

**Powder River Basin Resource Council
Center for Biological Diversity**

September 21, 2009

Bureau of Land Management, Casper Field Office
Attn: Teresa Johnson
2987 Prospector Drive, Casper, WY 82604
casper_wymail@blm.gov

RE: Final Environmental Impact Statement for South Gillette Area Coal Lease Applications

Dear Ms. Johnson,

Thank you for the opportunity to review the Final Environmental Impact Statement (FEIS) and present our comments and concerns on the proposed South Gillette Area Coal Lease Applications.

The Powder River Basin Resource Council (PRBRC) has a long history of involvement working for responsible coal leasing and mining in the Powder River Basin. PRBRC was formed in 1973 by ranchers and concerned citizens of Wyoming to address the impacts of strip mining on rural people and communities. Today, we work for the preservation and enrichment of our agricultural heritage and rural lifestyle; the conservation of our unique land, mineral, water, and clean air resources, consistent with the responsible use of those resources to sustain the livelihood of present and future generations; and the education and empowerment of our citizens to raise a coherent voice in the decisions that will impact their environment and lifestyle. Our members live, work, and travel throughout the Powder River Basin near the various coal mines of the area.

The Center for Biological Diversity (the "Center") is a non-profit conservation organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 225,000 members and supporters throughout the western United States and around the world, and offices in New Mexico, Arizona, California, Nevada, Oregon, Alaska, Illinois, Minnesota, Vermont, and Washington, D.C. The Center also works to reduce greenhouse gas emissions to protect biological diversity, our environment, and public health.

Thank you for responding to comments made during the public process regarding the draft environmental statement (DEIS). By this letter, we supplement our comments submitted on the draft document and make several additional comments based on BLM's responses. But first we would like to note the omission of Powder River Basin Resource Council's written comments in Appendix I. Oral comments made by Shannon Anderson at the public hearing on November 19, 2008 were included in the Appendix, but our written comments dated December 17, 2008 were not. PRBRC's written comments are hereby specifically incorporated herein by reference. Please respond to these comments in the final version of the document. For ease of reference we have reattached PRBRC's December 17, 2008 comments.

In our comments on the DEIS for the proposed coal leasing and mining, we outlined many of the inadequacies of the document under NEPA and its implementing regulations. We raised concerns about the project's narrow focus and the lack of a reasonable range of alternatives, as well as BLM's failure to adequately address the pressing issue of greenhouse gas emissions and global warming, failure to provide adequate baseline data for the project area, failure to adequately analyze the project's environmental consequences, failure to address the project's cumulative impacts, and failure to provide adequate mitigation measures, among many other issues. We reiterate those comments here because unfortunately, we remain deeply concerned about the risks posed to people, wildlife, and the environment from the proposed project and BLM's failure to adequately address many of the issues we raised. We also submit these supplemental comments to highlight additional problems with the proposed action and BLM's analysis of its impacts.

A. Climate Change

State of the Science

In "Response to Comment Letter 2: Center for Biological Diversity," BLM states "It is not yet possible to associate specific actions with the specific climate impacts." However, as the EIS now makes clear, combustion of Powder River Basin coal is responsible for approximately "33.6 percent of the estimated 2,134.1 million metric tons of [annual] U.S. CO₂ emission from coal combustion." Since coal combustion is well-recognized as the leading cause of human-induced climate change, one can clearly draw the conclusion that this specific action – leasing a large amount of Powder River Basin coal, which will lead to mining the coal and combusting it in power plants – will contribute to climate impacts. Indeed, both the U.S. Environmental Protection Agency and Energy Information Administration have methodology and data available for estimating CO₂ emissions from fossil fuel combustion.¹ Additionally, the greenhouse gas (GHG) emissions of the mining process are reasonably estimated through company reports. Thus, BLM has information upon which it can draw reasonable conclusions about the climate impacts of this action.

Recently released Department of Interior Secretary Order No. 3289 (revising Sec. Order No. 3226), directs that "[e]ach bureau and office of the Department must consider and analyze potential climate change impacts when undertaking long-range planning exercises...and making major decisions regarding potential use of resources under the Department's purview." The BLM clearly falls under the Department of Interior and leasing a large amount of coal is certainly a major decision regarding potential use of federal resources under BLM's control. Thus, in this case, the order requires analysis of "potential climate change impacts." There is no requirement for certainty of actions leading to specific impacts. The order instead calls for a discussion of "potential" impacts and for the BLM to consider those impacts prior to making decisions.²

¹ See, e.g., EPA, ANNEX 2 Methodology and Data for Estimating CO₂ Emissions from Fossil Fuel Combustion; Hong and Slatick, 1994. Carbon Dioxide Emission Factors.

² For the most comprehensive and up-to-date statement of the impacts of climate change in the U.S., see U.S. Global Change Research Program, *Global Climate Change Impacts in the United States* (June 2009) ("GCRP Report") (available at <http://www.globalchange.gov/publications/reports/scientific-assessments/us-impacts>). For the most up-to-date statement of the impacts of climate change internationally, see Copenhagen Climate Congress, *Synthesis Report – Climate Change: Global Risks, Challenges and Decisions* (Mar. 2009) ("Copenhagen Report"),

The response to the Center for Biological Diversity also states “There is no list of EPA recognized GHGs at this time.” We disagree. On April 24, 2009, the EPA published a Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Clean Air Act in the Federal Register. 74 Fed. Reg. 18886, *et seq.* The proposed endangerment finding includes a section on EPA recognized GHGs. These six GHGs, including carbon dioxide and methane, are well-recognized in climate scientific literature and other public information regarding climate change.³ As EPA notes, “Under all future scenarios, carbon dioxide is projected to remain the dominant driver of climate change for the remainder of this century.” *Id.* at 18895.

Mitigation Options

In their comments, Arch Coal subsidiary Ark Land Company notes that the EIS “should include some discussion of mitigation measures that would mitigate greenhouse gas emissions from the proposed action.” Comment Letter 8 in Appendix I of the FEIS. We believe the BLM’s response, and the information added to Section 3.18.3, does not adequately address the issue.

BLM has still not analyzed mitigation options, such as the potential for capturing and using the methane. Nor did BLM analyze the alternative of flaring – i.e., burning – the methane to drastically reduce the project’s global warming impacts. The agency failed to examine these alternatives despite the fact that methane is routinely captured at working coal mines in the United States and around the world,⁴ and despite the fact that methane is flared at working mines in Europe and Australia.

BLM should also consider alternatives for the mining process that will mitigate the climate change impacts of these mines. As electrical power consumption during the mining process is one of the largest sources of carbon emissions from mining, BLM should mandate requiring renewable energy to power mining. According to recent press reports, some mines in the Powder River Basin have already been considering wind power or other renewable energy power sources for mining operations. This would be preferable to the consumption of coal-fired electricity, which has significant climate change impacts.

(available at <http://climatecongress.ku.dk>). In April of this year, the EPA released the final technical support document for the endangerment analysis concerning greenhouse gas emissions that may be addressed under the Clean Air Act; this document provides information about the impacts of climate change in the U.S. and internationally as well. See EPA, *Technical Support Document: Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act* (Apr. 17, 2009) (available at <http://epa.gov/climatechange/endangerment.html>).

³ See also, e.g., 2009 U.S. Greenhouse Gas Inventory Report (April 2009) at <http://www.epa.gov/climatechange/emissions/usinventoryreport.html>.

⁴ The nearby North Antelope Rochelle Mine has a methane capture project that involves methane drainage from surface wells in advance of the mining face. According to EPA, “the project is estimated to reduce 200,000 tonnes of carbon dioxide equivalent annually.” In addition to the climate change benefits, the mining company also receives economic benefits through the carbon credit process. U.S. EPA, Coalbed Methane Outreach Program, May 2009 newsletter, at 7, available at http://www.epa.gov/cmop/docs/spring_2009.pdf.

The federal agencies' failure to even consider these reasonable mitigation measures and failure to account for the impacts of methane venting on climate change violates NEPA.⁵

B. Reclamation

In response to several sets of comments detailing the lack of contemporaneous reclamation occurring at mines in the Powder River Basin, including Wyoming Chapter of the Sierra Club, BLM states, "Lands that are disturbed to recover coal must be reclaimed following mining in accordance with the requirements of state and federal law...reclamation follows as mining progresses." This response greatly oversimplifies the issue.

BLM should thoroughly review and include information from its cooperator, OSM's Evaluation Year 2009 Annual Evaluation Summary Report for the Wyoming Regulatory Program. OSM's oversight guidance (REG-8) requires analysis of "reclamation success as measured by bond release" because as the WY Department of Environmental Quality noted in their comments on the report, "Until an area has achieved bond release, the quality of the reclamation is unproven." According to the 2009 OSM Wyoming report, only 30% of disturbed acres have received Phase I bond release, only 4.9% of disturbed acres have received Phase II bond release, and only 5.3% of acres have received Phase III bond release. Report at 8.⁶ These percentages demonstrate the extent of the problem. BLM notes that "According to the measurements used in REG-8, the data shows that the State program may not be effective in its goal of having all disturbed lands reclaimed to the approved post-mining land use as contemporaneously as possible." *Id.* at 9. For Evaluation Year 2009 alone, 5,720 acres were released from bond (only 341 of which were Phase III bonds) while 10,634 new acres were bonded. *Id.* at 27. Thus, the amount of new land being disturbed is almost double the amount of land completing any stage of reclamation for the year.

Even if you take the state's very liberal interpretation of reclamation to include lands that "have been backfilled, graded, topsoiled, and seeded" only 44% of the disturbed mine lands in Wyoming "have been reclaimed." *Id.*⁷ As the chart on page 12 of the report clearly shows, there is a growing gap between the number of acres disturbed versus the number of acres reclaimed. Of particular note for this EIS is "[t]he ratio of reclaimed acres to disturbed acres [at the Caballo Mine] is 0.44." *Id.* at 15. The report adds that the mine "must keep several active pits open so that coal can be blended to meet customer and contract requirements. This is a reason why the mine was *unable* to conduct reclamation activities for the past several years." *Id.* (emphasis added). BLM must consider this information in the EIS.⁸

⁵ We would also like to note that EPA also called for this analysis in the agency's comments: "The FEIS should include some potential mitigation for the additional greenhouse gases that will [be] emitted by the SGAC Mines if the maintenance leases are issued." EPA Comments at 5.

⁶ Although these numbers are cumulative for the entire state, as the report notes, "Over ninety-two percent of all coal produced in Wyoming comes from the large surface mines in the Powder River Basin near Gillette, Wyoming." Report at 1.

⁷ Again, we would like to stress that the only objective (and legally authorized) measure of reclamation is Phase III bond release, which ensures vegetative success and returning mined lands to pre-mining uses. Until lands are released from bonds, they are still under control of the mining companies and may be re-disturbed.

⁸ Please also review pages 37 through 40 of the report which provides information from WY DEQ on the ratio of affected acres versus reclaimed acres for all mines, including those reviewed under this EIS.

As we have noted in numerous comments to BLM, lack of contemporaneous reclamation has substantial impacts, such as the spread of noxious weeds, decreased air quality as a result of a larger area of disturbance, less water restoration because areas are unable to start recharging in a timely fashion, and a longer loss of livestock and wildlife pastureland.

BLM's role in the process – leasing the coal on federal lands – is not trivial. In fact, it is the go or no go stage for mining operations. Once leased, other agencies, such as DEQ, claim to have little ability to prevent new mining because of pre-existing lease rights. BLM has the sole ability to control the pace and scale of coal leasing and subsequent mining in response to the failure of mining companies to comply with SMCRA mandates. In short, SMCRA mandates are not being complied with. For this reason, BLM must not lease new coal and instead should wait to lease new tracts until reclamation of current tracts is complete.

C. Groundwater Drawdown

We agree with the comments of the U.S. Geological Survey that “the conclusion that drawdown specifically attributable to mining cannot be defined and numerical ground-water models are no longer practical to predict drawdown due to mining alone is not true.” USGS comments at 1. However, BLM has skirted its duty to ensure compliance with SMCRA's hydrologic balance requirements by failing to analyze (and separate for purposes of such analysis) drawdown caused by coal mining from drawdown caused by CBM production. As noted in our comments on the DEIS, BLM has both procedural NEPA duties to analyze impacts of water drawdown and restoration methods and timetables and substantive duties to ensure compliance with SMCRA and its implementing federal and state regulations prior to leasing new coal tracts. BLM has failed to demonstrate that SMCRA mandates are being met and that related and ongoing coal mining operations are not materially damaging surface and sub-surface waters.

D. Raptors

All disturbed areas plus the appropriate buffers need to be considered in the analysis of impacts to raptor nests and populations, not just the lease application tracts. This information needs to be consistently presented throughout the FEIS and the information in the Supplementary Volume needs to be included in both the body and Executive Summary of the FEIS. Buffer areas around active raptor nests need to be clearly delineated and declared as unsuitable for coal leasing.

E. Ute Ladies' Tresses Orchid

Ute ladies'-tresses orchids (ULTO) are listed as threatened, and identified as possibly being in the area. This wetlands orchid can survive underground without blooming for many years, so surveying must be done multiple times to assure that the orchids do not exist in an area. It will generally not flower in drought years or years that start wet or cold. FEIS at E1-10. It blooms in late July to early September. It cannot be properly identified without the flower being present. *Id.* It has been observed on Antelope Creek at 5100 feet. *Id.*

In preparing the South Gillette EIS, BLM has not performed adequate surveys to confirm or deny the presence of this threatened flower. According to the ULTO Bi-Op for the Modified Idaho Roadless rule, “[b]ecause different plants come into bloom at different times within a population, a population must be visited several times during the growing season for an accurate count.”⁹ Not much is known about ULTO, but similar species can live up to 50 years and bloom only once every 20 years.¹⁰

According to the FWS Interim Survey Requirements for ULTO (1992), “the Service recommends that surveys be conducted annually for three consecutive years.”

This threatened flower could be impacted by both direct habitat destruction from strip-mining or through the continued dewatering of the area as a cumulative result of CBNG drilling and mining, particularly in combination with reduced water availability from global warming. Yet, the decision to go ahead with these leases could be made well in advance of acquiring the data necessary to know whether this species will be impacted. These lease applications were generally submitted in late 2005 and early 2006, allowing for plenty of time to perform multiple surveys in 2006, 2007 and 2008. There is no excuse for not properly surveying.

When several key surveys were done, much of Wyoming was abnormally dry; in August 2007, it was particularly worse. At the same time, it is possible that there were very wet springs during survey years. Absence of the ULTO flowers during surveys may have been the result of weather conditions.

Even where the FEIS purports to address the impacts of the proposed action to Ute ladies’-tresses – *e.g.*, in connection with noting that the imperiled plant is known to occur on certain lease tracts – the document still fails to comply with NEPA by considering only the potential impacts to the species. *See, e.g.*, FEIS at 4-68 (discussing on the “potential” impacts to ULTO, which is “known to occur in the PRB Coal Review Task 3 study area”). However, this is a violation of NEPA, as merely identifying potential impacts, without including an analysis of the nature, intensity, and extent of the actual impacts of federal activities, with supporting scientific or objective data, is insufficient.¹¹

For these reasons, a Record of Decision is not possible until proper surveys for this threatened flower have been completed according to FWS protocol. Once proper surveys have been completed, a SEIS should be issued with the new information, available for public comment.

Thank you for your time and consideration of these comments.

⁹ Fish and Wildlife Service, Biological Opinion – Modified Idaho Roadless Rule 14420-2008-F-0586 at 235.

¹⁰ *Id.*

¹¹ *See, e.g., Defenders of Wildlife v. Babbitt*, 130 F. Supp. 2d 121, 128 (D.D.C. 2001) (setting aside agency’s EIS where it “states that noise would be increased and both the pronghorn and their habitat would be disturbed” but contains “no analysis of what the nature and extent of the[se] impacts will be”); *see also Nat’l Parks & Conservation Assn. v. Babbitt*, 241 F.3d 722, 743 (9th Cir. 2001) (NEPA document inadequate where it identified “an environmental impact” but “did not establish the intensity of that impact”); *Citizens Against Toxic Sprays, Inc. v. Bergland*, 428 F. Supp. 908, 922 (D. Or. 1977) (“Conclusory statements which do not refer to scientific or objective data supporting them do not satisfy NEPA’s requirement for a ‘detailed statement.’”).



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