

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

Ms. Prill Mecham, Field Manager
Ms. Kellie Roadifer, RMP Team Leader
BLM Pinedale Field Office
P.O. Box 768
Pinedale, WY 82941-0768

Re: Scoping Comments for the Revision of the Pinedale RMP

April 7, 2003

Dear Ms. Mecham and Ms. Roadifer:

The following comments are submitted on behalf of Wyoming Outdoor Council, American Lands, Biodiversity Conservation Alliance, Defenders of Wildlife, the Greater Yellowstone Coalition, the Jackson Hole Conservation Alliance, Natural Resources Defense Council, The Wilderness Society, the Upper Green River Valley Coalition, Wildlands CPR, the Wyoming Chapter of the Sierra Club, and the Wyoming Wilderness Association for consideration during the scoping process for the Pinedale Field Office's Resource Management Plan (RMP) revision and associated environmental impact statement (EIS) that were solicited by the Bureau of Land Management (BLM).

As you are well aware, the Federal Land Policy Management Act (FLPMA) and related BLM regulations require BLM to manage the public lands and their resources pursuant to a RMP. All future actions must conform to the terms and conditions established in the RMP. Given this overarching importance, BLM must ensure careful adherence to the legal requirements applicable to a RMP established by FLPMA, the requirements for preparing an EIS established by the National Environmental Policy Act (NEPA) as well as any other requirements mandated by federal law.

To help ensure those requirements are met, we ask the BLM to consider and address each of our specific points that follow. In the first section of these comments we ask BLM to consider requirements applicable to any EIS, particularly at the scoping stage. Next we ask BLM to ensure the RMP abides by the requirement to not allow unnecessary or undue degradation of the public lands and present general requirements applicable to land use planning established by FLPMA. In the third section of these comments we present general requirements applicable to land use planning that are established by other federal environmental laws. In the fourth and longest section we present a number of resource-specific concerns and the legal requirements applicable to those concerns that the EIS should consider and which the RMP should provide for. Special emphasis will be given throughout these comments to issues related to oil and natural gas leasing, exploration, and development.

SECTION I: LEGAL REQUIREMENTS APPLICABLE TO THE RESOURCE MANAGEMENT PLAN ENVIRONMENTAL IMPACT STATEMENT THAT THE BLM MUST COMPLY WITH DURING SCOPING

The “scoping” stage of preparing an EIS requires BLM to make two determinations: i) what is the scope of the project – in this case the RMP – to be analyzed in the EIS; and ii) what are the issues that will be analyzed “in depth” in the EIS. 40 C.F.R. § 1501.7(a).¹ Other environmental reviews (such as 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 our comments below are within the legal scope of an RMP, and therefore they must be analyzed in-depth in the EIS.

I. CONSIDER CONNECTED, CUMULATIVE, AND SIMILAR ACTIONS

In determining the scope of the RMP EIS, BLM must consider “connected actions,” “cumulative actions,” and “similar actions.” 40 C.F.R. § 1508.25. Connected actions are actions that are “closely related” to the RMP. Closely related actions include *any reasonably foreseeable* oil and gas development projects that would not occur “but for” authorization provided in the RMP. Examples of oil and gas development actions/projects that would not occur but for authorization in the RMP include leasing, exploration projects, and full-field development projects. Thus, the EIS should address each of these types of connected actions/projects in detail, and given the significant amount of historical data that exists for these types of actions/projects they are reasonably foreseeable and detailed consideration should be possible.

Similar actions include authorizations for oil and gas development occurring on State and private lands in or adjacent to the geographic area of the RMP, Forest Service 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 RMP revision and

¹ See also BLM Handbook H-1790-1.V.B.1; BLM Handbook H-1601-1.III.A.1; 43 C.F.R. § 1610.4-1 (requiring scoping for RMPs to comply with Council on Environmental Quality scoping regulations).

informed decision-making by BLM and to meet NEPA's cumulative impacts analysis requirements.

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."² In addition, the Forest Supervisor stated,

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 requests 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.³

As the lands with a consent to lease decision sit directly adjacent to the Pinedale Resource Area, the RMP EIS 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 leasing followed by subsequent development in either the Pinedale RA and/or the Bridger-Teton National Forest could lead to violations of the Clean Air Act. This conclusion highlights the importance of completing an ecosystem-wide impacts study in the RMP EIS.

Similarly, the existing and future pipeline network for natural gas will have a major impact on the likelihood and scale of future natural gas development. Please disclose and analyze the existing location and capacity of natural gas pipelines in determining new developments and the impact of new natural gas pipelines that are expected to be built with future energy development in the Resource Area.

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 oil and gas development. Impacts and actions that should be addressed in a cumulative fashion include, but are not limited to: road construction effects, 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

² *Letter to Bob Bennett, BLM State Director from Kniffy Hamilton, Forest Supervisor, Bridger-Teton National Forest* (Mar. 7, 2003) (Attached as [Exhibit A](#)).

³ *Id.*

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. § 1508.25.⁴

An issue closely associated with the consideration of connected, similar, and cumulative actions and impacts is the Reasonably Foreseeable Development (RFD) scenario for oil and gas development. This issue will be addressed at length below. Suffice it to say here that development of a realistic, well supported, economically rational, and scientifically based RFD is crucial for a proper analysis and determination of connected, similar, and cumulative impacts.

II. THE BLM MUST INVOLVE THE PUBLIC

BLM should hold early scoping meetings, as provided for by NEPA's implementing regulations (also referred to as "CEQ regulations") so that the public can be fully informed of and participate in the RMP revision process. 40 C.F.R. § 1501.7(b). These meetings should include meetings at times and places that allow the participation of people who do not live within the geographic boundaries of the RMP, or even within the State; for example, telephone conferences or web-based scoping meetings should be considered. *See* BLM Handbook H-1790-1.V.B.c.4 (encouraging use of "a variety of methods and mediums" for facilitating public participation in the scoping process). This recommendation is consistent with, and required by, BLM's land use planning regulations. 43 C.F.R. §§ 1610.2(a), (f).

In his regard, two problems have already arisen during this scoping process. First, in early March members of the public seeking to submit comments via email on both the RMP EIS and the South Piney Development Project received an message from the BLM stating,

Undeliverable: scoping: Pinedale RMP. Your message did not reach some or all of the intended recipients.⁵

Staff members with our groups immediately notified the BLM of this issue and the BLM rectified the situation. Apparently, the overwhelming number of comments from citizens across the nation overloaded technological capabilities. In the future, we ask that the BLM recognize the national importance of the Upper Green River Valley (i.e. the Pinedale Resource Area) as an integral part of the Greater Yellowstone Ecosystem and provide expanded technological capacity to allow and facilitate public participation. Additionally, if comments were lost, the RMP EIS must disclose the extent of this loss.

Second, the Upper Green River Valley is Greater Yellowstone's crucial link, connecting the stunning mountain ranges that spill out of Yellowstone and Grand Teton National Parks with one of the most unique and spectacular landscapes in North America – the Red Desert. Nestled

⁴ In this regard we ask BLM to consider the report *Fragmenting Our Public Lands, The Ecological Footprint From Oil And Gas Development*, courtesy of The Wilderness Society (C. Weller et al., authors)(Sep. 2002)(Attached as [Exhibit B](#)).

⁵ *See Email to Kellie Roadifer, Team Leader, Pinedale BLM from Kelly Matheson, Wyoming Outdoor Council* (Mar. 3, 2003)(Attached as [Exhibit C](#)).

between the high peaks of the Wind River, Gros Ventre, and Wyoming Ranges, the Valley is the winter home to impressive herds of pronghorn, mule deer, and elk that summer in Greater Yellowstone's mountain highlands surrounding Jackson. Considering the Upper Green's importance to wildlife (not to mention air and water quality) it is no surprise that the fate of the Upper Green River Valley is of great importance to the residents in and around Jackson Hole, Wyoming.

In view of this importance, as well as the tremendous interest in and a *specific* request for a Jackson meeting, the Pinedale BLM should have hosted a public scoping meeting in Jackson. We are disappointed that the Pinedale BLM denied the meeting request,⁶ feel it was a mistake, and believe the Pinedale BLM should not repeat this error during the next public comment period.

Other towns besides Jackson as well as Pinedale, Rock Springs, and Marbleton should also be considered for open houses and hearings on the *draft* EIS, since the Upper Green's wildlife and other resources are valued by residents throughout the state and country. For example, hunting districts in the Pinedale Resource Area attract many thousand of Wyoming hunters for all across the state every year. So towns like Lander, Casper, and Laramie should be considered for open houses and hearings. We also strongly encourage the BLM to schedule field trips for the public in the interim between this comment period and the issuance of the alternatives, before the *draft* EIS is issued and during the *draft* EIS comment period. This is critical as on-the ground experience with the issues and direct face-to-face discussion is valuable both for the BLM RMP ID Team and for the larger public.

III. THE RMP 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";

⁶ See *Letter to Cathy Purves, Wyoming Wildlife Federation from Eldon Allison, Acting Field Manager, Pinedale BLM* (Mar. 3, 2003)(Attached as [Exhibit D](#)).

- 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 issues that BLM must identify for analysis in its RMP EIS include the above goals and policies, and we ask BLM to “insure” that these considerations are “infused” into oil and gas leasing, exploration, and development activities considered in the EIS and authorized by the RMP.

IV. IDENTIFY THE PURPOSE AND NEED

The BLM NEPA Handbook requires BLM to identify the purpose and need of the project being analyzed. BLM Handbook H-1790-1.V.B.e. While the purposes and needs for the RMP are broadly defined by the FLPMA and other law, BLM should give specific attention to the purposes and needs for oil and gas related activities that will be analyzed in the EIS. BLM should address in detail what the purpose of future leasing is. It should address what the purpose of future potential exploration and development activities would be. These considerations should be made with explicit recognition of the relative value of the RMP area for meeting local, regional, and national energy needs and what alternatives exist for meeting those needs locally, regionally, and nationally. Alternative forms of energy such as wind power must be considered when determining the purpose and need for oil and gas development along with the relative contributions of alternatives and fossil fuels to climate change. The relative value of the area for meeting energy needs versus supplying environmental amenities/needs should be considered in identifying the purpose(s) and need(s) of oil and gas development. Similarly, identification of where specifically oil and gas leasing, exploration, and development is appropriate and inappropriate in the RMP area, and why, should be addressed in the EIS as part of the definition of the purpose and need for the RMP.

V. IDENTIFY FUTURE DESIRED OUTCOMES AND CONDITIONS

BLM’s Land Use Planning Handbook requires BLM to identify desired outcomes or desired future conditions resulting from implementation of the RMP. BLM Handbook H-1601-1.II.B.1. BLM should determine what the desired outcome(s) from oil and gas leasing, exploration, and development activities are, particularly with reference to the desired outcome(s) for endangered species protection, migratory wildlife, non-migratory wildlife, prevention of habitat fragmentation, protecting the naturalness of landscapes and their aesthetic appeal, the prevention of unnecessary or undue degradation of public lands, the prevention of air and water pollution, and the protection of surface owner rights on split-estate lands. Mechanisms for resolving conflicts between the desired outcomes for oil and gas development relative to other resources should be identified in the EIS and adopted in the RMP. The requirement for BLM to prevent unnecessary or undue degradation of the public lands should be paramount in such balancing.

Furthermore, some statutes, such as the Endangered Species Act, require that where there are conflicts between what is desired for oil and gas-related activities versus other resources, the

objectives for oil and gas development must recede. The RMP should acknowledge this and make provisions for meeting this requirement. For example, closure of lands to certain resources uses, such as oil and gas development, is specifically provided for as a means to achieve desired outcomes. BLM Handbook H-1601-1.II.B.2 (*See also Section IV (II)(A)(2)* below). Measures for protecting the land to achieve desired outcomes should be developed at an appropriate scale, with a landscape or bioregional scale being the appropriate scale for many actions, particularly endangered species protection. BLM Handbook H-1601-1.III.A.4.

In addition to BLM's own planning guidance, and as referenced above, various laws collectively establish a requirement to engage in ecosystem management and ensure protection of biological diversity also establish elements of a statement of desired outcomes:

- As required by the ESA, BLM should seek to conserve the ecosystems upon which endangered and threatened species depend on in the RMP area.
- As required by the Clean Water Act, BLM should seek to restore and maintain the chemical, physical, and biological integrity of all waters in the RMP area. Additionally, the plan should seek to eliminate the discharge of pollutants into waters in the RMP area, "provide for the protection and propagation of fish, shellfish, and wildlife," and provide for "recreation in and on the water[s]" in the RMP area. 33 U.S.C. § 1251(a)(1)-(2).
- The Clean Air Act declares a national purpose to "protect and enhance the quality of the nation's air resources so as to promote the public health and welfare . . ." 42 U.S.C. § 7401(b)(1).
- Pursuant to FLPMA, BLM should ensure that public lands in the RMP area are managed to protect the "quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values," as well as ensure compliance with the definitions of multiple use and sustained yield. 43 U.S.C. §§ 1701(a)(8), 1702(c) and (h). No unnecessary or undue degradation of the public lands can be allowed. 43 U.S.C. § 1732(b).
- BLM's Fundamentals of Rangeland Health and the grazing standards and guidelines are a blueprint for ecosystem-management-based goals that BLM should apply to all activities in the RMP area. *See* 43 C.F.R Subpt. 4180.
- The Clean Water Action Plan and Riparian-Wetlands Initiative establish goals for watershed planning that should be adopted in the RMP.
- The Wilderness Act should provide the desired outcome for all BLM roadless areas, namely they should be managed so that they remain "an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain." 16 U.S.C. § 1131(c).

Taken together, these laws define what BLM's statement of desired outcomes should be under the RMP, and the RMP should ensure such outcomes are implemented on the ground. The report "Conservation Management of America's Public Lands: An Assessment and Recommendations for Progress 25 Years After FLPMA"⁷ provides further guidance on many of these elements and should be considered by BLM as it adopts a statement of desired outcomes for the RMP.

⁷ A White Paper by the National Wildlife Federation and the Natural Resources Defense Council (Oct. 2001).

VI. THE RMP EIS MUST 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, the 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).

This binding (“shall”) authority makes it imperative that BLM include, and thoroughly analyze, a ***conservation alternative***, including the provisions set forth in these comments, in the RMP EIS. The underlying principles of the alternative are reasonable and contain appropriate mitigation measures. Therefore, BLM *must* devote substantial treatment to and a rigorous analysis of the alternative that seeks to conserve Wyoming’s great heritage.

Beyond the CEQ regulations, court decisions also make clear that the discussion of alternatives is “the heart” of the NEPA process and that the environmental analysis must “[r]igorously explore and objectively evaluate all reasonable alternatives.” 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, we would like to make two specific requests. First, because ongoing leasing, during the RMP process, limits the BLM’s options to manage lands, leasing must be halted until the new RMP has been adopted. (Discussed in further detail in [Section I \(VIII\)](#) below). Second, because 90% of the Resource Area is now under lease, we specifically ask that a “No New Leasing” alternative be developed and analyzed in the *draft* EIS. Such an alternative would assist in fulfilling BLM’s obligations to, during the scoping process, develop alternatives that emphasize needed environmental protection even if such alternatives limit and/or strongly regulate oil and gas development. Such options may not be dismissed without a thorough and careful analysis in the EIS. Elements of an alternative that achieves needed environmental protections are presented in the concluding section of these comments.

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 because all of the elements (affirmative protection of endangered species, restoration of the ecological integrity of the Nation's waters, etc.) are legally required and have been established as the desired outcome for the public lands by *Congress*. To the contrary, BLM must provide full, careful, and objective consideration of alternatives embodying these elements.

Finally, throughout this analysis process, the BLM must understand and keep on the forefront of the planning, that under the FLPMA, the chosen alternative must "best" meet the needs of the American people as a whole. The FLPMA makes it explicitly appropriate that not all uses be accommodated in all areas, and requires consideration of the relative values of resources, which cannot be defined in solely economic terms. The elements of an alternative outlined in these comments are appropriate and reasonable under these standards, and thus should be fully considered in the EIS and adopted by BLM in the RMP.

VII. 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. 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. *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).

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 RMP 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 RMP EIS and how it intends to gather such data in the future.

For example, 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, for instance, 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:

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

- 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;
- 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 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 the RMP EIS.

In addition, and on a slightly different note, our groups would like to emphasize that the *draft* EIS must set forth and summarize *the monitoring data that has been collected* pursuant to the monitoring mandate in the Record of Decision (ROD) for the Pinedale Anticline Natural Gas Project.¹² Finally, this summary must include a clear and concise statement setting forth *the extent to which the BLM has failed to fulfill its monitoring obligations* pursuant to the Pinedale Anticline ROD.

VIII. INTERIM ACTIONS

The National Environmental Policy (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).

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

Despite this express and clear prohibition, the Pinedale BLM has taken or initiated a number of actions that will both have an adverse environmental impact and limit the choice of reasonable alternatives that the agency might take in its RMP EIS.

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 Appendix C, Record of Decision for the Pinedale Anticline Natural Gas Project* (Jul. 2000).

¹² *Id. at C-2.*

First, the Pinedale BLM has continued leasing on a bi-monthly basis. Many of our groups have protested each decision to lease since August of 2001 to the BLM State Director following any adverse decisions with an appeal to the Interior Board of Land Appeals. The reason for this is simple (and will be discussed further below). *According to the BLM*, leasing is an irretrievable commitment of resources. In other words, once land is leased the BLM believes it has little to no authority to prohibit industry for developing the lease parcel and with 90% of the Pinedale Resource Area already leased, the BLM already has foreclosed many of its management options.

Second, just *two days prior to* announcing the initiation of the scoping period for the RMP revision the BLM initiated the public scoping for the *South Piney Development Project*. On January 29, 2003, the BLM notified the public that Infinity Oil and Gas of Wyoming, Inc. and Williams Production RMT Company submitted a proposal to drill between 100 and 210 gas and coalbed methane (CBM) wells adjacent to the Wyoming Range in the southwestern portion of the Pinedale Resource Area.¹³ If allowed to proceed this would be the first CBM project in the Pinedale Resource Area.

Further demonstrating the BLM intent to violate NEPA, as well as the pace at which industry seeks to industrialize the Upper Green River Valley, *during* the scoping period for the RMP EIS and the *South Piney Development Project*, the BLM initiated scoping on a **second** major gas project. On March 13, 2003, the BLM notified the public that Encana Oil and Gas (USA) Inc., BP America, and other natural gas development companies submitted a proposal to expand natural gas exploration and development operation in the Jonah Field – a large-scale oil and gas field already being drilled.¹⁴ The operators seek approval of the *Jonah Infill Drilling Project*. If approved as proposed by industry, 1250 additional wells would be drilled from 850 well pads in the central portion of the Resource Area. The proposal would result in the presence of 32 to 64 wells in one square mile section.

This continuation of leasing, as well as the two major gas development projects are clearly interim actions that will determine subsequent development *and* limit alternatives available to the BLM in its RMP revision process.

For instance, if the BLM auctions off lease rights (i.e. the right to develop) during the RMP revision process and then determines to close the areas leased to oil and gas development, the agency effectively foreclose its options to withdraw such areas to leasing in contravention of NEPA, the ESA, and the definition of multiple-use in FLPMA. Put another way, if the BLM continues to lease during the RMP process, the BLM necessarily limits the choice of reasonable alternatives because under the RMP amendment process the BLM will not be able to put these areas off-limits to development, add more or different stipulations, or require no surface occupancy. *See* 40 C.F.R. § 1506.1(c)(3) (“Interim action prejudices the ultimate decision on the program when it tends to determine subsequent development or limit alternatives.”). In addition, if BLM continues to lease this will foreclose options to adopt varying reasonably foreseeable development (RFD) scenarios, again in contravention of NEPA, the ESA, and FLPMA.

¹³ 68 Fed. Reg. 4,513 (Jan. 29, 2003)(Attached as [Exhibit G](#)).

¹⁴ 68 Fed. Reg. 12,100 (Mar. 13, 2003)(Attached as [Exhibit H](#)).

The BLM appears to understand the problem created by leasing during an RMP revision process. On May 11, 2001, the BLM issued an Instruction Memorandum (IM) that prohibited the BLM from leasing unleased areas during the RMP amendment process stating precisely,

For lands on which oil and gas leases have not been issued, leasing decisions should be withheld pending completion of the planning decision associated with an EA or EIS for an RMP amendment or revision that is being undertaken where oil and gas is the primary issue being considered. This policy applies even though lands may be open to oil and gas leasing under the existing RMP.¹⁵

On August 3, 2001, the BLM issued a new IM rescinding the instructions given on May 11 and instead allowing leasing, despite federal environmental law that prohibits agencies from taking actions that would have an adverse environmental impact during agency analysis, so long as the BLM determines that leasing will not “constrain the choice of reasonable alternatives under consideration in the planning process.”¹⁶

In view of the above, and considering that the BLM has expressly stated over and over and over again in a number of environmental documents that leasing results in an irretrievable commitment of resources,¹⁷ the RMP EIS must thoroughly address the impacts ongoing leasing on its choice of alternatives and must legally justify this ongoing leasing given NEPA’s prohibition on actions that will limit the range of alternatives.

The evaluation of the *South Piney Development Project* and the *Jonah Infill Drilling Project*, create the same problems. Concurrent evaluation of these projects will influence and foreclose options that the BLM may adopt in its RMP EIS. In short, it will limit the alternatives the BLM has to set a reasonably foreseeable development scenario, close areas to leasing, set well spacing requirements, require the use of directional drilling and other available technologies, adopt strict mitigation measures, adopt new lease terms, etc. This too is in direct contravention of NEPA, the ESA, and FLPMA’s definition of multiple use.

IX. REQUIRE ONGOING AND CONSISTENT MONITORING

Monitoring of RMP implementation and the impacts resulting from plan implementation are crucial. A number of legal requirements apply to plan monitoring, and they should be carefully adhered to. *See, e.g.*, 43 C.F.R. §§ 1610.4-9, 1610.5-3; BLM Handbook H-1601-1.IV-VII. Likewise, the RMP should make provision for the effective enforcement of its provisions. It is worth noting that the standards and requirements developed in an RMP are mandatory and must

¹⁵ *Instruction Memorandum No. 2001-146*, U.S. Dep’t of Interior, Bureau of Land Management (May 11, 2001)(Attached as [Exhibit I](#)).

¹⁶ *Instruction Memorandum No. 2001-191*, U.S. Dep’t of Interior, Bureau of Land Management (Aug. 3, 2001)(Attached as [Exhibit J](#)).

¹⁷ *See* Examples from federal agency documents of BLM *belief* that once it has leased lands, it has little authority to prohibit development attached as [Exhibit K](#).

be implemented, and not just when site-specific projects are pursued. *See Southern Utah Wilderness Alliance v. Norton*, 301 F.3d 1217 (10th Cir. 2002).

In view of these provisions the RMP EIS must include precise plans to monitor resources for the life of this RMP as well as plans to ensure that the monitoring is completed in a timely and thorough fashion. The failure to monitor for pronghorn as required by the *Record of Decision for the Pinedale Anticline Natural Gas Project* discussed in [Section I \(VII\)](#) above perfectly illustrates why enforcement mechanisms must be set forth in the RMP EIS. In this regard, our groups believe that the BLM should adopt a simple yet effective policy. In short, if monitoring is not happening, development should not proceed.

X. INCLUDE A WIDE-ARRAY OF MITIGATION MEASURES

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 RMP EIS assessment process. 40 C.F.R. §§ 1502.14(f); 1501.16(h); 1505.2(c); and 1505.3.¹⁸ 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.

XI. 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 revising this RMP, 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, migratory bird treaties, the Convention on International Trade in Endangered Species, and international efforts related to biological diversity preservation, among others.

¹⁸ In the regard we would like to note that the BLM must consider mitigation opportunities *throughout* the RMP EIS, not just in the oil and gas section of the analysis.

The EIS supporting the RMP 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 RMP EIS must ensure up-to-date ecological information is utilized in developing the EIS and RMP. For example, as discussed in detail below in [Section IV \(II\)\(C\)\(4\)](#) below, 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 particularly when setting the Reasonably Foreseeable Development (RFD) scenario.

SECTION II: FLPMA’S LEGAL REQUIREMENTS APPLICABLE TO THE RESOURCE MANAGEMENT PLAN ENVIRONMENTAL IMPACT STATEMENT THAT THE BLM MUST COMPLY WITH DURING SCOPING

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 the key provisions of BLM’s organic statute as they necessarily affect the current NEPA process, range of alternatives and mitigation measures selected and analyzed in the RMP EIS.

I. IN MANAGING THE PUBLIC LAND 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 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 the bedrock for all analyses in the EIS, and activities undertaken pursuant to the RMP. It is crucial to recognize that unnecessary *or* undue degradation must be prevented; the RMP 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 context of oil and gas development, we specifically recommend that BLM 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.” *See* 43 C.F.R. § 3101.1-2 (but also providing for substantial retained discretion in BLM to regulate oil and gas development despite issuance of the lease). Instead, we urge BLM to require, in a direct and positive fashion, that oil and gas development 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 necessary to prevent unnecessary *or* undue degradation, the RMP should define, and prevent, unnecessary or undue degradation in an equally direct, positive fashion.

II. THE REQUIREMENT TO MANAGE FOR MULTIPLE USE AND SUSTAINED YIELD HAS SUBSTANTIVE COMPONENTS THAT MUST BE ADHERED TO

Under FLPMA, land use plans for public lands are to “use and observe” multiple use and sustained yield principles, give priority to designation and protection of areas of critical environmental concern, and provide for compliance with pollution control laws, among other things. 43 U.S.C. § 1712(c). *See also* 43 U.S.C. §1711(a); BLM Handbook H-1601-1. Likewise, specific management actions must be done pursuant to multiple use and sustained yield principles. 43 U.S.C. § 1732(a). These requirements must be borne in mind as the RMP is developed.

The definition of multiple use in FLPMA is long, but key provisions include the following: (1) Public lands and their resource values must be managed so that they “best meet the present and future needs of the American people;” (2) It is appropriate that some land be used “for less than all of the resources;” and (3) 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). Sustained yield as defined in FLPMA can be achieved either by “high-level annual” or “regular periodic” output of resources, so long as this is accomplished in a way that can be maintained in perpetuity and is consistent with the definition of multiple use. 43 U.S.C. §1702(h). These definitions give substance to the requirement that land use plans and resulting management actions are to use and observe multiple use and sustained yield principles.

Furthermore, since sustained yield can be achieved by providing for regular periodic outputs of renewable resources, we ask that BLM consider this measure of sustained yield rather than just high-level annual measures. Occasional (periodic) outputs of some resources may be a far more sustainable means to manage for multiple use in perpetuity than to attempt to produce the resource annually, especially at a “high-level.” For example, drought could well make livestock grazing ill-advised and unsustainable in some years if other resource values such as wildlife are to be protected and maintained.

III. THE BLM MUST “BEST” MEET THE PRESENT AND FUTURE NEEDS OF THE PUBLIC

The purpose of this planning process must be to produce a plan that “best” meets the present and future needs of the American people. The RMP 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 plan 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.

IV. MORE ON ALTERNATIVES

FLPMA explicitly provides that the alternative plans that are developed need not accommodate all resource uses on all lands. This provision has special significance relative to oil and gas leasing, exploration, and development because too often essentially all lands are made available by BLM for oil and gas extraction. Therefore, we request that the alternatives developed for consideration in the EIS include a wide range of options relative to allocating lands in this area to oil and gas extraction activities. Moreover, FLPMA provides that areas where less than all resource uses are allowed should be “large enough to provide sufficient latitude for periodic adjustments” to accommodate changing circumstances. 43 U.S.C. §1702(c).

V. CONSIDER THE RELATIVE VALUE OF RESOURCES

It is also important to emphasize that under FLPMA the alternatives that are developed must consider the *relative* value of the resources involved. By this legally required measure, rare, unique, and sensitive native species have a relative value far in excess of more common or easily replaced public land resources, or resources that can be provided from other lands. The same is true of many other resources, such as cultural and wilderness resources. Accordingly, the alternative plans that are developed, and particularly the preferred alternative, must give special emphasis to protecting and providing for relatively rare resources.

VI. PROTECT THE QUALITY OF SCIENTIFIC, SCENIC, HISTORICAL, ECOLOGICAL, ENVIRONMENTAL, AIR AND ATMOSPHERIC, AND WATER RESOURCE, AS WELL AS ARCHEOLOGICAL VALUES

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 through the planning process for these public assets. The EIS should reflect this Congressional guidance in all alternatives that are developed and considered, especially in the plan that is finally selected.

SECTION III: BEYOND NEPA AND FLPMA – FEDERAL ENVIRONMENTAL LAWS APPLICABLE TO THE RESOURCE MANAGEMENT PLAN ENVIRONMENTAL IMPACT STATEMENT

Beyond NEPA and FLPMA, the BLM must ensure that it abides by a number of federal environmental laws throughout this planning process. The below discussion details some, but certainly not all, of the general legal requirements that the BLM must adhere to.

I. ENSURE COMPLIANCE WITH THE CLEAN WATER ACT

A. COMPLY WITH BOTH THE SPIRIT AND LETTER OF THE STATE WATER QUALITY STANDARDS

The Clean Water Act (CWA) establishes many requirements that BLM must adhere to in the RMP. It is imperative that BLM insure that waters on its lands comply with State water quality standards. 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 RMP 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 RMP 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 the State water quality standards applicable to the RMP area have made narrative provisions a component of water quality standards, the RMP should ensure these narrative standards are fully met, and modify management where they are not.

B. ENSURE COMPLIANCE WITH THE STATE’S ANTI-DEGRADATION POLICY AND PROTECT OUTSTANDING NATIONAL RESOURCE WATERS

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. Of particular significance are Outstanding National Resource waters, where water quality must be maintained and protected. 40 C.F.R. § 131.12(a)(3). Outstanding National Resource waters are waters that “constitute an outstanding National resource, *such as* waters of National and State parks and wildlife refuges *and* waters of exceptional recreational or ecological significance . . .” *Id.* (emphasis added). While States designate Outstanding National Resource waters, the Clean Water Action Plan makes it appropriate for BLM to identify waters that should be fully protected by this designation during its planning process, and to make recommendations to the State and EPA accordingly.

C. ADOPT PROVISIONS TO REDUCE THE NUMBER OF IMPAIRED WATERS

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 RMP should include 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 RMP is prepared. If any specific load allocation has been made by the State for activities on BLM lands, BLM should obviously ensure that these are complied with.

D. ENSURE FULL COMPLIANCE WITH SECTIONS 401 AND 404

The RMP should ensure full compliance with sections 401 and 404 of the CWA. 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 RMP 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 RMP, 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.

E. IMPLEMENT THE CLEAN WATER ACTION PLAN

An important step toward complying with the CWA can be made by ensuring the RMP 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.*

F. IMPLEMENT THE RIPARIAN-WETLAND INITIATIVE

Similarly, the RMP 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.” The importance of implementing the Clean Water Action Plan and the Riparian-Wetland Initiative will be addressed further, below, in the section on riparian area management.

II. ENSURE COMPLIANCE WITH THE CLEAN AIR ACT

A. ENSURE COMPLIANCE WITH LOCAL, STATE AND REGIONAL AIR QUALITY STANDARDS

The RMP must manage actions on public lands to meet the air quality standards prescribed by Federal, State, and local laws. Meeting the requirements of applicable State implementation plans and ambient air quality standards is a must, and air quality in non-attainment areas must be improved. Protecting air quality should be a priority – not just an afterthought that is done if convenient or “feasible.” The FLPMA requires BLM to consider the relative value of the various resources, and indeed clean air is quickly becoming (along with undeveloped landscapes) a most valued, yet dwindling resource. Therefore, BLM should take a proactive approach to managing air quality by, among other things: gathering baseline air quality data; setting aggressive standards; requiring any actions on public lands to meet those standards (i.e. no flaring, no two-stroke engine use on public lands, etc); analyzing the cumulative impact of any proposed action with other past, present, and reasonably foreseeable actions; establishing an effective monitoring program; and halting any actions that contribute to air pollution if such monitoring reveals that standards have been exceeded.

B. ADDRESS REGIONAL HAZE AND VIEWSHED ISSUES

The EIS should address the issue of regional haze and the destruction of viewsheds caused by haze. Much of the air pollution causing this haze can be attributed to coal-fired power plants and a general increase in the burning of fossil fuels within and beyond the RMP region. Accelerated

oil, gas, and coalbed methane development on Federal, State and private lands is another contributor. Part and parcel of reducing regional haze are the requirements in the Clean Air Act for the prevention of significant deterioration of air quality and protection of air quality in various airshed categories, particularly in Class I airsheds applicable to National Parks and wilderness areas. The EIS should address how prevention of significant deterioration requirements can be met, and the RMP should require steps to ensure they are met.

C. ADDRESS THE IMPACTS OF OIL AND GAS ACTIVITIES ON AIR QUALITY

Oil and gas development activities directly contribute to air pollution in several ways, and all should be addressed in the RMP EIS. Oil and gas development activities produce large surface disturbances (pads and roads) and increase vehicle traffic, which contributes to particulate pollution. Oil and gas development activities also contribute to NO_x, SO₂, and volatile organic compound (VOCs) pollution, through activities like flaring, drilling, processing plants, and wellhead compressors and compressor stations, to name a few. The Environmental Protection Agency (EPA) has prepared a report on the oil and gas extraction industry.¹⁹ Data in the report 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 from oil and gas development activities in the RMP area.

As indicated, air pollution problems, perhaps more than any other environmental problem, are not subject to human-created, artificial boundaries. Consequently, the EIS must consider air pollution problems existing in the RMP area (whatever their source) at appropriately broad scales.

III. ENSURE COMPLIANCE WITH THE ENDANGERED SPECIES ACT

A. THREATENED AND ENDANGERED SPECIES

Several relevant provisions of the ESA that must be considered and complied with in the RMP EIS. Of course, the Section 7 “duty to ensure” listed species are not jeopardized, the duty to ensure critical habitat is not destroyed or adversely modified, and the duty to proactively seek to

¹⁹ *Profile of the Oil and Gas Extraction Industry*, EPA Office of Compliance, Sector Notebook Project, October 2000.

conserve listed species, apply to all management actions. These requirements can be furthered if the RMP: (1) adopts strong provisions for the protection and conservation of listed species, and (2) adopts measurable objectives for upward population trends for all listed species present or likely to be present in the RMP area. For example, the RMP should comply with and seek to implement any recovery plans and/or biological opinions applicable to listed species in the planning area.

Additionally, there are two other areas of crucial importance relative to the Section 7 “duty to ensure” that BLM must abide by to protect threatened or endangered species. First is the need to engage in careful biological assessments (BA) or other ESA-related analyses to determine if listed species in the RMP area are likely to be adversely affected by the RMP, or by actions carried out under the RMP. It is critical that only credible and reputable scientists conduct BAs and other ESA-related analyses, and BLM must ensure that this is the case by establishing criteria for the quality of BAs and other ESA-related analyses—whether prepared by/for BLM or by/for an applicant—in the RMP. 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-1601-1 at Appendix G pages 5,13-16; 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). The RMP should prohibit this approach and certainly it should not be utilized in the RMP EIS itself.

Second is the need to engage in consultation with the Fish and Wildlife Service and/or the National Marine Fisheries Service (collectively, “the Services”) relative to any listed species that occur in RMP area that may be adversely affected by the RMP or by actions authorized by the RMP or contemplated in the RMP. We believe that consultation regarding the RMP is required and should be initiated or reinitiated relative to all listed, proposed, and petitioned species and their critical habitat in the RMP area so as to ensure that the activities authorized or contemplated in the RMP do not jeopardize listed species or result in the destruction or adverse modification of critical habitat. Consultation should be completed and any biological opinion(s) issued by the Services adopted by BLM and made a binding part of the RMP (and activities occurring under it) prior to approval of the RMP. The RMP should establish criteria to ensure that the regulatory requirements for reinitiating consultation are complied with at the earliest possible time so as to ensure 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 enforced by the RMP. These recommendations are consistent with BLM’s Land Use Planning Handbook and its Special Status Species Manual. *See* BLM Handbook H-1601-1 at Appendix C Page 5-7; *Id.* at Appendix G; BLM Manual MS-6840.2.E.

In the context of oil and gas leasing, “incremental step” consultation is of particular concern, and the EIS must address this issue. *See* 50 C.F.R. § 402.14(k); Endangered Species Consultation Handbook at 5-7.²⁰ In our view, the decision in *Conner v. Burford*, 848 F.2d 1441 (9th Cir. 1988)

²⁰ U.S. Fish and Wildlife Service, March 1998.

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.* The RMP should confirm and reinforce these duties and requirements. Section 7(a) (1) of the ESA requires this.

BLM’s planning handbook requires that a result of consultation/conferencing and the planning process itself must be the establishment of “conservation elements” that are presented in the RMP. See BLM Handbook H-1601-1 at Appendix G page 5. It is imperative that these elements take account of all critical life stages (e.g., juveniles vs. adults) and ecological needs (e.g., breeding, feeding, shelter and cover) for all proposed and listed species, including ensuring protection of important habitat for these species.

B. ESA CANDIDATE AND BLM SENSITIVE SPECIES

BLM must ensure full compliance with BLM Manual MS-6840.06.E (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’ 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, and in the context of planning require that, “Land use plans shall be sufficiently detailed to identify and resolve significant land use conflicts with special status species without deferring conflict resolution to implementation-level planning.”

SECTION IV: SPECIFIC RESOURCE CONCERNS THAT MUST BE THOROUGHLY ADDRESSED IN THE RMP EIS

The diverse values present in the Upper Green River Valley will be touched on at numerous points throughout our comments but we feel they cannot be highlighted enough. This area is the crucial link, connecting the stunning mountain ranges of Yellowstone to the unique and spectacular Red Desert. As Greater Yellowstone’s largest expanse of winter-range, it provides home to more than 100,000 big-game animals – deer, pronghorn, elk, moose, and bighorn sheep. It is home to the longest migration corridor in the lower 48 states and excluding the caribou, the Upper Green holds the Western’s Hemisphere’s longest migratory corridor. It contains a world-class fishery attracting thousands of anglers each year. In other words, the Upper Green River Valley is not only a national, but also a global treasure.

Under the surface of this treasure lies a rich energy resource. To get to the oil and gas, the surface resources must be manipulated as we have yet to find a method to get the gas out of the ground without scarring the landscape. Thus, while we understand that there will be energy development in the Upper Green River Valley, for public health, environmental, and economic reasons, decision-makers must consider – and mitigate- the significant impacts of large-scale energy development on the Valley’s natural values and local communities. Our comments below provide guidance on how this can be done.

In addition to addressing the impacts of oil and gas leasing, exploration, and development, this section also contains comments on a wide-array of resource issues. However, we would like to emphasize that given the explosion of energy development in the Upper Green, all resource issues must be considered in context of the expansive efforts to drill the entire Valley.

I. PRELIMINARY MATTERS

A. THE FOUR C'S

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. Accordingly, we ask that the RMP EIS consider and include the four tenets of this policy – cooperation, communication, consultation, and conservation – *throughout* the environmental planning process. Specifically, we ask that the BLM include a wide-array of provisions to successfully implement this policy.

B. DEVELOPING MANAGEMENT AREAS

We also understand that given the vast acreage of the Pinedale Resource Area that a “one size fits all” approach will not work in terms of management of resources and mitigation of impacts. For example, important wildlife populations such as sage grouse may be concentrated in certain regions, just as cultural and historic resources and soil types may vary by location. Therefore, BLM will follow its own lead and create specific management areas and within the RMP develop mitigation measures to protect the resources as they vary from one area to another just as it did in its recent Record of Decision for natural gas wells in the Pinedale Anticline project.

II. OIL AND GAS OVERVIEW: TAKING A BALANCED APPROACH TO OIL AND GAS LEASING, EXPLORATION, AND DEVELOPMENT

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). As you know, 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 resource 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, or 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. In light of this push to get the gas out, the following comments will first address our primary concerns related to oil and gas exploration, leasing, and development (including coalbed methane development) and then discuss other resource issues.

As stated above, we understand that there will be energy development in the Upper Green River Valley. But, 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, pollution and draining of water resources, and adverse impacts to surrounding communities and owners of split-estate lands. To address such issues, throughout the revised RMP the BLM must consider – and include – provisions 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.

The following comments discuss such provisions in detail but as a preliminary matter, we would like to highlight that oil and gas leasing, exploration, and development cannot occur without BLM first: (1) conducting an in depth analysis of cumulative impacts of the development; (2) fully disclosing these impacts to the public; and (3) avoiding – or fully mitigating - these impacts to protect other resources in the Valley. This will ensure that the BLM maintains the proper balance to protect those sensitive and irreplaceable parts of the ecosystem in a manner that sustains a normal equilibrium of resource values to the greatest degree possible. Additionally, we would like to clarify that the concerns expressed in this section with regard to oil and gas leasing, exploration, and development also generally apply to other leasable minerals, including but not limited to coalbed methane, tar sands, oil shales, phosphate, and gilsonite. The EIS should make similar analyses relative to these minerals. Additionally, many of the recommendations in this section are in conformance with the report “Land Use Planning and Oil and Gas Leasing on Onshore Federal Lands.”²¹ We request that BLM consider and respond to this report as it develops the RMP.

A. LEASING

1. PLACE A MORATORIUM ON LEASING DURING THE RMP REVISION PROCESS

BLM acknowledges that approximately 90% of the mineral estate under its control has already been leased.²² In an effort to try and protect multiple uses and protect below and above ground resources, the BLM should prohibit future oil and gas leasing of the last 10% of lands in the Resource Area and allow any leases that expire to remain expired until the revised RMP is completed.

²¹ National Academy of Sciences, 1989

²² Presentation by Prill Mecham, Field Director, Pinedale Resource Area, Pinedale, WY (Mar. 5, 2003); *Federal Oil and Gas Lease in the Pinedale Resource Area*, Doug Pflugh, Earthjustice (2002)(Attached as [Exhibit L](#)).

It is crucial that this “look before you lease” policy be adopted during the RMP revision process to ensure that a lease is not issued before the site-specific resource values in an area are fully understood. This is vital because if leasing occurs, the BLM forecloses its options in contravention of NEPA, the ESA, and the definition of multiple-use in FLPMA. For instance, if the BLM determines to close certain areas such as migratory bottlenecks, crucial winter range, sensitive viewsheds etcetera to oil and gas development, yet lease rights (i.e. development rights) in these areas have already been sold, the BLM will have little authority to keep the area closed to development actually closed. In addition, if BLM continues to lease this will foreclose options to adopt varying reasonably foreseeable development (RFD) scenarios, again in contravention of NEPA, the ESA, and FLPMA. This moratorium on leasing is also consistent with NEPA’s prohibition against taking interim actions during the NEPA process discussed in [Section I \(VIII\)](#) above.

If the BLM does not halt leasing, any leases issued during this RMP revision process must be issued with a No Surface Occupancy stipulation (NSO) on the entire lease parcel pending completion of the RMP and site-specific EIS to determine whether surface occupancy should be allowed.

Finally, should the BLM erroneously believe leasing may continue during the RMP process, the RMP EIS must disclose the amount of lands leased since the initiation of the RMP planning process (a map with text would be most helpful to the public) and the repercussions of continued leasing, including the status of any protests, appeals, or court cases.

2. WITHDRAW ENVIRONMENTALLY SENSITIVE AREAS FROM OIL AND GAS LEASING

To ensure the energy development in the Upper Green River Valley is compatible with the public’s desire to protect important natural values the RMP should withdraw environmentally sensitive areas to oil and gas leasing, exploration, and development. Such withdrawals are consistent with the Federal Lands Policy Management Act (FLPMA). In a memorandum to the Secretary of the Interior the Solicitor found that the applicable public law gives the Secretary three ways to decide not to lease tracts of public lands for oil and gas or other minerals: (1) exercising h[er] statutory discretion under the Mineral Leasing Act, *see Udall v. Tallman*, 380 U.S. 1 (1965); *United States ex rel. McLennan v. Wilbur*, 283 U.S. 414 (1931); (2) withdrawing the land through FLPMA’s section 204; or (3) excluding lands from leasing through FLPMA’s section 202 planning process.²³ Specifically, the Solicitor found that:

FLPMA’s definition of multiple use expressly recognizes that the most “judicious use” of land may involve the use of some land “for less than all of the resources,” and that consideration must be given “to the relative values of the resources and not necessarily the combination of uses that will give the greatest economic return” 43 U.S.C. § 1702(c). Thus, foreclosing mineral exploration and development on even a sizeable tract

²³ *Memorandum from the Solicitor to the Secretary of the Interior regarding the Jack Morrow Hills Coordinated Activity Plan* at 2-4 (Dec. 22, 2000)(Attached as [Exhibit M](#)).

of federal land does not violate the statutory definition of multiple use, and is not *per se* unreasonable.

FLPMA also provides that an area may be withdrawn or “excluded”[] from mineral development when such development may be incompatible with “maintain[ing] other public values n the area.” *See* 43 U.S.C. § 1702(j)(definition of withdrawal in FLPMA). FLPMA requires that, for withdrawal proposals exceeding 5,000 acres, the Secretary submit certain kinds of information and analyses to the appropriate committees about the withdrawal. *See* 43 U.S.C. § 1714(c)(2). But FLPMA does *not* make mineral activity the preeminent use of federal lands; indeed, FLPMA’s statement of policies makes clear that mining activity is only one of many values to be promoted on the public lands. *See* 43 U.S.C. § 1701(a).²⁴

With regard to Section 202 exclusions that Solicitor stated that this should not be new to the BLM as the agency has long taken the view that land use plans are an appropriate process by which to decide whether or not to exclude lands from mineral leasing, mineral sales, and other discretionary actions.²⁵ Section 202(e) of FLPMA authorized the BLM to make land use planning decisions that totally eliminate certain types of land uses. 43 U.S.C. § 1712(e). Further, the BLM Land Use Planning Handbook states that “Land use plans . . . identify lands . . . that are closed to certain uses.” H-1601-1, II.A.

In view of the above opportunities to withdraw ecological important lands from mineral leasing, the BLM must consider, and should withdraw, the following areas from mineral leasing during this current RMP revision process:

- The Wind River Front;
- Areas of Critical Environmental Concern; *
- Migratory bottlenecks; **
- Transitional and winter ranges of mule deer and pronghorn antelope;**
- Big game birthing areas;
- Sage grouse leks;**
- Sage grouse nesting and brood-rearing habitat;**
- Prairie dog towns; **
- Raptor nesting areas (including burrowing owls);
- Mountain plover habitat;
- Riparian areas along the Green and New Fork Rivers;
- The viewshed within visual distance of the historic trails that cut the Resource Area;
- The viewshed within visual distance of portions of rivers eligible for protection under the Wild and Scenic Rivers Act;
- The viewshed within visual distance of the two Wilderness Study Areas - Lake Mountain and Scab Creek;
- All eight identified semi-primitive non-motorized recreation areas and their viewshed areas;

²⁴ *Id.* at 2-2.

²⁵ *Id.* at 2-3.

- Any roadless areas that are identified in this revision process of 5,000 acres or more;
- Archeological, historic, and paleontological sites;
- Private surface areas;**

* Discussed at length in a separate document entitled *Critical Condition: Areas of Critical Environmental Concern (ACECs) for Big Game in the Upper Green River Valley, Wyoming* attached as [Exhibit GG](#).

** Discussed in further detail later in our comments.

With respect to the Wind River Front, currently, the BLM has closed approximately 250,000 acres along this scenic front to oil and gas leasing.²⁶ This area includes portions of the Hoback Basin and the southern foothills of the Gros Ventre Range. The area should remain closed, and any current leases within allowed to expire, because of: i) its important scenic values; ii) its critical values to migratory wildlife; iii) its use as the only available control areas to determine the impacts of oil and gas development on migratory wildlife; and iv) the impacts to the Class I airshed over the Wind River Range should development be approved in this area. Furthermore, since the Green River Office of the BLM has closed the southern end of the Wind River Front to oil and gas leasing if this area remains closed it forms the only continuous corridor that can be utilized by both wildlife and recreationalists alike in the Upper Green River Valley.

If lease rights have already been secured in areas withdrawn or closed to leasing by the revised RMP, the *draft* EIS analysis must address the scope of oil and gas development that is likely, given the valid existing rights held by the lessees and must discuss the opportunities to:

- Allow expired leases to remain expired;
- Void the leases and refunding lease payments to the lessees;
- Trade leases within the environmentally sensitive area for lease parcels in areas with less critical natural resource values;
- Seek voluntary forfeiture of lease right as part of a mitigation program;
- If drilling must go forth, place a non-surface occupancy stipulation on any approval to drill allowing operators to directionally drill from outside of the environmentally sensitive area at issue if possible.

Finally, please include an economic analysis in this regard.

3. PLACE NON-SURFACE OCCUPANCY STIPULATIONS ON ALL FUTURE LEASES ISSUED

The RMP should specify that all future leases should be issued with a No Surface Occupancy Stipulation (NSO) until the site-specific analysis is completed. This is essential because when bought, leases rights are valid for ten years but may be valid for decades. (See [Section IV \(II\)\(A\)\(4\)](#) immediately below). Over the course of ten years resource issues may change and the BLM may decide that an area should not be developed due to other important resource values.

²⁶ *Record of Decision, Pinedale Anticline Oil and Gas Exploration and Development Project*, BLM Pinedale Field Office, 34-35 (Jul. 2000)(Attached as [Exhibit N](#)).

Without the NSO stipulation, however, the BLM acknowledges, over and over again, that it has little authority to prevent surface occupancy.²⁷ For example, in the record of decision for the Pinedale Anticline Oil and Gas Exploration and Development Project the Pinedale BLM expressly stated,

On land leased without a No Surface Occupancy stipulation, the Secretary of the Interior *cannot deny* the permit to drill but can only impose reasonable mitigation measures. In the absence of a No Surface Occupancy stipulation covering the entire lease, restrictions based on oil and gas lease operations must be “reasonable” and *cannot directly or indirectly prohibit the development of the lease*. Although an individual APD can be denied, the *right to drill and develop somewhere on the leasehold cannot be denied* by the Secretary. To deny all activity, absent a no surface occupancy stipulation on the lease, may constitute a breach of contract and violate an operator’s right to conduct development activities on the lease lands. (Emphasis added).²⁸

This recommendation should *not* be interpreted to mean that surface occupancy would not be allowed on lease parcels. It merely gives the BLM authority, down the road, to protect resources should the need arrive. Without such a stipulation, and as can be seen above, the BLM’s believes its hand are tied to protect other resource values.

This recommendation is particularly important with respect to leases that could threaten important wildlife habitat or use areas, water resources, recreation areas, all riparian and wetland areas, wild, scenic, or recreational river corridors or potential corridors, Areas of Critical Environmental Concern, archeological, historical, or paleontological resources that have not been fully withdrawn from leasing.

4. DISCLOSE WHY LEASE RIGHTS HAVE NOT EXPIRED

A number of leases in the Pinedale RA were purchased decades ago but are still valid. The BLM should provide a map with accompanying text to inform the public which lands in the Pinedale Resource Area have been leased and for how long. The BLM should further explain why leases of greater than ten years have not expired. On a related subject, the RMP EIS should also disclose all unitization agreements, the implications of these agreements and thoroughly discuss the history and current status of lease suspensions in the Resource Area.

5. PROHIBIT LEASING WHEN THE RFD HAS BEEN EXCEEDED

Considering that the BLM believes it has limited authority to limit development once land has been leased for oil and gas development as discussed above, the RMP must explicitly prohibit oil and gas leasing whenever the reasonably foreseeable development scenario (RFD) has been exceeded, especially if this development is occurring due to new technological innovations that

²⁷ See Examples from federal agency documents of BLM *belief* that once it has leases lands, it has little authority to prohibit development attached as [Exhibit K](#).

²⁸ *Record of Decision, Pinedale Anticline Oil and Gas Exploration and Development Project*, BLM Pinedale Field Office, 48 (Jul. 2000)(Attached as [Exhibit K](#)).

have not been subject to adequate environmental review. Coalbed methane (CBM) is a clear example in this regard: many development proposals for this method of extracting methane far exceed the RFDs in existing RMPs, largely because this technology was not even envisioned when many RMPs were prepared. Moreover, the environmental impacts may not have been adequately evaluated (water from CBM development is the obvious example). Under these conditions, leasing should not proceed until updated environmental analyses are completed, and the RMP should so provide.

Should the situation arise where the RFD has been exceeded but valid lease rights within the Resource Area exist, the BLM should utilize its authority under 43 C.F.R. § 3103.4-4 to suspend the lease until the operator/s can proceed without exceeding the RFD.

6. GUIDE AND REGULATE THE CONFIGURATION OF TIMING OF LEASE OFFERINGS

The RMP should guide and regulate the configuration and timing of lease offerings when parcels are offered for lease. Currently, industry nominates parcels that are typically scattered throughout millions of acres of public lands. As a result, pre-leasing environmental analyses are not based on common airsheds, river drainages, or other ecological units; nor do they adequately assess cumulative impacts. The revised RMP should ensure that these problems are not perpetuated.

7. MONITOR AND ENFORCE LEASE ACREAGE LIMITS

The RMP EIS should explicitly provide that lease acreages limits specified at 43 C.F.R. § 3101.2-1(a) be monitored and enforced by the BLM. BLM's LR2000 database makes this a relatively simple undertaking. To the extent BLM views this as an activity for the State Office or other BLM administrative level, the EIS should nevertheless discuss what actions are being taken at that other level and provide citizens with information so they can become aware of and monitor those efforts.²⁹

B. EXPLORATION

Oil and gas operators complete seismic exploration projects *to acquire and evaluate subsurface geological data to facilitate for further development of oil and gas reserves*. In light of this primary objective, seismic activities are inherently part of a larger action and depend on future development for their justification. In short, industry would not pay seismic companies millions of dollars to complete seismic work if they did not anticipate following through with diligent efforts to get the gas out of the ground.

²⁹ This point applies to *any* activity BLM claims does not need to be fully explored in the EIS or decided in the RMP. Even if true, the RMP and RMP EIS should still assist citizens who desire to get information about these activities and to participate in them. Thus, BLM should, at a minimum, provide a discussion of what is occurring at the other administrative level and provide basic contact information.

With this end goal in mind, while evaluating seismic activities in the RMP revision process the BLM must consider all past, ongoing, and reasonably foreseeable similar, connected, and cumulative actions in this portion of its environmental analysis. 40 C.F.R. §§ 1508.25(a)(2)-(3) and 1508.25(c)(3). This includes, but is not limited to, oil and gas lease sales, additional seismic projects, and past, proposed, ongoing, and foreseeable future development.

Considering this, and because there has been a recent flurry of seismic activity in the Pinedale RA, the BLM should first, identify all past seismic projects completed in the Pinedale RA. A table setting forth the project name, dates of project, legal description, type (2D or 3D), equipment utilized, acreage within project area, and miles of lines completed, with an accompanying map, including land status, would be most helpful to the public.

In addition the RMP should:

- Require that the BLM to thoroughly examine the impacts set forth in [Exhibit HH, Guidance on Adequately Evaluating the Impacts of Site Specific Seismic Exploration Projects](#), before approving any further seismic activities in the Upper Green River Valley;
- Prohibit seismic exploration activities in areas closed to oil and gas development;
- Prohibit seismic exploration activities in crucial and sensitive wildlife habitat;
- Continue to seasonally restrict seismic activities during times when such activity would adversely impact wildlife;
- Require operators to provide an *adequate* bond before beginning seismic projects;
- Adopt stringent reclamation standards and only release bonds when these standards have been met.

C. DEVELOPMENT

1. ALLOW FOR PUBLIC PARTICIPATION IN THE DEVELOPMENT OF OIL AND GAS RESOURCES

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 ADPs. The RMP should address this issue and provide that all those who request mailed notice receive such notice.

The Federal Onshore Oil and Gas Leasing Reform Act (FOOGLRA) requires that “[A]t least 30 days before approving applications for permits to drill (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 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 authorized officer 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).

2. INCLUDE PROVISIONS TO NOTIFY THE PUBLIC OF IMMEDIATE THREATS INCLUDING METHANE MIGRATION

The RMP should include a provision 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, including methane migration. As BLM knows, methane migration to the surface through unintended avenues can pose serious risks to human health and safety (in addition to harming soils and burrowing animals). Additionally, the RMP EIS should provide that all reports of methane migration to any residence, building or near human activity will result in the automatic shutting in of all CBM wells within a 3 mile radius. 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.

3. ADOPT A REASONABLY FORESEEABLE DEVELOPMENT SCENARIO THAT BALANCES DEVELOPMENT WITH THE PROTECTION OF OTHER VALUABLE NATURAL RESOURCES

The BLM must adopt a Reasonably Foreseeable Development (RFD) scenario that balances energy development with the protection of other valuable natural resources. If the BLM fails to do so, the Valley could be turned into a single continuous gas field in violation of FLPMA’s multiple-use mandate and a number of other federal environmental laws. Some may challenge this conclusion but the facts clearly support this possibility. Consider this - the Pinedale Field Office has already approved six major oil and gas projects that cover 633,406 acres of the

1,185,000 million acre mineral estate controlled by the agency.³⁰ In other words, 53% of the Valley is already within oil and gas field boundaries and either developed or in the process of being developed.

Further, according to the Field Manager, Prill Mecham, the BLM has already leased approximately 90% of the Valley to oil and gas operators.³¹ Our understanding is that the vast majority of these leases have been sold without NSO stipulations. In simple terms this means that if industry requests permission to drill across 90% of the Valley, they currently have the right to do so.

In addition, during this RMP revision process the BLM is considering two additional major gas field development projects – the *South Piney Development Project* and the *Jonah Infill Drilling Project*. The recent submission of these proposals, in combination with the fact that industry has purchased the lease rights on approximately 90% of the Valley, demonstrates industry’s interest in developing the entire landscape. If approved, these projects would add up to 1460 new wells, and a tighter and/or more expansive network of roads, pipelines, and compressor stations to the Valley floor. These projects would also further degrade air and water quality as well as fragment wildlife habitat.

Considering that development is already approved on over half of the Valley floor and that industry owns the development rights across 90% of the Valley the conclusion is clear – the BLM must adopt an RFD that preserves the status quo for the short term – 53% of the Valley under development – and seeks to *reduce* this for the long term. To adequately address this issue the RMP EIS must first set forth the following to the public:

- Which lands have been leased, the stipulations that attach to these leases, and when the leases will expire;
- Which leased lands lay within project area boundaries and how much acreage this consumes;
- The number of wells that have been approved and the number of wells that have been drilled throughout the Resource Area;

³⁰ The following table summarizes the information regarding oil and gas projects given to our groups by the BLM’s Pinedale Field Office:

	Project	Acres in Project Area	Date Approved
1	Pinedale Anticline	197, 345	ROD Issued – Jul. 2000
2	Jonah I & Jonah II	59,600	ROD Issued – Apr. 1998
3	Castle Creek Unit	21,322	ROD Issued – Oct. 1983
4	Riley Ridge	159,928	ROD Issued – Jan. 1984
5	Big Piney/LaBarge CAP	196,841	ROD Issued – Aug. 1991
6	Burley	1,370	ROD Issued – Jun. 1994
	Total	633,406	

³¹ Presentation by Prill Mecham, Field Director, Pinedale Resource Area, Pinedale, WY (Mar. 5, 2003); *Federal Oil and Gas Lease in the Pinedale Resource Area*, Doug Pflugh, Earthjustice (2002)(Attached as [Exhibit L](#)).

- The amount of surface disturbance in the Valley to date and the amount predicted based on project approvals; (*See also, Section IV (II)(C)(4)* below discussing the need to acquire and utilize satellite technology to determine actual surface disturbance combined with ground-truthing efforts).
- Reclamation efforts throughout the Pinedale RA, including details regarding the total acres disturbed since the last RMP, the acreage successfully reclaimed, the definition of “successful reclamation”, and the acres where reclamation was attempted but failed;
- Predictions regarding the length of time the BLM expects that the current oil and gas projects will be operating.

In addition, because much of southwest Wyoming is being developed by the oil and gas industry, and pursuant to NEPA’s requirement to disclose cumulative impacts, in developing an appropriate RFD scenario the BLM must consider actions being implemented outside the Pinedale Resource Area boundaries. This analysis should resemble the analysis completed in the Pinedale BLM’s *draft* EIS for the Pinedale Anticline Natural Gas Project Area. In this document the BLM considered 19 other existing and potential oil and gas projects throughout southwest Wyoming. (For these projects we ask that the BLM set forth the information outlined in the bullet points above). Obviously, the information has changed but the analysis should not - the BLM should examine and set forth the cumulative impacts of all ongoing and foreseeable oil and gas leasing, exploration, and development projects or proposals throughout the air and watershed.

Considering this impacts analysis, the BLM must develop a range of RFD scenarios that address both the acreage allowed to be developed and the number of wells to be drilled within this acreage. The public must understand the amount of acreage slated for development because of the impacts to open space and wildlife. The public must understand the number of wells the BLM seeks to permit because of the impacts to air and water quality for the surrounding communities, downstream users, and citizens from across the country that visit the Greater Yellowstone Ecosystem.

Any RFD Scenario development must also be based on baseline data and ongoing monitoring. Accordingly, in this section of the RMP EIS the BLM must set forth the following:

- Baseline air and water quality data;
- Baseline data on wildlife including, but not limited to, the pronghorn antelope, mule deer, elk, moose, bighorn sheep, sage grouse, mountain plover, prairie dogs, black-footed ferrets, the array of raptors, and all species listed on the BLM’s sensitive species list that are present within the Pinedale Resource Area;
- Data from past, current, and ongoing monitoring of air and water quality;
- Data from past, current and ongoing wildlife studies including, but not limited to, studies with respect to pronghorn antelope, mule deer, elk, moose, bighorn sheep, sage grouse, mountain plover, prairie dogs, black-footed ferrets, the array of raptors, and all species listed on the BLM’s sensitive species list that are present within the Pinedale RA;
- Baseline data and data from past, current, and ongoing studies examining road densities and surface disturbance in the Resource Area;
- Socio-economic studies examining issues such as the impacts of an energy boom on community resources, wildlife, etc.;

- Any other applicable studies that examine or information related to the impacts of oil and gas development on other natural resource values.

4. BASE ANY ASSUMPTIONS REGARDING 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, etcetera are correct. This analysis must be completed for each oil and gas project within the Resource and should also consider projects on adjacent lands. A table with accompanying text would best convey this information to the public.

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. 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 RA.³² 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 RMP EIS and used in developing a balanced RFD scenario.

5. REQUIRE PHASED DEVELOPMENT

Consistent with BLM's duty to control the timing, duration and siting of operations, in addition to its duty to manage for multiple use, prevent unnecessary or undue degradation and discretion to impose reasonable mitigation measures³³, development in the Upper Green River Valley must occur in orderly stages. Overall, the BLM must ensure that it while developing oil and gas resource it prevents the unnecessary and undue degradation of the lands³⁴ and avoids of impacts of oil and gas development where technologically feasible, and especially in cases where avoiding impacts is practical.³⁵

The principles underpinning phased development include:

³² See the satellite imagery processed courtesy of SkyTruth for the Upper Green River Valley Coalition included within the brochure attached as [Exhibit O](#).

³³ 43 U.S.C. §§ 1732(a)-(b); 43 C.F.R. §§ 3101.1-2; 3164.3; 3162.1; and 3162.5-1.

³⁴ 43 U.S.C. § 1732(b).

³⁵ 40 C.F.R. § 1508.20(a).

TAKING IT SLOW: As discussed above, six major oil and gas projects already approved by the Pinedale BLM already cover approximately 633,406 acres of the 1,185,000 million acre mineral estate controlled by the agency. In other words, 53% of the Valley is already developed. Development in other areas should not be approved until these fields are drained and reclaimed.

When other gas fields are developed, wells should be geographically clustered in order to maximize and allocate resource recovery and utilize common infrastructure. Clustered development allows for increased planning over large areas and may also facilitate reinjection of CBM discharge water into depleted portions of the same aquifer. Other advantages to phased development include learning about groundwater impacts and establishing producer accountability.

ONE COAL SEAM AT A TIME: If CBM development proceeds, a key principle to responsible CBM development is understanding, disclosing, and then mitigating the environmental damage *as* it occurs. Due to the dewatering process associated with this development, many of the impacts are far underground and, of course, out of sight. Developing one coal seam at a time, with proper monitoring of the impacts to aquifers both above and below the target aquifer, is the best way to ensure the below ground impacts are not left out of mind. This orderly development will aid in understanding these belowground impacts, such as recharge, subsidence, cross-aquifer contamination and fluctuations in water quality. BLM knows that naturally occurring fractures and fissures between aquifers can seriously compromise adjacent aquifers over time. By limiting and isolating CBM development in an area to one target seam at a time, while monitoring other aquifers and the effects of dewatering, injecting and fracturing, the target coal seam can be more thoroughly studied and the impacts properly mitigated. Finally, adopting the one seam at a time approach allows the possibility of injecting water from one coal seam into another, thereby preserving water resources and minimizing surface impacts.

CLEAN UP AS YOU GO: This is an important feature of phased development. The principle here is that the entire Upper Green River Valley should not be subject to the impacts of oil and gas development at once. With phased development, operators will be required, consistent with applicable law and lease terms, to reclaim areas during the production cycle, with full reclamation of a disturbed project prior to the next phase of development occurring somewhere else in the Valley.

While the one coal seam at a time principle ensures responsible and paced development underground, the continuous reclamation principle utilizes area-specific phases of development in the Valley. The phased timing of development may extend the life of the gas play in the Valley which, if predictions are correct, will be many decades. In this fashion, portions of the Valley will be in different stages of the production cycle at different times, avoiding the full brunt of impacts from development. In addition, phased development of this type will allow portions of the Valley to be fully reclaimed to a pastoral landscape supporting a variety of uses, before other areas are disturbed. Phased

development also allows for benefits in subsequent development based upon information gained from assumptions and extraction techniques utilized in earlier phases.

MINIMIZING IMPACTS: Phased development provides the added benefit of reducing surface impacts. BLM-approved projects and wells can “bundle” or cluster impacts by tying into existing infrastructure such as power lines, pipelines, compressor stations, water treatment facilities and rights-of-way. BLM recognizes that it has a duty to minimize surface impacts and that phased development benefits all: landowners, industry (shared costs by using existing infrastructure) and the overall environment.

A key component here will be BLM’s control over the spacing of wells, specifically within BLM’s jurisdiction for all federal development by virtue of the standard oil and gas lease. In no instance should spacing be less than 80 acres on federal mineral estates, and BLM will approve plans of development with an assumption that 160 acre spacing is sufficient to, in the case of CBM, dewater targeted coal seams to allow the gas to migrate to the surface.

MONITORING IMPACTS: Monitoring will be [discussed in greater detail below](#). The benefit to better monitoring from phased development is obvious: a more orderly approach to development allows monitoring data to be more thoroughly collected, analyzed and implemented into future APD approvals. The impacts to land, water, air, watersheds and wildlife, for example, that are clear and demonstrable in an early phase of development, can be utilized by BLM to require better and/or different mitigation techniques in future project approvals. As industry is reaping the financial benefit from the public lands and mineral estates, consistent with the standard oil and gas lease, operators should be responsible for a proportional share of monitoring.

DRAINAGE: The BLM must disclose the potential for the drainage of federal oil and gas resources and water resources to become an issue in the Valley. This discussion should disclose the various ownership patterns of these resources. Recognizing that the benefits to organized, structured and phased development far outweigh any possible drainage situations, BLM will take the following steps to address drainage: (a) where possible, BLM will execute agreements with owners of producing wells, under which the U.S. may be compensated for the drainage. 43 C.F.R. § 3162.2-2 (b); 66 Fed. Reg. 1883, 1893 (Jan. 10, 2001); (b) BLM, prior to permitting wells under the threat of lost royalties to drainage will, in the case of adjacent, non-federal wells, explore the following alternatives: requiring the lessee of the drained lease unit to pay compensatory royalties; entering into an agreement (e.g., communitization, participating area, unitization) with the lessee to apportion and collect royalties on federal oil and gas; relinquishing the affected acreage; modifying existing agreements with lessees; or, a combination of the above actions. BLM “Drainage Protection Guidelines,” H-3160-2.02; 2.06.A.1; *see also* 43 C.F.R. § 3162.2-4; 66 Fed. Reg. 1883, 1893 (Jan. 10, 2001).

STABILIZE LOCAL ECONOMIES: One final benefit of the phased-development approach that must be analyzed is the positive economic impacts on local communities. The principles of phased development should give local communities a consistent and long-

term income and employment streams instead of the boom and bust cycle that so often accompanies energy development.

6. DEVELOP WITHIN KNOWN FIELDS FIRST

Often, the most appropriate opportunities for oil and gas development from both an economic perspective and ecological perspective are within known and operating oil and gas fields, while the dwindling wildlife, scenic, wilderness and other resource values throughout the rest of the Resource Area are irreplaceable and should be protected. The BLM must consider this, pursuant to Section 202 of FLPMA, when determining the pace at which and where it will allow oil and gas development to proceed in the Upper Green River Valley.³⁶

7. CLARIFY APD APPROVAL

BLM sometimes seems to take the position that it must *approve* an application for permit to drill (APD) within 30 days. This is incorrect, and the RMP should specify the circumstances under which BLM may take more than 30 days to review an APD. Final action on APDs can be, and must be, delayed as needed to conduct needed, thorough environmental analyses. 43 CFR § 3162.3-1(h)(3); Onshore Oil and Gas Order No. 1, III.B.2. The list of reasons for extending the time for when an APD may be processed is not limited to just the enumerated concerns in Onshore Oil and Gas Order No. 1, and the preparation of an environmental assessment (EA) or EIS is a specific reason for extension of the APD processing time. Onshore Oil and Gas Order No. 1, III.D.

A specific purpose and need for an EA for an APD is to determine whether an EIS is needed. 40 C.F.R. § 1501.4; Onshore Oil and Gas Order No. 1, III.G.5.a. Yet it is extremely rare, at best, for an EIS to be prepared at the APD stage. The RMP should provide guidance for when the cumulative impacts of approving a number of APDs rises to the level of producing significant impacts on the human environment, requiring preparation of an EIS. This is especially important if drilling in an area has not previously been analyzed in a “full field” EIS because there is no question that the approval of several individual wells can have cumulatively significant impacts. And even if a prior full field EIS has been prepared, the RMP should provide guidance as to when supplementation of the prior EIS should occur. *See* 40 C.F.R. § 1502.9(c) (outlining requirements for supplementing an EIS).

8. 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

³⁶ *See* FLPMA § 202(c) requiring that the relative scarcity of the values involved, and the availability of alternative sites for producing those values be considered.

and require the use of this technology will result in the unnecessary degradation of other natural resources in violation of the FLPMA.³⁷

Accordingly, the BLM must provide full NEPA disclosure and review of all industry practices in the *draft* EIS for this RMP revision, designating a list of best practices for oil and gas (including CBM) development in the Upper Green River Valley.^{38, 39} As production continues, technological advances will be made thus the RMP must: i) require that new practices shall receive full NEPA disclosure and review in an appropriate NEPA process before experimental implementation; and ii) provide a follow-up NEPA process to allow for the adoption of new practices for widespread use. In addition, the RMP should require that decisions to approve new practices shall be informed by best available information and actual monitoring data collected in the Upper Green River Valley. APD approval should incorporate the use of new and alternative technologies.

9. THE USE OF RENEWABLE ENERGY SOURCES

The RMP EIS must fully address renewable sources of energy in at least two regards. First, it must address potential renewable sources of energy available from lands within the RMP area. It should address the relative merits of pursuing these types of energy developments versus fossil fuel development. It should fully address the potential *negative* impacts of renewable sources of energy. For example, wind energy farms can have negative consequences for avian species if not properly designed and sited. The EIS must address these issues fully and openly. The RMP should adopt provisions to ensure these negative effects are avoided or at least mitigated. Second, the potential for renewable energy sources *developed elsewhere* to obviate the need for fossil fuel development in the RMP area should be addressed. Almost all agree, fossil fuels are not a long-term solution to our energy needs and that renewable energy production must be fostered, so the EIS should address this aspect of energy development.

The EIS should also consider ways the BLM itself can maximize the use of renewable or alternate energy sources, and increase the efficiency of energy use in all activities BLM undertakes, including in its buildings and automobile fleet. The RMP should require increased use of renewable or alternate sources of energy by BLM and should include requirements for increased energy use efficiency. These efforts should be documented and publicized.

10. ADDRESS GLOBAL WARMING

While global warming is also addressed in the section on Air Quality, the importance of this

³⁷ 43 U.S.C. § 1732(b).

³⁸ [Exhibit P](#) sets forth a list of current alternative technologies (applying to conventional oil and gas and/or CBM production) that the BLM must thoroughly studied and potentially require of all operators.

³⁹ 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 Q](#)) and Articles for the Denver Post on Directional Drilling (Nov. 17, 2002)(Attached as [Exhibit R](#)).

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 to reduce this problem. For example, coal seam fires could unnecessarily contribute to global warming. Flaring of hydrocarbon by-products contributes to global warming, and much of that may be unnecessary. 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 RMP should make provisions to reduce and minimize them.

11. REGULATE WELL SPACING

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, therefore, not controlling. BLM should inform that public of any Memorandums of Understanding that it might have with the State of Wyoming regarding well spacing. The BLM should also fully utilize this authority by specifying, in the final RMP, well spacing densities that are appropriate for protecting the other important natural resources in the Upper Green River Valley, as required pursuant to 43 U.S.C. § 1732(b) and other law. For instance, the RMP should approve different well spacing requirements considering the different resource concerns just as the BLM did in its Record of Decision for natural gas wells in the Pinedale Anticline Natural Gas Project.

12. MINIMIZE ROADS AND FULLY RECLAIM THOSE CONSTRUCTED FOR ENERGY DEVELOPMENT

Energy development creates a vast network of roads over the lands from which resources are being extracted⁴⁰ thereby adversely impacting *all* other natural resources in the area. Accordingly, the RMP EIS must address efforts to minimize road construction throughout the RA with particular emphasis on reducing roads associated with oil and gas development. Where roads are allowed, the RMP EIS must discuss the adverse impacts that roads have on wildlife, air and water quality, open space, and communities. Impacts from roads include, but are not limited to:

- The take of wildlife from collisions with vehicles;
- Fragmentation and loss of wildlife habitat;
- Increased poaching due to the ease of accessibility created by roads;
- Degradation of air quality due to road dust kicked up by vehicular traffic and exhaust from the vehicles;
- Water runoff and subsequent pollution due to road development;
- Adverse affect local vegetation due to the use of sealants;
- The spread the seeds of non-native species which can virtually wipe out native plant communities when introduced to a disturbed area such as a roadside due to vehicular traffic;
- The increase of motorized recreation where roads have been built;

⁴⁰ Photo of the Jonah Field courtesy of Peter Aengst of the Wilderness Society and LightHawk (Fall 2001)(Attached as [Exhibit S](#)).

- The continued use of the roads by off-road vehicles that is certain to continue in areas of high road densities if measures are not taken to prevent their use and abuse;
- Increased off-trail use by motorized recreationalists in areas with high road densities. This type of use would entirely preclude any opportunity for restoration of the area following energy development.

In view of the above, the RMP EIS should adopt measures to minimize road development and where development is allowed, should adopt mitigation measures including, but not limited to, the following:

- Require remote monitoring of oil and gas wells wherever possible. This technology eliminates the need for roads to individual well sites after their initial installation and cuts down on the noise, dust, and pollution that results from daily vehicular monitoring;
- Require the complete obliteration and active revegetation with native plants of all roads developed for extraction of energy resources;
- Mandate that all roads no longer required but not yet fully reclaimed be signed closed and barricaded;
- Ensure monitoring and enforcement of road closures. Apply strict penalties in the event closures are disregarded;
- Prohibit roads from energy development from becoming incorporated into the designated route “system” simply through use; a full NEPA analysis should be undertaken before any road is converted into a designated route.
- Implement educational efforts to inform the public of the necessity of post-extraction rehabilitation. This includes active outreach to the motorized recreation community to explain the need for restraint in densely road areas under repair.

13. 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 RMP EIS assessment process. 40 C.F.R. §§ 1502.14(f); 1501.16(h); 1505.2(c); and 1505.3.⁴¹ 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

⁴¹ In the regard we would like to note that the BLM must consider mitigation opportunities *throughout* the RMP EIS, not just in the oil and gas section of the analysis.

resources including, but not limited to, air and water quality and wildlife. Detailed comments in this regard are included in the sections on air, water, and wildlife below. 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.⁴² 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 there are areas 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 RMP EIS 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.

14. REQUIRE THE CONTAINMENT OF LITTER AND INDUSTRIAL WASTE

The RMP 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 lath, 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.

15. PROTECT ARCHEOLOGICAL, HISTORICAL AND CULTURAL RESOURCES

Recognizing the importance of archeological, historical, and cultural resources, and the importance of adhering to the National Historic Preservation Act and other applicable laws the RMP EIS must require provisions, including but not limited to, the following:

- Prior to the approval of any exploration or development project (including the approval of individual APDs), the BLM must acquire a full inventory of all archeological, historical, and cultural resources;
- If archeological, historical, and/or cultural resources are found in an area to be explored or developed the BLM must impose mitigation measure to protect these resources from any adverse impacts associated with oil and gas exploration and development;
- If a cultural property is encountered during exploration and/or development of oil and gas resources, all operations must immediately halt until BLM is contacted and qualified archaeologists evaluate the cultural/historical significance. Operations may only resume if determined not to unreasonably interfere with the cultural and historic values.

16. WATER MANAGEMENT PLANS (WMPS)

In the case of CBM production, the RMP should provide that the reinjection of produced water would be the preferred method of handling byproduct water. In the event reinjection is not

⁴² 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 RMP EIS.

technologically feasible (with this burden on the operator) or where it poses a risk to drinking water sources, BLM will require water management plans to be submitted as part of a complete APD. In order to further protect above and below ground resources, the RMP should require that each APD contain a Water Management Plan (WMP). All WMPs should:

- i) Baseline data should be Require baseline data for each targeted coal zone, as well as each coal seam. Baseline data should include an analysis of water quality, quantity and structural integrity for each targeted coal seam that will be dewatered as well as existing topography and soil types to assist in evaluating erosion and reclamation. All target coal seams should be monitored quarterly for the possibility of cross-aquifer contamination by produced water injection (and drilling and hydraulic fracturing fluids), the ability to receive reinjected water, aquifer depletion, recharge rates and subsidence.
- ii) Not occur until the ability of the targeted aquifer is studied as to its capability to receive the injected water. Monitoring should be required on a quarterly basis to determine whether the reinjection process is leading to any contamination of unintended aquifers. All APDs should be conditional upon the results of monitoring and the types of impacts that monitoring discloses. These studies should include the quality and capacity/recharge ability of the receiving and depleted aquifers, in addition to any subsidence.
- iii) Set forth a method of water treatment and/or reinjection that will not impair or degrade existing agricultural, soil or water uses, not only at the point of discharge, but also at any downstream tributary;
- iv) Require that for any water that is discharged onto the ground surface, or in a reservoir, in order to protect soils and other resources, all water must be sufficiently treated to a level of effluents to protect existing and attainable water uses. As a starting point for water quality analysis and for anti-degradation standards, BLM will compare produced water with the water that this region would normally receive in a high level snowmelt and/or rainfall event;
- v) Demonstrate protection of water uses (both quality and quantity) for all surface owners (including federal owners) from the point of discharge downstream to the confluence with the first naturally perennial stream or river;
- vi) Provide baseline data for the (pre-CBM) quality and quantity (natural hydrograph) for all possibly affected mainstems and contain appropriate monitoring models to assess cumulative impacts of all CBM wells affecting the same mainstem. All WMPs should demonstrate protection for all existing and attainable uses for the water in mainstems on a cumulative impact scale;
- vii) contain documentation that no water table (through infiltration or seepage) will be impaired beyond its designated use. A starting point for water quality comparison

will be the existing baseline water quality and any changes documented through continued monitoring;

- viii) have written documentation of a well mitigation agreement with all landowners having any type of water well within a 3-mile radius of the proposed well. Requirements here include: (1) demonstration by the operator that all landowners within the radius have been contacted regarding entering into this type of agreement by certified mail; (2) copies of all written agreements, and in the case of absent written agreements, written acknowledgment by the landowner verifying an informed waiver of entering into such an agreement; (3) a term in the agreement whereby the operator, if liable, will pay the full cost of well replacement, in addition to incidental and consequential damages; and (4) a term in the agreement whereby, due to the difficulty in establishing hydrologic connectivity, a rebuttable presumption that any significant loss in hydrostatic pressure or available water in a protected well is due to the operator's CBM well(s), with the operator assuming full liability;
- ix) Require quarterly monitoring of all possible drinking water sources will be conducted to ensure compliance with the Safe Drinking Water Act and to preserve the Valley's precious underground drinking water sources.

D. 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 in this RMP 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.

With specific regard to split-estate lands, the BLM has provided guidance on which factors to consider when increasing bond amounts, including, but not limited to:

- (i) damage to crops;
- (ii) damage to tangible improvements;
- (iii) loss of grazing land; and
- (iv) adverse water impacts.

BLM Instruction Memorandum WY-99-57.

BLM should specifically adopt these non-exhaustive factors when considering raising bonding amounts. 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.

E. 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 RMP 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.⁴³ 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;

⁴³ *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 T](#)).

- (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 reseeding 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 RMP EIS 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.

F. PROTECT SURFACE OWNER RIGHTS

BLM recognizes the numerous issues and conflicts that arise from split-estate lands – generally, where the federal government owns (and subsequently leases) the mineral estate under land that is privately owned, usually by ranchers and farmers whose families patented this land several generations ago. While the split-estate issue in the Pinedale Resource Area is smaller than that in some BLM Resource areas in Wyoming, this is still an issue a major concern because private landowners who live on “split estates” are often severely affected by BLM’s oil and gas leasing decisions.

In the past, The BLM has often ignored or given little attention to the legitimate concerns of surface owners and their communities. This revision process provides the BLM with an opportunity to remedy this situation and adopt means by which to minimize conflicts between surface owners and companies developing subsurface minerals by proactively seeking and addressing their concerns.

Reinforcing the immediate need to protect surface-owner, 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.⁴⁴ 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.⁴⁵ 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 inventory all split-estate lands within the Pinedale Resource Area, and publish an appendix in the *draft* EIS and *final* Record of Decision that identifies all split-estates (federal mineral, private surface) in the resource area, by homesteading act and by township, section, range as the information in the 1988 RMP is *extremely* vague in this regard. For an example of the ownership information that should be provided see Table 1-1 from the Supplemental Draft EIS for the Jack Morrow Hills Coordinated Activity Plan attached as [Exhibit II](#). This table serves as a clear and concise example of the type of information and format that should be included in this *draft* EIS.

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 [Section IV \(II\)\(A\)\(2\)](#) above, the BLM has general withdrawal authority pursuant to 43 U.S.C. § 1714. Considering that the amount of private surface lands in the Pinedale Resource Area is only a small portion of the total acreage⁴⁶ and most of the private lands are located in the

⁴⁴ *Instruction Memorandum No. 2003-131 to All Field Offices from BLM Director* (Apr. 3, 2003) and accompanying press release (Attached as [Exhibit U](#)).

⁴⁵ 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).

⁴⁶ According to the 1998 RMP, the Pinedale BLM oversees 931,000 acres of surface and 1,185,000 acres of minerals. If this is accurate, then the *maximum* amount of federal minerals underlying private surface would be approximately 154,000 acres. We conclude that this is the *maximum* amount of acreage because some of these 154,000 acres will be state sections. As this is a maximum of 12% of the Resource Area the BLM should consider withdrawing these lands, particularly if they are important to wildlife, from oil and gas leasing and development.

areas critically important to wildlife, the BLM should withdraw these lands from leasing. This would ensure that surface use conflicts are minimized.

3. ADOPT LAND 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, Reclamation, and Water Management Plan 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.⁴⁷

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 RMP 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.

⁴⁷ Release No. 06-01-02, Pinedale BLM Field Office (Jun. 13, 2002).

As discussed at the very beginning of Section IV, 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.” 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 RMP 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 RMP 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 RMP 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 RMP 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* RMP 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.

G. 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.

H. ADDRESS THE GRANTING OF EXEMPTIONS AND EXCEPTIONS

The RMP EIS must address the issue of granting exemptions and exceptions to both lease stipulations *and* other protective measures at the APD stage. At a minimum, the RMP 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. Another common rationale for permitting exemptions or exceptions are claims that “game species aren’t on the winter range yet” 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. The public participation requirements of NEPA must be fully complied with. Even if the *RMP* 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. *RMP* level analysis supporting exemptions and exceptions is simply not site-specific enough to allow for approval of site-specific requests, and the *RMP* should so provide.

I. SUNDRY NOTICES

BLM employs Sundry Notices pursuant to 43 C.F.R. § 3162.3-2(a) (authorizing use of Form 3160-5, the Sundry Notice). In our experience, Sundry Notices are used for a wide array of activities, and not necessarily just for “further well operations”, as required by the regulations. The *RMP* should define precisely when the use of Sundry Notices is appropriate, and in our view they are inappropriate for anything other than the enumerated activities mentioned at 43 C.F.R. § 3162.3-2(a). Additionally, the *RMP* should define when NEPA compliance is required and what opportunities exist for public involvement relative to Sundry Notices.

J. TOXIC AND HAZARDOUS WASTES AND CHEMICALS; STORM-WATER 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 final *RMP* 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. We specifically recommend that, if “fracing” is contemplated, the option of requiring water only – i.e., prohibiting the use of toxic chemicals – be considered. The *RMP* 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.

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

BLM should work with the EPA relative to regulation of hazardous and toxic wastes generated from oil and gas development activities. EPA's report on the oil and gas extraction industry provides information regarding these 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 sectors, despite the significant levels of toxic and hazardous materials used and generated by the industry. The RMP should make provisions for ensuring that, in cooperation with the EPA, the rate of inspections (and as necessary, enforcement) is increased.

K. RIGHTS-OF WAY

Rights-of-way are often part-and-parcel of energy development projects, as well as many other activities. 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 ESA. The RMP 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 RMP must ensure they are avoided or at least mitigated. For example, the RMP 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 RMP.

L. ADDRESS THE SOCIO-ECONOMICS OF OIL AND GAS DEVELOPMENT

In addition to the socio-economic analysis discussed in relation to the principles of phased development in [Section IV \(II\)\(C\)\(5\)](#) above, consideration of oil and gas development potential in the RMP area must address potential oil and gas reserves/resources from the standpoint of economically recoverable resources and not just technically recoverable resources. The purpose of the RMP is to guide actual management actions for approximately 10 years; oil and gas extraction activities will be largely driven by real world economics, not by technical feasibility, which only sets a theoretical outer boundary to the actual level of development. It would, of

course, be appropriate and useful for BLM to address economically recoverable oil and gas resources from the standpoint of “high” and “low” price scenarios.

Addressing oil and gas socio-economic issues from an economically recoverable perspective is appropriate in at least two specific regards. First, as noted above, this should be the basis for any decisions resulting from studies done pursuant to EPCA. Second, economic recoverability should guide BLM’s development of the Reasonably Foreseeable Development Scenario (RFD) applicable to oil and gas development in the RMP area. Basing the RFD, and resulting forecasts (like job growth and revenues) and decisions on technically recoverable resources unrealistically inflates the likely level of oil and gas development and has little utility in the real world. As mentioned above, development of the oil and gas RFD on the basis of economically recoverable resources is also necessary for a proper analysis of connected, related, and cumulative actions and impacts, as required by NEPA.

Furthermore, we request that BLM consider addressing reasonably foreseeable development scenarios in a broader context than just oil and gas development. For example, non-economic expansion of demand for wilderness is “reasonably foreseeable” and is just as certainly “development” as expansion of oil and gas activities is. And, of course, there is a strong economic component to activities like wilderness use. We believe this approach is in accordance with the requirements of NEPA and FLPMA and BLM’s Land Use Planning Handbook.

In considering oil and gas development potential in the RMP area, BLM should address the viability of recovering oil and gas from existing – proven - fields as opposed to creating new fields where the oil and gas potential is less known. In our view, it is appropriate from economic and environmental perspectives for BLM to favor development in existing fields and discourage it or prohibit it in undeveloped areas, especially in areas with other important resources. *See* 43 U.S.C. § 1732(b).

BLM should address the economics - as well as the technical feasibility - of requiring oil and gas companies to utilize directional drilling and other techniques that reduce the “footprint” of oil and gas development activities. Oil and gas companies have a vested interest in reducing short-term costs. In contrast, BLM has a duty to define what drilling techniques will be utilized on public lands (as well as when they will be used and where they will be used) on the basis of broader public interest considerations. *See* 43 U.S.C. §§ 1732(b); 1702(c) (multiple use to be based on relative values and “not necessarily [] the combination of uses that will give the greatest economic return or the greatest unit output”).

Considerations of the contribution of the oil and gas industry to employment, income, and other economic measures must include a national, State, and regional perspective of the relative value of these activities. As mentioned, FLPMA requires BLM to manage the public lands to achieve what is “best” for the “American people,” not just local economies. Moreover, these analyses must consider not only the present contribution of various sectors of the economy, but also trends that are apparent. The RMP EIS should realistically address the socio-economic impacts of the boom and bust development cycle associated with oil and gas drilling and development.

M. ISSUES SPECIFIC TO COALBED METHANE DEVELOPMENT

Currently, only a handful of coalbed methane (CBM) wells have been drilled in the Pinedale Resource Area. However, given industry estimates of CBM reserves in the Upper Green, the success of the test wells and the scoping notice sent out just two days prior to the beginning of the RMP scoping process, this is slated to change. In view of this upcoming change, the RMP must, in great detail, address CBM issues and impacts and adopt specific provisions to avoid – or fully mitigate – such impacts on other valuable natural resources. Such analysis is required by both MEPA and FLPMA as well as recent IBLA decisions that expressly recognize the unique impacts of CBM development. The comments below discuss CBM development but by no means summarize all of the issues associated with this energy source. Here, however, it is essential to highlight that fact that since the 1988 RMP failed to even mention the words coalbed methane, much less discuss its unique impacts on a landscape, the BLM may not approve CBM development of any lands leased prior to the completion of this RMP.

1. COLLECT BASELINE DATA AND REQUIRE A WATER MONITORING PROGRAM

Before the BLM may proceed with CBM extraction, the agency must first collect sufficient baseline data on the water quality of each targeted coal seam, along with baseline data of the water the Valley normally receives from rainfall and snowmelt. Of particular concern are salinity and SAR values. Salinity (often referred to as the "salinity hazard") is the potential for accumulation of soluble salts in the root zone. Although some plants tolerate more salts than others, all plants have a maximum tolerance. The guiding literature provides that salinity, as measured by electrical conductivity ("EC") in dS/m, is satisfactory for irrigation at <.75 dS/m, can provide suitable crop growth with proper management at .75 to 2.25 dS/m, and is generally unacceptable for crop irrigation with >2.25 values. United States Dep't of Agriculture, *Agricultural Handbook 60: Diagnosis and Improvement of Saline and Alkali Soils* at 71 (L.A. Richards ed., 1954). Importantly, this assumes the water is applied to non-saline, non-sodic soils. High salinity makes water less available to plants and at very high levels the plants may suffer direct salt damage. Waters are not suitable for irrigation with an EC greater than 2.25; in areas with restricted drainage, anything higher than 1.2 is problematic.

The sodium adsorption ratio (SAR) value of water is the ratio of sodium to calcium and magnesium. The SAR value, often referred to as "sodicity," affects plant production by slowing infiltration and the permeability of soils. High sodicity reduces water movement into the soil, decreases the storage of plant-available water in the soil, and increases overland flow and erosion on sloping landscapes. As the proportion of sodium adsorbed on a soil increases, the soil tends to disperse, which results in reduced rates of water penetration. When water cannot penetrate or effectively infiltrate into the soil horizons, there is less water available for plant/root uptake. This lower availability of water directly and negatively affects plant productivity. The SAR values for water at 6 to 8 are the upper threshold before infiltration and permeability problems will affect existing agricultural uses. The BLM must therefore disclose the soil types in the Valley analyze and disclose whether these soils will be significantly affected by the addition of sodium, as they will disperse rapidly. The result is lower infiltration and low hydraulic conductivity.

2. PROHIBIT WATER DISCHARGE

The RMP should prohibit discharge of water extracted from coalbeds onto the ground or into surface waters. This is particularly true of saline “produced” water. In addition to salinity problems, produced water—whether from CBM production or from conventional wells—can be contaminated with heavy metals (Se, As, Ba, Hg, etc.). Selenium may be of particular concern, especially relative to impacts on avian species, and it is important to note that if produced water is stored in reservoirs or pits, heavy metals can become even more concentrated than in the produced water itself. The EIS should consider the problem of produced water storage pits/reservoirs leading to concentrated chemical solutions that harm wildlife (or other resources), and should particularly consider compliance with the Migratory Bird Treaty Act in this regard.

Water from CBM development should be reinjected in an environmentally safe manner (i.e., in a manner that ensures groundwater supplies are not contaminated). However, if water from CBM production is discharged, directly or indirectly, into streams, the impacts of augmented flows and increased concentrations of salts (ions) and dissolved solids on the ecological characteristics of the streams (perennial or intermittent) should be analyzed. Such analyses must account for the full range of variations in stream flow, effluent (produced water) concentrations, and sensitivities of different species at different life-stages. Impacts from altering stream thermal conditions and the timing of flows must be analyzed. Effects of discharged produced water on adjacent riparian areas, and the effects of increased turbidity and sedimentation should be considered. The analysis should consider lethal and sub-lethal effects on biota. If produced waters are or become a “discernible, confined and discrete conveyance . . . from which pollutants are or may be discharged”, they must be treated as point source discharges of pollutants and a National Pollution Discharge Elimination System (NPDES) permit must be required. 33 U.S.C. §§ 1362(14), 1342. Based on these analyses, the RMP should provide standards to prevent or mitigate these impacts.

3. ADDRESS HYDRO-GEOLOGIC ISSUES

CBM development can lower water tables, which has widespread implications and therefore these issues must be addressed in the EIS. If produced waters are not reinjected, potential effects on agriculture must be considered. Dewatering coalbeds can increase the likelihood of difficult-to-control coal seam fires. Seepage of methane and its effects on vegetation, water (including domestic water and aquifers), and even the safety of people’s homes must be considered. Again, the RMP must ensure these impacts are prohibited or mitigated.

4. ADDRESS THE IMPACTS OF WELL DENSITY

CBM fields can have a much higher density of wells than occurs in conventional gas fields. Consequently, issues such as habitat fragmentation, outright loss of habitat, and impacts to visual resources are magnified. Because of this, the RMP must ensure that the unique impacts of CBM development are evaluated prior to leasing, and that such analyses do not simply duplicate the analyses done for conventional gas fields.

5. RESERVOIRS

CBM development often requires the construction of water reservoirs. The RMP must address this impacts on other natural resources this additional part of the oil and gas puzzle will cause including impacts to soils in the proposed retention reservoirs – with a decade or more of continuous saline/sodic water dumped into them, operators must address what will happen to these areas after the CBM play is over. In other words, what are the prospects of meaningful reclamation? During the life of the wells, BLM should analyze, through quarterly monitoring required of all operators, the likely impacts to wildlife and bird species that may be negatively impacted by reservoirs that will only increase in salt concentrations over time. Reclamation requirements in an approved APD must account for removal and appropriate disposal/burial of affected soils in reservoirs.

If operators seek on-channel reservoirs the CWA will require that operators secure section 404 permits. As on-channel reservoirs can and have blocked flow of natural rain and snowmelt waters to downstream water, all WMPs that include on-channel reservoirs should contain written agreements with all potentially affected downstream users.

6. NATURAL SPRINGS

Naturally occurring springs and seeps are important in this semi-arid region for their contribution to wetlands, healthy riparian areas and clean water. Before a project is approved, the RMP EIS should require an inventory of all existing springs/seeps and not allow any surface disturbance that impedes their functional capacity (and/or natural hydrograph) or affects downstream uses.

7. FISHERIES

The BLM should be well aware that minimal data has been acquired by any federal or state agency, or by industry, on the effects of enormous volumes of CBM discharge water on fish and other aquatic life populations in the ephemeral drainages (now reclassified as Class 3 – capable of maintaining aquatic life) and mainstem streams. Accordingly, the RMP EIS should prohibit the granting of APD for CBM development until proper baseline data is provided in a regional NEPA study on key fish and other aquatic life populations in mainstems. This information should include information on the naturally occurring hydrograph for all waters capable of sustaining fish populations, including the impact of year-round CBM water on species that are dependent on ephemeral flows and intermittent ponding. BLM should assess the impacts prior to APD approval to natural flow regimes, including quantity and quality of water, timing, magnitude, temperature, and turbidity, on aquatic species present in these waterbodies.

Furthermore, no APD should be granted until an operator provides sufficient scientific data to demonstrate that produced CBM water that reaches any Class 3 tributary or mainstem, whether directly or through infiltration by hydrologic connection with a water table, will not adversely affect the health and vitality of aquatic life therein. BLM realizes that some impacts may develop overtime and therefore, some APD approval may occur as data is collected, with all APDs subject to suspension, modification and revocation as impacts are discovered.

8. PERMIT REOPENERS

The RMP EIS should require, consistent with both its own and operators' duties under the Clean Water Act, that it will reopen and void any permit at any point where collected data as required through monitoring demonstrates an impairment to existing and attainable water quality uses and Chapter 1 water quality standards including, but not limited to: agriculture (both irrigated crops and natural vegetation), settleable solids, soil quality, fisheries and all aquatic life, stock water and drinking water. Upon being reopened and voided, an operator should be required to submit a new WMP with the required baseline data and written agreements before a subsequent APD is prepared and approved in accordance with NEPA.

9. WATER QUALITY OF NATURAL SPRING RUN-OFF

Presently, producers are not required to measure, high or low flow, the quality of the natural rain and snow melt-off water during the spring and early summer. As this water is of high quality and is water that has been typically used to irrigate and provide water for natural vegetation, all operators should be required to provide data for these waters as a proper measure for BLM to evaluate any degradation of water quality in the Valley.

With CBM discharges potentially creating perennial waterways out of ephemeral drainages, impacts must be assessed and evaluated concerning the loss of this high quality water, as now it will be necessarily diluted with CBM wastewater. Operators should be required to monitor for and submit this data. In considering impacts to mainstem streams, BLM should take into account, and require data on the following: prior to CBM discharge: natural run-off in high season most likely *added* to the water quality of the mainstems. Now the issue has turned to the opposite: how much will CBM water deteriorate the mainstems? Accordingly, baseline conditions for mainstem comparisons must be during the spring and early summer season, at high flow. That time is generally when water quality is at its high, and therefore, is the baseline level for anti-degradation and impairment of existing use models.

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

In addition to the scoping comments from Paulette Middleton already submitted, incorporated here by reference, and attached as [Exhibit V](#) we would like to emphasize the following points.⁴⁸ In view of the potential oil and gas boom in the Upper Green River Valley, the RMP 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. As highlighted above, FLPMA requires that "in the development and revision of land use plans [RMPs], the Secretary shall — (8) provide for compliance with applicable pollution control laws, including State and Federal air, water, noise or other pollution standards or implementation plans." 43 U.S.C. § 1712(c)(8).

These statutory directives have been implemented by regulation: Each land use authorization shall contain terms and conditions which shall: (3) Require compliance

⁴⁸ Comments attached as [Exhibit V](#).

with air and water quality standards established pursuant to applicable Federal and State law. 43 C.F.R. § 2920.7.

With respect to air quality the BLM should be fully aware 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 RMP 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 RMP 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 PM_{2.5} 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 RMP EIS must conduct a regulatory analysis to identify the minor source baseline dates for pollutants. If the RMP 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.” Thus 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.

Specifically, 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”⁴⁹ 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.”⁵⁰ 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.

C. BLM MAY NOT RELY ON STATE PERMITTING PROCESS TO FULFILL OBLIGATIONS UNDER FLPMA AND NEPA

At the onset of this process our groups would like to make it clear that the BLM may not rely on the State’s permitting process. In short, it may not be substituted for the affirmative duty imposed on BLM to “provide for compliance” with NAAQS and the increments, both because FLPMA requires that the RMPs contain the measures necessary to ensure compliance, and because BLM has no assurance that the States will perform a complete increment consumption analysis before the proposed actions are substantially underway and contributing to additional emissions that may add to further exceedances of increments or cause increments to be violated. For these reasons, the RMP EIS must include the increment consumption analysis so that BLM’s

⁴⁹ *Letter to Arlen G. Hiner, BLM Team Leader from Bill Yellowtail, EPA* (Oct. 3, 1997).

⁵⁰ *Id.*

obligation to develop and adopt sufficient mitigation measures may be performed as part of the project NEPA analyses and adopted as conditions in the ROD.

D. 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 not only to the review of permits for major stationary sources, but also applies to the development of RMPs under FLPMA. 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 RMP and subsequent projects in the Pinedale Resource Area 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 also developing RMPs for other federal public lands 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 RMP 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 this RMP.

E. THE RMP 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 authorized by RMPs.

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 RMP 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.

F. THE RMP EIS MUST IDENTIFY AND MITIGATE ACID RAIN IMPACTS

The RMP 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.

G. THE RMP 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 RMP 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.⁵¹ Accordingly, the RMP 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.

⁵¹ See *The Impacts of Exposure to Fine Particles on Human Health*, R. Yunke (Spring 2003)(Attached as [Exhibit W](#)).

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 PM2.5 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 PM2.5 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 the 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.

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.

IV. PROTECTING GREATER YELLOWSTON'S DIVERSE WILDLIFE SPECIES

As has been touched upon over and over again in our comments, the Upper Green River Valley 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 species and issues. One common need, however, is the following. When considering impacts to wildlife, BLM must do more than consider just the area actually impacted by a given activity. 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" should be considered.⁵² BLM must

⁵² See footnote 4 for full citation.

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. BLM must also ensure that it fully complies with BLM Manual MS-6840 (Special Status Species Management).

A. ENSURING 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 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 RMP 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 RMP provide for the following steps to ensure that wildlife diversity is protected. As requested below, all riparian areas should be designated ACECs and given special management. It is widely recognized that: i) riparian areas in the west are crucial centers of biological diversity; and ii) most BLM riparian areas are in unhealthy condition. Consequently, special management provisions for these areas must be made in the RMP. Riparian area management is discussed in more detail below. The RMP must also ensure that other special habitats are protected and enhanced. As noted, all wildlife requires adequate habitat for feeding, reproducing, and hiding or resting (sheltering), and the plan must ensure that such is provided 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 RMP should provide for and protect.

In addition to protecting special habitats, the plan 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 RMP makes special provision for protecting keystone resources.

The EIS must 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 RMP 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 RMP must also limit habitat fragmentation resulting from other activities, such as the construction of well pads.

More generally, the BLM should consider the principles of island biogeography so as to ensure that fragmentation does not degrade existing wildlife habitats. That is, it must insure that small islands of habitat are not created by management activities such as logging, chaining, or oil and gas development. The RMP should ensure both that the total areas of important habitats are maintained and that these habitats are not further fragmented. Creating habitat fragments impedes dispersal, colonization, and foraging. Moreover, fragmented habitats can have altered environmental conditions and allow for intrusions of pests (weed invasions and cowbird nest parasitism are classical examples). We specifically requests that BLM limit any further fragmentation of sagebrush communities, which are critical to many species on many BLM lands, and which is an increasingly imperiled ecosystem.

The flip side of habitat fragmentation is maintaining migration corridors and other ecological linkages. 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 RMP must ensure that management actions authorized by the RMP 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.

The principles of island biogeography should also guide BLM in creating protected areas. Here, an obvious application is the creation of ACECs. Modern conservation biology has firmly established that larger protected areas are of greater value, and are more effective, than smaller areas for maintaining the ecological integrity of a protected area. Consequently, when BLM designates ACECs, or other areas, to protect wildlife, it should ensure they are large enough to protect the species, habitat, or ecological attributes for which the ACEC is created.

We also request that BLM consider and enunciate in the RMP a policy relative to habitat “edge.” Increasing edge has been common in classical wildlife management because it was perceived as a means to increase biological diversity, or more particularly, as a means to benefit certain games species. Modern conservation biology, however, recognizes a number of problems associated with increasing the amount of edge, such as: modifying microclimates needed by some species, increasing impacts of wind in some communities, increasing the incidence of fire, and increasing predation and competition from exotic and pest species that are often well adapted to the disturbed conditions that characterize ecological edges. Furthermore, even if increasing edge increases overall biological diversity, it can be harmful to certain, usually rare and/or specialized, species. Similarly, increasing edge can be problematic for species that require large, undisturbed blocks of habitat, such as many predators. We believe it would be inappropriate to increase edge to the detriment of rare or highly specialized native species or species that need large contiguous habitats, and the RMP must ensure that this does not occur.

It may be impossible to fully protect biological diversity (and to effectively manage many other resources) without considering other landowners and landholdings within the RMP area. Therefore, we request that the EIS consider other landholdings relative to BLM’s efforts to protect biological diversity. Land exchanges could be warranted in some circumstances, and if so the RMP should provide for initiating any needed legislative authority or other processes. The Land and Water Conservation Fund, as well as the new Land Conservation, Preservation and Infrastructure Improvement Fund, are two funds that might allow acquisition of important inholdings, or other lands, in fee simple or perhaps via other mechanisms such as conservation easements. The RMP should establish a program or at least guidance for how BLM will attempt to work with other landowners relative to biodiversity protection efforts, and make provision for accessing funding needed to implement those efforts.

It is critical to note that biological diversity encompasses far more than just species diversity. Genetic diversity and the diversity of biological communities are also components of biological diversity. Consequently, the RMP should make provisions for maintaining these elements of diversity, although our reservations regarding increasing edge should be borne in mind relative to modifying community level diversity.

It is also critical to note that protecting biological diversity can only be dealt with appropriately at the planning level; it certainly cannot be dealt with appropriately or effectively at a project-specific level. The reason for that is readily apparent: fragmentation, connectivity and other factors affecting biological diversity are inherently landscape level considerations, not site specific. The project level is simply too small a scale to effectively consider what are inherently ecosystem level concerns and processes. The import of this is that the *RMP* should establish specific, binding limits on road densities and other disturbances that cannot be exceeded in the planning area. This is the only way to ensure biological diversity is preserved, and that ecosystem attributes are not “nickel and dimed” to death by individually small but cumulatively significant site-specific projects. The BLM should consider bio-regional plans developed by the Nature Conservancy in assessing broad-scale needs relative to biodiversity protection.

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 RMP 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. Again, these considerations should not and cannot be left to the project level because the perspective at that point is too constrained to permit meaningful ecosystem level analysis.

B. PROTECTING YELLOWSTONE’S MIGRATORY WILDLIFE – AN UNIQUE GLOBAL RESOURCE

The Pinedale Planning Area, also known as 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 which depend on long-range migration for their very survival.⁵³ 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.⁵⁴ The deer migrate up to 100 miles each way from the mountain highlands of the Greater Yellowstone Ecosystem to the grasslands 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 *protection measures* set forth in the scoping comments from West Inc. prepared for the Greater Yellowstone Coalition, The Wilderness Society, and the Wyoming Outdoor Council, and attached as [Exhibit Y](#).⁵⁵ Here we will first highlight *some* of the key recommendations from this report that must be included in the RMP EIS and in addition will emphasize several crucial points.

⁵³ *Groups seek migration protection*, Jeff Gearino, Casper Star, A-3 (Mar. 17, 2003)(Attached as [Exhibit X](#)).

⁵⁴ *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 Y](#)).

⁵⁵ *An evaluation of the 1988 BLM Pinedale Resource Management Plan, 2000 BLM Pinedale Anticline Final EIS, and Recommendations for the current revision of the Pinedale Resource Management Plan*, prepared for the Greater Yellowstone Coalition, The Wilderness Society, and the Wyoming Outdoor Council by Western EcoSystems Technology Inc. (Jan. 22, 2003)(Attached as [Exhibit Z](#)).

1. KEY RECOMMENDATIONS THAT MUST BE IN THE RMP EIS TO PROTECT BIG GAME

Energy development could have impacts on wildlife that occur immediately as well as over the long-term. The Pinedale RMP revision should incorporate recommendations that address both time horizons. These include:

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.
- Based on their already well-documented importance to big game, four locations should be considered as Areas of Critical Environmental Concern: the Trapper's Point Migratory Bottleneck; the Cora Butte Transition Range; the Fremont Lake Bottleneck; and the LaBarge Creek Native Elk Winter Range.

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 target levels.
- The WGFD Strategic Habitat Plan should be closely followed and included within the Pinedale RMP revision.
- 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 UGRV.
- 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 RMP. 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.

2. WITHDRAW LANDS IN MIGRATORY BOTTLENECKS FROM OIL AND GAS EXPLORATION, LEASING AND DEVELOPMENT

Migratory bottlenecks are small corridors that big game animals travel through as they make their way between their summer and winter ranges. If the bottlenecks in the Pinedale Resource Area are blocked by human development, the migration of Yellowstone's big-game

animals could be severed.⁵⁶ Accordingly, the revised RMP should prohibit *all* oil and gas exploration, leasing, and development in *all* of the migratory bottlenecks in the Pinedale Resource Area. (See [Section IV \(II\)\(A\)\(2\)](#) above setting forth BLM’s legal authority to take this action.)

Precedent for this prohibition has already been set. In August of 2002, the Pinedale BLM offered parcels in the well-documented Trapper’s Point bottleneck for lease to the oil and gas industry. Once the Wyoming Game and Fish Department (WGFD) learned of this leasing proposal, the state wildlife agency voiced its concern stating that, “[T]he Department is gravely concerned with the proposed leasing and potential development of BLM lands in the Trapper’s Point area west of Pinedale.”⁵⁷ The WGFD explained that its concerns stemmed from the lack of “assurances for protection of th[e] corridor if the drilling results in full field production.”⁵⁸ The letter continues, “Ancillary facilities associated with full production and the associated monitoring and maintenance of facilities would be a grave concern. Any activities or additional surface disturbance in this corridor could be detrimental.”⁵⁹

In its letter the WGFD also noted the national significance on this issue, notified the BLM that the Wildlife Heritage Foundation has ranked Trapper’s Point as its highest conservation priority in Wyoming, and summarized the cultural and historic significance of this site stating,

Archaeological records suggest deer and antelope have been migrating through this particular bottleneck for thousands of years. A recent dig conducted by the Wyoming State Archaeologist documented a 6,000-year-old antelope kill site in the core of the bottleneck.⁶⁰

After receipt of the letter from WGFD, the BLM explained that it had made an administrative mistake by placing the lease parcels, within a migratory bottleneck, on the auction block.⁶¹ Accordingly, the BLM wisely rejected and refunded industry bids for the parcels. The revised RMP must disclose and analyze the extensive documentation of migratory bottlenecks. Further, it should permanently prohibit oil and gas exploration, leasing, and development in the bottlenecks for the same reasons the BLM did not lease the parcels at Trapper’s Point in August of 2002.

Industry may already hold lease rights to parcels within migratory bottlenecks. The draft Environmental Impact Statement (EIS) must disclose the extent to which areas within bottlenecks are leased and the potential for development within these areas. Text accompanied

⁵⁶ *North American Study* at 1.

⁵⁷ *Letter to Alan Kesterke, Acting State Director, Wyoming BLM from Bill Wichers, Deputy Director, Wyoming Game and Fish Department* at 1 (hereinafter *Trapper’s Point Letter*)(Aug. 2, 2002)(Attached as [Exhibit AA](#)).

⁵⁸ *Id.* at 2.

⁵⁹ *Id.*

⁶⁰ *Id.*

⁶¹ *BLM Withdraws two Trapper’s Point leases*, Jeff Gearino, Casper Star, Section A (Aug. 15, 2002)(Attached as [Exhibit BB](#)).

by a map would be the most appropriate method to convey this information to the public. Once identified, the BLM should discuss the options for prohibiting surface disturbance in these critical wildlife areas. The following options exist and must be discussed in the EIS:

- Void the leases and refunding lease payments to the lessees.
- Trade leases within the migratory bottlenecks for lease parcels in areas with less critical natural resource values
- If drilling must go forth, place a non-surface occupancy stipulation on any approval to drill allowing operators to directionally drill from outside of the bottleneck

Finally, the EIS should require that when leases within bottleneck area expire, they remain off limits to exploration, leasing, and development. Along these same lines, the EIS should prohibit suspensions of leases within these areas.

3. 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.⁶² 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.⁶³ 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 IV \(II\)\(C\)\(13\)](#) above. The RMP EIS must therefore fully explore this possibility.

4. STUDY AND DISCLOSE THE INCREASE IN POACHING STEMMING FROM AND INCREASE IN POPULATION DUE TO THE OIL AND GAS BOOM

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 Mountains, USA*.⁶⁴ The RMP must discuss the impacts of population growth that accompanies

⁶² *North American Study* at 1.

⁶³ *Mitigation Policy*, Wyoming Game and Fish Commission at 6 (Apr. 28, 1998)(Attached as [Exhibit CC](#)).

⁶⁴ *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 DD](#)).

oil and gas development on the wildlife species on the Upper Green River Valley. 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.

C. 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.⁶⁵ 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 RMP EIS must:

- Evaluate the threats to this species which include, but are not limited to, oil and gas exploration and development, off-road vehicle use, shooting, poisoning, noxious weeds, inappropriate livestock grazing, fire suppression and plague;
- Fund research and monitoring efforts for this species;
- Designate all white-tailed prairie dog complexes totaling over 5,000 acres as Areas of Critical Environmental Concern;
- Close occupied and recovery habitat for white-tail prairie dogs to oil and gas leasing, exploration, *and* development (See Section X above). Alternatively, place NSO stipulations on all leases and approvals to drill in prairie dog habitat;
- Prohibit off-route ORV use; immediate close and rehabilitate non-system ORV routes within occupied and recovery habitat; and prohibit new routes from being developed in occupied and recovery habitat;
- Prohibit white-tailed prairie dog shooting throughout the entire Resource Area;
- Prohibit white-tailed prairie dog poisoning on all lands throughout the entire Resource Area;
- Control noxious weed infestations and rehabilitate areas with noxious weeds by revegetating areas with native species;
- Prohibit livestock grazing in occupied and recovery habitat;
- Restore natural fire regimes;
- Monitor for disease by collecting fleas and testing prairie dog carcasses in areas of suspected prairie dog declines and in all back-footed ferret reintroduction areas;
- Fund and conduct plague vaccine research;

⁶⁵ *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).

- Provide enforcement mechanisms to ensure adherence to each of the above measures.

D. PROTECTING THE IMPERILED SAGE GROUSE

1. SAGE GROUSE THROUGHOUT THE WEST, IN WYOMING, AND IN THE UPPER GREEN RIVER VALLEY

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. Maintaining large, unbroken expanses of effective sage grouse habitat throughout Wyoming thus should be a top priority in this RMP EIS.

The area at issue in this RMP revision process - the Upper Green River Valley – is 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 this scoping period.⁶⁶ 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 RMP EIS.

⁶⁶ *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 EE](#)).

2. AN BRIEF OVERVIEW OF OIL AND GAS DEVELOPMENT AND SAGE GROUSE

Before moving on to the next issue, however, our groups would like to briefly discuss the serious problems that oil and gas development poses for the grouse. As set forth above, if present land management practices continue the result will be habitat decline and reduced distribution and numbers of sage grouse throughout the Pinedale RA. The BLM must consider this when developing a RFD scenario for oil and gas development. 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.

In its current management plan for the Upper Green River Valley (the “Pinedale RMP”) and in recent oil and gas project EIS’s, the BLM has consistently ignored scientific guidelines developed to protect sage grouse populations. For example, the Pinedale BLM has chosen .25 - .5 mile distances from active leks for restrictions on development even though the scientific literature indicates there should be no manipulation of sagebrush habitats within **three** miles of active leks. Even this minimum, unsupported distance of .25 - .5-mile restriction is not guaranteed as BLM documents allow the granting of exceptions to this surface disturbance restriction under certain circumstances. Perhaps most serious is that the Pinedale BLM has completely failed to recognize the importance of sage grouse winter use habitat, since there is no active mapping of these areas and no stipulations to help protect these habitats.

3. KEY RECOMMENDATIONS FOR THE BLM’S REVISION OF THE PINEDALE RMP

To minimize the impacts of energy development on the Upper Green’s nationally significant sage grouse populations, the Pinedale BLM must adopt and follow *all* of the recommendations set forth in Dr. Braun’s technical scoping comments. Here, however, we would like to briefly highlight some of the top priority recommendations:

- The BLM should adopt a policy of no surface disturbance within 3 miles of occupied leks;
- All areas used by sage-grouse during both average and severe winters should be located and given special protection through designation as “Areas of Critical Environmental Concern;”
- Standard surveys should 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 forb availability;
- Replicated, long-term studies should be immediately initiated to understand the effects of habitat fragmentation on predator numbers and predation rates on sage grouse;

- Habitat guidelines published by Connelly et al. (2000)⁶⁷ should be incorporated into the new RMP's "desired future condition" so that sage grouse nest success and chick survival improve;
- Effective mitigation practices are needed immediately in the Upper Green and should include: road closures (permanent or seasonal), burial of power lines, modifications of fences and other structures, and elimination of livestock grazing in areas where oil and gas production is permitted.

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

As discussed above in [Section III \(III\)](#), the BLM must comply with the Endangered Species Act (ESA). This includes following the provisions for all listed and candidate species. Just days before scoping comments were due, 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 very recent submission, here we would simple 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 RMP EIS to protect this species and its habitat.

F. RAPTORS

Raptors often receive protective stipulations and other protective measures, particularly in the context of oil and gas development activities. The EIS 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 RMP 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 RMP. Additionally, the EIS should address compliance with the Bald Eagle Protection Act and Migratory Bird Treaty Act and the RMP should specify the means by which BLM will ensure compliance with these laws as well as pursue (or facilitate) enforcement of them.

G. ADDITIONAL SPECIES

A number of other species in the Upper Green River Valley live in the Upper Green River Valley including but not limited to black-footed ferrets (a species protected under the ESA), burrowing owls, mountain plover (a candidate species under the ESA) etc. The RMP must provide a list of

⁶⁷ Attached as [Exhibit FF](#).

species in the Resource Area, 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 RMP.

V. PROTECTING UNIQUE LANDSCAPES

A. DESIGNATION OF AREAS OF CRITICAL ENVIRONMENTAL CONCERN MUST BE GIVEN PRIORITY

1. PRIORITIZE ACEC DESIGNATION

Areas of Critical Environmental Concern (ACECs) are defined in FLPMA. Just as the definitions of multiple use and sustained yield give substance to FLPMA’s requirements for management to be based on multiple use and sustained yield, the definition of ACEC gives substance to the requirement that priority be given to designation and protection of ACECs. ACECs are defined as areas “where special management attention is required . . . to protect and prevent irreparable damage” to important resources, including fish and wildlife resources, ecological features, and historical, paleontological and archeological resources. 43 U.S.C. §1702(a). Candidate ACECs must have relevance and importance. 43 C.F.R. § 1610.7-2(a). Since Congress required that designation and protection of ACECs be given priority in land use planning, it is critical that all alternatives developed in the EIS do so. 43 U.S.C. § 1712(c)(3).

2. GENERAL CONSIDERATIONS FOR ACEC DESIGNATION AND MANAGEMENT

In view of this mandate our groups, under separate cover and attached, have submitted a detailed nomination of Areas of Critical Environmental Concern.⁶⁸ In addition to this specific nomination, however, we ask that, in general, the BLM consider designating ACECs for all species that have been listed pursuant to the Endangered Species Act or recognized as sensitive species by BLM. The rarity and/or uniqueness of these species means they are “relevant” and “important” by definition. The fact that they are rare also shows “special management attention” is needed; or, in the case of inherently rare species, that special management is needed to protect what is often very limited habitat. Furthermore, in our view the loss of species through extinction or the continued decline of species (especially already-rare species) constitutes “irreparable damage” in both ecological and quality-of-life terms. Therefore, these species warrant improved protection through ACEC designations.

It is also worth noting that the Endangered Species Act (ESA) establishes requirements that can be achieved—and are required to be achieved—by ACEC designation. There is, of course, the well known jeopardy standard in section 7(a)(2) of the ESA that prohibits agencies from jeopardizing the continued existence of listed species or taking actions that result in the destruction of adverse modifications of critical habitat. 16 U.S.C. § 1536(a)(2). Designating

⁶⁸ *CRITICAL CONDITION: Areas of Critical Environmental Concern (ACECs) for Big Game in the Upper Green River Valley, Wyoming*. A petition to the Wyoming BLM in accordance with the Pinedale RMP Scoping Process (Apr. 6, 2003)(Attached as [Exhibit GG](#)).

ACECs is an obvious means of ensuring this duty is met, and is especially relevant given the priority Congress attached to designating ACECs during land use planning.

But perhaps more importantly, section 7(a)(1) of the ESA requires all Federal agencies to “utilize their authorities in furtherance of the purposes of this chapter by carrying out programs for the conservation” of listed species. 16 U.S.C. § 1536(a)(1) (emphasis added). This is a mandatory duty. Given the priority that Congress attached to designating ACECs, and its commandment that all agencies carry out programs to conserve listed species, it is apparent ACEC designation is precisely the kind of program Congress intended be used to further the conservation of listed species. Additionally, since agencies must further the purposes of the ESA by carrying out conservation programs, it is worth noting that one purpose of the ESA is to “provide a means whereby the ecosystems upon which [listed] species depend may be conserved.” 16 U.S.C. § 1531(b). ACECs are clearly a flexible means to protect the ecosystems on which listed species depend, and thus they provide a convenient programmatic means to further the purposes of the ESA that BLM is required to fully utilize and implement. Given the priority for endangered species protection established by Congress, and the priority given to ACEC designation in FLPMA, ACECs should be used liberally to protect rare species in the RMP area.

Furthermore, we request that all riparian areas in the geographic area of the RMP be designated ACECs. The ecological value of these areas is universally acknowledged. It is also widely recognized that most riparian areas in the west are in a non-functioning or functioning at risk status. Thus, special management is needed. Riparian areas are discrete and easily recognized, generally speaking. Consequently, they would be relatively easy to delineate for special management. In the aggregate they have far more than local importance. This recommendation is in accordance with BLM’s Riparian-Wetlands Initiative, which will be discussed more below, as will additional needs for riparian area management. Reflecting the overarching importance of riparian areas, the BLM Manual specifically provides that important riparian-wetlands areas should be considered for designation as ACECs.

In addition to riparian areas, other areas that should be considered for ACEC designation are: *big game wintering areas, *migration and other ecological corridors, and areas with special breeding, feeding or sheltering value for wildlife, such as cliff areas used by raptors, prairie dog colonies, and caves. Areas of *large, contiguous habitat, should also be considered for ACEC designation. Archeological, historical, and paleontological sites and resources should be protected through the liberal use of ACEC designations, as required by FLPMA. (See CRITICAL CONDITIOIN: Areas of Critical Environmental Concern (ACECs) for Big Game in the Upper Green River Valley, Wyoming attached as [Exhibit GG](#)).

Relative to ACECs, the RMP “shall include the general management practices and uses, including mitigating measures, identified to protect designated ACEC[s].” 43 C.F.R. § 1610.7-2(b). In our view, this requires the following. First, given the purpose of ACECs the requirement to “prevent irreparable damage” establishes a greater protective standard than either the non-impairment standard in the definition of multiple-use or the prevention of unnecessary or undue degradation standard applicable to all actions. Compare 43 U.S.C. § 1702(a) with 43 U.S.C. §§ 1702(c), 1732(b). Second, wherever, an ACEC is designated, BLM should consider withdrawing the areas from operation of the mining and mineral leasing laws pursuant to 43

U.S.C. § 1714 so as to ensure there is no irreparable damage. (Also see Section X above). Third, where a potential ACEC has only been identified, BLM must nevertheless “take all feasible action to assure that those qualities that make the resource important are not damaged or otherwise subjected to adverse change pending an ACEC designation decision.” 45 Fed. Reg. 57318, 57326 (Aug. 27, 1980).

B. WILD AND SCENIC RIVERS

In formulating, analyzing, and making decisions regarding future management in the RMP area, the BLM must comply with the National Wild and Scenic Rivers Act of 1968. 16 U.S.C. §§ 1271-87. As Congress made clear, the purpose of the Act is to safeguard one of the Nation’s most spectacular and critical resources—our rivers. To that end, the Act requires that rivers of the Nation which

possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, *shall* be preserved in free-flowing condition, and that they and their immediate environments *shall* be protected for the benefit and enjoyment of present and future generations. 16 U.S.C. § 1271 (emphasis added).

In fulfilling the requirements of this statute, the BLM should consider that rivers and streams in the RMP area are of tremendous importance to the wildlife and fish, and the beauty and recreational appeal of the area. Water is the lifeblood of the arid west, and a priceless resource. Unless the BLM is willing to protect these vital corridors, its efforts to preserve ecosystem integrity, conserve wildlife and fish, and manage the public lands in the best interests of the American people, may be for naught.

Recognizing the importance of rivers to every aspect of public land values, the Wild and Scenic Rivers Act requires the BLM, as part of its land use planning duties, to consider whether the rivers under its jurisdiction qualify for inclusion in the Wild and Scenic Rivers System. 16 U.S.C. § 1276(d); BLM Manual MS-8351 (Wild and Scenic Rivers Policy). To do this, the agency must first make a determination of which river segments are “eligible” for inclusion in the system. The agency must consider all stream segments under its jurisdiction and must recognize that all free-flowing rivers and streams with outstandingly remarkable values are eligible for Wild and Scenic River designation.

Second, the BLM must determine which of the eligible segments are “suitable” for designation as Wild and Scenic Rivers. In this phase, BLM evaluates rivers eligible for inclusion in the system in terms of conflicting uses. Conflicting uses must be real and reasonably foreseeable, not theoretical or unsubstantiated. The BLM’s suitability determinations must reflect that the law *favors inclusion* of eligible rivers in the Wild and Scenic Rivers System, as opposed to exclusion.

As BLM practice makes clear, when the agency deems a river eligible for status as a Wild and Scenic River, it must manage the river to preserve its outstandingly remarkable qualities until the agency can address its suitability. In turn, once the agency determines a river is suitable, the agency must take all management steps necessary to protect the river so that Congress may have

a meaningful opportunity to include the river in the Wild and Scenic Rivers System. To do otherwise would run counter to agency policy, undermine the Act, and disregard FLPMA's requirement that the BLM protect resources valuable to the American people, such as rivers that are eligible or suitable for Wild and Scenic River designation, for the benefit of future generations and without undue degradation of these resources. 43 U.S.C. § 1702(c); 43 U.S.C. § 1732(b). Additionally, BLM must reconsider rivers that have previously been inventoried to determine whether they may now possess the qualities required for designation as a Wild or Scenic River—just as wilderness inventories require on-going updates and modifications, so do Wild and Scenic Rivers inventories.

Our groups understand that the Pinedale BLM completed a Review of the Potential Wild and Scenic Rivers in the Pinedale Resource Area but are concerned, given that the law favors inclusion, that of the 105 sections of water reviewed only ten were found eligible and of those ten, only four sections were found suitable. Our primary concern is that the BLM appears to have taken an overly restrictive interpretation of the “outstandingly remarkable” criteria. In addition, however, we are concerned that the BLM failed to consult the public in any way during the initial Wild and Scenic review process. Accordingly, our groups will soon be closely reviewing the BLM's Final Report on Wild and Scenic Rivers in the Pinedale RA. In the interim, we ask that the BLM, during the RMP process, reconsider its findings in the *Final Report of the Review of Potential Wild and Scenic Rivers in the Pinedale Resource Area* paying special attention to Fontenelle Creek and some of the other creeks on the westside of the Resource Area that are important for cutthroat trout. In addition, we ask that the RMP set forth a plan to seek Wild and Scenic designation of the four sections deemed suitable.

C. WILDERNESS, WILDERNESS STUDY AREAS, AND THE NATIONAL LANDSCAPE CONSERVATION SYSTEM

1. GENERAL CONSIDERATIONS

Pursuant to the provisions at 43 U.S.C. § 1782(c), 43 C.F.R. Part 6300, and BLM Handbook H-8550-1 (Interim Management Policy for Lands Under Wilderness Review), as well as the Wilderness Act itself, the RMP EIS must address the protection of existing wilderness study areas (WSA's) and any designated wildernesses in the RMP area. The RMP should establish standards to ensure that the wilderness qualities of existing wildernesses and WSA's are not impaired or degraded. For example, we believe oil and gas development activities in WSAs should be prohibited or regulated to the full extent permitted by law. Exploration leaves long-term marks on the landscape, which should be avoided to the extent possible. Oil and gas drilling activities also impair and degrade wilderness qualities and should be prohibited except under no surface occupancy stipulations. Ensuring non-impairment is a non-discretionary duty that BLM must meet. *Southern Utah Wilderness Alliance v. Norton*, 301 F.3d 1217 (10th Cir. 2002).

Likewise, we believe citizen-proposed wilderness areas should receive the same considerations and protections as WSAs so long as they comply with the Wilderness Handbook requirements relative to wilderness inventory areas (WIA's). Pursuant to BLM Handbook H-6310-1 (Wilderness Inventory and Study Procedures) and the FLPMA §201, 43 U.S.C. § 1711(a)

(requiring the Secretary of Interior to “prepare and maintain on a continuing basis an inventory of all public lands and their resources and other values”), and FLPMA §202, 43 U.S.C. § 1712(a) (requiring the Secretary of Interior to “develop, maintain, and, when appropriate, revise land use plans which provide by tracts or areas for the use of the public lands”), BLM must consider supplemental and new information concerning WIAs that were previously considered for WSA status.⁶⁹ Specifically, BLM Handbook H-6310-1.06.E provides that:⁷⁰

In order for such requests from the public to be considered, they should be accompanied by (a) a map which identifies the specific boundaries of the area in question; (b) a detailed narrative that describes the wilderness characteristics of the area and documents how that information significantly differs from the information in prior inventories conducted by BLM regarding the wilderness values of the areas; and (c) photographic documentation.

BLM must ensure in the EIS that any supplemental or new information relative to WIA’s previously inventoried for WSA status is fully and appropriately considered so that modifications and additions to WSAs can be made in the RMP. Activities that could impair wilderness qualities in citizen-proposed wilderness areas should not be permitted.

2. SPECIFIC AREAS

a. SCAB CREEK, SILVER CREEK FALLS, AND COTTONWOOD CREEK

In 1990, the Wyoming Wilderness Coalition (WWC) re-inventoried BLM areas for wilderness for the “Citizens’ Wilderness Proposal for Wyoming BLM Lands”. WWC found that the Scab Creek, Silver Creek Falls, and Cottonwood Creek areas were identified in the Citizen’s Wilderness Proposal with 10,000 acres including 120 U.S. Forest Service acres for wilderness recommendation. The BLM identified 12,900 acres in their initial inventory and only recommended 7,636 acres to Congress. This WSA provides an unique opportunity to study and explore a wide variety of life zones in the continuum of ecosystems from 7,400 feet to 12,500 feet, and supports a great variety of wildlife including black bear, mountain lion, bobcat, golden and bald eagles, prairie and peregrine falcons, moose and mule deer.

b. LAKE MOUNTAIN

The BLM identified Lake Mountain WSA only 13,865 acres for wilderness and recommended zero acres. The Citizens’ Proposal re-inventoried the area and found 18,000 acres including 600

⁶⁹ See BLM Information Bulletin No. 2001-042 (Jan 12, 2001) (“Recently Issued Solicitor’s Opinion Regarding Land Use Planning - Jack Morrow Hills Opinion”) (“BLM may not refuse to consider credible new information which suggests that the WSA boundaries identified in the late 1970’s do not include all public lands within the planning area that have wilderness characteristics and are suitable for management as wilderness.”).

⁷⁰ It is also worth noting that where citizen- proposed wilderness areas have been introduced as legislation they are properly considered under BLM Handbook H-6310-1.06.D.

U.S. Forest Service acres that qualified for wilderness. The area contains canyons and steep talus slopes, open sagebrush grasslands and thick forest of spruce, sub-alpine fir and aspen. The clear streams that flow through the area include La Barge Creek and Rock Creek. Rock Creek, an ACEC, contains a rare population of Colorado cutthroat trout and must be protected from industrial development.

Expanding the acreage and boundaries of the wilderness recommendations of Lake Mountain and Scab Creek would protect these very threatened yet valued resources.

c. SEMI-PRIVATE ROADLESS AREAS

The Pinedale BLM has identified eight semi-primitive roadless areas on their Recreation Opportunity Spectrum Map. All roadless areas should be protected for their quiet recreation, wildlife security and water quality values. No new roads should be built and off-highway vehicles should be strictly prohibited.

The largest area near Merna should be established and recognized as a year-round non-motorized recreation area. The roadless area near Scab Creek should be added to the WSA boundary recommendation, as should the two semi-primitive areas near and south of the Lake Mountain WSA/Rock Creek ACEC. The three areas east of Big Piney should be protected and recognized for their unique landscapes – the Little Colorado Desert habitat and their ability to provide sanctuary in this bottleneck migration corridor.

3. NATIONAL LANDSCAPE CONSERVATION SYSTEM LANDS

In addition to ensuring proper management of wilderness resources, the RMP should also provide for proper management of components of the National Landscape Conservation System (NLCS). These areas should be managed to ensure the values that led to their special management status are given first priority, and incompatible uses should not be allowed. Additionally, the RMP should identify and recommend potential additions to the NLCS. Likewise, the RMP should ensure BLM's Grasslands Initiatives,⁷¹ as applicable, are fully implemented by adopting measurable objectives for their implementation.

D. RIPARIAN AREAS

The RMP area contains remarkable riparian areas that are vitally important to the ecological health of the region. Properly managing riparian areas is a critical component of managing for biological diversity and for meeting many other needs. Only about 1% of the lands managed by the BLM are wetlands, yet these are some of the most ecologically important landscapes under BLM jurisdiction. Consequently, and as discussed above, it is critical that the Clean Water Action Plan and Riparian-Wetlands Initiative be fully implemented by the RMP, and that riparian areas be afforded ACEC protection.

⁷¹ Great Basin Restoration Initiative, Sagebrush Ecosystem Conservation Initiative, and Prairie Conservation Initiative.

Riparian areas and wetlands provide rare oases of lush vegetation and water in an arid environment. As a result, they are rich in wildlife like birds, deer, elk, amphibians, fish, cougar, bobcat, and other species. They also improve water quality by filtering sediment and other pollutants, stem erosion, improve groundwater reserves, reduce the risk of flash flooding, and provide shelter for wildlife. They are also often home to important cultural sites. See BLM's Riparian-Wetlands Initiative for the 1990's (RWI) at 7-8; BLM Handbook H-1737.08-09.

Because of the critical importance of these areas, two Executive Orders require their protection. Executive Order 11988 (1977) requires federal agencies to avoid adverse impacts associated with the occupancy of floodplains. Executive Order 11990 (1977) requires federal agencies to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial value of wetlands. Further, all federally approved activities must include all practical measures to minimize adverse impacts to wetlands and riparian areas.

The BLM's policy is to “maintain, restore, or improve riparian-wetland ecosystems to achieve a healthy and proper functioning condition that assures biological diversity, productivity, and sustainability. . .” BLM Handbook H-1737.06. RMPs must “recognize the importance of riparian-wetland values, and initiate management to maintain restore, improve or expand them.” Id. at 1737.06.B.4.

The cornerstone to effective protection of riparian areas is the completion of a comprehensive inventory of the riparian and wetlands resources within the bounds of the RMP area. These areas should be identified and their functioning condition should be evaluated. See RWI at 16 (noting need for inventories). “Improving the functioning condition of these areas is the focus of BLM’s riparian-wetland restoration goal.” RWI at 11.

Based on the critical importance of riparian areas, and the considerations set forth above, we urge the BLM to incorporate into the RMP specific, measurable riparian and wetland area protections. These include, among other things:

- Completion of “a broad inventory” of all riparian areas and an evaluation of their functioning condition pursuant to BLM Manual MS-1737.22 (“Inventories are usually conducted prior to preparation of . . . RMPs;” and “an RMP will generally require broad inventory”). This inventory should be done prior to preparation of the RMP EIS and should be presented in it.
- Specification of the steps that will be undertaken so that riparian areas that are not in properly functioning condition can be restored, and how the condition of areas that are in properly functioning condition will be maintained.
- Exclusion of ORVs from riparian areas and wetlands except on designated routes;
- Incorporation of riparian and wetland area protection with protection of the associated watersheds. BLM Manual MS-1737.32; Clean Water Action Plan.
- Assurance that livestock grazing standards and guidelines and Fundamentals of Rangeland Health are complied with, and that livestock grazing is excluded from riparian areas as needed;
- Development of an effective monitoring program that measures biodiversity and wildlife populations, soil erosion, vegetation health, the presence of non-native species, water

quality and quantity, and the impacts of other uses such as grazing, ORVs, recreation uses, and other activities;

- A prohibition on oil and gas leasing and development in riparian areas, or a requirement for no surface occupancy stipulations. Analysis should be provided in the EIS of how mineral development and associated impacts such as waste pits, roads, pipelines and other uses will be regulated so as to avoid impacts to riparian areas and wetlands;
- A prohibition on the issuance of rights-of-way in riparian and wetlands areas, or in areas where such use would adversely impact riparian areas;
- Identification of lands for acquisition in riparian or wetlands areas that are ecologically, hydrologically or geologically linked to BLM wetlands and crucial to their functioning;
- Designation of riparian areas and wetlands as ACECs.

E. VISUAL RESOURCES

It is BLM policy that visual resource management (VRM) classes are assigned to all public lands as part of the Record of Decision for RMPs. The objective of this policy is to “manage public lands in a manner which will protect the quality of the scenic (visual) values of these lands.” BLM Manual MS-8400.02. Under the authority of FLPMA, the BLM must prepare and maintain on a continuing basis an inventory of visual values for each RMP effort. 43 U.S.C. § 1701; BLM Manual MS-8400.06. In addition, NEPA requires that measures be taken to “. . . assure for all Americans . . . aesthetically pleasing surroundings.” Once established, VRM objectives are as binding as any other resource objectives, and no action may be taken unless the VRM objectives can be met. *See* IBLA 98-144, 98-168, 98-207 (1998). The RMP must make clear that compliance with VRM classes is not discretionary.

In order to comply with the laws and regulations, the visual qualities of all lands within the RMP area must be inventoried, and VRM classifications for such lands must be analyzed in the EIS. We submit that all areas proposed for wilderness designation, whether citizen-proposed or otherwise, must be designated as VRM I “to preserve the existing character of the landscape.” This would also be true for any visual ACECs identified during the RMP revision process. Visual sensitivity within these areas is very high; the visual quality of these areas is of deep concern to thousands of individuals and local and national organizations; and any action that would impact visual resources within these areas would be extremely controversial and typically unnecessary or undue.

Oil and gas development severely degrades the visual quality of an area. We submit that all areas not currently being developed for oil and gas production should be classified as at least VRM II, in order to “retain the existing character of the landscape.” The fact that development has occurred in the past, however, should not limit VRM classifications. Indeed, BLM objectives for visual resource classes contemplate rehabilitating such areas in order to meet the VRM class determined through the RMP revision process. In addition, it must be noted that other management actions must reflect VRM classifications. For example, oil and gas leasing may need to be prohibited or no surface occupancy may be required so as to comply with the VRM class.

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 RMP should reflect—and require—this conservative approach to managing these priceless and irreplaceable resources.

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 RMP should ensure this problem is avoided.

RMPs are the principle guide for the BLM’s management of cultural resources. *See* BLM Manual MS-8100.08.A.1.a. Therefore, BLM’s preparation of the RMP EIS provides an excellent opportunity for the agency to address concerns about these resources and to implement policies that will protect and preserve cultural resources.

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 RMP, and must provide evidence of cultural resource consideration as part of the EIS prepared as part of the RMP revision 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 planning process 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 RMP 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 RMP 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. More specifically, the BLM should consider closing culturally sensitive areas to mineral leasing and entry, grazing, and designating ACECs to protect fragile cultural resources. Also, the RMP should specify a travel plan for ORVs that limits vehicle travel to routes that do not pass near culturally sensitive areas. All ORV routes designated in the RMP should be surveyed for cultural resources to ensure the protection of those resources. Finally, the EIS should address the impacts of oil and gas exploration and development activities on cultural resources, with particular attention being given to the effects of the use of explosives or "vibrosis" vehicles during exploration activities. The RMP should make provisions that ensure these activities will not destroy or alter cultural resources.

VII. FIRE AND FIRE POLICY

The RMP EIS should address issues related to fires and fire policy. The RMP should:

- Establish an ecologically based fire *restoration* program so that fire can play its natural, and necessary, role in the RMP area.
- Prohibit any mechanical treatments (e.g., thinning) of vegetation in wilderness areas or wilderness study areas.
- Prohibit road building as a means to accomplish any vegetation treatments in furtherance of the fire policy. If “non-permanent” roads are allowed, there should be stringent assurance they will in fact be temporary.
- Be consistent with the Western Governors Association’s 10-year Comprehensive Wildfire Strategy prepared in 2001.
- Provide that funds for fire management should be used, in accordance with our recommendations on invasive and exotic species, to eradicate flammable invasive species such as cheatgrass. They should also be used to restore native species less likely to create fire problems, and for restoring seed banks of native species.
- Provide that riparian areas should be restored so that they can serve as natural firebreaks.
- Provide that fire suppression efforts and related vegetation management efforts (like thinning) are focused on the “wildland urban interface.” Remote areas where fire causes few if any problems and may in fact be an important component of ecological health should not be subject to mechanical vegetation management activities pursued to accomplish fire policy.

Any attempts in the RMP to “cut red tape”, “improve the regulatory process”, or prevent “needless delays”, as called for in the Healthy Forests Initiative, must nevertheless fully comply with all applicable law, and in particular must not limit the ability of concerned citizens to participate in decisions related to fire management and policy. Rhetoric should not be the basis for fire policy and management. For example, if the BLM proposes to base fire suppression and/or related vegetation management activities or policies on purported delays due to administrative challenges or lawsuits, it should provide credible data from the RMP area in the EIS to support such a claim.

Additionally, the EIS should address underlying assumptions or conditions that influence fire policy in a thorough and scientifically credible manner. The full costs and benefits of fire suppression and related vegetation management activities should be illuminated, particularly relative to other means of reducing fire hazards, such as allowing natural fires to burn or “prescribed” burning. Land exchanges and other similar methods for preventing encroachment of housing developments among otherwise remote BLM lands should be addressed. The relative importance of past fire suppression policy and drought in creating “unnatural” fuel accumulations and creating hazardous fire conditions should be thoroughly addressed and analyzed. Whether fuel accumulations are in fact “unnatural” should be fully explored.

VIII. LIVESTOCK GRAZING

A. IMPLEMENT PLAN TO PROTECT AND RESTORE RANGELAND HEALTH

Livestock grazing can have profound impacts on wildlife and the public lands. *See* 43 U.S.C. §§ 1901(a)(1) (determining that “vast segments” of the public rangelands are in unsatisfactory condition), 1751(b)(1) (finding that much federal rangeland “is deteriorating in quality”). Recognizing this, BLM adopted standards and guidelines for grazing administration in 1995 that are designed to restore and protect range health and degraded range conditions. *See* 43 C.F.R. Subpt. 4180. The RMP should provide a clear and binding schedule for ensuring that the three steps the grazing rules establish for determining if grazing needs to be modified are accomplished in a timely manner. The three steps are: assess rangeland health, determine if grazing is a significant factor causing unhealthy rangelands, take appropriate actions to eliminate or modify grazing by the start of the next grazing season. Furthermore, for allotments that have already been assessed, provision should be made in the RMP for future assessments and determinations—the standards and guidelines are intended to be an ongoing, prominent factor in grazing management, and the Fundamentals of Rangeland Health are standing national requirements. It is also worth noting that pursuant to the Public Rangelands Improvement Act (PRIA), “the goal” of rangeland management “shall be to improve the range condition of the public rangelands” 43 U.S.C. § 1903(b) (emphasis added).

BLM’s standards and guidelines and the Fundamentals of Rangeland Health also have potential applicability and utility for properly managing all resource uses in the RMP area. For example, many standards and guidelines and the Fundamentals of Rangeland Health would be appropriate as stipulations to oil and gas leases to ensure there is not unnecessary or undue degradation. Consequently, as part of this planning effort, the BLM should consider what changes if any are needed to extend the standards and guidelines and Fundamentals of Rangeland Health to all other programs, and the RMP should provide for their adoption as requirements to guide all future management activities and decisions. The standards and guidelines, and the Fundamentals of Rangeland Health, provide a convenient existing means to meet many of the requirements highlighted in these comments, which BLM, through the RMP, should take advantage of.

B. ENSURE MONITORING TO ASSESS WHETHER STANDARDS AND GUIDELINES FOR RANGE HEALTH ARE BEING MET

In addressing livestock grazing in this plan, we urge the BLM to pay special attention to the following. Monitoring and follow-up monitoring needed to ensure any changes necessary to meet the standards and guidelines must be provided for in the RMP. The condition of springs and riparian areas, including biotic and abiotic components, and whether they are in proper functioning condition must be given special attention. The condition of upland areas, including cryptobiotic crusts must be carefully monitored and protected. In all cases where these important resources and areas are not functioning properly, the BLM must include in the RMP mandatory steps that will be taken to remedy these failures.

C. COMPLETE A SITE-SPECIFIC IMPACTS ANALYSIS, DETERMINE SUITABILITY, AND BALANCE RESOURCE USE

We also ask that BLM address compliance with the “Comb Wash Decision” in the EIS and the RMP itself. *National Wildlife Federation v. BLM*, 140 IBLA 85 (1997). That appeal not only affirmed the longstanding rule that NEPA requires the BLM to analyze the site-specific impacts of grazing, it must also engage in “reasoned decision-making” on the question of whether to allocate lands and associated resources to this particular use. The EIS should include the required analysis of site-specific impacts of grazing and the required discussion of the balancing of values that will ensure that grazing best meets the present and future needs of the American people. As noted above, this balancing is required so as to meet the requirement that public lands are managed on the basis of multiple use and sustained yield. *See* 43 U.S.C. §§ 1702(c), 1732(a). The Comb Wash Decision held that this balancing is mandatory, and the plan should reflect both that this balancing was carried out and what its results were, on a site-specific basis.

In accordance with the standards and guidelines, the Comb Wash Decision, and provisions in the FLPMA and PRIA, the EIS should determine the suitability of lands within the RMP area for livestock grazing and the RMP should require adjustments accordingly. There is no doubt BLM has this responsibility and authority. *See*, 43 U.S.C. §§ 315 (grazing districts must be chiefly valuable for grazing), 315a (BLM can do “any and all things” necessary to manage grazing), 1701(a)(8) (public lands to be managed to protect environmental values), 1702(c) (multiple use management allows for areas to be deemed unsuitable for certain uses and requires consideration of relative resource values), 1712(a)-(c) (land use plans to be based on multiple use), 1712(d) (land use classifications can be modified or terminated), 1712(e) (allowing for elimination of principle or major uses), 1732(c) (revocation of permits authorized), 1752 (allowing discontinuation of grazing permits and a determination in land use plans of whether lands “remain available for domestic grazing”), 1903(b) (allowing for discontinuation of grazing pursuant to land use planning decisions). *See also Public Lands Council v. Babbitt*, 529 U.S. 728 (2000) (holding that allocation of forage in a land use plan pursuant to 43 C.F.R. § 4100.0-5 does not, on its face, violate the Taylor Grazing Act). Livestock grazing, like all land uses, should only occur in areas where it has been carefully determined, pursuant to the land use planning process, to be a suitable use of the land. The suitability determination should be made in the RMP at two levels: (1) for the RMP area as a whole and (2) for site-specific areas.

D. INSURE LIVESTOCK GRAZING DOES NOT ADVERSELY IMPACT FRAGILE RESOURCES SUCH AS RIPARIAN AREAS

As noted above, the impacts of grazing on riparian areas should receive particular attention in the EIS, and the RMP should make binding and mandatory provisions to deal with the impacts of grazing in riparian areas. BLM’s Riparian-Wetlands Initiative acknowledged the importance of insuring that livestock grazing is compatible with riparian habitat protection, and set an ambitious goal for the agency to achieve. It is now years past the date the Initiative set, so the BLM has no excuse for failing to include, in the RMP, binding benchmarks to ensure its goal is finally achieved. This could require reducing or eliminating livestock grazing in some riparian areas due to their overwhelming ecological importance and the generally recognized negative impacts of grazing on riparian areas. Upland areas, too, may require special livestock management in order to ensure the restoration of fragile areas and cryptobiotic soils, or to protect remnant high condition/seral stage vegetation. BLM should not rely on water developments as a

way to transfer grazing pressure from riparian areas to other (usually upland) areas. This approach often does not solve problems; it just moves them from ecosystems with a relatively high ability to recover due to the availability of water (riparian areas) to ecosystems with little or no ability to recover from excessive livestock grazing (uplands).

E. INSURE ADHERENCE TO THE CLEAN WATER AND SAFE DRINKING WATER ACT

Requirements related to the Clean Water Act were mentioned above, but they bear repetition in the context of livestock grazing. BLM should ensure there is sufficient water quality monitoring relative to the impacts of livestock grazing, and take concrete steps to guarantee that livestock grazing does not adversely impact water quality or impair designated beneficial uses of these waters. The BLM must collect all data necessary to evaluate and achieve compliance with water quality standards, including in particular standards related to fecal coliform bacteria. Compliance with the Safe Drinking Water Act should also be addressed.

F. ANALYZE THE IMPACTS OF LIVESTOCK ON ARCHEOLOGICAL, CULTURAL, AND HISTORIC RESOURCES

The RMP EIS must recognize and analyze the significant adverse impact of livestock grazing on archeological, historic, and cultural resources and fulfill its obligation to identify and proactively protect these resources.

G. ANALYZE THE ECONOMIC IMPACTS OF LIVESTOCK GRAZING

The RMP EIS must include a thorough analyses of the full suite of economic impacts of livestock grazing, including the direct and indirect costs of the grazing program to the public, the taxpayer, the BLM, the permittees, and the neighboring communities as each of these interests are impacted economically by management choices for grazing on BLM lands. Only by doing so can the BLM determine the costs and benefits of the proposed action and alternatives to the proposed action. Furthermore, such analysis is part of the FLPMA balancing test and will help determine whether grazing should occur on the relevant allotments.

IX. OFF-ROAD VEHICLES AND RS 2477

A. RMP REQUIREMENTS

Travel and dispersed recreation management are critical issues facing public lands managers, today and in the future. Given 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 RMP EIS address these issues. If not fully addressed by the RMP, this will simple result in increased expectations of use by recreationalists, more illegal routes, further degradation of resources, and more dissatisfied users. Accordingly, our groups urge the BLM planning staff to fully evaluate and take a proactive approach to managing recreation and associated travel.

Off-road Vehicle (ORV) use is addressed by Executive Order 11644 (1072) and 11989 (1977), and by regulations at 43 C.F.R. § 8340 et seq. Section 8342.1 provides that:

- (a) Areas and trails shall be located to minimize damage to soil, watershed, vegetation, air or other resources of the public lands, and to prevent impairment of wilderness suitability;
- (b) Areas and trails shall be located to minimize harassment of wildlife or significant disruptions of wildlife habitats. Special attention will be given to protect endangered or threatened species and their habitats;
- (c) Areas and trails shall be located to minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands, and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors;
- (d) Areas and trails shall not be located in officially designated wilderness areas or primitive areas. Areas and trails shall be located in natural areas only if the authorized officer determines that off-road vehicle use in such locations will not adversely affect their natural, esthetic, scenic or other values for which such areas are established.

Based on this language, the mounting problems and enormous resource damage resulting from ORV use (legal and illegal), and technological advances that allow these machines to travel in previously inaccessible areas we urge the BLM to require the following in the RMP:

- Prohibit unrestricted cross-country ORV use in the planning area. Public lands users should not be permitted to access public resources and destroy or damage them for recreational (or economic) purposes without being held responsible for mitigation or costs associated with any damage. ORV use should not be an exception to that rule;
- Restrict ORV use to designated routes under a “closed unless posted open” policy. Trails designated a open should be clearly marked so that all users will be aware of where ORV use is, and is not, allowed. This will also assist with effective law enforcement;
- Determine, even where a route is recognized, constructed, and maintained, whether recreational ORV use is appropriate on that route. Full NEPA analysis should be completed for every project proposal involving that use of ORV’s. Designation of ORV routes should only occur where the BLM determines, through a public process, that existing and proposed ORV use will not result in adverse environmental impacts;
- Where routes are open for administrative purposes (including authorized uses by permittees), BLM should still ensure that authorization is tailored as narrowly as needed to ensure resource protection while allowing for the valid administrative access;
- Adoption of a program that implements effective, frequent monitoring of ORV impacts, and sets clear benchmarks which, if exceeded, trigger closure of an area to ORV’s. If monitoring and enforcement cannot be effectively accomplished due to lack of personnel or resources, the RMP should not allow the use;
- Prohibit, in accordance with 43 C.F.R. § 8342.2(c), ORV use in wilderness study areas, other areas the BLM has inventoried and found to have wilderness character, areas within citizen-proposed wilderness areas, and de facto roadless areas. These lands comprise a

fraction of the lands within the Pinedale RA thus closing them to ORV use will still leave plenty of lands open for ORV use elsewhere;

- Prohibit ORV use in critical wildlife habitat, transitional and winter range areas, areas critical for nesting, breeding or other reproductive behaviors, and habitat for threatened, endangered, or sensitive species;
- Prohibit ORV use in Areas of Critical Environmental Concern discussed at length in our petition for ACECs attached as [Exhibit GG](#);
- Prohibit ORV use in riparian area and wetlands. These areas are of critical importance to the biological functioning of the Pinedale RA and are exceedingly rare. The presence of ORV's is not appropriate in these fragile ecosystems and the RMP should so stipulate;
- Evaluate, pursuant to 43 C.F.R. § 8342.2(a), the impacts of ORV use "on all resources and uses in the planning area." The RMP EIS must evaluate the impacts of ORV use on the full range of resources present in the area, including wildlife habitat, wilderness quality lands, non-motorize recreation, grazing, water quality, scenic quality, and other uses.

B. CLOSE NON-SYSTEM, USER CREATED TRAILS IN THE INTERIM

Too often we have seen RMPs promise to develop travel plans later, but they fail to materialize as other post-planning priorities take over. Moreover, the stopgap method of allowing ORV use on "existing" trails pending completion of the RMP or travel plan is unacceptable as this equates to an open designation allowing ORVs to create new tracks every season. Instead, in the interim, user-created and non-system trails should be closed until the BLM has the opportunity to complete site-specific NEPA. The "existing trails" designation also creates an enforcement nightmare, with BLM rangers unable to sanction anyone whose wheels are on a track, even if that track was made the previous weekend.

C. EVALUATE AND MINIMIZE ROUTE SYSTEM

In general, BLM should evaluate the road system in the RMP area and determine the minimum system of routes necessary. Based on that analysis, BLM should close redundant routes; roads with no destination or purpose; illegal, "ghost," or "wildcat" routes; and roads in sensitive areas. The RMP should make these closures immediately effective and ensure sufficient funding for enforcement of these closures. The BLM should mandate road removal for all unnecessary roads. Numerous research studies have demonstrated that the only way to completely eliminate potential negative impacts from a road is complete obliteration. Complete obliteration means ripping the roadbed up to three feet deep, restoring drainages, and replacing the discarded road fill, the bottom of which is original topsoil layer, into the road cut. Road closures, primarily in the form of gating and tank traps, are often ineffective because closure devices are easily vandalized and bypassed by motorized vehicles. In addition studies have documented high failure rates of road closures to effectively prevent road use. Socially, partially closed roads attract recreationalists and are intrusions in the scenic vista.

D. DEFER ANY R.S 2477 CLAIMS

Claims pursuant to R.S. 2477 can be a sever threat to public land resources. The RMP should deter determining the validity of R.S. 2477 right-of-way claims until there is a generally applicable unambiguous legal requirement for the BLM to do so. In addition , R.S. 2477 claims should not be processed until the Department of Interior can clarify the relationship of the recent “Disclaimer of Interest Rule” to R.S. 2477 claims.

At this time, authority to determine the validity of these claims is limited to quiet title actions. If a determination of the validity of an R.S. 2477 right-of-way is made, BLM should adopt the standards set forth in *Southern Utah Wilderness Alliance v. BLM*, 147 F.Supp.2d 1130(D. Utah 2001). That is, valid claims must show evidence of intentional physical construction, of a publicly used highway with some clear destination, on public lands that had not otherwise been reserved for public purposes. *Id.* Any determination of the validity of an R.S. 2477 claim should be an open process with full opportunities for public involvement and comment.

X. NOXIOUS WEEDS

According to BLM Instruction Memorandum, all NEPA documents *must* include an analysis of the potential for weed spread and establishment as an environmental consequence of proposed actions. Measures and stipulations to minimize or avoid the spread of weed[s] *must* be provided.” (BLM I-M 99-178 at 2-3 (1999) (emphasis added)). Moreover, Executive Order 13112, “Invasive Species,” (Feb. 3, 1999) directs all federal agencies to: identify actions that may promulgate invasive species; prevent their introduction; monitor invasive populations accurately and reliably; and, not authorize any action that it believes will cause or promote the introduction of invasive species. Accordingly, the revised RMP must include this discussion as it relates to all resource management activities. This is of particular importance when evaluating the level at which oil and gas exploration and development will be allowed in the Valley.

Soil disturbance from roads, well pads, reservoirs and compressor stations, in addition to increased human and vehicular traffic all lead to weed infestation. Additionally, because produced waters from CBM operations are of low quality (e.g., high SAR/TDS values), CBM drilling will encourage noxious plant invasion (e.g., salt-tolerant species).

We ask that BLM ensure the RMP provides for compliance with Executive Order 13112. Specifically, 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 RMP should establish guidance as to when avoidance of ground-disturbing activities is preferred and appropriate. Similarly, the effect of ground disturbance resulting from rangeland management actions, including grazing itself, on invasive species status should be fully considered, and again the RMP should establish standards as to when these activities may be inappropriate due to invasive species considerations.

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 RMP should establish standards for protecting native plant communities and rare or special status species. BLM’s grazing regulations and the PRIA 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 RMP 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 RMP must insure that no cross-country vehicular (motorized and bicycle) travel is allowed in known habitat or locations of sensitive plant species;
- The RMP must not allow surface disturbing activities in threatened, endangered or sensitive plant species habitat;
- The RMP must target areas with threatened, endangered, or sensitive plants for noxious weed control activities as a first priority;
- The RMP must exclude areas with threatened, endangered, or sensitive plants from fuelwood cutting areas;
- BLM must review grazing allotments and address the protection of areas with threatened, endangered, or sensitive plants species;
- The RMP must not permit communication sites, oil and gas drilling pads, utility rights-of-way, and road rights-of-way in known areas with special status species populations;
- The RMP 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;
- The RMP must not allow reseeded or surface-disturbing restoration after fires in areas with special status plant species, as the natural diversity and vegetation structure must be allowed to provide regeneration;
- BLM must survey the planning 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 planning area. The RMP 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 RMP (see section on riparian habitat management, below), and native cottonwood and willow communities along riparian areas should be targeted for protection and reestablishment where they have been eliminated or degraded;
- The RMP must address how all equipment/vehicles will be properly cleaned prior to their arrival in the Resource Area;
- The RMP should make every APD contingent upon the prevention of weed infestation and include plans to monitor weed infestation over the life of the RMP.

There are a variety of vegetation restoration methods that can be used to restore and promote a natural range of native plant communities in the planning area. BLM must prohibit methods and projects that do not achieve the objective of restoring and promoting a natural range of native plant communities. Consequently, we believe BLM should establish the following standards in the RMP:

- Chaining, roller-chopping, or similar methods of vegetation manipulation must be prohibited due to the widespread disturbance they cause;
- Livestock must be excluded from a restoration/revegetation site for enough time to document that the restoration is successful;
- Although control of noxious weed species is a priority, chemical treatments of noxious weed species should be used *only* if damage to other resources in the area is significant, imminent and certain, and if damage to other resources (e.g., the damage to native species) is determined to be of less significance than the noxious weed problem. Other means of noxious weed control should be given first priority;
- BLM must prioritize areas for which fire could improve the vegetation communities and then allow natural fires to burn in these areas (see section on fire policy, below) ;
- BLM must establish monitoring plots to determine the effectiveness of the treatments used for invasive plant control *and* to provide baseline data of overall change in conditions;
- Fuelwood harvesting must be carefully regulated, and should be concentrated in areas that have already been disturbed.

XI. NOISE

The RMP EIS must address issues related to noise, and its impact on the remoteness and quietness that so many seek on the public lands. We particularly ask that the EIS address, and the RMP provide requirements to minimize, the noise created by oil and gas development activities, especially the noise problems from compressors and compressor stations. Noise occurring due to oil and gas exploration and well drilling should also be minimized. ORV noise should also be addressed.

XII. TOXIC SUBSTANCES

The RMP should adopt an overarching prohibition on the use of insecticides, herbicides, fungicides, rodenticides, and other similar substances. Use of such substances should then only be allowed if in conformity with a site-specific written plan and fully evaluated prior to use in a NEPA document. The site-specific plan shall be subject to public review, comment, and landowner notification and approval. It must describe the type and quantity of material to be used, the pest to be controlled, the method of application, the location of the application and storage/disposal of containers, and other information, and will only be allowed as consistent with state and federal law.

XIII. RECREATION MANAGEMENT

The recreation resource on public lands is becoming increasingly valuable: more people want to recreate on a finite amount of public land. Recreationists desire solitude, clean air, clean water, vast undeveloped landscapes, and a place to witness healthy natural systems thriving with native plants and wildlife. The RMP should accommodate those desires.

In order to ensure the continued viability of these desired experiences, the BLM must manage public lands under a “recreation opportunity spectrum,” or ROS. Increasing recreation pressure dictates the need to include more lands within ROS classes that protect the land’s undeveloped, wild character, i.e. primitive and semi-primitive non-motorized recreation classes. These designations allow for multiple activities of the sorts most desired by the public: camping, picnicking, hiking, climbing, enjoying scenery, wildlife or natural features viewing, nature study, photography, spelunking, hunting (big game, small game, upland birds, waterfowl), ski touring and snowshoeing, swimming, fishing, canoeing, sailing, and non-motorized river running.

All lands within WSAs, BLM inventoried lands of wilderness character, proposed wilderness, and ACECs should be managed as ROS class primitive, while other spectacular and important lands in the RMP area, such as important wildlife habitat, should be managed as ROS semi-primitive non-motorized.

Should you have any further questions in regard to our comments, please feel free to contact us at any time. Thank you for your consideration.

Sincerely,

Kelly Matheson
Greater Yellowstone Program Coordinator, Wyoming Outdoor Council
(307) 332-7031 ext. 20

On behalf of:

Erik Molvar
Wildlife Biologist, Biodiversity Conservation Alliance
(307) 742-7978

Noah Matson and Matt Niemerski
Director of Public Lands Programs and Public Lands Associate, Defenders of Wildlife
(202) 682-9400 ext. 294

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

Bridget Lyons
Transportation Policy Coordinator, Wildlands CPR
208-354-0058

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