.Par.97516.File.dat/CARMMS_Final_Report_w-appendices_012015.pdf. As part of the CARMMS report, the BLM estimated per well emissions, including greenhouse gas emissions, in tons per year, as follows:

³ In addition to the Billings and Miles City Field Offices, the BLM estimated greenhouse gas emissions associated with oil and gas leasing in the Butte and Dillon Field Offices.

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

Using these CARMMS estimates, as well as assumptions used in the agency's reasonably foreseeable development scenario analyses, it appears relatively straightforward for the agency to estimate total greenhouse gas emissions, at least on a cumulative basis. For instance, in the Rock Springs Field Office, the agency concluded in 2013 that 4,804 new conventional oil and gas wells will be drilled in the area by 2031. *See* Rock Springs RFD at Table 20. 4,804 new wells would amount to 441,480 tons of carbon dioxide for construction (4,804 wells * 108.1 tons of CO₂) and 1,210,127 tons/year for production (4,804 wells * 251.9 tons/year).

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 EA 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 EA is 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. Furthermore, even other land management agencies, including the U.S. Forest Service ("USFS"), are analyzing greenhouse gas emissions associated with oil and gas leasing decisions. In a recent Final EIS analyzing the impacts of oil and gas leasing on the Pawnee National Grassland in Colorado, the USFS reported that reasonably foreseeable oil and gas development would emit up to 127,440 tons of carbon dioxide and up to 6,068 tons of methane annually. *See* Exhibit 3, USFS, "Pawnee National Grassland Oil and Gas Leasing Analysis Final Environmental Impact Statement" (December 2014) at 188, available online at http://a123.g.akamai.net/7/123/11558/abc123/forestservic.download.akamai.com/11558/www/nea/95573_FSPLT3_2393686.pdf. Even the Fishlake National Forest in Utah estimated greenhouse gas emissions from reasonably foreseeable development that would result from their oil and gas leasing decision. In a Final EIS prepared in 2013, the agency estimated that 365,336 metric tons of CO₂e would be released annually, not just from production and other related direct

impacts, but also indirectly from transportation, refining, and ultimate consumption. *See* Exhibit 4, USFS, “Record of Decision and Final Environmental Impact Statement, Oil and Gas Leasing Analysis” (August 2013) at 169, available online at http://a123.g.akamai.net/7/123/11558/abc123/forestservic.download.akamai.com/11558/www/nepa/24321_FSPLT3_1452301.pdf.

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, including several Montana Field Offices, have analyzed the likely greenhouse gas emissions that would result based on the BLM’s own reasonably foreseeable development scenarios. *See e.g.* Exhibit 9 to Guardians’ May 25, 2015 EA Comments at 51. In Colorado, the BLM estimated the likely greenhouse gas emissions that would result from the reasonably foreseeable development projected in each field office. *See* Exhibit 5, BLM, “CARMMS GHG Emissions,” available online at http://www.blm.gov/style/medialib/blm/co/information/nepa/air_quality.Par.54983.File.dat/CARMMS%20GHG%20Data.xlsx. 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 for any Field Office in the High Desert District.

The failure to address cumulative greenhouse gas emissions is made worse by the fact that the underlying Final EISs prepared for the Rawlins, Rock Springs, Pinedale, and Kemmerer , Field Office’s 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 FONSI are unsupported under 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 12 to

Guardians’ May 25, 2015 EA 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. *See* Exhibit 13 to Guardians’ May 25, 2015 EA Comments. This report and the social cost of carbon estimates were again revised in 2015. *See* Exhibit 6, Interagency Working Group on Social Cost of Carbon, “Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866” (July 2015), available online at <https://www.whitehouse.gov/sites/default/files/omb/inforeg/scc-tds-final-july-2015.pdf>.

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 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 14 to Guardians’ May 25, 2015 EA Comments.

Revised Social Cost of CO₂, 2010 – 2050 (in 2007 dollars per metric ton of CO₂)

Discount Rate	5.0%	3.0%	2.5%	3.0%
Year	Avg	Avg	Avg	95th
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	25	69	95	212

Most recent social cost of carbon estimates presented by Interagency Working Group on Social Cost of Carbon. The 95th percentile value is meant to represent “higher-than-expected” impacts from climate change. *See* Exhibit 6 at 3.

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 17 to Guardians’ May 25, 2015 EA 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 9 to Guardians’ May 25, 2015 EA Comments at 76.

In conducting its analysis, the BLM used a “3 percent average discount rate and year 2020 values,” presuming social costs of carbon to be \$46 per metric ton. *Id.* Based on its estimate of greenhouse gas emissions, the agency estimated total carbon costs to be “\$38,499 (in 2011 dollars).” *Id.* In Idaho, the BLM also utilized the social cost of carbon protocol to analyze and assess the costs of oil and gas leasing. Using a 3% average discount rate and year 2020 values, the agency estimated the cost of carbon to be \$51 per ton of annual CO₂e increase. *See* Exhibit 6 to Guardians’ May 25, 2015 EA 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 12 to Guardians’ May 25, 2015 EA 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 16 to Guardians’ May 25, 2015 EA 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 12 to Guardians’ May 25, 2015 EA 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 7, Executive Office of the President of the United States, “The Cost of Delaying Action to Stem Climate Change” (July 2014), available online at https://www.whitehouse.gov/sites/default/files/docs/the_cost_of_delaying_action_to_stem_climate_change.pdf. 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.

Exhibit 7 at 1.

The requirement to analyze the social cost of carbon is supported by the general requirements of NEPA, specifically supported in federal case law, and by Executive Order 13,514. 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*, ---F. Supp.2d---, 2014 WL 2922751 (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 3 (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 p. 19. 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.* at pp. 19-20.

In addition to case law, Executive Order 13,514 makes the “reduction of greenhouse gas emissions a priority for federal agencies.” Executive Order 13,514 at Preamble. The reduction of emissions includes emissions from both direct and indirect activities. *Id.* at Section 1. This Executive Order requires that, “[i]n order to create a clean energy economy that will increase our Nation’s prosperity, promote energy security, protect the interests of taxpayers, and safeguard the health of our environment,” it is the “policy of the United States” that agencies “shall

prioritize actions based on a full accounting of both economic and social benefits and costs.” *Id.* When quantifying greenhouse gas emissions, the USFS is specifically instructed to “accurately and consistently quantify and account for greenhouse gas emissions” from sources controlled by the agency, including “emissions of greenhouse gases resulting from Federal land management practices.” *Id.* at Section 9(a). The results of quantifying emissions from proposed federal land management actions, of fully accounting for all economic and social costs and benefits of those proposed actions, and the resulting prioritization of actions based on this quantification and accounting must be fully disclosed on publically available websites. *Id.* at Section 1.

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. Instead, the BLM rejected the notion that a social cost of carbon analysis was appropriate, implicitly concluding that there would be no cost associated with the proposed oil and gas leasing.

In response to Guardians’ comments, the BLM provides various excuses for rejecting addressing the social cost of carbon emissions associated with reasonably foreseeable oil and gas development. Each of these excuses fall flat.

The BLM first asserts that a cost-benefit analysis is not required under NEPA, nor is the agency required to quantify the cost of greenhouse gas emissions. *See* EA, Appendix F at unnumbered page 41. While BLM may be correct that a cost-benefit analysis is not required under NEPA, the agency nevertheless prepared a socio-economic impacts analysis for the proposed leasing that expressly analyzed economic benefits. For example, the BLM fully analyzed, to the dollar, the projected revenue that would result from the selling and issuing the leases. *See* EA at 91. Although the BLM may be correct that a cost-benefit analysis may not be required under NEPA, the agency nevertheless assessed the economic benefits of leasing. For the BLM to now dismiss assessing the costs of leasing would be to engage in the same “half of a cost-benefit analysis” that the U.S. District Court for the District of Colorado rejected as “arbitrary and capricious.”

Similarly, while the BLM may be correct that it is not “required” to analyze the cost of greenhouse gas emissions, the agency is similarly not “required” to analyze the economic benefits of coal leasing, including benefits associated with increased revenue and jobs. The agency nevertheless analyzed and disclosed economic benefits in the EA. Such a one-sided analysis that effectively only discloses “good” impacts and expressly ignores “bad” impacts is indicative of exactly the kind of uninformed decisionmaking prohibited under NEPA.

The BLM also asserts that estimating the social cost of carbon would be “challenging.” EA, Appendix F at unnumbered page 41. However, analyzing the social cost of carbon amounts to a simple multiplication equation. Other BLM Field Offices have been able to complete such simple multiplication equations. We understand that multiplication can be challenging, but presume that the High Desert District staff have acquired the ability to conduct such mathematical exercises

BLM also asserts that carbon dioxide increase associated with the proposed leasing would be “negligible” in the context of nationwide or global carbon emissions. EA, Appendix F

at unnumbered page 41. While it is unclear how the BLM reached this conclusion in the first place, the agency seems to be implying that the reasonably foreseeable carbon costs associated with the proposed oil and gas leasing would be smaller than, say, all global emissions. Here, the BLM misconstrues the purpose of the social cost of carbon protocol, which as explained earlier, is meant to “estimate the economic damages associated with a small increase in carbon dioxide (CO₂) emissions.” Exhibit 12 to Guardians’ May 25, 2015 EA Comments at 1. In this case, while the BLM may perceive carbon dioxide increases associated with the proposed leasing to be “small” or “negligible,” it is exactly these types of discrete increases that the social cost of carbon protocol is to be applied. Ultimately, the BLM may somehow conclude that the carbon costs associated with the lease modification are “negligible,” but the agency cannot prejudice this assessment in an effort to avoid analyzing impacts under NEPA.

The BLM also confusingly asserts that analyzing social cost of carbon would lead to an “unbalanced” analysis. EA, Appendix F at unnumbered page 42. It is unclear what exactly the agency means in making this statement, but it appears the BLM may be asserting that assessing carbon costs would not lead to what it perceives to be an “apples to apples” assessment of costs and benefits. Putting aside the merits of this argument, it is unclear how rejecting conducting any assessment of carbon costs leads to any more of a “balanced” assessment of costs and benefits. Here, in spite of the BLM’s concern over balance, the EA only assesses purported economic “benefits” with no mention at all of any costs. By any measure, the current analysis is not balanced because it only represents one side of a cost-benefit analysis. For BLM to assert that assessing carbon costs would somehow skew the outcome of this already one-sided analysis is difficult, if not impossible, to comprehend. Even if, as the BLM believes, it would not produce an “apples to apples” type of economic assessment, the costs of carbon are still a relevant consideration in the NEPA process. Particularly given that the social cost of carbon protocol is meant to illustrate economic damages, the relevancy of carbon costs appears unquestionable. Rejecting any and all consideration of carbon costs does not resolve any perceived “imbalance” in the NEPA process, but rather it signals that the BLM did not make a well-informed decision.

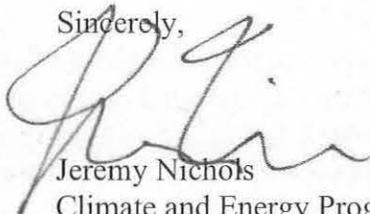
The BLM states that “[r]eporting the SCC [social cost of carbon] in isolation would be misleading.” EA, Appendix F at unnumbered page 38. It is absolutely unclear what the BLM is referring to in making this statement. It appears as if the BLM may believe that calculating carbon costs using the protocol developed by the Interagency Working Group on the Social Cost of Carbon would produce misleading results, but it is unclear how the BLM reached this conclusion. The Interagency Working Group includes 12 federal agencies, including the White House Council of Economic Advisers, Council on Environmental Quality, and the Office of Management and Budget. Their protocol was found to rely on sound methodology by the Government Accountability Office. By any measure, it appears that every effort was made to ensure the social cost of protocol produced estimates of carbon costs that were not misleading. Further, while the BLM asserts that reporting social cost of carbon estimates “in isolation” would be inappropriate, the agency makes no attempt to explain what additional context would be needed.

Regardless, as with BLM’s claim of “imbalance,” it is unclear how outright rejecting any assessment of carbon costs remedies any perception that the social cost of carbon protocol yields

“misleading” results. Implicitly, BLM presumed that there were no carbon costs associated with the proposed oil and gas leases. However, the U.S. District Court for the District of Colorado rejected any notion that the BLM could conclude that the costs of carbon amounted to \$0 as arbitrary and capricious and a violation of NEPA.

In any case, 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 context of the High Desert EA is unsupported under NEPA and cannot stand to support the decision to offer the aforementioned lease parcels for sale and issuance in November of 2015.

Sincerely,



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- Exhibit 1
 - [http://www.blm.gov/style/medialib/blm/co/programs/oil_and_gas/Lease_Sale/2015/may_2015.Par.42432.File.dat/May%2015%20RGFO%20lease%20sale%20\(pre-public%20draft,cso%20edits%20incorporated\).pdf](http://www.blm.gov/style/medialib/blm/co/programs/oil_and_gas/Lease_Sale/2015/may_2015.Par.42432.File.dat/May%2015%20RGFO%20lease%20sale%20(pre-public%20draft,cso%20edits%20incorporated).pdf) (Attachment F, only)
- Exhibit 2
 - http://www.blm.gov/style/medialib/blm/co/information/nepa/air_quality.Par.97516.File.dat/CARMMS_Final_Report_w-appendices_012015.pdf
- Exhibit 3
 - http://a123.g.akamai.net/7/123/11558/abc123/forestservic.download.akamai.com/11558/www/nepa/95573_FSPLT3_2393686.pdf
- Exhibit 4
 - http://a123.g.akamai.net/7/123/11558/abc123/forestservic.download.akamai.com/11558/www/nepa/24321_FSPLT3_1452301.pdf
- Exhibit 5
 - http://www.blm.gov/style/medialib/blm/co/information/nepa/air_quality.Par.54983.File.dat/CARMMS%20GHG%20Data.xlsx
- Exhibit 6
 - <https://www.whitehouse.gov/sites/default/files/omb/inforeg/scc-tds-final-july-2015.pdf>
- Exhibit 7
 - https://www.whitehouse.gov/sites/default/files/docs/the_cost_of_delaying_action_to_stem_climate_change.pdf