



Climate Denial at U.S. Interior Department, Fracking Free-for-All in Rockies: *Oil and Gas Leasing in May 2015 to Unleash Carbon Pollution, Destroy Western Public Lands*

Public Lands on the Auction Block

Spurred by industry demands, the U.S. Department of the Interior’s Bureau of Land Management is planning to auction off nearly 180,000 acres of public lands oil and gas leases in the Rocky Mountain states of Colorado, Idaho, Montana, Utah, and Wyoming.

Throughout the month of May, a total of 183 lease parcels comprising 179,418 acres of public lands are slated to be sold to the oil and gas industry.

These plans portend more oil and gas drilling and fracking in the American West. Iconic public lands, including Colorado’s Pawnee National Grassland, Utah’s Uinta Mountains, Idaho’s Snake River Plains, and Wyoming’s Red Desert are at risk.



Climate Denial Fueling a Carbon Disaster

Worse, the U.S. Interior Department’s plans threaten to unleash millions of tons of carbon pollution, undermining our nation’s efforts to combat climate change and President Obama’s call for greenhouse gas reductions.

Using the Bureau of Land Management’s own methods, WildEarth Guardians calculated a range of carbon emissions likely to result from the May 2015 lease sales. These emissions include carbon dioxide releases from engines and flaring, as well as methane leaks and venting at well sites.

These estimates, which are presented in the Methods section below, indicate annual carbon emissions could be as much as 3.2 million metric tons annually. Total emissions would be much higher as this estimate does not account for processing and ultimate combustion of oil and gas.

The estimated annual carbon emissions resulting from Interior Department oil and gas leasing in May 2015 could be as much as 3.2 million metric tons annually, as much more than half a million cars.

This estimate does not take into account emissions from processing and combustion. Total lifecycle greenhouse gas emissions would be much larger.

State	Low CO _{2e}	High CO _{2e}
CO	163,652	654,609
ID	29,272	117,086
MT	723	2,894
UT	69,015	276,059
WY	548,560	2,194,238
TOTALS	811,222	3,244,887

The Need for Change

In spite of these climate impacts, the Interior Department has rejected pleas to exercise restraint.

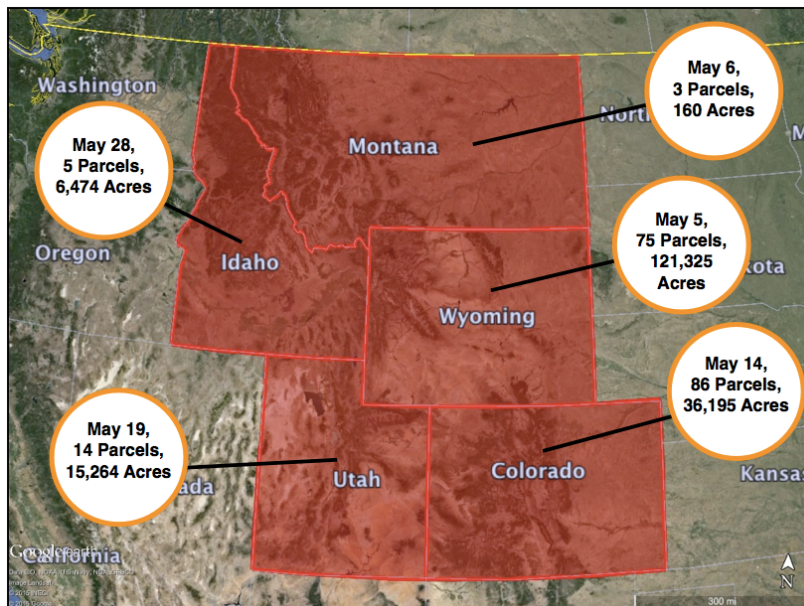
In Utah, Bureau of Land Management officials actually denied climate change, claiming, “there is a substantial amount of professional disagreement and uncertainty as to what impacts greenhouse gas (GHG) emissions have on climate.”¹

In Colorado, officials asserted it would be “highly speculative” to estimate the greenhouse gas emissions that would result from development of leases in that state.² However, the Bureau of Land Management in Idaho forthrightly calculated the greenhouse gas emissions that would result from oil and gas leasing. In all cases, the agency proposed no actions to limit greenhouse gas emissions.³

Oil and gas produced from public lands is already responsible for nearly 10% of all U.S. greenhouse gas emissions.⁴ If our nation has any hope of effectively curtailing carbon, the Interior Department must stop denying climate change and start taking steps to limit greenhouse gas emissions from oil and gas development on public lands.

As a first step, the Interior Department should immediately put in place a moratorium on new oil and gas leasing. Such a step would not interfere with production of existing leases. As the Interior Department’s own statistics show, only a little more than half of all leases on public lands are currently producing and only a little more than a 1/3 of all leased acreage is in production. The table below presents this data. The oil and gas industry already has plenty of reserves available to tap.

The need for a moratorium is underscored by the social costs of additional carbon emissions. As the federal government has acknowledged, current carbon costs could be as high as \$109 per metric ton.⁵ This means costs associated with the Interior Department’s May 2015 oil and gas lease sales could be as much as \$353 million per year, although total costs would be much higher if combustion emissions were taken into account.



Total number of oil and gas leases and leased acres currently in effect and currently producing on public lands.⁶

	Currently In Effect	Currently Producing
Total Leases	46,183	23,657
Total Acres	34,592,450	12,690,806

Methods

WildEarth Guardians' estimates of annual greenhouse gas emissions resulting from oil and gas leasing relied on conservative methods utilized by the Bureau of Land Management. In its environmental analysis for oil and gas leasing in Idaho, the agency estimated that one well would be developed per 640 acres and that an average of 2,893.7 metric tons of carbon dioxide equivalent would be released annually per well.⁷ Greenhouse gas emissions are released from methane leaks, truck and equipment engines, drilling rigs, flaring, and venting.

Total number of leases and acres to be leased is based on information provided by the Bureau of Land Management in environmental analyses prepared under the National Environmental Policy Act.⁸

An estimate of one well per 640 acre unit is based on traditional well spacing requirements. However, well spacing may be as low as one well per 40 acres in some areas and multiple horizontal wells may be drilled within a single unit.⁹ Given this, Guardians estimated emissions based on three spacing scenarios: one well per 640 acres, one well per 320 acres, and one well per 160 acres. Total wells could be as much as 1,121 wells.

The range of likely annual emissions are presented in the table below. Note that these estimates only reflect emissions resulting from well construction and production. Estimates do not account for processing and ultimate combustion emissions. These annual emissions are likely to occur for at least 10 years, which is the term of an oil and gas lease.

Estimates of oil and gas wells and carbon dioxide equivalent emissions (in metric tons) from May 2015 leasing by Interior Department in Colorado, Idaho, Montana, Utah, and Wyoming. Estimates based on one well per 640, 320, and 160 acre scenarios.

State	Number of Leases	Acres	No. of Wells-640 Acre Spacing	CO ₂ e Emissions	No. of Wells-320 Acre Spacing	CO ₂ e Emissions	No. of Wells-160 Acre Spacing	CO ₂ e Emissions
CO	86	36,195	57	163,652	113	327,305	226	654,609
ID	5	6,474	10	29,272	20	58,543	40	117,086
MT	3	160	0	723	1	1,447	1	2,894
UT	14	15,264	24	69,015	48	138,029	95	276,059
WY	75	121,325	190	548,560	379	1,097,119	758	2,194,238
TOTALS	183	179,418	280	811,222	561	1,622,443	1,121	3,244,887

According to the U.S. Environmental Protection Agency's online greenhouse gas equivalencies calculator, 3,244,887 tons of carbon equals the amount released annually by 0.85 coal-fired power plants or the amount released annually by 683,184 passenger vehicles.¹⁰

End Notes

1. BLM, "Environmental Assessment for May 2015 Oil and Gas Lease Sale in the Richfield Field Office," EA No. DOI-BLM-UT-C020-2014-036-EA (Feb. 2015) at 68, available online at <https://www.blm.gov/ut/enbb/files/RFO.EA.Final.2.13.2015.pdf>.
2. BLM, "Environmental Assessment for the Royal Gorge Field Office May 2015 Competitive Oil and Gas Lease Sale," DOI-BLM-CO-F02-2014-049-EA (Aug. 2014) at 170, available online at http://www.blm.gov/style/medialib/blm/co/programs/oil_and_gas/Lease_Sale/2015/may_2015.Par.62582.File.dat/Final%20draft%20RGFO%20May%2015%20Lease%20EA.pdf.
3. BLM, "Little Willow Creek Protective Oil and Gas Leasing," DOI-BLM-ID-B010-2014-0036-EA (Feb. 10, 2015) at 41, available online at https://www.blm.gov/epl-front-office/projects/nepa/39064/55133/59825/DOI-BLM-ID-B010-2014-0036-EA_UPDATED_02272015.pdf.
4. Stratus Consulting, "Greenhouse Gas Emissions from Fossil Energy Extracted from Federal Lands and Waters: An Update," Final Report Prepared for The Wilderness Society (Dec. 23, 2014), available online at <http://wilderness.org/sites/default/files/Stratus-Report.pdf>.
5. Interagency Working Group on Social Cost of Carbon, "Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866" (May 2013) at 3, available online at https://www.whitehouse.gov/sites/default/files/omb/inforeg/social_cost_of_carbon_for_ria_2013_update.pdf.
6. BLM, Summary of Onshore Oil and Gas Statistics, website available at http://www.blm.gov/style/medialib/blm/wo/MINERALS_REALTY_AND_RESOURCE_PROTECTION/energy/oil_gas_statistics/data_sets.Par.69959.File.dat/summary.pdf.
7. BLM, "Little Willow Creek Protective Oil and Gas Leasing," EA No. DOI-BLM-ID-B010-2014-0036-EA (February 10, 2015) at 35 and 41, available online at https://www.blm.gov/epl-front-office/projects/nepa/39064/55133/59825/DOI-BLM-ID-B010-2014-0036-EA_UPDATED_02272015.pdf. Carbon dioxide equivalency refers to the measurement of a greenhouse gases global warming potential as compared to carbon dioxide. According to the BLM, of the key greenhouse gases released by oil and gas drilling and fracking, carbon dioxide has an equivalency of 1, methane 21, and nitrous oxide 310. *Id.* at 35.
8. These environmental assessments include those cited above in Colorado, Idaho, and Utah, as well as the following:
 - BLM, "Determination of NEPA Adequacy, Oil and Gas Lease Parcel May 6, 2015 Sale," DOI-BLM-MT-C020-2015-0009-DNA (Feb. 5, 2015), available online at http://www.blm.gov/style/medialib/blm/mt/blm_programs/energy/oil_and_gas/leasing/lease_sales/2015/may_6.Par.43509.File.dat/MCFO_May%202015_DNA%20signed%20fm%20dm%20dsd.pdf.
 - BLM, "Environmental Assessment for May 2015 Oil and Gas Lease Sale in the Cedar City Field Office, Utah," DOI-BLM-UT-C010-2015-0009-EA (Feb. 2015), available online at https://www.blm.gov/ut/enbb/files/2015_02_06_CCFO_FINAL_EA_May_2015_O&G_Lease_Sale.pdf.
 - BLM, "Environmental Assessment, May 2015 Oil and Gas Lease Parcels," WY-040-EA14-141 (May 2015), available online at <http://www.blm.gov/style/medialib/blm/wy/information/NEPA/og/2015/05may/ver2.Par.14858.File.dat/V2EA.pdf>.
9. Oil and Gas 360, "Horizontal Drillers Plowing Ahead in the Wattenberg" (Aug. 27, 2014), available online at <http://www.oilandgas360.com/horizontal-drillers-plowing-ahead-wattenberg/>.
10. EPA, "Greenhouse Gas Equivalencies Calculator," website available at <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>.