IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

516 Alto Street)
Santa Fe, New Mexico 87501)
and) Case No
SIERRA CLUB)
85 Second Street, Second Floor)
San Francisco, California 94105,)
)
Plaintiffs,)
)
V.)
)
U.S. BUREAU OF LAND MANAGEMENT)
1849 C Street N.W.)
Washington, D.C. 20240,)
)
Defendant.)

COMPLAINT FOR DECLARATORY JUDGMENT AND INJUNCTIVE RELIEF

INTRODUCTION

- 1. The Powder River Basin in northeastern Wyoming and southeastern Montana is the largest coal production region in the United States. In 2008, 42 percent of all coal mined in the United States came from the Powder River Basin. Since 2000, Powder River Basin coal production has increased nearly 40 percent, from 360 million tons to a record 494 million tons annually.
- 2. Most of the coal mined from the Powder River Basin is shipped by rail and then burned in coal-fired power plants throughout the United States. Powder River Basin coal powers hundreds of plants in 38 states from New Jersey to Oregon. The vast

majority of Powder River Basin coal is burned in the Midwest. All of the coal mined in the Powder River Basin is owned and leased by the federal government.

- 3. Coal-fired power plants are the largest source of carbon dioxide in the country, responsible for 32 percent of all carbon dioxide emissions nationwide.
- 4. The Powder River Basin is linked to more carbon dioxide emissions than almost any other region or activity in the country, because more coal is extracted from the Powder River Basin than from any other region. The U.S. Bureau of Land Management ("BLM") itself discloses that coal from the Powder River Basin contributes 12.8 percent of all carbon dioxide emissions released in the United States and 40 percent of all carbon dioxide released by coal-fired power plants in the country.
- 5. In spite of the massive carbon dioxide emissions resulting from Powder River Basin coal production, BLM continues to issue new coal leases in the Basin without fully analyzing the environmental impacts—particularly climate change impacts—of increased carbon dioxide emissions resulting from this coal leasing.
- 6. BLM recently authorized the sale of four large coal leases in the Powder River Basin: the North Hilight, South Hilight, North Porcupine, and South Porcupine leases. Collectively, these four leases have the potential to produce more than 1.8 billion tons of coal, resulting in over three billion metric tons of carbon dioxide emissions when the coal from these leases is burned in coal-fired power plants.
- 7. These leases, and the coal mining they permit, will increase the amount of coal consumed by increasing supplies, decreasing prices, and increasing the total amount of coal available.

- 8. In preparing its Environmental Impact Statement for the lease authorizations, BLM estimated the annual carbon dioxide emissions that would result from combustion of coal from each of these leases. Even though these emissions are likely to increase the amount and rate of climate change, BLM included no analysis of the environmental impacts of these emissions. Nor did BLM consider the cumulative effect of these carbon dioxide emissions together with past, present, and reasonably foreseeable coal leases in the Powder River Basin.
- 9. In preparing its Environmental Impact Statement for the lease authorizations, BLM also failed to fully analyze the impact of ozone, nitrogen dioxide, and particulate matter emissions.
- 10. BLM failed to analyze methods to minimize any of these emissions, methods to mitigate their impacts, or alternatives that would have had lower emissions.
- 11. Accordingly, Plaintiffs WildEarth Guardians and the Sierra Club allege that BLM's authorization of the North Hilight, South Hilight, North Porcupine, and South Porcupine leases violates the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321 *et seq.*
- 12. Separately, BLM's decisions to sell and execute the North Hilight, South Hilight, North Porcupine, and South Porcupine leases also sanction activities that will result in the violation of air pollutant emission limits established under the Clean Air Act for the protection of human health and the environment.
- 13. BLM's authorizations of these leases also violate the Federal Land Policy and Management Act ("FLPMA"), 43 U.S.C. §§ 1701 *et seq.* requirements that agency

actions ensure compliance with the governing land use management plan and applicable air quality standards.

JURISDICTION AND VENUE

- 14. This Court has jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 (federal question), 2201 (declaratory relief), and 2202 (injunctive relief). The cause of action for Plaintiffs' claims is provided by the judicial review provision of the Administrative Procedure Act ("APA"), 5 U.S.C. §§ 701-706.
- 15. An actual and present controversy exists between the parties within the meaning of the Declaratory Judgment Act, 28 U.S.C. § 2201.
- 16. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1391(e) because Defendant BLM resides in this judicial district, and a substantial part of the events or omissions giving rise to the claims have occurred in this district due to decisions made here by BLM.

PARTIES

organization with offices in New Mexico, Colorado, and Arizona. It brings suit on its own behalf and on behalf of its members. WildEarth Guardians ("Guardians") protects and restores the wildlife, wild places, and wild rivers of the West. Towards this end, Guardians and its members work to replace fossil fuels with clean, renewable energy in order to safeguard public health, the environment, and the Earth's climate. Guardians has approximately 4,700 members, many of whom live, work, and/or recreate in Wyoming's Powder River Basin.

- 18. Plaintiff SIERRA CLUB is a national nonprofit organization of approximately 625,000 members dedicated to exploring, enjoying, and protecting the wild places of the earth; to practicing and promoting the responsible use of the earth's ecosystems and resources; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. The Sierra Club's concerns encompass climate change, air quality impacts, water quality, wildlife, and other environmental concerns. The Sierra Club's highest national priority campaign is its "Move Beyond Coal" Campaign, which aims to transition the nation away from coal and toward clean energy solutions. The Wyoming Chapter of the Sierra Club has approximately 900 members in the state of Wyoming, many of whom live, work, and/or recreate in the Powder River Basin.
- 19. Plaintiffs' members live, work, recreate, and conduct other activities on public lands, including lands affected by BLM's leasing of the North Hilight, South Hilight, North Porcupine, and South Porcupine tracts. Plaintiffs and their members use public lands affected by these leases for recreational, scientific, aesthetic, conservation and other public purposes, and are harmed by the aesthetic and environmental impacts of coal mining there.
- 20. Plaintiffs' members have a substantial interest in ensuring they breathe the cleanest air possible. Plaintiffs members are currently affected by poor air quality associated with existing coal leasing in the Powder River Basin, and will be harmed by further declines in air quality caused by mining of the challenged leases.
- 21. Plaintiffs and their members will be injured by the greenhouse gas emissions that will result from the mining and combustion of coal that will occur as a

result of the North Hilight, South Hilight, North Porcupine, and South Porcupine leases. Without the leases, these large amounts of coal would not be mined or combusted. Mining and combustion of this coal will meaningfully increase global greenhouse gas emissions, thereby increasing the magnitude and rate of global warming. Climate change is already injuring plaintiffs' members in the following ways, and the incremental emissions resulting from the leases will increase these injuries:

- a. Sierra Club members own property at or near sea level in Texas, Florida, Maryland, and California that is prone to flooding with even a small sea level rise. Sea levels have already risen as a result of climate change. These members face increased risk of harm to their health, recreational, economic, and aesthetic interests as a result the challenged leases.
- b. Plaintiffs' members in the Rocky Mountains and elsewhere recreationally ski. Global warming is decreasing and will continue to decrease average annual snowpack in this region, leading to shorter ski seasons and diminishing plaintiffs' members opportunity to ski.
- c. Plaintiffs' members in the Rocky Mountains fish for species that will decline in abundance, possibly leading to extinction, because of global warming. Global warming will harm these fish species by increasing wildfires and altering precipitation patterns, leading to increased water temperatures, changes in flow regimes, and other changes that are deleterious to these species fish.

- d. Plaintiffs' members enjoy viewing wildlife in the Rocky

 Mountains, including Wyoming that will be harmed by similar consequences of global warming, diminishing plaintiffs' recreational opportunities.
- e. Plaintiffs' members own property in the Rocky Mountains, including Wyoming, and their use and enjoyment of this property will be harmed by the increased drought, wildfires, and damage from insects that will be caused by climate change.
- 22. Each of the above climate impacts will be made worse by emissions resulting from the leases, because increased emissions will increase the amount and rate of global warming, in turn increasing the magnitude of the changes underlying these impacts.
- 23. Plaintiffs and their respective members have a substantial interest in ensuring that BLM complies with federal law, including the requirements of NEPA and FLPMA.
- 24. Plaintiffs' members have been accorded a procedural right through NEPA to protect their interests in the environment. Defendant's failure to comply with NEPA, as set out in this complaint, threatens plaintiffs' members interests in the environment because Defendant failed to adequately consider the impacts of its actions on the environment.
- 25. BLM's failure to comply with NEPA inflicts an informational injury on plaintiffs. One of the purposes of NEPA is to provide information to the public regarding environmental impacts of federal actions, including organizations such as plaintiffs. Plaintiffs, in turn, are organized in part for the purposes of disseminating and raising

public awareness of such information. As alleged below, BLM's EIS wrongfully omitted information regarding the impacts of the coal consumption that these leases will enable, depriving plaintiffs and their members of this information.

- 26. The declaratory and injunctive relief that the Plaintiffs seek will redress the injuries to plaintiffs' members. Adequate NEPA analysis may lead BLM to change its decision.
- 27. The BUREAU OF LAND MANAGEMENT ("BLM") is an agency of the United States within the Department of Interior that is directly responsible for carrying out the Department's obligations under statutes and regulations governing coal leasing and development, including complying with NEPA and FLPMA.

FACTS AND LEGAL FRAMEWORK

- A. The Powder River Basin and BLM's Coal Leasing Process.
- 28. The Powder River Basin is located in northeastern Wyoming and southeastern Montana, and covers an area of roughly 24,000 square miles.
- 29. Some of the largest deposits of sub-bituminous coal in the world underlie the Powder River Basin. Sub-bituminous coal is favored for electrical generation due to its low sulfur content. The Powder River Basin is the single largest source of coal in the United States. Wyoming Powder River Basin coal is shipped nationwide to 38 states.
- 30. Approximately six percent of Wyoming Powder River Basin coal is burned in Wyoming. Most Powder River Basin coal is burned in other States, among them Colorado, Texas, Kansas, Missouri, Ohio, and Illinois. Increasingly, coal from the region is being exported internationally to markets in Asia.

- 31. The U.S. Department of Energy ("DOE") reports that in 2010, 468,428,000 tons of coal were mined from the Powder River Basin, comprising more than 43 percent of all coal produced in the United States. More coal is mined in the Powder River Basin than in any other region of the country. DOE also noted that in 2010, of the top 10 producing coal mines in the United States, nine were located in the Powder River Basin.
- 32. Federal regulations provide for two types of coal leasing processes:

 Competitive Leasing and Lease-by-Application.
- 33. Competitive Leasing applies in those areas BLM has designated as Coal Production Regions. As part of this Competitive Leasing process, BLM establishes regional leasing levels that include a ceiling for coal leasing, and delineates lease boundaries based on an assessment of regional environmental impacts and public input. BLM then auctions leases within the Coal Production Region to the highest bidder. *See* 43 C.F.R § 3420.
- 34. BLM's Lease-by-Application process applies where there is an "emergency need for unleased coal" or in areas "outside Coal Production Regions." 43 C.F.R § 3425.0-2. This process allows coal companies, rather than BLM, to delineate lease tracts and propose them for leasing. Lease proposals are not based on regional leasing levels or any regional environmental impact analysis. The Lease-by-Application process does not allow BLM to put a ceiling on coal leasing. *See* 43 C.F.R § 3425.
- 35. BLM designated the Powder River Basin a "Coal Production Region" on November 9, 1979. *See* 44 Fed. Reg. 65,196 (Nov. 9, 1979).

- 36. On January 9, 1990, BLM "decertified" the Powder River Basin as a Coal Production Region. *See* 55 Fed. Reg. 784-85 (Jan. 9, 1990). Decertification allowed BLM to lease coal in the Powder River Basin using the streamlined Lease-by-Application process.
- 37. Since decertification of the Powder River Federal Coal Region in 1990, Wyoming coal production increased from 184 million tons in 1990 to 445 million tons in 2006, an increase of 242 percent. Wyoming coal production has increased at a more rapid rate than other domestic coal production.
 - B. The North Hilight, South Hilight, North Porcupine, and South Porcupine Coal Leases.
- 38. BLM authorized the North Hilight, South Hilight, North Porcupine, and South Porcupine coal leases (the "Leases") under the Lease-by-Application process.
- 39. On October 7, 2005, the Ark Land Company ("ALC") (a subsidiary of Arch Coal, Inc., which is headquartered in St. Louis, Missouri) filed an application with BLM for federal coal reserves in the "North Hilight" (WYW 164892) and "South Hilight" (WYW 174596) tracts located in the Wyoming Powder River Basin immediately adjacent to the Black Thunder Mine in Campbell County, Wyoming. ALC is the operator of the Black Thunder Mine. ALC applied to lease the North and South Hilight tracts in order to extend the life of the Black Thunder Mine. The South Hilight tract was offered for sale on December 14, 2011. ALC was the successful bidder and acquired the South Hilight lease tract. BLM has not yet scheduled a sale date for the North Hilight tract.
- 40. On September 29, 2006, BTU Western Resources, Inc. ("BTU") (a subsidiary of Peabody Energy, which is also headquartered in St. Louis, Missouri) filed an application with BLM for federal coal reserves in the "North Porcupine" (WYW

173408) and "South Porcupine" (WYW 176095) tracts located in the Wyoming Powder River Basin immediately adjacent to the North Antelope Rochelle Mine in Campbell County, Wyoming. Powder River Coal, LLC, (another subsidiary of Peabody Energy) is the operator of the North Antelope Rochelle Mine. BTU applied to lease the North and South Porcupine tracts in order to extend the life of the North Antelope Rochelle Mine. The South Porcupine tract was offered for sale on February 29, 2012. BLM has not scheduled a sale date for the North Porcupine tract.

- 41. In 2010, the Black Thunder Mine produced 116,225,536 tons of coal.

 During that same year, the North Antelope Rochelle Mine produced 105,785,685 tons of coal. Combined, this represents more than 47 percent of the coal produced in the Wyoming Powder River Basin and 20 percent of all coal produced in the U.S.
- 42. The North Hilight tract includes approximately 4,529 acres containing 467,596,000 tons of mineable federal coal in Campbell County, Wyoming.
- 43. The South Hilight tract includes approximately 1,976 acres containing 222,676,000 tons of mineable federal coal in Campbell County, Wyoming.
- 44. The North Porcupine tract includes approximately 6,364 acres containing 721,154,828 tons of mineable federal coal in Campbell County, Wyoming.
- 45. The South Porcupine tract includes approximately 3,243 acres containing 401,830,508 tons of mineable federal coal in Campbell County, Wyoming.
- 46. Mining of the Leases will directly lead to the release of harmful air pollutants into the Powder River Basin. These air pollutants include ozone, carbon dioxide, and particulate matter.

- 47. Coal mined from the Leases will be burned in coal-fired power plants.

 Burning this coal will release high levels of harmful greenhouse gases, including carbon dioxide, into the atmosphere. These increased carbon dioxide emissions will increase the rate of climate change and resulting harmful environmental impacts.
- 48. Additionally, both Arch Coal, Inc. and Peabody have stated their intent to increase the export of coal from the Powder River Basin to Asia.

C. Climate Change, Carbon Dioxide, and Coal.

- 49. Climate change has been intensively studied and acknowledged at the global, national, and regional scales. The Nobel Prize-winning Intergovernmental Panel on Climate Change ("IPCC") has determined that "[w]arming of the climate system is unequivocal" and, further, that "[o]bservational evidence from all continents and most oceans shows that many natural systems are being affected by regional climate changes, particularly temperature increases."
- 50. Increases in the release of greenhouse gases by human activities have intensified the greenhouse effect, leading to climate change. According to a U.S. Global Change Research Program report entitled *Global Climate Change Impacts in the United States*:

Observations show that warming of the climate is unequivocal. The global warming observed over the past 50 years is due primarily to human-induced emissions of heat-trapping gases. These emissions come mainly from the burning of fossil fuels (coal, oil, and gas) with important contributions from the clearing of forests, agricultural practices, and other activities.

51. Carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride are recognized as greenhouse gases. In 2009, the U.S. Environmental Protection Agency ("EPA") found that these "six greenhouse

gases taken in combination endanger both the public health and the public welfare of current and future generations." 74 Fed. Reg. 66,496 (Dec. 15, 2009).

- 52. In Secretarial Order No. 3289, Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources (Sept. 14, 2009), the Secretary of Interior proclaimed that "[t]he realities of climate change require us to change how we manage the land, water, fish and wildlife, and cultural heritage and tribal lands and resources we oversee." The Secretary proceeded to call for the development of a "unified greenhouse gas emission reduction program" among Department of Interior agencies.
- 53. In Executive Order No. 13514, *Federal Leadership in Environmental*, *Energy, and Economic Performance* (Oct. 5, 2009), President Obama called on all federal agencies to "measure, report, and reduce their greenhouse gas emissions from direct and indirect activities."
- 54. In the Final EIS ("FEIS") for the Leases, BLM outlined some of the impacts of climate change to the American West, stating:

If global warming trends continue into the foreseeable future, Chambers (2006) indicates that the following changes may be expected to occur in the West:

- The amount and seasonal variability of precipitation will increase over most areas. IPCC (2001) climate model scenarios indicate that by 2100, precipitation will increase about 10 percent in summer, about 30 percent in fall, and 40 percent in winter. Less snowfall will accumulate in higher elevations, more precipitation will occur as rain, and snowmelt will occur earlier in the spring because of higher temperatures.
- Streamflow patterns will change in response to reduced snowpacks and increasing precipitation. Peak flows in spring are expected to occur earlier and be of lower magnitude because of snowpack changes. Runoff from greater amounts of winter rainfall will cause

- higher winter flows. Summer flows will be lower, but with higher variability depending on the severity of storm events.
- Some populations of native plants, invasive species, and pests will expand. Increasing amounts of atmospheric carbon dioxide and precipitation during the growing season will provide favorable growth conditions for native grasses, perennial forbs, woody species, and invasive annuals such as cheatgrass. Insect populations also will likely increase because milder winter temperatures will improve reproduction and survival rates.
- Fire frequency, severity, and extent will increase because of the increased availability of fine fuels (grasses, forbs, and invasives) and accumulation of fuels from previous growing seasons. Higher temperatures will extend the length of fire seasons. Expansion of pinyon-juniper species and increasing tree densities could increase the number of high severity crown fires. Higher rates of insect damage and disease also may increase fuel accumulations.
- Sensitive species and overall biodiversity will be reduced. Highelevation habitats will shrink in area or disappear as lowerelevation plant communities expand. It is probable that some mammalian, avian, and other species that currently inhabit these high-elevation habitats may become extinct. Higher rates of disease and insect damage also may pose threats to other sensitive plant and animal species.
- emitted greenhouse gas in the United States. According to an EPA report, *Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990-2009* ("2011 GHG Inventory Report"), the U.S. emitted 7,311.8 million tons (6,633.2 million metric tons) of greenhouse gases in 2009, comprising 19 percent of human created greenhouse gases released globally. Of this total, carbon dioxide comprised 83 percent of total U.S. greenhouse gas emissions, or 6,068.4 million tons (5,505.2 million metric tons).
- 56. EPA also determined in the 2011 GHG Inventory Report that the electricity generation sector is the largest source of greenhouse gases in the U.S., largely due to carbon dioxide emissions. Coal-fired power plants release more than 80 percent of

all greenhouse gases from the electricity generation sector, including more than 1,930 million tons (1,747 million metric tons) of carbon dioxide—nearly 30 percent of the nation's total greenhouse gas inventory and 33 percent of all carbon dioxide released in the U.S., making coal-fired power plants and the mines that supply them the largest source of carbon dioxide in the country.

- D. Other Air Pollutants from Coal Production—Ozone, NO_2 , PM_{10} , and $PM_{2.5}$.
- 57. Surface coal mining activities generate various air pollutants including ozone precursors, nitrogen dioxide ("NO₂"), and particulate matter ("PM₁₀") and fine particulate matter ("PM_{2.5}"). Tailpipe emissions from mining equipment and emissions from trains used to haul coal from mines produce ozone precursors. Blasting of mine overburden produces gaseous clouds that contain NO₂. Coal crushing, storing, and handling facilities are the most common sources of particulate matter.
- 58. Ground-level ozone is a dangerous pollutant that causes a variety of significant adverse impacts to human health. According to EPA, elevated levels of ozone have a "causal relationship[] with a range of respiratory morbidity effects, including lung function decrements, increased respiratory symptoms, airway inflammation, increased airway responsiveness, and respiratory-related hospitalizations and emergency department visits." 73 Fed. Reg. 16,436, 16,443-46 (March 27, 2008). Furthermore, EPA has stated that the latest scientific evidence on ozone effects "is highly suggestive that [ozone] directly or indirectly contributes to non-accidental and cardiorespiratory-related mortality," including "premature mortality." *Id.* EPA has concluded that individuals with asthma are at particular risk from the adverse effects of ozone. *Id.*

- 59. Ozone is a criteria pollutant under the federal Clean Air Act ("CAA"), 42 U.S.C. §§ 7401 *et seq.* The CAA establishes National Ambient Air Quality Standards ("NAAQS") for each criteria pollutant that represents the maximum allowable concentration of each pollutant that can occur in the air and still protect public health. *See* 42 U.S.C. § 7409. Currently, the NAAQS limit for ozone concentrations is no more than 0.075 parts per million ("ppm") over an eight-hour period. According to EPA, an exceedance of the standard occurs whenever ambient ozone concentrations reach 0.076 ppm or higher and a violation occurs whenever the three-year average of the fourth-highest annual eight-hour ozone concentrations is 0.076 ppm or higher.
- 60. NO₂ is a criteria pollutant under the CAA. The NO₂ annual standard is 53 parts per billion ("ppb"). On July 15, 2009, EPA proposed to supplement the annual standard with a one-hour NO₂ standard of between 80 and 100 ppb. *See* 74 Fed. Reg. 34,404-66 (July 15, 2009). EPA believed it was necessary to supplement the annual standard with a standard governing short-term exposure because "recent studies provide scientific evidence that is sufficient to infer a likely causal relationship between short-term NO₂ exposure and adverse effects on the respiratory system." *Id.* at 34,410. According to EPA, "[e]pidemiologic evidence exists for positive associations of short-term ambient NO₂ concentrations below the current NAAQS with increased numbers of emergency department visits and hospital admissions for respiratory causes, especially asthma." *Id.* at 34,413. EPA promulgated the final one-hour NO₂ standard of 100 ppb on February 9, 2010. *See* 75 Fed. Reg. 6,474-6,537 (Feb. 9, 2010).
- 61. Particulate matter less than 10 microns in diameter, or PM₁₀, is a criteria pollutant under the CAA. *See* 71 Fed. Reg. 61,144 (Oct. 17, 2006). The NAAQS limits

hourly PM₁₀ concentrations to no more than 150 micrograms/cubic meter. *Id.* at 61,202. According to EPA, health effects associated with short-term exposure to PM₁₀ include "aggravation of respiratory and cardiovascular disease (as indicated by increased hospital admissions), increased respiratory symptoms in children, and premature mortality." *Id.* at 61,178.

- 62. Particulate matter less than 2.5 microns in diameter, or PM_{2.5}, is a criteria pollutant under the CAA. *See* 71 Fed. Reg. 61,144 (Oct. 17, 2006). The NAAQS limits annual PM_{2.5} concentrations to no more than 15 micrograms/cubic meter. *Id.* The NAAQS limits 24-hour PM_{2.5} concentrations to no more than 35 micrograms/cubic meter. *Id.* According to EPA, health effects associated with short-term exposure to PM_{2.5} include "aggravation of respiratory and cardiovascular disease (as indicated by increased hospital admissions and emergency department visits), changes in lung function and increased respiratory symptoms, as well as new evidence for more subtle indicators of cardiovascular health." *Id.* at 61,152.
- 63. Mining of the Leases will lead to increased levels of harmful air pollutants—ozone, NO₂, PM₁₀ and PM_{2.5}—in the Powder River Basin.

E. The Wright Area Leasing FEIS and Records of Decision.

64. The National Environmental Policy Act ("NEPA") was enacted to ensure that federal projects do not proceed until the environmental effects associated with those projects are completely assessed and analyzed by the proponent federal agency. *See* 42 U.S.C. § 4332(2)(C).

- 65. NEPA requires the preparation of an environmental impact statement ("EIS") if a proposed federal action has the potential to "significantly affect" the quality of the human environment. 42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1501.4.
- 66. An EIS must, *inter alia*, analyze alternatives to the proposed action as well as the direct, indirect, and cumulative impacts associated with the proposed action. *See* 42 U.S.C. § 4332(2); 40 C.F.R. § 1508.9. The discussion of "alternatives to the proposed action" is the "heart" of the NEPA process. 42 U.S.C. § 4332(C)(iii), (E); 40 C.F.R. § 1502.14. This discussion is intended to provide "a clear basis for choice among options by the decisionmaker and the public." 40 C.F.R. § 1502.14. Federal agencies must "[r]igorously explore and objectively evaluate all reasonable alternatives." *Id*.
- 67. An EIS must include a discussion of methods to mitigate adverse environmental consequences associated with the proposed action. *See* 40 C.F.R. §§ 1502.14(f), 1502.16(h).
- 68. FLPMA requires BLM to manage public lands "under principles of multiple use and sustained yield, in accordance with the land use plans" developed by BLM. 43 U.S.C. § 1732(a). Under FLPMA, BLM has the authority to regulate "the use, occupancy, and development of the public lands." 43 U.S.C. § 1732(b).
- 69. Any land use authorization by BLM shall "[r]equire compliance with air and water quality standards established pursuant to applicable Federal or State law." 43 C.F.R. § 2920.7(B)(3).
- 70. In 2010, BLM issued its FEIS for the Wright Area, including the North Hilight, South Hilight, North Porcupine, and South Porcupine Coal Lease Applications.

 On March 1, 2011, the BLM Wyoming State Director signed the Record of Decision

("ROD") adopting Alternative 2 for the South Hilight lease, as analyzed and assessed in the FEIS. On September 30, 2011, the BLM Wyoming State Director signed the ROD adopting Alternative 2 for the North Porcupine lease, as analyzed and assessed in the FEIS. On July 20, 2011, the BLM Wyoming State Director signed the ROD adopting Alternative 2 for the South Porcupine lease, as analyzed and assessed in the FEIS. On February 1, 2012, the BLM Wyoming State Director signed the ROD adopting Alternative 2 for the North Hilight lease, as analyzed and assessed in the FEIS.

- 71. The FEIS analyzed three alternatives, including a "no action" alternative, for the proposed Leases. The selected alternative ("Alternative 2") would reconfigure each tract to include additional acreage.
- 72. Neither of the two action alternatives analyzed in the FEIS included measures that would: (1) reduce, eliminate, or mitigate carbon dioxide emissions, (2) reduce, eliminate, or mitigate ozone, NO₂, PM₁₀, and PM_{2.5} emissions, or (3) reduce, eliminate, or mitigate adverse climate change impacts. In their comments on the FEIS, Plaintiffs proposed alternatives that included these measures.
- 73. Insofar as the analysis of air quality was concerned, BLM did not adequately analyze the direct, indirect, and cumulative impacts of ozone, NO₂, PM₁₀, and PM_{2.5} emissions from the Leases to Wyoming Powder River Basin's air quality.
- 74. According to EPA monitoring data, ozone levels in Campbell County, Wyoming have exceeded the ozone NAAQS on 16 occasions since 2001. Two monitors are in operation in Campbell County, one in the Thunder Basin National Grassland and the other in southern Campbell County. The three-year average of the fourth-highest annual eight-hour ozone readings for the years 2007-2009 is 0.065 ppm at the South

Campbell County Monitor and 0.069 ppm at the Thunder Basin Monitor—that is, within 92 percent of the NAAQS. During this same three-year period, eight-hour ozone concentrations have peaked as high as 0.088 ppm.

- 75. BLM's air quality analysis in the FEIS did not estimate ozone concentrations that would result from the Leases.
- 76. In its FEIS, BLM stated that "[ozone] has been included in discussions on emissions of [nitrogen oxide] NOx since NOx is one of the main ingredients involved in the formation of ground level [ozone]." BLM provides no information on projected ozone levels from lease development. BLM also provides no analysis of air quality impacts from increased ozone emissions resulting from lease development.
- 77. BLM's air quality analysis in the FEIS did not analyze NO₂ emissions from the Leases on an hourly basis. Prior to BLM's completion of the Wright Area FEIS, EPA supplemented the annual NO₂ standard with a one-hour NAAQS for NO₂ to protect public health from short-term NO₂ exposure. In its FEIS, BLM acknowledged this new standard. However, BLM did not analyze hourly emissions from the Leases in light of this new standard.
- 78. In the FEIS, BLM recognized that "NO₂ is by far the most toxic of several species of NOx." BLM continues to note that NO₂ "may cause significant toxicity because of its ability to form nitric acid with water in the eye, lung mucous membranes, and skin," "may cause death by damaging the pulmonary systems," and "may exacerbate pre-existing respiratory conditions, or increase the incidence of respiratory infections."
- 79. In analyzing the PM_{10} impacts of the Leases, BLM concluded that the Leases would comply with the 24-hour PM_{10} NAAQS. However, BLM discloses in the

cumulative impacts section of the FEIS that cumulative impacts of the Leases would lead to future exceedances of the 24-hour PM₁₀ NAAQS, with concentrations as high as 624.1 micrograms/cubic meter, even under a low production scenario.

- 80. With respect to the PM_{2.5} impacts of the Leases, the FEIS provides no analysis of the degree to which the Leases will affect annual and 24-hour PM_{2.5} concentrations, or the potential impacts those concentrations might have on the air quality in the region. Modeling prepared for the BLM as part of the Powder River Basin Coal Review shows that background 24-hour PM_{2.5} concentrations are, on a cumulative basis, already at 87.6 micrograms/cubic meter, more than twice the NAAQS. BLM discloses in the FEIS that the cumulative impacts of the Leases would lead to future exceedances of the 24-hour PM_{2.5} NAAQS, with concentrations as high as 218.4 micrograms/cubic meter, even under a low production scenario.
- 81. In analyzing and approving the Leases, BLM did not analyze how and to what degree increased carbon dioxide emissions from leasing activities would contribute to climate change, or otherwise assess the significance of the carbon dioxide emissions. In its FEIS, the BLM discloses that for every ton of Powder River Basin coal burned, 1.659 metric tons of carbon dioxide are released. Given this, combustion of coal from the Leases has the potential to release in total 3,008,193,920 metric tons of carbon dioxide.
- 82. The BLM also disclosed that carbon dioxide emissions associated with coal mining in the Powder River Basin are expected to increase by more than 20 percent by 2020. The FEIS indicates the region could be responsible for 956 million metric tons of carbon dioxide annually.

83. BLM did not analyze and assess such impacts resulting from the Leases or their magnitude of contribution to climate change. BLM also did not consider measures to mitigate those impacts or alternatives that would reduce or eliminate carbon dioxide emissions occurring as a consequence of the agency's decision to offer the Leases.

F. Procedural History.

- 84. On August 25, 2009, WildEarth Guardians submitted timely Comments on the Wright Area DEIS.
- 85. On August 30, 2010, WildEarth Guardians and the Sierra Club submitted timely joint Comments on the Wright Area FEIS.
- 86. On April 4, 2011, Plaintiffs filed a timely Notice of Appeal and Petition for Stay with the Interior Board of Land Appeals ("IBLA") over BLM's issuance of the ROD adopting Alternative 2 and authorizing for sale and issuance the South Hilight coal lease.
- 87. On July 19, 2011, the IBLA denied Plaintiffs' Petition for Stay of the ROD, thereby making BLM's decision to offer the South Hilight lease effective, final, and subject to judicial review. *See* 43 C.F.R. §§ 4.21(a)(3), (b)(4), (c).
- 88. On September 17, 2011, Plaintiffs filed a timely Notice of Appeal with the IBLA over BLM's issuance of the ROD adopting Alternative 2 and authorizing for sale the South Porcupine coal lease. BLM's decision to offer the South Porcupine lease for sale and issuance became effective thereafter, making it subject to judicial review. *See* 43 C.F.R. § 4.21(a)(1).

- 89. On November 21, 2011, Plaintiffs filed a timely Notice of Appeal and Petition for Stay with the IBLA over BLM's issuance of the ROD adopting Alternative 2 and authorizing for sale the North Porcupine coal lease.
- 90. On February 22, 2012, the IBLA denied Plaintiffs' Petition for Stay of the ROD, thereby making BLM's decision to offer the North Porcupine lease effective, final, and subject to judicial review. *See* 43 C.F.R. §§ 4.21(a)(3), (b)(4), (c).
- 91. On February 22, 2012, Plaintiffs filed a motion to voluntarily dismiss their Appeals of the South Hilight, North Porcupine, and South Porcupine coal leases in order to challenge BLM's leasing authorizations in federal court. On February 28, 2012, the IBLA filed an order granting this dismissal.
- 92. On March 5, 2012, Plaintiffs filed a timely Notice of Appeal with the IBLA over BLM's issuance of the ROD adopting Alternative 2 and authorizing for sale the North Hilight coal lease. BLM's decision to offer the North Hilight lease for sale and issuance became effective thereafter, making it subject to judicial review. *See* 43 C.F.R. § 4.21(a)(1).
- 93. Also on February 28, 2012, WildEarth Guardians sent BLM a notice of its intent to file suit over BLM's authorizations of the South Hilight, North Porcupine, and South Porcupine coal leases.
- 94. On March 23, 2012, Plaintiffs filed a motion to voluntarily dismiss their Appeal of the North Hilight coal lease in order to challenge BLM's leasing authorization in federal court. On March 27, 2012, the IBLA filed an order granting this dismissal.

- 95. Plaintiffs have exhausted their administrative remedies over the North Hilight, South Hilight, South Porcupine, and North Porcupine leases in accordance with 43 C.F.R. § 4.21(c).
- 96. On December 14, 2011, BLM held a sale for the South Hilight coal lease in which Ark Land Co. was the successful, and only, bidder.
- 97. On February 29, 2012, BLM held a sale for the South Porcupine coal lease. BLM rejected the bid of BTU, which was the only bid received, for being below market value. It is anticipated that that BTU will submit a higher bid and that the BLM will ultimately award the lease to the company.

CLAIMS FOR RELIEF

First Claim for Relief: Violation of NEPA – FEIS Is Legally Inadequate (Failure to Take a Hard Look at Impacts to the Environment and Reasonable Alternatives)

- 98. Plaintiffs incorporate by reference the allegations in all preceding paragraphs.
- 99. NEPA requires federal agencies to take a "hard look" at the environmental consequences of their actions. 42 U.S.C. § 4332. NEPA's implementing regulations require BLM to consider and assess the direct and indirect impacts of mining and burning coal from the Leases, as well as the cumulative environmental impacts of mining and burning coal from the Leases when added to other past, present, and reasonably foreseeable future actions, including cumulative and similar actions, and to assess their significance. *See* 40 C.F.R. §§ 1508.25(a)(2),(3), 1508.25(c)(3), 1508.7.
- 100. NEPA and its implementing regulations also require BLM to include in EISs "reasonable alternatives" to a proposed action that will avoid or minimize the

action's adverse effects on the quality of the human environment. 42 U.S.C. § 4222(C)(iii), (E); 40 C.F.R. §§ 1500.2(e), 1502.14, 1508.9(b).

- 101. Additionally, NEPA's implementing regulations require that an EIS, in considering reasonable alternatives, discuss means to mitigate adverse environmental consequences. Mitigation includes, but is not limited to, avoiding, minimizing, rectifying, or compensating for adverse project impacts to the environment. *See* 40 C.F.R. § 1508.20.
- amount of carbon dioxide that would be emitted by mining and consuming coal from the leases, BLM failed to analyze the effect these emissions would be likely to have on the environment by increasing the amount and rate of global warming. Such impacts are indirect in that they "are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." 40 C.F.R. § 1508.8(b). Combustion of coal is a "logical consequence" of offering the Leases.
- 103. The FEIS is legally inadequate because BLM failed to analyze and assess the cumulative impacts of carbon dioxide emissions from all past, present, and reasonably foreseeable coal leasing and development, and other activities and development, in the Powder River Basin.
- 104. The FEIS is legally inadequate because BLM failed to analyze how the direct, indirect, and cumulative greenhouse gas emissions associated with the Leases will influence climate change. In the RODs for each lease, BLM assumed that the release of greenhouse gases associated with the Leases will contribute to climate change. Despite

this assumption, BLM made no attempt to analyze and assess such impacts and the magnitude of contribution to climate change.

- 105. BLM also failed to analyze any mitigation measures that would reduce or eliminate carbon dioxide emissions and subsequent climate change impacts associated with these emissions.
- 106. The FEIS is legally inadequate because BLM failed to adequately analyze the direct, indirect, and cumulative impacts to air quality resulting from ozone, NO₂, PM₁₀, and PM_{2.5} emissions from coal mining activities on the Leases. BLM also failed to analyze any mitigation measures that would reduce or eliminate ozone, NO₂, PM₁₀, and PM_{2.5} emissions.
- or minimize carbon dioxide emissions and address subsequent climate change impacts resulting from these emissions. In their Draft EIS comments, Plaintiffs proposed several reasonable alternatives for reducing carbon dioxide emissions including requiring capture and sequestration of carbon dioxide emissions resulting from burning coal from the Leases; requiring more efficient mining equipment, such as mine hauling trucks that run on alternative fuels; requiring the mine operator to secure carbon offsets before commencing coal mining activities; and limiting annual coal production to reduce greenhouse gases from coal combustion.
- 108. BLM failed to analyze any reasonable alternative that would prevent or minimize further degradation to Powder River Basin air quality from ozone, NO_2 , PM_{10} , and $PM_{2.5}$ emissions.

109. BLM's approval and adoption of Alternative 2 for all four of the Leases on the basis of a legally inadequate EIS that failed to provide an adequate analysis of (1) air quality, carbon dioxide, and climate change impacts, (2) a reasonable range of alternatives, and (3) reasonable mitigation measures was arbitrary and capricious, and constitutes a violation of NEPA under the standards of the APA. *See* 5 U.S.C. § 706(2).

Second Claim for Relief: Violation of FLPMA – Failure to Comply With Air Quality Standards

- 110. Plaintiffs incorporate by reference the allegations in all the preceding paragraphs.
- 111. FLPMA provides that BLM's land use plans must "provide for compliance with applicable pollution control laws, including State and Federal air, water, noise, or other pollution standards or implementation plans." 43 U.S.C. § 1712(c)(8).
- 112. BLM's applicable land use plan—the Buffalo Resource Management Plan ("RMP")—explicitly provides for such compliance. The Buffalo RMP states that BLM will "minimize emissions that could result in acid rain, violations of air quality standards, or reduced visibility," and that the Agency will ensure its decisions are "conditioned to avoid violating Wyoming and national air quality standards."
- 113. FLPMA and BLM's regulations prohibit agency action that is inconsistent with the land use plan. *See* 43 U.S.C. § 1732(a) (mandating that the Secretary "shall manage the public lands ... in accordance with the land use plans"); *see also* 43 C.F.R. § 1610.5-3(a) ("resource management authorizations and actions" must conform to the applicable resource management plan).

- 114. FLPMA's implementing regulations require that each land use authorization made by BLM shall require compliance with federal air quality standards established pursuant to applicable federal law. *See* 43 C.F.R. § 2920.7(b)(3).
- 115. The NAAQS for ozone, NO₂, PM₁₀, and PM_{2.5} are federal air quality standards designated pursuant to 42 U.S.C. § 7408.
- 116. Although the air quality monitors in the region have detected numerous exceedances of the ozone NAAQS, BLM did not even attempt to analyze the impacts of the North Hilight, South Hilight, North Porcupine, and South Porcupine lease emissions to air quality. Therefore, there is no evidence that BLM complied with FLPMA's substantive air quality standard protection requirements in authorizing the Leases for sale.
- 117. BLM did not analyze the impacts of the Leases to the recently adopted hourly NO₂ NAAQS. Therefore, there is no evidence that BLM complied with FLPMA's substantive air quality standard protection requirements in authorizing the Leases for sale.
- 118. BLM's own FEIS shows that on a cumulative basis, the Leases will contribute to exceedances of the NAAQS for PM₁₀ and PM_{2.5}. BLM does not deny that exceedances of the 24-hour PM₁₀ NAAQS have been recorded, or that the FEIS projects exceedances of the NAAQS. Rather, the BLM asserts that it simply has no authority to address these impacts. Such an assertion conflicts with FLPMA's requirement that the Agency's actions "provide for compliance with...Federal air...standards[.]" 43 U.S.C. § 1712(c)(8). The governing RMP explicitly echoes this requirement, stating that BLM shall both comply with Federal air quality standards and minimize emissions.
- 119. BLM's failure to provide for compliance with federal air quality standards for ozone, NO₂, PM₁₀, and PM_{2.5} prior to authorizing the sale of the Leases violates

FLPMA and its implementing regulations, and is arbitrary, capricious, and contrary to law under the standards of the APA. *See* 5 U.S.C. § 706(2).

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs respectfully request that the Court:

- A. Declare that BLM's actions are in violation of NEPA and FLPMA, and their implementing regulations, as set forth above;
- B. Adjudge and declare that BLM's Wright Area FEIS and the RODs approving the North Hilight, South Hilight, North Porcupine, and South Porcupine coal leases are arbitrary and capricious and contrary to law, vacate said FEIS and RODs as invalid, and vacate any lease sales, issuances, or other actions conducted under and/or pursuant to the FEIS and RODs;
- C. Enjoin any further BLM approvals or actions with respect to the North Hilight, South Hilight, North Porcupine, and South Porcupine lease parcels, and any coal mining activities on the North Hilight, South Hilight, North Porcupine, and South Porcupine lease parcels until such a time as BLM has complied with NEPA and FLPMA and adequately analyzed the direct, indirect, and cumulative impacts of its leasing decisions;
- D. Enter such temporary, preliminary, or permanent injunctive relief as specifically prayed for by Plaintiffs hereinafter;
- E. Award Plaintiffs their reasonable fees, costs, expenses, and disbursements, including attorneys' fees, associated with this litigation pursuant to the Equal Access to Justice Act, 28 U.S.C. § 2412(d); and

F. Grant such additional and further relief as the Court may deem just and appropriate.

Respectfully submitted on this 2nd day of May 2012.

/s/ Samantha Ruscavage-Barz
(Bar No. CO0053)
WildEarth Guardians
516 Alto St.
Santa Fe, New Mexico 87501
(505) 988-9126 x.1158 (office)
sruscavagebarz@wildearthguardians.org

/s/ James J. Tutchton (Bar No. CO0054) WildEarth Guardians 6439 E. Maplewood Ave. Centennial, Colorado 80111 (720) 301-3843 (office) jtutchton@wildearthguardians.org

/s/ Joanne Spalding Joanne Spalding (CA Bar No. 169560) Nathan Matthews (CA Bar No. 264248) Nathaniel Shoaff (CA Bar No. 256641) (Pro Hac Vice Submissions Pending) Sierra Club 85 Second Street, Second Floor San Francisco, CA 94105 (415) 977-5725 (office)

Attorneys for Plaintiffs

joanne.spalding@sierraclub.org