



***Bureau of Land Management
Protest Resolution Report***

**Buffalo Field Office
Final Supplemental
Environmental Impact
Statement and Proposed
Resource Management Plan
Amendment**

November 22, 2019

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Acronyms

AEO	Annual Energy Outlook
BFO	Buffalo City Field Office
BLM	Bureau of Land Management
BTU	British thermal unit
CDPA	Coal Development Potential Area
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO ₂ e	carbon dioxide equivalent
EIA	US Energy Information Administration
EIS	Environmental Impact Statement
FLPMA	Federal Land Management and Policy Act
FR	Federal Register
FSEIS	Final Supplemental Environmental Impact Statement
GHG	greenhouse gas
GWP	global warming potential
MCFO	Miles City Field Office
NAAQS	National Ambient Air Quality Standards
NEMS	National Energy Modeling System
NEPA	National Environmental Policy Act
RFD	reasonably foreseeable development
RMP	Resource Management Plan
RMPA	Resource Management Plan Amendment
SCC	social cost of carbon
SCM	social cost of methane
SEIS	Supplement Environmental Impact Statement

Introduction

Upon release the Final Supplemental Impact Statement (FSEIS) and Proposed Resource Management Plan Amendment (RMPA) on October 4, 2019, a 30-day protest period began in which any person who previously participated in the planning process and had an interest that is or may be adversely affected by the proposed plan could submit a protest on the proposed plan. A protest could raise only those issues which were submitted for the record during the planning process.

All protests must be in writing and be filed with the BLM State Director, either as a hard copy or electronically via the Bureau of Land Management's (BLM's) ePlanning website by the close of the protest period, which was November 4, 2019. All protest letters sent to the BLM via fax or e-mail would be considered invalid unless a properly filed protest is also submitted.

The ePlanning page for each planning project contained a tool for submitting a valid protest electronically. The link to the respective ePlanning project page where a protest could be filed was included in the Notice of Availability for the proposed RMPA and FSEIS, and in related news releases and Dear Reader letters.

All protests had to be filed within the 30-day protest period, which began on the date that the notice of receipt of the FSEIS/RMPA is published in the Federal Register (FR), October 4.

The following items must have been included to constitute a valid protest:

- The name of the RMP or RMPA and final Environmental Impact Statement being protested;
- The name, mailing address, telephone number and interest of the person filing the protest (in other words, how the protestor will be adversely affected by the approval or amendment of the plan);
- A statement of the issue or issues being protested;
- A statement of the part or parts of the plan or amendment being protested (including Chapter, Section, Page, and/or Map);
- A copy of all documents addressing the issue or issues that were submitted during the planning process by the protesting party, or an indication of the date the issue or issues were discussed for the record; and
- A concise statement explaining why the State Director's decision is believed to be wrong.

See 43 Code of Federal Regulations (CFR) Part 1610.5-2. Protestors were informed that before including their personal identifying information in their protests, their entire protest—including personal identifying information—may be made publicly available at any time. BLM cannot guarantee that personal identifying information will be withheld upon request.

In order for the issue raised in a protest to be valid, it had to include the following:

- It must be in the record that the protest issue has been raised in the planning process before, or that the issue provides significant new information (in other words, it came to light near the end of the draft RMP or RMPA comment period);
- The protest must relate to a planning issue, not an implementation issue;
- The protest must clearly state what law/regulation/policy the BLM is violating (i.e., names the law/regulation/policy specifically or uses key words that make it clear);
- The protest must clearly explain why the proposed RMP or RMPA violates the stated law/regulation/policy;

- The protest must give a reference in the document where the violation stated occurs; and
- The protest must be concise.

If the protest lacked any of the above elements, it was deemed invalid. Finally, the Director rendered the decision on the protest regarding its validity and its approval or denial. The decision was recorded in writing and set forth the reasons for the decision. The decision was sent to the protesting party by certified mail, return receipt requested. The decision of the Director is the final decision of the Department of the Interior.

Specific information related to the protests received can be found below.

Buffalo SEIS/RMPA Protest Period

The BLM released the Buffalo Field Office Final Supplemental EIS and Proposed RMP Amendment for public protest on October 4, 2019. The BLM received four (4) protest letters during the 30-day protest period (see **Table I**).

Table I: Protest Determination

Protestor/Organization	Determination
The Wilderness Society	Denied - Issues and Comments
Western Environmental Law Center, Sierra Club, Montana Environmental Information Center, WildEarth Guardians, Western Organization of Resource Councils, Center for Biological Diversity, Powder River Basin Resource Council, Northern Plains Resource Council, Natural Resources Defense Council, and Big Blackfoot Riverkeeper	Denied - Issues and Comments
Northern Cheyenne Tribal Historic Preservation Office	Denied - Comments Only
Jean Public	Denied - Comments Only

As outlined in the BLM's FR notice dated October 4, 2019 (84 FR 33284), the planning regulations at 43 CFR 1610.5-2 describe the requirements for filing a valid protest. The BLM evaluated all protest letters to determine which protest letters were complete, timely, and which persons held standing to protest, consistent with BLM land use planning regulations at 43 CFR 1610.5-2. Table I includes determinations as to how protest letters did or did not meet the requirements.

Coal Screen

WELC, WORC, et al.

Laura King, et al.

Issue Excerpt Text: As discussed above, BLM failed to heed the instructions of the court in considering climate change when screening for multiple use considerations in determining how much coal to make available for leasing. BLM must redo its coal screening and especially "screen 3," as ordered by the court.

Additionally, BLM overestimates the amount of coal that can be economically developed, using outdated assumptions about strip ratios and Btu content. BLM should update its analysis using current market conditions and profit forecasts for Powder River Basin coal mines, using data from U.S. Energy Information Administration (“EIA”), company filings with the U.S. Securities and Exchange Commission, and other data as appropriate. Starting with an accurate coal development potential area (“CDPA”) is critical to the screening process. BLM should also consider the total demand for Powder River Basin coal and how that demand will shrink in the future. BLM should limit leasing to areas that truly have development potential, areas that, if leased, will guarantee to return royalties and other revenue to the Department of the Interior.

Issue: The Buffalo Field Office (BFO) coal screening analysis contained in the FSEIS cannot be lawfully relied upon to determine what lands should be acceptable for further consideration for coal leasing.

Response: 43 CFR 3420.1-4(e) establishes the coal screening criteria to be applied prior to land use planning actions in order to identify areas acceptable for further consideration for leasing.

The Federal Coal Management Program established four major steps to be used in the identification of federal coal areas that are acceptable for further consideration for leasing. The four steps are 1) identification of coal development potential; 2) application of the coal unsuitability criteria; 3) multiple use conflict evaluation; and 4) surface owner consultation. Collectively, these steps are called the Coal Screening Process (43 CFR 3420.1-4).

43 CFR § 3420.1-4(e)(1) states that “only those areas that have development potential may be identified as acceptable for further consideration for leasing. The Bureau of Land Management shall estimate coal development potential for the surface management agency.” Lands determined to have development potential are considered acceptable for further consideration for leasing and are applied to the remaining coal screens. Lands determined to not have development potential are eliminated from further consideration for leasing.

43 CFR § 3461.5 lists the criteria for assessing lands unsuitable for all or certain stipulated methods of coal mining. These 20 criteria include the Federal Land System, Federal Lands within Rights-of-Ways, Buffer Zones along Public Roads, Schools, and Parks, Wilderness Study Areas, Scenic Areas, Scientific Study, Historic Lands and Sites, Natural Areas, Federally Designated Critical Habitat for Threatened and Endangered Species, State-listed Threatened and Endangered Species, Bald and Golden Eagle Nest Sites, Bald and Golden Eagle Roost and Concentration Areas, Falcon Cliff Nesting Sites, Migratory Birds of High Federal Interest, Habitat for Species of High Interest to the State, 100-Year Floodplain, Municipal Watersheds, National Resource Waters, Alluvial Valley Floors, Tribal and State Proposed Criteria.

43 CFR 3420.1-4e(3) states that “multiple land use decisions shall be made which may eliminate additional coal deposits from further consideration for leasing, to protect resource values of a locally important or unique nature not included in the unsuitability criteria.” Multiple-use values may include possible oil and gas development and soil, forest, wildlife, recreation, agriculture, air, and watershed resources. Lands with coal potential may be eliminated from further consideration for leasing where multiple uses conflict.

Finally, 43 CFR 3400.0-5 describes the surface owner consultation screen, whereby qualified surface owners can express their preference for mining federal coal under their surface lands. In order to be a qualified surface owner, the individual(s) must: (1) hold legal or equitable title to the surface of split estate lands; (2) have their principal place of residence on the land; personally conduct farming or ranching operations upon a farm or ranch unit to be affected by surface mining operations; or receive directly a significant portion of their income, if any, from such farming and ranching operations; and (3)

have met the first two conditions for a period of at least 3 years, except for persons who gave written consent less than 3 years after they met the requirements. In computing the 3-year period, the BLM Authorized Officer shall include periods during which title was owned by a relative of such person by blood or marriage if, during such periods, the relative would have met the requirements of this section.

The BLM applied the coal screening criteria listed in 43 CFR 3420.1-4(e) to determine lands acceptable for coal leasing for the BFO Final SEIS and to develop the Alternative B Coal Development Potential Area (CDPA). Under Coal Screen #1 (Coal Development Potential), the BLM adjusted the CDPA boundary based on coal quality and stripping ratio; that is, the cost to produce). Coal quality is measured partly by the British thermal unit (BTU) range at which it burns, with higher quality coal burning hotter; that is, at a higher BTU. Mines in the northern part of the decision area produce coal that burns in the 8,200 to 8,400 BTU range, the mines in the central part of the decision area produce in the 8,400 to 8,600 BTU range, and the mines in the southern part of the decision area produce in the 8,600 to over 8,800 BTU range.

To balance the cost of production and quality, and in keeping with the current pricing in the coal market, the BLM used stripping ratios of 4:1, 5:1, and 6:1 for mines in the northern, central, and southern parts of the decision area, respectively.

The biggest change is the exclusion of Sheridan County, based on changes in economic forecast since 2001 (see Appendix B Reasonably Foreseeable Development in the Final SEIS for more details). BLM used the Energy Information Agency's 2019 Annual Energy Outlook to evaluate total demand for Powder River Basin coal and how that demand will change during the span of the RMPA and checked the estimate against 2018 production for the mines in the Powder River Basin, as reported by the Mine Safety Health Administration (see Appendix B in the Final SEIS).

The BLM considered greenhouse gas (GHG) emissions and climate change as part of the multiple use screen in Section 2.2.5 of the Final SEIS. The BLM considered an alternative that would reduce GHG emissions by limiting leasing to only areas immediately adjacent to the existing coal mines. This was done in order to consider the consolidation of the infrastructure used in the mining and transportation of the coal. However, the BLM determined that the supporting infrastructure is already consolidated and highly interconnected in the eastern half of Campbell County. In addition, it is highly unlikely, in eastern Campbell County, that a new coal mine would start and new infrastructure would be constructed within the next 20 years. Because of these factors, no additional multiple use screen for emissions and climate change was applied. The mines and the associated infrastructure in the BFO are highly consolidated, well developed, and interconnected so that some areas not immediately adjacent to, but between the mines, might be needed for future leasing. This was also not considered a feasible multiple use screen because it could not be implemented without disrupting existing mining operations.

The BLM properly followed the coal screening criteria and developed the reasonably foreseeable development scenario using the best available science (US Energy Information Administration [EIA]'s 2019 Annual Energy Outlook [AEO] and 2018 production levels). Accordingly, this protest is denied.

FLPMA – General

The Wilderness Society Chase Huntley

Issue Excerpt Text: Neither the Miles City nor Buffalo Resource Management plan amendments consider the potential for capturing and storing climate change emissions via the sequestration of carbon in the native soils and vegetation that blankets these Field Offices. The extent of carbon sequestration in

the soil and natural systems within these field offices, and the implications of reasonably foreseeable development on that ecosystem service, is not adequately addressed in the RMPAs. In both FEISs sequestration is at best alluded to; the amount of carbon sequestered in terrestrial ecosystems nationally and in the two states is only mentioned (see page 3-10 of both FEISs). There is no discussion of how land management decisions could help, or hinder, carbon sequestration in natural systems in these two Field Offices. There is a need for a holistic analytic analysis that considers sequestration of carbon as part of the land use planning for these two areas, including especially lands with wilderness characteristics.

The court order that is driving this process found three deficiencies in the existing Buffalo and Miles City RMPs that required further analysis under the National Environmental Policy Act (NEPA) and Federal Land Policy and Management Act (FLPMA): the availability of coal for leasing and development needed to be reconsidered; downstream combustion impacts from coal needed to be considered; and the time horizon for analyzing GHG emissions needed to be reassessed. Considering the potential for carbon sequestration in soils and native vegetation (including in Lands with Wilderness Characteristics (often abbreviated to “LWC” in NEPA documents)) is a necessary, and appropriate, part of considering how much land will be available for coal mining. If lands are not made available for coal development more carbon can be stored in the soils and grasslands of these areas, reducing climate change impacts. BLM violated NEPA’s ‘hard look’ mandate by failing to consider this issue in order to meet the terms of the court’s order.

In addition to not meeting the requirements of the court order, the failure to consider carbon sequestration in these RMPs fails to meet the requirements of FLPMA. When the BLM develops an RMP it must consider present and potential uses of the lands; consider the relative scarcity of the values involved and alternative means of meeting those values (including via recycling); and weigh long-term versus short-term benefits to the public of the proposed plan. 43 U.S.C. §§ 1712(c)(5)-(7). Clearly a consideration of the value of carbon sequestration in native soils and grasslands would meet these requirements and the failure to consider capturing and storing climate change emissions via sequestration altogether violates these provisions.

Issue: BLM’s failure to consider carbon sequestration in either of the FSEISs/RMPAs fails to meet the requirements of Federal Land Management and Policy Act (FLPMA).

Response: When the BLM develops or revises land use plans, it must consider present and potential uses of the lands; consider the relative scarcity of the values involved and alternative means of meeting those values (including via recycling); and weigh long-term versus short-term benefits to the public of the proposed plan. 43 U.S.C. §§ 1712(c)(5)-(7).

The purpose and need for this FSEIS is to respond to the court order described in Chapter I of the Final Supplemental EIS/Proposed RMPA. The court order did not require the BLM to analyze carbon sequestration in the EIS. In response to the court order and in the context of the purpose and need, the BLM did consider present and potential uses of the land, the relative scarcity of the values involved, and the long-term versus short-term benefits to the public in the multiple-use screen of the coal screening process.

The BLM properly established the purpose and need to respond to the court order, and the Final SEIS/Proposed RMPA complies with the purpose and need. Accordingly, this protest is denied.

NEPA – Baseline

WELC, WORC, et al.

Laura King, et al.

Issue Excerpt Text: In general, the Buffalo Field Office RFD anticipates a realistic decline in coal production in the coming years. It also wisely assumes no new mine will access federal coal in Sheridan County within the next 20 years. The only element of some concern is the anticipated increase in coal production from 2028-2030. For the sake of transparency and building public trust in the Buffalo Field Office’s RFD, the office should have explained in the final SEIS the model’s factors that produce the coal production increase in those years.

Issue: The BFO reasonably foreseeable development (RFD) projections are inconsistent with other forecasts and lack any clarification or justification for its projections such that the BLM has failed to adequately describe baseline conditions in the Planning Area.

Response: The Council on Environmental Quality’s (CEQ) regulations implementing National Environmental Policy Act (NEPA) require that agencies use “high quality information” (40 CFR § 1500.1(b)). NEPA regulations require the BLM to “ensure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements” (40 CFR § 1502.24).

The BLM NEPA Handbook also directs the BLM to “use the best available science to support NEPA analyses and give greater consideration to peer-reviewed science and methodology over that which is not peer-reviewed” (BLM Handbook H-1790-1, p. 55). Under the BLM’s guidelines for implementing the Information Quality Act, the BLM applies the principle of using the “best available” data in making its decisions (BLM Information Quality Act Guidelines, February 9, 2012).

As discussed in Appendix B of the Final SEIS, the BLM examined forecasts under the reference case and six side cases from the EIA’s 2019 AEO (Section B.4 of Appendix B in the Final SEIS) and developed an RFD based on the best fit to 2018 production by the 12 mines operating in the CDPA, as reported by the Mine Safety Health Administration. Detailed information on the underlying assumptions of AEO 2019 are available online at <https://www.eia.gov/outlooks/aeo/assumptions/>.

The BLM used the best available science and current coal production data to evaluate total demand for Powder River Basin coal and how that demand may change in the future. Accordingly, this protest is denied.

NEPA – Range of Alternatives

WELC, WORC, et al.

Laura King, et al.

Issue Excerpt Text: Indeed, the Montana Federal District Court invalidated BLM’s prior EISs for the Buffalo and Miles City RMPs explicitly because the agency failed to consider a reasonable alternative that reduced the amount of coal made available under the plans. The court explained that “BLM’s failure to consider any alternative that would decrease the amount of extractable coal available for leasing rendered inadequate the Buffalo EIS and Miles City EIS in violation of NEPA.” *W. Org. of Res. Councils v. U.S. Bureau of Land Mgmt.*, 2018 WL 1475470 at *9 (D. Mont. March 26, 2018). BLM has failed to correct that error here, and instead repeats arguments already made and judicially rejected.

In both the Buffalo and Miles City SEISs, BLM failed to consider any alternative that reduced the amount of coal available for development. In the Buffalo SEIS, BLM evaluated only two alternatives: a No Action

Alternative, which continued management of coal in the planning area as it existed under the prior plan, and Alternative B, the agency’s Preferred Action Alternative, which changed the amount of acres available to leasing (from 686,896 in Alternative A to 455,467 acres under Alternative B), Buffalo SEIS at ES-5, but did not change the amount of coal likely to be developed. As BLM explains in the Buffalo SEIS, “The GHG emissions quantified for production and downstream combustion are the same under Alternative A (No Action Alternative) and Alternative B (the action alternative) because the same RFD [reasonably foreseeable development scenario] is used for both.” Buffalo SEIS at 3-14.

WELC, WORC, et al.

Laura King, et al.

Issue Excerpt Text: The BLM has broad discretion not to lease public lands for minerals development and has the responsibility to use this discretion to safeguard environmental and human health resources and values in light of climate change. See, e.g., *Udall v. Tallman*, 380 U.S. 1 (1965); *Rocky Mountain Oil & Gas Ass’n v. U.S. Forest Serv.* 157 F.Supp.2d 1142 (D. Mont. 2000). The BLM must consider a “no leasing” alternative in light of rapidly shrinking global carbon budgets, as described below.

...

BLM offers several unavailing excuses as to why it cannot consider a No Leasing Alternative. In Buffalo, BLM asserts that a No Leasing Alternative:

1. Would not meet BLM’s multiple use mandate under FLPMA;
2. Would not meet the leasing requirements under the Mineral Leasing Act;
3. Is precluded because coal development is an authorized use of public lands; and
4. Is precluded because BLM’s coal screening process does not allow BLM to apply a blanket No Leasing Alternative. Buffalo SEIS at 2-8.

...

These claims lack merit.

First, it is clear that Federal Land Policy and Management Act’s (“FLPMA”) multiple use mandate does not require BLM to prioritize mineral development over other uses, including Conservation Groups’ preferred alternative of closing the Buffalo and Miles City planning areas to all fossil fuel development in order to avoid using public lands to exacerbate climate change. The fact that coal leasing is one possible use for public lands does not mean that the Department of the Interior is required to manage public lands to accommodate coal leasing for decades into the future. FLPMA does not mandate that every use be accommodated on every piece of land; rather, balance is required. See *Norton v. S. Utah Wilderness Alliance*, 542 U.S. 55, 58 (2004). “Multiple use’ requires management of the public lands and their numerous natural resources so that they can be used for economic, recreational, and scientific purposes without the infliction of permanent damage.” *Public Lands Council v. Babbitt*, 167 F.3d 1287, 1290 (10th Cir. 1999) (citing 43 U.S.C. § 1702 (c)). Here, BLM acknowledges that using these lands for coal, oil, and gas production will result in massive amounts of GHG emissions (both direct and indirect), and that GHG emissions are the leading cause of climate change. Miles City SEIS at 3-6 to 3-9; Buffalo SEIS at 3-6 to 3-9. Prioritizing the need to reduce GHG emissions from public lands over the need to promote fossil fuel development on those same public lands does not violate FLPMA’s multiple use mandate.

...

Second, the Mineral Leasing Act (“MLA”) similarly does not preclude BLM from considering a No Leasing Alternative, including an alternative where BLM would not issue any future leases for coal, oil, or gas in the Buffalo and Miles City planning areas.

[Third argument related to failure to consider all reasonable alternatives, including alternatives that fight climate change]

WELC, WORC, et al.

Laura King, et al.

Issue Excerpt Text: In order for BLM to properly analyze and disclose to the public the environmental consequences of its plans, the agency must first understand how its decision to allow massive amounts of coal, oil, and gas production in the planning areas impacts overall production and use of these fossil fuels. BLM has the tools that would allow it to study the issue and disclose the market and climate impacts to the public and decision makers – other federal agencies have used these market models for years – but BLM has failed to either use these tools or explain its refusal to do so in the SEISs.

BLM failed here...First, BLM refused to consider a “no coal leasing alternative,” or indeed any alternative that entails a different amount of coal leasing under either the Buffalo or Miles City plan. Second, BLM failed to consider a “no fossil fuel” Leasing Alternative under either plan, which would stop BLM from issuing new coal, oil, and gas leases in both the Buffalo and Miles City planning areas, effectively closing the Powder River Basin to new leasing.

...

In the Buffalo plan, BLM asserts that it has no obligation to consider market impacts because each of the alternatives it considers entails an identical amount of coal production. Buffalo SEIS at App. I-4 to I-6, I-9, I-47, I-50, I-51. In the Miles City plan, BLM asserts that its decisions in this RMPA “would not result in shifts to the energy market . . . because the RFD does not anticipate new leasing beyond the approved leases or existing lease applications” Miles City SEIS at E-8; *accord* E-31. As explained in Conservation Groups’ SDEIS and scoping comments, policies limiting coal, oil, and/or gas production in the Buffalo and Miles City planning areas would have measurable impacts on the U.S. energy markets and the GHG emissions from the electric sector as a result of shifts in the amount of coal, oil, and gas burned to generate electricity in the U.S. See, e.g., SDEIS Comments at 27-28. Here, BLM attempts to forgo the analysis and disclosure of these impacts – required by NEPA – by claiming that it cannot even consider any alternative in which BLM limits the amount of fossil fuels produced on these lands. As explained above, BLM’s failure to consider a reasonable range of alternatives violates NEPA and directly contradicts the clear direction from the District Court in this case. Moreover, as further described below, BLM’s land management choices matter when it comes to energy production and climate change and other agencies routinely use energy modeling tools to analyze and disclose market and climate impacts. *Id.*

Issue: BLM violated NEPA in both FSEISs because it has failed to include an alternative that either prohibits new coal leasing or significantly reduces coal leasing within the planning area.

Response: The NEPA directs the BLM to “study, develop, and describe appropriate alternatives to recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources;...” (NEPA Sec 102(2)(E)). You must analyze those alternatives necessary to permit a reasoned choice (40 CFR 1502.14). In determining the alternatives to be considered, the emphasis is on what is “reasonable” rather than on whether the proponent or applicant likes or is itself capable of implementing an alternative. “Reasonable alternatives include those that are

practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant” (Question 2a, CEQ Forty Most Asked Questions Concerning CEQ’s NEPA Regulations (March 23, 1981)). The purpose and need for action dictates the range of alternatives that must be analyzed, because action alternatives are not reasonable if they do not respond to the purpose and need for action (BLM NEPA Handbook, H-1790-1, 6.2 Purpose and Need, 6.2.1 The Role of the Purpose and Need Statement, 6.6.1 Reasonable Alternatives).

The BLM is required to include a discussion of a range of reasonable alternatives to the proposed action, alternatives which are technically and economically feasible and which meet the purpose and need, and which have a lesser environmental impact (42 U.S.C 4332(2)(C); 40 CFR 1502.14; 40 CFR 1508.9(b); 43 C.F.R 46.420(b)). No specific or minimum number of alternatives is required (43 CFR 46.415(b)). When there are potentially a very large number of alternatives, the BLM may only analyze a reasonable number to cover the full spectrum of alternatives. What consists of a reasonable range depends on the nature of the proposal and the facts of the case (BLM Handbook H-1790-1, Section 6.6.1 quoting Question 1b, CEQ, Forty Most Asked Questions Concerning CEQ’s NEPA Regulations, March 23, 1981).

You may eliminate an action alternative from detailed analysis for any of the following reasons (BLM NEPA Handbook H-1790-1, Section 6.6.3):

- It is ineffective (it would not respond to the purpose and need);
- It is technically or economically infeasible;
- It is inconsistent with the basic policy objectives for the management of the area (such as, not in conformance with the LUP);
- Its implementation is remote or speculative;
- It is substantially similar in design to an alternative that is analyzed; or
- It would have substantially similar effects to an alternative that is analyzed.

If you consider alternatives during the EIS process but opt not to analyze them in detail, you must identify those alternatives and briefly explain why you eliminated them from detailed analysis (40 CFR 1502.14).

In some situations, it may be appropriate to analyze a proposed action or alternative that may be outside the BLM’s jurisdiction. BLM NEPA Handbook, H-1790-1, at 50. (citing Question 2b, CEQ Forty Most Asked Questions Concerning CEQ’s NEPA Regulations (March 23, 1981)): “An alternative that is outside the legal jurisdiction of the lead agency must still be analyzed in the EIS if it is reasonable. A potential conflict with local or federal law does not necessarily render an alternative unreasonable, although such conflicts must be considered. Section 1506.2(d). Alternatives that are outside the scope of what Congress has approved or funded must still be evaluated in the EIS if they are reasonable, because the EIS may serve as the basis for modifying the Congressional approval or funding in light of NEPA’s goals and policies. Section 1500.1(a).”

In Section 2.2.5 of the FSEIS, the BLM did consider a no leasing alternative for coal; however, this alternative was dismissed from further consideration because making the entire decision area unacceptable for further consideration for coal leasing would not meet the BLM’s multiple use mandate under FLPMA, the leasing requirements under the Mineral Leasing Act of 1920, as amended, and 43 CFR 3400.2. Although a land use planning-level decision can be made that precludes coal development throughout the planning area, it does so by making areas unacceptable for further consideration of leasing; the process undertaken to arrive at this land use plan allocation must be consistent with the federal regulations. Namely, the BLM is required to go through the coal screening process outlined in 43 CFR 3420 et. seq. to arrive at its decision on coal allocations. As part of this process, the multiple-use

screen is the screen used to remove lands that would conflict with resources of high value to the public from further consideration for coal leasing.

In the 2015 RMP, the BLM did consider a no leasing alternative for oil and gas but eliminated it from further detailed analysis. See the 2015 RMP for further details. A detailed emissions analysis was not necessary because this alternative was not brought forward for further analysis. Because such an alternative is considered, it is within the range of alternatives.

Alternative B shows a 34 percent reduction in lands acceptable for further consideration of leasing compared to Alternative A. Once the land use plan-level decision has identified areas acceptable or unacceptable for further consideration of leasing, the decision whether to lease parcels is made at the application level; this is a discretionary action and the no-leasing/no-action alternative would be considered at this stage in the NEPA process.

The policy detailed in 43 CFR 3420.1–4e explains the selectivity of resources that should drive such determinations of unacceptability. This is consistent with BLM Handbook 3420, which directs the BLM to prioritize energy development to support competitive energy markets and national energy objectives. The BLM’s authorities are clear in their direction that coal unacceptability for leasing is based on protecting specific, high-value resources and does not consider unspecific resource concerns.

For the reasons stated above, this protest is denied.

NEPA – Impacts Analysis – Air Resources, Including Greenhouse Gases and Climate Change

The Wilderness Society Chase Huntley

Issue Excerpt Text: NEPA requires a more searching analysis of climate implications than merely disclosing the amount of pollution. Rather, BLM must examine the “ecological[,]... economic, [and] social” impacts of those emissions, including an assessment of their “significance.” 40 C.F.R. §§ 1508.8(b), 1502.16(a)-(b). The U.S. Supreme Court has called the disclosure of impacts the “key requirement of NEPA,” and held that agencies must “consider and disclose the *actual environmental effects*” of a proposed action in a way that “brings those effects to bear on [the agency’s] decisions.” *Baltimore Gas & Elec. Co. v. Natural Res. Def. Council*, 462 U.S. 87, 96 (1983) (emphasis added). The tons of greenhouse gases emitted by the proposed actions are not the “actual environmental effects” under NEPA. Rather, the actual environmental effects are the climate impacts caused by those emissions, such as property loss, changes in energy demand, impacts to agriculture, forestry, and fisheries, human health impacts, changes in fresh-water availability, ecosystem service impacts, impacts to outdoor recreation, and catastrophic impacts. These kinds of impacts are included in the SCC calculations developed by the IWG. BLM’s failure to employ SCM and SCC methods in the environmental impact statements at issue here violates NEPA and should be corrected.

WELC, WORC, et al. Laura King, et al.

Issue Excerpt Text: In order for BLM to properly analyze and disclose to the public the environmental consequences of its plans, the agency must first understand how its decision to allow massive amounts of coal, oil, and gas production in the planning areas impacts overall production and use of these fossil fuels. BLM has the tools that would allow it to study the issue and disclose the market and climate impacts to the public and decision makers – other federal agencies have used these market

models for years – but BLM has failed to either use these tools or explain its refusal to do so in the SEISs.

WELC, WORC, et al.

Laura King, et al.

Issue Excerpt Text: While BLM disclosed GWPs for both the 20-year and 100-year time horizons from the IPCC’s 2013/2014 Fifth Assessment Report (hereinafter, “AR5”), it failed to use the correct values for methane GWP from that report. Miles City SEIS at 3-13; Buffalo SEIS at 3-13. BLM cites a 100-year methane GWP of 28 and a 20-year methane GWP of 84. Miles City SEIS at 3-13; Buffalo SEIS at 3-13. AR5 includes a range of estimates for methane GWP.²⁵ Without including climate-carbon feedbacks (“cc fb”), methane has a 100-year GWP (“GWPI00”) of 28 and a 20-year GWP (“GWP20”) of 84. However, the IPCC also notes that, “[t]hese values do not include CO₂ from methane oxidation. Values for fossil methane are higher by 1 and 2 for the 20 and 100 year metrics, respectively (Table 8.A.1) (emphasis added).”²⁶ In other words, the most current lower-end scientific estimate of GWPI00 for fossil methane, which is what will be produced from these BLM leases, is 30, not 28, and for GWP20 is 85, not 84. The IPCC also provides upper end estimates of fossil methane GWPI00 and GWP 20 with cc fb of 36 and 87, respectively. BLM has provided no justification for why it relies on the incorrect, lower-end estimates of GWPI00 and GWP20. These failures undermine the accuracy and integrity of the GWP analysis. See 40 C.F.R. §§ 1500.1(b), 1502.24. Thus, BLM failed to provide a “full and fair discussion” of the methane pollution resulting from its actions, as required by NEPA. See *id.* § 1502.1.

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Issue Excerpt Text: BLM failed to contextualize emissions, such as through the use of 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.²⁸²⁹ Although the social cost of carbon and social cost of methane protocols could be used to analyze and disclose to the public the significance of the emissions and impacts of the Buffalo and Miles City plans individually, such an analysis is also informative, appropriate and would fulfill the analysis required by NEPA as part of BLM’s analysis of the cumulative climate impact of the two plans together. NEPA requires a more searching analysis of climate implications than merely disclosing the amount of pollution. Rather, BLM must examine the “ecological[,]... economic, [and] social” impacts of those emissions, including an assessment of their “significance.” 40 C.F.R. §§ 1508.8(b), 1502.16(a)-(b). The U.S. Supreme Court has called the disclosure of impacts the “key requirement of NEPA,” and held that agencies must “consider and disclose the *actual environmental effects*” of a proposed action in a way that “brings those effects to bear on [the agency’s] decisions.” *Baltimore Gas & Elec. Co. v. Natural Res. Def. Council*, 462 U.S. 87, 96 (1983) (emphasis added). The tons of greenhouse gases emitted by the proposed actions are not the “actual environmental effects” under NEPA. Rather, the actual environmental effects are the climate impacts caused by those emissions, such as property loss, changes in energy demand, impacts to agriculture, forestry, and fisheries, human health impacts, changes in fresh water availability, ecosystem service impacts, impacts to outdoor recreation, and catastrophic impacts. These kinds of impacts are included in the social cost of carbon calculations developed by the Interagency Working Group.

Not only does BLM violate NEPA’s ‘hard look’ mandate in its failure to analyze and disclose the significance of emissions through use of tools such as the social cost of carbon protocol, but also because the agency includes an extensive analysis of the economic benefits of the RMP without similarly disclosing the costs, see Buffalo SEIS at 3-25 to -30 and Appendix D and Miles City SEIS at 3-39 to -51 and Appendix D, thus providing a misleading analysis in violation of NEPA. *High Country Conservation Advocates v. U.S. Forest Service*. 52 F.Supp. 3d 1174, 1193 (D. Colo. 2014).

WELC, WORC, et al.

Laura King, et al.

Issue Excerpt Text: Finally, BLM fails to take a hard look at the indirect and cumulative impacts of coal combustion. Emissions of particulate matter, oxides of nitrogen, sulfur dioxide, and highly toxic lead, mercury, and arsenic will result in significant impacts.

WELC, WORC, et al.

Laura King, et al.

Issue Excerpt Text: BLM fails to use readily available market-modeling mechanisms and new, peer-reviewed literature examining the impacts of U.S. coal leasing policy on supply, price, and consumption. The fact is that BLM is in control of a massive percentage of the U.S. coal supply, and that changes in coal supply will affect its price and use. Here, through the Buffalo and Miles City RMP amendments, BLM could close the Powder River Basin, the largest coal producing region in the country, to future coal leases. That policy, embodied in the No Leasing Alternatives that BLM refused to study in these SEISs, and as demonstrated by the independent modelling and analyses of Erickson and Lazarus and Vulcan Philanthropies, would cause a massive decrease in U.S. coal supply, leading to an increase in coal price, and cause some U.S. utilities to switch from coal to cheaper alternatives with fewer or no GHG emissions, such as gas, wind, solar, and energy efficiency. BLM must use one of the available energy modelling tools, such as EIA’s NEMS or ICF’s Integrated Planning Model, to disclose these impacts and compare across alternatives, or explain why it cannot do so. 40 C.F.R. § 1502.22. BLM’s failure to do so here inaccurately diminishes the climate impacts of BLM’s plans and violates NEPA. BLM’s SEISs fail to provide accurate scientific information, fail to use available tools to study the market and climate effects of its proposal, and fail to take the “hard look” that NEPA requires.

Issue: BLM fails to take a hard look at the indirect and cumulative impacts of coal combustion, particularly in relation to emissions produced by coal combustion and thus violates NEPA in the following ways:

1. BLM fails to employ social cost of methane (SCM) and social cost of carbon (SCC) methods in the environmental impact statements at issue that would provide proper contexts of the direct and indirect impacts of the proposed action.
2. BLM’s reliance on incorrect 20-year and 100-year global warming potential (GWP) estimates fails to adequately disclose the impacts of methane pollution resulting from the proposed action and accordingly violates NEPA.
3. BLM has failed to use readily available market-modeling mechanisms and new, peer-reviewed literature examining the impacts of U.S. coal leasing policy on supply, price, and consumption.

Response: The effects analysis must demonstrate that the BLM took a “hard look” at the impacts of the action (BLM NEPA Handbook, H-1790-1, 6.8.1.2, Analyzing Effects). The CEQ regulations specify that the environmental information made available to public officials and citizens before decisions are made must be of “high quality” (40 CFR 1500.1(b)). A “hard look” is a reasoned analysis containing quantitative or detailed qualitative information. (BLM NEPA Handbook, H-1790-1, 6.8.1.2 Analyzing Effects). The BLM must use information of high quality and scientific integrity in its NEPA analysis, including information provided as part of the public involvement (40 CFR 1500.1(b) and 1502.24). The NEPA documents are to be analytic, rather than encyclopedic (40 CFR 1500.4(b) and 1502.2(a)). NEPA directs that data and analyses in an EIS must be commensurate with the importance of the impact (40 CFR 1502.15), and that NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail (40 CFR 1500.1(b)).

NEPA directs that data and analyses in an EIS must be commensurate with the importance of the impact (40 CFR § 1502.15), and that NEPA documents must concentrate on the issues that are truly significant

to the action in question, rather than amassing needless detail (40 CFR § 1500.1(b)). The BLM is required to take a hard look at potential environmental impacts of adopting the BFO Proposed RMP Amendment/Final SEIS.

The level of detail of the NEPA analysis must be sufficient to support reasoned conclusions by comparing the amount and the degree of change (impact) caused by the proposed action and alternatives (BLM Handbook H-1790-1, Section 6.8.1.2). The BLM need not speculate about all conceivable impacts, but it must evaluate the reasonably foreseeable significant effects of the proposed action.

Additionally, the BLM must discuss the cumulative effects of the proposed action and the alternatives when preparing an EIS (BLM Handbook H-1790-1, Section 6.8.3). CEQ regulations (40 CFR § 1508.7) define cumulative effects as “. . . the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such actions.”

Both the Buffalo EIS and the Miles City FSEISs considered regional or statewide air quality from BLM and non-BLM sources. BLM compared the projected emissions of its activity with statewide emissions totals to measure the impact of the plans on the National Ambient Air Quality Standards (NAAQS). This analysis fostered “informed decision making” by providing an appropriate context to evaluate BLM’s emissions. Block, 690 F.2d at 761. This appropriate context included a comparison of those emissions to regional or statewide emissions. BLM reasonably used the NAAQS as a standard in these analyses.

Evaluation of impacts in the Supplemental EIS were prepared in accordance with the CEQ’s Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions (84FR30097) which states that “A projection of a proposed action’s direct and reasonably foreseeable indirect GHG emissions may be used as a proxy for assessing potential climate effects.” In addition, the use of GHG emissions to evaluate climate change impacts was upheld in the court’s opinion and order as stated under Claim 4 page 47, “BLM’s selection of GHG emissions as a proxy by which to analyze climate change impacts represents a scientific judgment deserving of deference.”

BLM considered and ultimately decided not to employ the use of SCC and the SCM protocols for this environmental review for several reasons:

First, monetary estimates of damages associated with GHGs are not useful for informing decisions when they cannot be considered alongside other monetized costs and benefits or used in the calculation of net benefits or cost-benefit ratios. Without monetized estimates of other impacts, including those on other resources, and of social benefits realized through industrial efficiencies, technological advances, and time savings, there is no context in which social costs of GHGs can be interpreted.

Section 3.5.2 of the FSEIS provides estimates of economic activity and mineral revenues in relation to expressed attitudes, values, and beliefs associated with local economic opportunities and employment and mineral revenues and funding for public services. Estimates of employment, income, and revenues were not expressed as benefits or costs, thus they are not directly comparable to monetary estimates of the social cost of GHGs.

While employment, income, and revenues may be perceived as benefits by employees, local governments, and residents, they may also be perceived as costs to the employer; therefore, it is critical to distinguish that how people may perceive an economic impact is not the same as, nor should be interpreted as, a cost or a benefit. This is a key distinction discussed in economic literature (Boardman et al. 2011; Watson et al. 2007; Kotchen 2011).

While the BLM did not monetize damages associated with GHG emissions and climate change, it evaluated climate impacts in the SEIS in accordance with the CEQ's Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions (84FR30097). It states that "A projection of a proposed action's direct and reasonably foreseeable indirect GHG emissions may be used as a proxy for assessing potential climate effects."

In addition to quantifying GHG emissions, the BLM further considered potential impacts of climate change on people and qualitatively discussed that shifts in precipitation and temperatures may adversely affect human health and safety in a number of ways. The BLM took this approach because climate change and potential climate impacts, in and of themselves, are often not well understood by the general public (Etkin and Ho 2007; National Research Council 2009). This is in part due to the challenges associated with communicating about climate change and climate impacts, stemming in part from the fact that most causes are invisible, such as greenhouse gases, and there is a long lag time and geographic scale between causes and effects (National Research Council 2010).

The BLM's approach recognizes that there are environmental impacts associated with the development and use of fossil fuels. It quantifies potential GHG emission estimates and discusses potential climate change impacts qualitatively; this effectively informs the decision-maker and the public of the potential for GHG emissions and the potential implications of climate change. This approach presents the data and information in a manner that follows many of the guidelines for effective climate change communication developed by the National Academy of Sciences (National Research Council 2010). It makes the information more readily understood and relatable to the decision-maker and the general public.

Finally, the SCC/SCM protocols do not measure the actual incremental impacts of a project on the biophysical environment in a specific geographic location and does not include all damages or benefits from greenhouse gas emissions. The SCC/SCM protocols estimate economic damages associated with an increase in carbon dioxide emissions, typically expressed as a 1 metric ton increase in a single year, and includes potential changes in net agricultural productivity, human health, and property damages from increased flood risk over hundreds of years.

The estimate is developed by aggregating results "across models, over time, across regions and impact categories, and across 150,000 scenarios" (Rose et al. 2014, p. 8-1). The dollar cost figure arrived at is based on the SCC/SCM calculation and represents the value of damages avoided if, ultimately, there is no increase in carbon or methane emissions. But the dollar cost figure is generated in a range and provides little benefit in assisting the BLM Authorized Officer's decision for this RMPA.

In addition to quantifying GHG emissions, the BLM considered potential impacts of climate change on people and qualitatively discussed that shifts in precipitation and temperatures may adversely affect human health and safety in a number of ways. See Section 3.5.1 for a description of potential impacts to human health and safety from climate change.

This evaluation of climate impacts fully responds to the specific requirements of the District of Montana's ruling. Specifically, the Final SEIS quantifies the GHG emissions based on GWP values for both 20- and 100-year time horizons to calculate carbon dioxide equivalents (CO₂e) (see Tables 3-4 through 3-7 in the Final SEIS for a description of the GWPs and scientific relevance of these two time horizons). The GWPs used in the Supplemental EIS are not necessarily lower bounds on the true values, since GWP values are subject to significant uncertainties (+/- 30% and +/- 39% for the 20-year and 100-year methane GWP, as per IPCC AR5, Table 8.SM.14); thus, the true values may be lower than the values used. An increase of 1 in the 20-year methane GWP represents a change of 1% in the GWP value; an increase of 2 in the 100-year methane GWP represents a change of 7%. Both values are well within the

methane GWP uncertainty bounds cited in AR5. The selection of GWPs in the Supplemental EIS were based on consistency with GWPs used in the EPA’s national GHG inventory and the global emission reported in AR5, neither of which included additional CO₂ from methane oxidation or climate-carbon feedbacks.

Additionally, GHG emissions from coal, oil, and gas from the BFO are reported as a percentage of state, national, and global emissions. The selection of GWPs in the Supplemental EIS were based on consistency with GWPs used in the EPA’s national GHG inventory and the global emission reported in AR5, neither of which included additional CO₂ from methane oxidation or climate-carbon feedbacks

Protesters recommend the use of the EIA National Energy Modeling System, which was used by EIA modelers to generate the annual energy outlook. BLM cites in Appendix B of the Final SEIS and throughout Appendix I of the Final SEIS that forecasts from the AEO, which EIA develops from runs of their National Energy Modeling System (NEMS) model, was used in preparing the RFD for the SEIS. EIA does not support outside use of NEMS, and BLM does not have access to modify or run the NEMS model.

The BLM considered the issues raised by the protestors as described above. The protest is denied.

NEPA – Impacts Analysis – Social and Economic Considerations

The Wilderness Society

Chase Huntley

Issue Excerpt Text: BLM must evaluate the economics of drilling projects by accounting for the benefits of methane reductions to public health, the climate, and the environment, as well as the costs to these very same areas from impacts caused by methane emissions the agency and operators are unable to prevent. If the agency chooses to base decisions in these EISs and plan amendments on the new, limited, and arbitrary definition of waste under its 2018 Rescission Rule, which is being litigated, that does not delimit the agency’s full spectrum of field office level authority and responsibility, it must present an analysis to support that decision that also takes these factors into account.

WELC, WORC, et al.

Laura King, et al.

Issue Excerpt Text: In order for BLM to properly analyze and disclose to the public the environmental consequences of its plans, the agency must first understand how its decision to allow massive amounts of coal, oil, and gas production in the planning areas impacts overall production and use of these fossil fuels. BLM has the tools that would allow it to study the issue and disclose the market and climate impacts to the public and decision makers – other federal agencies have used these market models for years – but BLM has failed to either use these tools or explain its refusal to do so in the SEISs.

...

BLM failed here...Third, although BLM refuses to study the market effects of *any* alternative, it “assumes” that its decisions – across the entire Powder River Basin and all federal lands – have no impact on the amount of coal developed. This final point is plainly inaccurate and has been rejected by several courts.

Issue: The BLM fails to adequately disclose and analyze the economic impacts of the proposed action and thus violates NEPA in a few ways;

1. BLM has failed to evaluate the economics of drilling projects by accounting for the benefits of methane reductions to public health, the climate, and the environment, as well as the costs to these very same areas from impacts caused by methane emissions the agency and operators are unable to prevent.
2. BLM refuses to study the market effects of *any* alternative, it “assumes” that its decisions – across the entire Powder River Basin and all federal lands – have no impact on the amount of coal developed.

Response: The effects analysis must demonstrate that the BLM took a “hard look” at the impacts of the action (BLM NEPA Handbook, H-1790-1, 6.8.1.2, Analyzing Effects). The CEQ regulations specify that the environmental information made available to public officials and citizens before decisions are made must be of “high quality” (40 CFR 1500.1(b)). A “hard look” is a reasoned analysis containing quantitative or detailed qualitative information. (BLM NEPA Handbook, H-1790-1, 6.8.1.2 Analyzing Effects). The BLM must use information of high quality and scientific integrity in its NEPA analysis, including information provided as part of the public involvement (40 CFR 1500.1(b) and 1502.24). The NEPA documents are to be analytic, rather than encyclopedic (40 CFR 1500.4(b) and 1502.2(a)). NEPA directs that data and analyses in an EIS must be commensurate with the importance of the impact (40 CFR 1502.15), and that NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail (40 CFR 1500.1(b)).

NEPA directs that data and analyses in an EIS must be commensurate with the importance of the impact (40 CFR § 1502.15), and that NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail (40 CFR § 1500.1(b)). The BLM is required to take a hard look at potential environmental impacts of adopting the BFO Proposed RMP Amendment/Final Supplemental EIS.

The level of detail of the NEPA analysis must be sufficient to support reasoned conclusions by comparing the amount and the degree of change (impact) caused by the proposed action and alternatives (BLM Handbook H-1790-1, Section 6.8.1.2). The BLM need not speculate about all conceivable impacts, but it must evaluate the reasonably foreseeable significant effects of the proposed action.

Additionally, the BLM must discuss the cumulative effects of the proposed action and the alternatives when preparing an EIS (BLM Handbook H-1790-1, Section 6.8.3). CEQ regulations (40 CFR § 1508.7) define cumulative effects as “. . . the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such actions.”

NEPA requires agencies to take a hard look at reasonably foreseeable effects, including those that are ecological, aesthetic, historic, cultural, economic, social, or health related, whether direct, indirect, or cumulative (40 CFR 1508 (a) and (b)) when undertaking a major governmental action; however, NEPA provides considerable latitude in what issues are considered significant and the degree and type of analysis that must be conducted to provide decision-makers with sufficient information to make an informed decision.

Many states, including Wyoming, still have stringent emissions control requirements; emissions estimates in the EIS are based on reasonably foreseeable development practices. Specific emission control requirements (including controls on methane emissions) would be taken into consideration in environmental impact analyses prepared for specific projects; this detailed information is not available at the RMP stage analyzed in the FSEIS. In addition, the court determined that the BLM considered methane mitigation measures within its authority under Claim 2 on page 47 of the court order “BLM has

not violated NEPA by failing to consider an alternative at the RMP level that would mandate the type of methane mitigation measures proposed by Plaintiffs.”

The BLM conducted an economic impact analysis to assess economic activity and mineral revenues, in relation to expressed attitudes, values, and beliefs. These are associated with local economic opportunities and employment and mineral revenues and funding for public services. While indicators for these attitudes, values, and beliefs included estimates of employment, income, and revenues, these measures were not expressed as benefits or costs which would imply changes in social welfare. Foundational economic theory dictates that an economic impact does not equate to an economic benefit (Watson et al. 2007; Kotchen 2011). The distinction between metrics used in economic impact and cost-benefit analyses are further discussed in Appendix D of the Final SEIS.

The forecasted production in the RFD scenario is derived from EIA’s 2019 AEO and the 2018 production levels. Management decisions analyzed in the Final SEIS would not directly affect market conditions (i.e., supply, demand, and prices) for coal or substitute fuel sources. While production volumes and coal’s share of the electricity generation fuel mix may change over the next 20 years, these changes would occur across both alternatives and would be driven by outside market and societal forces. Therefore, market effects don’t inform the decision.

The BLM considered the issues raised by the protestors as described above. The protest is denied.

NEPA – Cumulative Effects

WELC, WORC, et al.

Laura King, et al.

Issue Excerpt Text: In the Buffalo SEIS and Miles City SEIS, BLM purports to quantify the cumulative GHG emissions from producing and burning coal, oil, and gas generated under the Buffalo and Miles City Field Offices. Buffalo SEIS at 3-25, T. 3-9; Miles City SEIS at 3-23, T. 3-8. By quantifying the GHG emissions of the two plans together, BLM has corrected one significant error from the SDEISs. However, additional flaws remain that BLM must correct in order to comply with NEPA’s mandate that the agency take a hard look at the cumulative climate impacts of its proposals. 40 C.F.R. 1508.7.

First, the cumulative GHG emissions reported in the Buffalo SEIS and Miles City SEIS do not match.

...

Second, as described in the sections that follow, BLM failed to use any available tool to analyze the impact of these cumulative GHG emissions beyond merely disclosing the amount of emissions calculated. At a minimum, NEPA required BLM to use available tools, such as: (1) the social cost of carbon and social cost of methane to quantify the environmental harms caused by BLM’s massive fossil fuel extraction plans, and (2) carbon budgets to provide meaningful context as to the climate impacts as to the Buffalo and Miles City plans.

Issue: The Proposed RMPA/Final SEIS violates NEPA because it fails to adequately discuss the cumulative impacts of potential GHG emissions from coal leasing. BLM has reported inconsistent emission between the two SEISs and has failed to use any available tool like the SCC to analyze the impact of these cumulative GHG emissions beyond merely disclosing the amount of emissions calculated.

Response: The BLM must discuss the cumulative effects of the proposed action and the alternatives when preparing an EIS (BLM Handbook H-1790-1, Section 6.8.3). The CEQ regulations (40 CFR §

1508.7) define cumulative effects as “. . . the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such actions.”

See NEPA - Impacts Analysis - Air Resources, Including Greenhouse Gases and Climate Change, for a response to the issue regarding the social cost of carbon.

The BLM used the EPA FLIGHT data to determine emissions from large sources other than coal mining and oil and gas development and production in the planning area (see Section 3.5.1 of the Final SEIS). In addition, the cumulative emissions totals include GHG emissions from the production and downstream combustion of coal, oil, and gas from the 2019 Miles City Field Office (MCFO) Coal Leasing Final SEIS and Proposed RMPA.

The approximately two percent difference between the BFO and MCFO cumulative emission totals is based on the location of sources and magnitude of emissions from those sources in each of the planning areas to establish the basis for cumulative emissions. These cumulative sources are different for the BFO and MCFO planning areas. The MCFO planning area includes the Dry Fork Basin located in northeast Montana, which is not included in the BFO cumulative effects area.

While the BLM did not monetize damages associated with GHG emissions and climate change, it evaluated climate impacts in accordance with the CEQ’s Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions (84FR30097). It states that “A projection of a proposed action’s direct and reasonably foreseeable indirect GHG emissions may be used as a proxy for assessing potential climate effects.”

This evaluation of climate impacts fully responds to the specific requirements of the District of Montana’s ruling. Specifically, the Final SEIS quantifies the GHG emissions based on GWP values for both 20- and 100-year time horizons to calculate CO_{2e} (see Tables 3-4 through 3-7 in the Final SEIS for a description of the GWPs and scientific relevance of these two time horizons). Additionally, GHG emissions from the combustion of coal, oil, and gas produced from within the BFO are quantified and reported as a percentage of state, national, and global emissions.

In addition to quantifying GHG emissions, the BLM considered potential impacts of climate change on people and qualitatively discussed that shifts in precipitation and temperatures may adversely affect human health and safety in a number of ways. For an explanation of why the BLM took this approach, see Appendix D of the Final SEIS.

With the large uncertainty in estimating carbon budgets, it is not a useful tool for assigning a GHG emissions significance level at this time. Furthermore, the Intergovernmental Panel on Climate Change Special Report states that proposed actions across many sectors and spatial scales are needed to reduce emissions and limit warming. There is no requirement or mechanism to apply a worldwide carbon budget to a management plan in this FSEIS. Evaluations of such Proposed Actions are beyond the scope of this FSEIS.

Based on the disclosed GHG emissions in the FSEIS and the substantial uncertainties in the size of carbon budgets, including carbon budgets would not provide additional useful information to the decision-maker or public.

For the reasons stated above, this protest is denied.