The Wilderness Society · Conservation Colorado Western Slope Conservation Center Wilderness Workshop

September 11, 2018

Delivered via BLM's Comment Submission Form at <u>https://eplanning.blm.gov/epl-front-office/eplanning/comments/commentSubmission.do?commentPeriodId=70756</u>

Bureau of Land Management Uncompahgre Field Office 2465 S. Townsend Ave. Montrose, CO 81401

Re: Comments on the Uncompany Field Office Preliminary Environmental Assessment and Finding of No Significant Impact for the December 2018 Oil and Gas Lease Sale

To whom it may concern:

Please accept and fully consider these comments on the Uncompany Field Office Preliminary Environmental Assessment (EA) for the December 2018 Oil and Gas Lease Sale, submitted on behalf of The Wilderness Society, Conservation Colorado, Western Slope Conservation Center, and Wilderness Workshop. Our organizations and our members are deeply invested in sound stewardship of our public lands, and we appreciate the opportunity to comment at this stage in the lease sale process.

I. National Environmental Policy Act (NEPA)

A. BLM's NEPA process is invalid.

BLM has acknowledged that the agency failed to consider scoping comments that were timely submitted, stating on the lease sale website: "BLM inadvertently failed to include some additional letters from organizations and individuals." These included comments submitted by the Town of Paonia Administrator "on behalf of the Citizens of Paonia" as well as the Western Slope Conservation Center. From our reading of the EA, it is clear to us that the BLM did not only omit these comments from Attachment F, but also failed to respond to the comments in the EA itself. For instance, the Town of Paonia expressed significant concerns regarding impacts to local tourism and corresponding economic sectors, while the EA states the opposite regarding local concerns. The BLM cannot simply disregard comments were submitted by a local government on behalf of a community that would be particularly impacted by development of the proposed leases. BLM must reinitiate the NEPA process and develop a new EA that considers and incorporates all substantive comments submitted by the public.

NEPA requires that agencies "make diligent efforts to involve the public in preparing and implementing their NEPA procedures." 40 CFR 1506.6(a). Addressing public involvement in Environmental Assessments, BLM's NEPA Handbook reiterates that, "The CEQ regulations direct agencies to encourage and facilitate public involvement in the NEPA process to the fullest extent possible (40 CFR 1500.2(d), 40 CFR 1506.6)." Handbook H-1790-1 § 8.2.

Further, BLM's NEPA Handbook recommends the agency to respond to substantive comments. H-1790-1 § 6.9.2.2. In addition, while the following Council on Environmental Quality (CEQ) regulations implementing NEPA technically apply to responding to substantive comments made during the public comment period for an Environmental Impact Statement (EIS), BLM's NEPA Handbook cites them for responding to substantive comments, in general, and BM should heed them:

The CEQ regulations at 40 CFR 1503.4 recognize several options for responding to substantive comments, including:

- modifying one or more of the alternatives as requested.
- developing and evaluating suggested alternatives.
- supplementing, improving, or modifying the analysis.
- making factual corrections.
- explaining why the comments do not warrant further agency response, citing cases, authorities, or reasons to support the BLM's position.

H-1790-1 § 6.9.2.2. Further, as the Handbook notes, "we recommend that the decisionmaker responsible for preparing an EA consider whether public comments identify impacts, alternatives or mitigation measures that warrant preparation of a new EA." *Id.* Neither BLM's guidance nor NEPA considers such a cavalier response to substantive comments. BLM must take these comment omissions seriously and provide substantive responses to substantive comments.

B. BLM has failed to take the "hard look" required by NEPA prior to issuing oil and gas leases.

NEPA requires federal agencies to take a "hard look" at the environmental consequences of proposed actions. 40 C.F.R. § 1500.1; *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989) (citations omitted). Agencies must comply with this requirement before there are "any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented." 42 U.S.C. § 4332(C)(v); *see also* 40 C.F.R. §§ 1501.2, 1502.5(a). Courts have held that BLM makes such a commitment when it issues an oil and gas lease without reserving the right to later prohibit development. *N.M. ex rel. Richardson v. BLM*, 565 F.3d 683, 718 (10th Cir. 2009); *see also Sierra Club v. Hodel*, 848 F.2d 1068, 1093 (10th Cir. 1988) (agencies are to perform hard look NEPA analysis "before committing themselves irretrievably to a given course of action so that the action can be shaped to account for environmental values"); *Sierra Club v. Peterson*, 717 F.2d 1409, 1411 ([o]n land leased without a No Surface Occupancy Stipulation the Department cannot deny the permit to drill; it can

only impose 'reasonable' conditions which are designed to mitigate the environmental impacts of the drilling operations.). Moreover, it is well-established that BLM cannot issue leases without a valid EIS to support the decision to make lands available for leasing and sufficient site-specific NEPA regarding specific parcels to be leased. *See, e.g. N.M.* v. BLM, *supra*; *Pennaco Energy, Inc. v. U.S. Dep't of Interior*, 377 F.3d 1147 (10th Cir.2004).

Here, BLM has not met the "hard look" requirement because the agency cannot rely on a 30-year old Resource Management Plan (RMP) for environmental analysis, and the preliminary EA does not adequately analyze potentially impacted resources as detailed below.

1. <u>Issuing new leases requires a new EIS, which in this situation should be</u> <u>completion of the revision of the Uncompany RMP.</u>

We note that BLM is proposing to apply stipulations to these leases from the Uncompany Draft RMP in acknowledgement of the fact that the 1989 Uncompany Basin RMP does not include adequate stipulations. While we appreciate the effort of the BLM to provide additional stipulations to these leases, the BLM must tier them to the new EIS associated with the Uncompany RMP.

Preliminary EA § 2.2.2. BLM does have the authority, and indeed the obligation, to adopt new measures at the leasing stage if necessary to protect other resource values.¹ However, in this situation the addition of new stipulations is insufficient due to the need for extensive updated environmental analysis. As part of taking the "hard look" required by NEPA, BLM must conduct an analysis that is "appropriate to the action in question." *Metcalf v. Daley*, 214 F.3d 1135, 1151 (9th Cir. 2000); *Robertson v. Methow Valley Citizens Council*, 490 U.S. at 350. Further, both NEPA and the Federal Land Policy and Management Act (FLPMA) contemplate and require working from up to date

¹ For example, in *Yates Petroleum Corporation*, 174 IBLA 155 (2008), the Interior Board of Land Appeals (IBLA) affirmed the BLM's authority to revise conditions of approval (COAs) for applications for permit to drill (APDs) to increase the stipulated seasonal buffers around sage-grouse leks from 2 to 3 miles, based on updated scientific information demonstrating previously conditioned smaller buffers as inadequate (looking at WAFWA studies). The IBLA based its conclusions in Section 6 of the standard oil and gas lease terms, which provides that leases are subject to "reasonable measures" as needed to "minimize adverse impacts" to other resource values not otherwise addressed at the time of leasing. Thus, it follows that if BLM has the authority to adopt new, protective measures at the permitting stage, then it clearly does at the leasing stage, provided those measures are adequately evaluated in the relevant NEPA document.

Not only does the BLM have the authority to impose more protective measures in COAs, but the IBLA also required the BLM to consider such measures when a need exists for the agency to do so. In *William P. Maycock, et al.*, 177 IBLA 1 (March 16, 2009), the IBLA found that when the agency "acknowledges the validity of the more recent research that demonstrates that [previous] mitigation measures are not as effective as originally anticipated" the BLM is obligated to consider that a 2-mile seasonal buffer would not reduce the impacts of oil and gas drilling to insignificance. The BLM was required to reassess the potential mitigation measures included in the COAs prior to approving APDs. As a result, the BLM clearly has the legal *authority* to impose reasonable measures on existing and future leases and is *required to consider* the need for such measures.

information in land use plans and the associated environmental analyses. *See e.g.*, 43 U.S.C. §§ 1711(a) and 1712(a) (inventories required on a "continuing" basis and must be kept "current" and land use plans must be revised "when appropriate") and 40 C.F.R. § 1502.9(c)(ii) (supplemental environmental impact statements required if there are "significant new circumstances or information"). The EA cannot provide the depth of analysis on potentially impacted resources that is required because, as BLM has already determined in commencing the revision of the outdated Uncompahyre RMP, the data and analysis underlying the existing EIS are no longer valid or sufficient. While a narrow set of new information or management approaches arising in connection with a recently-completed RMP (such as Governor Hickenlooper's recommendations in his comments of July 17, 2018, for managing big game habitat in leases being considered in Northwest Colorado, also citing Secretary Order 3362) might be suitable for evaluation through an EA and new lease stipulations, that is not an appropriate course of action here.

Tiering this EA to the Draft EIS associated with the Draft Uncompany RMP similarly cannot justify a Finding of No Significant Impact. By definition, the analysis in the Draft EIS is not complete and the BLM, by its own admission is close to completing a Proposed RMP/Final EIS for input from the public and cooperating agencies and for a Governor's Consistency Review. Making irretrievable commitments of resources now when a valid environmental impact statement can be completed in the near future with the required input from the public, cooperating agencies and the State of Colorado would be arbitrary and capricious. The best way for BLM to ensure it is meeting its obligations under applicable law and policies would be to complete the revision of the Uncompany RMP before oil and gas leasing is authorized.

2. <u>BLM must evaluate the cumulative impacts of this lease sale.</u>

As we stated in our scoping comments, BLM must evaluate the cumulative impacts of BLM Colorado's December 2018 oil and gas lease sale in its entirety. BLM Colorado is analyzing 223 parcels covering 224,341 acres across the state for the December lease sale. However, BLM is analyzing these parcels in four separate NEPA documents, one of which is for the Uncompany field office. In addition to addressing direct, indirect and cumulative impacts of leasing the parcels in this field office, BLM must analyze the cumulative impacts of the additional parcels being considered for the December lease sale in Colorado.

In order to take the "hard look" required by NEPA, BLM is required to assess impacts and effects that include: "ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, *whether direct, indirect, or cumulative.*" 40 C.F.R. § 1508.8. (emphasis added). NEPA regulations define "cumulative impact" as:

the impact on the environment which results from the *incremental impact of the action when added to other past, present, and reasonably foreseeable future actions* regardless of what agency (Federal or non-Federal) or person undertakes

such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

40 C.F.R. § 1508.7 (emphasis added). To satisfy NEPA's hard look requirement, the cumulative impacts assessment must do two things. First, BLM must catalogue the past, present, and reasonably foreseeable projects in the area that might impact the environment. *Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 809–10 (9th Cir. 1999). Second, BLM must analyze these impacts in light of the proposed action. *Id.* If BLM determines that certain actions are not relevant to the cumulative impacts analysis, it must "demonstrat[e] the scientific basis for this assertion." *Sierra Club v. Bosworth*, 199 F.Supp.2d 971, 983 (N.D. Ca. 2002). A failure to include a cumulative impact analysis of actions within a larger region will render NEPA analysis insufficient. *See, e.g., Kern v. U.S. Bureau of Land Management*, 284 F.3d 1062, 1078 (9th Cir. 2002) (analysis of root fungus on cedar timber sales was necessary for an entire area).

The list of past, present and reasonably foreseeable future actions in the cumulative effects analysis area (CEAA) should also include the Paonia Reservoir management project, including the 2017 Paonia Dam intake structure repair. The repair resulted in a large release of sediment to the North Fork Gunnison River, which had impacts to macroinvertebrates and fish in the river (see the interim report prepared by Colorado Parks and Wildlife, July 2018). The Bureau of Reclamation intends to complete future management activities at Paonia Reservoir that may further affect the resources of the North Fork Gunnison River. Management activities at Paonia Reservoir should be considered in the wildlife and water quality cumulative effects sections.

Similarly, the list of past, present and reasonably foreseeable future actions in the CEAA should include the 11 current CDPS permits listed with the Colorado Water Quality Control Division for dischargers (construction, commerce and industry, and public and private utilities) to streams within the CEAA. The 11 discharges to surface water cumulatively effect surface water quality. In addition, there is a currently permitted discharge to ground water (private utility) within the CEAA that effects ground water quality that should also be listed in this section. These discharges should be considered in the water quality cumulative effects section.

3. <u>BLM must thoroughly analyze potentially impacted resources.</u>

Before any leasing can occur, BLM must thoroughly analyze the direct, indirect and cumulative effects of potential leasing and development. We commend the BLM for developing stipulations to protect various resources from undue impacts from oil and gas development associated with the leasing of these parcels, however, it is clear that the proposed stipulations still fall short – both from a procedural standpoint as stated above as well as in protecting resources from undue impact from the proposed leasing. In the preliminary EA, BLM has specifically failed to adequately analyze and protect the following resources:

i. Visual Resources

The North Fork Valley is known for its dark skies, rural charm, bucolic beauty, and stunning views. The communities and farms of the valley are stitched together by the world-famous West Elk Loop Scenic Byway. These scenic resources are valued by local residents and draw tourists who contribute to the local economy. BLM must analyze potential impacts to visual resources from oil and gas development that would be reasonably foreseeable as a result of issuing new leases, and ensure the overall rural and scenic character of the Valley is protected—which draws in an ever-increasing number of tourists and residents, benefits the wineries and farm stands, and fuels the creative muses of the area's growing number of artists, performers and authors.

It does not appear as though the proposed stipulations address the visual resource concerns we have stated in our previous and current comments. In particular, we are concerned about failures to address visual resource impacts for parcels 8320 and 8351, which are located in close proximity on prominent landscape features to Colorado State Highway 133 West Elk Loop Scenic Byway, Paonia State Park, and the Gunnison National Forest.

ii. Wastes and other Hazards

Section 3.4.14 of the EA should include all potential hazards associated with oil and gas development and operations. For example, there is no discussion about fires and explosions caused by oil and gas operations such as those that occurred within the past year in Firestone, Greeley, and elsewhere Colorado.² Engineering and administrative controls for all possible hazards should be included in the mitigation section.

It is stated in the mitigation section that hazardous materials could not be hauled by truck during unsafe conditions such as "muddy severe winter conditions." Muddy conditions typically do not occur simultaneously with severe winter conditions. It is suggested that the sentence be changed to say that hazardous materials would not be hauled by truck during adverse road conditions such as muddy, slippery conditions and/or severe winter conditions.

It is stated in the mitigation section that gathering lines would be buried at least 4 feet at stream crossings. The EA needs to describe how such lines would be buried at stream crossings to prevent temporary and permanent adverse effects to stream channels and water quality.

iii. Water Resources

Section 3.4.15 of the EA should be renamed "Surface Water and Groundwater Quantity and Quality," as the discussion is about effects to both water quantity and quality.

Surface Water Impacts

² https://www.denverpost.com/2017/12/06/colorado-oil-gas-explosions-since-firestone-explosion/

The list of Public Water Systems (PWSs) within the CEAA is incomplete. There are other PWSs within this area, such as the Pitkin Mesa Pipeline, and the Town of Somerset, the latter of which diverts water from the North Fork Gunnison River within the CEAA. A complete list of PWSs needs to be included in the EA. In addition, other domestic water supplies within the CEAA, whether they be direct surface water diversions, reservoirs, springs or wells, should be listed in the EA. This includes domestic water supplies in and near Paonia. Mitigation to protect these domestic water supplies needs to be included in the EA. Please explain how adverse effects of oil and gas development to drinking water supplies (either quantity or quality) would be mitigated.

There are numerous water rights located within the CEAA for surface diversions, spring diversions, wells, and reservoir storage that are used for domestic, agriculture, wildlife, etc. These water rights should be listed in an appendix in the EA. The EA needs to describe how adverse effects to water rights as a result of oil and gas development/production would be minimized or avoided. In addition, the EA needs to describe how any adverse effects to quantity or quality caused by oil and gas development/production would be mitigated. If a water right becomes unusable, the oil and gas company should be required to replace it.

The EA states on page 57 that decreases in stream flows could occur if surface waters are used as the source of fresh water for drilling, completion, and dust abatement. The Colorado State Engineer has declared virtually the entire Gunnison Basin to be over-appropriated. Where would oil and gas companies, if they were to develop oil and gas resources on any of the five proposed parcels, find adequate fresh water for drilling, completion and dust abatement? The EA needs to describe the possible sources of such water, and how the use of any such water would affect water supply and water rights within the CEAA.

Please explain in the EA where oil and gas companies would be expected to find adequate fresh water for drilling, completion and dust abatement during drought years such as 2018. During 2018, numerous springs and reservoirs in the area have gone dry, and stream flows are very low. The EA needs to describe this situation and how water resources within the CEAA would be affected by oil and gas development/production during drought conditions.

The water quality of the North Fork of the Gunnison River is currently good. Local citizens have been collecting baseline surface water quality data for over 17 years through the state-supported River Watch program.³ Some of the primary water quality issues are related to salinity and selenium loads, as well as sedimentation, all of which increase as the river and ditches flow down valley. Water quality is exacerbated by development on the highly erodible Mancos soils that comprise much of the region. BLM must analyze how oil and gas development that would be reasonably foreseeable as a result of new leasing would potentially impact the surface water quality of the North Fork.

³ Western Slope Conservation Center - http://westernslopeconservation.org/external-resources/

The proximity of lease areas 8351 and 8320 to the Paonia Reservoir, and future oil and gas development on these parcels, presents unacceptable risks to the quality of water stored and used to support production on approximately 15,000 acres of agricultural land.

To ensure protection of surface water resources within and downstream of the CEAA, it is recommended that baseline water quality data be collected prior to oil and gas development on any of the five parcels, and that surface water quality data continue to be collected during oil and gas development and production from any surface water bodies located within 1 mile downstream of oil and gas wells, multi-well pads, or disposal wells. The list of analytes should be the same as those listed on page 58 of the EA for groundwater samples, with the exception of dissolved gases. The results of all water quality sampling should be made available publicly. Any surface water or groundwater sampling results that clearly indicate contamination from oil and gas production should result in the BLM and/or other agencies requiring that the oil and gas company take immediate action to eliminate the source of contamination to surface water or groundwater.

The draft EA states that there are four potential sources of impacts to surface water. Another source that should be added to this list is the discharge of water to surface waters, such as construction storm water. The Colorado Water Quality Control Division should also be listed as regulating discharges from industrial operations such as oil and gas production.

The EA states that there would be "regular BLM, COGCC, and operator inspections" to prevent surface water contamination. Please specify in the EA what regular means. It is suggested that facilities be inspected at least monthly, and after any runoff-producing precipitation events (rain or snowmelt).

The EA does not describe how surface water will be protected at stream crossings at the locations of roads or pipelines. Please provide Best Management Practices to be used to prevent sediment releases from roads to streams, and to prevent other contaminant releases to streams from roads and pipelines at stream crossings. It is stated in the EA that localized flooding could be caused by oil and gas activities, but the EA does not describe potential impacts to stream morphology due to such flooding. Rather than defer describing the impacts of flooding to future NEPA planning, the EA needs to describe the potential impacts within and downstream of the 5 parcels. These types of impacts are well documented at other locations with similar geology in Colorado and elsewhere in the western U.S.

Groundwater Impacts

Impacts in groundwater recharge areas carry real risk harm to groundwater and springs. Recharge areas for aquifers are both broad and shallow, as noted in a comment from one local domestic water company. Springs are primarily fed by subsurface collection of precipitation percolating through talus and glacial deposits into a larger sub-surface groundwater storage in the till deposits. These springs are dependent entirely upon precipitation and surface runoff for their supply and recharge of the underground well system (Wright Engineering Study of 1977, extracting data from U.S. Geological Survey's Professional Paper No. 617 entitled "Quaternary Geology of the Grand and Battlement Mesas Area, Colorado") and do so from an area of greater than 1 sq. mi.⁴

The groundwater section does not include any discussion of springs that may provide water for unique floral and faunal habitats and/or have existing water rights for various uses. These springs should be inventoried and identified in the affected environment section and there should be a discussion of why they would not be impacted or how potential impacts would be mitigated.

The COGCC rule states that the operator must monitor up to 4 domestic wells within 0.5 miles of an oil/gas well. On page 58, the EA states that there are 52 domestic wells within 1 mile of the proposed parcels. If by chance there are no domestic wells or fewer than 4 domestic wells within 0.5 miles of a given oil/gas well, it is hoped that the BLM would stipulate that additional domestic wells would be monitored. The selected wells should be those considered to be the most at risk from drilling operations or accidental fluid losses. This issue is particularly important in this area, where potable water supplies are limited.

On page 59, the draft EA states that "the BLM requires that surface casing be set from 500 to 1,500 feet deep...". The BLM should clarify this statement to include a discussion of what type of well completion would occur between the ground surface and 500 feet in any given well. It may be a matter of terminology, but the existing statement in the EA is not clear.

The draft EA also states on page 59 that hydraulic fracturing "occurs at depths of 5,000 to 10,000 feet below ground surface." Please explain why this is the depth range expected within the 5 parcels.

On page 60, the draft EA states that "BLM inspectors may witness the cementing of surface casing and pressure testing to ensure that the space between the casing and borehole wall is sealed." The EA should state that either qualified BLM inspectors or other qualified agency inspectors (such as from COGCC) will be present under these circumstances. Given the complexity of deep drilling, casing, and cementing, it is important that inspectors be qualified, based on actual experience with this technology.

The BLM cannot conclude in the FONSI that there are no significant impacts from the proposed activity when there are at least two significant unresolved issues that could lead to significant impacts. These issues are the lack of a decision regarding allowing or not allowing deep injection of waste water and the lack of any discussion regarding stream depletions due to withdrawals for the drilling, development, and production of oil and gas wells.

Stipulations

We appreciate that the BLM has included stipulations that address steep slopes, hydrological features, major rivers, and public water supplies, among additional wildlife stipulations as required by law. We do not believe, however, that these stipulations adequately protect water resources.

⁴ Pitkin Mesa Pipeline Company comments on the Uncompanyer Draft RMP/EIS.

UFO-NSO-Hydrologic Features, UFO-NSO Major Rivers, and UFO-CSU-Hydrologic Features restrict surface occupancy near streams, riparian areas, fens/wetlands, water impoundments, and PWSs that use a groundwater well or spring. Such restrictions should also include all seeps and springs. Many seeps and springs within the CEAA have water rights associated with them that are not for PWSs. In addition, seeps and springs are unique habitats, often found to harbor concentrations and refuges of endemic plants and animals. Because seeps and springs provide relatively constant water temperature and chemistry, due to their dependence on subterranean flow through aquifers, many spring source species do not occupy downstream habitats where temporal fluctuations in water temperature and flow are greater. Seeps and springs are often hot spots of biological diversity, providing habitat for many uncommon species of plants and animals. In Colorado, several rare plant and animal species are known to be limited to these wet areas within otherwise dry landscapes, especially on the Western Slope. Seeps and springs are important to regional landscape diversity, as they provide small but widely distributed habitat that offers a source of water, food, cover, nesting habitat, and habitat for rare and/or unique species.

UFO-CSU-Domestic Water Wells states that surface occupancy or use may be restricted. This stipulation should say that surface occupancy or use "will" be restricted, not "may" be restricted. In addition, such restrictions should apply to surface occupancy near any surface water or groundwater for which a water right exists for any use.

UFO-CSU-Hydrologic Features, Controlled Surface Use states that surface occupancy or use may be restricted. This stipulation should say that surface occupancy or use "will" be restricted. In addition, this restriction should also apply to seeps and springs.

UFO-CSU-Public Water Supplies, Controlled Surface Use states that surface occupancy or use may be restricted. The stipulation should say that surface occupancy or use "will" be restricted.

Additionally, BLM needs to add scales on all of the maps in Attachment E.

iv. Geologic Hazards

Geologic Instability and Landslides

The statewide ranking of landslide hazard areas by Rogers (2002) names the State Highway 133 corridor, from Hotchkiss to Paonia Reservoir, as the #2 most serious landslide area in Colorado. It contains "extremely active landslides along entire corridor, [and] severe rockfall hazard on west side of Paonia Reservoir." At risk is the highway itself, the adjacent Union Pacific railroad line, and coal-mining, the Paonia Reservoir and Dam itself, as well as all downstream irrigation infrastructure. It stands to reason that the surrounding lands, particularly lease parcels 8351 and 8320, being of similar geology, would contain widespread landslide terrain and potentially severe landslide hazards. This is partially borne out in the same publication, which lists the nearby East Muddy Creek Landslide, along the base of the Raggeds mountain range, as the #12 most serious landslide hazard area in the state.⁵

The abundance of landslides in the greater Grand Mesa/North Fork/McClure Pass area is further underscored in the Colorado Landslide Inventory Map Viewer.⁶ This compilation from previous CGS and USGS projects shows that extensive landslide terrain is present in the area. It does not assess whether the landslide is active or dormant, nor does it assess the overall hazard or movement potential; those assessments are accomplished by site-specific geotechnical studies, augmented by drilling, material testing, and stability modeling.

Landslide activity can be induced or accelerated by human activities such as road building, fill emplacement, and obstruction or diversion of surface or shallow subsurface water. At risk are those very facilities. Of greater importance is the effect on oil & gas wells. A moving landslide body is subject to differential internal movements, and the basal boundary is a locus of potentially serious shear movements.

The forces generated within a moving landslide are too great for a drill pipe to resist, even with casing and other reinforcement. A sheared borehole pipe becomes a place where an uncontrolled, pressurized leak will occur into the surrounding substrate. Landslides often have complicated shallow ground water systems. Hydrocarbon or waste fluid spills within a landslide would be difficult to trace and remediate. Landslides often contain ground water seeps. Contaminants reaching the seeps could then enter surface waters.

Oil and gas pipelines are also at particular risk in landslide terrain, in part because they are buried in shallow ground and cross between areas having variable ground stabilities. The boundaries between stable and unstable ground, or between sliding ground masses that are moving at different rates, are the sites of pipeline breakage, pressurized leaks, and ground and surface water contamination.

Another effect to consider is the role of natural climate variations upon landslide activity. In western Colorado, landslide activity is influenced strongly by the amount of snow that accumulates during the winter. In 1983 and 1984, there were notably deep snowpacks in Colorado and Utah. The melting of the snows created abundant runoff, and the ground was saturated over a long period of time, resulting in a spate of landslide reactivations and several potential emergency situations. In our area, the East Muddy Creek Landslide became so active that State Highway 133 had to be relocated across the river, at a high public cost.

⁵ Rogers, W.P., 2005, Critical landslides in Colorado – a year 2002 review and priority list: Denver, Colorado Geological Survey Open-File Report 03-16, 59 p., 1 map plate, scale 1:500,000.

⁶ Colorado Geological Survey, Colorado landslide inventory map viewer: Denver, Colorado Geological Survey web site, http://coloradogeologicalsurvey.org/geologic-hazards/landslides/colorado-landslide-inventory/

Once landslide reactivation occurs, there is little we can do to stop the earth from sliding. Engineered stabilization treatments, used when building roads, pipelines, or other facilities, may have a local effect, but many landslides are far too massive for those treatments to have any effect. In short, landslide movements driven by natural changes in ground moisture are essentially beyond human control, and in those cases the risk of damage to facilities, and resulting impact to the local ecosystem, is unavoidable.

Earthquakes and Seismic Hazards

The discussion in the EA regarding induced seismicity on page 27 does not clearly distinguish between induced seismic events resulting from hydraulic fracturing versus deep wastewater disposal. The more recent information on earthquakes due to wastewater disposal and the resulting damage at the surface in other oil and gas regions such as Oklahoma was ignored. This information is particularly relevant to this project area because of the existing geologic instability issues and the apparent lack of a decision by the BLM to allow or not allow deep wastewater disposal.

The Colorado Earthquake Map Server is an online, interactive mapping tool that shows the epicenter locations and magnitudes of historical earthquakes in Colorado.⁷ In the immediate area around the proposed lease sale, it shows one earthquake at Hotchkiss, a belt of 45 earthquakes near Bowie and Somerset, and three separate earthquakes along the valley of Muddy Creek.

The Hotchkiss quake occurred in 2008, at a shallow depth of 1 km (4,000 feet), with a magnitude of 2.7. No explanation of cause was given. The Bowie /Somerset earthquakes had magnitudes of less than 4.0 and one of 4.4 and occurred at shallow depths of around 1 km. Many of these are attributed to "coal bumps," or sudden ground movements or collapses within the area's large, underground coal mines. The largest reported quake, which occurred in 1944 in the upper reaches of Hubbard Creek, had an intensity of VI, and was felt strongly in Grand Junction, Montrose, Aspen and Eagle. The three Muddy Creek earthquakes occurred in 1984, 1988, and 2008, with magnitudes of 2.7 to 3.1, and depths of 1 to 5 km (4,000 to 16,400 feet). The northernmost quake is attributed to a possible coal bump at a coal mine near Redstone.

The map server data show that both natural and human-caused earthquakes have occurred in the proposed lease sale area. It is plausible that both types of earthquakes will continue to occur here, with shallow, low-magnitude "coal bump" quakes far outnumbering the deeper and higher-magnitude natural quakes.

The pertinent questions are (1) whether the hydraulic fracturing itself, which occurs several thousand feet below the ground surface in the targeted production zone of the Mancos Shale, will produce felt earthquakes; (2) whether waste fluids pumped under pressure into disposal wells produce felt earthquakes; (3) whether the induced seismicity from these operations will affect the stabilities within the coal mines and cause a chain-reaction effect of more occurrences of "coal bumps;" and (4) whether the induced

⁷ Morgan, M.L., 2017, Colorado earthquake map server: Golden, Colorado Geological Survey web site, http://coloradogeologicalsurvey.org/geologic-hazards/earthquakes/maps/

seismicity will affect the stabilities of landslides in the area and cause more occurrences of reactivation of dormant landslides or greater movement within currently active landslides. All of these effects could increase the overall earthquake hazard, affect mine safety, and cause increased damage to properties and infrastructure within the greater North Fork and Muddy Creek area.

There is scientific evidence for (2) occurring from injection wells in different circumstances in Colorado (see Colorado Geological Survey newsletter, *RockTalk*, v 5, no.2, April 2002) and elsewhere. The injection appears to produce earthquakes of small to moderate severity, up to about magnitude 5.0. As such, there is a possibility that induced seismicity from fracking operations leads to more frequent and occasionally more powerful earthquakes.

We have not seen a discussion about the potential effect of (3) on mine stability and safety, but parts of the underground mines exist in a partially collapsed or locally reinforced condition, both of which are metastable. It seems that ground shaking from nearby, induced earthquakes could certainly compromise the delicate stability within the mines. Additionally, we have not seen a discussion about the potential effect of (4) on landslide stability and hazards. It seems intuitive that an increased level and frequency of seismicity could have a destabilizing effect on a landscape where there are already abundant unstable or metastable slopes.

Rockfalls are already a frequent hazard in the North Fork and Muddy Creek areas, where they damage roads (and sometimes close them for days) and threaten the safety of people driving or riding in vehicles. The process occurs because the sandstone bedrock cliffs are cracked and locally unstable. It stands to reason that an increased level and frequency of seismicity could destabilize the rock cliffs even more, thus increasing the overall rockfall hazard and corresponding impacts to transportation and water infrastructure.

v. Agriculture

In addition to analyzing potential impacts on water resources generally, BLM must specifically analyze the impacts to agriculture, both related to water supply and otherwise. Protection of the North Fork Valley's water supply relies on preventing pollution, protecting source water areas, protecting water bodies and riparian areas, and protecting water systems and conveyances. For agricultural operators, water quantity and quality are both of utmost importance. Organic agriculture, specialty crops and high quality hay all depend on abundant water free from contamination.

The North Fork Valley is home to Colorado's highest concentration of organic farms. Irrigation in the valley relies on an interconnected series of canal, ditches and tail-water impoundments. Surface contamination and spills, which occur regularly in Colorado oil and gas fields, could spread rapidly though the irrigation systems that water the valley.⁸

⁸ "Oil and gas companies in Colorado reported 615 spills in 2015," Denver Post March 17, 2016. Online at <u>www.denverpost.com/2016/03/17/oil-and-gas-companies-in-colorado-reported-615-spills-in-2015/</u>

BLM must analyze potential impacts to irrigation systems from oil and gas development that would be a reasonably foreseeable result of issuing new leases.

BLM must also analyze other impacts to agriculture that are reasonably foreseeable from oil and gas leasing, including impacts to air quality and climate. According to NOAA, the Gunnison River Basin is "a microcosm" of the broader climate and water troubles bedeviling the state.⁹ Climate impacts, which would be exacerbated by additional leasing and development, are already affecting agriculture in the Gunnison River Basin:

Higher temperatures mean precipitation is increasingly falling as rain rather than snow. That has decreased the Rockies' snowpack, a natural reservoir that feeds the Colorado River system's summer streams. Now, there's less to melt. Crops go parched. Riverbeds go dry. Farmers' pockets go empty.¹⁰

Therefore, in addition to analyzing climate change impacts generally, as discussed further in these comments, BLM must analyze climate impacts on agriculture specifically.

vi. Wildlife Habitat

We do not see adequate stipulations for safeguarding against impacts to elk and mule deer habitat, including migratory routes, calving, and winter range. The BLM lands in and around the North Fork Valley provide for an abundance and diversity of wildlife, from moose, bear and lynx in the upper reaches, to Gunnison sage grouse, Yellow-bill Cuckoo, fox and coyote in the bottomlands—which are critical winter range for herds of elk and deer. Waterbodies and riparian areas provide important habitat and travel routes for a variety of species. Upland migration routes and connectivity are critical elements to maintaining healthy populations, from endangered and sensitive species to big game. Specific habitat areas—nesting sites, leks, floodplains and fish habitat, migration routes, and winter range are all important wildlife resources that must be analyzed in the NEPA document prepared for this lease sale.

Streams and rivers that head on the Grand Mesa and West Elks contain important trout fisheries, and the Gunnison River just below the confluence is a Colorado Gold Medal trout stream. The Gunnison River is also home to three species of endangered fish that are known to be impacted by activity on the selenium rich soils of the North Fork Valley. We do not see adequate stipulations for protecting fisheries/aquatic life in the EA. In particular, **UFO-TL-Coldwater Sportfish and Native Warmwater Fish Timing Limitation** states that no in-stream channel work is allowed within occupied fisheries from April 1 to July 15 to protect redds and emerging fry. The spawning season for brook trout and brown trout is in the fall. Where brook trout and brown trout are present, no in-stream channel work should be allowed during the fall.

⁹ "If Trump gets his oil boom, leases could cover this valley," ClimateWire July 13, 2018. Online at <u>https://www.eenews.net/stories/1060088927</u>

Colorado Parks and Wildlife, in previous comments on oil and gas leasing in the North Fork Valley, emphasized the importance not only of protecting the critical winter habitat that covers nearly all of the valley, but of the important migration routes that connect the winter range with uplands and calving areas.¹¹ BLM must thoroughly analyze potential impacts to habitat and migration routes and apply necessary stipulations to protect those resources.

Secretarial Order 3362, *Improving Habitat Quality in Western Big-Game Winter Range and Migration Corridors*, directs DOI bureaus to work with the states "to enhance and improve the quality of big-game winter range and migration corridor habitat on Federal lands" The State of Colorado referenced this guidance in its scoping comments to BLM for this lease sale, and proposed stipulations for parcels in the Uncompahgre Field Office to achieve this objective. BLM has not proposed to adopt all of the stipulations that the State of Colorado finds necessary to protect big game winter habitat and other important habitat in Colorado.

The State specifically recommended CSU stipulations to limit surface density to one pad per section to protect elk winter concentration area and mule deer critical winter range for parcels 8320 and 8351. The State also recommended CSU stipulations to protect moose habitat for parcel 8140. BLM has not considered or applied these stipulations in the preliminary EA. Without these stipulations, and others recommended by the State of Colorado, the proposed lease parcels are lacking necessary protections for important winter habitat and other wildlife.

vii. Recreation

Hunting is a mainstay that brings large revenue for western Colorado coffers. The economic contributions made by maintaining healthy and abundant fish and wildlife populations are substantial. The CPW comments on the March 2012 oil and gas lease sale emphasized the economic importance of protecting this habitat for the hunting opportunities provided.

...benefits from hunting and fishing recreational activities are a sustainable annual source of economic benefit for Delta and Gunnison counties only if wildlife populations, and particularly big game populations, are maintained and quality hunting opportunities continue to exist.¹²

Hunting and fishing are multimillion dollar industries in the region, estimated at over \$80 million annually (in 2007) for the two counties.¹³ River sports, hiking, camping, mountain biking, climbing and trail running are other highly popular recreation activities in the North Fork Valley. BLM must analyze potential impacts to all of these recreation resources from oil and gas leasing and development.

¹¹ Colorado Park and Wildlife comments on March 2012 oil and gas lease sale, February 3, 2012.

 $^{^{12}}$ *Id*.

¹³ *Id*.

viii. Air Quality

It is stated on page 16 of the EA that Deep Creek Lake in the Raggeds Wilderness is extremely sensitive to atmospheric deposition because the background ANC values are less than 25 μ eq/L. Deep Creek Lake is within the CEAA, as are numerous other surface water bodies. The draft EA does not provide any analysis of the effects of changes in air quality due to the proposed oil and gas lease sale in the CEAA to surface water bodies, nor does it provide any proposed mitigation of the effects of atmospheric deposition to surface water bodies in the CEAA. It is particularly important to discuss effects to and mitigation for Deep Creek Lake, which could become chronically acidic due to increased atmospheric deposition to surface water bodies due to the proposed oil and gas leases and possible mitigation of these effects must be added to the EA.

Climate change is affecting resources in the CEAA such as water (e.g. reduced snowpack, earlier spring runoff), air quality (e.g. poorer summer air quality due to increased wildfires), and wildlife (e.g. effects to fish due to changes in timing and volume of runoff). The Climate Change section of the draft EA discusses climate model predictions, but provides no specific details of current changes that have been observed and measured in the CEAA. Such information should be added to the EA, and these changes included in the cumulative effects analyses for these resources.

ix. Socio-economics

On Page 38, the EA states: "Historically, tourism and farm-based agri-tourism have developed concurrently with mineral extraction in the North Fork Valley, and there is no evidence that existing oil and gas development has impacted agriculture or tourism in Delta and Gunnison counties. Based on local experiences, leasing the parcels would not be likely to affect tourism or small-scale farms, including orchards and vineyards, in the North Fork Valley, county government expenditures, or land values."

We take strong issue with this statement, as we not only disagree with these conclusions, but have consistently submitted substantive comments stating otherwise – in response to the Scoping Notice of this lease sale – as well as in many other NEPA and FLPMA-driven public processes over the last eight years. Additionally, the Town of Paonia expressed significant concern regarding the socio-economic impacts of the proposed lease sale, and this statement in the EA makes it clear that their comments were not only omitted from the record, but also ignored in the analysis of these lease parcels.

This proposed lease sale would allow for increased oil and gas activity on top of existing oil and gas development, and could increase the likelihood of impacts from these activities which could be occurring in much closer proximity to farms, water sources, and tourist attractions. Proximity and increase of development could significantly increase impacts from truck traffic, noise, dust, and emissions could breach a threshold for many local producers to continue remaining viable as agri-tourism businesses.

C. BLM has failed to consider a range of alternatives.

NEPA generally requires the lead agency for a given project to conduct an alternatives analysis for "any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(2)(E). The regulations further specify that the agency must "rigorously explore and objectively evaluation all reasonable alternatives" including those "reasonable alternatives not within the jurisdiction of the lead agency," so as to "provid[e] a clear basis for choice among the option." 40 C.F.R. § 1502.14. This requirement applies equally to EAs and EISs. *Davis v. Mineta*, 302 F.3d 1104, 1120 (10th Cir. 2002); *Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1228-29 (9th Cir. 1988).

Here, BLM has evaluated only a "No Action Alternative" and a "Preferred Alternative." Preliminary EA § 2.2. An EA offering a choice between leasing every parcel, and leasing nothing at all, does not present a reasonable range of alternatives. *See TWS v. Wisely*, 524 F. Supp. 2d 1285, 1312 (D. Colo. 2007) (BLM violated NEPA by failing to consider "middle ground compromise between the absolutism of the outright leasing and no action alternatives"); *Muckleshoot Indian Tribe*, 177 F.3d 800, 813 (NEPA analysis failed to consider reasonable range of alternatives where it "considered only a no action alternative along with two virtually identical alternatives").

Our scoping comments included a proposed alternative that detailed stipulations BLM should consider applying to each parcel, drawn from Alternative B1 in the Uncompanyer Draft RMP. The preferred alternative in the preliminary EA would apply stipulations from the Draft RMP; it would be plainly reasonable for BLM to also consider an alternative that would apply the B1 stipulations, which are the most protective stipulations considered in the Draft RMP.

BLM also should consider an alternative to adopt the Controlled Surface Use stipulations recommended by the State of Colorado in its scoping comments on the lease sale. The State recommended the following CSU stipulations that are not considered in the preliminary EA:

- CSU to limit surface density to one pad per section to protect elk winter concentration area and mule deer critical winter range for parcels 8320 and 8351.
- CSU to protect moose concentration area for parcel 8140.

Failing to consider alternatives that would protect other public lands resources from oil and gas development also violates FLPMA. Considering only one alternative in which BLM would offer all oil and gas lease parcels for sale, regardless of other values present on these public lands that could be harmed by oil and gas development, would indicate a preference for oil and gas leasing and development over other multiple uses. Such an approach violates the agency's multiple use and sustained yield mandate, as detailed in Section II of these comments.

D. BLM must not authorize oil and gas leasing which would preclude alternatives under consideration in the Uncompany RMP revision.

The majority of the parcels proposed for the December lease sale would be unavailable for leasing under Alternative B1 in the Uncompany Draft RMP, and others would have NSO stipulations more extensive than those proposed in the preliminary EA. (See Figure 1.)



Figure 1. Proposed lease sale parcels and stipulations in the Uncompany Draft RMP, Alt. B1.

Moving forward with the proposed lease sale at this time would undermine the ongoing RMP revision by foreclosing management alternatives that might otherwise protect the natural resource values of the area. This would contravene NEPA, which provides that:

(a) Until an agency issues a record of decision as provided in Sec. 1505.2 (except as provided in paragraph (c) of this section), no action concerning the proposal shall be taken which would:

1. Have an adverse environmental impact; or

2. Limit the choice of reasonable alternatives.

. . . .

(c) While work on a required program environmental impact statement is in progress and the action is not covered by an existing program statement, agencies **shall not** undertake in the interim any major Federal action covered by the program which may significantly affect the quality of the human environment unless such action:

1. Is justified independently of the program;

2. Is itself accompanied by an adequate environmental impact statement; <u>and</u> 3. Will not prejudice the ultimate decision on the program. Interim action prejudices the ultimate decision on the program when it tends to determine subsequent development or limit alternatives.

40 C.F.R. § 1506.1 (emphasis added). Offering leases in areas that are under consideration for leasing closure and major constraints will limit the choice of alternatives and prejudice the ultimate decision in the ongoing Uncompany RMP revision.

It is well within BLM's authority to defer all of the parcels in the Uncompahgre Field Office. Neither the Mineral Leasing Act (MLA), FLPMA nor any other statutory mandate requires that BLM must offer public lands and minerals for oil and gas leasing that are nominated for such use, even if those lands are allocated as available to leasing in the governing land use plan. BLM's Land Use Planning Handbook 1601-1, § VII (E) specifically states that it may defer decisions in a planning area if the choice of alternatives in an RMP revision may be impacted. The 10th Circuit Court of Appeals confirmed this discretion in *N.M. v. BLM*, 565 F.3d. 683 at 698 (10th Cir. 2009) when it stated, "[i]f the agency wishes to allow oil and gas leasing in the plan area it must undertake additional analysis...but it retains the option of ceasing such proceedings entirely".

II. Federal Land Policy and Management Act

Prioritizing oil and gas leasing on the public lands is inconsistent with FLPMA's multiple-use mandate. Under FLPMA, BLM is subject to a multiple-use and sustained yield mandate, which prohibits the Department of the Interior (DOI) from managing public lands primarily for energy development or in a manner that unduly or unnecessarily degrades other uses. *See* 43 U.S.C. § 1732(a). Instead, the multiple-use mandate directs DOI to achieve "a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations." 43 U.S.C. § 1702(c). Further, as co-equal, principal uses of public lands, outdoor recreation, fish and wildlife, grazing, and rights-of-way must receive the same consideration as energy development. 43 U.S.C. § 1702(1).

DOI appears to be pursuing an approach to oil and gas management that prioritizes this use above others in violation of the multiple use mandate established in FLPMA. For example, a March 28, 2017 Executive Order and ensuing March 29, 2017 Interior Secretarial Order #3349 seek to eliminate regulations and policies that ensure energy development is balanced with other multiple uses. Similarly, BLM Colorado frequently

begins its press releases regarding oil and gas lease sales by stating: "In keeping with the Administration's goals of promoting America's energy independence..."¹⁴ This rhetoric seems to indicate that BLM is prioritizing oil and gas leasing and development above other multiple uses.

None of the overarching legal mandates under which BLM operates – be it multiple-use or non-impairment – authorizes DOI to establish energy development as the dominant use of public lands. On our public lands, energy development is an allowable use that must be carefully balanced with other uses. Thus, any action that attempts to enshrine energy development as the dominant use of public lands is invalid on its face and inconsistent with the foundational statutes that govern the management of public lands.

Federal courts have consistently rejected efforts to affirmatively elevate energy development over other uses of public lands. In the seminal case, *N.M. ex rel. Richardson v. BLM*, the Tenth Circuit put to rest the notion that BLM can manage chiefly for energy development, declaring that "[i]t is past doubt that the principle of multiple use does not require BLM to prioritize development over other uses." 565 F.3d 683, 710 (10th Cir. 2009); *see also S. Utah Wilderness Alliance v. Norton*, 542 U.S. 52, 58 (2004) (defining "multiple use management" as "striking a balance among the many competing uses to which land can be put"). Other federal courts have agreed. *See, e.g., Colo. Envtl. Coalition v. Salazar*, 875 F. Supp. 2d 1233, 1249 (D. Colo. 2012) (rejecting oil and gas leasing plan that failed to adequately consider other uses of public lands). Thus, any action by BLM that seeks to prioritize oil and gas leasing and development as the dominant use of public lands would violate FLPMA.

Additionally, leasing lands with low potential for oil and gas development in particular violates FLPMA's multiple use mandate. Leasing in low potential areas gives preference to oil and gas development at the expense of other uses because the presence of leases can limit BLM's ability to manage for other resources, in violation of FLPMA's multiple use mandate. In the Colorado River Valley RMP, for example, BLM decided against managing lands for protection of wilderness characteristics in the Grand Hogback lands with wilderness characteristics unit based specifically on the presence of oil and gas leases, even though the leases were non-producing:

The Grand Hogback citizens' wilderness proposal unit contains 11,360 acres of BLM lands. All of the proposed area meets the overall criteria for wilderness character...There are six active oil and gas leases within the unit, totaling approximately 2,240 acres. None of these leases shows any active drilling or has previously drilled wells. The ability to manage for wilderness character would be difficult. If the current acres in the area continue to be leased and experience any development, protecting the unit's wilderness characteristics would be infeasible...

¹⁴ See for example BLM Colorado press release on September 6, 2018, available at <u>https://www.blm.gov/press-release/blm-colorado-oil-and-gas-lease-sale-nets-3364526</u>.

Colorado River Valley Proposed RMP (2015), p. 3-135. Within a year of the RMP being finalized, 5 of the 6 leases had expired. Similarly, in the Grand Junction RMP, BLM expressly stated that undeveloped leases on low-potential lands had effectively prevented management to protect wilderness characteristics:

133,900 acres of lands with wilderness characteristics have been classified as having low, very low, or no potential...While there is not potential for fluid mineral development in most of the lands with wilderness characteristics units, the majority of the areas, totaling 101,100 acres (59 percent), are already leased for oil and gas development.

Grand Junction Proposed RMP (2015), pp. 4-289 – 4-290. The presence of leases can also limit BLM's ability to manage for other important, non-wilderness values, like renewable energy projects. *See, e.g.*, White River Oil and Gas Proposed RMP Amendment, p. 4-498 ("Areas closed to leasing...indirectly limit the potential for oil and gas developments to preclude other land use authorizations not related to oil and gas (e.g., renewable energy developments, transmission lines) in those areas."). In offering the leases involved in this sale, BLM runs a similar risk of precluding uses and protection of other public lands resources.

III. Mineral Leasing Act (MLA)

Development potential should inform BLM's leasing decisions. The preliminary EA states that "most (81%) of the Federal oil and gas leases in the [Cumulative Effects Analysis Area] shown on Map 1 do not have active wells within their boundaries (57 active wells on 18 of 92 existing individual leases in the CEAA)." Preliminary EA, p. 14. This would indicate that BLM is facilitating a great deal of speculative leasing in areas unlikely to be developed, in contravention of the MLA.

The MLA is structured to facilitate actual production of federal minerals, and thus its faithful application should discourage leasing of low potential lands. The MLA directs BLM to hold periodic oil and gas lease sales for "lands...which are known or believed to contain oil or gas deposits..." 30 U.S.C. § 226(a). These sales are supposed to foster responsible oil and gas development, which lessees must carry out with "reasonable diligence." 30 U.S.C. § 187; *see also* BLM Form 3100-11 § 4 ("Lessee must exercise reasonable diligence in developing and producing...leased resources."). However, BLM's oil and gas leasing program facilitates, and perhaps even encourages, speculative leasing, leading to unproductive leasing of public lands which does not carry out the provisions or intention of the MLA or FLPMA.

The preliminary EA offers no "reasonable assurance" that the proposed leases actually contain oil or gas deposits that would be developed and thus support a leasing decision under the MLA. BLM should document its determination that these lands have reasonable potential for oil and gas development.

Conclusion

Thank you again for the opportunity to comment. We hope to see BLM complete needed analysis and fully comply with applicable law and guidance prior to proceeding with leasing these parcels.

Sincerely,

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