



September 14, 2015

VIA FAX (303-239-3799)

Ruth Welch, State Director
Colorado State Office
BLM
2850 Youngfield St.
Lakewood, CO 80215

Dear Ms. Welch:

The Center for Biological Diversity (the “Center”) hereby files this Protest of the Bureau of Land Management (“BLM”)’s planned November 12, 2015 oil and gas lease sale and Environmental Assessment DOI-BLM-CO-F020-2015-0061 DN pursuant to 43 C.F.R. § 3120.1-3. The Center formally protests the inclusion of each of the following parcels, covering 89,534.3 acres in the Royal Gorge Field Office, including the Pawnee National Grasslands:

COC77247	COC77271	COC77295	COC77319	COC77343
COC77248	COC77272	COC77296	COC77320	COC77344
COC77249	COC77273	COC77297	COC77321	COC77345
COC77250	COC77274	COC77298	COC77322	COC77346
COC77251	COC77275	COC77299	COC77323	COC77347
COC77252	COC77276	COC77300	COC77324	COC77348
COC77253	COC77277	COC77301	COC77325	COC77349
COC77254	COC77278	COC77302	COC77326	COC77350
COC77255	COC77279	COC77303	COC77327	COC77351
COC77256	COC77280	COC77304	COC77328	COC77352
COC77257	COC77281	COC77305	COC77329	COC77353
COC77258	COC77282	COC77306	COC77330	COC77354
COC77259	COC77283	COC77307	COC77331	COC77355
COC77260	COC77284	COC77308	COC77332	COC77356
COC77261	COC77285	COC77309	COC77333	COC77357
COC77262	COC77286	COC77310	COC77334	COC77358
COC77263	COC77287	COC77311	COC77335	COC77359
COC77264	COC77288	COC77312	COC77336	COC77360
COC77265	COC77289	COC77313	COC77337	COC77361
COC77266	COC77290	COC77314	COC77338	COC77362
COC77267	COC77291	COC77315	COC77339	COC77363

COC77268	COC77292	COC77316	COC77340	COC77364
COC77269	COC77293	COC77317	COC77341	COC77365
COC77270	COC77294	COC77318	COC77342	COC77366
				COC77367

PROTEST

1. Protesting Party: Contact Information and Interests:

This Protest is filed on behalf of the Center for Biological Diversity and their board and members by:

Wendy Park
Staff Attorney
Center for Biological Diversity
1212 Broadway #800
Oakland, CA 94612
wpark@biologicaldiversity.org

The Center is a non-profit environmental organization with 50,400 member activists, including members who live and recreate in the Royal Gorge planning area, including the Pawnee National Grasslands. The Center uses science, policy and law to advocate for the conservation and recovery of species on the brink of extinction and the habitats they need to survive. The Center has and continues to actively advocate for increased protections for species and habitats in the planning area on lands managed by the BLM and Forest Service. The lands that will be affected by the proposed lease sale include habitat for listed, rare, and imperiled species that the Center has worked to protect including the mountain plover, ferruginous hawk, bald eagle, and sharp-tailed grouse. The Center's board, staff, and members use the lands within the planning area, including the lands and waters that would be affected by actions under the lease sale, for quiet recreation (including hiking and camping), scientific research, aesthetic pursuits, and spiritual renewal.

2. Statement of Reasons as to Why the Proposed Lease Sale Is Unlawful:

BLM's proposed decision to lease the parcels listed above is substantively and procedurally flawed for the reasons discussed below.

A. The Lease Sale Should Be Suspended Until BLM Has Had the Opportunity to Consider a No-Leasing-No-Fracking Alternative in its Update of the Eastern Colorado Resource Management Plan.

On July 31, 2015, the Center, Food & Water Watch, Colorado 350, and John Fielder submitted a scoping comment letter requesting consideration of a "no-leasing-no-fracking" alternative in BLM's update of the Eastern Colorado Resource Management Plan. The comment

letter is attached hereto and incorporated by reference. As described in the letter, halting all new leasing and fracking within the Eastern Colorado planning area would be an important step towards slowing the effects of climate change:

The internationally agreed-on target for avoiding dangerous climate change and its disastrous consequences is limiting average global temperature rise caused by greenhouse gas pollution to two degrees Celsius (2°C), or 3.6 degrees Fahrenheit.¹⁸ Climate experts have estimated that the world can emit 1,000 gigatons of carbon dioxide (1,000 GtCO₂ or 1 trillion tons of CO₂) after 2010 to have a reasonable chance of staying below 2°C of warming.¹⁹ Given uncertainties, coupled with the dire predictions of climate change impacts, a more conservative carbon budget would be more prudent. Nonetheless, using this budget, the IPCC has found that proven fossil fuel reserves amount to **four to seven times more** than what we can afford to burn, to have only a *likely* chance of staying within the 2°C target.²⁰ In short, the vast majority of proven reserves must be kept in the ground for preserving a livable planet. Minimizing new fossil fuel production is critical. Opening up new areas to extraction and allowing more fracking, on the other hand, runs completely counter to slowing the effects of climate change.

According to a recent report by EcoShift Consulting commissioned by the Center and Friends of the Earth, unleased federal fossil fuels represent a significant source of potential greenhouse gas emissions:

- Potential GHG emissions of federal fossil fuels (leased and unleased) if developed would release up to 492 gigatons (Gt) (one gigaton equals 1 billion tons) of carbon dioxide equivalent pollution (CO₂e); representing 46 percent to 50 percent of potential emissions from all remaining U.S. fossil fuels.
- Of that amount, up to 450 Gt CO₂e have not yet been leased to private industry for extraction;
- Releasing those 450 Gt CO₂e (the equivalent annual pollution of more than 118,000 coal-fired power plants) would be greater than any proposed U.S. share of global carbon limits that would keep emissions below scientifically advised levels.¹

Fossil fuels within the Eastern Colorado planning area are a significant portion of the federal carbon estate. According to the Eastern Colorado Reasonably Foreseeable Development Scenario, operators could extract over 47 million barrels of oil, over 1 trillion cubic feet of conventional natural gas, and over 152 billion cubic feet of coalbed natural gas within the planning area over the next two decades.² At least 1.2 billion tons of federal coal could be extracted. These vast reserves—some of which underlie the nearly 90,000 acres of fluid minerals

¹ EcoShift Consulting et al., The Potential Greenhouse Gas Emissions of U.S. Federal Fossil Fuels (Aug. 2015), available at <http://www.ecoshiftconsulting.com/wp-content/uploads/Potential-Greenhouse-Gas-Emissions-U-S-Federal-Fossil-Fuels.pdf>,

² http://www.blm.gov/style/medialib/blm/co/programs/oil_and_gas/Lease_Sale/2015/november_2015.Par.28735.File.dat/RGFO_Nov_15_EA.pdf.

available for lease—represent a significant opportunity to lock away millions of tons of greenhouse gas emissions.

As BLM has not yet had a chance to consider a no-leasing-no-fracking-alternative as part of the Eastern Colorado RMP planning process, BLM should suspend new leasing until it properly considers this alternative in the EIS. BLM has *never* comprehensively considered the cumulative climate change impacts of *all* potential fossil fuel extraction within the Eastern Colorado planning area. But climate change is a problem of regional and global proportions resulting from the cumulative greenhouse gas emissions of countless individual sources, which cannot simply be addressed piecemeal on a project-by-project basis. BLM would be remiss to continue leasing when it has never stepped back and taken a hard look at this problem at the appropriate scale. Before allowing more oil and gas extraction in the planning area, BLM must: (1) comprehensively analyze the total greenhouse gas emissions which result from fossil fuel leasing and all other activities within the planning area, (2) consider their cumulative significance in the context of global climate change, carbon budgets, and other greenhouse gas pollution sources outside the planning area, and (3) formulate measures that avoid or limit their climate change effects. By continuing leasing in the absence of any overall plan addressing climate change BLM is effectively burying its head in the sand.

BLM's mandate to ensure "harmonious and coordinated management of the various resources *without permanent impairment of the productivity of the land and the quality of the environment*" requires BLM to limit the climate change effects of its actions. *See* 43 U.S.C. §§ 1701(a)(7), 1702(c), 1712(c)(1), 1732(a) (emphasis added); *see also id.* § 1732(b) (directing Secretary to take any action to "prevent unnecessary or undue degradation" of the public lands). Those effects have already taken a significant toll on public lands in the form of more severe droughts and wildfires, reduced snowmelt and stream flows, and degraded habitat for species. Suspension of new leasing would maximize BLM's options for slowing the effects of climate change and preventing degradation of the public lands. Once parcels are leased for oil and gas development, BLM will be more constrained in its ability to limit greenhouse gas emissions from oil and gas operations in the planning area. Under BLM's interpretation of its regulations, absent a no surface occupancy stipulation, a lessee has the right to surface use of the leased parcel once the lease is final. *See Richardson*, 565 F.3d at 718 (citing 43 C.F.R. § 3101.1-2 ["A lessee shall have the right to use so much of the leased lands as is necessary to explore for, drill for, mine, extract, remove and dispose of all the leased resource in a leasehold subject to: Stipulations attached to the lease . . . [and other] reasonable measures . . ."]). With a no surface occupancy stipulation, drilling operations and extraction could still occur remotely off-site. BLM should preserve all of its options for managing climate change effects, which threaten "permanent impairment of the productivity of the land and the quality of the environment."

Suspension of new leasing would also avoid the adverse effects of hydraulic fracturing, detailed in the Center's July 31 scoping comment, until BLM fully considers these impacts, and balances other competing resource uses in a comprehensive planning process. Conditions have dramatically changed since 1991 and 1996, when the Northeast and Royal Gorge RMPs last considered oil and gas leasing, due to climate change, rapid population growth along the Front Range, and increasing water scarcity and other climate- and human-induced strains on natural resources. Fracking and horizontal drilling are relatively new and dangerous extraction methods

that the current RMPs do not address. All of these changed conditions require a fresh look at the public health, environmental, environmental justice, and industrialization impacts of fossil fuel extraction and especially fracking across the entire Eastern Colorado planning area. Furthermore, they require a re-evaluation of conservation needs and objectives for increasingly scarce and/or fragile natural resources. Piecemeal analyses of individual APDs or lease sales do not provide the appropriate perspective for examining the cumulative effects of fracking at the regional and landscape scale and for making such land management decisions. Proceeding with new leasing and fracking proposals *ad hoc* in the absence of a comprehensive plan that addresses these changed conditions is premature and risks irreversible damage before the agency and public have had the opportunity to weigh the full costs of oil and gas extraction and consider necessary limits on fracking.

B. BLM’s Proposed Finding of No Significant Impact and Determination of NEPA Adequacy Are Arbitrary and Capricious.

BLM’s proposed Finding of No Significant Impact (“FONSI”) for the sale of BLM parcels (which includes split-estate parcels), and its proposed Determination of NEPA Adequacy (“DNA”) for the sale of Forest Service parcels, lack any evidentiary support with respect to the lease sale’s impacts on wildlife. BLM’s Environmental Assessment (“EA”) does not adequately analyze the impacts of leasing BLM parcels on the Ferruginous Hawk and other raptors, Mountain Plover, and Mule Deer. The DNA also erroneously relies on the Forest Service’s Pawnee National Grasslands Oil and Gas Leasing Analysis Final Environmental Impact Statement (“PNG FEIS”) to determine that the proposed sale of the Forest Service parcels complies with NEPA. The PNG FEIS fails to consider effective measures to mitigate the impacts of oil and gas development on raptors, including the Ferruginous Hawk, and BLM fails to discuss or impose any such measures.

Ferruginous Hawks and Other Raptors

Ferruginous Hawk habitat is found throughout the RGFO, including the Pawnee National Grasslands, and many parcels overlap this habitat. *See* Rocky Mountain Wild Mapping for Colorado November 2015 Lease Sale (“RMW Maps”) and RMW ABI Screen.³ In addition

³ Maps available at: http://rockymountainwild.org/site/wp-content/uploads/15-109_CONov2015Sale_Map_1.pdf; http://rockymountainwild.org/site/wp-content/uploads/15-109_CONov2015Sale_Map_2.pdf; http://rockymountainwild.org/site/wp-content/uploads/15-109_CONov2015Sale_Map_3.pdf; http://rockymountainwild.org/site/wp-content/uploads/15-109_CONov2015Sale_Map_4.pdf; http://rockymountainwild.org/site/wp-content/uploads/15-109_CONov2015Sale_Map_5.pdf; http://rockymountainwild.org/site/wp-content/uploads/15-109_CONov2015Sale_Map_6.pdf; http://rockymountainwild.org/site/wp-content/uploads/15-109_CONov2015Sale_Map_7.pdf; http://rockymountainwild.org/site/wp-content/uploads/15-109_CONov2015Sale_Map_8.pdf; http://rockymountainwild.org/site/wp-content/uploads/15-109_CONov2015Sale_Map_9.pdf; http://rockymountainwild.org/site/wp-content/uploads/15-109_CONov2015Sale_Map_10.pdf; http://rockymountainwild.org/site/wp-content/uploads/15-109_CONov2015Sale_Map_11.pdf; http://rockymountainwild.org/site/wp-content/uploads/15-109_CONov2015Sale_Map_12.pdf; http://rockymountainwild.org/site/wp-content/uploads/15-109_CONov2015Sale_Map_13.pdf. RMW’s ABI Screen is available at http://rockymountainwild.org/site/wp-content/uploads/15-109_CONov2015SaleNoticeScreen.xlsx. The habitat data in these maps and screen are sourced from Colorado Parks and Wildlife.

However, while the EA notes that existing 1/8-mile stipulations to protect the Ferruginous Hawk are inadequate, and that the “best available science” requires a one-mile buffer to protect Ferruginous Hawks, it nevertheless makes no changes to these stipulations, such that a FONSI is untenable.

The EA provides the following discussion of impacts to the Ferruginous Hawk:

Raptors are protected by a suite of stipulations (CO-03, CO-18, and RG-05) that require no surface occupancy within one-eighth of a mile of nests and a timing limitation to protect raptor nesting and fledgling habitat. *It is widely noted that 1/8 of a mile buffer for ferruginous hawk is highly ineffective protection based on the best available science, and that this does not protect inactive nests which may be used in alternate years.* This species is very sensitive to disturbance during breeding season, and such actions would cause nest failure, including abandonment of chicks; *best available science emphasizes a one-mile buffer. New stipulations developed for this species for a 1/2 mile buffer may be incorporated into future leases.*

EA 53-54 (emphases added).

CO-03 directs that “[n]o surface occupancy or use is allowed...[t]o protect raptor nests within a one-eighth mile radius from the site.” CO-18 is a timing stipulation prohibiting surface use, except operation and maintenance of production facilities, from February 1 through August 15, “[t]o protect raptor (this includes golden eagles, all accipiters, falcons [except the kestrels], all butteos, and owls) nesting and fledgling habitat during usage for one-quarter mile around the nest site.” BLM appears to interpret these stipulations to prohibit disturbance within one-eighth mile of a raptor nest or within one-quarter mile of nesting and fledgling habitat. *See* EA at 53. Numerous BLM parcels are subject to CO-03 and CO-18, suggesting that significant levels of potential Ferruginous Hawk habitat and nesting sites are located within these areas. *See* BLM Lease Sale Notice, Attachment A. (RG-05 appears to be a timing stipulation similar to CO-18, but RG-05 has not been applied to any parcel).

Despite BLM’s clear recognition that 1-mile buffers are necessary to avoid Ferruginous Hawk nest failure and abandonment of chicks, the EA cryptically notes that “[n]ew stipulations developed for this species for a 1/2 mile buffer *may* be incorporated into *future* leases.” EA at 54 (emphases added). In other words, BLM seems to anticipate the possible imposition of improved but still inadequate half-mile buffers on future leases, but not on the leases currently at issue. No provision is made for one-mile or even half-mile buffers on the instant leases. Given the potential for numerous failed nests within the lease sale area, and the uncertain numbers of nests on the BLM parcels which are mostly split-estate parcels, *see* EA at 58, 59 (noting lack of raptor nesting information), BLM cannot reasonably claim that “no significant impact” will result from the lease sale.

A one-eighth mile buffer (equivalent to 0.125 miles or 201 meters) is also inadequate to protect raptors in general. Before the PNG EIS, the Pawnee National Grasslands land-use plan

required a minimum 500-meter buffer (approximately 1/3 mile) from all raptor nests. The PNG EIS, however, notes that even this buffer could be inadequate to protect raptors:

The Forest Service nest buffer of 500 meters...provides some measure of protection albeit potentially inadequate compared to more recent literature. Colorado Parks and Wildlife suggests a buffer of 800 meters [0.50 miles] and Environment Canada (2009) suggests a buffer of 1000 meters [0.62 miles]. Keeley and Bechard (2011) found that hawks flush at distances of greater than 600 meters [0.37 miles].

PNG EIS Final Wildlife Report (“FWR”) at 44. A mere one-eighth-mile buffer could therefore lead to adverse effects on numerous raptors that nest on leased parcels and result in significant effects on raptors. BLM cannot properly make a FONSI determination, when the number of nesting raptors within the project area is unknown, and is potentially large since many BLM parcels may include raptor nesting habitat. *See* EA at 58, 59.

BLM’s Determination of NEPA Adequacy regarding Forest Service parcels on the Pawnee National Grasslands is also flawed. In the PNG EIS, the Forest Service adopted for each and every parcel within the Grasslands, an NSO prohibiting any surface disturbance on the entire parcel. But even with this NSO applying to all Grasslands parcels, numerous impacts on ferruginous hawks could result from development on neighboring non-federal lands, including: the short-term loss of 508 acres of habitat within (unspecified) nest buffers during the construction phase; the long-term loss of 63 acres of nesting habitat after reclamation; loss or degradation of breeding, nesting, rearing and foraging habitats for hawks and their prey resulting from approximately 16 miles of road construction; direct mortality or injuries due to vehicle collisions; and disturbance from vehicles and noise resulting in nest abandonment. FWR at 44-45.

The PNG EIS, however, notes that the Forest Service “would not have the ability to impose restrictions on non-PNG lands,” and “[a]ny protective measures would have to be negotiated and are not guaranteed.” *Id.* at 44, 46. No description of potential measures to reduce these impacts is provided. The most the EIS states on this topic is: “Examples of proactive measures are in the district files but a key opportunity to promote and maintain hawks is early coordination with PNG program managers, other federal agencies (BLM), Colorado Parks and Wildlife, energy development companies, and other land owners.” *Id.* at 46. This description utterly fails to inform the public of what “proactive measures” exist and whether they will be effective.

Elsewhere, however, in response to public objections to the EIS, the PNG EIS admits that BLM could require operators to adjust siting of operations to mitigate wildlife and other environmental impacts. *See* Forest Service Response to Wild Earth Guardians’ Objection, File Code 1570, 15-02-00-0057-21SB (Feb. 6, 2015) (“[I]t is acknowledged that regulation of both surface and subsurface operations on federal land may, in some cases, influence configuration of operations on adjacent land, and the impacts from those operations on NFS land. Where this is the case, the Forest Service and BLM work with operators to configure facilities and operations in a manner that avoids adverse impacts.”). Nonetheless, again, the EIS still fails to identify any

measures that could be incorporated into surface-use plans for operations on non-federal lands to reduce impacts to Ferruginous Hawks.

Along the same lines, the DNA acknowledges that the NSO may not adequately protect raptor nests on the Grasslands or on nearby private parcels, but again fails to identify specific measures that would address this gap in protection:

Several raptor species described as BLM sensitive species have a history of nesting within or immediately adjacent to the Pawnee National Grasslands. These raptors include: ferruginous hawk, golden eagle, prairie falcon, bald eagle and burrowing owl. The analysis for those species completed for the Pawnee National Grassland Oil and Gas Leasing Analysis is sufficient [sic], the No Surface Occupancy described in the Pawnee National Grassland Oil and Gas Leasing Analysis may not be adequate to maintain [sic] however it is recognized that reproductive success of raptors nesting near or on the National Grassland boundary could be affect [sic] by future development of those parcels even with a No Surface Occupancy. Potential effects would be discussed on a more site specific basis during the Application for Permit to Drill (APD) phase.

DNA at 5. Besides being incoherent, this explanation neither discusses particular measures that could be applied to oil and gas development on non-federal lands to avoid, reduce, or compensate impacts to the Ferruginous Hawk. Accordingly, the DNA erroneously concludes that the “PNG FEIS fully covers the [Forest-Service-parcel lease sale] and constitutes BLM’s compliance with the requirement of NEPA.”

Mountain Plover

BLM’s FONSI is also unjustified because it fails to adequately discuss the impacts of oil and gas development on mountain plover, despite the occurrence of mountain plover within the lease sale area. *See* RMW Maps. The EA’s analysis of impacts is extremely cursory, compared to the PNG EIS’s discussion of oil and gas development impacts on mountain plover, which is much more detailed and comprehensive. *Compare* EA at 53 (limiting discussion to impacts from vehicle collisions) *with* FWR at 49-52 (discussing habitat fragmentation, loss of habitat, and human disturbance impacts of oil and gas development). The EA further fails to discuss or adopt any mitigation measures addressing those impacts that are discussed, merely noting that “mitigation (plover nesting survey, timing limitations, etc.) to prevent take would be implemented at the APD stage,” and that “if development is to occur April 10 through July 10, a survey for nesting mountain plover would be required where habitat exists. *Id.* at 53, 54. This cursory discussion of the lease sale’s impacts on mountain plover does not comply with NEPA, and BLM’s FONSI lacks adequate evidentiary support. Further, neither the EA nor the PNG EIS appear to place timing limitations on oil and gas development to protect breeding plovers, although such stipulations have been previously required under the Pawnee National Grasslands land-use plan.

Mule Deer

BLM's FONSI is also flawed in that it fails to take into account mule deer habitat losses that will result from oil and gas production within winter habitat. A recent study shows that oil and gas development causes significant habitat loss in the Piceance Basin of Colorado:

Energy development drove considerable alterations to deer habitat selection patterns, with the most substantial impacts manifested as avoidance of well pads with active drilling to a distance of at least 800 m. Deer displayed more nuanced responses to other infrastructure, avoiding pads with active production and roads to a greater degree during the day than night. In aggregate, these responses equate to alteration of behavior by human development in over 50% of the critical winter range in our study area during the day and over 25% at night.⁴

The only protections provided for mule deer are a timing limitation stipulation (CO-09), which prohibits surface disturbance during the winter months, but this measure does nothing to offset the impacts of the substantial habitat loss that may occur with increased oil and gas infrastructure throughout the region. This is especially problematic, because extensive winter mule deer habitat is found within the lease sale areas. *See* RMW ABI Screen. The EA's failure to discuss these habitat loss impacts and adopt any mitigation measures to offset these losses render BLM's FONSI invalid.

For all of the reasons stated above, as well as in the attached and cited documents incorporated by reference herein, the lease sale, will, if adopted unchanged, result in violations of BLM's obligations under NEPA, the Endangered Species Act, Federal Land Policy and Management Act, and Mineral Leasing Act. An appropriate response to this protest would be for BLM to withdraw the lease sale notice, prepare an EIS, and issue a new lease sale notice consistent with statutory obligations as outlined above.

Please do not hesitate to contact me if you have any questions or to schedule a protest resolution meeting.

Sincerely,

Wendy Park
Staff Attorney
Center for Biological Diversity

⁴ Northrup, J. M. et al. Quantifying spatial habitat loss from hydrocarbon development through assessing habitat selection patterns of mule deer, *Global Change Biology* (Aug. 2015), available at <http://onlinelibrary.wiley.com/doi/10.1111/gcb.13037/epdf>.