



Re: Public Comment on DOI-BLM-MT-0000-2018-0007-EA

To whom it may concern:

Environment Montana Research & Policy Center is a nonprofit organization dedicated to protecting Montana's air, water and open space. We investigate problems, craft solutions, educate the public and decision-makers, and help the public make their voices heard in local, state and national debates over the quality of our environment and our lives. Our members use Montana's waterways for their drinking water and also for a range of recreational pursuits, including swimming, fishing, paddling, and bird watching.

We believe that fracking has no place in the Big Hole River valley.

Anglers from around the world travel to the Big Hole River region, just for the chance to spend a couple days along its Blue-Ribbon trout streams. It's a place to find stillness and peace, and it's also a place where families and friends escape to recharge and reconnect. Clean, cold water is the lifeblood of this community, and oil and gas development would jeopardize this way of life.

We specifically protest the proposal to open any of the following parcels to oil or gas development, and we request that they be permanently withdrawn from any future lease sales:

- MTM 105421-GY
- MTM 105431-GQ
- MTM 105431-GR
- MTM 105431-GK
- MTM 105431-GL
- MTM 105431-GU
- MTM 105431-GV
- MTM 105431-GW
- MTM 105431-GM
- MTM 105431-GF
- MTM 105431-GJ
- MTM 105431-GX

Oil and gas development at these sites poses a threat to the water quality of the Big Hole River and its tributaries.

In our 2016 report, *Fracking by the Numbers*, we found that fracking requires huge volumes of water for each well – water that is often needed to maintain healthy aquatic ecosystems. From 2005 – 2016, at least 239 billion gallons of water were used for fracking, at an average of 3 million gallons per well. Water used in fracking becomes unsuitable for most uses other than fracking another well (*Numbers*, pg. 24-25).

Toxic substances in fracking chemicals and wastewater are associated with a variety of negative health and habitat impacts. A 2014 study by scientists at Lawrence Berkeley national Laboratory reported that around 10 percent of chemicals used in fracking fluid are known to be toxic to humans or aquatic life (*Numbers*, pg. 10).

Water contamination related to fracking can cause fish to die. For example, after fracking equipment failed at an Ohio site in 2014, a fire broke out, causing trucks to explode and thousands of gallons of toxic chemicals to leak into an Ohio River tributary. More than 70,000 fish died as a result (*Numbers*, pg. 17).

If a similar spill were to occur at the parcels along Willow Creek (MTM 105431-GU, MTM 105431-GV, and MTM 105431-GW), or anywhere else in the watershed, the resulting impact could be devastating to the Big Hole River's trout habitat, as well as the guides, outfitters, other local businesses and residents that rely on the region's clean, cold rivers for their livelihoods and their way of life.

Development of the proposed leases will destroy natural landscapes and directly impact the parcels' recreational value.

We disagree with the Bureau's finding that the proposed leases will not directly impact recreational opportunities (EA, pg. 7). In particular, we are aware that at least four parcels (MTM 105431-GF, MTM 105431-GJ, MTM 105431-GX, and MTM 105431-GH) are used regularly as recreational land for hunting antelope, and three connected parcels are located along a fishable tributary of the Big Hole River, Willow Creek (MTM 105431-GU, MTM 105431-GV, and MTM 105431-GW).

As noted in our 2016 report, well pads, new access roads, pipelines and other infrastructure built for fracking turn rural landscapes into industrial zones (pg. 25-26). From 2005-2016, infrastructure to support fracking directly damaged at least 679,000 acres of land, an area slightly smaller than Yosemite National Park (*Numbers*, pg. 25-26).

As well pads, roads, pipelines and other gas infrastructure replace wildlands and farmland, the nation loses wildlife habitat and the remaining areas are increasingly fragmented and inhospitable to wildlife. For example, the mule deer population in Wyoming Pinedale Mesa decline 40% from 2001 to 2015, a period of extensive oil and gas development (*Numbers*, pg. 16).

The clearing of land for well pads, roads and pipelines may also threaten aquatic ecosystems by increasing sedimentation of nearby waterways and decreasing shade. A study by the Academy of Natural Sciences at Drexel University found an association between increased density of gas drilling activity and degradation of ecologically important headwater streams (*Numbers*, pg. 17).

Because of the damage that the fracking infrastructure causes to both upland and aquatic habitat, it is foreseeable that the hunting and fishing opportunities on these parcels will also be permanently

impacted. This loss in recreational value should have been considered in the Bureau's environmental assessment.

Oil and gas development is not worth the risk.

The value of a pristine Big Hole River is worth far more than the fleeting value of the oil and gas we can extract from its watershed. By the Bureau's own estimate, 11 of the 12 parcels listed have either a low or very low development potential (EA, pg. 12). Pushing forward with development on these parcels, despite the significant risks to the region's natural habitat, wildlife, and way of life, defies both practical and economic sense.

For this reason, we respectfully ask for you to permanently withdraw these parcels from this and future sales. Thank you for your careful consideration of our comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'Skye Borden', with a long horizontal line extending to the right.

Skye Borden
State Director