

**DEFENDERS OF WILDLIFE
WYOMING OUTDOOR COUNCIL
BIODIVERSITY CONSERVATION ALLIANCE
GREATER YELLOWSTONE COALITION
JACKSON HOLE CONSERVATION ALLIANCE
NATURAL RESOURCES DEFENSE COUNCIL
THE WILDERNESS SOCIETY
UPPER GREEN RIVER VALLEY COALITION
WYOMING CHAPTER OF THE SIERRA CLUB
WYOMING WILDERNESS ASSOCIATION**

Prill Mecham, Field Manager
BLM Pinedale Field Office
432 East Mill Street
P.O. Box 768
Pinedale, Wyoming 82941

Re: Scoping Comments for the Jonah Infill Drilling

May 12, 2003

Dear Ms. Mecham:

The following comments are submitted on behalf of Defenders of Wildlife, Wyoming Outdoor Council, Biodiversity Conservation Alliance, Greater Yellowstone Coalition, Jackson Hole Conservation Alliance, Natural Resources Defense Council, The Wilderness Society, the Upper Green River Valley Coalition, Wyoming Chapter of the Sierra Club, and Wyoming Wilderness Association during the scoping process for the Jonah Infill Drilling Project (Infill Project) that were solicited by the Bureau of Land.

As you are well aware, our groups have an ongoing interest in the management of the public lands and resources in the, Pinedale Resource Area (also known as the Upper Green River Valley). We are especially concerned about the impacts that oil and gas exploration, leasing, and development have on air quality, water quality, and world-class wildlife resources in the Upper Green. Our deep concern over the natural resources in the Upper Green River Valley has been triggered by the major natural gas boom that is occurring today across the majority of the Valley with new wells going in as fast as the BLM can grant approval and industry can secure the drill rigs. This headlong rush to explore the Upper Green River Valley is currently occurring without a careful, comprehensive analysis of the impacts of the oil and gas development and in excess of the reasonable foreseeable development scenario set forth in the outdated RMP. No one knows at what point the region's wildlife populations will be threatened or when airborne pollution from the Valley's booming oil and gas development will significantly degrade the air and water quality of the nearby wilderness areas, Greater Yellowstone's high lakes, and the Green River and its tributaries. With industry having secured approval to drill thousands of new wells in the Valley and new lease rights being sold on a regular basis, the Valley could end up being reduced

to a single, dominant use – oil and gas production. In essence, 1.2 million acres of the public lands that link the Greater Yellowstone Ecosystem together could be converted to a single, continuous, industrial sacrifice zone.

While we understand that there will be energy development in the Upper Green River Valley, we believe that for public health, environmental, and economic reasons, decision makers *must* consider – and avoid – the significant impacts of large-scale energy development on the Valley’s other world-class natural values and local communities. Such impacts include but are not limited to fragmentation of wildlife habitat, marring of scenic vistas, degradation of air quality, alteration of vegetation cover, and pollution and draining of water resources.

To address such issues, the BLM must consider – and include – provisions in the Jonah Infill Drilling Project Environmental Impact Statement and Record of Decision (Infill Project EIS/ROD) to ensure that the highly profitable oil and gas industry will be held accountable for the full liability of conducting its business in the Upper Green River Valley. Inclusion of such provisions are essential as the Jonah Area has already become an industrialized zone and industry’s plan to nearly triple the number of wells already permitted will further degrade any other natural resources that exist in the area.¹

The following comments discuss such provisions in detail but as a preliminary matter, we would like to highlight the fact that the environmental analysis of this project *must be postponed* until the BLM has revised and issued a ROD revising its overarching Resource Management Plan (RMP). To do otherwise will foreclose options that the agency has available to it. Following this discussion we ask the BLM to consider requirements applicable to any EIS, particularly at the scoping stage. Next we ask BLM to ensure that RMP abides by the requirements applicable to land use planning established by the Federal Lands Policy Management Act (FLPMA). In the final section we will address specific resource concerns and the legal requirements applicable to those concerns that the EIS must address.

SECTION 1

THE BLM MUST POSTPONE THE ENVIRONMENTAL ANALYSIS OF THIS JONAH INFILL DEVELOPMENT PROJECT UNTIL THE PINEDALE RMP HAS BEEN REVISED AND A RECORD OF DECISION SIGNED

The National Environmental Policy Act (NEPA) limits the actions an agency may take during the NEPA process. Specifically, NEPA requires that,

Until an agency issues a record of decision . . . no action concerning the proposal shall be taken which would: (1) have an adverse environmental impact; or (2) limit the choice of reasonable alternatives.

40 C.F.R. § 1506.1(a)(1)-(2); *See also* 40 C.F.R. § 1502.2(f) (stating agencies “shall not commit resources prejudicing selection of alternatives before making a final decision.”)

¹ *See* aerial photograph of the Jonah II Natural Gas Field attached as Exhibit A. Photo courtesy of The Wilderness Society and LightHawk (Jun. 2001).

This prohibition strictly applies when the interim project will prejudice the ultimate decision of a program. 40 C.F.R. § 1506.1(c)(3). Interim action prejudices the ultimate decision of a program when it tends to determine subsequent development or limit alternatives. 40 C.F.R. § 1506.1(c)(3).

Despite this express and clear prohibition, the Pinedale BLM has taken or initiated the environmental analysis of a number of actions, including this project, at the same time it is updating its Resource Management Plan (RMP) – a plan that will guide management decisions on approximately 1.2 million acres of public lands for the next 10 –15 years. The decision to evaluate additional major oil and gas development projects while also revising the Pinedale RMP *will* undoubtedly limit the choice of reasonable alternatives that the agency might take in its RMP EIS/ROD and accordingly, violate NEPA’s clear prohibition on committing resources and prejudicing the selection of alternatives before making a final decision. For instance, this concurrent evaluation could limit the alternatives the BLM has to set a reasonably foreseeable development scenario, set well spacing requirements, require the use of directional drilling and other available technologies, adopt strict mitigation measures, adopt new lease terms, etc.

Considering this clear and express prohibition, the BLM *must* postpone the environmental analysis of the Infill Project until the BLM has issued a ROD for the revised RMP. If the BLM elects to abide by this requirement we ask that the BLM file our comments for future reference as we assume that after the RMP has been complete, the BLM will proceed with the scoping on this proposal. Should the BLM elect to violate NEPA’s prohibition on interim actions and proceed with the environmental analysis of the Jonah Infill Project, we ask that the BLM carefully consider and respond to each of the following concerns.

SECTION 2

REQUIREMENTS APPLICABLE TO AN ENVIRONMENTAL IMPACT STATEMENT THAT THE BLM MUST COMPLY WITH DURING SCOPING

The “scoping” stage of preparing an environmental impact statement (EIS) requires the Bureau of Land Management (BLM) to make two determinations: (1) what is the scope of the project – in this case the Jonah Infill Drilling Project – to be analyzed in the EIS; and (2) what are the issues that will be analyzed “in depth” in the EIS. 40 C.F.R. § 1501.7(a). *See also* BLM Handbook H-1790-1.V.B.1. Other environmental reviews (such Biological Assessments and consultation for species listed pursuant to the Endangered Species Act) should be identified so that they can be done concurrently with the EIS and integrated with it. We believe the issues identified in these comments are within the legal scope of the Infill Project, and therefore they should be analyzed in depth in the Infill Project EIS.

I. THE BLM MUST FACILITATE AND ENCOURAGE PUBLIC PARTICIPATION

The BLM must hold early scoping meetings, as provided for by NEPA’s implement regulations so that the public can be fully informed of *and participate* in the Infill Project EIS process. 40 C.F.R. § 1501.7(b). Herein lies the BLM’s first *flatly egregious error*. These meetings should be held at times and places that facilitate and encourage public participation in the scoping

process. See BLM Handbook H-1790-1.V.B.c.4. In this case the BLM thwarted public participation from anyone opposed in any way to the project when the BLM decided, *the day of the only scheduled* public scoping meeting, to change the location of the meeting from the *Sublette County Public Library* to the *site of an industry sponsored barbeque*.² To require any members of the public that would like to speak out against the project to do so at *an industry sponsored event* is an unprecedented and a flagrant violation of the letter and spirit of NEPA's public participation mandates.

In addition, it is important to point out that, in the scoping notice, the BLM promised a "series of meetings".³ Yet, instead of the promised "series of meetings", the BLM only hosted a *single* scoping meeting, and again, that *single* meeting was held at an *industry sponsored event*.

Such actions not only violate federal law but also are in direct contravention of express BLM policy. Shortly after taking her position as Director of the BLM, Ms. Kathleen Clarke wrote that the agency was "practicing the Four C's in Wyoming, working with the state of Wyoming, local communities, landowners and the energy industry to find solutions." Ms. Clarke defined the "Four C's" as "cooperation, communications and consultation, all in the service of conservation."

Our groups would like to emphasize our appreciation of the ideas behind the Four C's policy. That being said however, we would also like to be clear that we are gravely disappointed in the lack of implementation of the policy as highlighted by the above initial problems with meeting NEPA's public participation mandates. Accordingly, we ask that the Infill Project EIS consider and include the four tenets of this policy – cooperation, communication, consultation, and conservation – *throughout* the environmental planning process as well as within the Record of Decision.

II. IDENTIFY PURPOSE AND NEED TO INCLUDE ENVIRONMENTAL PROTECTIONS

NEPA as well as the BLM NEPA Handbook requires BLM to identify the purpose and need of the project being analyzed. 40 C.F.R. § 1502.3; BLM Handbook H-1790-1.V.B.e. In formulating the purpose and need, the BLM cannot claim the purpose and need for the Infill Project is essentially solely defined by, and constrained by, whatever rights and desires the lessees, primarily Encana Oil and Gas Inc. and BP America, may have to develop oil and gas. BLM retains discretion relative to oil and gas development activities on public lands, even after a lease issues. Most if not all oil and gas leases provide that the lessee agrees that development and production "shall be subject to control in the public interest . . . and in the exercise of his judgment the Secretary may take into consideration, among other things, federal laws, state laws, and regulations issued thereunder" Furthermore, BLM's oil and gas leasing regulations provide that a lessee takes a federal oil and gas lease subject to stipulations in the lease, restrictions deriving from non-discretionary statutes, and "such reasonable measures as may be required . . . to minimize adverse impacts to other resource values, land uses or users not

² See *Jonah Field: the little field that could*, Sublette Examiner Oil and Gas Industry Edition at 8-9 (Apr. 24, 2003)(Attached as [Exhibit B](#)).

³ 49 Fed. Reg. 12101 (Mar. 13, 2003)(Attached as [Exhibit C](#)).

addressed in the lease stipulations at the time lease operations are proposed.” 43 C.F.R. § 3101.1-2. *See also* 30 U.S.C. §§ 226(f)-(g); 43 C.F.R. §§ 3162.3-1, 3162.5-1; Onshore Oil and Gas Order No. 1 (all authorizing continuing oversight so as to ensure environmental protection).

The Jonah NEPA documents also provide that substantial discretion is retained by BLM relative to oil and gas operations in these areas. *See Draft EIS - Jonah Field II Natural Gas Development Project* at 1-4 through 1-5. Thus, BLM cannot define the purpose and need for the Jonah Infill Project as just to allow natural gas to be developed; it must also include strong environmental protections as at least a co-equal purpose and need (see discussion of preventing unnecessary and undue degradation, below).

III. BEFORE THE PINEDALE RMP, THE JONAH II EIS/ROD, AND THE MODIFIED JONAH FIELD II EA CAN BE UTILIZED FOR TIERING, THEY MUST BE SUPPLEMENTED BY AN UPDATED NEPA ANALYSIS

NEPA’s implementing regulations encourage agencies to tier their environmental analysis to other NEPA documents whenever possible. 40 C.F.R. § 1502.20. In this case, it appears that the BLM intends to tier its environmental analysis of the Infill Project from the 1988 Pinedale RMP, the Jonah II EIS/ROD, and the Modified Jonah Field II EA (hereinafter Jonah II NEPA documents). 49 Fed. Reg. 12,101. Our groups assume this is correct because: i) the Scoping Notice for the Jonah Infill Drilling Project cites to these documents; ii) the project area is within the overall area analyzed in conjunction with the Jonah II Natural Gas Development Project; and iii) the Scoping Notice states that “Any authorization and actions proposed for approval in the EIS will be evaluated to determine if they conform to the decisions on the 1988 Pinedale RMP.” If this assumption regarding potential tiering is incorrect please let our groups know this is so.

Assuming for the moment that we are correct and the BLM intends to tier this proposal to add up to 1250 new wells over and above the 497 wells analyzed and approved to the 1988 Pinedale RMP and the Jonah II NEPA documents, we would like to point out the problems the BLM must overcome before it can properly do so.

First, we would like to highlight the fact that the 1988 Pinedale RMP is *incredibly* outdated and the analysis within is, for the most, part inadequate at this point. In short, the current RMP is over 15 years old, a number of changed circumstances have arisen in the 15 years, and the reasonably foreseeable development scenario has been dramatically exceeded thus nullifying the cumulative impacts analysis. This is yet another reason why the environmental analysis of the Infill Project cannot be completed until the BLM signs a ROD during the RMP revision process. *See* Section 1 above.

Second, the Jonah II NEPA documents, although completed more recently than the RMP, are, too, outdated. Therefore the Jonah II NEPA documents themselves must be supplemented before they can be used for tiering purposes and before any further drilling can occur. Supplementation of an EIS is required when an agency “makes substantial changes in the proposed action that are relevant to environmental concerns” or if there are “significant new circumstances or information relevant to environmental concerns” 40 C.F.R. §§ 1502.9(c)(1)(i)-(ii).

Virtually *tripling* the size of the well field analyzed in the Jonah II NEPA documents, which is what the Infill Project would do, is certainly a substantial change in the initial Jonah actions that is relevant to environmental concerns. Furthermore, the cumulative effects of the Jonah II Natural Gas Project in conjunction with the numerous other oil and gas development projects (including the Pinedale Anticline Natural Gas Development authorized *after* the Jonah II project) occurring in western Wyoming is another significantly changed circumstance, and one that was not addressed in the original Jonah II NEPA documents. In addition, wildlife data has been collected and concerns for Greater Yellowstone's wildlife are on the rise. To highlight a *few* of the changes, ongoing mule deer studies demonstrate the importance of the area for migratory mule deer, sage grouse and pygmy rabbits have been petitioned for listing under the Endangered Species Act, and mountain plover are a candidate species for listing.

The above are but examples of the significant new changes, circumstances, and information relevant to environmental impacts in the Infill Project area that demand supplementation of the existing Jonah II NEPA documents before it can be used to authorize oil and gas drilling in the Jonah Area in general. The Supreme Court has determined that the significance criteria at 40 C.F.R. § 1508.27 are relevant to determining whether to supplement an existing NEPA document, and when they are considered it is clear the 1988 Pinedale RMP and the Jonah II NEPA documents must be supplemented.

We would also like to note, without going into detail, that if the BLM intends to tier off of the Pinedale Anticline Natural Gas Development Project NEPA documents, these too must be supplemented as significant changed circumstances have arisen since these documents were issued and signed.

IV. SET FORTH A REASONABLE RANGE OF ALTERNATIVES

The range of alternatives is “the heart of the environmental impact statement.” 40 C.F.R. § 1502.14. Accordingly, NEPA requires that BLM, in the instant EIS:

- (1) Present the impacts of the proposal and alternatives in comparative form, in order to sharply define the issues and provide a clear basis for choice among the options by the decision-maker and the public;
- (2) Rigorously explore and objectively evaluate *all reasonable alternatives*;
- (3) Devote substantial treatment to each alternative;
- (4) Include reasonable alternatives not within the jurisdiction of the lead agency; and
- (5) Include *appropriate mitigation measures* not already included in the proposed action or alternatives.

40 C.F.R. §§ 1502.14; 1502.14(a), (b), (c) and (f) (emphasis added).

Such objective evaluation is gravely compromised when agency officials bind themselves to a particular outcome or foreclose certain alternatives at the outset. Therefore, in the context of oil and gas development, in the Infill Project Area, BLM must use the scoping process to develop alternatives that emphasize needed environmental protection even if such alternatives limit

and/or strongly regulate natural gas development and not dismiss such options without a thorough and careful analysis in the EIS. In short, the BLM *must* devote substantial treatment to and a rigorous analysis of the alternative that seeks to conserve Wyoming's great wildlife, clean air, and clean water instead of merely moving forward with the highest level of industrialization as proposed by the oil and gas industry.

Particular alternatives or elements of alternatives that we request BLM to fully develop and consider in the Infill Project EIS, and adopt in the ROD, include the following:

- An alternative that requires that new wells be directional-drilled only from existing well pads. This option is further developed below in Section 4(I)(B).
- Alternatives that require the use of best available technologies. For example, the BLM should require the operators to capture, versus flare, gas thereby decreasing the amount of greenhouse gases being placed into the atmosphere.
- A wide range of alternatives providing for different numbers of wells. Encana Oil and Gas Inc. and BP America have proposed to develop up to 1,250 new wells. The BLM must examine alternatives that would provide for lower levels of industrialization.
- A wide range of alternatives providing for different configurations and spacing of wells must be considered. The regulations at 43 C.F.R. § 3162.3-1(a)(3) allow BLM to regulate well spacing pursuant to “any other program established by the authorized officer”—well spacing designations of the State oil and gas commission are not controlling. The well spacing desired by lessees is also not determinative due to the discretion retained by BLM to regulate gas development and due to the requirement for BLM to prevent unnecessary or undue degradation. BLM should fully utilize this authority by specifying in the ROD well spacing densities that are appropriate for protecting other resource values in the Infill Project Area, as required pursuant to 43 U.S.C. § 1732(b) and other law.
- Consideration of alternatives that require offsite mitigation to decrease the impacts of oil and gas development caused by the Infill Project, and require such mitigation in the ROD for the project. Exploration of this option is crucial as the Jonah II Natural Gas Project Area and the other natural resources within the project area have already been tremendously impacted by oil and gas development.

Alternatives embodying these elements set forth in our comments *must not* be treated as straw men whose only function is to provide “extremes” against which to contrast “moderate” alternatives. To the contrary, BLM must provide full, careful, and objective consideration of alternatives embodying these elements.

V. CONSIDER CONNECTED, CUMULATIVE, AND SIMILAR ACTIONS

In determining the scope of the Infill Project EIS, BLM must consider “connected actions,” “cumulative actions,” and “similar actions.” 40 C.F.R. § 1508.25.

A. CONNECTED ACTIONS

Connected actions are actions that are “closely related” to the Infill Project EIS. Certainly in this regard, the Infill Project EIS must consider the actions occurring pursuant to the Pinedale Field Office RMP EIS and ROD, the Jonah II Natural Gas Project EIS/ROD, the proposed South Piney Development Project, and *all* of the other numerous and ongoing oil and gas projects occurring in *southwestern* Wyoming.

B. SIMILAR ACTIONS

Similar actions include authorizations for oil and gas development occurring on State and private lands in or adjacent to the geographic area of the Infill Project Area, Forest Service Forest Plans and other analyses authorizing oil and gas activities on nearby lands administered by the Forest Service, and RMPs for adjacent BLM Field Offices/Districts. The scope of the EIS should include a detailed analysis of these similar actions so as to foster informed public participation in the Infill Project and informed decision-making by BLM.

For instance, on March 7, 2003, the Bridger-Teton National Forest announced its decision to *not* authorize the BLM to issue oil and gas leases in Management Areas 21, 45, 71, and 72 qualifying this decision not to lease by adding, “Should new information or changed conditions occur, the Forest Service may re-evaluate this decision at anytime.”⁴

With the conclusion of the environmental analysis for the 376,000-acre block of the Bridger-Teton National Forest, Forest personnel will now be available to respond to numerous lease request for that portion of the Forest where consent to lease has already been given. There are now 613,500 acres with a consent to lease decision and 280,947 acres requested for leasing from 1996 to present. I view progress on this leasing backlog as critically important.⁵

As the lands with a consent to lease decision sit directly adjacent to the Pinedale Resource Area, the Infill Project must include an ecosystem-wide impacts study taking the direct, indirect, and cumulative impacts that leasing, exploration, and development actions on the Bridger-Teton National Forest into account when determining the extent to which the BLM will allow development in the Pinedale RA. This is of particular import with regard to the impacts on air quality, water quality, and wildlife.

For example, the *draft* EIS on leasing in MA 21, 45, 71, and 72 found that air quality impacts from the extensive BLM development were approaching the acceptable limits for the Class I airshed of the Wilderness Areas in the Wind River Range. Thus, further development in either the Pinedale RA, as proposed with this project, and/or the Bridger-Teton National Forest could lead to significant adverse impacts and potential violations of the Clean Air Act. This possibility

⁴ Letter to Bob Bennett, BLM State Director from Kniffy Hamilton, Forest Supervisor, Bridger-Teton National Forest (Mar. 7, 2003)(Attached as [Exhibit D](#)).

⁵ *Id.*

highlights the importance of completing an ecosystem-wide impacts study before allowing *any* development to proceed.

With respect to private lands activities the Infill Project EIS should disclose how the following impacts, in combination with up to 1250 new wells, will impact other valuable natural resources such as air, water, and wildlife:

- Subdivision Sprawl/Zoning
- Roads
- Fences
- Grazing

C. CUMULATIVE ACTIONS

Cumulative actions are actions that, incrementally, have cumulatively significant impacts, even if the individual impacts are minor. Thus, BLM should define the scope of the EIS to include analysis of the cumulative effects of actions/projects that have impacts in common with those resulting from natural gas development. Actions that should be addressed in a cumulative fashion include, but are not limited to:

- Road construction activities
- Activities leading to soil and vegetation disturbance
- Activities leading to changed habitat structure
- Activities leading to habitat fragmentation; and
- Activities causing air or water pollution.

These cumulative impacts result from a number of cumulative actions, including oil and gas development, and thus they must be addressed in a comprehensive manner. Similarly, the scope of the EIS must include consideration of direct and indirect impacts of oil and gas development activities. 40 C.F.R. § 1508.25.⁶

D. PRESENTATION OF THE IMPACTS ANALYSIS

NEPA requires that environmental documents be written in a manner that the public can readily understand. 40 C.F.R. § 1502.8. In view of the vast array of projects - both oil and gas related and non-oil and gas related - that the Pinedale BLM has completed, implemented, or is currently analyzing we ask that the impacts analysis be set forth in a manner that meets NEPA's requirement that information be presented in a format that is easy to understand.

⁶ In this regard we ask BLM to consider the report *Fragmenting Our Public Lands, The Ecological Footprint From Oil And Gas Development*, The Wilderness Society (C. Weller et al., authors) (Sep. 2002)(Attached as Exhibit B in our Comments submitted during the scoping period for the RMP revision process). In particular we ask BLM to utilize the methodology for cumulative effects assessment recommended in that report.

For instance, when summarizing the extent of oil and gas leasing in the Resource Area (which the BLM must do to evaluate reasonably foreseeable future development) the BLM should include a map of all the leases in the Resource Area and on adjacent lands. When summarizing past, current, and reasonably foreseeable seismic exploration projects the BLM should include a table summarizing the following information:

- Location of each project/project boundaries (a map would be appropriate);
- Date of each project;
- Size of each project (total surface area w/in project boundaries), number of lines, miles of lines;
- Equipment utilized;
- Amount of surface-utilization;
- Resources impacted (including impacts to wildlife and the effects of increased accessibility);
- Reclamation efforts utilized.

When summarizing the oil and gas projects throughout *southwest* Wyoming the EIS should contain the following:

- Location of each project/project boundaries (a map would be appropriate);
- Date that each project was approved with a prediction on when the project will be completed;
- Size of each project (total surface area w/in project boundaries);
- Number of acres directly disturbed by well pads, roads, pipelines, etc.;
- Number of wells permitted; number of well pads permitted;
- Number of wells drilled to date;
- Resources impacted (including impacts to wildlife and the effects of increased accessibility);
- Reclamation efforts completed to date.

These only serve as examples of the type of information that must be including in the impacts analysis. The same type of information should be included regarding other management issues such as grazing, ORV use, travel planning, etcetera.

VI. GATHER NECESSARY INFORMATION AND DISCLOSE WHERE INFORMATION IS LACKING

It is rarely possible for the BLM (or any other Federal agency) to obtain perfect amounts of information. However, BLM must not allow this fact to stymie environmentally informed decision-making by BLM. CEQ regulations essentially establish a presumption *in favor of* obtaining information that is essential to reasoned decision-making. *See* 40 C.F.R. § 1502.22 (emphasis added); *See also* BLM Handbook H-1790-1.III.A.2.d. BLM should take steps to gather needed information in all but the narrow range of exceptions permitted by the CEQ regulations. But if BLM concludes information is not essential to reasoned consideration of alternatives, or the cost of obtaining the information is exorbitant, or the means for acquiring the information are unknown, the BLM must nevertheless scrupulously abide by CEQ guidance in this regard, namely that “credible scientific evidence” be presented relative to reasonably

foreseeable significant adverse impacts (including low likelihood but catastrophic impacts) so that the impacts can be assessed based on approaches that are “generally accepted in the scientific community.” See 40 C.F.R. § 1502.22(b). See also 40 C.F.R. § 1502.24 (requiring professional and scientific integrity in an EIS). Among other things, to meet these requirements, BLM must disclose the baseline conditions present in the project area prior to any development and disclose the current ecological conditions of all resources in the Infill Project area in order to evaluate environmental conditions and impacts in an informed manner.

In this regard, it is of particular importance that the BLM collect (if it has not done so already) baseline data on important resource issues including, but not limited to, air and water quality data and wildlife data such as populations, migrations, habitat assessments etc. If the BLM has this data it must set such data forth in the EIS. If the BLM does not have baseline data it must set forth how it intends to deal with the lack of data in the EIS and how it intends to gather such data in the future.

For example, with respect to wildlife, the BLM has an ongoing duty, pursuant to FLPMA, the 1988 RMP, and the Pinedale Anticline Natural Gas Project ROD to inventory its lands and monitoring the impacts of activities on wildlife species.⁷ The BLM must disclose how it has, since 1988, monitored for this data and what the findings have been. If the BLM has failed to complete such monitoring, this too must be disclosed in the Infill Project EIS.

Such inventory and monitoring activities are crucial given the important wildlife values in the Pinedale Resource Area. For instance, across the globe there are 29 species of mammals that depend on a long-range migration for their very survival and the pronghorn of western Wyoming are one such species. Despite the global significance of this migration, monitoring efforts are, in short, lax. To illustrate this conclusion, consider this.

In view that there is a great deal of uncertainty about how oil and gas development will impact other valuable natural resources, the BLM, cooperatively with the oil and gas operators in the Pinedale Natural Gas Project Area are *legally mandated* to implement monitor plans *for a number of species*.⁸ With respect the pronghorn, in July 2000 upon approving industry’s right to construct and drill over 700 wells in an area referred to as the Mesa, the BLM required the implementation of a plan to:

- Monitor and document mule deer and antelope populations associated with the PAPA for changes, if any, in numbers, distribution, and reaction to oil /gas development;

⁷ FLPMA requires the Secretary of the Interior to “prepare and maintain on a continuing basis an inventory of all public lands and their resources and other values.” 43 U.S.C. §1711(a). See also, 1988 Pinedale RMP at 21 stating “The Pinedale Resource Area will continue to be inventoried to identify potential habitat and occurrence for T & E species.”; Pinedale RMP at 22 stating “Mule deer, elk, antelope, and sage grouse use patterns will be monitored. Habitat trend for the species will be interpreted through survey data collected, in cooperation with livestock and watershed studies and monitoring activities.”; Pinedale Anticline ROD at Appendix C-2 through C-3 detailing the monitoring plans for wildlife, water air, and cultural resources.

⁸ *Record of Decision for the Pinedale Anticline Natural Gas Project* at C-1 (Jul. 2000).

- Document changes, if any, in crucial winter habitat and quality, and changes in animal numbers, distribution, and reaction.⁹

Despite this mandate in 2001 the BLM decided that instead of monitoring, it would simply “note” pronghorn antelope observations during mule deer surveys.¹⁰ This is wholly unacceptable for a number of reasons not the least of which is that at least two years of baseline data has been lost due to the BLM’s blatant violation of its own mandates despite the submission from the WGFD of a comprehensive monitor plan for pronghorn.¹¹ Such failure to monitor must be rectified immediately and then rectified permanently in documents such as the RMP EIS/ROD and the Infill Project EIS/ROD.

VII. BASE ANY ASSUMPTIONS REGARDING SURFACE DISTURBANCE CAUSED BY DEVELOPMENT ON INFORMATION GAINED DURING GROUND-TRUTHING ACTIVITIES AND ON ANALYSIS OF SATELLITE IMAGERY

BLM has completed a number of environmental analyses of oil and gas projects. Each of these analyses utilizes *assumptions* with respect to the amount of surface disturbance that such projects cause. Now that the projects have been implemented, and in some cases completed, the BLM must revisit its assumptions and evaluate whether the assumptions regarding surface disturbance from well-pad construction, road-building, pipeline infrastructure, construction of compressor stations, effects on wildlife, etcetera are correct. (This must also be done as part of the cumulative impacts analysis). This analysis must be completed for each oil and gas project within the Resource Area and should also consider projects on adjacent lands. A table with accompanying text would best convey this information to the public.

Further to properly evaluate whether the assumptions are correct the BLM must use high quality, accurate information to ensure the professional and scientific integrity of its conclusions in this regard. 40 C.F.R. §§ 1500.1(b); 1502.24. With respect to surface disturbance, to our knowledge the BLM has two options. First, the BLM may physically place a team on the ground in the oil and gas project areas to ground-truth their assumptions about surface disturbance. Second, the BLM could use satellite imagery to digitize and determine the extent to surface disturbance has impacted the Resource Area.¹² Ideally, the BLM will use a combination of imagery-based analysis followed up by on-the-ground investigations. Once this data is collected and analyzed it must be shared with the public in the Infill Project EIS much like the BLM did in the *draft* Environmental Impact Statement for the Pinedale Anticline Natural Gas Project.

⁹ *Id.* at C-2.

¹⁰ *Wildlife Monitoring Protection Plan for the Pinedale Anticline Project 2001* (May 2001)(Attached as [Exhibit E](#)).

¹¹ *Draft* Monitoring Plan submitted to the AEM Wildlife Task Group by Doug McWirter, Biologist, WGFD (Jan. 15, 2001)(Attached as [Exhibit F](#)).

¹² See the satellite imagery processed courtesy of SkyTruth for the Upper Green River Valley Coalition included within the brochure attached as [Exhibit G](#).

VIII. THE EIS AND ROD MUST INSURE THAT THE POLICIES AND GOALS SET FORTH IN THE NATIONAL ENVIRONMENTAL POLICY ACT ARE MET

BLM must bear in mind that the “primary purpose” of an EIS is to “insure that the policies and goals defined in [NEPA] are infused into the ongoing programs and actions of the Federal Government.” 40 C.F.R. § 1502.1. The policies and goals of NEPA include:

- Encouraging a “productive and enjoyable harmony between man and his environment”;
- Promoting “efforts which will prevent or eliminate damage to the environment and biosphere”;
- Using “all practicable means and measures . . . to create and maintain conditions under which man and nature can exist in productive harmony . . .”;
- Fulfilling “the responsibilities of each generation as trustee of the environment for succeeding generations”;
- Assuring “all Americans safe, healthful, productive and esthetically and culturally pleasing surroundings”;
- Allowing beneficial use of the environment “without degradation . . . or other undesirable or unintended consequences”;
- Preserving “important historic, cultural and natural aspects of our national heritage . . .”;
- Achieving a “balance between population and resource use . . .”, and
- Enhancing “the quality of renewable resources” and maximizing recycling of depletable resources.

42 U.S.C. §§ 4321-4331. *See also* BLM Handbook H-1790-1.V. B.2.a.(3). Thus, the needs that BLM must identify for analysis in its EIS include the above goals and policies, and we ask BLM to “insure” that these goals and policies are “infused” into the Infill Project EIS and ROD.

IX. INSURE ADHERENCE WITH INTERNATIONAL PRINCIPLES AND LAW AND UTILIZE CURRENT ECOLOGICAL DATA

NEPA requires BLM to make a number of considerations that we specifically urge BLM not to overlook. NEPA requires the BLM to “recognize the worldwide and long-range character of environmental problems and thus support international efforts to prevent declines in the world environment,” to “insure that presently unquantified environmental amenities and values” are given consideration,” and “initiate and utilize ecological information in the planning and development of resource-oriented projects.” 42 U.S.C. § 4332, 40 C.F.R. § 1507.2. *See also* BLM Handbook H-1790-1.V. B.2.a.(3).

Thus, in preparing the Infill Project EIS and ROD, BLM should consider, analyze, and wherever appropriate facilitate, international efforts to prevent environmental decline. These include a number of international agreements and treaties for resource protection, such as United Nations biosphere reserves, the Kyoto protocols, migratory bird treaties, the Convention on International Trade in Endangered Species, and international efforts related to biological diversity preservation, among others.

The EIS for the Infill Project should also explicitly address unquantified environmental values and ensure they are given equal emphasis relative to economic analyses. For example, many residents of the Pinedale Resource Area consider the sense of open space as well as quiet to be important values. The EIS should address the impact of the various analyzed alternatives on these local unquantified values and ways to mitigate for impacts on these values.

Finally, the Infill Project EIS must ensure up-to-date ecological information is utilized in developing the documents. For example, as discussed in detail below in Section 2(VII) above, to determine the extent of surface disturbance in the Resource Area, the BLM should utilize current satellite imagery combining the use of the imagery with ground-truthing. This would give the BLM essential information with respect to the actual amount of surface disturbance throughout the Resource Area as well as provide the BLM with scientifically credible and objective information upon which to base assumptions.

SECTION 3

REQUIREMENTS APPLICABLE TO LAND USE PLANNING ESTABLISHED BY THE FEDERAL LANDS POLICY MANAGEMENT ACT

Congress enacted FLPMA in 1976 in order to provide a comprehensive statutory framework for the BLM's administration of public lands. We take this opportunity to highlight key provisions of the BLM's organic statute as they necessarily affect the current NEPA process, range of alternatives, and mitigation measures selected and analyzed in the Infill Project EIS.

I. IN MANAGING THE PUBLIC LANDS THE BLM SHALL TAKE ANY ACTION NECESSARY TO PREVENT THE UNNECESSARY OR UNDUE DEGRADATION OF THE LANDS AS REQUIRED BY FLPMA

This provision from the Federal Land Policy and Management Act (FLPMA) is a *mandatory* requirement applicable to all resource uses and decisions affecting BLM lands. 43 U.S.C. § 1732(b). Consequently, it must serve as a bedrock for all analyses in the Infill Project EIS, and activities undertaken pursuant to the ROD. It is crucial to recognize that unnecessary *or* undue degradation must be prevented; the Infill Project EIS/ROD must provide that *both* prongs of this standard are met. Clearly, the BLM bears a heavy responsibility before it can authorize activities that may degrade the public lands.

We urge BLM *not* to define “unnecessary or undue degradation” by default, in a negative fashion, in the Infill Project EIS/ROD. BLM must reject the position that because regulations provide that an oil and gas lease conveys the right to “use so much of the leased lands as is necessary to explore for, drill for . . . and dispose of all of the leased resource . . .” essentially anything an oil and gas lessee proposes to do to develop a lease is “necessary” or “due” and therefore any resulting degradation of the public lands is not “unnecessary” or “undue.” As noted above, BLM retains authority to condition oil and gas development despite issuance of a lease; issuance of a lease does not tie BLM hands to the extent it sometimes claims. Therefore, we urge BLM to require, in a direct and positive fashion, that gas development in the Infill Area not cause unnecessary or undue degradation, and to ensure that this is the case. The confusing,

circuitous approach of defining unnecessary or undue degradation by default leads, for example, to an improper failure to require directional and horizontal drilling technologies, which may not be a *lessee's* first choice, but which will still allow development of a leasehold but with far less degradation of the public lands, which is what *BLM* must concern itself with. Given the direct, unambiguous command from Congress to do *whatever* is needed to prevent unnecessary *or* undue degradation, the Infill Project EIS and ROD should define, and prevent, unnecessary or undue degradation in an equally direct, positive fashion.

II. THE REQUIREMENT TO MANAGE THE PUBLIC LANDS FOR MULTIPLE USE AND SUSTAINED YIELD HAS SUBSTANTIVE COMPONENTS THAT THE BLM MUST ABIDE BY

Under FLPMA, specific management actions like the Jonan Infill Project must be done pursuant to multiple use and sustained yield principles. 43 U.S.C. § 1732(a). The definition of multiple use in FLPMA is long, but key provisions include the following:

- Public lands and their resource values must be managed so that they “best meet the present and future needs of the American people;”
- There must be harmonious and coordinated resource management that is done “without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or greatest unit output.” 43 U.S.C. § 1702(c).

These provisions gives substance to the requirement for management actions to be done pursuant to multiple use principles.

The Jonah Infill Project must “best” meet the present and future needs of the American people. The Infill Project cannot adequately meet these needs, or generally meet these needs, or largely meet these needs, it must “best” meet them. FLPMA explicitly requires that what is “best” must be viewed from the perspective of the present and the future and all alternatives, including the proposed action, must be designed to satisfy this requirement. What is best now may not meet future needs, and since future needs may be unknown in some respects, the only way to “best” insure that future needs are met is to develop and select alternatives that have a large built-in margin of safety. To achieve a large built-in margin of safety the ROD should emphasize resource and ecosystem protection, which will best ensure that future options are retained. Furthermore, what is “best” must be determined with reference to the needs of the American people as a whole, not a small subset of the American people.

In addition to the requirement to manage for multiple use and sustained yield, Congress declared a policy in FLPMA that public lands are to be “managed in a manner that *will* protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values” as well as to “preserve and protect certain public lands in their natural condition” and provide “food and habitat for fish and wildlife.” 43 U.S.C. §1701(a)(8) (emphasis added). Consequently, Congress has made clear that strong environmental protection must be provided for in the Infill Project EIS/ROD.

SECTION 4
SPECIFIC RESOURCE CONCERNS THAT MUST BE THOROUGHLY ADDRESSED IN THE JONAH
INFILL PROJECT EIS/ROD

I. WELL FIELD DEVELOPMENT ISSUES

A. ALLOW FOR PUBLIC PARTICIPATION DURING THE SITE-SPECIFIC PHASE OF THE OIL AND GAS PLANNING PROCESS

Currently the BLM provides the public with notice of all gas field development projects. Our groups greatly appreciate the notice and opportunity to participate. However, our groups have asked, and been denied, the opportunity to receive notice of individual Applications for Permits to Drill (APDs). The Infill Project EIS/ROD should address this issue and provide that all those who request mailed notice receive such notice of all APDs issued pursuant to the any authorization of further drilling in the Jonah Project Area.

The Federal Onshore Oil and Gas Leasing Reform Act (FOOGLRA) requires that,

[A]t least 30 days before approving APDs under the provisions of a lease . . . the Secretary shall provide notice of the proposed action. Such notice shall be posted in the appropriate local office of the leasing and land management agency The requirements of this subsection are *in addition to any public notice required by other law.*

30 U.S.C. § 226(f)(1994)(emphasis added).

In addition to FOOGLRA, the CEQ regulations for implementing NEPA are mandatory and binding on all federal agencies. 40 C.F.R. § 1507.1. The CEQ's regulations require federal agencies to involve the public in decisions that affect the quality of the human environment. 40 C.F.R. §§ 1500.2(d); 1506.6. Specifically, 40 C.F.R. § 1506.6(b)(1) requires that an agency "[M]ail notice to those who have requested it on an individual action." This mandate assists federal agencies in fulfilling their obligation to encourage and facilitate public involvement in decisions which affect the quality of the human environment to the fullest extent possible. 40 C.F.R. § 1500.2(d). Furthermore, public access to APD requests will ensure that environmental information is available to citizens before decisions are made and before actions are taken as required by 40 C.F.R. § 1500.1(b). Finally, public review of APDs will assist the BLM meet its consultation responsibilities pursuant to 43 C.F.R. § 3162.3-1(h) which requires that the authorized officer shall consult with the appropriate Federal surface management agency and with *other interested parties* as appropriate" (emphasis added).

Regarding the timing of the notice, we ask that the EIS/ROD provide that the BLM send a copy of the APDs to groups requesting such notice within three business days of the day the application is received. This will maximize the time the public has to comment on APD requests as the BLM believes that the authorized officer believes must take action on the APD "[A]s soon as practical, but in no event later than 5 working days after the conclusion of the 30-day notice period for Federal lands, or within 30 days from receipt of the application for Indian lands." 43 C.F.R. § 3162.3-1(h).

This notice is of particular importance in view of a recent Instruction Memorandum aimed at expediting the APD process.¹³ As our groups have yet to see how this IM will be implemented it is essential that the BLM provide us with the opportunity to participate in the public process that we seek.

B. DIRECTIONAL DRILLING

The Infill Project EIS must fully consider, and the ROD require, the use of directional drilling technologies to the fullest extent possible. In this regard we ask BLM to fully consider the report *Drilling Smarter: Using Directional Drilling to Reduce Oil and Gas Impacts in the Intermountain West*.¹⁴ The ROD must go well beyond making provisions along the lines of “directional drilling will be considered when applications for permits to drill are filed” and “may be required if deemed practical by the authorized officer” or other similar non-binding statements that are little more than platitudes. As noted above, BLM retains discretion to condition development even after a lease is issued—its options are not nearly as limited as BLM often claims. As also discussed, BLM is *required* to do whatever is needed to prevent unnecessary or undue degradation of the public lands. Therefore, BLM should consider the *Drilling Smarter* report and the ROD should *require* that *all* new wells approved be directional drilled from existing pads in the Infill Project Area.

C. THE USE OF ALTERNATIVE AND INNOVATIVE TECHNOLOGIES

BLM recognizes that alternative and innovative technologies are advancing as industry, government and private citizens learn more about oil and gas exploration and development. This principle is based upon many factors but primarily the obligation that both BLM and operators have to protect other natural resources and the environment. BLM recognizes that if an available technology is cost-effective and can reduce impacts to other resources, the failure to implement and require the use of this technology will result in the unnecessary degradation of other natural resources in violation of the FLPMA. 43 U.S.C. § 1732(b).

Accordingly, the BLM must provide full NEPA disclosure and review of all industry practices in the *draft* EIS for this proposed project, designating a list of best practices for oil and gas development in the Upper Green River Valley including, but not limited to, directional drilling, recycling of drilling fluids, use of alternative fuel sources, and reduction of intentional venting.¹⁵

¹³ *Instruction Memorandums No. 2003-146, 2003-147, 2003-151, 2003-152, 2003-153 to All Field Officials from BLM Director* (Apr. 14, 2003) and accompanying press release (Attached as [Exhibit H](#)).

¹⁴ *Drilling Smarter: Using Directional Drilling to Reduce Oil and Gas Impacts in the Intermountain West*, Erik Molvar, Biodiversity Conservation Alliance (Spring 2002)(Attached as [Exhibit I](#)) or available at www.voiceforthewild.org.

¹⁵ For more information regarding the use of directional drilling please see *Drilling Smarter: Using Directional Drilling to Reduce Oil and Gas Impacts in the Intermountain West*, Erik Molvar, Biodiversity Conservation Alliance (Spring 2002)(Attached as [Exhibit I](#)) and Articles for the Denver Post on Directional Drilling (Nov. 17, 2002)(Attached as [Exhibit J](#)).

As production continues, technological advances will be made thus the EIS/ROD must provide a follow-up NEPA process to allow for the adoption of new practices for widespread use. In addition, the EIS should require that decisions to approve new practices shall be informed by best available information and actual monitoring data. APD approval should incorporate the use of new and alternative technologies.

In addition the Infill Project EIS/ROD should require that operators utilize renewable energy sources whenever possible. For example, operators currently utilize solar power in the oil and gas fields already developed in the Pinedale Resource Area. The EIS should disclose the extent to which renewable and alternative energy sources are already being used and discuss means to further utilize such technology.

D. EXEMPTIONS AND EXCEPTIONS TO LEASE STIPULATIONS

The EIS must address the issue of granting exemptions and exceptions to lease stipulations. At a minimum, the EIS must identify which stipulations cannot be relaxed and the specific conditions that must be met before a request to exempt or relax any of the others will be granted. In our view, relaxing environmental protections should not be allowed. All too often exemptions or exceptions are granted when a company needs “just a few more days” to complete drilling or other activities. This is not a sufficient reason in our view—the stipulations are clear and companies should be able to complete activities as agreed to, or wait a few months to complete them when resource damage is lessened. Allowing drilling to continue essentially for the convenience of a company leads to unnecessary or undue degradation by definition.

Another common rationale for permitting exemptions or exceptions are claims that “game species aren’t on the winter range yet” or “the sage grouse aren’t yet strutting” and other similar justifications. Rationales such as this are insufficient: drilling during a restricted period may prevent animals that *would have* moved onto the range from doing so, it may disturb and stress animals that are in areas adjacent to or nearby the area being drilled, it may concentrate animals in areas that are not being drilled, it may cause undisturbed areas to be overgrazed and degraded, etc. At a minimum, granting exceptions and exemptions to stipulations constitute Federal actions subject to NEPA; that is an EIS or EA needs to be prepared before they are granted, and the Infill Project ROD should so provide. The public participation requirements of NEPA must be fully complied with. Even if the Infill Project EIS provides guidance on the circumstances under which relaxation of environmental standards can be allowed, and such guidance was subject to NEPA (as it must be), BLM must still comply with NEPA when actual requests are made and the site-specific consequences can be analyzed. NEPA analysis supporting exemptions and exceptions that does not consider the site-specific issues involved is inappropriate, and the ROD should so provide.

E. NEPA AND THE ESA PROHIBIT THE DRILLING OF ADDITIONAL WELLS IN THE JONAH INFILL PROJECT AREA WHILE THE INFILL EIS IS BEING PREPARED

In the Scoping Notice the BLM stated that,

During the preparation of the EIS, proposed development of additional exploratory wells within the project area on public lands may be approved subject to an environmental review by BLM and to a finding that such development is consistent with the 1988 Pinedale RMP.

BLM cannot do this for three reasons - to proceed with exploratory drilling would: violate NEPA; further exceed the current reasonably foreseeable development scenario; and potentially violate the ESA.

CEQ regulations provide that “Until an agency issues a record of decision . . . no action concerning the proposal shall be taken which would: (1) have an adverse environmental impact; or (2) limit the choice of reasonable alternatives.” 40 C.F.R. §§ 1506.1(a)(1)-(2). *See also* 40 C.F.R. § 1502.2(f) (stating agencies “shall not commit resources prejudicing selection of alternatives before making a final decision.”). We would like to highlight the fact that impacts do not have to be “significant” for the prohibition on taking an action to apply; the action only needs to produce “adverse” environmental impacts to be barred. And as your agency is well aware, drilling, to even the smallest extent, creates a number of adverse environmental impacts as it adds toxic air pollutants to the atmosphere, removes vegetation which serves as cover and forage for wildlife, disturbs wildlife with noise and increased human presence, introduces toxic substances into the landscape, etcetera, etcetera.

Furthermore, as the BLM is well aware, the RFD scenario set forth in the 1988 RFD has been exceeded. To drill more wells, exploratory or not, would further exceed this scenario and is, simply put, illegal.

Finally, Section 7(d) of the ESA establishes similar prohibitions relative to taking actions that may affect listed species. Since the BLM itself has already identified the “action” as being a 1250 well project (on top of the existing action under the Jonah NEPA documents authorizing 497 wells and much more), for purposes of the ESA it cannot redefine the “effects of the action” to be nothing more than the impacts resulting from the “exploratory wells.” *See* 50 C.F.R. § 402.02. Consequently, BLM must consult with the Fish and Wildlife Service based on the full “action,” “action area” and “effects of the action,” not just a few (we assume) “exploratory wells.” This will first require the preparation of a biological assessment since the Infill Project is a “major construction activity” requiring preparation of an EIS. *Id.* at § 402.12(b).

Should the BLM feel it can proceed with exploratory drilling despite the above, our groups would like to *expressly* request notice via *mail* service of any proposal to undertake such an activity as required by 40 C.F.R. § 1506.6(b)(1).

F. INCLUDE PROVISIONS TO NOTIFY THE PUBLIC OF HEALTH AND SAFETY THREATS

The Infill Project EIS/ROD should include provisions requiring that if there is an immediate threat to public health, safety, or welfare or the environment, BLM will notify the operator(s) and immediately order that all wells causing these problems be shut-in pending further investigation. This provision will apply to all aspects of oil and gas extraction. Based upon a thorough

investigation, if the threat cannot be remedied by mitigation, the BLM should require that all offending well(s) be plugged, reclaimed and monitored. If mitigation can remedy the threat, the BLM should require that the shut-in order remain in effect until mitigation and monitoring measures are adopted and implemented, after full notice and hearing. Additionally, the EIS/ROD should provide that all reports of health and safety threats be readily available to the public.

G. TOXIC AND HAZARDOUS WASTES AND CHEMICALS; STORMWATER RUNOFF

The use of hydraulic fracturing and the impacts of drilling fluids (muds) and chemicals must be considered in the EIS. Hydraulic fracturing and drilling fluids contain a wide array of chemicals, many of which are clearly toxic or hazardous. The appropriateness of using these chemicals must be addressed in the EIS, and in particular the EIS and the ROD should ensure compliance with the Clean Water Act, Safe Drinking Water Act, Toxic Substances Control Act, Resource Conservation and Recovery Act, and the Comprehensive Environmental Response Compensation Liability Act (CERCLA—the Superfund) relative to the use of these and other toxic and hazardous substances.

The ROD should provide specific guidance regarding the requirements oil and gas companies must abide by to meet the requirements of these laws, and provide for complete and thorough compliance, monitoring, and enforcement by BLM. For instance, we specifically recommend that, if “fracking” is contemplated, the option of requiring water only – i.e., prohibiting the use of toxic chemicals – be considered.

In addition, spill prevention and cleanup requirements must be specified, and provisions for collecting and disposing of these wastes must be provided for in detail, again with sufficient monitoring and enforcement to ensure compliance. While Federal pollution and toxic and hazardous waste law may provide some exemptions for the oil and gas industry, BLM still has sufficient authority, and responsibility, under NEPA and FLPMA to require inventory and monitoring of these chemicals, as well as spill prevention, cleanup, and mitigation plans. *See, e.g.*, 43 U.S.C. § 1732(b); 43 C.F.R. §§ 3162.4-1(a), 3162.5-1(c)-(d); Onshore Oil and Gas Order No. 1, III.G.4.b.(7). *See also* Executive Order No. 13,016 (delegating authority to land management agencies to enforce CERCLA on lands they manage); BLM Manual MS-1703 (Hazardous Materials Management).

On a related issue, BLM should ensure that oil and gas drilling operations (including well pads) comply with any applicable stormwater discharge requirements, including acquiring NPDES permits, as required.

BLM should work with the Environmental Protection Agency (EPA) relative to regulation of hazardous and toxic wastes generated from gas development activities in the Infill Project Area. The EPA has prepared a report on the oil and gas extraction industry that we ask BLM to consider.¹⁶ The report provides information regarding toxic substances and data on rates of inspection and enforcement actions for this industry. These data show oil and gas extraction facilities receive little in the way of inspection and enforcement relative to the other 29 industrial

¹⁶ Profile of the Oil and Gas Extraction Industry, EPA Office of Compliance, Sector Notebook Project, October 2000.

sectors, despite the significant levels of toxic and hazardous materials used and generated by the industry.¹⁷ The Infill Project EIS/ROD should make provisions for ensuring that, in cooperation with the EPA, the rate of inspections (and as necessary, enforcement) is increased.

H. RIGHTS-OF WAY

Rights-of-way are part-and-parcel of energy development projects. All provisions in the Mineral Leasing Act and FLPMA must be adhered to relative to rights-of-way to help ensure environmental protection. We specifically request that the EIS address several issues.

The issue of the impact of power lines on birds and bats should be addressed, particularly with regard to raptors. Electrocutions are one negative impact of power lines, and electrocutions could violate the Migratory Bird Treaty Act and Bald Eagle Protection Act, not to mention the Endangered Species Act. The Infill Project ROD should have provisions to ensure these laws are not violated if rights-of-way are granted, as well as provisions that specify thorough monitoring and the penalties that will be imposed by BLM for failure to comply. Perhaps just as importantly, power lines change the “structure” of habitat, which may create favorable conditions for some species but be unfavorable for others. For example, there is evidence that ferruginous hawks, which are becoming rare, can be placed at a competitive disadvantage to other raptors when power lines create perches in otherwise open habitat. Likewise, the increasingly imperiled sage grouse can be further threatened if raptors are provided hunting perches in habitat occupied by sage grouse. The EIS must take account of these kinds of effects, and the ROD must ensure they are avoided or at least mitigated. For example, the ROD should require that existing rights-of-way, with similar types of structures, be utilized to the extent possible. Similarly, the impacts rights-of-way have on habitat fragmentation must be analyzed in the EIS, and provision made to avoid or mitigate these impacts in the ROD.

I. VISUAL RESOURCES

NEPA requires that measures be taken to assure for all Americans . . . aesthetically pleasing surroundings. As the BLM is aware, oil and gas development severely degrades the visual

¹⁷ Data in the report also show the oil and gas extraction industry ranks as follows in terms of creating air pollutants among the 29 industrial sectors EPA had data for in 1997:

| <u>Pollutant</u> | <u>Ranking (out of 29)</u> |
|------------------|----------------------------|
| CO | 9 th |
| NO ₂ | 3 rd |
| PM ₁₀ | 14 th |
| Particulates | 22 nd |
| SO ₂ | 2 nd |
| VOC | 5 th |

These data emphasize the importance of regulating air pollution resulting from natural gas development activities in Infill Project Area.

quality of an area. Accordingly, the Infill Project EIS must disclose which visual resource management (VRM) areas will be impacted by this project and means to fully mitigate such impacts.

J. NOISE

The EIS and the ROD itself should address issues related to noise, and its impact on the remoteness and quietness that so many seek on the public lands. Impacts of noise on wildlife should also be considered. We particularly ask that the EIS address, and the ROD provide requirements to minimize, the noise created by oil and gas exploration, development, and production activities, especially the noise problems from compressors and compressor stations. After addressing means to minimize noise we ask that the ROD provide for monitoring of noise in the oil and field and its impacts on wildlife.

K. REQUIRE THE CONTAINMENT OF LITTER AND INDUSTRIAL WASTE

The Infill Project EIS should contain a provision that requires that all construction, drilling and other areas and access roads shall be kept litter-free. Further, the BLM should require that the operator provide a trash pit or trash cage, and trash must be collected and contained during operation, that all garbage, trash, flagging, etc., be removed from the area and hauled to an authorized dump site, and that each drilling location and construction site be equipped with appropriate toilet facilities.

L. INSPECTION AND ENFORCEMENT

BLM recognizes that the many duties and requirements of federal and state laws are meaningless unless two things occur: inspection followed up by enforcement. The RMP should thus set forth strict inspection and enforcement guidelines inspecting the well sites quarterly, with at least one unannounced visit annually. All inspection findings will be kept in writing and made available to the public. In addition, BLM will back up its inspection findings with strict enforcement, including lease cancellation pursuant to 43 C.F.R. § 3163.1(a)(5) and all civil and criminal penalties in 43 C.F.R. Subpart 3163.

To be sure the actions are completed, the BLM must not only quantify the needs that projected development will entail in terms of personnel and costs, it must also explain how it will ensure that these needs will in fact be met in the Infill Project EIS/ROD. In our view, if BLM lacks resources to engage in inspection and enforcement sufficient to ensure compliance with all requirements applicable to oil and gas drilling on public lands within the Infill Project Area, then it should not allow further development to occur—it should deal with the backlog of inspection, enforcement, and cleanup needs first. BLM has sufficient authority, and a responsibility, to prevent development if it lacks sufficient resources to ensure compliance with requirements applicable to oil and gas development. *See, e.g.,* 43 U.S.C. § 1732(b).

M. BONDING

Sufficient bonds must be provided to BLM as part of a complete APD. Presently, these bond amounts are set at: \$10,000.00 per lease (all wells developed under one lease); \$25,000.00 blanket bond for all wells in a state; and \$150,000.00 blanket bond for all wells in the country. 43 C.F.R. §§ 3104.2; 3104.3. These bond amounts apply to *all* federal oil and gas development, regardless of surface ownership (private or federal). In the case of Stock Raising Homestead Act split-estate lands, an additional bond amount of \$1,000.00 must be posted, in the event a surface use agreement is not reached with the private surface owner. 43 C.F.R. § 3814.1(c).

BLM recognizes that all bonding amounts (both private and public surface) are *dramatically low* in contrast to costs of full reclamation. Recent Wyoming examples illustrate this point: operators posting \$25,000.00 statewide bonds have left clean-up costs, for *one well*, of \$37,000.00. In addition, BLM recognizes that it has approximately 90 orphan wells nationwide, with expected liability to the taxpayer at \$1.7 million, yielding an average cost of reclamation (and just plugging and abandoning), *per well*, of approximately \$19,000.00. BLM acknowledges that full reclamation of some orphaned natural oil and gas wells can cost up to \$75,000.00. Accordingly, BLM recognizes that bonding amounts are far too low for federal oil and gas activities.

To bring some balance to this situation, BLM should adopt a change in its bonding policy and discretionary functions under the Mineral Leasing Act and in this Infill Project EIS. The applicable regulation provides that:

The authorized officer may require an increase in the amount of any bond whenever it is determined that the operator poses a risk due to factors, including, but not limited to . . . [when] the total cost of plugging existing wells and reclaiming lands exceeds the present bond amount based on the estimates determined by the authorized officer. 43 C.F.R. § 3104.5(b).

Given the above discussion of *actual* reclamation costs, BLM's policy should reflect a presumption that the current bonding amounts are far too low. In addition, given the examples demonstrating that bonding amounts are far too low, BLM should establish that the minimum bond would start at a presumption of \$20,000.00 per anticipated well that the operator intends upon drilling. This amount, or higher, will be applied at the APD stage, regardless of any bond posted per lease, by state or nationwide. By utilizing this discretion, BLM will bring bonding amounts to a more realistic level to cover reclaiming federal surface resources, in addition to adequately safeguarding landowners on the split-estates.

N. RECLAMATION

Closely related to the issue of bonding is reclamation. Reclamation of both federal surfaces and private surfaces associated with split-estate lands means returning the land and surface resources back to the time of pre-surface disturbance activities. The Infill Project EIS/ROD should require the each ADP fully describe and detail the reclamation efforts that will be required by each operator. In this regard, the following non-exhaustive list serves as an example of what should be included in an APD but the BLM should also follow Chapter 6 of the Onshore Oil and Gas

Operations Gold Book with respect to all reclamation and abandonment requirements.¹⁸ In addition, all posted bonds must, at a minimum, be sufficient under current market prices, to ensure the full reclamation of:

- (i) plugging and abandonment of wells, to adequately ensure that below ground the well casing is sealed to prevent any cross-aquifer communication;
- (ii) damage to, and replacement of, soils (due to compacting, impacts from produced water, and erosion);
- (iii) damage to tangible improvements;
- (iv) damage to both irrigated crops and native vegetation;
- (v) the restoration of all pre-disturbance native vegetation;
- (vi) the eradication of all exotic, non-native, plants (i.e., weeds) as a result of surface disturbances and/or produced water impacts;
- (vii) the backfilling and contouring of all disturbed lands, including reservoirs, and removal of all soils that have been contaminated by produced water, drilling fluids and other oil and gas drilling products;
- (viii) the complete reclamation of any oil and gas drilling fluid reserve pits, including removal and transportation of wastes, and backfilling in reserve pits with high quality soils that meet the soil characteristics of the region;
- (ix) recontouring and reseeded with native grasses, all disturbed surface areas;
- (x) the complete restoration of underground aquifers to proper functioning condition, and if not feasible (e.g., an aquifer has collapsed) then an operator will be required to provide adequate substitute resources and proper compensation (40 C.F.R. § 1508.20(e)); and
- (xi) the removal and proper disposal of all heavy machinery and infrastructure including water treatment facilities, compressor station areas, pipelines, power lines and PVC pipe.

BLM also recognizes that many aspects of reclamation can be an ongoing process throughout the life-cycle of a well. Leaving everything to the end creates a reclamation “backlog” and could very well make full reclamation more difficult, e.g., allowing weeds to propagate during the life of the well instead of combating the problem on a monthly basis. Therefore, consistent with its inspection, monitoring and enforcement authorities (*See, e.g.*, 43 C.F.R. §§ 3161.2; 3161.3), the Infill Project EIS/ROD should require that the BLM inspect all drilling operations on a quarterly basis, and, as necessary and appropriate, require phased reclamation of disturbed areas.

The EIS should also require that all bonds be held by BLM until all reclamation is completed and inspected by BLM. On all bond releases, BLM shall invite interested and affected parties to participate in the final inspection. Regarding split-estates, BLM shall notify all affected surface owners of this opportunity by certified mail, with at least 15 days advance notice

¹⁸ *BLM: Surface Operating Standards for Oil and Gas Exploration and Development* (3rd Edition – Gold Book, Chapter 6 (A portion of the text attached as [Exhibit K](#)).

O. ADOPT LAND OWNER PROTECTION PROVISIONS

According to the scoping notice this project will impact, relatively speaking, a small portion of private surface lands – 640 to be exact. Regardless of the acreage, however, the BLM must fully address and adopt provisions to protect private surface owners in the Infill Project EIS.

Reinforcing the immediate need to protect surface-owners, on April 3, 2003, the BLM issued a press release and an Instruction Memorandum (IM) vowing to protect surface-owner rights on split estate lands.¹⁹ The IM clarifies policy, procedures and conditions for approving oil and gas operation on split estate lands. In short, the order requires that the lessee or its operator enter into good-faith negotiations with the private surface owner to reach an agreement to compensate for any loss of crops or any damages to tangible improvement. If those good-faith negotiations do not produce an agreement with the surface owner, the BLM will require an adequate bond from the lessee or its operator in an amount sufficient to indemnify the surface owner against the reasonable and foreseeable damages for loss of crops and tangible improvements caused by the proposed operations.²⁰ This IM is a very important step in protection surface owner rights and the protections expressly given in this memorandum must be expressly incorporated into the RMP EIS. However, our groups feel the BLM must do more to protect surface owner rights. The below comments provide a starting point from which to begin.

1. INVENTORY AND DISCLOSE SURFACE AND MINERAL OWNERSHIP AND ADMINISTRATIVE JURISDICTION

The BLM must first inventory all split-estate lands within the Infill Project Area, and disclose in the *draft* EIS and *final* Record of Decision that clearly identifies all split-estates (federal mineral, private surface), by homesteading act and by township, section, range. The BLM should then *personally* notify all land owners that may be impacted by this project.

2. WITHDRAW PRIVATE SURFACE LANDS FROM LEASING

In addition to the provisions authorizing the BLM to withdraw oil and gas resources from leasing discussed in our comments submitted during the scoping period for the RMP revisions process which we incorporate here by reference, the BLM has general withdrawal authority pursuant to 43 U.S.C. § 1714. Considering that the amount of private surface lands in the Infill Project Area is only a small portion of the total acreage, the BLM should consider an alternative that withdraws any these lands *not already leased*, from leasing. This would assist in minimizing surface use conflicts.

¹⁹ *Instruction Memorandum No. 2003-131 to All Field Offices from BLM Director* (Apr. 3, 2003) and accompanying press release (Attached as [Exhibit L](#)).

²⁰ In addition to compensation for damage to permanent improvements and crops, BLM shall ensure bond posted is adequate to compensate surface owner for "any damage that may be caused to the value of the land for grazing." 43 C.F.R. § 3814.1(b).

3. ADOPT SURFACE OWNER PROTECTION PROVISIONS

If the BLM fails to withdraw private surface lands from oil and gas leasing, the RMP should include a discussion of and adopt landowner protections provisions that condition development to protect private surface owners who could be adversely affected by oil and gas development. Specifically, the BLM should adopt the provisions set forth in the **Bonding and Reclamation Sections** above as well as the **provisions below**. Each of these provisions are designed to reduce economic inequities resulting from these split-estate lands that are within BLM's jurisdiction and protect the rights and quality of life of people living in the Valley.

a. ENSURE LANDOWNER PARTICIPATION IN OIL AND GAS LEASING, EXPLORATION, AND DEVELOPMENT DECISIONS

As discussed above, pursuant to our federal environmental law the public has the right to participation at all stages of oil and gas leasing, exploration, and development. This is of particular import in the case of split-estates and has been a problem in the past. For instance, in the BLM's public notification of the Merna 3-D Geophysical Project completed on both private and public lands the agency simply stated that,

The project area would be four to nine miles wide and approximately 35 miles long, encompassing 290 square miles. Nearly one-third of the project will be conducted on BLM-administered lands. Those portions on the project occurring on state and private lands are not subject to BLM authorization.²¹

This statement wholly failed to notify private landowners of their rights thus, when the oil man came knocking on the doors of the private residences offering landowners \$3.00 per surface acre to cross their property with 65,000 thumper trucks that leave 100-foot swaths of destruction in their wake, sometimes also leaving tens of thousands of dollars worth of damage, the landowner had no idea what to say. This situation must be addressed and resolved in the EIS.

Additionally, in the past the BLM has not notified landowners when industry nominates the minerals under their surface for sale. At a meeting with former BLM State Director, Al Pierson, at the Pinedale Field Office, members from our groups asked that the BLM be a adopt a "*Good Neighbor Policy*" and send a simple notification letter to all landowners when the minerals underneath their property are *up for sale*. This would give the landowner the opportunity to protest such sale. The BLM *flatly* refused stating that this was the landowner's responsibility and that the agency had no notification duty. While the BLM *may*, and we strongly emphasize *may*, be correct in that the agency has no legal duty to personally notify the landowners of a *lease sale* that will directly effect them, this administration has emphasized the importance of communication and should therefore, communicate.

As discussed in the attached comments, shortly after taking her position as Director of the BLM, Ms. Kathleen Clarke wrote that the agency was "practicing the Four C's in Wyoming, working with the state of Wyoming, local communities, landowners and the energy industry to find

²¹ Release No. 06-01-02, Pinedale BLM Field Office (Jun. 13, 2002).

solutions.” Ms. Clarke defined the “Four C’s” as “cooperation, communications and consultation, all in the service of conservation.” To really improve “communications” with the local community and local landowners, the Pinedale BLM should tell the public, pursuant to the Four C’s policy, before it sells the rights out from underneath them. Adoption of this “*Good Neighbor Policy*” would go a long way towards enhancing communications pursuant to the “Four C’s” policy and towards minimizing conflicts with surface owners.

The next problem the EIS must address is this. Again, in the past the BLM has not widely disseminated the customary environmental assessments associated with APD approval, but instead has provided EA information to requesting individuals *after* the issuance of a Decision Record approving an APD. The EIS should implement measures to ensure full and active public participation in the APD process.

APDs require NEPA (EAs and/or EISs) – Onshore Order No. 1 at III.G.5.a. – and that EAs *must* be properly disseminated to the public. Department of Interior Manual 516 DM 2-4 at 3.3. Accordingly, for all APDs in the Pinedale Field Office, BLM should do more than post them in a notebook and list them on the Internet. BLM should disseminate the APDs and the accompanying EAs to all parties that request them (40 C.F.R. § 1506.6(b)(1)), all surface estate owners on split-estates, and in the case of CBM production to all downstream surface owners between the discharge and the first mainstem river. Additionally, the BLM should publish the availability of the EA in at least two local papers (40 C.F.R. § 1506.6(b)(3)(iv)), *before* a Decision Record is reached, and 30 days before the comment period closes.

Further, because of the importance of public participation especially when a split-estate surface owner is involved, the EIS should explicitly ensure the following:

- i) BLM should prepare site-specific environmental analysis consistent with the requirements of NEPA section 102(2)(C) (i.e., an EIS) for leasing decisions on split-estate lands (e.g., federal minerals underlying private surface). Accordingly, under this approach, the EIS decision would be to defer leasing decisions on split-estate lands subject to subsequent site-specific analysis (which would be triggered by industry nomination to lease);
- ii) BLM shall provide record surface owner 45-day advance written notice of proposed leasing decision and opportunity to comment, including recommending specific lease stipulations;
- iii) Prior to any entry upon a privately owned surface estate, BLM will ensure and require as part of surface use operations, that the operator makes access arrangements with the private surface owner *prior to* entry upon the lands for any surveying or staking. Onshore Order No. 1 at III.A;
- iv) An onsite predrill inspection shall be scheduled and conducted by the appropriate BLM office within 15 days of receiving the applicant’s initially-filed document, i.e., either a Notice of Staking or a complete APD. The BLM shall invite the

surface owner to participate in the onsite inspection. This invitation will be extended as early as possible. Onshore Order No. 1 at III.C;

- v) With Stock Raising Homestead Act (SRHA) split-estates, BLM will first, in this Record of Decision, notify all split-estate surface owners of their rights of bond appeal and notification, as set forth in 43 C.F.R. § 3814.1, including the bonding requirements and procedures if an acceptable surface use agreement is not reached. Second, in situations where a bond is posted in lieu of a surface use agreement, BLM will require strict compliance with SRHA bonding amounts, notification to landowners and appeal rights and procedures.

b. ADOPT THE LAND OWNER PROTECTION PROVISION IN SMCRA

While developing the *draft* EIS, the BLM should review and make full use of the provisions in the Surface Mining Control and Reclamation Act, 30 U.S.C. §§ 1221 to 1230a, that apply to protect surface owners with federal minerals estates underneath their land.

II. PROTECT GREATER YELLOWSTONE'S DIVERSE WILDLIFE RESOURCES

As has been touched upon over and over again in our comments on various projects to the Pinedale BLM, the Upper Green River Valley – the Valley within which this project will take place if approved - supports a world-class wildlife resource. From the pronghorn who hold the record for the longest migration in the lower 48 states to the world renowned fisheries of the Upper Green, this area must be protected to ensure the long-term viability of healthy, abundant, and free-ranging wildlife species.

The following concerns regarding wildlife touch on a number of issues. As a preliminary matter, however, one common need is the following. When considering impacts to wildlife, BLM must do more than consider just the area actually impacted by natural gas drilling and development. The effects of oil and gas development, for example, are far broader and more pervasive than just the public land acreage converted to bare dirt for roads and oil pads. In this regard, the report *Fragmenting Our Lands, The Ecological Footprint From Oil And Gas Development*, which deals with habitat fragmentation due to oil and gas development in the Big Piney/ Labarge CAP area, should be considered, and we ask that BLM do so.²² BLM must ensure its analyses of impacts to wildlife consider indirect, connected, related, long-term, and cumulative impacts in as quantitative, and scientifically supported, a manner as possible.

A. ENSURE WILDLIFE DIVERSITY – GENERAL CONSIDERATIONS

BLM has a duty to protect the diversity of all native wildlife on public lands by providing for ecosystem-based management. FLPMA requires public land management to protect ecological and other values, and also requires that they be managed for multiple use and sustained yield. 43 U.S.C. §§ 1701(a)(7)-(8). NEPA requires BLM to fulfill its trustee obligation for future generations, assure productive surroundings, avoid environmental degradation, preserve

²² See *infra* n. 6.

important natural aspects of our national heritage, and enhance the quality of renewable resources. 42 U.S.C. §§ 4331(b)(1)-(6). The CWA established the objective of restoring and maintaining the chemical, physical, and biological integrity of the Nation's waters, which of course includes the water near the Infill Project Area. 33 U.S.C. § 1251. The ESA establishes the purpose of conserving the *ecosystems* upon which threatened and endangered species depend on. 16 U.S.C. § 1531(b). BLM's livestock grazing standards and guidelines establish standards of ecological health applicable not only to livestock grazing, but to resource management generally. See 43 C.F.R. subpt. 4180. The Clean Water Action Plan establishes the need to manage public lands on a watershed—that is, ecosystem—basis. Read together, these and other legal standards establish that BLM must ensure the *ecosystems* it manages are fully protected so as to enhance biological diversity.

With this in mind, we ask that the Infill Project EIS/ROD ensure that wildlife diversity is protected. This means that the EIS/ROD must ensure that wildlife has adequate habitat for feeding, reproducing, and hiding or resting (sheltering) for all species at all critical life stages. Wintering areas, colonial or other concentrated avian nesting areas, spawning beds, and traditional birthing areas are examples of the special habitats the Infill Project EIS/ROD should provide for and protect.

In addition to protecting special habitats, the environmental analysis must provide for protecting certain species to ensure that biological diversity is protected. Certainly species listed pursuant to the ESA and BLM and/or State sensitive species must receive species-specific attention, but other species should receive special emphasis as well. The plan should identify and provide for the protection of “keystone” species, which can be literally key to preventing undesirable, cascading ecological effects, such as widespread extinctions. Prairie dogs are an example of a keystone species that demand special management efforts. The status of carnivores is often indicative of the overall environmental health of an area, and thus they warrant special management prescriptions, and in any event there is widespread public demand and support for protecting these magnificent creatures. It is also important to note that there are keystone *resources* that are critical for protecting a host of species. Springs or other water holes, deep pools in streams, and salt or mineral licks are examples. BLM should ensure that the Infill Project EIS/ROD makes special provision for protecting keystone resources.

The EIS must also carefully evaluate problems resulting from habitat fragmentation and the need for maintaining the connectivity or linkage of habitats. Habitat fragmentation is strongly associated with the road building that accompanies most, if not all, traditional management activities. By altering the physical environment, roads and highways modify animal behavior. Many species shift home ranges, change movement patterns and even reproductive and feeding behaviors to avoid roads. Perhaps the most pervasive, yet insidious, impact of roads is providing access to natural areas and encouraging further development. Additional information on the impacts of roads on wildlife can be found at <http://www.defenders.org/habitat/highways/new/ecology.html>, which we incorporate into these comments by this reference, and ask BLM to consider. Based on the information from this and other sources, it is apparent that the Infill Project EIS/ROD must limit habitat fragmentation resulting from road building, protect current roadless areas, provide for aggressively closing unneeded or ecologically destructive roads, and provide for maintaining needed roads so as to

reduce negative environmental impacts. The Infill Project EIS/ROD must also limit habitat fragmentation resulting from other activities, such as the construction of well pads.

The EIS/ROD must also ensure that migration corridors and other ecological linkages are maintained. The conservation biology literature indicates it is probably more effective to preserve existing corridors/linkages than to attempt to create new ones. It is crucial the EIS identify all existing migration and other movement corridors. The Infill Project EIS must ensure that management actions authorized by the Infill Project ROD protect the ecological integrity of these corridors and linkages. Big-game migration routes have been widely documented, but riparian areas, mountain ranges and ridges, and other areas serve as important linkages among habitats (and even eco-regions) that must be preserved. Ensuring that corridors remain as wide as possible is the best way to ensure that they are in fact effective.

Part and parcel of planning for maintaining biological diversity via ecosystem-based management is a need to ensure that indirect and cumulative impacts of management actions are fully considered. As noted above, the NEPA regulations provide guidance in this regard. Cumulative impacts are the incremental impacts of actions, past, present and future, regardless of whom undertakes them. *See* 40 C.F.R. §1508.7. Indirect effects of an action are further removed from the action itself, but still are reasonably foreseeable. *See* 40 C.F.R. §1508.8. *See also* 40 C.F.R. §1508.25(c). It is worth noting that the ESA provides somewhat similar definitions for these concepts that are applicable to listed species. *See* 50 C.F.R. § 402.02 (defining actions, action areas, and effects of the action in very broad terms). The JIDP EIS must take special care that these “second-order” impacts are fully considered and analyzed if BLM is to meet its legal mandate for ecosystem management and preserving biological diversity.

B. ENSURE COMPLIANCE WITH THE ENDANGERED SPECIES ACT

BLM must comply with Section 7 of the ESA in undertaking the Infill Project. This means that BLM must comply with its affirmative duty under Section 7(a)(1) to proactively implement programs for the conservation of listed species. Likewise it must meet the equally mandatory duty to ensure that the Infill Project does not jeopardize the continued existence of listed species or result in the destruction or adverse modification of their critical habitat. These requirements can be furthered if the ROD adopts strong provisions for the protection and conservation of listed species. For example, the ROD should comply with and seek to implement any recovery plans and/or biological opinions applicable to listed species that occur in the Infill Project Area.

More specifically, in this case, because an EIS is being prepared and the Infill Project is therefore a major construction activity, BLM must prepare a Biological Assessment (BA) in order to meet its Section 7(a)(2) “duty to ensure” listed species are not harmed. It is critical that only credible and reputable scientists conduct the BA and other ESA-related analyses, and BLM must ensure that this is the case by establishing criteria for the quality of the BA and other ESA-related analyses. BLM should monitor and enforce these requirements. This is consistent with the requirement to use the best available science established by the ESA. *See also*, BLM Manual MS-6840.2.E.2-5. Additionally, BLM sometimes has totally merged BAs with accompanying EISs, making ESA compliance totally indistinguishable from NEPA compliance. In our view this is inappropriate because the substantive requirements of the ESA (imposing mandatory duty

to conserve listed species) cannot be met by totally merging them with the procedural requirements of NEPA (requiring analysis and disclosure of environmental impacts).

Additionally, BLM must ensure that it fully complies with the requirements to engage in early consultation with the Fish and Wildlife Service relative to the effects of this action on listed species in this action area. Consultation should be completed and any biological opinion(s) issued by the Fish and Wildlife Service adopted by BLM and made a binding part of the ROD (and activities occurring under it) prior to approval of the Infill Project ROD. The ROD should establish criteria to ensure that the regulatory requirements for reinitiating consultation are complied with at the earliest possible time so as to ensure listed species are not jeopardized. *See* 50 C.F.R. § 402.16 (establishing reinitiation criteria). Moreover, the prohibition on foreclosing reasonable and prudent alternatives, as provided for in section 7(d) of the ESA, must be adhered to by BLM during preparation of the EIS and enforced by the ROD. These recommendations are consistent with BLM’s Special Status Species Manual. *See* BLM Manual MS-6840.2.E.

In the context of oil and gas development, “incremental step” consultation is of concern, and the EIS must address this issue. *See* 50 C.F.R. § 402.14(k); Endangered Species Consultation Handbook at 5-7.²³ In our view, the decision in *Conner v. Burford*, 848 F.2d 1441 (9th Cir. 1988) should control all consultation in the context of oil and gas development. We recognize without approving, however, that BLM will likely reject this proposition outside of the Ninth Circuit. Nevertheless, we ask that BLM consider the *rationale* (if not the holding) expressed in *Conner* so that listed species receive the maximum amount of protection possible. To that end, BLM must assist the Fish and Wildlife Service in conducting the most fully informed consultation possible, including assisting it to develop “views on the entire action.” *See* 50 C.F.R. § 402.14(k). BLM must fulfill its “continuing obligation to obtain sufficient *data* upon which to base the final biological opinion on the *entire* action.” *Id.* (emphasis added). BLM must assist the Fish and Wildlife Service in developing a fully informed understanding of the effects of the *entire* action, even if incremental step consultation is used. *Id.* This requires that the first incremental step be analyzed via formal consultation. *Id.* The ROD should confirm and reinforce these duties and requirements.

C. PROTECT BLM SENSITIVE SPECIES AND ESA CANDIDATE SPECIES

BLM must ensure full compliance with BLM Manual MS-6840 (Special Status Species Management). BLM Manual MS-6840.06.E requires that “protection provided by the policy for candidate species shall be used as the minimum level of protection for BLM sensitive species”—that is:

Consistent with existing laws, the BLM shall implement management plans that conserve candidate species and their habitats and shall ensure that actions authorized, funded, or carried out by the BLM do not contribute to the need for the species to become listed.

BLM Manual MS-6840.06.C & .06.E. *See* BLM Manual MS-6840.06.C (1&3) (discussing BLM’s responsibility to confer with U.S. Fish & Wildlife Service regarding individual species’

²³ U.S. Fish and Wildlife Service, March 1998.

needs). BLM Manual MS-6840.06.C.2 imposes a series of additional substantive obligations on the BLM regarding candidate [and therefore sensitive] species management:

2. For candidate species [and sensitive species] where lands administered by the BLM or BLM authorized actions have a significant effect on their status, [the BLM shall] manage the habitat to conserve the species by:
 - a. Ensuring candidate [and BLM sensitive species] are appropriately considered in land use plans (BLM 1610 Planning Manual and Handbook, Appendix C).
 - b. Developing, cooperating with, and implementing range-wide or site-specific management plans, conservation strategies and assessments for candidate [and sensitive] species that include specific habitat and population management objectives designed for conservation, as well as management strategies necessary to meet those objectives.
 - c. Ensuring that BLM activities affecting the habitat of candidate [and sensitive] species are carried out in a manner that is consistent with the objectives for managing those species.
 - d. Monitoring populations and habitats of candidate [and sensitive] species to determine whether management objectives are being met.

Additionally, BLM must ensure compliance with BLM Manual MS-6840.22. Provisions here require BLM to take a broad and proactive approach to special status species management.

D. INCLUDE A WIDE-ARRAY OF MITIGATION MEASURES INCLUDING OFF-SITE MITIGATION REQUIREMENTS

Mitigation of impacts to fish and wildlife resources is assuming ever-increasing importance in project planning, especially as the rate of potentially damaging development across our public lands increases. In view of this increasing importance, and combined with NEPA's mandate to include appropriate mitigation measures, discussion of mitigation must have a *prominent place* and must be a *major part* of the Infill Project assessment process. 40 C.F.R. §§ 1502.14(f); 1501.16(h); 1505.2(c); and 1505.3. Specifically, the CEQ regulations interpreting NEPA require that the EIS identify the "means to mitigate adverse environmental impacts," 40 C.F.R. § 1502.16(h), and "include appropriate mitigation measures already included in the proposed action or alternatives." 40 C.F.R. § 1502.14(f). "Mitigation" is defined to include: (a) avoiding the impact altogether by not taking a certain action; and (b) minimizing impacts by limiting the degree or magnitude of the action. 40 C.F.R. § 1508.20.

Considering this mandate, the BLM must consider a *wide-array* of mitigation measures that lessen, and potentially eliminate, the adverse impacts of development on other valuable natural resources including, but not limited to, air and water quality and wildlife. Detailed comments in this regard are included in other sections of these comments. Here, however we would like to

make two general comments. First, we urge the BLM to include a Resource Protection Alternative that includes mitigation measures similar, but more stringent than and with enforcement capabilities, the alternative adopted in the Record of Decision for the Pinedale Anticline Natural Gas Project.²⁴ Second, we would like to highlight the importance of off-site mitigation. Off-site mitigation is an invaluable tool for protecting wildlife and rangelands in the Pinedale Resource Area. Off-site mitigation will ensure that areas exist for the wildlife to roam, forage, breed, nest, and survive. It will also ensure that the BLM can properly study the impacts of development on wildlife pursuant to a number of federal mandates. Accordingly, the Infill Project EIS/ROD must analyze and discuss any and all options for off-site mitigation to balance the adverse impacts on the booming oil and gas developments in the Valley.

E. PROTECTING YELLOWSTONE'S MIGRATORY WILDLIFE – AN UNIQUE GLOBAL RESOURCE

The Upper Green River Valley, is home to a world-class wildlife resource. As highlighted during recent scientific symposiums that BLM officials attended, there are only 29 species across the globe that depend on long-range migration for their very survival.²⁵ Two of these twenty-nine species – the pronghorn antelope and mule deer – winter in the Upper Green River Valley and it is here that scientists have documented the longest recorded seasonal migration routes for both of these species.²⁶ The deer migrate up to 100 miles each way from the mountain highlands of the Greater Yellowstone Ecosystem to the sagebrush steppe of the Valley. Yellowstone's pronghorn have the longest migration – up to 150 miles - of any land mammal in the Western hemisphere. These world-class migrations must be protected. To do so we ask that the BLM consider and adopt each of the following the following recommendations.

Key Recommendations for Addressing Immediate Impacts:

- No surface occupancy should be allowed in areas that provide severe winter relief range for mule deer and pronghorn.
- Until ongoing studies are completed, a minimum buffer zone of 200 meters should be placed around wells and roads. In places, larger buffers should be considered.
- Where possible, directional drilling from a reduced number of pads per section should be required. Pads should be placed to minimize disturbance to big game.

²⁴ Any Resource Protection Alternative must include a clear and concise method of enforcing (by both the BLM and public) any and all mitigation measures included in the Infill Project EIS.

²⁵ *Groups seek migration protection*, Jeff Gearino, Casper Star, A-3 (Mar. 17, 2003)(Attached as [Exhibit M](#)).

²⁶ *Potential Effects of Oil and Gas Development on Mule Deer and Pronghorn Populations in Western Wyoming*, Proceedings of the 2002 North American Wildlife and Natural Resources Conference, Dallas, TX, by H. Sawyer, F. Lindzey, D. McWhirter, K. Andrews (Spring 2002, *in press*)(hereinafter “*North American Study*”)(Attached as [Exhibit N](#)).

Key Recommendations for Addressing Long-term Impacts:

- Sufficient data should be collected so as to define the ecological and landscape conditions necessary for maintaining big game populations at Wyoming Game and Fish Department (WGFD) target levels.
- The WGFD Strategic Habitat Plan should be closely followed and included within the Infill Project EIS and subsequent ROD.
- Indirect impacts of energy development on wildlife are poorly understood. They should be more extensively studied and incorporated into a long-term cumulative effect analysis, which also takes into account the subdivision of private lands in the Upper Green River Valley.
- Since the existing body of scientific knowledge is inconclusive regarding the impacts of energy development activities on big game populations, the BLM should consider incorporating *principles* of adaptive management into the Infill Project. These include: i) accurate delineation of critical habitat and corridors; ii) development of a relatively low number of wells, followed by an assessment of their effects through monitoring and research; and iii) based on these assessments, modify development, and implement effective mitigation measures.

Require “No Net Loss” of Big Game Transitional and Winter Ranges

Yellowstone’s big game rely on relatively distinct summer, transitional, and winter ranges during their annual migratory cycle. While summer ranges appear relatively secure because of their size and land status, the transition and winter ranges of both the mule deer and pronghorn antelope are threatened by energy development and subdivision expansion.²⁷ To avoid and minimize the adverse impacts of development the EIS should contain a provision requiring that there be no net loss of big game transitional and winter ranges throughout the Pinedale Resource Area. This mitigation requirement would be fully consistent with WGFD’s no net loss policy.²⁸ The WGFD adopted this policy because it recognizes that one of Wyoming’s most unique and valued resources is its abundant, free-ranging wildlife and that without habitat protection the populations of these important species would be limited. A requirement of “no net loss” of winter and transitional ranges is vital as the Upper Green River Valley is the largest publicly-owned expanse of wildlife winter range in the Greater Yellowstone Ecosystem. One potential method for ensuring no net loss would be to require off-site mitigation as discussed in Section 4(II)(D) above. The Infill Project EIS must therefore fully explore this possibility.

F. STUDY AND DISCLOSE THE INCREASE IN POACHING STEMMING FROM AND INCREASE IN POPULATION DUE TO INCREASED ACCESS AND HUMAN PRESENCE

As human populations expand, conflicts with wildlife are inevitable. This is illustrated in a study completed by Joel Berger and Dennis Drake entitled, *Effects of Agricultural, Industrial, and Recreational Expansion on Frequency of Wildlife Law Violations in the Central Rocky*

²⁷ *North American Study* at 1.

²⁸ *Mitigation Policy*, Wyoming Game and Fish Commission at 6 (Apr. 28, 1998)(Attached as [Exhibit O](#)).

*Mountains, USA.*²⁹ The Infill Project EIS/ROD must discuss the impacts of population growth that accompanies oil and gas development on the wildlife species in and near the project area. This discussion should include an analysis of potential increases in wildlife law violations, the actual impact these violations have on animal population sizes, opportunities for education-oriented conservation measures, and opportunities to mitigate the impacts of increased populations on wildlife species.

G. RECOVERING THE WHITE-TAILED PRAIRIE DOG AND ITS HABITAT NEEDS

While white-tailed prairie dogs can still be found throughout the sage-steppe country of Wyoming, Utah, Colorado, and Montana, the occupied acreage has declined by at least 92% from historical estimates.³⁰ These declines have been disastrous for many of the species that rely on white-tailed prairie dogs, including the black-footed ferret, mountain plover, burrowing owl, and ferruginous hawk. If extinction of these once widespread and abundant species is to be avoided, and if the white-tailed prairie dog ecosystem is to be recovered, the BLM must actively work toward prairie dog conservation and recovery. Accordingly, with respect to prairie dogs the Infill EIS must disclose whether any prairie-dog towns are found in the project area and if so should include the following:

- An evaluation the threats that oil and gas development has on this species;
- A mechanism to fund research and monitoring efforts for this species within the project area;
- Direction closing occupied and recovery habitat for white-tail prairie dogs to oil and gas leasing, exploration, *and* development. Alternatively, place NSO stipulations on all approvals to drill in prairie dog habitat;
- A prohibition of all off-route motorized travel in the project area;
- Provisions to control noxious weed infestations and rehabilitate areas with noxious weeds by revegetating areas with native species;
- Enforcement mechanisms to ensure adherence to each of the above measures.

Our groups would like to highlight the fact that each recommendation in this section also applies to black-tailed prairie dogs.

²⁹ *Effects of Agricultural, Industrial, and Recreational Expansion on Frequency of Wildlife Law Violations in the Central Rocky Mountains, USA*, J. Berger and D. Drake, Conservation Biology, Vol. 1, No. 3 (Sep. 1988)(Attached as [Exhibit P](#)).

³⁰ *Petition for a rule to list the white-tailed prairie dog (Sciuridae: Cynomys leurus) as Threatened or Endangered under the Endangered Species Act, 16 U.S.C. § 1531 et seq. (1973 as amended) and for the designation of Critical Habitat*, Center for Native Ecosystems, Biodiversity Conservation Alliance, Southern Utah Wilderness Alliance, American Lands Alliance, Forest Guardians, Terry Tempest Williams, Ecology Center, and Sinapu (Jul. 11, 2002).

H. PROTECTING THE IMPERILED SAGE GROUSE

Once common throughout much of western North America and known as the “icon of the sagebrush steppe,” populations of this sensitive species have plummeted across most of its range. It is estimated that in just the last fifty years, there has been a 50% decrease in total area occupied by sage grouse and up to an 80% decrease in total numbers in some areas. Sage grouse are now extinct in at least four states and one Canadian province where populations once existed. Six petitions recently have been filed to list all remaining populations under the federal Endangered Species Act.

Wyoming, however, still has one of the strongest sage grouse populations in the world and will have a key role in deciding the fate of this magnificent species. In nearby states habitat loss and fragmentation has largely isolated populations, resulting in significant decreases in sage grouse numbers and local extinctions. Wyoming still has a mostly connected distribution, but if habitat fragmentation continues, the State’s presently linked sage grouse population will begin to unravel. Given Wyoming’s key role in maintaining sage grouse populations, the strong presence of grouse in the Infill Project Area, and the recent petition for listing as an endangered species under the ESA, the Infill EIS must thoroughly evaluate the impacts various alternatives will have on this species.

The Infill Project Area is part of the Upper Green River Valley, a 1.2 million-acre area of predominantly public land (managed by the BLM) and provides exceptional habitat for sage grouse. While present data are too limited to conclusively evaluate the overall health of the Upper Green’s sage grouse populations and trends in the available habitat, there are worrisome signs. In recent years there has been a local decline in spring counts of sage grouse numbers and site inspections have indicated substantial disturbance in almost all habitat in the Valley. Besides the impacts from the current natural gas development boom, new housing, power line and road corridors, and livestock grazing have all affected sage grouse habitats. While studies are needed to confirm the extent and specifics of how these activities harm local populations, it is clear that continuing with present practices will result in habitat decline and reduced distribution and numbers of sage grouse throughout the Valley.

In view of these problems we have attached technical scoping comments from Dr. Clait Braun prepared for The Wilderness Society, the Wyoming Outdoor Council and the Greater Yellowstone Coalition to be used during the scoping period for the RMP Revision but are applicable here as well.³¹ We ask that the BLM consider the information provided with in Dr. Braun’s comments and incorporate the recommendations included in his comments into the Infill Project EIS/ROD.

To briefly highlighting some of the top priority recommendations in Dr. Braun’s comments, the Infill Project EIS/ROD should:

³¹ *A Review of Sage-Grouse Habitat Needs and Sage-Grouse Management Issues for the Revision of the BLM’s Pinedale District Resource Management Plan*, Dr. Clait E. Braun, GROUSE Inc. (Oct. 2002)(Attached as [Exhibit Q](#)).

- Adopt a policy of no surface disturbance within 3 *miles* of occupied leks;
- Locate and give special through designation as “Areas of Critical Environmental Concern” to all areas used by sage-grouse during both average and severe winters;
- Require that standard surveys be conducted as soon as possible to estimate changes in numbers of sage grouse in identified winter use areas and to locate active leks. Mid to late summer brood rearing areas also should be mapped based on moisture and green forage availability;
- Immediately initiate replicated, long-term studies to understand the effects of habitat fragmentation on predator numbers and predation rates on sage grouse;
- Incorporate the habitat guidelines/desired future conditions published by Connelly et al. (2000)³² into the new Infill Project EIS/ROD so that sage grouse nest success and chick survival improve;
- Require road closures (permanent or seasonal), the burial of power lines, modifications of fences and other structures, and elimination of livestock grazing in areas where oil and gas production is permitted.

Dr. Braun’s comments must be considered in view of the serious problems that oil and gas development poses for the grouse. Road building, well pad construction, and noise disturbance associated with oil and gas development can fragment effective sage grouse habitat and compromise the quality of seasonal use areas. In addition, by creating more linear areas and smaller habitat patches, energy development can boost predation rates on sage grouse. So, for a variety of reasons, major oil and gas development reduces the area useable by sage grouse, which often leads to greater isolation of populations and a reduced ability to handle droughts, severe winters, or other natural disturbances. The Infill EIS/ROD must address each of these threats and include means to avoid the impacts of these threats to grouse.

I. THE PYGMY RABBIT – A NEW CANDIDATE FOR LISTING UNDER THE ESA

As discussed above, the BLM must comply with the Endangered Species Act (ESA). This includes following the provisions for all listed and candidate species. In early April 2003, The Committee for the High Desert, American Lands Alliance, Biodiversity Conservation Alliance, the Center for Native Ecosystems, and the Oregon Natural Deserts Association, filed a petition to list the Pygmy rabbit under the ESA. Once, biologists considered Wyoming to be on the periphery of its range, but due to drastic declines outside of Wyoming, the Wyoming occupied habitat is now crucially important and threatened by the oil and gas boom in the Pinedale Resource Area. While most of our groups have yet to receive and review a copy of the petition given its recent submission, here we would simply like to draw the BLM attention to the petition, remind the BLM of its responsibility under the ESA, and ask that the BLM incorporate the appropriate protection measures into the Infill Project EIS/ROD to protect this species and its habitat.

³² Attached as [Exhibit R](#).

J. RAPTORS

Raptors often receive protective stipulations and other protective measures, particularly in the context of oil and gas development activities. The Infill EIS/ROD should examine existing stipulations and protections to determine their effectiveness and to determine whether they should be modified so as to protect these magnificent birds. Too often raptor stipulations only apply to occupied nests. Again, however, this is an inappropriately restricted approach from a biological and ecological perspective. The EIS should examine whether habitat that could potentially be occupied by raptors, such as previously utilized nests, should receive protection so as to ensure the continued viability of raptors in the Infill Project Area. It should consider all biological needs of raptors and develop suitable protections for all significant life-stages of the various raptors, all of which should be included in the Infill Project EIS. Additionally, the EIS should address compliance with the Bald Eagle Protection Act and Migratory Bird Treaty Act and the Infill Project EIS should specify the means by which BLM will ensure compliance with these laws as well as pursue (or facilitate) enforcement of them.

K. ADDITIONAL SPECIES

A number of other species in the Upper Green River Valley live in the Jonah Infill Project Area including but not limited to, burrowing owls, mountain plover (a candidate species under the ESA), possibly the black-footed ferrets (a species protected under the ESA). In addition a host of aquatic species may be impacted by additional drilling, including the fisheries in the high mountain lakes due to lake acidification. Accordingly, the Infill Project EIS must provide a list of species within and outside the Resource Area boundaries that will be impacted. After this list is compiled the BLM must disclose monitoring, population, and habitat data in regard to each species and must adopt mitigation measures to protect each of these species from any development approved by this EIS.

III. AIR QUALITY: PROTECTION WYOMING CLEAN AIR AND CLEAR VISTAS

In view of the oil and gas boom in the Upper Green River Valley, the Infill Project EIS must contain a comprehensive analysis of the impact oil and gas exploration and development will have on Wyoming's clean air, clear vistas, and community health. During this analysis process the BLM must fully consider that under both FLPMA and the CAA, BLM cannot authorize any activity which does not comply with all the applicable local, state, tribal, and federal air quality laws, statutes, regulations, standards, and implementation plans. These requirements include the NAAQS and WAAQS which set the maximum limits for several air pollutants, and PSD increments which limit the incremental increase in certain air pollutants (including NO₂, PM₁₀, and SO₂) above legally defined baseline concentration levels. In addition, this section of the Infill Project EIS must comply with NEPA. NEPA requires that the BLM complete a comprehensive impacts analysis and set forth mitigation measures to ensure compliance with air pollution standards.

Accordingly, the Infill Project EIS must include the following:

- A complete increment consumption analysis to identify areas where PSD increments have previously been fully consumed by prior development, and/or will be fully by the additional emissions from the proposed oil and gas development projects;
- Analysis of control strategies, including but not limited to emissions control technologies, work practices, and/or the phasing of project development to identify mitigation strategies sufficient to prevent expected exceedances of the: (i) PM-10 NAAQS; (ii) exceedances of the allowable Class I increments in Forest Service Class I airsheds; (iii) exceedances of the Class II increments within the project area and at identified receptor areas of concern; and (iv) impairment of visibility at mandatory Class I areas and implementation of the national visibility goal;
- Analysis of the recent evidence of adverse health effects associated with exposure to PM-10 and PM2.5 that has become available since EPA completed its last final revision of the Criteria Document for Particulate Matter in 1996 for the purpose of informing the public of adverse health effects and adverse effects on public welfare that may be experienced by local populations even in the event of full compliance with the NAAQS and applicable PSD increments;
- A cumulative impacts analysis of all completed, ongoing, and proposed oil and gas projects in the Greater Yellowstone Ecosystem when considered together with other polluting activities that have been permitted or undertaken in the area to be affected by the proposed projects;
- Mitigation measures sufficient to “provide for compliance with ...air pollution standards,” including the NAAQS, PSD increments, and visibility impairment, as required by FLPMA. Such mitigation measures must be adequate to prevent: (i) exceedances of the PM-10 NAAQS; (ii) exceedances of the allowable Class I increments on Forest Service Lands; (iii) exceedances of the Class II increments within the project area and at identified receptor areas of concern; and (iv) impairment of visibility at mandatory Class I areas. In addition, mitigation should be identified to prevent the adverse effects on public health that will result from the large increase in exposure to daily concentrations of fine particles, and the adverse effects of emissions on acid-sensitive watersheds;

The below discussion details requirements related to the above.

A. THE BLM MUST CONDUCT A COMPLETE INCREMENT CONSUMPTION ANALYSIS

In a recent brief filed in the Ninth Circuit Court of Appeals, the U.S. Department of Justice provided a good summary of the increment enforcement process.

In determining what level of deterioration to permit in a given air quality planning area, there needs to be a starting point of air pollution - a “baseline” concentration level - against which to assess expected emission increases. The CAA limits the amount of permissible increase in air pollution concentration over a baseline, and these caps are known as the “PSD increments.” *See* 42 U.S.C. § 7473(a)-(b) (increments for particulate matter and SO₂); 40 C.F.R. § 52.21(c) (increments for NO₂). As with the NAAQS, increment is expressed in terms of micrograms of a pollutant per cubic meter of air (“ug/m³”).

Determining the “baseline concentration” for an air quality planning area necessarily involves collecting air quality data and conducting technical analyses. *See Alabama Power Co. v. Costle*, 636 F.2d 323, 374 (D.C. Cir. 1980) (“The increment concept incorporates the idea of a baseline from which deterioration is calculated, by models or monitors, to determine whether it is permissible.”). Under the Act, this assessment is keyed to “the first permit applicant” in that area. *Id.* at 376. That is, “baseline concentration” is the ambient concentration level which exists at the time of the first PSD permit application. 42 U.S.C. § 7479(4); 40 C.F.R. § 52.21(b)(13)(i). The date on which this first PSD permit application is submitted is known as the “minor source baseline date.” 40 C.F.R. § 52.21(b)(14)(ii). This date applies to the “baseline area,” which essentially tracks the border of an air quality planning (section 107(d)) area. 40 C.F.R. § 52.21(b)(15)(i).

Filed October 7, 2002, in *Reno Sparks Indian Colony v. EPA*, No. 02-71503.

This description makes clear that the essential element of an increment consumption analysis is a determination of the extent to which the allowable increment has been consumed since the baseline was set for the area affected by the proposed projects. Accordingly, the BLM must conduct a regulatory analysis to identify the minor source baseline dates for pollutants. If the EIS fails to include a comprehensive increment consumption analysis the EIS will be rendered inadequate because without such analysis it is impossible to determine whether increments have been consumed by prior development, or whether the proposed actions will cause the increments to be exceeded.

B. NEPA AND FLPMA REQUIRE CONSIDERATION OF MITIGATION MEASURES TO PREVENT ADVERSE IMPACTS

The CEQ regulations interpreting NEPA require that the EIS identify the “means to mitigate adverse environmental impacts,” 40 C.F.R. § 1502.16(h), and “include appropriate mitigation measures already included in the proposed action or alternatives.” 40 C.F.R. 1502.14(f). “Mitigation” is defined to include (a) avoiding the impact altogether by not taking a certain action, and (b) minimizing impacts by limiting the degree or magnitude of the action. 40 C.F.R. §1508.20. Where federal environmental standards are shown to be adversely affected by the proposed action, the NEPA review must at least identify sufficient mitigation measures that will prevent the adverse impact.

This obligation is reinforced by FLPMA which establishes the obligation to adopt RMPs that “provide for compliance with pollution standards.” As the current RMP is outdated and the RFD has been drastically exceeded the BLM can have no idea whether the current RMP meets this requirement. Thus, before moving forward with the Jonah Infill Project the RMP EIS must describe the full magnitude of the exceedances of increments that will result from adding emissions from the completed, ongoing, and proposed projects and then identify the mitigation measures that will effectively prevent those adverse impacts. Furthermore, under FLPMA the obligation to adopt RMPs that “provide for compliance” with standards also requires that the plans for these areas adopt mitigation measures to correct NAAQS and increment violations that

are currently caused by mining operations on the federal lands within the planning area or that extract federal coal under private surface. This obligation reaches to the oil and gas arena. Only after these obligations are met may the BLM proceed with the analysis of this proposed project providing one more legal reason why the BLM must postpone this analysis.

Considering this in the Jonah context we should highlight the fact that EPA has for many years brought this obligation to perform a full increment consumption analysis to BLM's attention with regard to oil and gas developments. In the context of the EIS for the Jonah II Natural Gas Development Project in Wyoming's Green River Valley, EPA's Regional Administrator informed BLM that "CEQ clearly states that mitigation measures must cover the 'range of impacts' of the proposed action and that the DEIS must identify the 'relevant', reasonable mitigation measures that could improve the project . . . even if they are outside the jurisdiction of the lead agency . . ." ³³ EPA also called on BLM to identify mitigation measures sufficient to prevent the adverse impacts on visibility identified in the EIS, and also to prevent NOx increment violations. In order to fully assess the magnitude of any increment violations that would need to be mitigated, EPA called upon BLM to conduct "a PSD increment consumption analysis [f]or [sic] NOx [that] should be completed for all sources to the west and southwest of the Bridger Wilderness Area and all sources to the east of the Fitzpatrick and Popo Agie Wilderness Areas that could reasonably have an impact." ³⁴ In view of this, it is quite clear that the RMP EIS must include an air quality assessment sufficient to identify the full consumption of increment, and fully identify mitigation measures sufficient to prevent future violations and correct existing violations of the increments and then, only after this is complete may the Infill Project analysis proceed.

C. IMPAIRMENT OF VISIBILITY MUST BE PREVENTED

The Clean Air Act imposes on the Secretary of the Interior, as a Federal Land Manager ("FLM"), "an affirmative responsibility to protect the air quality related values (including visibility) of any such lands within a Class I area and to consider, in consultation with the Administrator, whether a proposed major emitting facility will have an adverse impact on such values." 42 U.S.C. § 7475(d)(2)(B). The Secretary's affirmative responsibility applies, under FLPMA to the review of permits for major stationary sources. Under FLPMA, public lands are to be managed to "protect the quality of . . . ecological, environmental, air and atmospheric, water resource and archeological values; [and] that where appropriate, will preserve and protect certain public lands in their natural condition." 43 U.S.C. § 1701(a)(8). Because this project will *directly* impact Class I areas our groups would like to emphasize that the Secretary's affirmative responsibility to protect visibility in these Class I areas.

In addition, the National Park Organic Act charges the Secretary with the duty to protect national park lands in their natural condition. Such lands that are also Class I under the Clean Air Act are subject to statutory directives that express the clear intent of Congress that these lands be included within the lands that the Secretary has an affirmative responsibility to protect. When the Secretary, acting through the BLM, is considering projects for other federal public lands

³³ *Letter to Arlen G. Hiner, BLM Team Leader from Bill Yellowtail, EPA* (Oct. 3, 1997).

³⁴ *Id.*

where the activities being authorized are shown to interfere with the express policies enacted to protect parks, wilderness and monuments under her stewardship, then the Secretary must exercise her planning authority under FLPMA to ensure that the air and atmospheric resources (including visibility) in Class I areas is protected.

In view of these duties the Infill Project EIS must expressly address how the Secretary will carry out her affirmative responsibility to protect visibility in these Class I areas that will be impacted by 1250 new wells.

D. THE EIS MUST PROVISIONS TO IMPLEMENT THE EPA'S "NO DEGRADATION" POLICY UNDER THE CLEAN AIR ACT.

In addition to the affirmative responsibility to protect visibility in Class I areas under her charge as an FLM, the Secretary acting through BLM under FLPMA, also has a responsibility to ensure the national visibility goal established by the Clean Air Act is implemented in all Class I areas likely to be impacted by emissions from developments.

The CAA "declares as a national goal the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory class I Federal areas which impairment results from manmade air pollution." 42 U.S.C. § 7491(a)(1). EPA has promulgated rules to implement this national goal. 40 C.F.R. Part 51, subpart P. These regulations include requirements defining reasonable progress toward the national goal. "The reasonable progress goals must provide for an improvement in visibility for the most impaired days over the period of the implementation plan and ensure no degradation in visibility for the least impaired days over the same period." 40 C.F.R. § 51.308(d)(1). This rule has been affirmed by the D.C. Circuit Court of Appeals in response to an attack by industry arguing that EPA is not authorized by the Act to establish a "no degradation" standard. *American Corn Growers v. EPA*, (D.C. Cir 2002) ("Petitioners' claim that the agency is without authority to mandate attainment of the national goal is therefore meritless.")

This standard for reasonable progress must be addressed in the Infill Project EIS. The information needed to identify the least impaired days is available from the transmissometer data used for the visibility impact analysis, and the output from the CalPUFF model provides the information to provide a meaningful assessment of the extent to which visibility will be degraded on the least impaired days. Thus that information should be developed and submitted to the public in the EIS. The results of that analysis should then be considered for the purpose of identifying the kinds of mitigation measures necessary to achieve the no degradation standard.

E. THE EIS MUST IDENTIFY AND MITIGATE ACID RAIN IMPACTS

The Infill Project EIS must identify potentially adverse impacts on water chemistry in highly sensitive high altitude lakes. The EIS should then consider and include mitigation measures that will prevent NAAQS and increment violations, and ensure no degradation of visibility on the least impaired days, is assessed to determine if they will prevent the adverse impacts on lake chemistry. If not, then additional mitigation options should be identified to determine the extent of mitigation needed to prevent adverse impacts on the quality of these lakes.

F. THE EIS MUST IDENTIFY AND MITIGATE IMPACTS ON PUBLIC HEALTH FROM FINE PARTICLE EXPOSURES

The emissions sources from oil and gas projects are and will be a major source of NO_x emissions which are transformed in the atmosphere to form fine particle nitrates. Given the potentially severe adverse health effects associated with fine particle exposures, the EIS must fully assess the potential adverse public health effects associated with cumulative emissions of fine particles and fine particle precursors from the current and proposed sources of fine particles. In addition, the EIS must identify any current or potential large increases in exposure to fine particles (FP) from background concentrations of 19 to 42 µg/m³.

Recent evidence of the effects of FP exposures demonstrates the potential for increased premature mortality, hospitalizations, asthma and other respiratory disease episodes, increased medication and health care costs, increased loss of work days and lost wages as well as lost school days for children.³⁵ Accordingly, the EIS must inform the public of these adverse health impacts, address the new evidence of health problems, and provide means to mitigate these adverse health impacts.

This analysis of FP health effects in the NEPA context is made necessary by EPA's guidance to air quality permitting agencies that they are not required to apply NSR review requirements to fine particulate sources until after an area has been designated for the PM 2.5 NAAQS. Such designations are not expected until 2004 or later. In addition, EPA has failed to promulgate PSD increments for PM_{2.5} as required by § 166 of the CAA. Our groups believe that such a waiver of permit procedures is not authorized by the Act and implementing regulations, but as long as EPA exempts major fine particulate sources from permit review and from increments and increment review, the potential adverse health effects associated with exposures to fine particulates must be addressed under NEPA.

This analysis is also made necessary because the FP NAAQS promulgated by EPA in 1997 does not prevent adverse health effects demonstrated by the health effects research published since 1996 when EPA closed the last version of the PM Criteria Document relied upon to set the 1997 NAAQS for PM_{2.5} to protect public health pursuant to §109(b) of the CAA. Therefore, since the 1997 NAAQS appears no longer to be adequate to protect against adverse health effects, the residual adverse effects allowed by the NAAQS must also be considered under NEPA. In the event it is determined that this project together with current and foreseeable projects in the Pinedale Resource Area will contribute to adverse health effects among the residents of Wyoming, mitigation measures must also be considered under NEPA to prevent those effects.

In addition, the EIS should include a risk assessment using the techniques applied by EPA in the development of its Risk Assessment for the 1997 FP NAAQS to estimate the increased adverse health risk to the local populations in the area of the projects.

³⁵ See *The Impacts of Exposure to Fine Particles on Human Health*, R. Yunke (Spring 2003)(Attached as [Exhibit S](#)).

Finally, the recent decision of the Ninth Circuit Court of Appeals requires that the research evidence of health effects associated with air pollutants from diesels be addressed under NEPA. *Public Citizen v. US DOT*, No. 02-70986 (Jan. 16, 2003). The evidence of adverse health effects associated with 24-hour exposures to FP must be included in the EISs.

G. ADDRESS GLOBAL WARMING

The importance of this issue cannot be underscored enough. Accordingly, we would like to emphasize that the EIS should address the problem of global warming and the steps BLM can take in considering this project to reduce this problem. For example, flaring of hydrocarbon by-products contributes to global warming, and much of that may be unnecessary as companies like BP America have developed methods to capture the vast majority of gas that is often flared. BLM should make a thorough analysis of how activities it undertakes or authorizes contribute to the generation of carbon dioxide or other “greenhouse gasses,” and the EIS should make provisions to avoid, reduce and minimize them.

IV. ENSURE COMPLIANCE WITH THE CLEAN WATER ACT

The Clean Water Act (CWA) establishes many requirements that BLM must consider in the EIS and adhere to in the ROD. It is imperative that BLM insure that any waters in the Infill Project Area comply with State water quality standards and that those standards are not violated by natural gas development. It is critical to recognize that State water quality standards “serve the purposes” of the CWA, which, among other things, is to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters. . .” 33 U.S.C. §§ 1313(c)(2)(A), §1251(a). That is, a purpose of water quality standards is to protect aquatic ecosystems, and BLM must ensure this comprehensive objective is met by ensuring water quality standards are complied with. Water quality standards are typically composed of numeric standards, narrative standards, designated uses, and an anti-degradation policy. All too often, however, only numeric standards are viewed as “water quality standards.” That narrow view is incorrect. The Supreme Court held in *PUD No. 1 of Jefferson County v. Washington Dep’t of Ecology*, 511 U.S. 700 (1994), that *all* components of water quality standards are enforceable limits. Consequently, the ROD must ensure all components of State water quality standards are met, not just numeric standards.

Adopting this legally sanctioned view of water quality standards is important. For example, a typical designated use for a stream might state that the stream is “protected for cold water species of game fish and other cold water aquatic life, including necessary organisms in their food chain.” Designated uses of this sort encompass a far more holistic, ecosystem-based view than focusing on, say, the concentration of chloride in the stream (a numeric standard). Consequently, the ROD should provide that designated uses be fully achieved, and if they are not, require prompt management changes even if numeric standards are otherwise being met. Similarly, narrative standards can often embody a better ecological synthesis than numeric standards, and thus BLM should ensure that they too are achieved. For example, a State’s narrative standard might make it illegal to contaminate a stream with “floating materials or scum that create objectionable odors or cause undesirable aquatic plant growth.” If Wyoming has established

narrative standards applicable to the Infill Project Area the ROD should ensure these narrative standards are fully met, and modify management where they are not.

The State's anti-degradation policy is also a critical component of water quality standards. *See* 40 C.F.R. § 131.12 and applicable State regulations. The EIS should consider the requirements of the anti-degradation policy and the ROD should assure these requirements are met.

In addition to the anti-degradation policy's protections for waters that *are* meeting water quality standards, where State water quality standards *have not* been achieved despite implementation of point source pollution controls, section 303(d) of the CWA requires a State to develop a list of those still-impaired waters, with a priority ranking, and to set total maximum daily loads (TMDLs) of pollutants for the stream "at a level necessary to implement the applicable water quality standards. . . ." 33 U.S.C. § 1313(d)(1)(C). Consequently, to the extent waters within the BLM's jurisdiction have been identified as water quality impaired segments, or contribute stream flow to such segments, the Infill Project ROD should require affirmative steps toward reducing that impaired status, regardless of whether the State has made a specific allocation of pollutant load to BLM lands at the time the ROD is adopted. If any specific load allocation has been made by the State of Wyoming for activities on BLM lands, BLM should obviously ensure that these are complied with.

The Infill Project EIS should consider the requirements of sections 401 and 404 of the CWA and the ROD should ensure full compliance with these requirements. Section 401 requires State certification of compliance with State water quality standards prior to authorization of certain actions on BLM lands. 33 U.S.C. § 1341. The ROD should fully implement this requirement. Section 404 requires permits before discharges of dredged or fill material can be made into navigable waters, and BLM, through the ROD, should assist the EPA and Army Corps of Engineers with implementation and enforcement of this requirement, which, of course, is a powerful means for the protection of wetlands. *See* 33 U.S.C. § 1344.

An important step toward complying with the CWA can be made by ensuring the Infill Project ROD adheres to and incorporates elements of the Clean Water Action Plan. The Clean Water Action Plan makes many provisions, but several are particularly relevant to public lands management. The Clean Water Action Plan requires "managing natural resources on a watershed basis . . ." <http://www.cleanwater.gov/action/c2b.html>. Federal agencies must adopt a policy that "will ensure a watershed approach to federal land and resource management that emphasizes assessing the function and condition of watersheds, incorporating watershed goals in planning, enhancing pollution prevention, monitoring and restoring watersheds, recognizing waters of exceptional value, and expanding collaboration with other agencies, states, tribes, and communities." *Id.* The BLM is specifically required to provide for "enhanced watershed restoration efforts, including the integration of watershed restoration as a key part of land management planning and program strategies," among many other requirements. *Id.* The BLM "will increase maintenance of roads and trails and aggressively relocate problem roads and trails to better locations. Where unneeded roads pose threats to water quality they will be obliterated and the land restored." *Id.* Implicit in this requirement is a prohibition on creating, or permitting, additional roads that could become problem roads, especially where there is no realistic basis given budget and personnel constraints to believe they can be adequately

maintained. This requirement, of course, has special relevance relative to oil and gas extraction activities, which are typically characterized by a profusion of roads. Relative to riparian areas, the Clean Water Action Plan requires that BLM “will enhance the quality of streams and riparian zones and accelerate restoration.” *Id.*

Similarly, the Infill Project ROD should make provision for implementing BLM’s Riparian-Wetland Initiative, and seek to implement the specific objectives established in that initiative, particularly the objective of restoring 75% of riparian areas to “proper functioning condition.”

V. INVASIVE SPECIES, NOXIOUS WEEDS, AND MANAGEMENT OF NATIVE VEGETATION

We ask that BLM ensure the ROD provides for compliance with Executive Order 13112, which established requirements and procedures Federal agencies are to adhere to relative to invasive species. Section 2 of the Executive Order requires BLM to identify actions that may affect the status of invasive species and to then:

Use relevant programs and authorities to: (i) prevent the introduction of invasive species; (ii) detect and respond rapidly to and control populations of such species in a cost-effective and environmentally sound manner; (iii) monitor invasive species populations accurately and reliably; (iv) provide for restoration of native species and habitat conditions in ecosystems that have been invaded; (v) conduct research on invasive species and develop technologies to prevent introduction and provide for environmentally sound control of invasive species; and (vi) promote public education on invasive species and the means to address them

Just as important, the Executive Order requires BLM to “not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere unless, pursuant to guidelines that it has prescribed, the agency has determined and made public its determination that the benefits of such actions clearly outweigh the potential harm caused by invasive species; and that all feasible and prudent measures to minimize risk of harm will be taken in conjunction with the actions.” The EIS should fully analyze the extent of the invasive species problem in this area, the causes, and options for both restoration and prevention in the future.

We believe BLM should consider whether it is more effective and efficient, ecologically and economically, to simply avoid certain ground-distributing activities so as to ensure the requirements of the Executive Order are complied with. For example, not building certain roads or authorizing certain oil and gas drilling activities may be a very cost effective, as well as ecologically effective, means to prevent the spread of invasive species, and the ROD should establish guidance as to when avoidance of ground-disturbing activities is preferred and appropriate. The ideal action here is to require that all new wells be directionally drill from existing pads.

The flip side of preventing invasive species from becoming established is protecting native plant species and communities, especially rare and special status species. The BLM should conduct surveys to determine the location and characteristics of native plant communities and rare or

special status species. The survey results should be presented in the EIS, and the ROD should establish standards for protecting native plant communities and rare or special status species. BLM's grazing regulations and the Public Rangelands Improvement Act establish that native species and plant communities are to be given preference over non-native species and communities (whether invasive or intentionally created), so the ROD should establish standards to ensure these requirements are met. To prevent invasive species dominance, and to favor native species and plant communities over non-natives, we make the following specific requests:

- The EIS/ROD must insure that no cross-country vehicular travel is allowed in known habitat or locations of sensitive plant species within the project area;
- The EIS/ROD must prohibit surface disturbing activities and rights-of way in threatened, endangered or sensitive plant species habitat;
- The EIS/ROD must address how operators will be trained with respect to noxious weed identification;
- BLM must augment law enforcement personnel and field staff, and instruct them to concentrate efforts in areas with special status species habitat in order to curb noncompliance activities and protect sensitive species from irreversible impacts;
- BLM must survey the project area to document all "relict" or undisturbed plant communities—areas that have persisted despite the warming and drying of the interior west over the last several thousand years, or have not been influenced by settlement and post-settlement activities (livestock grazing, roads, energy development). These are unique areas that can be used as a baseline for gauging impacts occurring elsewhere in the project area. The EIS/ROD should provide that relict and undisturbed plant communities must be managed for their protection; no activities that could negatively affect these communities should be allowed;
- Protection of riparian plant communities should receive special attention in the EIS/ROD, and native cottonwood and willow communities along riparian areas should be targeted for protection and reestablishment where they have been eliminated or degraded;
- The EIS/ROD must address how all equipment/vehicles will be properly cleaned prior to their arrival in the Resource Area;
- The EIS/ROD should make every APD contingent upon the prevention of weed infestation and include plans to monitor weed infestation over the life of the project.

VI. CULTURAL AND PALEONTOLOGICAL RESOURCES

Most if not all historical, archeological, and paleontological resources (hereinafter, "cultural resources") are strictly non-renewable: once marred or destroyed, they are forever lost to future generations. Such fragility demands utmost care and humility from BLM managers and planners. The EIS should reflect—and require—this conservative approach to managing these priceless and irreplaceable resources. This is especially important in view that there are *hundreds of cultural sites* (perhaps over 700) in the Jonah Project Area. A number of these sites have already been excavated resulting in impressive and valuable findings.

BLM's multiple-use mandate requires land managers to consider the value of cultural resources in their decision-making process. Unfortunately, these resources are frequently given short shrift in this calculus. Their value is not easily measured, and as a result they are sacrificed in pursuit

of more obviously economically profitable resources. The EIS and subsequent ROD should ensure this problem is avoided.

The BLM's management of cultural resources is governed and guided by a host of laws, orders, and regulations. These include, but are not limited to, the Antiquities Act of 1906, the National Historic Preservation Act (NHPA), Executive Order 11593, the Archaeological Resources Protection Act (ARPA), and the Native American Graves Protection and Repatriation Act (NAGPRA). BLM's decisions regarding cultural resource management are also governed by the FLPMA and NEPA. The BLM must adhere to these and other laws when preparing and implementing the Infill Project EIS/ROD, and must provide evidence of cultural resource consideration as part of the EIS prepared as part of the analysis process. *See* BLM Manual MS-8100.08.A.1.b.(3).

As noted above, the BLM's multiple-use mandate requires managers to balance resource use and resource preservation. BLM Manual MS-8100.08.A.1.b.(2) states that land use plans should take into account the effects other land and resource uses may have on cultural resources. The manual notes that the need for additional information should be evaluated, responsibilities assigned, and schedules established at the outset of the planning process. *See* BLM Manual MS-8100.08.A.1.b.(2). In other words, not only must the BLM examine the effects of other land and resource uses on cultural resources, it must evaluate whether or not it possesses sufficient information to assess these potential resource conflicts. If the agency lacks enough information to make informed decisions, it must collect data according to a plan and schedule established at the outset of the planning process. The BLM should clearly spell out the process the agency will follow in order to comply with the procedures outlined by BLM Manual MS-8100.08.A.1.b.(2).

Of particular concern in the analysis is the preparation and maintenance of cultural resource inventories. FLPMA requires the Secretary of the Interior to "prepare and maintain on a continuing basis an inventory of all public lands and their resources and other values." 43 U.S.C. §1711(a). Surveys for cultural resources are also mandated by ARPA. *See* 16 U.S.C. 470ii (requiring the Secretary of the Interior to develop plans for surveying lands to determine the nature and extent of archaeological resources and to prepare a schedule for surveying lands that are likely to contain the most valuable archaeological resources); Executive Order 11593, Protection and Enhancement of the Cultural Environment (requiring federal agencies to nominate to the Secretary of the Interior all sites that appear to qualify for listing on the National Register of Historic Places). Further, the NHPA mandates that the BLM establish a preservation program to identify, evaluate, and protect historic properties, and to nominate qualifying properties to the National Register of Historic Places. *See* 16 U.S.C. § 470h-2.

The EIS must ensure these legal mandates are fully complied with. The required inventories and programs can—and should—serve to identify areas of resource sensitivity and should be used proactively by the BLM in its planning and management in order to avoid resource conflicts.

Another concern is consultation with Native American tribes during the planning process. BLM is required to consult with tribes under FLPMA, NEPA, American Indian Religious Freedom

Act, NAGPRA, and Executive Order 13007, in order to learn of tribal concerns and places of traditional religious or cultural importance to the tribe within the planning area. BLM Manual MS-8120.51.A describes consultation requirements during land use planning. *See also* BLM Handbook H-8160-1 (Procedural Guidance for Native American Consultation); BLM Manual MS-8160 (Native American Consultation). The BLM must specifically request the views of tribal officials, and must solicit the views of traditional leaders or religious leaders. BLM must be diligent in its pursuit of this information.

BLM Manual MS-8120.32.A makes clear that the BLM can prevent unauthorized use of cultural properties through a variety of measures, including administrative protection measures. The manual specifically notes that the BLM's protective measures may include "withdrawal, closure to public access and off-road vehicles, special designations," etc. *See* BLM Manual MS-8120.32.A. The EIS should identify areas where cultural sites are at risk, and the ROD should employ one or more of these administrative measures to protect these resources. The areas designated should be of sufficient size to allow viable protection of the resources; designation of just the site itself may not allow for effective management.

Abiding by the above mandates is especially important given the issuance of a recent Instruction Memorandum (IM).³⁶ The IM authorizes the BLM to do away with the traditional linear approach to surveying for cultural resources and instead use a block survey.³⁷ Utilization of this type of survey will, according to the press release accompanying the IM, allow the BLM to cover larger areas and "improve[s] [customer] service to oil and gas operators by reducing some sources of delay in meeting BLM National Historic Preservation Act (NHPA) Section 106 compliance responsibility for APD and Sundry Notice processing"³⁸ The Infill Project EIS must address the implications of this recent IM on the Jonah Area's significant cultural resources.

VII. TRAVEL PLANNING AND OFF-ROAD VEHICLES USE

In view of the increased amount of roads that accompany oil and gas development and the recent increase in the popularity of recreation, the technological advances in mechanized and motorized "toys," and the high growth rates in the number of visitors to public lands, it is critical that the Infill Project EIS address travel planning and off-road vehicle issues. If not fully addressed by the EIS, this will simply result in a web of unnecessary roads, more illegal routes, and further degradation of resources. Accordingly, our groups urge the BLM planning staff to fully evaluate and take a proactive approach to managing travel, roads, and off-road vehicle use within the Infill Project Area.

³⁶ *Instruction Memorandums No. 2003-147 to All Field Officials from BLM Director* (Apr. 14, 2003) and accompanying press release (Attached as [Exhibit H](#)).

³⁷ *Id.*

³⁸ *Id.*

Thank you for considering these comments. Should you postpone the environmental analysis of this project until after the ROD for the revised RMP has been signed as required by NEPA we ask that you keep our comments on file to be considered at that time.

Sincerely,

Kelly Matheson
Greater Yellowstone Program Coordinator
Wyoming Outdoor Council
262 Lincoln St.
Lander, WY 82520
(307) 332-7031 ext. 20

On behalf of:

Matt Niemerski
Public Lands Associate, Defenders of Wildlife
(202) 682-9400 ext. 294\

Jeff Kessler
Biodiversity Conservation Alliance
(307) 742-7978

Tim Stevens
Issues and Outreach Director, Greater Yellowstone Coalition
(406) 586-1593

Pam Lichtman
Program Director, Jackson Hole Conservation Alliance
(307) 733-9417

Johanna Wald,
Senior Attorney, Natural Resources Defense Council
(415) 777-0220 ext. 347

Peter Aengst
Program Director, The Wilderness Society
(406) 586-1600 ext. 105

Linda Baker
Organizer, Upper Green River Valley Coalition
(307) 367-3670

Aaron Bannon
Program Director, Wyoming Chapter of the Sierra Club
(307) 672-0425

Liz Howell
Director, Wyoming Wilderness Association
(307) 673-4752

Cc: Bob Bennett, Wyoming BLM
Brent Manning, Wyoming Game and Fish Department
John Corra, Wyoming Department of Environmental Quality
Mike Long, U.S. Fish and Wildlife Service
Kniffy Hamilton, Bridger-Teton National Forest
Becky Aus, Shoshone National Forest
Steve Martin, Grand Teton National Park
Suzanne Lewis, Yellowstone National Park
Barry Reswig, National Elk Refuge
Environmental Protection Agency