February 13, 2017

BY E-MAIL SUBMISSION

Bureau of Land Management
Wyoming State Office
5353 Yellowstone Ave.
Cheyenne, WY 82009
BLM_WY_PTCList_comments@blm.gov

Re: Actions in the Upper Green River Basin of Wyoming Presumed to Conform to the Clean Air Act

Dear BLM:

WildEarth Guardians, the Center for Biological Diversity, Earthworks, Western Watersheds Project, and Great Old Broads for Wilderness submit the following comments on the Bureau of Land Management's ("BLM's") proposed list of actions in the Upper Green River Basin region of Wyoming that are presumed to conform to the Wyoming State Implementation Plan ("SIP") and its goal of attaining and maintaining National Ambient Air Quality Standards ("NAAQS") for ground-level ozone. The BLM published its proposed list in the Federal Register on December 26, 2016. *See* 81 Fed. Reg. 96,033-96,043 (Dec. 26, 2016).

The proposed list includes actions that the BLM asserts should be presumed to the Wyoming SIP in accordance with the U.S. Environmental Protection Agency's ("EPA's") Clean Air Act general conformity requirements set forth at 40 C.F.R. § 93.150, *et seq*. For the following reasons, we object to BLM's proposed list because it: 1) Makes unsupported claims regarding the perceived lack of foreseeability of emissions related to oil and gas resource management in the Upper Green River Basin; 2) Represents an inappropriate segmentation of a single federal action; and 3) Lacks adequate supporting information and analysis.

At the outset, it is important to point out that the BLM's proposed action here is subject to National Environmental Policy Act ("NEPA") review requirements. "NEPA is our basic national charter for protection of the environment." 40 C.F.R. § 1500.1(a). It is meant to "foster excellent action," intended to "help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment." 40 C.F.R. § 1500.1(c). At a basic level, NEPA requires that, prior to undertaking an action that affects the environment, federal agencies analyze and assess environmental consequences (i.e., effects), consider a range of reasonable alternatives, and make a well-informed decision based on these considerations. To this end, NEPA requires that "high quality" environmental information be relied upon and made available to the public before

actions are taken, noting that that "accurate scientific analysis, expert agency comments, and public scrutiny" are essential components of NEPA compliance. 40 C.F.R. § 1500.1(b).

Specific to the BLM, an action is subject to NEPA when: 1) it would cause effects on the human environment and 2) it is subject to BLM control and responsibility. *See* 43 C.F.R. § 46.100(a). The procedural requirements of NEPA apply when a proposed action is developed to the point that the BLM "has a goal and is actively preparing to make a decision on one or more alternative means to accomplishing that goal" and "the effects of the proposed action can be meaningfully evaluated." 43 C.F.R. § 46.100(b).

While there is no question the proposed action here is subject to BLM control and responsibility, the establishment of its "presumed to conform list" for the Upper Green River Basin is also certain to cause effects on the human environment. By establishing its list, the BLM will, in effect, identify actions where air emissions will not be subject to additional scrutiny or limitation. In essence, the BLM's action will authorize air pollution by eliminating the potential for it to be reduced pursuant to the Clean Air Act. While the list itself may not authorize specific project-level actions, the list is establishing a presumptive threshold that will guide future decisions and analyses.

It is telling that the BLM's own proposal references and includes extensive air quality analysis that was prepared to justify the "presumed to conform list." By virtue of compiling and proposing the list, the agency is essentially acknowledging that there will be impacts to air quality. Although we disagree with the agency that the air quality impacts will be below Clean Air Act general conformity thresholds, the reality is there will be impacts triggering NEPA's implication. Even Clean Air Act regulations are clear that a determination of conformity "does not exempt the action from [] the National Environmental Policy Act[.]" 40 C.F.R. § 93.150(d).

Clearly the establishment of the "presumed to conform list" is an action subject to NEPA. The question then is, when must the BLM apply its requirements? Here, the answer seems to be right now. With its proposed "presumed to conform list," the BLM clearly has a goal, namely to exempt certain actions from Clean Air Act oversight, and is actively preparing to make a decision on a means of accomplishing that goal, namely by establishing its list.

Further, the effects of the BLM's proposed action can be meaningfully evaluated. In fact, by proposing its list, the agency is conceding that it can meaningfully analyze the air quality impacts of its actions, especially in terms of volatile organic compound ("VOC") and nitrogen oxide ("NOx") emissions. To this end, the BLM present a VOC and NOx emissions analysis in its proposal in order to justify its proposed list. Without such an analysis, the BLM could not justify proposing such a list.

Given this, the BLM cannot move to finalize any presumed to conform list unless and until the agency meets its obligations under NEPA. Further, given that the proposed action here is not identified as an action that may be categorically excluded from NEPA analysis, the agency must move to prepare an Environmental Assessment ("EA") or Environmental Impact Statement ("EIS") for its proposed action. In light of the context and intensity of the proposed action, and

the fact that the proposal would appear to pose potentially significant impacts to air quality, we would strongly urge the BLM to prepare an EIS.

An EIS is needed to effectively analyze air emissions and associated air quality impacts associated with the "presumed to conform list" in order to demonstrate compliance with the Clean Air Act. While BLM has presented some emission estimates in its proposal, we believe these estimates are severely flawed, especially with regards to oil and gas operations, and do not demonstrate that the list fully complies with EPA general conformity rules. Furthermore, an EIS is needed in order to demonstrate that implementation of the proposed list will not "cause or contribute to any new violation" of the ozone NAAQS, "interfere with provisions in the Wyoming SIP for maintaining the NAQS," "increase the frequency or severity of any existing violation" of the ozone NAAQS, or "delay timely attainment" of the ozone NAAQS. *See* 40 C.F.R. § 93.153(j).

An EIS is especially necessary to ensure that on a cumulative basis, the action of implementing applicable Resource Management Plans ("RMPs"), particularly the Pinedale RMP, fully complies with EPA's general conformity rules. While the BLM asserts that emissions from certain individual actions may be presumed to conform, these individual actions are being implemented pursuant to the BLM's action of approving and implementing its RMPs. To this end, before any individual action within the Upper Green River Basin can be presumed to conform, the agency must ensure that reasonably all foreseeable emissions associated with its RMPs will conform as well. An EIS is the proper vehicle for conducting such an analysis.

Beyond the failure of the BLM to comply with NEPA, we have the following concerns that the proposed presumed to conform list does not comport with the Clean Air Act and EPA regulations:

1. **Emissions from oil and gas leasing decisions in the Upper Green River Basin are reasonably foreseeable at the leasing stage.**

We are very concerned with BLM's assertion that emissions related to oil and gas development are not reasonably foreseeable at the leasing stage.

It is important to first point out that BLM's claim that emissions from oil and gas development are impossible to predict at the leasing stage because the nature of subsequent development is speculative is undercut by the very nature of its oil and gas leasing program and system of regulation. The whole point of issuing leases is to facilitate development. The BLM only offers leases for sale based on industry "expressions of interest." Further, if a company purchases a lease, it must put it into production within 10-years or the lease expires. 43 C.F.R. § 3107.2-1. If a company purchases a lease, but has no intention of putting it into production, the company would be violating the terms and conditions of its lease. In fact, the BLM has rejected lease offers where a company has no intention to put a lease into production. *See* Exhibit 1, BLM Decision Rejecting Lease Offers (Oct. 18, 2016).

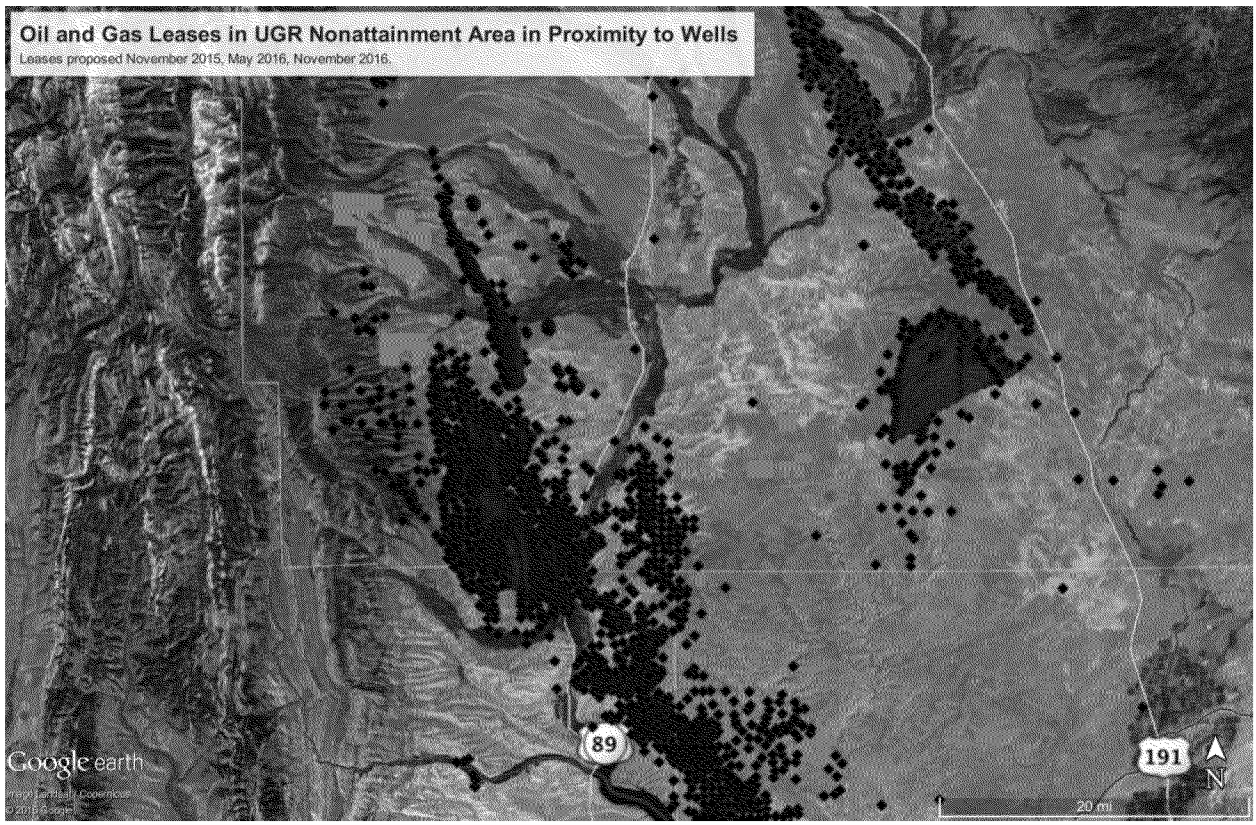
Given this, the BLM's claim that future development of leases is speculative appears to be counter to the very purpose and implementation of its oil and gas leasing program. It does not appear that BLM tolerates leasing oil and gas to companies who have no intention of producing oil and gas. To this end, it is incredibly reasonable to presume that any leases issued to industry will be developed within their 10-year term.

The fact that development of leases is not speculative or impossible to predict is underscored by the fact that oil and gas development in the Upper Green River Basin is extensive. According to the BLM's reasonably foreseeable development scenario for the Pinedale Field Office, up to 9,150 oil and gas wells are projected for development by 2020. *See* Table below from BLM Reasonably Foreseeable Development Scenario for Pinedale Field Office, available at https://www.blm.gov/wy/st/en/programs/Planning/rmps/pinedale/og_rfd.html.

Table 13. Total wells projected to be drilled within the Pinedale Field Office area for the base line and each alternative for the period 2001-2020. The projections of the percent of federal wells drilled for this period is also presented.

Alternative	Coalbed Gas Wells	Non-coalbed Oil and Gas Wells	Total Wells	Percent Federal
Base Line	600	8,550	9,150	86.38
Alternative 1 (No Action)	512	7,927	8,439	85.22
Alternative 2	586	8,465	9,051	86.22
Alternative 3	382	6,074	6,456	80.68
Alternative 4	547	7,836	8,383	85.12
Alternative				

Recent leasing in the Pinedale Field Office underscores that this federal action is not occurring in a region where oil and gas development is speculative or difficult to predict. In November 2015 and May 2016, the BLM proposed to lease several parcels in the Field Office, all of which are within or near areas of intensive oil and gas development. *See* Image below. It would be completely disingenuous for the BLM to claim that the reasonably foreseeable impacts of leasing are impossible to predict or otherwise speculative.



Recently proposed oil and gas leases (orange) in the Upper Green River Basin Ozone Nonattainment Area (purple) in proximity to oil and gas wells (red). Map prepared using BLM, EPA, and Wyoming Oil and Gas Conservation Commission Data.

Furthermore, in leasing in other offices, the BLM has been more than capable of presenting reasonable estimates of future development in conjunction with proposed oil and gas leasing. Examples of this include:

- In Utah, the BLM recently prepared an analysis in conjunction with its December 2016 oil and gas lease sale in the Vernal Field Office where the agency assumed that, at a minimum, one well would be developed and put into production on every lease parcel offered for sale. *See* Exhibit 2, BLM, "Environmental Assessment, November 2016 Competitive Oil and Gas Lease Sale," EA No. DOI-BLM-UT-G0101-2016-033-EA (Oct. 14, 2016) at 39.

- In New Mexico, BLM recently prepared an analysis in conjunction with its September 2016 oil and gas lease sale in the Carlsbad Field Office where the agency concluded that up to 401 wells could be developed on 36 lease parcels in southeastern New Mexico. *See* Exhibit 3, BLM, "Environmental Assessment for July 2016 Competitive Oil and Gas Lease Sale, Carlsbad Field Office, DOI-BLM-NM-P020-2016-0588-EA" (April 2016), at 13.

- In Idaho, BLM recently prepared an analysis in conjunction with its May 2015 oil and gas lease sale in the Four Rivers Field Office where the agency concluded that up to 25 wells could be developed on 5 lease parcels in southwestern Idaho. *See* Exhibit 4, BLM, "Environmental Assessment, DOI-BLM-ID-B010-2014-0036-EA, Little Willow Protective Oil and Gas Leasing" (Feb. 2015) at 18.

- In Utah, BLM recently prepared an analysis in conjunction with its February 2017 oil and gas lease sale in the Canyon Country District Office where the agency concluded that more than seven wells would be developed on six lease parcels in southern Utah. *See* Exhibit 5, BLM, "Environmental Assessment, DOI-BLM-UT-Y020-2016-0042-EA, February 2017 Oil and Gas Lease Sale" (Sept. 2016) at 17.

- In Montana, BLM recently prepared an analysis in conjunction with its May 2017 oil and gas lease sale in the Miles City Field Office where the agency used "reasonable projections and assumptions" in determining that 15 oil and gas wells would be developed on 156 lease parcels in southwestern Montana. *See* Exhibit 6, BLM, "Environmental Assessment, DOI-BLM-MT-C020-2016-0134-EA, May 3, 2017 Oil and Gas Lease Parcel Sale" (Nov. 2016) at 39.

Based on the ability of the BLM to project reasonably foreseeable development, all it takes is basic math to project reasonably foreseeable VOC and NOx emissions. The BLM did this in Idaho, calculating that its May 2015 leasing decision would produce up to 130 tons of VOC emissions and 365 tons per year of NOx emissions per year. *See* Exhibit 4 at 34. The State of Idaho relied on a report that the BLM had prepared by Kleinfelder, which developed emission estimates for representative oil and gas wells in key oil and gas producing regions of the western United States. BLM relied on estimates in this report related to emissions from single natural gas wells in the Upper Green River Basin of Wyoming, finding that wells emit on average 14.6 tons of NOx and 5.2 tons of VOCs annually. *See* Exhibit 7, Kleinfelder, "Air Emissions Inventory Estimates for a Representative Oil and Gas Wells in the Western United States," Report Prepared for BLM National Operations Center (March 25, 2013) at 2.

In Colorado, BLM similarly estimated a potential range of VOC and NOx emissions that would result from leasing and reasonably foreseeable development in the Royal Gorge Field Office. In a report prepared by URS, it was estimated that the issuance of seven parcels could lead to between seven and 67 wells. Depending on whether the well primarily produced oil or gas, emissions were projected to range from between 21.72 to 34.06 tons of VOCs and 15.73 to 21.75 tons of NOx emissions annually for single wells. *See* Exhibit 8, URS Group, "Draft Oil and Gas Air Emissions Inventory Report for Seven Lease Parcels in the BLM Royal Gorge Field Office," Prepared for Colorado State Office and Royal Gorge Field Office, Colorado (July 2013) at 3.

Given the BLM's own analysis in its own NEPA documents and its own reports, there is simply no support for the agency's present claim that emissions associated with oil and gas leasing are not reasonably foreseeable at the leasing stage. While BLM may believe that these estimates are not as precise as the agency would prefer, that does mean the emissions are not reasonably foreseeable. It is telling that when EPA finalized its general conformity rules, the

agency stated that, "descriptions of emissions contained in documents such as...NEPA documents should be considered reasonably foreseeable emissions." 58 Fed. Reg. 63,214, 63,225 (Nov. 30, 1993). Put another way, if estimates of emissions are good enough for NEPA, they are good enough for conformity purposes. To this end, there is no reason to believe that BLM cannot estimate reasonably foreseeable development and emissions associated with leasing in the Upper Green River Basin Nonattainment Area at the leasing stage.

Furthermore, the BLM has even established guidance directing its offices to calculate reasonably foreseeable emissions associated with oil and gas leasing activities. Indeed, a recent interagency guidance for future actions addresses development of quantitative air quality analysis and modeling in lease sale decisions. In 2011, the EPA, Department of Interior, and Department of Agriculture entered into a Memorandum of Understanding (MOU) to establish a "a clearly defined, efficient approach to compliance with [NEPA] regarding air quality . . . in connection with oil and gas development on Federal lands." Exhibit 9, MEMORANDUM OF UNDERSTANDING AMONG THE U.S. DEPARTMENT OF AGRICULTURE, U.S. DEPARTMENT OF THE INTERIOR, AND U.S. ENVIRONMENTAL PROTECTION AGENCY, REGARDING AIR QUALITY ANALYSES AND MITIGATION FOR FEDERAL OIL AND GAS DECISIONS THROUGH THE NATIONAL ENVIRONMENTAL POLICY ACT PROCESS, Preamble (2011), available at: https://www.epa.gov/sites/production/files/2014-08/documents/air-quality-analyses-mou-2011.pdf. The MOU "provides for early interagency consultation throughout the NEPA process; common procedures for determining what type of air quality analyses are appropriate and when air modeling is necessary; specific provisions for analyzing and discussing impacts to air quality and for mitigating such impacts; and a dispute resolution process to facilitate timely resolution of differences among agencies." *Id.* at 4. The goal of this process is to ensure that "[F]ederal oil and gas decisions do not cause or contribute to exceedances of the National Ambient Air Quality Standards (NAAQS)." *Id.* at 1, 2. The MOU outlines recommended procedures to follow, which include identifying the reasonably foreseeable number of oil and gas wells and conducting an emissions inventory of criteria pollutants. Further air quality modeling is required if certain criteria are met, based on the level of emissions impact and the geographic location of the action. *Id.* § V.E.1., pg. 9. The MOU indicates that "[e]xisting reasonably foreseeable development scenarios can be used to identify the number of wells." *Id.*

It is telling that with regards to greenhouse gases, the BLM has directed its offices to fully disclose all direct and indirect carbon dioxide, methane, and other emissions associated with oil and gas leasing. In a permanent Instruction Memorandum issued on January 12, 2017, the BLM stated that its offices should, "Quantify and disclose to the fullest extent possible the reasonably foreseeable direct and indirect GHG [greenhouse gas] emissions when analyzing the direct and indirect effects of [] proposed action[s]." Exhibit 10, BLM, "The Council on Environmental Quality Guidance on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews," Permanent Instruction Memorandum 2017-003 (Jan. 12, 2017). If the BLM is required to disclose direct and indirect greenhouse gas emissions associated with oil and gas leasing, then there is no reason to believe that the agency is not capable of disclosing reasonably foreseeable VOC and NOx emissions.

Finally, BLM's claim that future development of oil and gas leases will be subject to NEPA and appropriate Clean Air Act conformity scrutiny at the drilling permit stage is simply unfounded. For one thing, at the time of leasing, the BLM never proposes stipulations that would grant the agency discretion to limit, or outright prevent, development of leases on the basis of air and/or Clean Air Act compliance. For example, with regards to recent oil and gas leases proposed for sale in the Pinedale Field Office in November 2015 and May 2016, the BLM proposed no stipulations that would provide the agency with authority to curtail or prevent development of the leases in order to meet Clean Air Act conformity requirements or any other air quality measures for that matter. *See* Exhibit 11 and 12.

The issuance of a lease effectively conveys a right for industry to develop the leasehold. *See* 43 C.F.R. § 3101.1-2. The only way to effectively constrain or guide future development is through the issuance of stipulations as part of the lease. *See* 43 C.F.R. § 3101.1-3. To this end, without imposing stipulations that would allow the BLM to modify or even prevent future development of leases in order to comply with general conformity requirements, the agency is effectively closing the door on its ability to influence future air emissions in compliance with the Clean Air Act. Without adequate leasing stipulations, the BLM cannot "kick the can down the road," so to speak, and rely on future decisionmaking processes where the agency has limited authority to do anything to rein in air pollution.

2. BLM has arbitrarily defined a single well as the "action" that is presumed to conform to avoid ever having to do a conformity analysis on its oil and gas leasing decisions.

Although the General Conformity Rule enables BLM to develop a list of specific "actions" that are presumed to conform to a SIP, BLM cannot use this provision to define an "action" so narrowly such that is has the effect of categorically exempting an entire agency program—here, BLM's oil and gas leasing and development program—from compliance with the conformity requirement. Yet, complete avoidance of the conformity requirement will be the effect if individual oil and gas wells are presumed to conform, and conformity analysis is not required until a proposed project includes multiple wells that, in the aggregate, exceed emission thresholds. 81 Fed. Reg. 96,038. Thus, BLM's attempt to avoid doing a conformity analysis for oil and gas leasing authorizations by making the relevant unit of analysis a single well, rather than the aggregate number of wells allowed by the lease authorization, violates the General Conformity Rule.

BLM is using the 'presumed to conform' provision of the Rule as loophole through which to allow extensive oil and gas development in the Upper Green River Basin without making a conformity determination that would capture the aggregate ozone impacts of multiple BLM leasing authorizations. As shown in the table above, the Pinedale Field Office is projecting between 6,454 and 9,150 new wells by 2020. Using BLM's per well estimates for NOx and VOCs, even the low end of this proposed development has the potential to release between 16,780 and 25,816 tons of NOx, and between 1,936 and 3,227 tons of VOCs over the next three years. If BLM is allowed to determine whether to perform a conformity analysis based solely on the number of wells proposed in an application for a permit to drill, as BLM seems to suggest at

81 Fed. Reg. 96,038, then the agency can perpetually avoid addressing whether the emissions indirectly resulting from its leasing decisions cause or contribute to any violations of the ozone standard.

In its promulgation of the General Conformity Rule, EPA expressly rejected the type of staged analysis BLM is proposing here—*i.e.*, waiting to consider conformity until BLM receives an application for a permit to drill on a small portion of a lease—because EPA wanted to prevent "the segmentation of projects for conformity analysis." 58 Fed. Reg. 63,240. EPA stated that allowing agencies to use a tiered approach (similar to NEPA's tiering concept) to determining whether a conformity analysis was necessary could "undermine[] the rule if agencies chose to narrowly define their actions as separate activities for purposes of determining applicability." *Id.* Here, BLM is attempting to punt conformity analysis to the permitting stage when it receives individual applications for permits to drill that encompass no more than a handful of wells per application, likely below the number of wells that would exceed the 'presumed to conform' threshold. *See, e.g.,* 81 Fed. Reg. 96,038 (for new oil wells, stating that "up to 17 new wells in a single 12-month period on an existing pad would conform") (for new gas wells, stating that "up to 38 new wells in a single 12-month period on an existing pad would conform").

BLM's proposal that the relevant "action" for which conformity is assessed is a single oil or gas well both undermines and arbitrarily interprets the Conformity Rule's provision allowing agencies to create a 'presumed to conform' list for actions that have de minimis emissions. BLM cannot avoid the conformity requirement by segmenting its leasing decisions (which can authorizing leasing of hundreds of thousands of acres) into individual wells for the purpose of evaluating whether a conformity determination is necessary, and then say that because NOx and VOC emissions from an individual well are de minimus the action is presumed to conform. BLM's proposal has exactly the effect that EPA expressly tried to avoid—segmenting an activity in such a way that "might provide an overall inaccurate estimate of emissions." 58 Fed. Reg. 63,240.

3. The BLM cannot claim that the proposed actions are "presumed to conform" without first ensuring implementation of its RMPs conform to the Clean Air Act

Not only has BLM inappropriately proposed to segment oil and gas leasing and development actions in order to avoid scrutiny under EPA's general conformity rules, we are further concerned that the agency is overlooking the need to ensure implementation of its Resource Management Plans ("RMPs") conform to the Clean Air Act.

Here, while the BLM claims that many actions within the Upper Green River Basin Nonattainment Area produce emissions that are below de minimis thresholds, the agency overlooks the fact that all of these actions are undertaken pursuant to prior approvals, namely the applicable RMPs and their associated Records of Decision. This is a significant oversight. The BLM cannot possibly claim the actions identified in its "presumed to conform list" would conform to the Wyoming SIP unless and until the agency can demonstrate that full implementation of its RMPs also conform to the Wyoming SIP.

2017-004853-00204

In this case, the activities identified by the BLM as "presumed to conform" are all undertaken in accordance with RMPs approved for the Pinedale and Rock Springs Field Offices. The 2008 Pinedale RMP specifically states, "This Approved RMP and resulting Record of Decision (ROD) for the Pinedale planning area are intended to provide land use planning and management direction on a broad scale and to guide future actions." Pinedale RMP at 2-1. The 1997 Rock Springs RMP (a.k.a., the Green River RMP) similarly states, "All public land and resource uses in the planning area must conform with the decisions, terms, and conditions of use described in this RMP." Green River RMP at 3. These RMPs simply echo the mandate of the Federal Land and Policy Management Act ("FLPMA"), which states that the BLM "shall manage the public lands [] in accordance with the land use plans developed [under FLPMA] when they are available[.]" 43 U.S.C. § 1732(a). To this end, BLM regulations state, "All future resource management authorizations and actions [] shall conform to the approved [resource management] plan." 43 C.F.R. § 1610.5-3(a).

In its project-level actions, BLM acknowledges the force and effect of its RMP approvals. For instance, in a recent EA for an oil and gas drilling proposal, the agency states, "This proposed action is subject to the following land use plan and is also in conformity with the following Environmental Impact Statements (EISs) and Environmental Assessments (EAs): [] Pinedale Resource Management Plan (RMP)/Environmental Impact Statement (EIS)/Record of Decision (ROD) As Amended." Exhibit 13, BLM, "Environmental Assessment, Ultra Resources Inc., Warbonnet 5-15 SIMOPS, DOI-BLM-WY-D010-2017-0019-EA" (Nov. 2016) at 2. BLM's Land Use Planning Handbook confirms that once RMPs are approved, they are "implemented" through "activity-level" or "project-specific" plans. BLM Land Use Planning Handbook, H-1610-1, Section IV.A at 29.

Thus, while the BLM may take site-specific or project-level actions, such as to approve the leasing, drilling, and production of oil and gas wells, they cannot proceed without the antecedent action of BLM approving and implementing an RMP. Given this, the BLM must necessarily ensure that the action of implementing its RMPs is first and foremost consistent with the Clean Air Act before the agency can possibly assert that actions undertaken in accordance with the RMPs are consistent with the Clean Air Act.

That BLM RMPs are first and foremost subject to Clean Air Act general conformity requirements is underscored by EPA's general conformity rules, which clearly indicate the the agency is required to ensure implementation of RMPs conform to applicable SIPs. Under the rules, federal action is broadly defined to mean, "any activity engaged in by a department, agency, or instrumentality of the Federal government, or any activity that a department, agency or instrumentality of the Federal government supports in any way, provides financial assistance for, licenses, permits, or approves[.]" 40 C.F.R. § 93.152 (defining "Federal action"). Implementation of the Pinedale and Green River RMPs certainly represents an "activity engaged in by" the BLM.

Even if the BLM does not believe that ongoing implementation of RMPs constitute "federal action" as defined by EPA's general conformity rules, then at a minimum, the fact that implementation of RMPs may not conform to the Wyoming SIP means that the agency is failing to protect air quality standards consistent with FLPMA. FLPMA requires that RMPs, "provide

for compliance with applicable pollution control laws, including State and Federal air [] pollution standards or implementation plans." 43 U.S.C. 1712(c)(8). If an RMP is not providing for compliance with applicable air pollution standards or implementation plans, then the BLM must amend or revise the RMP to ensure compliance in accordance with 43 C.F.R. §§ 1610-5.5 or 1610-5.6. To this end, the BLM must amend or revise the Pinedale, Green River, or other applicable RMPs so as to meet EPA general conformity rules prior to approving any "presumed to conform list."

The agency's Land Use Planning Handbook underscores the need for the BLM to amend or revise the Pinedale and Green River RMPs to address general conformity requirements and new air quality concerns in the Upper Green River Basin. With regards to revising its RMPs, the Handbook stats that, "revisions are necessary if monitoring and evaluation findings, new data, new or revised policy, or changes in circumstances indicate that decisions for an entire plan or a major portion of the plan no longer serve as a useful guide for resource management." BLM Land Use Planning Handbook, H-1610-1, Section VII.C at 46. Here, given the new designation of the Upper Green River Basin as nonattainment, as well as the new applicability of EPA's general conformity rules, it appears that decisions for the entire Pinedale and Green River RMPs no longer serve as a useful guide for resource management, particularly with regards to protecting air quality.

With regards to amending its RMPs, the Handbook states that amendments are needed whenever there is a need to "[c]onsider a proposal or action that does not conform to the plan," "implement new or revised policy that changes land use plan decisions," "respond to new, intensified, or changed uses on public land," or "consider significant new information from resource assessments, monitoring, or scientific studies that change land use plan decisions." BLM Land Use Planning Handbook, H-1610-1, Section VII.B at 45. Here, the designation of the Upper Green River Basin as a Nonattainment Area and the new applicability of EPA's general conformity rules confirms that: 1) implementation of project-level pollutant emitting actions under the RMPs do not conform with the requirement to protect air quality standards; 2) the new applicability of general conformity rules means that the BLM must implement a new policy with bearing on RMP decisions; 3) the designation of the Upper Green River Basin Nonattainment Area means that uses of public lands pose new and more intensive air quality impacts than previously determined; and 4) the designation of the Upper Green River Basin as nonattainment and the new applicability of EPA general conformity rules represents significant new information that has major bearing on RMP decisions.

Given the widespread implications of the nonattainment designation and effect of general conformity requirements, it appears that revision of the Pinedale and Upper Green River RMPs is warranted. At a minimum, they must be amended to ensure protection of air quality under FLPMA and to ensure that implementation of the RMPs conform to the Wyoming SIP.

The need to revise or amend the Pinedale and Green River RMPs is underscored by the very fact that BLM has proposed a "presumed to conform list" in the first place. The proposed list is, in essence, represents a sweeping change in the way lands and resources are to be managed within Upper Green River Basin Nonattainment Area. The proposed list is, in effect, a de facto proposal to revise or amend the RMPs. In light of this, the BLM absolutely must

explicitly revise or amend its RMPs consistent with 43 C.F.R. §§ 1610.5-5 or 1610.5-6 in order to adopt any such list and fully comply with EPA general conformity rules.

4. Lack of adequate supporting information and analysis regarding oil and gas development and production emissions.

We are finally concerned over the accuracy of the data relied upon by BLM to presume that emissions from oil and gas development and production emissions would fall below de minimis thresholds in EPA's general conformity rules.

In particular, the BLM's estimates of NOx and VOC emissions from oil and gas wells in the Upper Green River Basin appear to be significantly lower than numerous estimates the BLM has prepared for oil and gas development throughout the western U.S. including in the Green River Basin. In a 2013 report prepared for the BLM by Kleinfelder, the agency reported that natural gas wells in the Green River Basin emit on average 14.6 tons per year of NOx and 5.2 tons per year of VOCs. *See* Table below. These per well estimates are far greater than the estimates presented by the BLM in its proposal, raising serious concerns that the agency has significantly underestimated reasonably foreseeable emissions.

Per well NOx and VOC emissions estimated by BLM for Green River Basin gas wells. *See* Exhibit 7 at 2.

Pollutant	Per Well Emission Rate
NOx	14.6 tons/year
VOC	5.2 tons/year

Not only that, but BLM's estimates of per well NOx and VOC emissions presented in its proposal appear to represent exceptionally low rates as compared to reports the agency has prepared elsewhere in the western U.S. In Colorado, for example, the BLM reports per well emissions of NOx to be around 14-16 tons/year and emissions of VOCs to be only as low as 3.4 tons/year. In Utah, the BLM reported similar emission rates. *See* Tables below.

Per well NOx and VOC emissions estimated by BLM for southeastern Colorado. *See* Exhibit 14, BLM, "Environmental Assessment for the Royal Gorge Field Office November 2016 Competitive Oil and Gas Lease Sale" (Nov. 2016) at 22.

Pollutant	Oil Well Emission Rate	Gas Well Emission Rate
NOx	14.6 tons/year	15.73 tons/year
VOC	21.72 tons/year	34.06 tons/year

2017-004853-00204

Per well NOx and VOC emissions estimated by BLM for Little Snake Field Office of Colorado. *See* Exhibit 15, BLM, "Environmental Assessment for the May 2016 Competitive Oil and Gas Lease Sale" (Feb. 2016) at 22.

Pollutant	Per Well Emission Rate
NOx	15.63 tons/year
VOC	3.40 tons/year

Per well NOx and VOC emissions estimated by BLM for Vernal Field Office of Utah. *See* Exhibit 2 at 38.

Pollutant	Per Well Emission Rate
NOx	16.4 tons/year
VOC	9.0 tons/year

In its proposal, the BLM estimates that on a per well basis, VOCs will be less than one ton per year. This seems incredibly incongruous with the findings of the agency both in the Upper Green River and beyond. Further, BLM estimates that at most, wells will emit up to 5.6 tons/year of NOx. This estimate puts per well NOx emissions on part with per well NOx emissions from gas wells in the San Juan Basin, which is very odd given that the amount of time and energy needed for well development in the San Juan Basin is far less than in the Green River Basin. Regardless, as BLM's 2013 report on emissions from representative wells in the western U.S. demonstrates, emissions from individual wells are generally much higher than reported by the agency in its proposal. *See* Table below.

Per well NOx and VOC emissions for other representative wells in the western U.S. *See* Exhibit 7 at 2.

Pollutant	Gas-Uinta/Piceance	Gas-San Juan	Oil-Williston	Oil-Denver
NOx	15.6 tons/year	5.6 tons/year	15.6 tons/year	6.3 tons/year
VOC	3.4 tons/year	5.3 tons/year	17.6 tons/year	6.7 tons/year

The issue of ground-level ozone pollution in the Upper Green River Basin of Wyoming is a serious public health concern. Ground-level ozone concentrations that greatly exceed national ambient air quality standard levels regularly occur in the Upper Green River Basin during the winter, and have been linked to the extensive oil and gas operations in the region. *See* Wyoming Department of Health, Associations of Short-Term Exposure to Ozone and Respiratory Outpatient Clinic Visits — Sublette County, Wyoming, 2008–2011 (March 1, 2013). A 2009 study documented ground-level hourly ozone concentrations in the vicinity of the Jonah–Pinedale Anticline natural gas field that reached 140 ppb in winter. *See* Schnell, Russell C. et al., "Rapid Photochemical Production of Ozone at High Concentrations in a Rural Site During Winter," 2 *Nature Geoscience* 120 (2009). Given this, the BLM must ensure that its conformity

determinations under the Clean Air Act are legitimate, supported by the best available science, and put public health protection at the forefront.

Sincerely,

Jeremy Nichols
Climate and Energy Program Director
WildEarth Guardians
2590 Walnut St.
Denver, CO 80205
(303) 437-7663
jnichols@wildearthguardians.org

Diana Dascalu-Joffe
Senior Attorney
Center for Biological Diversity
1536 Wynkoop Street, Suite 421
Denver, CO 80202
720-925-2521
ddascalujoffe@biologicaldiversity.org

Bruce Baizel
Director, Energy Program
Earthworks Oil and Gas Accountability Project
PO Box 1102
Durango, CO 81302
(970) 259-3353
bruce@earthworksaction.org

Erik Molvar
Executive Director
Western Watersheds Project
319 South 6th St.
Laramie, WY 82070
(307) 399-7910
emolvar@westernwatersheds.org

Shelley Silbert
Executive Director
Great Old Broads for Wilderness
PO Box 2924
Durango, CO 81302
(970) 385-9577
shelley@greatoldbroads.org