



February 1, 2008

Director Jim Caswell  
Attn: Brenda Hudgens-Williams  
P.O. Box 66538  
Washington, D.C. 20035

Via email and first-class mail

### **Protest of the Rawlins Resource Management Plan FEIS**

Dear Director Caswell:

Pursuant to 43 CFR § 1610, Biodiversity Conservation Alliance, Wyoming Outdoor Council, Wyoming Wilderness Association, The Wilderness Society, Natural Resources Defense Council, Center for Native Ecosystems, Wild Utah Project, Western Watersheds Project, Californians for Western Wilderness, Great Old Broads for Wilderness, and WildEarth Guardians protest the Final Environmental Impact Statement (“FEIS”) for the Rawlins Resource Management Plan (“RMP”). We also incorporate by reference the protests of Dr. Clait Braun, Dr. Jason Lillegraven, and Hollis Marriott on the Rawlins RMP FEIS into this protest by reference.

Protestors consist of conservation advocacy groups representing the public interest, who each and in severalty have members who have used the lands and enjoyed the wildlife to be administered under the proposed Rawlins RMP in the past, and who plan future use of these lands. Degradation of lands and the scenic qualities, extirpation or depletion of sensitive wildlife species, and degradation in the health of the ecosystems managed under the Rawlins RMP would significantly impair the future use and enjoyment of these lands by the members of these protesting groups.

Overall, the proposed RMP does not reflect the multiple-use mandate of FLPMA, prioritizing oil and gas development over all other land uses to the detriment of sensitive landscapes and wildlife. The analysis of impacts, both direct and cumulative, presented in the EIS is deficient on a number of different fronts, failing to provide an adequate level of analysis to support leasing for oil and gas, wind energy development, uranium mining and milling, and other industrial uses of the land. Furthermore, the BLM has failed to present a range of reasonable alternatives in the EIS, failing to provide even a single alternative that balances oil and gas development with conservation needs, and provides an ecologically sustainable context for industrial uses in the Rawlins Resource Management Plan Planning Area (“RMPPA”).

The proposed plan does not contain adequately protective measures to ensure the maintenance of ecosystem health and multiple uses on the sensitive public lands of the Red Desert and other parts of the Rawlins Resource Management Plan Planning Area (hereinafter “RMPPA”). According to the Wyoming Game and Fish Department (“WGFD”),

Although this planning document includes broad objectives and concepts for managing public lands, it lacks sufficient, programmatic detail and direction to assure appropriate resource protection, monitoring and mitigation practices for activity level planning and permitting decisions. The RMP needs to provide substantially more detailed programmatic guidance in the form of measurable, quantifiable objectives and adequately defined management actions in order to function as an effective planning document and realistically, to achieve FLPMA and NEPA objectives for managing multiple-use public lands.

DEIS Comments and Responses at Row 1899. It is notable that BLM chose not to correct this deficiency, instead providing general rationalizations as to why specific direction was not provided. It is notable that for years the Forest Service has had land-use plans that have standards with a high degree of specificity covering large land areas comparable to (and neighboring) the Rawlins Field Office. *See, e.g.*, USFS (2003).

The Wyoming Game and Fish Department has provided a synopsis of the salient points of BLM’s land stewardship responsibilities:

NEPA requires BLM to view its traditional management missions and environmental protection procedures in light of national environmental protection objectives. 40 CFR 1500.2 (f) states, "Federal agencies shall to the fullest extent possible ... use all practicable means, consistent with the requirements of the Act and other essential considerations of national policy, to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions upon the quality of the human environment." By definition, "To the fullest extent possible means ... unless existing law applicable to the agency's operations expressly prohibits or makes compliance impossible" [40 CFR 1500.6]. This is our basic, national environmental charter. It is not a legitimate NEPA exercise to define alternatives that effectively constitute varying degrees of compliance with an agency's foundational, management mission. Each alternative, even the "development of resources" alternative, must contain adequate environmental protection procedures to comply with the requirements of FLPMA set forth at 43 CFR 1701(a)(8) and 1702(c)(1), (2) (protection of ecological and environmental values including fish and wildlife habitat, and principals of multiple use and sustained yield, respectively).

DEIS Comments and Responses at Row 1900. The proposed Rawlins RMP falls woefully short of these mandates.

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 fails to follow this Congressional guidance, especially in the preferred alternative.

The Red Desert area, comprising the westernmost quarter of the Rawlins Field Office, is an area of particularly high conservation concern due to its outstanding wilderness resources, important assemblages of rare sagebrush wildlife, and importance for public recreation. The proposed plan does not deal adequately with industrial development, which as a result of inadequate protective measures continues to be a major and increasing threat to the wildlife and recreation values of this area.

Particularly lacking in the EIS is adequate protection for Adobe Town, the most outstanding recreation and scenic resource in the RMPPA, and the Powder Rim and Ferris Dunes, two of the most important and sensitive wildlife areas in the planning area. Many cutting edge methods for managing oil and gas development, including directional drilling, well clustering, limits on well densities, and phased development, are not implemented or even considered for mandatory implementation under any alternative, even though these measures have been required in programmatic land-use decisions in other BLM jurisdictions. Finally, the BLM's failure to strengthen wildlife protective measures in the face of scientific evidence that current measures are failing is simply appalling. This is particularly true for sage grouse breeding and nesting areas, other BLM Sensitive Species habitats, and big game winter ranges. BLM's failure to make a course correction on wildlife conservation measures in the context of oil and gas development is likely to be a prime driver for Endangered Species listing for the sage grouse, Wyoming pocket gopher, white-tailed prairie dog, and pygmy rabbit.

## **LEGAL STANDARDS**

The following is a brief synopsis of the legal standards which apply to the claims brought forward in this Protest. Detailed descriptions of individual violations follow.

### **National Environmental Policy Act**

The National Environmental Policy Act ("NEPA") requires agencies to conduct environmental analysis of the direct and cumulative impacts of proposed projects, consider a range of reasonable alternatives (including an alternative that minimizes environmental impacts), solicit and respond to public comments.

### ***Range of Alternatives Requirements***

The range of alternatives is "the heart of the environmental impact statement." 40 C.F.R. § 1502.14. NEPA requires BLM to "rigorously explore and objectively evaluate" a range of alternatives to proposed federal actions. *See* 40 C.F.R. §§ 1502.14(a) and 1508.25(c). Formulation of alternatives during the NEPA disclosure and study process is at the heart of

Congress' choice of NEPA as the procedural method that guides federal agencies' management of the public lands. *See Natural Resources Defense Council v. Hodel*, 865 F.2d 288, 299 (D.C. Cir. 1988) (citing *Kleppe v. Sierra Club*, 427 U.S. 390, 410 (1976)). In fact, NEPA requirements state that "no action concerning the proposal should 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). *Catron County v. U.S Fish and Wildlife Service*, 75 F.2d 1429 (10th Cir. 1996)(partial NEPA compliance is not enough.) NEPA regulations also require agencies to address appropriate alternatives in Environmental Assessments. 40 C.F.R. § 1508.9, with specific reference to section 102(2)E of NEPA. In addition, the law requires consideration of a range of mitigation measures. *See Kootenai Tribe of Idaho v. Veneman*, 313 F.3d 1094, 1122-1123 (9<sup>th</sup> Cir. 2002) (and cases cited therein) (stating that agencies must develop and analyze environmentally protective alternatives in order to comply with NEPA).

Section 102(2)(C) of NEPA requires an agency to present alternatives to the proposed action, and Section 102(2)(E) requires the agency to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(2)(C) and (E) (1994); *see* 40 C.F.R. § 1501.2(c); *Biodiversity Associates*, IBLA 2001-166 at 6; *Wyoming Outdoor Council*, 151 IBLA 260, 272 (1999); *Howard B. Keck, Jr.*, 124 IBLA 44, 53 (1982); *Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1228-29 (9<sup>th</sup> Cir. 1988), cert. Denied, 489 U.S. 1066 (1989).

The fact that this basic, fundamental requirement that is the touchstone of every NEPA document has not gone unnoticed on the federal judiciary in sending back environmental studies that fail to meet this requirement, is noteworthy. *See e.g., Calvert Cliffs Coordinating Comm., Inc. v. United States Atomic Energy Comm'n*, 449 F.2d 1109, 1114 (D.C. Cir. 1971) (detailed EIS required to ensure that each agency decision maker has before him and takes into account all possible approaches to a particular project . . . which would alter the environmental impact and the cost-benefit balance); *Natural Resource Defense Council v. Callaway*, 524 F.2d 79, 93 (2d Cir. 1975); ("The duty to consider reasonable alternatives is independent from and of wider scope than the duty to file an environmental statement."); *Simmons v. United States Army Corps of Engineers*, 120 F.3d 664, 660 (7<sup>th</sup> Cir. 1997) ("The highly restricted range of alternatives evaluated and considered violates the very purpose of NEPA's alternative analysis requirement: to foster informed decision making and full public involvement."); *Alaska Wilderness Recreation & Tourism v. Morrison*, 67 F.3d 723, 729 (9th Cir. 1995) ("The existence of a viable but unexamined alternative renders an environmental impact statement inadequate."); *Dubois v. U.S. Dept. of Agric.*, 102 F.3d 1273, 1288 (1st Cir. 1996) (EIS invalid because agency did not consider alternative of using artificial water storage units instead of a natural pond as a source of snowmaking for a ski resort); *Libby Rod & Gun Club v. Poteat*, 457 F. Supp. 1177, 1187-88 (D. Mont. 1978), *rev'd in part on other grounds*, 594 F.2d 742 (9th Cir. 1979) (Army Corps of Engineers violated NEPA in an EIS for a hydroelectric dam by only cursorily addressing the alternatives of meeting the Northwest's energy needs through other sources or conservation.); *Northwest Env't'l Defense Center v. Bonneville Power Admin.*, 117 F.3d 1520, 1538 (9th Cir. 1997) ("An agency must look at every reasonable alternative, with the range dictated by the nature and scope of the proposed action.")

The failure to look at the full range of reasonable alternatives is related to BLM's duty in any environmental analysis to develop, study, analyze and adopt mitigation measures to protect other resources. The ability to adopt post-leasing mitigation measures – see 43 C.F.R. § 3101.1-2 – is quite broad, as all reasonable measures not inconsistent with a given lease may be imposed by BLM. This is particularly true given that BLM, pursuant to FLPMA, must manage public lands in a manner that does not cause either “undue” or “unnecessary” degradation. 43 U.S.C. § 1732(b). Put simply, the failure of BLM to study and adopt these types of mitigation measures – especially when feasible and economic – means that the agency is proposing to allow this project to go forward with unnecessary impacts to public lands, in violation of FLPMA.

The Tenth Circuit examined NEPA's alternatives requirement and agreed with other courts that “have interpreted NEPA to preclude agencies from defining the objectives of their actions in terms so unreasonably narrow that they can be accomplished by only one alternative (i.e. the applicant's proposed project).” *Colorado Environmental Coalition v. Dombek*, 185 F.3d 1162, 1165 (10<sup>th</sup> Cir. 1999), at 1174 (citing *Simmons v. United States Corps of Eng'rs*, 120 F.3d 664, 669 (7<sup>th</sup> Cir. 1997)). At the same time, an agency may not completely ignore an applicant's objectives. See *id.* at 1174-75. Taken together, these directives “instruct agencies to take responsibility for defining the objectives of an action and then provide legitimate consideration to alternatives that fall between the obvious extremes.” *Id.* at 1175. See *All Indian Pueblo Council v. United States*, 975 F.2d 1437, 1444 (10<sup>th</sup> Cir. 1992) (a thorough discussion of alternatives is “imperative”). Accordingly:

Agency compliance *vel non* with the requirement to consider alternatives is evaluated under the “rule of reason,” meaning that “the concept of alternatives must be bounded by some notion of feasibility,” and that agencies are required to deal with circumstances “as they exist and are likely to exist,” but are not required to consider alternatives that are “remote and speculative.” *Natural Resources Defense Council, Inc. v. Hodel*, 865 F.2d 288, 294095 (D.C. Cir. 1988) (internal citations omitted). However, in examining alternatives to the proposed action, an agency's consideration of environmental concerns must be more than a *pro forma* ritual. Considering environmental costs means seriously considering alternative actions to avoid them.

*Calvert Cliffs' Coordinating Comm., Inc. v. U.S. Atomic Energy Comm.*, 449 F.2d 1109, 1128 (D.C. Cir. 1971); see also *Southern Utah Wilderness Alliance*, 237 F.Supp.2d 48, 51; see also *Mineral Policy Center v. Norton*, 292 F.Supp.2d 30, 51 (D. D.C. 2003) (agency “not entitled to deference” where agency operates under erroneous assumption).

The failure to look at the full range of reasonable alternatives is related to BLM's duty in any environmental analysis to develop, study, analyze and adopt mitigation measures to protect other resources. The ability to adopt post-leasing mitigation measures – see 43 C.F.R. § 3101.1-2 – is quite broad, as all reasonable measures not inconsistent with a given lease may be imposed by BLM. This is particularly true given that BLM, pursuant to FLPMA, must manage public lands in a manner that does not cause either “undue” or “unnecessary” degradation. 43 U.S.C. § 1732(b). Put simply, the failure of BLM to study and adopt these types of mitigation measures –

especially when feasible and economic – means that the agency is proposing to allow this project to go forward with unnecessary impacts to public lands, in violation of FLPMA.

Simply listing and not analyzing the effectiveness of these measures also results in violation of NEPA. *See Northwest Indian Cemetery Protective Association v. Peterson*, 764 F.2d 581, 588 (9th Cir. 1985), *rev'd on other grounds*. 485 U.S. 439 (1988) (where the court determined that NEPA requires agencies to "analyze the mitigation measures in detail [and] explain how effective the measure would be. ... A mere listing of mitigation measures is insufficient to qualify as the reasoned discussion required by NEPA."). In a case where the Corps of Engineers attempted to rely on untested mitigation measures, the Wyoming District Court ruled, "the Court holds that the Corps' reliance on mitigation measures that were unsupported by any evidence in the record cannot be given deference under NEPA. The Court remands to the Corps for further findings on cumulative impacts, impacts to ranchlands, and the efficacy of mitigation measures." *Wyoming Outdoor Council v. U.S. Army Corps of Engineers*, 351 F.Supp.2d 1232, 1238. (D. Wyoming 2005).

Second, the mitigation measures relied upon must "constitute an adequate buffer' ... so as to 'render such impacts so minor as to not warrant an EIS.'" *Greater Yellowstone Coalition*, 359 F.3d at 1276 (quoting *Wetlands Action Network*, 222 F.3d 1105, 1121 (9<sup>th</sup> Cir. 2000)). In other words, "When the adequacy of proposed mitigation measures is supported by substantial evidence, the agency may use those measures as a mechanism to reduce environmental impacts below the level of significance that would require an EIS." *National Audubon Soc. v. Hoffman*, 132 F.3d 7, 17 (2d Cir. 1997). "In practice, mitigation measures have been found to be sufficiently supported when based on studies conducted by the agency,...or when they are likely to be adequately policed." *Id.*

The courts have had little patience with agencies' failure to provide sound scientific evidence to support the efficacy of their mitigation measures. In *Wyoming Outdoor Council*, the Court ruled:

In short, the mitigation measures relied upon by the Corps, while mandatory, are not supported by a single scientific study, paper, or even a comment. This Court does not expect the Corps to conduct extensive research on the efficacy of wetland replacement. Neither can the Court defer to the Corps' bald assertions that mitigation will be successful. ... As such, the Corps was arbitrary and capricious in relying on mitigation to conclude that there would be no significant impact to wetlands. The Court remands to the Corps to support its reliance on mitigation.

351 F.Supp.2d 1232, 1252, footnote omitted. The court concluded, "This Court will not rubberstamp an agency determination that ... relies on unsupported, unmonitored mitigation measures. NEPA and the CWA require more." 351 F.Supp. 2d 1232, 1252. In particular, federal agencies must explore alternatives to proposed actions that will avoid or minimize adverse effects on the environment, 40 C.F.R § 1500.2(3), alternative kinds of mitigation measures, 40 C.F.R. § 1508.25(c)(3), alternatives that would help address unresolved conflicts over the use of available resources (e.g. roadless areas and/or potential wilderness), 40 C.F.R. § 1501.2(c), and other reasonable courses of action, 40 C.F.R. § 1508.25(c)(2). The requirement to consider such

less damaging alternatives helps agencies meet NEPA's primary purpose of promoting "efforts which will prevent or eliminate damage to the environment and biosphere..." 42 U.S.C. § 4321. These requirements are affirmed in BLM policy: "BLM officials may not so narrow the scope of a planning/NEPA document as to exclude a reasonable range of alternatives to the proposed action..." USDI Instruction Memorandum No. 2001-075. The IBLA has established that the elimination of reasonable alternatives without sufficient analysis does not satisfy NEPA, and noted that "While we could speculate about the BLM's rationale for dismissing... alternatives, we should not be required to fill in the blanks for BLM. The record should speak for itself." *Biodiversity Associates*, IBLA 2001-166, at 7 (2001). Such objective evaluation is gravely compromised when agency officials bind themselves to a particular outcome or foreclose certain alternatives at the outset. Importantly, BLM's decision to approve a high-impact project in sensitive and undeveloped lands when lower-impact alternatives and mitigation measures were readily available has resulted in a project that wreaks unnecessary impacts on the public lands.

### ***Hard Look Requirements***

NEPA's purpose is to maintain a national "look before you leap" policy in regard to all major federal actions. Congress' intent in establishing this objective was to avoid uninformed agency decisions that could have serious environmental consequences. Thus, NEPA's mandate is that all federal agencies analyze the likely effects of their actions, as well as address the potential alternatives. "Agencies are to perform this hard look *before* committing themselves irretrievably to a given course of action so that the action can be shaped to account for environmental values. NEPA § 102(2)(c) requires the agency to consider numerous factors [including] irreversible commitments of resources called for by the proposal." *Sierra Club v. Hodel*, 848 F.2d 1068 (10<sup>th</sup> Cir. 1988) (rev'd on other grounds)(emphasis added). NEPA provides procedural protections for resources at risk by requiring analysis of impacts *before* substantial decisions are made that set development in motion. *See Conservation Law Foundation v. Watt*, 560 F. Supp. 561, 581 (D. Mass. 1983), *aff'd by Massachusetts v. Watt*, 716 F. 2d 946 (1<sup>st</sup> Cir. 1983).

Section 102(2)(C) of NEPA requires that the responsible federal agency prepare a detailed statement on the environmental impacts of the proposed action and any adverse environmental effects which cannot be avoided should the proposal be implemented. The regulations implementing NEPA provide that "[t]o determine the scope of environmental impact statements, agencies shall consider . . . (1) Connected actions, which means that they are closely related and therefore should be discussed in the same impact statement. . . . (2) Cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement. . . . [and] (3) Similar actions, which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography." 40 C.F.R. § 1508.25. A cumulative impact is defined as "the impact on the environment which results from the incremental impact of the actions when added to other past, present, and foreseeable future actions regardless of what agency ...or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." 40 C.F.R. § 1508.7. Because of the importance of cumulative impacts, "the consistent position of the case law is that ... the agency's EA must give a realistic evaluation of the total impacts and cannot isolate a proposed project, viewing it in a

vacuum.” *Grand Canyon Trust*, 290 F.3d 339, 342 (citations omitted). To satisfy NEPA’s hard look requirement, the cumulative impacts assessment must do two things. First, BLM must catalogue the past, present and reasonably foreseeable projects in the area that might impact the environment. *Muckleshoot Indian Tribe v. USFS*, 177 F.3d 800, 809-810 (9<sup>th</sup> Cir. 1999). Second, BLM must analyze these impacts in light of the proposed action. *Id.* If BLM determines that certain actions are not relevant to the cumulative impacts analysis, it must “demonstrat[e] the scientific basis for this assertion.” *Sierra Club v. Bosworth*, 199 F.Supp.2d 971, 983 (N.D. Ca. 2002). In *Wyoming Outdoor Council v. U.S. Army Corps of Engineers*, the court ruled,

The Court cannot defer to an EA/FONSI which has neglected, by its own terms, to even attempt to assess the extent of cumulative impacts that might be attributed to the agency action....The Corps must assess cumulative impacts to such a degree as to assure this Court that its issuance of a FONSI was not arbitrary and capricious.

351 F.Supp.2d 1232, 1243 (D. Wyoming 2005). The standard for an Environmental Impact Statement is even higher.

It is important to note that the 10<sup>th</sup> Circuit Court of Appeals decided that the critical stage for analysis of environmental impacts is the leasing stage rather than the APD stage. *Pennaco Energy v. United States Department of the Interior*, 377 F.3d 1147, 1160 (10<sup>th</sup> Cir. 2004). The court, quoting BLM’s own Handbook for Planning of Fluid Mineral Resources, held that the environmental impacts of oil and gas leasing must be analyzed before the agency makes an irreversible commitment, and that “[i]n the fluid minerals program, this commitment occurs at the point of lease issuance.” *Id.* Because the Rawlins RMP EIS constitutes the only stage at which the environmental impacts of leasing decisions will be analyzed, it becomes critically important that this analysis of impacts be complete and legally sufficient.

### ***Baseline Information Requirements***

Importantly, 40 C.F.R. §1502.15 requires agencies to “describe the environment of the areas to be affected or created by the alternatives under consideration.” Establishment of baseline conditions is a requirement of NEPA. In *Half Moon Bay Fisherman’s Marketing Ass’n v. Carlucci*, 857 F.2d 505, 510 (9<sup>th</sup> Cir. 1988), the Ninth Circuit states that “without establishing . . . baseline conditions . . . there is simply no way to determine what effect [an action] will have on the environment, and consequently, no way to comply with NEPA.” The court further held that, “The concept of a baseline against which to compare predictions of the effects of the proposed action and reasonable alternatives is critical to the NEPA process.”

### ***Response to Public Comment Requirements***

Under the National Environmental Policy Act, agencies have a responsibility to respond to comments submitted by the public or cooperating agencies:

An agency preparing a final environmental impact statement shall assess and consider comments both individually and collectively, and shall respond by one or more of the means listed below, stating its response in the final statement. Possible responses are to:

1. "Modify alternatives including the proposed action.
2. "Develop and evaluate alternatives not previously given serious consideration by the agency.
3. "Supplement, improve, or modify its analyses.
4. "Make factual corrections.
5. "Explain why the comments do not warrant further agency response, citing the sources, authorities, or reasons which support the agency's position and, if appropriate, indicate those circumstances which would trigger agency reappraisal or further response.

40 C.F.R. § 1503.4(a). Importantly, while agencies must attach comments considered “substantive” to the EIS (40 C.F.R. § 1503.4(b)), a comment need not be substantive to trigger the agency’s response requirement.

### **Administrative Procedures Act**

In the review of Federal agency action, courts apply the standard of review set forth in the Administrative Procedures Act (“APA”): “The reviewing court shall – (1) compel agency action unlawfully withheld or unreasonably delayed; and (2) hold unlawful and set aside agency action, findings, or conclusions found to be – (A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law...[or] (D) without observance of procedure required by law.” 5 U.S.C. § 706. *See also Friends of the Bow v. Thompson*, 124 F.3d 1210, 1215 (10<sup>th</sup> Cir. 1997) (Court reiterated that under the APA, it must set aside agency action that is “arbitrary, capricious, an abuse of discretion, or not otherwise in accordance with the law”). In *Friends of the Bow*, the Tenth Circuit explained what constitutes arbitrary and capricious agency action:

Generally, an agency decision will be considered arbitrary and capricious if “the agency had relied on factors which Congress had not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

*Friends of the Bow*, 124 F.3d at 1215 (internal citations omitted).

### **BLM Sensitive Species Policy**

Instruction Memorandum (IM) 97-118 governs BLM Special Status Species management and requires that actions authorized, funded, or carried out by the BLM **do not contribute to the need for any species to become listed as a candidate**, or for any candidate species to become listed as threatened or endangered. It recognizes that early identification of BLM sensitive species is advised in efforts to prevent species endangerment, and encourages state directors to collect information on species of concern to determine if BLM sensitive species designation and

special management are needed. In addition, for special status species, including sensitive species, BLM must:

Identify strategies and decisions to conserve and recover special status species. Given the legal mandate to conserve threatened or endangered species and BLM's policy to conserve all Special Status Species, land use planning strategies and decisions should result in a reasonable conservation strategy for these species. Land use plan decisions should be clear and sufficiently detailed to enhance habitat or prevent avoidable loss of habitat pending the development and implementation of implementation-level plans. This may include identifying stipulations or criteria that would be applied to implementation actions. Land use plan decisions should be consistent with BLM's mandate to recover listed species and should be consistent with objectives and recommended actions in approved recovery plans, conservation agreements and strategies, MOUs, and applicable biological opinions for threatened and endangered species.

BLM Land Use Planning Handbook H-1601-1, Appendix C at 5, emphasis added. Additionally, if Sensitive Species are designated by a State Director, the protection provided by the policy for candidate species shall be used as the minimum level of protection. BLM Manual 6840.06. The policy for candidate species states that the "BLM shall carry out management, consistent with the principles of multiple use, for the conservation of candidate species and their habitats and **shall ensure that actions authorized, funded, or carried out do not contribute to the need to list any of these species** as threatened/endangered." BLM Manual 6840.06, emphasis added. Specifically, BLM shall:

- (1) Determine the distribution, abundance, reasons for the current status, and habitat needs for candidate species occurring on lands administered by BLM, and evaluate the significance of lands administered by BLM or actions in maintaining those species.
- (2) For those species where lands administered by BLM or actions have a significant affect on their status, manage the habitat to conserve the species by:
  - a. Including candidate species as priority species in land use plans.
  - b. Developing and implementing rangewide and/or site-specific management plans for candidate species that include specific habitat and population management objectives designed for recovery, as well as the management strategies necessary to meet those objectives.
  - c. " Ensuring that BLM activities affecting the habitat of candidate species are carried out in a manner that is consistent with the objectives for those species.
  - d. Monitoring populations and habitats of candidate species to determine whether management objectives are being met.
- (3) Request any technical assistance from FWS/NMFS, and any other qualified source, on any planned action that may contribute to the need to list a candidate species as threatened/endangered.

BLM Manual 6840.06. These obligations went completely unmet in the Rawlins RMP EIS and proposed plan. Clearly, the BLM must survey for special status species before allowing any ground disturbance in lease parcels, must develop site-specific management plans for these species, and must monitor special status species populations within the lease parcels to ensure that the agency is promoting their recovery. The BLM must acquire baseline data and analyze the impacts of the alternatives on these species. In cases where special status species obligations are flouted, this safety net becomes less meaningful and increases the need for Endangered Species Act protection.

### **National Historic Preservation Act**

Federal agencies have special stewardship responsibilities with respect to historic resources on land that is under the agency's "jurisdiction or control." Section 110(a) of the National Historic Preservation Act ("NHPA") requires that federal agencies "shall assume responsibility for the preservation of historic properties which are owned or controlled by such agency." 16 U.S.C. § 470h-2(a)(1). All historic properties under federal jurisdiction or control must be "managed and maintained in a way that considers the preservation of their historic, archaeological, . . . and cultural values. . ." 16 U.S.C. § 470h-2(a)(2)(B), and those properties must be "identified, evaluated, and nominated to the National Register." *Id.* § 470h-2(a)(2)(A); *see id.* §470h-2(a)(2)(E)(ii).

Failure to adequately protect identified cultural and historic properties, and traditional religious and cultural properties results in a violation of the NHPA. In 1992, Congress specifically amended Section 110 to increase Federal agencies' proactive, ongoing responsibility to locate, inventory, and nominate properties to the National Register, as well as assume the responsibilities for preserving historic properties. *See* 16 U.S.C. § 470h-2(a) (as amended 1992). Section 110 requires Federal agencies to adopt and utilize cultural resource management programs. *Id.* BLM adopted an agency-wide Cultural Resource Management Program (CRMP), which includes four manuals. The CRMP has three main components – identification, protection, and utilization. *See* BLM Manuals 8100 – Cultural Resource Management Plan; 8110 – Identifying Cultural Resources; 8120 – Protecting Cultural Resources; and 8130 – Utilizing Cultural Resources for Public Benefit. These four manuals direct BLM field offices to carry out their responsibilities under Section 110 of the NHPA.

The National Historic Preservation Act requires consultation for all projects that would have an adverse effect on properties eligible for the National Register of Historic Places. Federal regulation provides that,

[a]n adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

36 CFR § 800.5(a)(1). The Section 106 regulations also confirm that the "[p]hysical destruction of or damage to all or part of the Property," "[a]lteration of a property, including restoration,

rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's standards for the treatment of historic properties (36 CFR part 68) and applicable guidelines” or the “[c]hange of the character of the property's use or of physical features within the property's setting that contribute to its historic significance” results in an “adverse effect” on historic properties. 36 C.F.R. § 800.5(a)(2)(i-ii, iv). The regulations, with respect to timing of Section 106 consultation, state:

[Completion of a Section 106 review] does not prohibit agency officials from conducting or authorizing nondestructive project planning activities before completing compliance with section 106, provided that such actions do not restrict the subsequent consideration of alternatives to avoid, minimize or mitigate the undertaking's adverse effects on historic properties.

36 C.F.R. §800.1(c) (emphasis added). These regulations clearly communicate that avoid, minimize, or mitigate impacts to eligible properties be considered. Furthermore, the regulations instruct Federal agencies to initiate Section 106 early in an undertaking's planning to ensure that “a broad range of alternatives may be considered during the planning process for the undertaking.” *Id.* (emphasis added).

### **FLPMA Unnecessary or Undue Degradation Requirements**

By law, the BLM must “take any action necessary to prevent unnecessary or undue degradation of the lands.” 43 U.S.C. § 1732(b). BLM's Unnecessary or Undue Degradation (“UUD”) responsibilities are intertwined with the agency's NEPA duties. Under NEPA, BLM must identify impacts a proposed action will have to the environment; married to this obligation are the duties imposed by FLPMA to identify the thresholds of acceptable impact and then determine whether the impacts are unnecessary or undue. If the impacts are determined to be necessary and unavoidable, BLM must then analyze whether the impacts are undue. NEPA then reasserts itself in the process by mandating that alternatives be considered to ensure that unnecessary or undue actions are not undertaken and to ensure that methodologies used to prevent UUD are supported and verified. *Ecology Center, Inc. v. Austin*, 430 F.3d 1057, 1065 (9th Cir. 2005).

In the context of hard-rock mining, “[a] reasonable interpretation of the word ‘unnecessary’ is that which is not necessary for mining. ‘Undue’ is that which is excessive, improper, immoderate, or unwarranted.” *Utah v. Andrus*, 486 F.Supp.995, 1005 n.13 (Dist. Utah 1979). FLPMA requires that,

the public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; . . . that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use;

43 U.S.C. § 1701(a)(8). At the same time, FLPMA directs that these uses be balanced with mineral extraction by requiring that,

the public lands be managed in a manner which recognizes the Nation's need for domestic sources of minerals . . . from the public lands including implementation of the Mining and Minerals Policy Act of 1970 . . .

43 U.S.C. § 1701(a)(12). The key here is for BLM to balance these opposing needs.

The original hardrock mining regulations finalized in 1980 (1980 Regulations) defined unnecessary and undue degradation pursuant to FLPMA as “impacts greater than those that would normally be expected from an activity being accomplished in compliance with current standards and regulations and based on sound practices, including use of the best reasonably available technology.” 43 C.F.R. § 3802.0-5(l). These regulations, which became known as the “prudent operator standard,” were re-written in 2000, and the “prudent operator” standard was replaced by the “substantial irreparable harm” standard. The current mining regulations defining “unnecessary or undue degradation,” adopted in 2001, reflect a “return to the prudent operator standard.” *Mineral Policy Center* at 8. Because of significant factual and regulatory differences between oil and gas development and hardrock mining, the regulations are of only limited use, but that limited use is here somewhat helpful to understanding what BLM did wrong in the Jonah Field. In *Mineral Policy Center* at 22, the District Court held that, “[I]n enacting FLPMA, Congress’s intent was clear: Interior is to prevent, not only unnecessary degradation, but also degradation that, while necessary to mining, is undue or excessive.”

According to the original mining regulations, “Unnecessary or undue degradation means impacts greater than those that would normally be expected from an activity being accomplished in compliance with current standards and regulations and based on sound practices, ***including use of the best reasonably available technology.***” 43 C.F.R. § 3802.0-5(l) (emphasis added).

#### **CONSISTENCY WITH LOCAL AND STATE PLANS AND POLICIES**

According to FLPMA, “Land use plans of the Secretary under this section will be consistent with State and local plans to the maximum extent he finds consistent with Federal law and the purposes of this Act.” 43 U.S.C. § 1712(c)(9). There are a number of specific conflicts between state and local plans and the proposed RMP, outlined below. In the absence of a finding that the state or local plans in question are inconsistent with federal law or the purposes of FLPMA, the BLM needs to alter the final RMP to be in conformity with these plans.

#### ***Adobe Town Very Rare or Uncommon Designation***

In November of 2007, the Wyoming Environmental Quality Council designated all of Adobe Town – Wilderness Study Area plus all of the citizens’ proposed wilderness area lands excluding private inholdings – as Very Rare or Uncommon pursuant to the Wyoming Environmental Quality Act to protect the scenic, wildlife, cultural/historical, geological, and fossil features of the area. Attachment 1. This designation prevents non-coal surface mining in all cases where such mining would degrade the resources for which the area was established as Very Rare or Uncommon. Chapter VII, Designation of Areas Pursuant to W.S. §35-11-112 and W.S. §16-3-103. This area should be closed to locatable mineral entry, mineral materials extraction, oil shale and all other forms of non-coal surface mining in the RMP in order to maintain consistency with the state designation.

### ***WGFD Mitigation Policy***

The Wyoming Game and Fish Department Mitigation Policy sets thresholds that prevent the loss of habitat function for key habitats. *See* Attachment 2. Federal Candidate Species and Native Species Status 1 and 2 receive a mitigation category of “Vital,” for which habitat directly limits populations and restoration may be impossible; habitat function must be maintained if habitat modification is allowed to occur. *Id.* at 4, 6. In the RMPPA, species in this category likely to be impacted by the project include mountain plover, bald eagle, Townsend’s big-eared bat, roundtail chub, bluehead sucker, and flannelmouth sucker. *See* Attachment 3. Habitats such as Crucial Winter and Crucial Winter Relief Ranges also receive a mitigation category of “Vital,” regardless of whether or not the crucial ranges of two or more species overlap. Attachment 2 at 5.

Native Species Status 3 receive a mitigation category of “High,” for which WGFD recommend no net loss of habitat function through enhancement of degraded habitat when a habitat disturbing project is proposed. *Id.* at 4, 6, emphasis added. In the RMPPA, species in this category likely to be impacted by the project include the merlin, peregrine falcon, long-billed curlew, western scrub-jay, juniper titmouse, bushtit, Scott’s oriole, dwarf shrew, white-tailed prairie dog, Great Basin pocket mouse, silky pocket mouse, and swift fox. *See* Attachment 3. Big game winter-yearlong ranges and parturition areas also fall under the “High” reclamation category, demanding no net loss of habitat function. Attachment 2 at 5. For these species and habitats,

The Commission recognizes that some wildlife or wildlife habitats are so rare, complex and/or fragile that mitigation options are not available. Total exclusion of adverse impacts is all that will ensure preservation of these irreplaceable habitats.

*Ibid.*, p. 4. We concur wholeheartedly, and point out that FLPMA carries a legal requirement for the BLM to manage its lands in accord with state directives such as the WGFD Mitigation Policy.

It is important to note that the level of impact and development for each of the four plan alternatives exceed important thresholds set forth under the Wyoming Game and Fish Department’s *Recommendations for Oil and Gas Development in Crucial and Important Wildlife Habitats*. Attachment 4. Exceedence of these thresholds denotes a net loss of habitat function. For mule deer and pronghorn winter ranges and sage grouse nesting and brood-rearing habitats, the 8 wells per section fall under the “high” impact category, as do treatments that call for 20 acres or more of surface disturbance. Attachment 4 at 14, 20. In addition, WGFD recommends zero surface occupancy within migration corridors less than ½ mile in width. *Id.* at 23. There are a number of migration corridors identified by WGFD and other researchers within the ARPA that fit this category. *See, e.g.*, Attachment 5. For elk crucial winter range, levels of development requiring 8 wells per section fall into the “extreme” impact category. Attachment 4 at 23. These impact levels denote a net loss of habitat function, and when they occur, WGFD recommends that off-site mitigation funds be emplaced. Attachment 4 at 15, 21-22. Yet no off-site mitigation fund is established under the FEIS.

It is important to note that FLPMA requires the RMP to conform to established state policies and laws, including the Wyoming Game and Fish Department's Mitigation Policy. The WGFD *Recommendations for Oil and Gas Development* set forth the thresholds that determine the level at which there is a net loss of habitat function. The proposed plan exceeds these thresholds. In the Wild Cow WHMA, an area established by WGFD for its exceptional values to wintering big game, BLM states,

Surface disturbance would be restricted or prohibited within mountain shrub and aspen plant communities which provide important wildlife seasonal and crucial winter range habitats. However, there would still be a loss of habitat effectiveness, creating stress to wildlife from operational aspects of CBNG [coalbed methane] development.

FEIS at 4-339, emphasis added. Under all alternatives, BLM predicts

The total percentage of crucial winter range that would be directly and indirectly impacted by oil and gas and CBNG development include approximately 33 percent of the available elk crucial winter range, 44% of the available mule deer crucial winter range and 63 percent of the available pronghorn crucial winter range.

FEIS at 4-456. In the FEIS's 'Unavoidable Adverse Impacts' section, BLM states, "Because large areas of crucial big game habitat coincide with known areas of high and moderate oil and gas potential, impacts to crucial habitats would be unavoidable under current BLM policy to foster oil and gas development." FEIS at 4-534. This statement is bitterly ironic because, far from being "unavoidable," impacts to crucial winter ranges could be avoided readily by simply placing these ranges off-limits to surface-disturbing activities.

Mitigation measures in the FEIS are therefore not sufficient to prevent a net loss of habitat function for big game crucial ranges, prairie dog colonies, and key habitats for other State Sensitive species. The Rawlins RMP EIS therefore violates FLPMA's requirements to maintain consistency with established state policies.

### ***WGFD plans for Protecting Powder Rim***

According to the Wyoming Game and Fish Department's Strategic Habitat Plan, portions of the Powder Rim within Sweetwater County are identified as a Nongame habitat priority:

**Key Habitat Number and Name:** 14. Powder Rim

**Uniqueness:** Provides primary habitat for 5 species of Juniper obligates. SGCN list includes 8 bird and 16 mammal species. WY Gap classifies a large portion of the area as a high ranking for species diversity.

**Habitat quality ranking** 5.69-6.66 **Protective status ranking** 2.94-5.69

**Total Area:** 200,488 acres

**Ecological Systems and Area of Each:**

### **Ecological System ACRES**

Herbaceous Planted/Cultivated 540

Inter-Mountain Basins Active and Stabilized Dune 953

Inter-Mountain Basins Big Sagebrush Shrubland 138713

Inter-Mountain Basins Big Sagebrush Steppe 320

Inter-Mountain Basins Cliff and Canyon 4503

Inter-Mountain Basins Greasewood Flat 10

Inter-Mountain Basins Mixed Salt Desert Scrub 17307

Rocky Mountain Foothill Limber Pine - Juniper Woodland 37855

Rocky Mountain Lower Montane Foothill Riparian Woodland and Shrubland  
4208

These ecological system statistics have been computed for Key Habitat Area 14 as defined by 5th level HUCs.

### **Land Ownership ACRES**

State 2128

Private 1885

Bureau of Land Management 200488

These figures represent Land Ownership within each key habitat area as defined by the 5th Level HUCs.

### **SGCN Birds and Mammals: '**

#### **Species with Greatest Conservation Need**

##### **Birds: '**

Ash-throated Flycatcher (2B) Ferruginous Hawk (3A) Scott's Oriole (2B) "

Brewer's Sparrow (2C) Greater Sage-Grouse Western Scrub Jay (2B) "

Bushtit (2B) Juniper Titmouse (2B) "

##### **Mammals:**

Big Brown Bat (3A) Long-eared Myotis (2A) Silver-haired Bat (3B) "

Canyon Mouse (2B) Long-legged Myotis (2A) Spotted Bat (2A) "

Cliff Chipmunk (2B) Pallid Bat (2A) Townsend's Big-eared Bat (2A)

Great Basin Pocket Mouse (2B) Pinyon Mouse (2B) Vagrant Shrew (2B)

Hoary Bat (3B) Silky Pocket Mouse (2B) Western Small-footed Myotis (3A)

Little Brown Myotis (3A) "

See <http://gf.state.wy.us/downloads/pdf/AllKHA.pdf>, site last visited January 14, 2008. In addition, portions of the Powder Rim falling within Carbon County are within the area ranked as the #2 strategic priority for the Green River WGFD office under the Atlantic Rim habitat unit. See <http://gf.state.wy.us/downloads/pdf/habplan-GR.pdf>, site last visited January 14, 2008. This plan has three goals:

- 1) Manage, preserve and restore habitat for long term sustainable management of wildlife populations.
- 2) Increase wildlife based recreation through habitat enhancements that increase productivity of wildlife. "
- 3) Increase or maintain wildlife habitat and associated recreation on Commission lands.

[http://gf.state.wy.us/downloads/pdf/rpt\\_01\\_strategicplan.pdf](http://gf.state.wy.us/downloads/pdf/rpt_01_strategicplan.pdf), site last visited January 14, 2008. In failing to provide conservation measures that protect the wildlife values of the Powder Rim, particularly Goal 1, the proposed RMP is not in conformance with the WGFD Strategic Habitat Plan.

### ***Tribal Resolutions***

Although BLM argues that it has adequately offered opportunities for consultation with Native American tribes and governments regarding Traditional Cultural Properties and other historic and cultural sites, it is clear that such consultation has not occurred. The tribes themselves have stated, “Therefore be it resolved, the MT WY Tribal Leaders Council deems that the BLM consultation with the Tribes and tribal elders is and has been inadequate.” DEIS Comments and Responses at Row 450.

### ***Policies and Plans of County and Municipal Governments***

Albany County is one of the four counties that fall within the Rawlins RMPPA. The Albany County Commission passed a resolution that the Rawlins RMP adopt many of the recommendations found within The Western Heritage Alternative into the final Plan. The provisions of this resolution include:

- Placing all lands in citizens’ wilderness proposals off-limits to future oil and gas leasing (specifically, the commission recommended expanding WSAs to encompass Adobe Town expansions, Wild Cow Creek, and the Pedro Mountains);
- Placing crucial big game winter ranges and sage grouse leks and nesting areas under NSO stipulations;
- Requiring underground injection of CBM produced water throughout the planning area;
- Utilizing directional drilling and well clustering; and
- Establishing ACECs for Powder Rim, Ferris Dunes, Bates Hole/Chalk Mountain, Chain Lakes, current ACECs, and plover nesting areas, and placing these ACECs under NSO stipulations.

Attachment 6. Not only were these provisions not adopted in the proposed plan for the most part, but also (with a few exceptions outlined as follows), **most of these provisions were not even considered for implementation under any alternative.** The exceptions were that the Ferris Dunes is established as an ACEC in the proposed plan (but not placed under NSO stipulations), and Chain Lakes was at least considered for ACEC designation (but not placed under NSO stipulations in the proposed plan). The other provisions were ignored outright by BLM in the context of the EIS.

In addition, the BLM has yet to resolve issues surrounding leasing for oil and gas in the upper North Platte Valley. Leases were withdrawn from the December 2007 lease sale due to concerns raised by local governments and conservation groups that BLM had not adequately studied the implications of oil and gas development in this area, heretofore believed to have no oil and gas potential. BLM needs to ensure that the Final RMP is consistent with local government resolutions concerning oil and gas leasing in this and other areas in the RMPPA.

***Recommendations of Sage Grouse Local Working Groups and Governor’s Working Group***

Maintaining consistency with the WGFD Greater Sage-Grouse Conservation Plan (2004; see FEIS at ES-15) does not constitute appropriate management because this document is obsolete and has been superseded by stronger policies and plans put forward by local and state working groups. Indeed, at the governor’s Sage Grouse Summit in May of 2007, Director Cleveland of the WGFD publicly criticized the timing stipulations recommended by the old WGFD Conservation Plan and carried forward in the Preferred Alternative of the Rawlins RMP FEIS as being ineffective. Among the recommendations of the Sage Grouse Implementation Team explicitly directed as responsibilities of the BLM are the following:

- Identify undeveloped lands that have high biological value for sage grouse. Protect identified areas through repurchase of valid existing rights, use of No Surface Occupancy lease stipulations, preclusion of leasing, or other appropriate measures as a means to insure high quality habitat retention in the short term, until reclamation or mitigation within the home range of the affected population is able to meet the needs of sage grouse in the immediate area. Attachment 7 at unnumbered 6.
- Identify, develop, and utilize proven and reproducible mitigation measures for all impacts on Sage grouse and their habitats, using the best available science and information. *Id.* at unnumbered 10.
- Implement water management strategies that limit the potential of West Nile virus infections, and otherwise benefit sage grouse on all lands in Wyoming. *Id.* (It is notable that requirement of underground injection largely solves this problem for the Colorado River watershed under the proposed plan, but this area represents a small proportion of the RMPPA and would leave most of the sage grouse habitats vulnerable to West Nile outbreaks, which are tied to CBM produced water standing in reservoirs. Attachments 8 and 9.

Yet not one of these recommendations is represented in the range of alternatives in terms of the mitigation measures or land use zoning provided under the various alternatives.

***Partners in Flight Wyoming Bird Conservation Plan***

BLM is a participant in the Wyoming Partners in Flight Bird Conservation Plan, and specific biological objectives and recommendations for land birds are presented in the “Wyoming Bird Conservation Plan.” DEIS at 3-128. “This Plan identifies priority species and habitats, and establishes objectives for bird populations and habitats in Wyoming.” Attachment 10 at iii. Importantly, “The Wyoming Bird Conservation Plan, Version 1.0 **can and should be applied to other conservation planning efforts** taking place in Wyoming and regionally.” *Id.* at I-1, emphasis added. While the RMP Appendices seem to indicate that the Partners in Flight objectives and recommendations will be adopted into the Rawlins RMP, these need to be explicitly carried into the plan formally as nondiscretionary standards in order to comply with FLPMA’s conformity standards for local and state plans and policies. The direction in the

proposed Rawlins RMP runs contrary to the following recommendations in the Partners in Flight plan:

- Limit the amount of oil and gas development, mining, and habitat fragmentation in areas where Ferruginous Hawks occur. Attachment 10 at F-123.
- Protect nesting areas traditionally used by Ferruginous Hawks, as some individuals return to the same territory year after year. *Id.*; *see, esp.*, section on Shamrock Hills ACEC below in this Protest.
- Maintain habitat conditions within ¼ to ½ mile (0.4 to 0.8 km) of known Burrowing Owl nest sites in an undisturbed manner. *Id.* at F-131.
- Discourage road construction and other developments where it would reduce sagebrush habitat patch size to less than 50 acres (130 ha) [Brewer's sparrow, sage thrasher]. *Id.* at F-210, F-219.

BLM indicates that it intends to adhere to this plan only when “feasible and applicable” (DEIS Comments and Responses at Row 3040), making this a discretionary standard that could be flouted by the agency. This is not sufficient; the RMP must according to FLPMA maintain a nondiscretionary conformity to this plan, as it does not violate any other federal law or regulation.

#### **SPECIAL MANAGEMENT AREAS**

Because many (but not all) areas of elevated conservation concern Special Management Areas, the BLM's management of these areas attains elevated importance. Many Special Management Areas are slated for “intensive management,” which is defined in the FEIS Glossary as:

Management that includes the use of proper distance restrictions, mitigation stipulations, seasonal or timing restrictions, rehabilitation standards, reclamation measures, use of best management practices (Appendices 13, 14, and 15), and the application of the Wyoming Mitigation Guidelines for Surface Disturbing and Disruptive Activities (Appendix 1) to adequately protect the resources for which the intensive management is applied. Intensive management actions would be applied with the goal of maintaining or enhancing sensitive resources (i.e., plant communities, wildlife habitat, soils, water, archeological or paleontological resources, etc.). Management may include attaching conditions of approval to specific projects or additional planning recognizing the unique resources for which the area is managed; typically these would be more restrictive than standard management and would be designed for specific projects and locations.

This definition is so vague as to be free from any informational utility, and does not constitute a standard that provides any accountability whatsoever. It has been criticized by Governor Freudenthal, and the problems that the Governor brought to light were not addressed in the FEIS. *See* DEIS Comments and Responses at Row 1938. It basically leaves the management of such areas up to the unlimited discretion of the authorizing official as to what measures are “proper,” applying measures to “adequately protect” resources, with the “goal” (not “requirement” or “mandate”) of maintaining or enhancing sensitive resources. Our experience with BLM follow-

through on empty promises such as this one is that when it comes right down to it, the agency errs (frequently, and with major negative consequence) on the side of the preference of the industrial applicant, to the detriment of the sensitive resource.

Because there is no hard and fast commitment expressed or implied by this definition of intensive management, but rather a vacuous goal statement devoid of any hard and fast commitments, it renders this category of land management no different from unprotected lands which enjoy no special designation. For each ACEC, SRMA, or other designated land area slated for “intensive management,” the intensive management actions and BMP that will be applied for that particular area, and under what particular circumstances (if any) should be fully spelled out in the final RMP and expressed clearly so that the public has an adequate basis for expectations. At present, BLM’s description is too vague to allow the public to adequately evaluate or comment on it.

This problem was brought to BLM’s attention at the DEIS stage. See DEIS Comments and Responses at Row 71. Yet the agency did not provide additional information to clarify what management actions would be required for each SMA, and in so doing, it failed NEPA’s obligation to respond to public comment.

Beyond the reliance on ambiguous “intensive management,” optional Best Management Practices, and adaptive management strategies that (in too many cases) reduce the provisions of the proposed plan to an empty exercise in providing infinite discretion for BLM to fail to protect the resources for which these Special Management Areas are established, there are many specific problems with the BLM’s handling of Special Management Areas under the EIS and proposed plan as outlined below.

### **Potential Wilderness**

Despite the fact that BLM has acknowledged the presence of lands with wilderness character in the RMPPA that are outside existing WSAs, the agency does not consider protecting such lands in any alternative considered in the FEIS. Potential wilderness is a key issue in this RMP revision, based on the overwhelming majority of public comments directed to this issue. Yet it is essentially ignored in the EIS.

Lands with wilderness qualities in the RMPPA also qualify as roadless. BLM argues, “BLM has no mandate to manage for roadlessness.” DEIS Comments and Responses at Row 3112. However, under FLPMA, BLM is required to keep an ongoing inventory of resources on its lands. These resources include roadless lands, defined under BLM policy as follows:

roadless: for the purpose of the wilderness review program, this refers to the absence of roads which have been improved and maintained by mechanical means to ensure relatively regular and continuous use. A way maintained solely by the passage of vehicles does not constitute a road.

BLM Manual H-8550-1 at Glossary, page 3. In the Final EIS, management actions related to the Ferris Mountains addition and Adobe Town Fringe Areas were removed from all alternatives.

FEIS at 2-3. After recognizing that these areas possessed wilderness characteristics it is reasonable to expect BLM to at least consider managing these lands to maintain wilderness character in at least one alternative.

A. The Proposed Plan should consider designation of new Wilderness Study Areas.

At the outset, we want to emphasize our belief that BLM's abandonment of its authority to designate any additional Wilderness Study Areas ("WSAs") is invalid and will ultimately be overturned in pending litigation; and, therefore, does not prevent BLM from designating new WSAs. We are aware of the April 2003 settlement agreement (Utah Settlement) between Secretary of the Interior Norton and the State of Utah (in which BLM abdicated its authority to designate any additional Wilderness Study Areas), and we maintain that this agreement is invalid and will ultimately be overturned in pending litigation.

Because the courts have withdrawn their consent decree, there is currently a private settlement, which is not enforceable against the BLM, and the agency has not even issued any updated guidance seeking to continue applying this misguided, and illegal, policy.

Even if the Utah Settlement is reinstated, not as a consent decree, it is illegal. The Utah Settlement is based on an interpretation of FLPMA §§ 201, 202, and 603 that is contrary to FLPMA's plain language. Section 603 did not supersede or limit BLM's authority under § 201 to undertake wilderness inventories, but rather relies explicitly on BLM having exactly that authority under § 201. Nor did § 603 in any way limit BLM's discretion under § 202 to protect its lands as it sees fit, including managing areas as § 202 WSAs in accordance with the Interim Management Policy (IMP). Every prior administration has created WSAs under § 202 and they plainly had authority to do so. This administration has such authority as well, making this a reasonable alternative deserving of consideration in this NEPA process.

**Requested Remedy:** The BLM can and should consider designating new WSAs in the Rawlins RMP, including for the Adobe Town, Ferris Mountains, Kinney Rim, and Wild Cow areas, which have been shown to meet the criteria for designation.

B. The BLM must consider management of lands to protect their wilderness characteristics.

The BLM should also consider other management alternatives for protecting lands with wilderness characteristics. **The Utah Settlement does not affect BLM's obligation to value wilderness character or, according to BLM directives, the agency's ability to protect that character, including in the development of management alternatives.** In fact, BLM has not only claimed that it can continue to protect wilderness values, but has also committed to doing so. In an April 11, 2003 letter from the Secretary of Interior to Senator Bob Bennett regarding the *Utah v. Norton* settlement forbidding creation of new WSAs, the Secretary stated, "The Department is committed to listening to public input through the land use planning process and, where appropriate, managing specified areas of land for wilderness values." Attachment 11 at unnumbered 3. On September 29, 2003, BLM issued IMs 2003-274 and 2003-275, formalizing its policies concerning wilderness study and consideration of wilderness characteristics in the

wake of the Utah Settlement. In the IMs and subsequent public statements, BLM has claimed that its abandonment of previous policy on WSAs would not prevent protection of lands with wilderness characteristics. The IMs contemplate that BLM can continue to inventory for and protect land “with wilderness characteristics,” such as naturalness or providing opportunities for solitude or primitive recreation, through the planning process. The IMs further provide for management that emphasizes “the protection of some or all of the wilderness characteristics as a priority,” even if this means prioritizing wilderness over other multiple uses. (emphasis added). This guidance does not limit its application to lands suitable for designation of WSAs; for instance, the guidance does not include a requirement for the lands at issue to generally comprise 5,000-acre parcels or a requirement that the lands have all of the potential wilderness characteristics in order to merit protection.

The guidance issued by the BLM’s Arizona State Office serves to elaborate upon this guidance by providing for identification of lands with wilderness characteristics and development of management prescriptions to protect and enhance these values (See IM No. AZ-2005-007). The Proposed Resource Management Plan (RMP) for the Arizona Strip, which applies the Arizona guidance, includes land use allocations for lands with wilderness characteristics in every alternative and sets out protective management prescriptions. Table 2.10, p. 2-131, available on-line at: [http://www.blm.gov/az/lup/strip/docs/FEIS/CHAPTER\\_2.pdf](http://www.blm.gov/az/lup/strip/docs/FEIS/CHAPTER_2.pdf). The Arizona Strip Proposed RMP also includes a detailed discussion of how BLM identified and assessed wilderness characteristics, including on lands proposed for protection by the Arizona Wilderness Coalition, and the need for protective management. Appendix 3.D, available on-line at: [http://www.blm.gov/az/lup/strip/docs/FEIS/CHAPTER\\_2.pdf](http://www.blm.gov/az/lup/strip/docs/FEIS/CHAPTER_2.pdf). This process is consistent with BLM’s obligation under the Federal Land Policy and Management Act (FLPMA) to inventory for the many values of the public lands and consider ways to protect them (i.e., not all uses are appropriate in all places) in a resource management plan. 43 U.S.C. §§ 1711, 1712. In addition, it is consistent with the applicable BLM guidance discussed above. The process for inventory and protection of wilderness characteristics as set out in Appendix 3.D of the Arizona Proposed RMP also acknowledges that an area can be protected for some or all of the wilderness characteristics identified in IM Nos. 2003-274 and 2002-275, providing for protection of an area if it contains two of the three wilderness characteristics (“Naturalness, Solitude, or Primitive/Unconfined Recreation”). **However, based on the language of the guidance discussed above, it is appropriate for BLM to evaluate lands for and consider protection of areas with one, two, or all three of these characteristics.**

Courts have also confirmed the BLM’s obligations to consider the value of wilderness characteristics and the potential impacts of decisions on this resource when making land use planning decisions. In a recent decision, a federal court found that BLM’s failure to re-inventory lands for wilderness values and to consider the potential impact of decisions regarding management of a grazing allotment violated its obligations under NEPA and FLPMA, then enjoined any implementation of the decision until the agency reinventoried the lands at issue and prepared an environmental document taking into account the impacts of its decisions on wilderness values. In *Oregon Natural Desert Association v. Rasmussen*, CV 05-1616-AS, Findings and Recommendations (D.Or. April 20, 2006 – Attachment 12); Order (D.Or. December 12, 2006 – Attachment 13), the Oregon Natural Desert Association (ONDA) had

submitted an updated inventory of wilderness values, but BLM declined to “revisit” its previous inventory or to consider the potential damage to wilderness values from the proposed grazing management decisions. The court found that BLM had violated NEPA by failing to consider significant new information on wilderness values and potential impacts on wilderness values, and had also failed to meet its obligations under FLPMA by failing to engage in a continuing inventory of wilderness values. The court concluded:

The court finds BLM did not meet its obligation under NEPA simply by reviewing and critiquing ONDA's work product. **It was obligated under NEPA to consider whether there were changes in or additions to the wilderness values** within the East-West Gulch, **and whether the proposed action in that area might negatively impact those wilderness values**, if they exist. The court finds BLM did not meet that obligation by relying on the one-time inventory review conducted in 1992. **Such reliance is not consistent with its statutory obligation to engage in a continuing inventory so as to be current on changing conditions and wilderness values.** 43 U.S.C. § 1711(a).

BLM's issuance of the East-West Gulch Projects EA and the accompanying Finding of No Substantial Impact (FONSI) in the absence of current information on wilderness values was arbitrary and capricious, and, therefore, was in violation of NEPA and the APA. (emphasis added)

BLM is similarly obligated to both consider additions to wilderness values and evaluate the potential impacts on those wilderness values from its management decisions.

Further, considering protection of wilderness characteristics is necessary for the BLM to fulfill its obligations to consider a range of alternatives. NEPA requires BLM to “rigorously explore and objectively evaluate” a range of alternatives to proposed federal actions. *See* 40 C.F.R. §§ 1502.14(a) and 1508.25(c). An agency violates NEPA by failing to “rigorously explore and objectively evaluate all reasonable alternatives” to the proposed action. *City of Tenakee Springs v. Clough*, 915 F.2d 1308, 1310 (9<sup>th</sup> Cir. 1990) (quoting 40 C.F.R. § 1502.14). This evaluation extends to considering more environmentally protective alternatives and mitigation measures. *See, e.g., Kootenai Tribe of Idaho v. Veneman*, 313 F.3d 1094, 1122-1123 (9<sup>th</sup> Cir. 2002) (and cases cited therein). The benefits to other resources from protection of lands with wilderness characteristics are identified in the Draft RMP, where the BLM concluded that protection of the wilderness characteristics in the Adobe Town and Ferris Mountains Area “would reduce the potential for damage to cultural resources”; “would reduce the potential for dislocation and damage of paleontological resources”; “would provide outstanding opportunities for continued primitive and unconfined recreation”; “would preserve the visual horizon from key observation points”; “would protect habitat conditions for fish and wildlife.” *See, e.g.,* Draft RMP, pp. 4-16, 4-78, 4-90, 4-187, 4-230. An alternative protecting wilderness values, with the attendant benefits to other resources in the Rawlins Resource Area, must be examined in the RMP and considered in light of these important benefits.

In the Draft RMP, the BLM acknowledged that the Adobe Town area surrounding the existing WSA and the Ferris Mountains area “were determined to support wilderness characteristics” and

considered “protection and management for the special values” (i.e., their wilderness characteristics) in the alternatives. Draft RMP, p. 2-5. In the Proposed RMP, the agency acknowledges the submission of proposals for protection of certain areas and claims that it responded by conducting inventories “to determine whether they did indeed possess the wilderness characteristics of size, naturalness, or outstanding opportunities for primitive, unconfined recreation or solitude.” Proposed RMP, p. 2-11. These inventories “determined that some of these lands did indeed possess one or more of the above wilderness characteristics.” *Id.* However, the BLM then assessed whether or not these lands “were manageable as wilderness” and concluded that they were not due to the presence of oil and gas leases, so the RMP no longer considers protection of wilderness characteristics in any alternative. *Id.* Accordingly, in the Proposed RMP, “[a]ll management actions related to management of the West Ferris Mountains and Adobe Town Wilderness Study Area (WSA) fringe areas were removed.” Proposed RMP, p. 2-3. This conclusion fails to consider the option to manage the wilderness characteristics of these areas, incorrectly requiring that the lands be able to be managed “as wilderness” in order to protect any of their irreplaceable values. Further, the mere presence of oil and gas leases does not prevent the agency from managing these areas to protect their wilderness characteristics.

***Requested Remedy:*** The BLM’s approach to inventory and management of wilderness characteristics in the Proposed RMP is inconsistent with the agency’s own policy and guidance. The Proposed RMP must consider protection of lands with wilderness characteristics. The Proposed RMP must also consider protection of the wilderness characteristics of the lands based on one or more of the wilderness characteristics that they contain.

- C. The Proposed Plan should manage the Adobe Town, Ferris Mountains, Kinney Rim and Wild Cow areas for their wilderness characteristics; the criteria applied by BCA are more stringent than those that the BLM is required to apply.

As discussed above, the applicable standards for assessing wilderness characteristics set out in BLM’s national guidance (IM Nos. 2003-274 and 2003-275) are less stringent than those applicable under the Wilderness Act and under the now-revoked Wilderness Inventory Handbook, providing for management that emphasizes “the protection of some or all of the wilderness characteristics as a priority” over other multiple uses and not including a requirement for areas to comprise 5000-acre parcels. (emphasis added). The Proposed Plan adopts a more restrictive standard, identifying distinct wilderness characteristics, but then requiring that the lands at issue be manageable as wilderness. Regardless, the inventory conducted by BCA shows that these areas meet both the applicable criteria and the more stringent standards applied in the Proposed RMP.

BCA conducted its wilderness inventory in accordance with the more stringent standards of the Wilderness Act and the Wilderness Inventory Handbook. The Adobe Town, Ferris Mountains, Kinney Rim and Wild Cow areas met these criteria and, as a result, certainly meet both those applied in the Proposed Plan and the applicable criteria set out in IM Nos. 2003-274 and 2003-275.

**Requested Remedy:** The criteria used by BCA to inventory the Adobe Town, Ferris Mountains, Kinney Rim and Wild Cow areas under the Wilderness Inventory Handbook are more stringent than those that should be applied by the BLM (per IM Nos. 2003-274 and 2003-275, one or more of naturalness, outstanding opportunities for solitude, or outstanding opportunities for primitive, unconfined recreation) ; these areas unquestionably have wilderness characteristics that can and should be protected in the Rawlins RMP.

D. The Proposed RMP does not sufficiently disclose the BLM’s analysis of lands with wilderness characteristics.

NEPA requires that the information provided to the public be accurate and sufficient to permit analysis of the data provided and the methods used to analyze it. *See, e.g.*, 40 C.F.R. § 1500.1(b); *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). The agencies must “insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements.” 40 C.F.R. § 1502.24. Information regarding “reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives” and must be included in an EIS, if the “costs of obtaining it are not exorbitant.” 40 C.F.R. § 1502.22(a). In addition, regarding the content of an environmental analysis, “The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.” 40 C.F.R. § 1500.1(b). The Proposed RMP does not meet basic standards for disclosure and accuracy, and is impermissibly preventing meaningful public comment.

While the Draft RMP referenced acreage of the Adobe Town and Ferris Mountains areas that would be considered for management to protect its wilderness characteristics, neither the Draft nor the Proposed RMP set out the standards that were used to determine whether or not an area had wilderness characteristics or how those standards were applied to the citizen proposals for Adobe Town, Ferris Mountains, Kinney Rim and Wild Cow areas. This glaring lack of information violates NEPA’s requirement to provide sufficient information regarding the basis of the agency’s decision-making.

As noted in the BLM’s Land Use Planning Handbook, it is critical that the agency make data available electronically or, at a minimum, widely distribute the information to the public:

With the increased emphasis on collaborative planning, there is an additional need to make data available to interested publics, both during and upon completion of a plan or plan amendment. Under the Bureau-wide e-Planning Initiative, continued efforts will help bring the BLM land use planning process into an electronic business climate, reduce planning costs, and allow better public access to decision making. In the interim, access to planning data may be made available through BLM’s state websites or through distribution by CDs or hard copies of a planning document.

H-1601-1, Appendix G, p. 2.

Courts have confirmed the BLM's obligations to consider the value of wilderness characteristics and the potential impacts of decisions on this resource when making land use planning decisions. One recent federal court decision held that the Utah BLM arbitrarily ignored new information, its own wilderness inventory, in approving oil and gas leasing. Southern Utah Wilderness Alliance v. Norton, 457 F.Supp.2d 1253, 1264-69 (D.Utah 2006). The court reasoned that the BLM could not take the requisite "hard look" required under NEPA if the land use plan was not supplemented with the significant information from a wilderness inventory. Id. BLM must show that it fully considered the information submitted regarding wilderness characteristics, which necessarily includes disclosure of its methodology and analysis of each unit. Currently, the actual details of the review conducted for each proposal and the results of the evaluation are not presented. Accordingly, BLM has not demonstrated compliance with this burden.

**Requested Remedy:** The BLM must show that it has completed a thorough evaluation of the proposals. An explanation of the analysis, as well as the data generated, must be made available and widely distributed for public review and comment *prior* to the issuance of a Record of Decision.

- E. The Proposed Plan does not include management prescriptions which sufficiently protect wilderness characteristics.

Both IM No. 2003-274 and IM No. 2003-275 clarify that the BLM can manage lands to "protect" wilderness characteristics, including by prioritizing the protection of these characteristics over other uses. The Proposed Plan not only fails to consider protection of wilderness characteristics, but also fails to provide management prescriptions that will adequately protect those characteristics and, therefore, does not comport with BLM's guidance. When the agency corrects the failure by considering management of lands with wilderness characteristics, the BLM must also include appropriate management prescriptions to ensure the protection and/or enhancement of these values.

In the most recent ruling on the Utah Settlement challenge (*State of Utah v. Norton*, Case No. 2:96-CV-0870, Order and Opinion (D.Utah September 20, 2006)), Judge Benson found against the Conservation Groups for a number of reasons, including agreeing with the legal interpretation of FLPMA put forth by the State of Utah and the BLM (a finding we continue to dispute). However, the ruling also justifies the court's interpretation by finding that the agency can provide virtually the same protection for lands with wilderness characteristics through administrative decisions as it can through designation of new WSAs, with the only material difference being that, while the agency can alter its own management decisions, only Congress can change a WSA designation. The court stated: "Both Utah and the BLM acknowledge that the BLM has the discretion to manage lands in a manner that is **similar to the non-impairment standard** by emphasizing the protection of wilderness characteristics as a priority over other potential uses." Order and Opinion, p. 41 (emphasis added – see excerpt, Attachment 14).

In subsequent briefing to the U.S. Court of Appeals for the 10<sup>th</sup> Circuit, the Department of the Interior and the BLM reiterated that "the settlement does not preclude BLM from **inventorying public lands for wilderness-associated characteristics**" and that "the land management

decision obtained through FLPMA § 202 process may **resemble management under FLPMA § 603's non-impairment standard.**" In discussing how BLM will manage lands with wilderness characteristics, the brief refers to the "BLM's discretion under FLPMA § 202 to **preserve their wilderness-associated characteristics.**" Brief of the Federal Appellees, *State of Utah v. Kempthorne*, Case No. 06-4240 (February 26, 2007), pp. 40, 43 (emphases added - excerpt Attachment 15).

Accordingly, the BLM has significant flexibility to manage these lands to actually protect the wilderness values of these areas. The Draft RMP proposed certain prescriptions, such as closure to mineral material disposal, locatable mineral entry, oil and gas leasing, and off-road vehicle use, but the Proposed RMP does not consider any of these. *See*, Draft RMP, pp. 2-32 – 2-34. Suitable management prescriptions are identified below:

With limited exceptions, surface-disturbing activities or activities that involve the permanent placement of structures are not consistent with protection of wilderness characteristics. Specifically, the following activities should not occur within lands having wilderness characteristics:

- Permanent or temporary roads
- Use of motorized equipment or motorized vehicles
- Landing of aircraft
- Mechanical transport
- Structures, developments, or installations
- Commercial enterprises

Specific exemptions/allowances are made for:

- Valid Existing Rights. Prior-existing rights may continue. New discretionary uses that create valid existing rights are not allowed if they would detract from the wilderness values.
- Administrative Activities. New commercial activities or new permanent roads will not be authorized. BLM may authorize any of the other prohibitions if it is necessary to meet the minimum requirements to administer and protect the lands with wilderness character (called the "minimum requirement exception") and to protect the health and safety of persons within the area.

Allowed activities include (subject to limitations determined by the State Director):

- Managing fire, insects, weeds, and diseases;
- Completing recurring Federal mineral surveys;
- Continuing established livestock grazing;
- Allowing for commercial services to the extent necessary to provide for activities which are proper for realizing the recreational or other wilderness character purposes and are compatible with the defined values;
- Allowing for adequate access to inholdings.

Specific Guidance:

- (1) Emergencies. The use of motor vehicles and mechanical transport, and the construction of temporary roads, structures, and installations is allowed for emergency purposes and when consistent with the “minimum requirement exceptions.”
- (2) Land Disposals, Rights-of-Ways (ROWs), and Use Authorizations. Lands to manage for wilderness characteristics will be retained in public ownership. They will not be disposed through any means, including public sales, exchanges, patents under the Recreation and Public Purposes Act, State selections or other actions (except where a vested right was established prior to October 21, 1976).

Prior existing rights, such as leases under the Recreation and Public Purposes Act, leases/permits under 43 CFR 2920, and ROWs may continue. These also could be renewed if they are still being used for their authorized purpose.

The BLM will acquire State and private inholdings when practicable. In unique situations and subject to public review, exchanges may be made involving Federal and non-Federal lands when such action would significantly benefit that area’s wilderness characteristics.

New authorizations, leases, permits, and ROWs will not be authorized since they are considered new valid rights.

- (3) Routes of Travel. The construction of new permanent or temporary routes or roads will not be allowed.

No cross country motorized or mechanized travel will be allowed within areas managed to maintain wilderness characteristics. However, motorized or mechanized use of preexisting travel routes that are necessary for transportation and designated in the plan will be allowed subject to applicable prescriptions or stipulations. Motorized and mechanized routes must be minimized, and closure and restoration of unnecessary routes will be prioritized to enhance and protect wilderness characteristics. Any motorized or mechanized use off designated routes will not be allowed.

- (4) Locatable Minerals. Existing and new mining operations will be regulated using the 43 CFR 3809 regulations to prevent unnecessary and undue degradation of the lands.
- (5) Leasable Minerals. Existing mineral leases represent a valid existing right. These rights are dependent upon the specific terms and conditions of each lease. Existing leases will be regulated to prevent unnecessary or undue degradation. No new leases will be issued.

- (6) Grazing. Existing livestock grazing, and the activities and facilities that support a grazing program are permitted to continue.

Adjustments in the numbers and kind of livestock permitted to graze would be made as a result of revisions in the land use plan. Consideration is given to range condition, the protection of the range resource from deterioration.

The construction of new grazing facilities would be permitted if they are primarily for the purpose of protecting wilderness characteristics and more effective management of resources, rather than to accommodate increased numbers of livestock.

The use of motorized equipment for emergency purposes is allowed.

- (7) Fire Management. Fire management will be consistent with BLM policy. It may be appropriate to allow natural fires to burn in conformity with a fire management plan, and Wildland Fire Use is to be encouraged. Prescribed fires are allowed in conformity with a fire management plan so long as it is consistent in improving or maintaining the area's wilderness character.

Minimum impact suppression techniques will be applied.

- (8) Forest/Vegetation Health. Insects, disease, and invasive species may be controlled if it is determined that it is necessary to meet the minimum requirements to administer and protect these lands.

Insect and disease outbreaks must not be artificially controlled, except to protect timber or other valuable resources outside the land with wilderness characteristics, or in special instances when the loss to resources may cause adverse impacts to wilderness characteristics.

Vegetative manipulation to control noxious, exotic, or invasive species is allowed when there is no effective alternative and when the control is necessary to maintain the natural ecological balances within the area. Control may include manual, chemical, and biological treatment provided it will not cause adverse impacts to the wilderness characteristics.

- (9) Recreation. Primitive and unconfined recreational uses such as hiking, camping, rock climbing, caving, fishing, hunting, trapping etc. are allowed on these lands.

Recreational uses will not be allowed if they require:

- Motor vehicles or mechanical transport (e.g., mountain bikes) off routes designated as open or limited through the route designation process;
- Permanent structures or installations (other than tents, tarpaulins, temporary corrals, and similar devices for overnight camping).

New commercial services will not be allowed unless they are necessary for realizing the primitive and unconfined recreational values. An example of an allowed commercial service would be an outfitting and guide service. Existing commercial recreational authorizations may be allowed to continue under its terms and conditions to their expiration date.

Recreational or hobby collecting of mineral specimens when conducted without location of a mining claim may be allowed. This use will be limited to hand collection and detection equipment.

- (10) Cultural and Paleontological Resources. Cultural and paleontological resources are recognized as unique and valuable. They are also important supplemental values to an area's wilderness characteristics.

Resource inventories, studies, and research involving surface examination may be permitted if it benefits wilderness values. This same standard applies for the salvage of archeological and paleontological sites. Rehabilitation, stabilization, reconstruction, and restoration work on historic structures; excavations; and extensive surface collection may also be permitted if they maintain the area's wilderness character.

Permanent physical protection, such as fences, will be limited to those measures needed to protect resources eligible for the National Register of Historic Places and will be constructed so as to minimize impacts on apparent naturalness.

- (11) Wildlife Management. Fish and wildlife resources are a special feature that contributes to an area's wilderness character. Whenever possible, these resources should be managed to maintain that character. Fish and wildlife resources are part of the ecological supplemental values of wilderness, and should be managed to further their protection.

Nothing will be construed as affecting the jurisdiction or responsibilities of the State agencies with respect to fish and wildlife management on these lands. Fishing, hunting and trapping are allowable activities on these lands. The State establishes regulations and enforcement for these uses.

Stocking of wildlife and fish species native to the area may be permitted. Introduction of threatened, endangered, or other special-status species native to North America may be allowed. Management activities on these lands will emphasize the protection of natural processes. Management activities will be guided by the principle of doing the minimum necessary to manage the area to preserve its natural character.

**Requested Remedy:** In order to fulfill the obligation to consider management of lands to protect and/or enhance wilderness characteristics, and the guidance regarding protection of wilderness

characteristics in the national BLM instruction memoranda, the management prescriptions set out above should be applied to lands managed for wilderness characteristics in the Rawlins RMP.

### ***Adobe Town***

Adjacent to the Adobe Town Wilderness Study Area are approximately 95,200 acres of land, predominantly under BLM management, that possess wilderness character as defined under the Wilderness Act. In response to an intensive field inventory by Biodiversity Conservation Alliance, BLM conducted its own inventory of the area and identified approximately 47,539 acres that the agency concluded met all the wilderness criteria for WSA designation. *See* Attachment 16. These lands are important for recreation and wildlife not only for their own intrinsic wilderness qualities, but also because the protection of many of these lands protects the viewshed for many important and popular overlook points within the present Wilderness Study Area. The protection of these wilderness-quality lands is therefore critical to maintaining the availability of a wilderness experience to visitors in the Wilderness Study Area. This is particularly true for the Skull Creek Rim, a palisade of cliffs that rises 1,000 feet above the surrounding plain, much of which is currently pristine but enjoys no protection from industrial degradation under either the present Great Divide RMP or the proposed Rawlins RMP.

Adobe Town is widely regarded as the crown jewel of Wyoming's desert wilderness areas, and is unquestionably the highest-profile recreation landscape in the Rawlins Field Office. *See* Attachments 17 and 18. The area has been featured in numerous magazine stories and books. Attachments 19, 20, 21, 22, and 23. It has been covered extensively in feature stories in newspapers, some of which have run nationwide in major newspapers. *See, e.g.,* Attachments 100, 101, 102, and 103. This area has important spiritual significance for Native Americans. Attachment 24. The area is recognized as a nationally significant scenic resource by professional photographers. Attachment 25. Wyoming newspapers have repeatedly called for protection of Adobe Town lands within the citizens' wilderness proposal that lie outside the current WSA in their editorials. Attachments 26, 27, 28, 29, 30, 31, 113, 114. The protections of all of Adobe Town has been called for by a wide range of interest groups throughout Wyoming, including the Wyoming Association of Churches (Attachment 32), the over 19,000 union members of the Wyoming AFL-CIO (Attachment 33), the Wyoming Backcountry Horsemen (Attachment 34), Former BLM employees (Attachment 35) and the Albany County Commission (Attachment 6). In a summit held in Rock Springs in 2006, there was broad consensus concerning the need to protect all of Adobe Town, not just the Wilderness Study Area. Attachment 36. The overwhelming majority of comments received over the comment periods for the Rawlins RMP EIS explicitly called for the withdrawal of all of Adobe Town – both WSA and citizens' proposed additions – from future oil and gas development. Some commentators even recommended that Adobe Town become a National Park. *See, e.g.,* DEIS Comments and Responses at Row 980. Clearly, the need to protect this special landscape was the issue that resonated with greatest importance to the public, both in Wyoming and nationally, of all issues addressed by the Rawlins RMP EIS. Yet the BLM declined to protect lands beyond the WSA boundaries in its proposed Rawlins RMP, a monumental failure to respond to the public interest which should be corrected prior to issuance of the ROD for the plan.

BLM asserts that “Under the current criteria for wilderness characteristics, found in Instruction Memorandum No. 2003-275-Change 1, Consideration of Wilderness Characteristics in Land Use Planning, Attachment 1, the Adobe Town fringe areas included in the Citizens' Proposal for Wilderness, regardless of boundaries, do not possess wilderness characteristics.” DEIS Comments and Responses at Row 3112. This finding is unsupported by any information as to why these areas would not qualify under the IM, and conflicts directly with the BLM’s earlier findings that these areas do in fact possess wilderness qualities. See, e.g., BLM’s Adobe Town Citizens’ Wilderness Proposal Inventory Area Evaluation, Attachment 16; indeed, the wilderness criteria evaluated by BLM in their wilderness inventory evaluation are exactly identical to the wilderness characteristics as outlined in IM 2003-275-Change 1. BLM’s assertion that these areas lack wilderness characteristics is therefore unsupported by the records and is arbitrary and capricious and an abuse of discretion.

The provisions of the Adobe Town Dispersed Recreation Use Area (“DRUA”) (FEIS at A37-1) are quite confusing. It is puzzling why BLM would establish this area as a priority recreation area, but not restrict future mineral leasing, and manage permitted activities that are incompatible with recreation in a way that causes “severe deviation from the desired ROS over an extended period of time.” *Id.* The issuance of “Special Recreation Permits” for activities consistent with the ROS class is also puzzling. FEIS at A37-3. Will all visitors to the area (hunters, hikers, wildlife watchers, campers) be required to possess a permit, or does this apply only to commercial operations? This point needs to be clarified in the final plan.

The ROS mapping for the Adobe Town DRUA contains a significant error. It is clear from the map that “frontcountry” ROS areas are determined by buffering existing vehicle routes. See FEIS at Map 2-58. This route was inventoried by BCA as Route AT-19 in the Citizens’ Wilderness Inventory of Adobe Town (BCA 2001); we incorporate this inventory document, submitted to Rawlins BLM in 2001, into this protest by reference. A frontcountry area is designated along the southeast boundary of the WSA in T14N R96W, but the vehicle route along this boundary is no longer passable to motor vehicles. At one point it runs through the middle of a wetland. Attachment 37 at 165. Designating this route as a “frontcountry” area would be irresponsible because it would attract vehicle use to a route that is impassable, resulting in resource damage and unnecessary and undue degradation to the area. Similarly, the route along the southeast boundary of the WSA in T13N R96W has been washed out, and presently a 6-foot sheer embankment at Skull Creek Wash prevents further access to the old Coastal Haystack #4 well site; portions of this route north of the washout also no longer exist and should not be designated as frontcountry areas for the same reason. *Id.* at 163.

The closure of the Adobe Town WSA to all motorized use, if enforced effectively, should address the current low level of ORV use off designated vehicle routes. There are several spots where current public use along designated routes within the WSA is significant, and very clear signage will need to be provided to educate the public that several dead-end spurs are closed to vehicles. The spur jeep trail to East Fork Point and the spur to the southern Skull Creek Rim from the old Alberta Energy Corporation wellsite are likely to be the most salient examples of vehicle routes that current receive substantial traffic from visitors but are slated for closure. It appears that the semi-loop route along the Skull Creek Rim and the rim route along the Adobe

Town Rim are boundary routes that will remain open to vehicle travel, and if so, this should be made clear to the public in the ROD.

According to the FEIS, “Visual resource management class designations will be analyzed and modified to reflect present conditions and future needs.” FEIS at 1-12. BLM talks about “VRM adjustments to WSAs;” apparently these apply to Bennett Mountains and Ferris Mountains WSAs, but not Adobe Town. FEIS at 4-513. However, in the case of the Adobe Town citizens’ proposed wilderness lands lying outside the WSA, the designation of VRM Class III (which allows full-field oil and gas development with essentially no safeguards for visual resources) reflects neither existing conditions nor future needs. *See* FEIS at Map 2-50. BLM notes that “VRM Class III and IV areas allow much more modification of the natural environment” and “[m]itigation associated with VRM Class III and IV would allow more scenic contrasts, which would detract from the recreational setting (Appendix 2-25). Altering the recreational setting would influence recreational activities, which would displace some recreationists seeking back country to middle country recreational settings.” FEIS at 4-144. BLM also notes, “Visual impairments outside and adjacent to WSAs would be allowed if they are in conformance with the appropriate VRM classification of the adjoining area.” FEIS at 4-205. Indeed, BLM has in the past approved full-field gas development in areas of Adobe Town classified as VRM Class II and III at densities of 160-acre spacing, or 4 wells per square mile (BLM 2003: 2-3; 3-77). Roads, oil and gas facilities, and related traffic would have significant impact on visual resources in VRM Class II, III, and IV areas; “This would alter the landscape from a predominantly natural setting to a more industrialized setting.” FEIS at 4-393. In the end, “Oil and gas development would result in long-term reduction of recreation use in areas of high or moderate oil and gas potential, which would have significant impacts on recreation.” FEIS at 4-157, *and see* 4-512. These areas include areas of the Adobe Town Very Rare or Uncommon area designated by the state of Wyoming to protect scenic, fossil, wildlife, historic/cultural, and geological features, areas which BLM has determined possess wilderness character, and areas important to the viewshed of the Adobe Town Wilderness Study Area.

Almost all of these lands are essentially pristine at the present time, and there is a strong need to keep them that way in order to maintain wilderness characteristics, primitive recreation experiences, and/or viewsheds of important overlooks and recreation areas within the WSA. For two WSAs, BLM provided VRM Class II areas for surrounding lands “to preserve the visual quality of landscapes by requiring application of BMPs or mitigation on any surface disturbing activity or new facility...” FEIS at 4-208. This will “potentially reduce the noise, surface disturbance, and visible facilities, which would reduce the amount of development impacting the solitude of WSAs.” *Id.* Indeed, the effect of the Desolation Flats project and other full-field development projects thus far has been to

...destroy the natural character of the landscape, resulting in displacing recreationists to alternative areas. These areas are no longer desirable for dispersed primitive to semi-primitive recreational activities, such as hiking, camping, backpacking, viewing wildlife, or hunting because of the long-term industrial setting.

FEIS at 4-505. In addition, the entire Adobe Town Very Rare or Uncommon area designated by the State of Wyoming would be open to wind energy development, including important viewshed areas visible from prominent overlooks within the WSA, despite the state's recognition of the need to protect the scenic resources of this area. See FEIS at Maps 2-30 through 2-33. BLM's failure to even consider such measures under any alternative for the viewshed of Adobe Town (*see* FEIS at Maps 2-49 through 2-52; note inconsistency with text at 4-403) is both arbitrary and capricious and an abuse of discretion pursuant to the APA and a violation of NEPA's range of alternatives requirements. A VRM Class I should be applied to all of the Adobe Town citizens' proposed wilderness/Very Rare or Uncommon state designation that remains essentially pristine, while VRM Class II may be appropriate in a few areas where some intrusions presently occur.

BCA recommended that the BLM consider ACEC status for Adobe Town (Attachment 38), but the agency refused on the basis that it did not meet 'relevance and importance' criteria. DEIS Comments and Responses at Row 72. Under relevance, BLM addressed cultural values but not the significant scenic values. Attachment 39 at 54. These scenic values are outlined in this Protest, and explicitly recognized by the State of Wyoming, which designated all of the Fringe areas (plus additional citizens' proposed wilderness lands) as Very Rare or Uncommon. Attachment 40, *and see* Attachment 41. The Very Rare or Uncommon designation also recognizes the rarity of these scenic resources as well as the fragile nature of the lands, thereby meeting importance criteria. The state's designation of the area in question as Very Rare or uncommon thereby falsifies BLM's flawed analysis of relevance and importance criteria for Adobe Town. BLM must therefore recognize that Adobe Town meets ACEC criteria and consider an ACEC designation for the area in supplemental NEPA.

BLM notes that of the Wilderness Study Area, only 10,920 acres were recommended to Congress for wilderness designation. This recommendation was based on the fact that the rest of the newly created WSA was under lease for oil and gas development at the time (BLM 1981, *and see* Attachment 105). Now, these leases have expired, and the rationale for not recommending these areas for Congressional wilderness designation has disappeared. The new RMP should incorporate a new recommendation to Congress to designate 100% of the WSA as wilderness.

***Requested Remedy:*** BLM should withdraw the Very Rare or Uncommon area from future oil and gas leasing. These lands could be titled "Lands with Wilderness Character" or "Backcountry Area." In addition, the following Conditions of Approval should attach Because most of the area is presently leased for oil and gas development, well-defined intensive management through the following Best Management Practices are required in the Plan (not discretionary to be determined at some later date), and include the following:

- Maximum surface density of 1 wellpad per square mile;
- Mat drilling required (no bulldozing);
- Separators, condensate tanks, and other non-wellhead facilities sited outside the proposed wilderness lands;
- Closed-loop drilling required (no reserve pits);

- Sub-grade wellheads countersunk below ground level;
- Pipeline rights-of-way can be brush-hogged but not bladed;
- Two-track vehicle access only to wellheads;
- Green completions (no flaring);
- Abandoned well markers placed at grade level.

The Very Rare or Uncommon area (180,910 acres) should be closed to other forms of mineral entry to maintain consistency with the state Very Rare or Uncommon designation. This area should be managed as VRM Class II to protect the scenic resources recognized by the state in its Very Rare or Uncommon designation.

### **Ferris Mountains**

Under the Proposed Action, BLM states that all WSAs will be closed to motorized use, except for the Ferris Mountains, where motor vehicle use will be allowed on designated routes. FEIS at 4-155. We are unaware of any existing routes within the WSA that are currently open to motor vehicle use. Is BLM intending to opening this area to new motor vehicle roads and trails which are currently not in existence? BLM notes that “Allowing vehicle travel on designated roads and vehicle routes within the Ferris Mountains WSA would potentially increase the amount of erosion, and increase the potential for establishment or spread of weed species, potentially impairing the wilderness suitability of the WSA.” FEIS at 4-208. This violates the non-impairment criteria of BLM Handbook H-8550-1; BLM must therefore alter management of motor vehicles within the WSA to conform with non-impairment criteria under BLM regulations.

Having determined that some 5,300 acres of the Ferris Mountains outside the WSA on the western flank of the range possess wilderness characteristics, the BLM is proposing to leave these lands open to oil and gas leasing and other industrial use. BLM does not consider the multitude of options for protecting this area’s wilderness character (beyond expanding the present WSA) that have been presented to it in public comment. This failure to examine a range of reasonable alternatives, including those that would minimize impacts, for the protection of this area’s wilderness qualities violates NEPA’s requirements.

***Requested Remedy:*** BLM should withdraw the area recognized as possessing wilderness character from future oil and gas leasing. These lands could be titled “Lands with Wilderness Character” or “Backcountry Area.” In addition, the following Conditions of Approval should attach Because some of the area is presently leased for oil and gas development, well-defined intensive management through the following Best Management Practices are required in the Plan (not discretionary to be determined at some later date), and include the following:

- Maximum surface density of 1 wellpad per square mile;
- Mat drilling required (no bulldozing);
- Separators, condensate tanks, and other non-wellhead facilities sited outside the proposed wilderness lands;
- Closed-loop drilling required (no reserve pits);
- Sub-grade wellheads countersunk below ground level;

- Pipeline rights-of-way can be brush-hogged but not bladed;
- Two-track vehicle access only to wellheads;
- Green completions (no flaring);
- Abandoned well markers placed at grade level.

This area should be closed to other forms of mineral entry to maintain consistency with the state Very Rare or Uncommon designation. This area should be managed as VRM Class II to protect its scenic resources.

### ACECs

The designation of Areas of Critical Environmental Concern (“ACECs”) is a key requirement in BLM land-use planning. FLPMA repeatedly emphasizes the importance of ACECs in managing BLM lands:

The Congress declares that it is the policy of the United States that - ...

11. regulations and plans for the protection of public land areas of critical environmental concern be promptly developed...FLPMA Title I Sec.102(a) [43 USC § 1701]

The Secretary shall prepare and maintain on a continuing basis an inventory of all public lands and their resource and other values (including, but not limited to, outdoor recreation and scenic values), giving priority to areas of critical environmental concern. FLPMA Title II Sec. 201(a) [43 USC § 1711]

In the development and revision of land use plans, the Secretary shall - ...

1. " give priority to the **designation and protection** of areas of critical " environmental concern....

FLPMA Title II Sec. 202(c) [43 USC § 1712], emphasis added. The BLM must furthermore “give priority to designation and protection of areas of critical environmental concern...” 43 U.S.C. § 1712(c). Finally, BLM is directed to “consider the relative scarcity of the values involved...” FLPMA Title II Sec. 202(c)(6) [43 U.S.C. § 1712].

ACECs are areas “where special management is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes.” 43 U.S.C. § 1702(a).

BLM’s ACEC Manual (1613) provides additional detail on the criteria to be considered in ACEC designation, as discussed in the applicable regulations, as well. *See*, Manual 1613, Section .1 (Characteristics of ACECs); 43 C.F.R. § 8200. An area must possess relevance (such that it has significant value(s) in historic, cultural or scenic values, fish & wildlife resources, other natural systems/processes, or natural hazards) and importance (such that it has special significance and distinctiveness by being more than locally significant or especially rare, fragile or vulnerable).

In addition, the area must require special management attention to protect the relevant and important values (where current management is not sufficient to protect these values or where the needed management action is considered unusual or unique), which is addressed in special protective management prescriptions. An ACEC is to be as large as is necessary to protect the important and relevant values. Manual 1613, Section .22.B.2 (Size of area to receive special management attention). For potential ACECs, management prescriptions are to be “fully developed” in the RMP. Manual 1613, Section .22 (Develop Management Prescriptions for Potential ACECs).

The Manual also sets out more specific requirements for how consideration of ACECs should be conducted during the land use planning process. Manual 1613 specifically requires that each area recommended for consideration as an ACEC, including from external nominations, be considered by BLM, through collection of data on relevance and importance, evaluation by an interdisciplinary team and then, if they are not to be designated, the analysis supporting the conclusion “must be incorporated into the plan and associated environmental document.” Manual 1613, Section .21 (Identifying Potential ACECs). However, the treatment of proposed ACECs in the Draft RMP/EIS does not comply with BLM’s obligations.

To meet importance criteria “generally requires qualities of more than local significance and special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource, or qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change.” BLM Manual 1613.1. BLM Manual 1613 further clarifies the disjunctive nature, by stating “one or more of the following” for the various categories of importance criteria. BLM Manual 1613.1. However, in its analysis of relevance and importance for ACECs, BLM has systematically ignored the disjunctive nature of this statement, and disqualifies a number of strong candidates for ACEC status for failure to meet one of the criteria for “importance,” when these areas clearly meet other importance criteria.

It is clear that BLM has failed its duty to identify, designate, and protect the most important and sensitive areas in the RMPPA as ACECs. WGFD raised the following questions at the Draft EIS stage:

Why is the Stratton Sagebrush Steppe Research ACEC withdrawn for oil and gas leasing, but areas more significant to wildlife, such as the Sand Hills, Powder Rim, Red Rim and Atlantic Rim are not? Is this simply because there is low potential for oil and gas on the Stratton area? Are we to assume oil and gas withdrawals will only be pursued where there is little or no potential for oil and gas development?

DEIS Comments and Responses at Row 1289. These questions remain unanswered by BLM. We, too, are mystified by the BLM’s apparent inability to protect high-priority landscapes through the ACEC designation process.

BLM repeatedly protests that its management of ACECs for Jep Canyon, Shamrock Hills, and Como Bluffs have been ineffective due to checkerboard land ownership patterns. (see, e.g., DEIS Comments and responses at Row 12). However, BLM maintains authority to manage projects which require participation of federal parcels within checkerboard ACECs. According to BLM,

The Bureau of Land Management must comply with law, regulation, and policy regardless of land ownership or land pattern (e.g. checkerboard land pattern). For example, the Endangered Species Act (ESA) and the National Historic Preservation Act (NHPA) require federal agencies to identify and mitigate potential impacts to threatened and endangered wildlife and plant species and significant cultural resources regardless of land ownership or land pattern. The BLM cannot make management decisions on non-federally administered lands. However, the BLM cannot legally authorize an action that is not in compliance with these laws and their implementing regulations. If a project could not occur on non-federally administered lands without federal involvement, the federal agency is required to gather the information necessary to determine if adverse effects would occur for the entire project.

DEIS Comments and Responses at Row 1097. The same management requirements apply to requirements imposed under the Resource Management Plan, such as ACEC requirements, for checkerboard lands.

In justifying the removal of ACEC status for the Shamrock Hills and other checkerboard ACECs designated under the 1990 Great Divide RMP, BLM argues:

The BLM has determined that special management is not effective in these areas because of the checkerboard land pattern. As special management is not practical, no special designation for the areas is warranted.

See, e.g., DEIS Comments and Responses at Row 15. This statement is completely incorrect, demonstrably so in the case of the Shamrock Hills. A proposal for a coal gasification plant was advanced for the checkerboard lands of the Shamrock Hills ACEC in the late 1980s. *See* FEIS at 3-128. This proposal would have degraded the raptor habitat for which the ACEC was designated, and as a result, BLM ultimately denied permits to undertake this activity. As a result, the coal gasification effort did not move forward, either on public or on private checkerboard lands within the ACEC. As a direct result of BLM checkerboard holdings being designated as ACEC lands, the special values were protected. This proves beyond any doubt that ACEC designations in checkerboard lands are “practical,” and special management in such areas is “effective.” BLM itself touts its ability to successfully manage checkerboard ACECs for maintenance of relevant and important features. For the Shamrock Hills ACEC under Alternative 1:

Exclusion of wind power facilities or avoidance of linear transportation facilities would retain the relevant and important values for which the ACEC was designated.

FEIS at 4-239. BLM's assertion that managing checkerboard ACECs is not practical or effective is therefore arbitrary and capricious and an abuse of discretion pursuant to the APA, and cannot be used as a justification to remove ACEC status from checkerboard ACECs. BLM must therefore reconsider its ACEC decisions for Jep Canyon, Shamrock Hills, and Como Bluff in light of these facts.

### **Powder Rim Proposed ACEC**

The Powder Rim was proposed as an ACEC in the *Western Heritage Alternative*, and also was recommended as an ACEC by the Wyoming Game and Fish Department and the Albany County Commission. See Attachment 42, Attachment 6 and DEIS Comments and Responses at Row 1289. BLM's "importance" analysis contains several important mistakes which invalidate the analysis. There are several juniper obligate songbirds found in this potential ACEC rated "S1" (critically imperiled statewide) including the western scrub jay, juniper titmouse, bushtit, and Scott's oriole (Keinath et al. 2003).<sup>1</sup> Plants rates as 'S1' present in the Powder Rim proposed ACEC include *Penstemon gibbensii*, *Androstephium breviflorum*, *Atriplex wolfii*, *Boechera selbyi*, *Erigeron compactus* var. *consimilis*, and *Populus deltoides* var. *wislizenii*. Scoping Comments of Hollis Marriott on the Rawlins RMP, Cherokee/Powder Rim appendix. The presence of these species in the juniper woodlands of the Powder Rim gives the area statewide importance (which is more than local importance), meaning that the Powder Rim absolutely meets the "importance" criteria for juniper obligate songbirds, even though juniper habitats may be abundant outside Wyoming. Secondly, the Powder Rim contains 2 of only 3 known Gibben's penstemon populations in the state. Attachment 43. This plant is rated G1/S1 (critically imperiled at the global and state levels, Keinath et al. 2003), making this sensitive resource a globally important one, absolutely meeting the "importance" criteria for ACEC designation. Of note, all species rated 'G1,' including Gibben's penstemon, were recently petitioned for listing under the ESA.<sup>2</sup> Third, the presence of one of only two desert elk herds in Wyoming, which spend all year in desert environments without migrating to conifer-dominated montane habitats (the other being the Steamboat Mountain herd), makes the Powder Rim meet the "importance" criteria for ACEC designation.

The Powder Rim contains late prehistoric or early historic Native American pictographs which are comparable to features that met Relevance and Importance criteria for the Red Rim-Daley unit. See Attachment 39 at 10-11. BLM failed to consider the pictograph site in the Powder Rim proposed ACEC in its ACEC analysis, even after Protestors clearly brought these features to the agency's attention. Attachment 38 at 5, and see Attachment 39 at 47. For Red Rim, under "A significant historic, cultural, or scenic value (including but not limited to rare or sensitive archeological resources and religious or cultural resources important to Native Americans)" criteria, BLM states "This area has scenic values within the Red Sandstone Uplift, which also contains historic carvings. The historic carvings, located at the southern end of the rock uplift,

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<sup>1</sup> Keinath, D, B. Heidel, and G. Beauvais. 2003. Wyoming plant and animal species of concern. Laramie: Wyoming " Natural Diversity Database.

<sup>2</sup> See [http://www.denverpost.com/headlines/ci\\_6521226](http://www.denverpost.com/headlines/ci_6521226), site last checked 8/3/07.

include the names and dates of people that have traveled through the area.” Attachment 39 at 10. For Importance, under “Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change,” BLM recognizes, “The Red Sandstone Uplift contains unique and fragile historic carvings.” Attachment 39 at 11. The Powder Rim’s Native American pictographs are just as important as the historic carvings at Red Rim (and indeed, are regarded as more significant by archaeologists), and pictographs (being painted onto the surface of the rock with paints or dyes) are even more fragile and vulnerable to adverse change than rock carvings. It is therefore arbitrary and capricious and an abuse of discretion pursuant to the APA for BLM to rule that Powder Rim does not meet relevance and importance criteria for its archaeologically important pictographs while simultaneously ruling that Red Rim meets these criteria for comparable features.

For Jep Canyon, BLM found that the current ACEC meets Relevance and Importance criteria solely on the basis of “The area contains crucial winter habitat for elk and habitat for nesting pairs of raptors.” Attachment 39 at 6, 7. For Powder Rim, under the Relevance criteria for “A fish or wildlife resource,” BLM acknowledged that the area met the criteria due in part to “numerous raptors, including the ferruginous hawk (a BLM-Wyoming State Sensitive Species) nest in the area. Finally, mule deer, antelope, and elk use the Powder Rim junipers for crucial winter range.” Attachment 39 at 47. But the agency concluded that the area failed to meet Importance criteria because it contained only a small proportion of ferruginous hawk nests located in the entire 94.6 million acre) planning area, and big game crucial habitats were also located outside the Powder Rim proposed ACEC. In its ACEC evaluation, BLM concedes that Powder Rim contains both elk winter range and habitat for nesting raptors, the identical criteria that were the sole justification for Jep Canyon meeting Relevance and Importance criteria. BLM does not state in its justification for Jep Canyon that the area contains a large number of nest sites for ferruginous hawks (or any other raptor) as a proportion of the overall nest sites in the entire Field Office. Nor does BLM assert that in the case of Jep Canyon, elk crucial winter range is not found elsewhere in abundance in the general vicinity of the ACEC. Indeed, crucial elk winter range extends the length of the north-south Atlantic Rim uplift, stretching for miles beyond the boundaries of the Jep Canyon ACEC. For Powder Rim, BLM has concocted an artificial threshold to deny ACEC status which was never applied to the Jep Canyon in the context of ACEC eligibility. Indeed, on the sole basis of the wildlife Relevance and Importance criteria outlined above, the Jep Canyon area has been designated an ACEC for the past 18 years, since the adoption of the 1990 Great Divide RMP; clearly, these criteria are sufficient to manage the area for the protection of ‘a wildlife resource.’ It is arbitrary and capricious and an abuse of discretion pursuant to the APA for the BLM to deny consideration of the Powder Rim for ACEC status when it has already designated an area (Jep Canyon) that possesses identical criteria for ACEC status.

WGFD recommended Powder Rim as an ACEC for Alternatives 3 and 4. DEIS Comments and Responses, Row 10. According to the Wyoming Game and Fish Department, “However, crucial and other priority wildlife habitats are not mentioned either among the potential ACECs identified for consideration, or the areas eliminated from further analysis. Habitats that meet the relevance and importance criteria, **such as big game crucial winter ranges, sage grouse breeding complexes, raptor nest concentrations, and priority habitats of NSS species,**

should be analyzed and considered for designation as ACECs.” DEIS Comments and Responses (<http://www.blm.gov/rmp/wy/rawlins/documents.html>), Row 8, emphasis added. WGFD further recommended that areas with overlapping crucial ranges become Special Management Areas: “We recommend at least one of the alternatives in this plan evaluate establishing SMAs for other, publicly owned habitats within the RFO, particularly any with overlapping crucial habitats.” DEIS Comments and Responses, Row 9. Powder Rim contains triple-overlapping crucial winter ranges for elk, mule deer, and pronghorn, the largest such triple-overlap in the RMPPA. Yet BLM ignored this request as well, continuing to insist that the area does not meet relevance and importance criteria. Id.

### **Como Bluff ACEC**

Como Bluff is an important dinosaur dig site, the site of the famous 1800s “Bone Wars” between paleontologists Othniel C. Marsh and Edward Drinker Cope. The current ACEC was established in part to protect the Como Bluffs Historic District, which is listed on the National Register of Historic Places. *See* FEIS at 3-88. It is also a National Natural Landmark. Id. BLM proposes to eliminate not only the ACEC in this area, but to manage mineral and wind energy development in such a way that fails to protect the setting of the Historic District, in violation of the NHPA.

For oil and gas development, only Alternative 3 provides for an NSO stipulation to be applied to all future leases, the level of protection required to assure the prevention of impacts to the historic district and its setting. FEIS at 2-56.

This area has been designated an avoidance area for wind energy development. However, it is not an exclusion area under any alternative, and

because of the nature of these types of developments, significant impacts would be anticipated to the setting of the historic district. Large-scale projects such as these dominate the landscape, compromising the integrity of the setting and feeling of the historic district – values that make these resources eligible for the NRHP.

FEIS at 4-209. This level of impact is expressly prohibited by the NHPA, which directs agencies to protect historic sites and their settings. In addition, it is inconsistent with proposed management goals and objectives to “Protect the integrity of unique resource values, preserve historic significance, and provide opportunity for other uses where appropriate” and to “protect the historical significance of the site” that apply to all alternatives. FEIS at 2-55. The fact that an alternative that prevents significant impacts to the setting of the Historic District also comprises a violation of NEPA’s range of alternatives requirements. The final RMP must include increased protections from both minerals and wind energy development to entirely prevent significant impacts to the setting of this area.

### **Sand Hills/JO Ranch ACEC**

We approve of the expansion of the Sand Hills ACEC to include newly acquired federal property encompassing the JO Ranch site. This area was originally designated an ACEC to protect a unique vegetation community and sand dunes complex that supports an abundance of wildlife.

FEIS at 4-215. This vegetation complex is unique in Wyoming. FEIS at 3-88. The extreme road density in this area (FEIS at 4-215) is inconsistent with the need to protect vegetative communities and wildlife populations for which the ACEC was designated, so we concur with the need to undertake a vehicle management plan for this area, and the BLM should establish special standards for road density (not to exceed 1 mile per square mile of open routes) in the forthcoming RMP.

This is an area that is highly prone to severe impacts from surface-disturbing activities. Directly threatened are the very features for which the ACEC was originally established: “Much of the unique bitterbrush complex is within the loosely compacted sand dunes that are highly erosive.” FEIS at 4-216. But the proposed management of this area to protect this unique vegetation complex appears to be weakened, not strengthened, under the Proposed Alternative. *See* FEIS at 2-58, provisions for vegetation complex.

As BLM notes, potential for very intensive coalbed methane development is high, and the entire ACEC is presently leased for oil and gas development. FEIS at 4-217. BLM states that the impacts under the proposed plan would be similar to Alternative 3 (FEIS at 4-225), however, this does not appear to be the case, as the area would be closed to future leasing under Alternative 3 but open under the proposed plan. FEIS at 2-57. Impacts to currently leased lands (which comprise 100% of the ACEC) would result in impacts to the resources for which the ACEC was established. (“Intensive management... would provide some protection to the unique vegetation complex; however, there would still be impacts...,” FEIS at 4-223). This demonstrates definitively that, even under the current most-protective alternative, BLM is not emplacing standards sufficient to provide the “establishment **and protection**” of this ACEC, in violation of FLPMA. It is clear that the BLM has failed to provide for the level of protection required by FLPMA for this ACEC under the current Great Divide RMP, and is poised to carry this inadequate level of protection forward in even weaker form into the new Rawlins RMP.

### **Jep Canyon ACEC**

We find BLM’s argument that Jep Canyon cannot be managed as an ACEC due to checkerboard ownership unconvincing and not dispositive of the issue. It is clear that BLM has extremely little influence over activities that occur on private checkerboard holdings within the ACEC. It is equally clear that BLM has complete control over activities proposed on the federal sections, as well as activities that must be federally permitted that extend over both public and private estates. Certainly, it is preferable, once an area has sufficiently outstanding values to be identified as meeting the relevance and importance criteria for ACEC designation, that BLM provide the maximum possible protection for the lands within its control. Failure to do so amounts to an irresponsible lack of land stewardship.

The fact that winter range habitat capability is already being lost in the current ACEC, and this loss is projected to accelerate in the future (FEIS at 4-227), is already inconsistent with the management Goals and Objectives presented for this area across all alternatives. FEIS at 2-59. It is clear that FLPMA’s requirements for “establishment and protection” of ACECs is already being violated under the current RMP. Clearly, stronger management direction regarding oil and gas activities is required in the final Plan to meet these objectives. At minimum, the provisions of

Alternative 3, paired with phased development and the requirement for directional drilling and clustered development as approved under the Roan Plateau ROD (BLM 2007) are warranted here. We concur with the need to make this area a wind power exclusion area (*see* FEIS at Map 2-33) to protect nesting and foraging birds of prey.

### **Shamrock Hills ACEC/Raptor Concentration Area**

According to BLM, “Shamrock Hills ACEC is recognized as a Raptor Concentration Area, with one of the highest known nesting populations of ferruginous hawk in the United States.” FEIS at 3-89. However, while the Jep Canyon ACEC area (also protected for nesting raptors) is proposed as a wind energy exclusion area, the proposed plan would make this area an ‘avoidance area’ rather than an exclusion area for wind energy development. FEIS at Map 2-33. According to BLM, this provision

would limit, but not preclude, placement of these facilities, which would potentially result in trampling, disturbance, or loss of wildlife habitat. It would also displace, disturb, or cause stress, energy loss, injury or mortality to wildlife.

FEIS at 4-339. In addition, BLM notes that this area has potential for coalbed methane drilling at very high (80-acre spacing) densities (FEIS at 4-238), which would also be incompatible with maintaining the viability of breeding populations of ferruginous hawk. The ferruginous hawk is a BLM Sensitive Species and is a likely candidate to be petitioned for Endangered Species listing in the near future. Leaving “one of the highest known nesting populations of ferruginous hawk in the United States” open to wind farm and coalbed methane development in its key nesting area is recklessly irresponsible and will contribute to a trend toward listing for this species, in violation of BLM Sensitive Species policy. The policy for candidate species, which also applies to all BLM Sensitive Species, states that the “BLM shall carry out management, consistent with the principles of multiple use, for the conservation of candidate species and their habitats and shall ensure that actions authorized, funded, or carried out do not contribute to the need to list any of these species as threatened/endangered.” BLM Manual 6840.06. In land-use planning, BLM must operate under the following obligation:

Land use plan decisions should be clear and sufficiently detailed to enhance habitat or prevent avoidable loss of habitat pending the development and implementation of implementation-level plans.

BLM Land Use Planning Handbook H-1601-1, Appendix C at 5. The Rawlins RMP fails this obligation by allowing wind farm development in the Shamrock Hills Raptor Concentration Area, which would allow the avoidable loss of habitat for BLM Sensitive Species, contributing to the need to list the ferruginous hawk under the ESA. The Shamrock Hills (and all recognized Raptor Concentration Areas) should be designated as exclusion areas for wind energy development under the new plan, and should be withdrawn from future oil and gas leasing in order to protect this important wildlife resource.

### **Chain Lakes Proposed ACEC**

The Chain Lakes area contains unique wetlands of high importance to shorebirds and waterfowl. According to Knight et al. (1976: 167),

The greasewood communities are as diverse in species composition as we've seen for this vegetation type, and the ponds provide a rare habitat in the area for avocets, ducks, killdeer, willets, and other waterfowl. Red-winged blackbirds were seen in the rushes, and gray-fish were observed in the water. This whole area is truly unique and should be studied as a possible representative of the alkaline depression – alkaline pond natural history theme.

BLM states that this area has fair potential for wind energy development, yet Chapter 4 of the FEIS states that under all alternatives, the area would only be an “avoidance area,” not an “exclusion area” for wind energy development. FEIS at 4-248. By contrast, maps of wind energy development by alternative would make it an “exclusion area” under Alternative 3 but an “avoidance area” under no alternative. See FEIS at Maps 2-30 through 33. These inconsistencies render it impossible for the reader to determine how the BLM intends to manage wind energy development in this area. BLM notes that wind energy development would displace wildlife, and associated surface disturbance could lead to the degradation of the wetland systems found here. FEIS at 4-248 and 249. Clearly, this area should be an exclusion area for wind energy under the final Plan.

Mineral development impacts in this area are expected to be substantial. Under current management,

Wildlife species would be displaced and habitat would be lost, degraded, or fragmented. Continuous noise from oil and gas development activities would reduce the reproductive success of female greater sage-grouse and interfere with their ability to locate leks (Holloran 2005).

FEIS at 4-250. BLM also notes that “Mineral development activity that modifies the unique alkali wetlands would potentially alter water quality and quantity sufficiently to reduce the ability of the system to support the unique plant community.” FEIS at 2-249, emphasis added. CBM development could also impact the aquifer recharge to wetlands. Id. Surface discharge of wastewater could change the chemistry of the wetlands and contribute to sediment loading. FEIS at 4-251. Only Alternative 3 provides adequate protection for the sensitive wildlife resources in this area, and regardless of whether BLM ultimately chooses to manage this area as an ACEC or a WHMA, the oil and gas provisions of Alternative 3 should be applied.

### **Mountain Plover ACECs**

BLM erroneously concluded that mountain plover proposed ACECs in the Western Heritage Alternative do not meet relevance and importance criteria. BLM argues that mountain plover nesting concentration areas nominated for ACEC status do not meet the relevance criteria for designation, arguing that they do not constitute a “fish and wildlife resource.” ACEC Report at 37. BLM states that these areas are not essential for maintaining species diversity, that plover nesting habitat is abundant elsewhere in the planning area, and that current management

protection measures in the planning area are adequate to protect mountain plover nesting habitat. BLM's assertion that plover nesting habitat is widespread is unsupportable. According to plover expert Dr. Stephen Dinsmore, "There have been no detailed surveys of Mountain Plover habitat within this region, and specific factors that contribute to quality nesting habitat for this species are unknown." Comments of S. Dinsmore on the Great Divide RMP revision, Feb. 3, 2003. Indeed, these nesting concentration areas meet relevance criteria precisely because they represent the best plover nesting habitat in a field office dominated by shrubsteppe vegetation types unsuitable for nesting plover due to this bird's preference for very low vegetation or even bare ground as a prerequisite for nesting.

Subsequently, Regan Plumb of the University of Wyoming Cooperative Fish and Wildlife Research Unit undertook a survey of mountain plover breeding habitat in the region (Plumb 2004),<sup>3</sup> and found plover nesting concentration areas with substantial numbers of breeding plovers to be limited to a handful of localities (which were subsequently nominated for ACEC status under the Western Heritage Alternative). This study shows that the nesting concentration areas subsequently nominated for ACEC status have special worth in terms of containing the largest concentrations of nesting plovers in the region, thereby satisfying importance criteria for ACEC designation. In addition, the scientific importance of the Mexican Flats nesting concentration area for repeated scientific study by Fritz Knopf, Plumb, and others is well-known and further contributes to the importance of this proposed ACEC.

In addition, BLM never disputes that plover nesting areas are not fragile or sensitive, merely noting that they are no more fragile or sensitive than other mountain plover nesting habitat. ACEC Report at 38. Here, BLM applies a false standard; if all plover nesting areas are fragile or sensitive, then all plover nesting habitat necessarily meets importance criteria for ACEC designation.

Current management protection measures are not adequate to protect mountain plover habitat. While it was once believed that the roads and wellpads inherent to oil and gas production were compatible with maintaining nesting habitat for mountain plovers because plovers were found to nest in close proximity to these features (Ellison-Manning and White 2001a,b),<sup>4</sup> the nesting population of plovers in Utah (which exclusively occupied an area that was subjected to full-field development) was subsequently extirpated. Thus, in the final analysis, nesting in close proximity to oil and gas development is correlated with loss of the breeding population. Proposed protection measures in the Rawlins RMP Draft EIS (particularly no surface occupancy for plover nesting areas) should provide the level of protection needed to maintain mountain plover populations if (and only if) these measures are approved in the ROD for the Rawlins RMP. Thus,

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<sup>3</sup> Plumb, R.E. 2004. Minimum population size and concentration areas of mountain plovers breeding in Wyoming. M.S. Thesis, Univ. of Wyoming, 56 pp.

<sup>4</sup> Ellison-Manning, A.E., and C.M. White. 2001a. Breeding biology of mountain plovers (*Charadrius montanus*) in the Uinta Basin. West. N. Am. Nat. 61:223-228.  
Ellison-Manning, A.E., and C.M. White. 2001b Nest site selection by mountain plovers (*Charadrius montanus*) in a shrub-steppe habitat. West. N. Am. Nat. 61:229-235.

ACEC measures should incorporate the recommendations of Dinsmore and BCA et al. in Rawlins RMP NEPA comments to put plover nesting concentration areas under NSO stipulations.

### **Red Rim WHMA**

This area contains critically important pronghorn winter range, BLM Sensitive bird habitat, and historic rock carvings. We do not believe that the “intensive management” provided in the proposed plan will constitute adequate protection of these important resources, particularly given the heavy coalbed methane drilling activity predicted for this area. See FEIS at 4-262. Provisions for wind energy development and oil and gas leasing from Alternative 3 should be applied in the final plan regardless of whether this area is designated as an ACEC or remains managed as a WHMA.

This area should have been designated as “unsuitable” for coal leasing under Criterion 15 (see FEIS at A2-13); BLM admits that ¼ of the pronghorn crucial winter range in the RMPPA is found here. BLM states that it would allow “mining in these areas under a concept of maintaining a long-term balance between habitat and coal development.” *Id.* Given the strong likelihood of concurrent pressures on big game winter range from oil and gas development on a much more widespread basis, it would be inappropriate to simply balance big game habitats with coal mining without considering the impacts of oil and gas development and other permitted activities at the same time.

### **Laramie Plains Lakes Proposed ACEC/WHMA**

Management actions proposed under the plan are generally adequate for minerals management. NSO stipulations may possibly displace drilling and construction activities into wetland areas on adjacent private lands; this is the one local area where displacement through NSO stipulations might negate the benefits of the stipulation. For this reason, closure to future mineral leasing in the new Plan (as under Alternative 3) would be the preferable course of action. See FEIS at 4-287. The area should also be managed as an exclusion area for wind energy development; status of wind energy management under the proposed plan is not mentioned one way or another in the FEIS. FEIS at 4-288. Also, BLM should pursue the acquisition of additional wetland areas under the new plan, as projected for Alternative 3. FEIS at 4-286. It is unclear whether or not this would take place under the proposed plan, as the FEIS is silent on this point. *See* FEIS at 4-288. Land and realty actions also should preclude disposal of BLM lands in this area.

### **Blowout Penstemon ACEC**

We applaud BLM’s intention to designate the Blowout Penstemon ACEC and to expand its boundaries to account for the need to protect habitat for expansion of the population of blowout penstemon, listed under the Endangered Species Act. We also concur with the need to make realty adjustments to acquire private holdings within the ACEC. However, the BLM’s failure to provide protection within the ACEC from the greatest threats to the blowout penstemon (oil and gas development, mining, and livestock grazing) is inexplicable. The recommendation for withdrawal of this area from locatable mineral entry was removed in the Final EIS. FEIS at 2-5. This closure should be reinstated, and should be bolstered with either withdrawal from future oil and gas leasing or (at minimum) the imposition of NSO stipulations for all future oil and gas

leases in order to comply with FLPMA's directive to "designate **and protect**" Areas of Critical Environmental Concern..

The BLM has also not considered an appropriate range of reasonable alternatives for livestock grazing in the proposed ACEC. According to the FEIS, under all alternatives,

Livestock grazing would potentially result in trampling of blowout penstemon plants, grazed, and in some cases uprooted. This would primarily occur when grazing coincides with the primary growing season for the plant....grazing of blowout penstemon plants during extended periods of drought or during the plant's reproductive period would potentially reduce the viability of blowout penstemon populations.

FEIS at 4-306. These impacts appear to be unnecessary: If the ACEC designation includes a provision restricting livestock on/off dates to ensure that grazing does not occur during the primary growing and reproductive season of blowout penstemon and is removed during extended droughts, then most of these impacts would implicitly be avoided. This appears to be a reasonable alternative, yet not considered in any alternative, even though the blowout penstemon is listed under the Endangered Species Act.

In addition, "minerals management actions of permitting surface disturbing activities such as well pads, roads, and associated facilities would potentially increase traffic and the spread of weeds by vehicles and equipment, thus limiting the potential expansion of blowout penstemon." FEIS at 4-306. It is important to note that the Endangered Species Act mandates the protection and recovery of listed species; in cases like the blowout penstemon where populations are restricted to a very small range, recovery means providing for geographic expansion. BLM demurs that the proposed ACEC has "low potential" for oil and gas development as well as "limited mineral potential" and "therefore there is little potential for such development to impact the blowout penstemon in the area." FEIS at 4-306. Attachment 44 shows a small oilfield which has been built in the area within the ruins of the mining town of Ferris, established in the 1920s. As for mining, the Spanish Mines once produced commercial quantities of silver, lead, talc, and tungsten in this area, and claim patents were still valid as of 1999. Attachment 45 at 277. Uranium mining potential of this area remains completely unevaluated by the EIS. Clearly, there is significant potential for surface disturbance from both oil and gas development and mining in this area.

Oil and gas leasing within the ACEC would remain open, with NSO stipulations applied only to known occupied blowout penstemon habitat, but not to potential habitat into which the species could otherwise expand. FEIS at 4-313. The agency does admit that all alternatives

allow for surface disturbing activities within potential habitat, which would potentially reduce habitat capable of supporting expansion of plant populations. This would limit the opportunity for expansion beyond occupied habitat because of the constant disturbance from vehicles and equipment. In addition, this would increase the risk of weeds spreading and out-competing the blowout penstemon.

The objectives within the Recovery Plan would be more difficult to achieve, reducing the likelihood of the plant to be down-listed or de-listed.

FEIS at 4-307. In addition, “Impact to Special Status Species Plants and unique plant communities are potentially more harmful than impacts on overall vegetation , because they have narrow habitat parameters, and losses of individual plants or communities might affect the survival of the species.” FEIS at 4-370. Allowing this level of impact runs contrary to FLPMA’s directive to “designate and protect” Areas of Critical Environmental Concern as a priority for land-use planning.

Finally, there appears to be no prohibition on wind energy facility construction will be applied to the ACEC under any alternative. Wind energy development entails a high amount of surface disturbance, which would be expected to impact the blowout penstemon populations directly, and the operation of wind energy facilities within the ACEC or upwind of it would likely cause changes in local wind patterns, potentially causing the stabilization of dunes that form the requisite habitat for the blowout penstemon. This shortcoming is fully discussed on Page 103 of this Protest.

In the end, proposed management direction for the newly established ACEC does not protect the relevant and important values for which the area is designated. This violates FLPMA’s substantive directive to protect ACECs once they are designated. In many cases, adequately protective measures, applied elsewhere in the proposed RMP, are not even considered for this area under any alternative, in violation of NEPA’s range of alternatives requirements. Measures within the new ACEC must therefore be strengthened to comply with federal law and policy.

### **Upper Muddy Creek/Grizzly WHMA**

We applaud BLM’s commitment to provide additional protections and habitat improvements in this important wildlife habitat area, but are concerned that the BLM has failed to take advantage of the opportunity to improve conditions (or at least prevent them from getting worse) for rare native fishes, big game, and other wildlife species. The removal of barriers to fish passage needs to be a priority, as does removal of dams that interfere with the natural flow regime of Muddy Creek and preventing the construction of new impoundments that will alter the flow regime. The closure of the area to future oil and gas leasing in the proposed plan (FEIS at 2-79) is a commendable action that will ultimately provide for a strong level of habitat protection.

WGFD points out the critical relationship between groundwater flows and sensitive fish populations in the Upper Muddy Creek watershed, and outlines concerns that groundwater withdrawals related to coalbed methane development will jeopardize these fish populations. DEIS Comments and Responses at 2642. BLM’s response to these concerns is very confusing (id.), seeming to indicate that a change in management for this SMA is warranted. It does not appear that an appropriate change, outlined in BLM’s response to comments, was implemented in the proposed plan under the FEIS. The language of the final Plan should be checked to ensure the anticipated changes to CBM management are incorporated.

### **Cow Butte/Wild Cow WHMA**

We commend the BLM for its proposal to establish the Cow Butte/Wild Cow WHMA and manage this area for no future oil and gas leasing. FEIS at 2-83. This area contains the roadless Wild Cow Creek Citizens' Proposed Wilderness (approximately 33,000 acres) as well as many important wildlife habitats, and withdrawal from future leasing paired with requirements for intensive management could provide the appropriate level of protection for these important wildlife and recreational lands.

Under the proposed plan, this area would be an 'avoidance area' for wind power development. This provision

would limit, but not preclude, placement of these facilities, which would potentially result in trampling, disturbance, or loss of wildlife habitat. It would also displace, disturb, or cause stress, energy loss, injury or mortality to wildlife.

FEIS at 4-339. This is not an adequate level of protection for an area so important to wildlife and recreation, and a wind power "exclusion" designation is clearly warranted given the high wildlife, wilderness, and recreation qualities present in this area.

#### **Shirley Mountains SRMA and Cave Creek Cave ACEC**

We support the proposed expansion of the Shirley Mountains SRMA and designation of Cave Creek Cave ACEC, management of vehicle traffic on designated roads and trails, and its management under NSO stipulations for oil and gas development. However, there are some legal and management issues with other provisions of the SRMA that require adjustment prior to issuance of the final Plan.

The Shirley Mountains SRMA is proposed to be managed for VRM Class III (FEIS at 2-126), which allows substantial modification of the landscape. BLM itself notes that wind power development in the area has the potential to "significantly detract" from recreational settings in the area. FEIS at 4-507. Class III VRM is the only VRM classification considered for this area (id.), an arbitrary and capricious restriction of reasonable alternatives. In order to maintain management consistency with the objectives for the area, VRM should be changed to Class II for this area. BLM's failure to considering the management of this area for Class II VRM, which is not only reasonable but also the obvious and commonsense choice because this VRM Class is most consistent with management objectives for the SRMA (see FEIS at 2-51, 2-52), is a violation of NEPA's range of alternatives requirements.

The Shirley Mountains SRMA should also be withdrawn from consideration for withdrawal from designation of ROW corridors. However, no such withdrawal is considered under any alternative (See FEIS at 2-113), in violation of NEPA's range of alternatives requirements. Withdrawal from ROW designations should be implemented for reasons of consistency with the goals and objectives for the Shirley Mountains SRMA as outlined above.

The Shirley Mountains SRMA should be managed as an "exclusion area" for wind energy development, rather than an "avoidance area" as proposed under the new plan. FEIS at 4-188. According to BLM, this provision

would limit, but not preclude, placement of these facilities, which would potentially result in trampling, disturbance, or loss of wildlife habitat. It would also displace, disturb, or cause stress, energy loss, injury or mortality to wildlife.

FEIS at 4-339, emphasis added. BLM notes that this area has high potential for wind energy development, rating potential as “outstanding to superb” in the area. FEIS at 4-507. But “the potential exists for birds and bats to collide with operating wind turbine towers and blades, meteorological towers, and guy wires.” FEIS at 4-185. If anything, the FEIS understates the risk. Indeed, “ROW-approved actions for power lines, communication sites, and wind turbines would increase the potential of injury or death to bats, raptors, and other migratory birds as a result of collisions.” FEIS at 4-453. According to bird and bat mortality studies conducted for BLM by WEST, Inc. at the Foote Creek Rim wind power site within the RMPPA,

Using corrections for searcher and scavenger bias, the estimated total number of turbine-related casualties for 1999 [Nov 3, 1998 - Oct 31, 1999] for FCR I was 141 birds and 165 bats; for 2000 [Nov 1, 1999 - Dec 31, 2000] the estimate was 100 birds and 40 bats; and for 2001-2002 [June 1, 2001 - June 5, 2002] the estimate was 80 birds and 90 bats (Tables 3 and 4). Combining all years of data, the estimated total annual turbine related casualties was 103 birds (90% CI= 67 - 140) and 90 bats (90% CI = 30-150). The estimated mortality rate per year was estimated to be 2.04 birds/turbine and 2.38 bats/turbine for 1999; 1.45 birds/turbine and 0.63 bats/turbine for 2000; and 1.16 birds/turbine and 0.94 bats/turbine for 2001-2002 (Tables 3 and 4). For all years combined, the annual estimated mortality per turbine is 1.50 birds/turbine (90% CI = 0.93 - 2.08) and 1.34 bats/turbine (90% CI = 0.20- 2.43). The total number of avian casualties associated with the five met towers within FCR I was estimated to be 63 birds in 1999; 13 birds in 2000; and 46 birds in 2001-2002. Combining all years, the total annual estimate is 40 birds (90% CI = 20 - 55) (Table 3). The estimated avian mortality rate per met tower per year was 12.50 birds/tower in 1999; 2.53 birds/tower in 2000; and 9.23 birds/tower in 2001-2002. For all years combined, the annual estimate was 8.09 birds/tower (90% CI = 5.03 - 11.14) (Table 3).

Attachment 46 at 12. This is a substantial amount of annual mortality for both birds and bats. Given the fact that the Cave Creek Cave ACEC is largely being designated as a bat hibernaculum, and provides habitat for many bat species, including BLM Sensitive Species (FEIS at 3-91), allowing wind power facilities to be placed in the Shirley Mountains SRMA, within the foraging or movement radius of bats using the Cave Creek Cave ACEC, would violate the intent of the ACEC designation. Yet the BLM did not even consider this area as an “exclusion” area for wind energy development under any alternative. *See* FEIS at Maps 2-30 through 2-33. This violates NEPA’s range of alternatives requirements.

In response to comments by WGFD that actions well beyond the ¼ mile buffer for the Cave Creek Cave entrance, particularly logging, are likely to affect the hydrology of the cave system in negative ways, BLM states “Actions that may affect the hydrology of the cave would be

mitigated to ensure that the cave's dynamics are not adversely effected (sic).” DEIS Comments and Responses at Row 50. This statement should be carried into the Final RMP as a standard governing management of the ACEC. In addition, BLM notes that past clearcutting on private lands upstream of the cave have had significant impacts. FEIS at 4-515. However, the agency has not specifically committed to a moratorium on clearcutting of the public lands in the Cave Creek Cave watershed. This, too, needs to be added to the management direction for the ACEC/SRMA.

### **Pedro Mountains Special Recreation Management Area**

The BLM has done a good job of protecting this potential wilderness area by proposing to designate it as a SRMA which will be managed under NSO stipulations for oil and gas leasing. FEIS at 2-49. However, it is troubling that the BLM proposes to allow this area to remain open to locatable mineral entry. Id. This is an area that has had past uranium prospecting activity from Conoco-Phillips. Attachment 47 at 170. Given the increase in uranium prospecting and mining in recent years in response to rising prices, this area should be placed off-limits before a resource conflict arises that could lead to the degradation of the recreation resources for which the area is established. BLM should retain the existing proposed management for oil and gas leasing and strengthen it with a withdrawal from locatable mineral entry as under Alternative 3.

### **Laramie Plains Lakes SRMA**

We support proposed management direction for this SRMA.

### **Prairie Dog ACEC**

In order to fulfill the requirements of BLM Handbook H-6840, the BLM needs to implement the provisions of Alternative 3, designating white-tailed prairie dog complexes eligible for black-footed ferret reintroduction as an ACEC. The provisions of this alternative, including a moratorium on surface disturbance within colonies, is needed to prevent contributing to the need to list the species under the Endangered Species Act.

The adequacy of anti-perch devices on tall structures is questionable. According to Pacific Power Corp., “Anti-perch devices do not prevent raptors from perching on power poles in areas with a high prey base, such as prairie dog towns.” DEIS Comments and Responses at Row 2671. If this is the case, then tall structures should simply be eliminated from areas within 1 mile of prairie dog colonies, rather than relying on perch inhibitors of dubious effectiveness. Instead of “avoiding” areas within ¼ mile of prairie dog towns (which indicates that placement of tall structure may still occur under some circumstances – and contribute to impacts that contribute to a trend toward ESA listing in violations of BLM Sensitive Species policy), BLM should “prohibit placement” of tall structures within ½ mile of colony boundaries.

Provisions to have prairie dog colonies become “avoidance” or “exclusion” areas for wind energy development as under Alternative 3 may be unnecessary. Monitoring data from the Foote Creek Rim wind power facility indicate that there was no decline in white-tailed prairie dog burrow density (indeed, there was an increase) during the initial years of the facility’s operation. Attachment 48 at pp. v, 34.

### **Black-footed Ferret Recovery Area**

The Black-footed ferret recovery area has been proposed as an Area of Critical Environmental Concern to exclude industrial uses and close the area to recreational prairie dog shooting. The importance of this area has been ignored by BLM. According to WGFD,

Especially troubling is the complete lack of any discussion of the designated black-footed ferret experimental population area, the Federal Register delineating this area, or The Shirley Basin/Medicine Bow Black-footed Ferret Management Plan. The designated experimental population area covers over 25% of the area addressed by the RMP and management actions were cooperatively developed with Federal agencies, including the BLM.

DEIS Comments and Responses at Row 2638. While BLM assigns “higher priority” to “white-tailed prairie dogs (because of BFF concerns)” (*id.*), the agency claims that there is no need to protect the black-footed ferret population because it has Experimental Nonessential status under USFWS classifications. See DEIS Comments and Responses at Row 3042.

However, the experimental nonessential designation does not absolve agencies of the need to protect ferret habitat; it merely allows the species to be treated as proposed for listing rather than Endangered pursuant to the ESA, and in fact requires federal agencies to develop conservation plans for such populations, plans which could (and indeed should, in this case) include ACEC designation. See Attachment 49 at 41473. Indeed, specific benchmarks are required by the USFWS’s 10(j) Rule for establishing the experimental, nonessential population that require a maintenance of prairie dog colonies (the obligate habitat for ferrets) at 90% the 1990 levels. Attachment 49 at 41479. This requirement is eminently suitable for inclusion as a management provision of an ACEC. There is nothing in the ferret’s experimental, nonessential population direction that prevents BLM from establishing an ACEC for the Recovery Area and managing it to prevent future oil and gas surface disturbance and/or hard rock mineral location in potential ferret habitats within the area. The agency’s inconsistent management direction is arbitrary and capricious and an abuse of discretion.

BLM notes that prairie dog shooting at certain times of year could have population-level effects that could harm ferrets. FEIS at BA-34.

### **Wild and Scenic Rivers**

Under the Proposed Plan, only a short stretch of the Encampment River that lies within Encampment Canyon WSA would be recommended for Wild and Scenic River status. FEIS at 4-357. We find that the BLM’s suitability analysis must be deeply flawed for only that short (already protected) river segment to be recommended for protection of the large number of stream segments deemed eligible for designation; the proposed alternative appears to be a significant step backward from the existing RMP, in which no suitability determinations are made. BLM should implement Wild and Scenic River management under Alternative 3 instead.

### **THE EIS FAILS TO PRESENT A RANGE OF REASONABLE ALTERNATIVES**

Consideration of a broad range of reasonable alternatives, including alternatives that minimize environmental impacts, is at the core of NEPA’s legal obligations. However, all of BLM’s

alternatives proposed industrial-scale oil and gas leasing and development equal to or greater than the current plan's heavy development level, which has turned oil and gas development from a noncontroversial land use to one of (if not the single) most controversial issues in Wyoming today. The proposed plan utterly fails to balance oil and gas development with other land uses. It would be reasonable for BLM to have considered a much lower level of development, and the protection of the most environmentally sensitive subset of the planning area from industrial use. Numerous members of the public called for no oil and gas drilling at all. See, e.g., DEIS Comments and Responses at Rows 1008, 1017, 1040, 1402, 1480, 1870. Their preferences are not represented in the range of alternatives. Most commentors advocated adoption of the Western Heritage Alternative, which provides a balance of environmentally responsible drilling with the protection of the most sensitive wildlife habitats and recreation landscapes. Indeed, 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. The preferences of these members of the public also are not represented in the range of alternatives in the EIS. Multiple use law and regulation makes clear that not every use need be provided on every acre, and by extension, not every use need be provided in every BLM Field Office (nor is it – there are many Field Offices where various multiple uses are not even possible).

Each of the alternatives outlined below meets the BLM's legal and regulatory requirements, and would also be reasonable in terms of creating a balance of resource uses on the public lands. FLPMA requires these resources to be managed in a way that "best meets present and future needs of the American people" (including not only needs for oil and gas but also needs for wildlife habitat, watersheds, and recreation opportunities), that some land will be used "for less than all the resources," and also requires that this management be done in a harmonious manner "without permanent impairment of the productivity 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). Thus, FLPMA's multiple-use mandate embraces a balance between resource uses that leaves the land and wildlife unimpaired as a legacy to the future, and does not authorize a mania to direct management goals at production of a single resource (such as oil and gas, which dominates the four alternatives presented in the DEIS). See, e.g., 42 U.S.C. §§ 4331(b)(1)-(6). The following reasonable alternatives recommended in public comments are not represented among the BLM's four proposed alternatives in the EIS process:

- Alternatives providing greater acreage of wind avoidance areas to protect wildlife, scenic, and wilderness resources. DEIS Comments and Responses at Row 977.
- Alternatives for consolidating land ownership in checkerboard railroad lands. DEIS Comments and Responses at Rows 1097, 1101, 1107. Governor Freudenthal even recommended a Special Management Area designation for the checkerboard, to assist with management, but this alternative also was not considered. DEIS Comments and Responses at Row 1937.
- Requiring no net loss of public lands in the context of land exchange, sale, and disposal packages. DEIS Comments and Responses at 1107.
- A phased leasing alternative, or leasing only in proven fields, in which only a fraction of the field office is available for leasing and development at any one time (See, e.g., DEIS

Comments and Responses at Rows 1268, 1308, 1362, 1491, 1512, 1848). BLM states, “The pace and timing of mineral development activities depend on various factors beyond the management decisions of BLM.” FEIS at 4-189. This is because BLM has neglected to even consider phased leasing and development alternatives that would allow BLM to exercise its moral responsibility to control of the pace of development on federal lands. This is an alternative that BLM has adopted in its Roan Plateau programmatic decision (BLM 2007: ROD-39). In the context of the Powder River Basin coalbed methane programmatic analysis, the courts have observed that a phased development alternative, even when opposed by lessees and BLM, “fits hand-in-hand with the ‘adaptive management approach’ BLM subscribes to throughout the FEIS.” *Northern Plains Resource Council v. U.S. Bureau of Land Management*, No. CV 03-69-BLG-RWA, slip op. at 19 (D. Mont. Feb. 24, 2005). State agencies have recommended phased development as a sage grouse conservation strategy. Attachment 107 at 6. BLM’s failure to consider this alternative in this programmatic document, given its approval of this alternative in another programmatic document, is arbitrary and capricious and an abuse of discretion pursuant to the APA.

- Requiring directional drilling and well clustering through the imposition of limitations on well densities (*See, e.g.*, DEIS Comments and Responses at Rows 1269, 1363, 1391, 1473, 1489, 1831, 1845). This is an alternative that BLM has adopted in its Roan Plateau programmatic decision (BLM 2007: ROD-39). BLM’s failure to consider this alternative in this programmatic document, given its approval of this alternative in another programmatic document, is arbitrary and capricious and an abuse of discretion pursuant to the APA. By failing to limit the surface density of well sites, the proposed plan permits both unnecessary and undue degradation pursuant to FLPMA by allowing well densities to exceed standard levels (160-acre spacing for natural gas or oil) while degrading other resource values.
- No Surface occupancy requirements for lands within 3 miles of sage grouse leks, big game crucial ranges, and lands surrounding raptor nests (DEIS Comments and Responses at Row 1779, 1828, 1851,
- Requiring Best Management Practices and setting terms for their implementation in the plan, rather than leaving them as possibilities that might (or might not) be applied at the project level (*see, e.g.*, DEIS Comments and responses at 1830).
- Withdrawing all areas with wilderness qualities, including those outside current Wilderness Study Areas, from future oil and gas leasing (DEIS Comments and Responses at Rows 1850).
- Block-clearing areas for fossil and archaeological resources prior to approval of surface-disturbing projects (DEIS Comments and Responses at Row 1897).
- Alternatives that would maintain the discharge of airborne pollutants at or below current levels. DEIS Comments and Responses at 1975. Currently, each alternative under consideration would entail significant increases in each type of airborne pollutant measured. FEIS at 4-7, *and see* Figures 4-21 through 4-24. Increases in tons of pollutants range from a 68% increase under Alternative 3 to a 121% increase under Alternative 2, with a 102% increase in tons of airborne pollutants under the proposed plan. FEIS at 4-10. It is reasonable for BLM to impose additional mitigation measures in at least one

alternative that would hold the production of airborne pollutants at least to current levels, if not reduce them.

- Preventing the construction of communication sites in sensitive habitats and unimpacted areas, and instead requiring the co-location of new communication facilities with existing sites. DEIS Comments and Responses at Row 3115.
- Preventing wind energy construction activities on mountain plover nesting areas, along raptor migration routes, and in localities with high bat concentrations. DEIS Comments and Responses at Row 3129.

### ***The Western Heritage Alternative***

This alternative was supported by the overwhelming majority of citizens who comments on the Rawlins RMP in both oral testimony at public hearings and in written comments. While some felt the Western Heritage Alternative was too restrictive (*see, e.g.*, DEIS Comments and Responses at Row 1044), others felt the Western Heritage Alternative was too permissive and did not go far enough to protect sensitive lands and wildlife (*see, e.g.*, DEIS Comments and Responses at Rows 965, 967). Cooperating agencies expressed the legal need to consider the Western Heritage Alternative. According to Governor Freudenthal,

“I was disappointed that the BLM did not consider the Western Heritage Alternative in the DEIS. This Alternative was an example of a grassroots effort to participate in the planning process. The BLM might not have like the proposed direction of the Western Heritage Alternative – I have my own concerns about it and do not advocate for it to be the preferred alternative – but the National Environmental Policy Act is not about what we do or do not like. Rather it is about displaying a true range of alternatives to address the issues raised during the planning process. The Western Heritage alternative should be included in the final analysis to broaden the full range of alternatives.”

DEIS Comments and Responses at Row 963, *and see* Attachment 104. Certainly, BLM has not made the case that this is not a reasonable alternative worthy of detailed consideration in the EIS.

BLM asserts that the Western Heritage Alternative would place 91% of the planning area under NSO stipulations (FEIS at 2-9), and argues that such a total represents an unreasonable restriction on oil and gas development that renders this alternative incompatible with multiple-use mandates (2-10). BCA’s own GIS analysis indicates that only 66% of the planning area would fall under NSO stipulations. Attachment 50. Yet the FEIS provides no analysis regarding why their acreage total was so much higher for NSO than the BCA analysis.

It is important to note that the comments of BCA and co-signatories recommended adoption of the Western Heritage Alternative plus some additional protective measures, including all big game crucial ranges (instead of limiting NSO to areas of overlap between two or more crucial ranges). Does BLM’s analysis use the Western Heritage Alternative values for their analysis of NSO, or the more extensive NSO figures that would be produced by the BCA comments?

Also, it appears that the BLM may have mischaracterized the Western Heritage Alternative in its analysis, resulting in inflated NSO figures. It is unclear whether BLM buffered all sage grouse leks with NSO for their analysis of the Western Heritage Alternative, or merely the active leks. GIS data for sage grouse leks by activity status is readily available from WGFD, and the analysis should have buffered only the active leks (as this is the provision of the Western Heritage Alternative) and not the inactive and historic leks. It is also unclear whether the BLM's NSO total for the Western Heritage Alternative was mistakenly inflated through inappropriate application of NSO buffers to inactive and historic leks. The same applies to raptor nests; the Western Heritage Alternative provides for buffers only for active nests. BLM needs to provide a transparent explanation, categorically (and with maps) showing how it arrived at the figure of 91% NSO for the Western Heritage Alternative. Because this is the sole basis provided for failing to consider this alternative in detail, errors in calculations are critically important, and all discrepancies between BCA's analysis of NSO acreage and BLM's analysis of the same totals need to be explained.

BLM also asserts that more than 90% of BLM minerals would be accessed from private lands (FEIS at 2-9); this is a false statement and needs to be amended to indicate (if BLM spatial analysis is accurate) that more than 90% of the minerals would be accessed from either public lands not subjected to NSO limitations or from private lands. As BLM correctly notes, the vast majority of NSO lands under the Western Heritage Alternative are within 1 mile of lands where surface siting of facilities would be allowable, and the vast majority of the federal Red Desert lands outside of the checkerboard are not within 1 mile of private lands (rendering it impossible to displace drilling activity off federal surface). Even if one accepts BLM figures for NSO under the Western Heritage Alternative, a 90% NSO total, or even a 100% ban on future leasing (which commentors expressly requested the BLM analyze as a baseline for comparison, DEIS Comments and Responses at Row 807, an alternative which is not addressed in the DEIS or FEIS), is still compatible with multiple use requirements due to the vast acreage currently under lease in the field office, which would be open to future development and could be extended indefinitely if held by production directly or through unit production. In fact, BLM was presented with this analysis in DEIS comments, but failed to respond to the comment, in violation of NEPA's response to comments requirements. DEIS Comments and Responses at Row 808.

In many cases, commentors recommended that portions of the Western Heritage Alternative be implemented to protect specific resources, and in these cases, the BLM replied that in the agency's opinion this alternative was unreasonable and therefore the component part in question would not be considered. See, e.g., DEIS Comments and Responses at Row 519. But, because the BLM rejected consideration of the Western Heritage Alternative because it believed 91% of the field office would be managed for NSO leasing in the future, it is arbitrary and capricious for BLM to fail to consider a component part of this alternative that would result in less than 91% of the Field Office being placed under NSO. NEPA requires the agency to consider a broad range of alternatives, and even if the agency fails to consider the Western Heritage Alternative as a package, the component measures in this alternative should be considered for implementation in at least one alternative.

### ***Expanded Wilderness Protection Alternatives***

Given that BLM has formally recognized that wilderness-quality lands exist outside Wilderness Study Areas in the Ferris Mountains and Adobe Town (*see, e.g.*, Attachment 16), a reasonable alternative recommended for consideration through public comment was for BLM to protect these wilderness characteristics. Yet BLM rejected consideration of an alternative protecting wilderness characteristics in these areas. FEIS at 2-11.

First of all, NEPA requires federal agencies to consider a range of reasonable alternatives, including those that are beyond the agency's authority to implement. Even if the *State of Utah v. Norton* settlement is valid (which it is not in this case), BLM has the obligation to analyze the expansion of Wilderness Study Areas as an alternative.

BLM cites a settlement in the case of *State of Utah v. Norton* as justification for the notion that it cannot expand wilderness Study Areas under the Rawlins RMP. This argument is legally invalid. In 2005, the U.S. District Court of Utah withdrew its imprimatur from this settlement, leaving it a private agreement between two parties with no force of law. The State of Utah has no standing to enforce this settlement agreement on lands beyond its borders, and as the State of Wyoming is not party to this agreement, it is of little consequence in Wyoming from a legal standpoint, as there is no party to the settlement with standing to enforce it here. Therefore, the BLM could establish new WSA lands in Wyoming, and the State of Utah would have no legal interest in Wyoming land-use matters, a prerequisite to establish standing to sue. Therefore, there is no legal authority absent a Consent Decree preventing the BLM from establishing new WSA lands within the Rawlins Field Office.

BLM also argues that some lands were “unmanageable as wilderness because of preexisting oil and gas leases,” and uses this as a pretext for dropping consideration of such an alternative. FEIS at 2-11. The presence of valid oil and gas leases is irrelevant to manageability for wilderness qualities; it is not until valid leases are developed that wilderness qualities are impaired. BLM's argument is arbitrary and capricious and an abuse of discretion pursuant to the Administrative Procedures Act because it directly conflicts with agency experience with just this issue within the RMPPA. Virtually the entire Adobe Town WSA was encumbered by preexisting leases (and even oil and gas units) upon establishment in 1980, yet the BLM saw no obstacle to managing these lands for wilderness characteristics while allowing the valid existing lease rights to remain in force (BLM 1981, BLM 1991: 187, 190). Indeed, these leases were allowed to run their course, having been grandfathered in at the time of WSA designation, and today the Adobe Town WSA is no longer encumbered by oil and gas leases.

### ***Alternatives Requiring Directional Drilling***

Directional drilling should be required in all cases where it reduces environmental impacts. BLM concedes that “Mitigation measures that reduce surface disturbance such as drilling of multiple well bores from a single well pad would reduce the number of surface locations and, therefore, retain larger blocks of unfragmented, undisturbed habitat.” FEIS at 4-456, *and see* Attachment 99.

There has already been some success with directional drilling in the RRMPA including for horizontal wells in the basin-centered play of the Continental Divide – Wamsutter project, which features thick, continuous beds of reservoir rock. For a well in the Echo Springs field, Iverson et al. (1995)<sup>5</sup> reported,

The Amoco B-1 (vertical) well was drilled in 1981, hydraulically fractured, and put on line for an average of 1 mmscf of gas per day in the first year. To date, about 2 bscf has been produced, and the B-1 well is probably an economic success, especially if the low decline rate continues for the next 30 years. The 254B-2H (horizontal [not hydraulically fractured]) well has not been producing on-line long enough to determine an accurate decline, but production appears to be about the same as from the B-1 well. Considering the additional cost of horizontal drilling, the economics likely favor vertical or slant hole completions. The horizontal well probably will recover gas more efficiently from the single Almond Formation bar sand.

As early as 1995, Stewart reported, “Recent developments in the gas play in the Green River Basin, particularly the Mulligan Draw, Echo Springs, and Stagecoach fields, indicate favorable exploitation by horizontal drilling.”<sup>6</sup> These fields are within the RRMPA. Dunn et al. (1995) stated, “horizontal well completions may provide an efficient method to access the enormous natural gas resource present in Mesaverde group of the Greater Green River Basin.”<sup>7</sup>

In its response to comments, BLM argued that the operational limits of s-turn directional drilling in the Wamsutter field are a 6,200-foot vertical displacement before equipment limits are reached. DEIS Comments and Responses at Row 1492. We assume the BLM meant “horizontal displacement” rather than “vertical displacement,” as “vertical displacement” is not a commonly used term in the context of directional drilling. BLM uses this limitation to argue that the proposal in the Western Heritage Alternative of spacing wellpads 3 miles apart is not feasible to allow maximal extraction of oil and gas resources. However, using BLM’s figure of 6,200 feet of horizontal displacement, wells could be spaced 2.35 miles apart (with wellbores from adjacent pads able to touch each other – which of course one would never want to have happen from a safety perspective). According to BLM’s own analysis, it would be reasonable and feasible to impose such a surface spacing limitation. The agency should therefore have made a good faith effort to consider such a well-spacing limitation in at least one alternative, yet it failed to do so.

BP has used directional drilling to fully exploit 1 square mile from a single drilling pad in the Wamsutter Field, and has been successful in this effort. Attachment 51 at Slides 23, 25. The feasibility of drilling at 10-acre downhole spacing from one pad per square mile on the surface is considered to “likely not present a serious problem” with horizontal displacements at or below

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<sup>5</sup> Iverson, W.P., T.L. Dunn, and R.C. Surdam. 1995. Improvements to formation evaluation, Almond Formation, " Green River Basin, Wyoming. Wyo. Geol. Assoc. Guidebook 46:271-280.

<sup>6</sup> Stewart, W.W. 1995. Horizontal wells in Wyoming through 1994. Wyo. Geol. Assoc. Guidebook 46:283-295. "

<sup>7</sup> Dunn, T.L., B. Aguado, J. Himphreys, and R.C. Surdam. 1995. Cements and in-situ widths of natural fractures, Almond Formation, Green River Basin, Wyoming. Wyo. Geol. Assoc. Guidebook 46:255-269. "

2,500 feet. Attachment 52 at 21-22. It would certainly be reasonable for BLM to consider a 640-acre well-spacing limit on wellpad density on the basis of this success.

The incremental costs of drilling directionally range from 4-16% based on published information in western tight gas sands deposits. Attachment 52 at 27. In Wyoming, average incremental costs range from 11% at the Jonah Field to 12.5% in the Pinedale Anticline. *Id.* These cost premiums do not include cost savings for reduced construction of pipelines, roads, and wellpads, and efficiencies gained from clustering facilities. *Id.* at 28. Indeed, according to the Garfield County (Colorado) Oil and Gas Liaison, “Although directional drilling increases the cost of a well, much of this cost is recouped through reduced pad construction and co-locating facilities on one pad” (Dennison 2005). Overall, finding and development (“F&D”) costs per thousand cubic feet of gas make drilling economic if F&D costs remain below 30% of the market price of natural gas; for directional wells in the Piceance Basin and Pinedale Anticline, F&D costs of \$1.00/Mcf are reported. Attachment 52 at 29, 30. This would make directional drilling in this play economic at gas market prices down to \$3/mcf. Kreckel concludes, “Directional drilling, even when relatively costly, need not negatively impact the economics.” *Id.* at 30.

In order to adequately analyze the economic feasibility of requiring directional drilling, the BLM needs to document the operators’ projected costs in the EIS. BP, Anadarko, CDX Gas, and probably other operators are currently drilling directionally within the Rawlins Field Office, so comparative costs for drilling and completion, as well as F&D costs, should be available to the BLM for the purposes of analyzing economic feasibility. The commonplace application of directional drilling within the field office boundaries already illustrates that directional drilling is technically feasible.

### **BLM SENSITIVE SPECIES**

The FEIS provides woefully inadequate baseline information and analysis of impacts for many BLM Sensitive species. Many of these species are very rare, occupy habitat which is zoned for activities likely to impact them under the various alternatives, and face potential extirpation in the RMPPA without specific, targeted conservation measures in the new RMP. While the Biological Assessment provides at least some baseline information and analysis of impacts for Threatened, Endangered, or Candidate species under the ESA, it does not address BLM Sensitive Species at all. Many BLM Sensitive Species found in the Rawlins Field Office (including Baird’s sparrow, black-tailed prairie dog, boreal toad, Brewer’s sparrow, ferruginous hawk, Great Basin spadefoot, long-billed curlew, mountain plover, sage sparrow, sage thrasher, pygmy rabbit, swift fox, white-tailed prairie dog, and several bat species) have species assessments compiled by Wyoming Natural Diversity Database and listed on the BLM statewide website,<sup>8</sup> but the information in these assessments, although clearly available to BLM, inform neither the baseline information nor impacts analysis in the Rawlins RMP EIS. They are not even cited in the EIS. *See* FEIS at L-1 et seq. The FEIS ultimately fails to present adequate baseline information, readily available to BLM, for many sensitive species, and also fails to present a legally adequate analysis of impacts (indeed, for many BLM Sensitive Species, fails to provide any analysis of impacts at all) to satisfy NEPA’s ‘hard look’ requirements. The lack of baseline information and

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<sup>8</sup> <http://www.blm.gov/wy/st/en/programs/Wildlife/species-assessments.html>, site last visited 1/25/08.

‘hard look’ at impacts is chronic for BLM Sensitive Species under the RMP; below some of the most egregious examples are outlined.

### ***Wyoming Pocket Gopher***

For the Wyoming pocket gopher, baseline information is limited to four words, which do not even provide an accurate characterization of its habitat: “Meadows with loose soil.” FEIS at 3-159. In fact, the species is known from gravelly ridgetops; in meadows with loose soil, the sympatric northern pocket gopher dominates through competitive exclusion. Attachment 53 at 13. BLM was presented with this document in the context of the Atlantic Rim project several years ago, and thus should have been aware of the scientific information contained therein. Through this document, available to BLM on the internet at <http://www.fs.fed.us/r2/projects/scp/assessments/wyomingpocketgopher.pdf>, BLM would have been able to present baseline information on the known range of the species (Attachment 53 at 12), disappearance from areas of past occurrence (Attachment 53 at 21), threats – which include oil and gas development (Attachment 53 at 22) and management recommendations, none of which are presented in the FEIS (Attachment 53 at 24).

This species has been petitioned for listing under the Endangered Species Act. Attachment 54. Virtually its entire worldwide range falls within the RMPPA. Attachment 53 at 12. Indeed, much (if not all) of this range is in areas of high or moderate potential for oil and gas development. *See* FEIS at Map 4-7; *and see* Attachment 55. New information is being developed by the Wyoming Natural Diversity Database, and this information is reasonably available to BLM. *See* Attachment 56. Given the fact that experts have stated that compaction and fragmentation from oil and gas operations are one of the primary threats to the species, its entire worldwide range is within the RMPPA and under threat of development, the RMP FEIS should have included a very detailed analysis of potential impacts by alternative, as well as specific conservation measures to be applied that would mitigate these impacts. Instead, the Wyoming pocket gopher is not even mentioned in the BLM’s analysis of impacts (FEIS at 4-450), and no conservation measures are provided for this species. In failing to do so, BLM not only violates NEPA’s baseline information, hard look, and range of alternatives requirements, but also violates the agency’s own Sensitive Species direction, which precludes management that contributes to the need to list BLM Sensitive Species under the ESA. A sampling of some of the most egregious examples follows.

### ***Pygmy Rabbit***

The pygmy rabbit has also been petitioned for listing under the Endangered Species Act. Attachment 57. As a result of ongoing litigation over this species, the U.S. Fish and Wildlife Service has issued a positive 90-day finding for this species, indicating that there is “substantial biological information” that listing under the ESA is warranted. Attachment 58. For baseline information in the FEIS, BLM provides three words: “Basin-prairie and riparian shrub.” FEIS at 3-159. This is not even a correct description of the appropriate habitat, which is dense, old sagebrush stands, and sagebrush stands on stabilized sand dunes. Attachments 59 at 6, Attachment 60 at 62, M. Purcell, *pers. comm.* The pygmy rabbit was not known from the Rawlins Field Office until recent field studies located it here; the known range of this species was recently expanded eastward significantly by new field studies, and now ranges as far east as

the land at the foot of the Atlantic Rim, and possibly as far east as the upper North Platte Valley. Attachment 60 at 38. This is significant new information that came to light between Draft EIS and Final EIS and which was presented to the Rawlins BLM in the context of the Atlantic Rim CBM project in January, 2007. Attachment 61 at 27. This study clearly places the pygmy rabbit within the RMPPA, and should have triggered additional analysis of impacts. The pygmy rabbit should have been addressed in the FEIS with a full impacts analysis by alternative, this was not done. *See* FEIS at 4-450.

A literature review of pygmy rabbit habitat requirements and potential impacts, which BLM should have undertaken in fulfillment of its NEPA baseline information requirements, would have revealed some very salient information. Pygmy rabbits are obligate residents of sagebrush stands that are tall with dense canopy cover (Green and Flinders 1980, Katzner 1994).<sup>9</sup> Fragmentation of tall sage habitats can reduce the size, stability and success of pygmy rabbit populations because these animals are reluctant to cross open habitats (Katzner 1994).

Indeed, the Wyoming Natural Diversity Database compiled a comprehensive literature review of pygmy rabbit science **specifically for the Wyoming BLM**, filled with a wealth of baseline information. Attachment 59. Loss and fragmentation of sagebrush steppe and petroleum development are specifically listed as major threats for this species. Attachment 59 at 23-24. Given all of the detailed information and analysis already provided for BLM on this species, it is inexcusable that the FEIS should be so bereft of baseline data and impacts analysis. BLM could readily have mapped tall sage habitats in the RMPPA as baseline information, overlaid oil and gas management to obtain at least an index of impacts under each alternative, and come up with a range of reasonable alternatives for mitigation measures to minimize impacts. Indeed, the Species Assessment notes, “A conservation plan with a clear implementation strategy could avert USFWS listing action.” Attachment 59 at 31. The Rawlins RMP is the ideal vehicle for such a strategy, because pygmy rabbit habitat coincides closely with BLM-managed lands. These researchers further recommended to BLM, “Since pygmy rabbits depend on specific habitat conditions for their survival, it is important to identify and protect habitat that meets these ecological needs.” *Id.* Threats, including oil and gas development, should be mitigated. *Id.* at 32. In failing to do so, BLM not only violates NEPA’s baseline information, hard look, and range of alternatives requirements, but also violates the agency’s own Sensitive Species direction, which precludes management that contributes to the need to list BLM Sensitive Species under the ESA.

### ***Northern Goshawk***

For the northern goshawk, BLM’s baseline information on habitat is limited to four words: “Conifers and deciduous forests.” FEIS at 3-159. This description is completely inadequate and misleading; indeed, many types of coniferous and deciduous forest are unsuitable for northern goshawk habitat, as this species has very specific habitat requirements. The BLM should have

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<sup>9</sup> Green, J.S., and J.T. Flinders. 1980. Habitat and dietary relationships of the pygmy rabbit. *J. Range Manage.* 33:136-142.

Katzner, T.E. 1994. Winter ecology of the pygmy rabbit (*Brachylagus idahoensis*) in Wyoming. M.S. Thesis, Univ. of Wyoming, 125 pp.

undertaken a thorough review of the scientific literature for this species, as concerns about its viability were raised in comments on the Draft EIS. Attachment 62 at 119, 132.

The following literature review for the Medicine Bow National Forest, within the RMPPA, is and has been available to BLM on the internet at [http://www.voiceforthewild.org/mbnf/pubs/mb\\_cit\\_alt.pdf](http://www.voiceforthewild.org/mbnf/pubs/mb_cit_alt.pdf). The northern goshawk is a large accipiter that inhabits large tracts of mature forest. In Wyoming, Partners in Flight identified the goshawk under the heading of “Species clearly needs conservation action” (Cerovski et al. 2001, p. D-4). Reynolds and Meslow (1984) found that goshawk diets consisted of 55% birds and 45% small mammals, and that prey size tended to be larger than for other accipiters. Foraging sites are characterized by higher canopy closure, greater tree density, and greater density of large, old trees higher canopy closure, greater tree density, and greater density of trees (Beier and Drennan 1997).

On the Medicine Bow N.F. (within the RMPPA), Good (1998) found that foraging sites were characterized by gentler slopes, greater conifer density, and little understory growth. On a landscape scale, Good found that goshawks tended to hunt in forested areas with many small meadows and aspen groves. Goshawk nesting home ranges are quite large in North America, ranging from 1,200 to 10,000 acres each (USFWS 1998). Goshawks nest in dense, mature to old-growth forest with little understory vegetation (Moore and Henny 1983). The requirement for mature, closed-canopy forest for goshawk nesting has been noted in many other studies as well (e.g., Reynolds et al. 1982, Patla 1997). Patla (1997) also found that nest sites averaged over 1 km from the nearest road, and a disproportionate number were in trees with mistletoe, brooms, or broken tops. Goshawks on the Medicine Bow N.F. are migratory, wintering 70-185 km to the south of nesting areas (Squires and Ruggiero 1995).

Patla (1997) noted that nest success was positively correlated with basal area. Preferred forest types for nesting vary by region and available cover types: Lodgepole and aspen in Utah (Graham et al. 1999); Douglas fir in Idaho (Patla 1997); and spruce-fir and aspen forests on the White River National Forest of Colorado (USDA 1999). On the Medicine Bow National Forest, Squires and Ruggiero (1996) found that goshawks nested preferentially in mature, even-aged stands, with high canopy closure and little understory. In this study, nest trees tended to be taller, larger diameter, and on gentler slopes in this study, and lodgepole stands were used in proportion to their availability while fir was avoided as nesting habitat. These habitat requirements make the goshawk a good indicator for mature to older single-story stands (but not necessarily old growth according to the old-growth scorecard).

The negative effects of logging on northern goshawk nesting and foraging habitat is well-documented. On the Kaibab Plateau, Crocker-Bedford (1990) found that logging reduced nest site occupancy and nest success, and concluded that goshawks may persist for 1 to 5 years following logging, but with reduced reproductive success. These reductions in goshawk nest success have been attributed to the disappearance of stands with 60% canopy closure on the Kaibab. On the Black Hills, where selective harvest is the rule, Dykstra (1996) found goshawks only on unharvested plots. On the Olympic Peninsula of Washington, Finn (2000) found that goshawks were unlikely to occupy a nest site if clearcuts exceeded 20% of the overall home

range and 15% of the Post-fledging Family Area. Moore and Henny (1983) hypothesized that logging could reduce breeding populations in locales where nesting habitat is limited. Reynolds (1983) stated that uncut nest buffers of at least 8 ha should be preserved around goshawk nest sites. For this reason, the limitations on human activities within ¼ mile of any goshawk nest will be retained in this alternative, and expanded to year-round prohibitions for activities such as logging and road-building that might influence future nest site use.

Clearly, there is a great deal of scientific information on goshawk habitat requirements and the potential impacts of forest management to support thorough baseline information and hard look at impacts to the species. Yet none was attempted in the Rawlins RMP EIS. Because the RMP zones forested areas that offer potentially suitable northern goshawk habitat for logging and other activities disruptive to the species, the BLM should have undertaken a detailed direct and cumulative impacts analysis for this species by alternative. This analysis for goshawks is limited to one non-specific sentence in common for all alternatives: “Those species that require late-seral stages would lose habitat and would be displaced.” FEIS at 4-453. Impacts from forest management were not even discussed by alternative, even though different alternatives prescribed different forest management practices. Id. Nowhere does the EIS analyze or even venture a guess as to where displaced goshawks would go, whether displacement would result in population-level declines, and what the overall cumulative effect would be on the viability of goshawk populations in the RMPPA. These failings represent a clear violation of NEPA’s hard look requirements.

### ***White-tailed Prairie Dog***

In its comments on the Draft EIS, WGFD states, “The current no action policy by BLM likely resulted in the WTPD being petitioned for listing under the ESA” and further recommends that BLM establish ACECs offering strong protection for 8 white-tailed prairie dog complexes. DEIS Comments and Responses, Row 37. However, BLM has declined to establish such ACECs, and furthermore is continuing to follow the current policy under the Preferred Alternative that has led to a trend toward ESA listing, as recognized by WGFD officials. Instead, the agency responds that its current management direction is adequate (despite the clear indications to the contrary), and states that no special protection is needed, even for complexes supporting the Endangered black-footed ferret. Id. Indeed, the Biological Evaluation prepared for the Wyoming BLM for the white-tailed prairie dog states:

Implementation of energy and mineral resource management actions **may impact and is likely to contribute to the need for Federal listing** of the WTPD for the Great Divide (Rawlins FO), Green River (Rock Springs FO), Kemmerer, and Pinedale RMPs. This determination is based on the limited ability for the BLM to provide minimization of direct effects of oil and gas development to the WTPD through implementation of the conservation strategies (section 4.0) and the potential to damage or destroy suitable occupied and unoccupied WTPD habitat on split estates. In addition, each of these FOs have WTPD complexes located in areas of potential mineral development.

Attachment 63 at 3-14, emphasis in original. This conclusion indicates that present management for this species (based on discretionary avoidance of colonies during oil and gas development) is insufficient to preclude major impacts inconsistent with BLM Sensitive Species policy. BLM Handbook H-6840.06. In order to prevent these unacceptable adverse impacts, BLM should establish Prairie Dog ACECs as proposed in Alternative 3 (this implements BMP 27 of the Statewide Biological Evaluation, Attachment 63 at 4-3), ensure that all active colonies are excluded (not avoided) from surface-disturbing activities by ¼ mile, and disallow geophysical source points (shot-hole or vibroseis) within ¼ mile of active colonies.

BLM outlines its responsibilities to monitor and collect baseline data on BLM surface as follows:

Conduct data gathering, avoid or reduce impacts as appropriate, and monitor.  
Early coordination and consultation with the Service to benefit the species will be conducted on a case-by-case basis.

Rawlins RMP Biological Assessment (BA) at 24 (BA-24). For BLM minerals, the responsibilities are similar, but landowner permission is sought:

Request landowner permission to access lands for inventory and, if granted, conduct data gathering on affected areas and require avoidance or reduction of impacts, and monitor as appropriate. If permission is not granted, the Bureau will require project proponents to obtain access through appropriate legal action and, if obtained, conduct data gathering on affected areas and avoid or reduce impacts, and monitor as appropriate.

Id.

#### **THREATENED AND ENDANGERED SPECIES**

The Biological Assessment suffers from a lack of current data. For black-footed ferret, the BA states that the last reintroduction of black-footed ferrets occurred in 1994. FEIS at BA-35. However, the WGFD reintroduced approximately 85 ferrets into the Shirley Basin in 2005 and 2006 (BCA 2006). In addition, the distribution data for lynx in the RMPPA does provide a thorough accounting for lynx occurrences since the Colorado Division of Wildlife reintroduced lynx to the Southern Rockies Ecosystem. FEIS at BA-46. Since that time, lynx have been reported in Cheyenne,<sup>10</sup> and lynx successfully denned on the Medicine Bow National Forest<sup>11</sup> (but were subsequently shot illegally).

BLM has committed itself to several important binding measures to maintain lynx connectivity:

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<sup>10</sup> [http://gf.state.wy.us/services/news/pressreleases/07/01/24/070124\\_1.asp](http://gf.state.wy.us/services/news/pressreleases/07/01/24/070124_1.asp), last visited 1/23/08.

<sup>11</sup> <http://www.casperstartribune.net/articles/2004/02/21/news/wyoming/a75ca6cdf539057f87256e4100662104.txt>, last visited 1/23/08.

2. BLM shall ensure that key linkage areas that may be important in providing landscape connectivity within and between geographic areas across all ownerships are identified, using best available science.
3. BLM shall ensure that habitat connectivity within and between LAUs is maintained.

FEIS at BA-48. These measures will apply in Lynx Analysis Units, but it is unclear that all important lynx connectivity habitat which involves BLM lands will be included in these LAUs. And additional commitments and mitigation measures in the BA also depend on identification of lynx connectivity corridors. FEIS at BA-49, BA-52. However, lynx linkages are not identified in the FEIS, nor have any protective stipulations been provided in the FEIS. The Heart of the West Wildland Network report, submitted to BLM by BCA at the Draft EIS comment stage (Attachment 28 to DEIS Comments of BCA), used lynx as one of the focal species in modeling the most important connections on an ecoregional scale. On this basis, the linkages between Green Mountain, Ferris Mountains and the Laramie Range represent an important connectivity area between Northern Rockies and Southern Rockies lynx populations. However, outside the BA, there appears to be no reference in the FEIS to baseline lynx linkages (despite the BLM being presented with same by BCA and others), and no mitigation measures specific to maintaining lynx dispersal corridors.

### ***Wyoming toad***

The Wyoming toad is one of the most endangered animals in the world, being confined to an extremely narrow geographic range in the Laramie Basin, including some BLM lands. According to BLM,

The decline of the Wyoming toad can be attributed to a number of significant events, including habitat loss or degradation, predation, drought cycles, chytrid fungus, and pesticides....Pesticides are believed to be one of the primary factors contributing to the decline of the species.... Widespread aerial spraying of fenthion (commercially known as Baytex) for mosquito control occurred around the time the toad numbers started to fall.

FEIS at BA-60. Furthermore,

It is interesting to note that the last wild toad population, found in 1987, was on lands of the future Mortenson National Wildlife Refuge, where mosquito spraying was not allowed. This could be an indication that insecticide spraying and reduced mosquito populations may be a direct affect on populations.

Pesticides may also contribute to the increase in fungal outbreaks that have caused significant population declines. This may be due to pesticides causing a reduction in immunity factors that would normally protect the species.

FEIS at BA-61. No Surface Occupancy management for new toad release sites (FEIS at BA-61) is clearly warranted and a wise management action; this should extend to the current range of the toad as well. However, provisions for pesticide use are clearly inappropriate:

Pesticide applications and biological control agents will be allowed within known Wyoming toad habitat on a case-by-case basis. Where possible, biological control of pests would be used rather than chemical control. Where needed, pesticide use will be applied by hand within ¼-mile of habitat and only in cases where insect or weed outbreaks have the potential to degrade area ecological health. Outside the ¼-mile buffer, aerial application of pesticides will be carefully planned to prevent drift. The BLM will work with the Animal and Plant Health Inspection Service (APHIS) and the USFWS to select a pesticide and method of application that will most effectively manage the infestation and least affect the species.

FEIS at BA-62. BLM does not possess detailed knowledge about the direct and cumulative effects of pesticides on Wyoming toads, and there are far too few individuals in existence to waste them, on lab trials. Clearly, it would be reasonable and prudent to simply ban the use of all pesticides in Wyoming toad habitats to avoid a repeat of the declines in the 1970s through 1990s. See FEIS at BA-60. These concerns are echoed by the WGFD:

Herbicides should not be employed to control invasive plants in Wyoming Toad habitat under any alternative. These chemicals may impact the toad. Anurans are highly susceptible to chemicals such as herbicides and pesticides.

DEIS Comments and Responses at Row 51. The USFWS also raised concerns:

The Service is concerned that the use of insecticides could reduce the availability of prey for insectivorous fish, birds (young sage grouse), mammals (bats), amphibians (Wyoming toads), and/or reptiles.

DEIS Comments and Responses at Row 2278. Also, according to USFWS,

Malathion could reduce the insect food source needed for survival of Wyoming toads and may also be toxic to the toads themselves.

DEIS Comments and Responses at Row 2676. BCA raised similar concerns at the DEIS stage. DEIS Comments and Responses at Row 3053. Given the widespread opposition to pesticide use in Wyoming toad habitat, the history of Wyoming toad declines specifically related to pesticides, and the perilously small worldwide populations of Wyoming toad, BLM needs to provide greater protection by forbidding pesticide use.

#### **THE RMP PROPOSES NUMEROUS MITIGATION MEASURES OF UNKNOWN OR DISCREDITED EFFECTIVENESS**

The BLM has proposed a number of mitigation measures that have been shown to be invalid through rigorous scientific hypothesis testing. Chief among these are the seasonal stipulations governing drilling and construction activities in important big game, sage grouse, sharp-tailed grouse, and raptor habitats. These measures don't work because they address a comparatively minor part of the problem – disturbance and displacement of wildlife due to drilling and

construction related activities – while leaving the much more substantial and longer lasting problem – disturbance of wildlife from production-related activities – completely unaddressed. Compounding the problem is that exceptions and waivers can be granted to seasonal stipulations. FEIS at A9-1. And the record shows that the Rawlins Field Office has a rather dismal track record of granting the majority of waivers or exceptions sought by industry. Attachment 64 at 31.

Surface disturbing activities have a multitude of impacts, including displacement of wildlife and population declines resulting from a reduction in carrying capacity. FEIS at 4-532. In addition,

Irretrievable losses of wildlife habitat indirectly reduce the amount of suitable Special Status Species habitat. However, management prescriptions and mitigation measures prescribed under the Proposed Plan and alternatives are intended to reduce the magnitude of these impacts and would restore some of the soil, vegetation, and habitat lost.”

FEIS at 4-533. Essentially, these mitigation measures are all that is standing between sensitive species and irretrievable habitat loss, likely resulting in extirpation on the population (and possibly regional) level, so the effectiveness of the mitigation measures must be demonstrated with a high degree of certitude. BLM states, “The BLM applies mitigation measures (including timing stipulations) that are founded on the best scientific information available in coordination with other agencies to protect a diversity of resources.” DEIS Comments and Responses at Row 2645. BLM asserts, “BLM mitigation measures are generally well known, commonly accepted, and historically effective activities that reduce or eliminate adverse effects from multiple use resource management and have been developed in support of BLM’s multiple use mandate.” DEIS Comments and Responses at Row 1965. If these assertions are correct, then mitigation measures that are found to be scientifically unsound and are shown to be ineffective activities that do not reduce or eliminate adverse effects should be discarded in favor of scientifically supported, stronger measures.

However, in the FEIS, BLM implements several mitigation measures that have been proven ineffective by rigorous scientific hypothesis testing (notably sage grouse ¼ mile NSO plus timing stipulations as well as timing stipulations for mule deer winter range) and implements others that the best available science suggests will be ineffective (e.g., timing stipulations for other big game crucial winter ranges). At the same time, BLM ignores stronger mitigation measures, often proposed by experts in their field, which are well-supported by the scientific literature. See, e.g., DEIS Comments and Responses at 2615. In the end, BLM characterizes its standard suite of wildlife timing limitations as follows: “These measures prevent disturbance to critical time periods but afford no protection to the habitat.” FEIS at 4-68. But even this statement overstates the effectiveness of mitigation measures; they prevent disturbance from construction and drilling activities, but do nothing to limit disturbance from vehicle traffic and human presence during the production phase of development, which typically outlasts the drilling/construction phase by a factor of 30 to 100.

BLM claims, “The hard look at the effectiveness of mitigation measures, BMPs, and management actions is included in the impact analysis in the RMP FEIS.” DEIS Comments and

Responses at Row 3001. We were unable to locate a ‘hard look’ at the effectiveness of mitigation measures.

BLM declined to respond to the inadequacy of its mitigation measures, asserting that it was unaware of which mitigation measures BCA and others were referencing. DEIS Comments and Responses at Row 1965. The inadequate mitigation measures are these:

- Quarter-mile No Surface Occupancy buffers for sage grouse leks paired with larger buffers with seasonal limitations for drilling and construction activity;
- Timing limitation buffers for Columbian sharp-tailed grouse;
- The application of timing limitations on drilling and construction activity on big game (elk, mule deer, pronghorn, bighorn sheep) crucial winter ranges and/or parturition areas;
- The application of timing limitation buffers for known raptor nests.

WGFD remarked upon this shortcoming: “The standard stipulations pertain mostly to the development phase and not to the operational phase of permitted activities.” DEIS Comments and Responses at Row 2637.

### ***The RMP Proposes Inadequate Sage and Columbian Sharp-tailed Grouse Stipulations***

The current Great Divide RMP requires a ¼ mile NSO buffer around sage grouse leks with an additional 2-mile buffer subjected to timing stipulations that limit drilling and construction activities (but not production-related activities) to times outside the breeding and nesting season. FEIS at 3-157. In the end result, surface-disturbing activities, including the drilling of oil, gas and coalbed methane wells and the construction of roads, compressor stations, and other facilities are allowed to occur within the timing limitation buffer as long as the construction and drilling activities do not take place during the breeding and nesting season.

Both the sage grouse and the Columbian sharp-tailed grouse are BLM Sensitive Species in Wyoming. Wyoming sage grouse populations are some of the largest left in the nation and are relatively stable (showing a 17% decline from 1985-1994); nonetheless, sage grouse populations have experienced major declines rangewide in recent decades.<sup>12</sup> The Wyoming Game and Fish Department (“WGFD”) reported that since 1952, there has been a 20% decline in the overall Wyoming sage grouse population, with some fragmented populations declining more than 80%;<sup>13</sup> one of WGFD’s biologists reported a 40% statewide decline over the last 20 years.<sup>14</sup> These declines are attributable at least in part to habitat loss due to mining and energy development and associated roads, and habitat fragmentation due to roads and well fields.<sup>15</sup>

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<sup>12</sup> Connelly, J.W., and C.E. Braun. 1997. Long-term changes in sage grouse *Centrocercus urophasianus* populations " in western North America. *Wildl. Biol.* 3(3/4):229-234.

<sup>13</sup> WGFD. 2000. Minutes of the Sage Grouse Conservation Plan meeting, June 21, 2000, Casper, WY. Cheyenne: " Wyoming Game and Fish Department.

<sup>14</sup> Christiansen, T. 2000. Sage grouse in Wyoming: What happened to all the sage grouse? *Wyoming Wildlife News* " 9(5), Cheyenne: Wyoming Game and Fish Department.

<sup>15</sup> Braun, C.E. 1998. Sage grouse declines in western North America: What are the problems? *Proc. Western Assoc.* " State Fish and Wildl. Agencies 78:139-156. "

Oil and gas development poses perhaps the greatest threat to sage grouse viability in the region. In a study near Pinedale, sage grouse from disturbed leks where gas development occurred within 3 km of the lek site showed lower nesting rates (and hence lower reproduction), traveled farther to nest, and selected greater shrub cover than grouse from undisturbed leks.<sup>16</sup> According to this study, impacts of oil and gas development to sage grouse include (1) direct habitat loss from new construction, (2) increased human activity and pumping noise causing displacement, (3) increased legal and illegal harvest, (4) direct mortality associated with reserve pits, and (5) lowered water tables resulting in herbaceous vegetation loss. Pump noise from oil and gas development may reduce the effective range of grouse vocalizations.<sup>17</sup> Thus, lek buffers are needed to ensure that booming sage grouse are audible to conspecifics during the breeding season. A consortium of eminent sage grouse biologists recommended, "Energy-related facilities should be located >3.2 km from active leks."<sup>18</sup> And Dr. Clait Braun, the world's most eminent expert on sage grouse, has recommended even larger NSO buffers of 3 miles from lek sites, based on the uncertainty of protecting sage grouse nesting habitat with smaller buffers. Attachment 65 at 15.

The area within 2 or 3 miles of a sage grouse lek is crucial to both the breeding activities and nesting success of local sage grouse populations. One scientist described the lek site as "the hub from which nesting occurs."<sup>19</sup> Grouse exhibit strong fidelity to individual lek sites from year to year.<sup>20</sup> During the spring period, male habitat use is concentrated within 2 km of lek site.<sup>21</sup> A Montana study found that no male sage grouse traveled farther than 1.8 km from a lek during the breeding season.<sup>22</sup> Other researchers found that 10 of 13 hens nested within 1.9 miles of the lek site during the first year of their southern Idaho study, with an average distance of 1.7 miles from the lek site; 100% of hens nested within 2 miles of the lek site during the second year of this study, with an average distance from lek of 0.5 mile.<sup>23</sup> In Montana, Wallestad and Pyrah found that 73% of nests were built within 2 miles of the lek, but only one nest occurred within 0.5 mile of the lek site.<sup>24</sup> Because leks sites are used traditionally year after year and represent selection

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<sup>16</sup> Lyon, A.G. 2000. The potential effects of natural gas development on sage grouse (*Centrocercus urophasianus*) near Pinedale, Wyoming. M.S. Thesis, Univ. of Wyoming, 121 pp.

<sup>17</sup> Klott, J.H. 1987. Use of habitat by sympatrically occurring sage grouse and sharp-tailed grouse with broods. M.S. Thesis, Univ. of Wyoming, 82 pp.

<sup>18</sup> Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage grouse " populations and their habitats. Wildl. Soc. Bull. 28:967-985, p. 978.

<sup>19</sup> Autenreith, R. 1985. Sage grouse life history and habitat management. P. 52 in Rangeland fire effects: A " symposium. Boise, ID: Bureau of Land Management.

<sup>20</sup> Dunn, P.O., and C.E. Braun. 1986. Summer habitat use by adult female and juvenile sage grouse. J. Wildl. Manage. 50:228-235.

<sup>21</sup> Benson, L.A., C.E. Braun, and W.C. Leininger. 1991. Proc. Issues and Technology in the Management of " Impacted Wildlife, Thorne Ecol. Inst. 5:97-104.

<sup>22</sup> Wallestad, R., and P. Schladweiler. 1974. Breeding season movements and habitat selection of male sage grouse. " J. Wildl. Manage. 38:634-637.

<sup>23</sup> Hulet, B.V., J.T. Flinders, J.S. Green, and R.B. Murray. 1986. Seasonal movements and habitat selection of sage " grouse in southern Idaho. Pp. 168-175 in Proceedings--Symposium on the biology of *Artemisia* and *Chrysothamnus*, USDA Gen. Tech. Rept. INT-200.

<sup>24</sup> Wallestad, R., and D. Pyrah. 1974. Movement and nesting of sage grouse hens in Montana. J. Wildl. Manage. " 38:630-633.

for optimal breeding and nesting habitat, it is crucially important to protect the area surrounding lek sites from impacts.

Under the Rawlins RMP FEIS, each alternative would apply mitigation measures of no surface occupancy within ¼ mile of sage grouse leks, with an additional measure presenting human activity during certain hours of the day within this buffer. FEIS at 3-157. This is supplemented with the standard seasonal restriction of drilling and construction activities within 2 miles of the lek site for sage grouse or within 1 mile of the lek site for sharp-tailed grouse (and even these provisions are subject to waiver). *Id.* This identical suite of mitigation measures was applied to all alternatives. FEIS at 3-157. While these measures provide protection from drilling and construction activities, they do not prevent the industrialization of key sage grouse nesting habitats within 3 miles of the lek site, nor do they prevent human disturbance related to industrial activity during the post-construction, production phase of operations, often slated to last 30 to 50 years. *See* BLM (2006) at ES-1.

Sage grouse mitigation measures have been demonstrated to be ineffective at maintaining this species at pre-development levels in the face of oil and gas development by Holloran (2005) and Naugle et al. (2006). *See* Attachments 66 and 67. In both of these studies, comparable levels of development led to significant declines in sage grouse populations. Holloran found that, for the Pinedale Anticline and Jonah Fields of western Wyoming, current population trends predicted extirpation of sage grouse in developed areas within 19 years of the date of the study. Walker et al. found an 85% decline of sage grouse populations in the Powder River Basin of northeastern Wyoming since the onset of coalbed methane development there, under well densities and mitigation measures approved under the Atlantic Rim project. Under both studies, the BLM had implemented and required mitigation measures identical to those that would apply under the action alternatives proposed for the Rawlins RMP. Walker et al. concluded:

Seasonal restrictions on drilling and construction do not address impacts caused by loss of sagebrush and incursion of infrastructure that can affect populations over long periods of time. Regulatory agencies may need to increase spatial restrictions on development, industry may need to rapidly implement more effective mitigation measures, or both, to reduce impacts of CBNG development on sage-grouse populations in the PRB.

Attachment 67 at 2. There is no scientifically valid reason to expect the results to be any different in the RMPPA. Furthermore,

Strong support for models with negative effects of CBNG at both the 0.8-km and 3.2-km scales indicate that the current restriction on surface infrastructure within 0.4 km is insufficient to protect breeding populations.

*Id.* at 18. In the end,

Our analysis indicates that maintaining extensive stands of sagebrush habitat over large areas (6.4 km or more) around leks is required for sage-grouse breeding

populations to persist. This recommendation matches those of all major reviews of sage-grouse habitat requirements (Schroeder et al. 1999, Connelly et al. 2000*b*, Connelly et al. 2004, Crawford et al. 2004, Rowland 2004). Our findings also refute the idea that prohibiting surface infrastructure within 0.4 km of the lek is sufficient to protect breeding populations and indicate that increasing the size of no-development zones around leks would increase the probability of lek persistence.... Timing restrictions on construction and drilling during the breeding season do not prevent impacts of infrastructure (e.g., avoidance, collisions, raptor predation) at other times of the year, during the production phase (which may last a decade or more), or in other seasonal habitats that may be crucial for population persistence (e.g., winter).

Id. at 21.

For sage grouse, Holloran (2005) demonstrated that wells sited within 1.9 miles (during the post-drilling, post-construction production phase) caused negative impacts on sage grouse. Attachment 66 at 50. Walker et al. demonstrated negative effects on sage grouse lek populations when wells were sited between 0.5 and 2 miles of the lek. Attachment 67 at 2. Under all action alternatives, wells could be sited as near as 0.25 mile from a lek site. *See* FEIS at Table 2-6. In the context of the Atlantic Rim CBM project, the U.S. Fish and Wildlife Service also voiced its disapproval for the proposed mitigation measures:

The Service is very concerned that authorization of this project, as proposed, will significantly affect the population of greater sage-grouse that occurs in this area of Wyoming. Adverse affects to sage-grouse may occur through the long-term loss of sagebrush habitat, fragmentation of habitat, and noise associated with project activities. The Service does not support a 0.25-mile protective buffer around sage-grouse leks as a mitigation measure, nor do we support a 2-mile buffer to protect nesting habitat.... Additionally, recent information from a doctoral dissertation on the impacts of oil and gas development to greater sage-grouse in the Pinedale Anticline found that as development increased, lek activity declined up to 100 percent (Holloran 2005)... Additionally, Holloran concluded that stipulations placed on oil and gas development in the Pinedale Anticline, which are identical to those proposed for the Atlantic Rim development, were insufficient to maintain sage-grouse breeding populations in natural gas fields.

Attachment 68 at 3. Holloran also found that well densities exceeding 1 well per 699 acres had a negative impact on grouse. Attachment 66. State agencies recommend that well densities not exceed one site per square mile in cases where sensitive habitats cannot be avoided altogether. Attachment 107 at 2. Thus, in the absence of mitigation measures capping well density at this figure, oil and gas development would be expected to have deleterious effects on nesting sage grouse despite the mitigation measures put in place.

For the Cow Butte/Wild Cow WHMA, BLM concedes that stipulations for both sage grouse and Columbian sharp-tailed grouse are inadequate to maintain viable populations:

The development of oil and gas wells surrounding the ¼-mile buffer around grouse leks would reduce the amount of habitat available for nest site selection. The birds would be required to either nest in less optimal locations or space their nests more closely. Increased noise resulting from CBNG [coalbed methane]-related traffic would possibly affect the ability of female grouse (both greater-sage and Columbian sharp-tailed) to locate leks, potentially reducing the reproductive viability of the species. CBNG development within the Cow Butte/Wild Cow area would reduce the number of male grouse inhabiting leks within or adjacent to coalbed natural gas development. It would also increase fragmentation of plant communities used by grouse, degrading both nesting and brood-rearing habitat. The ability of these birds to move to adjacent, less disturbed habitat is extremely limited because of oil and gas development to the west and increasing elevation and snowpack to the east. Thus probable development would threaten sustained use of the area by sage grouse.

FEIS at 4-332. For sage grouse leks and nesting habitat, “35 percent of the currently-identified sage-grouse nesting habitat within the RFO would be potentially affected by oil and gas development.” FEIS at 4-456. Percentages for Columbian sharp-tailed grouse are similar. *Id.* Thus, according to the limited analysis presented in the FEIS, application of mitigation measures as proposed combined with oil and gas development projected for the RMPPA will result in major declines in sage grouse and Columbian sharp-tailed grouse populations across more than a third of the RMPPA. This level of impact would clearly contribute to the need to list both BLM Sensitive birds under the Endangered Species Act, in violation of BLM Sensitive Species Policy.

The EPA states, “the DEIS presents a strategy to allow future use of areas that contain “unsuitable” nesting habitats, but that are within the two-mile lek-center buffers, but to off-set these impacts by identifying suitable nesting habitats outside of the two-mile lek-center buffers. This will cause severely fragmented habitats, and EPA believes this would not result in a healthy or stable habitat for maintenance of the species.” DEIS Comments and Responses at Row 3254. Allowing oil and gas development in areas not deemed to be sage grouse habitat within the two-mile buffer of lek sites would provide even less protection than current timing stipulations do. It is notable that impacts from roads and wells, during both the construction/drilling and production phases of development, extend far beyond the area actually subjected to surface disturbance and into adjacent habitats. Attachment 66 at 50.

Thus, the sage grouse mitigation measures considered for all alternatives under the Rawlins RMP FEIS have already been proven ineffective by two BLM-funded studies in similar habitats, studies which had been presented to BLM prior to the issuance of the FEIS. Holloran (2005) concluded, “current development stipulations are inadequate to maintain greater sage-grouse breeding populations in natural gas fields.” Attachment 66 at 57. State wildlife agencies have come to a similar conclusion. Attachment 107. Yet in the face of overwhelming evidence that its standard mitigation measures were a failure, BLM has declined even to consider alternative mitigation for sage grouse.

*A Blueprint for Sage Grouse Conservation and Recovery* by Dr. Clait Braun, arguably the world's leading expert on sage grouse conservation provides recommendations for sage grouse conservation. *See* Attachment 65. Dr. Braun's recommendations constitute a reasonable alternative based on the best available science that would place a moratorium on the constructions of well, roads, and other infrastructure for the important nesting habitat that occurs within 3 miles of a sage grouse lek. Appellants requested similar measures throughout the NEPA process under The Western Heritage Alternative. *See* Attachment 42. State agencies concur that lek persistence increases with large NSO buffers. Attachment 107 at 4, 5. Yet BLM never considered the implementation of Dr. Braun's recommendations (or the Western Heritage Alternative's) in any of its own alternatives. Additionally, in the context of the Atlantic Rim project, the U.S. Fish and Wildlife Service stated,

The Service strongly recommends minimum protection measures as described by Connelly et al. (2000). The Service also encourages the Bureau to use its authority and not grant exceptions to protection measures for sage-grouse.

Attachment 68 at 3. These recommendations state that energy-related facilities should be placed at least 3.2 kilometers (2 miles) from a lek site. *See* Attachment 69 at 978. The BLM repeatedly failed to consider these alternatives throughout the NEPA process.

A number of experts criticized BLM's sage grouse mitigation measures in the context of the Great Divide RMP revision. In an interview, Pat Deibert of the U.S. Fish and Wildlife Service stated that the current quarter-mile buffer "is just not adequate," stating "One-quarter mile is just not going to protect these birds." Attachment 70 at 1. She also stated that a two-mile buffer where surface occupancy is prohibited "would be an absolutely huge improvement, not 100 percent, but huge." *Id.* According to Dr. Clait Braun, an eminent sage grouse scientist, "The BLM's present quarter-mile buffer around active leks is scientifically unsound, and the available data indicate that such a weak measure is a prescription for local population extinction," and added, "A three-mile buffer from surface disturbance is needed to protect sage grouse during breeding and nesting." *Id.* at 2.

BLM is aware that its standard mitigation measures, when applied in conjunction with an industrial project at 80-acre well spacing, "would result in habitat loss and disturbance and disturbance exceeding the significance criteria." BLM (2006) at 4-79. Similarly, for Columbian sharp-tailed grouse, "because of the magnitude of habitat loss and continued human presence during the production phase of the project, impacts would exceed the significance criteria." *Id.* Indeed, BLM's current mitigation measures, when applied to full-field development projects, are pushing the sage grouse toward Endangered Species listing. Attachment 71. This outcome violates BLM Sensitive Species policy. This should have led BLM to examine a range of alternatives for sage grouse and Columbian sharp-tailed grouse conservation in the context of the Rawlins RMP revision, including at least one that adequately protects these sensitive grouse.

In fact, BLM's own analysis indicates that its proposed mitigation measures are inadequate to prevent significant impacts to sage grouse and their habitats. The BLM cites "long-term reduction of potential sage-grouse nesting habitat" as one of the effects of the Atlantic Rim

project. BLM (2006: 4-34). This statement is an admission that significant impacts to the human environment will occur as a result of this project's implementation, and that mitigation measures approved in the Atlantic Rim ROD are inadequate to prevent these significant impacts. The measures of this ROD are identical to those proposed under all alternatives for sage grouse management throughout the RMPPA.

BLM also adopted many standard conditions of approval and mitigation measures for the Rawlins RMP without taking a hard look at whether these measures are effective. Numerous oil and gas projects in this region have adopted many of the same mitigation measures over the past twenty years and BLM failed to inventory these sites to measure their effectiveness. 40 C.F.R. § 1502.22 is triggered here. This provision requires "the disclosure and analysis of the costs of uncertainty [and] the costs of proceeding without more and better information." *Southern Oregon Citizens Against Toxic Sprays, Inc. v. Clark*, 720 F.2d 1475, 1478 (9th Cir. 1983); see also *Save Our Ecosystems v. Clark*, 747 F.2d 1240, 1244 (9th Cir. 1984) ("On their face these regulations require an ordered process by an agency when it is proceeding in the face of uncertainty.") There has been no disclosure or analysis of the effectiveness of mitigation measures proposed for sage grouse within the RMPPA.

Protestors have repeatedly called into question the effectiveness of protective measures proposed by BLM for sage grouse lek sites (the traditional breeding and strutting grounds for this bird) and nesting habitats. The availability and quality of these habitats are key to preventing the collapse of sage grouse populations. Yet the BLM has repeatedly failed to provide any analysis, whether field experiments or literature reviews, that examine the effectiveness of the proposed quarter-mile buffers where disturbance would be "avoided" that are required under the Atlantic Rim project as mitigation measures to protect sage grouse leks and nesting habitat. These quarter-mile buffers (encompassing 5.47 million square feet) would provide year-round protection for only 1.56% of the land area around the lek site that would be protected by the minimum two-mile buffers (encompassing 350.33 million square feet) recommended by experts<sup>25</sup> and 0.69% of the land area around the lek site that would be protected by the three-mile lek buffers (encompassing 788.24 million square feet) recommended by Dr. Braun. See Attachment 65. Furthermore, the proposed plan would allow roads and wells to be built within 2 miles of sage grouse leks (within sensitive nesting habitat) as long as construction occurred outside the breeding/nesting season. FEIS at Table 2-6. This is the very area for which experts have recommended that no oil and gas facilities or infrastructure be built.<sup>26</sup> BLM also has failed to analyze the setting aside of core areas in the RMPPA, as recommended by Holloran and state agencies. See Attachments 66, 107 (at 2).

The BLM also failed to examine a range of alternative mitigation measures for grouse wintering habitat in the FEIS. A recent BLM-funded study found that sage grouse avoided coalbed methane development in selecting winter habitats, which is detrimental "because individuals are forced into sub-optimal habitats where vital rates decline (i.e., survival and reproduction), which

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<sup>25</sup> Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage grouse populations and their habitats. *Wildl. Soc. Bull.* 28:967-985, p. 978.

<sup>26</sup> *Id.*

in turn negatively influences growth rate, size, and persistence, and generally leaves populations with little capacity to respond to new stressors.” Attachment 72 at 10, 12. For both species of grouse in the context of the Atlantic Rim project, BLM concludes, “The timing stipulation prevents winter disturbance to greater sage-grouse, but does not prevent the direct loss of wintering areas outside this time period. Loss of this habitat would lead to lower productivity and long-term decline in the population of these species.” BLM (2006) at 4-79.

### ***BLM Proposes Inadequate Big Game Crucial Winter Range Stipulations***

The timing stipulations for big game winter ranges and parturition areas proposed for the Rawlins RMP are tried and broken. The inadequacy of timing stipulations to prevent industrial development and activity inside crucial winter ranges during the winter season leads to a loss of habitat function and displacement of big game. Loss of winter ranges in valley bottoms and disruption of migration corridors are implicated as causes of long-term herd declines. FEIS at 3-148. BLM notes that conditions of winter range in the North Platte and Little Snake valleys already are generally fair to poor. FEIS at 3-148. Given the already impaired condition of big game winter ranges, the BLM has no business compounding the problem by inserting industrial development into winter ranges to displace big game onto still more marginal winter habitats.

There never was any scientific basis to assert the effectiveness of merely placing limitations on the timing of drilling and construction activities in crucial winter ranges and parturition areas, without placing any limits on industrialization of the landscape or subsequent human activity during winter throughout the production phase of oil and gas development. In the Red Desert, elk are known to avoid habitats within 0.6 mile of roads and wellsites in the winter, and within 1.2 miles of roads and wellsites in the summer. Attachment 73, *and see* Attachment 74. It is important to note that this study considered wellfield developments in the production phase, not the construction and drilling phase, when seasonal stipulations as proposed under the Rawlins RMP might result in some positive benefit. BLM provided a hard look at impacts of development on elk in the Fortification Creek area of the Powder River Basin. *See* Attachment 98. It is disappointing that the Rawlins RMP EIS did not attempt a similar hard look at impacts to elk.

For mule deer on the Pinedale Anticline winter ranges, subject to the same stipulation, displacement from crucial winter ranges has been total during most years. Attachment 75. Researchers funded by BLM and industry recorded a 46% drop in mule deer populations wintering on the Pinedale Anticline winter ranges ***while seasonal stipulations were in full force and effect***, with no corresponding decline for nearby populations unaffected by gas development; populations have not rebounded to date. Attachment 75 at II. It appears that during especially severe winters, snow conditions force mule deer to use traditional winter ranges even if they have been subjected to heavy oil and gas development, and population losses are the result. *Id.* These researchers concluded,

In gas fields like the PAPA [Pinedale Anticline] where well pad densities may reach 16 or more per section (2.58 km<sup>2</sup>), the number of producing well pads and associated human activity may negate the potential effectiveness of timing restrictions on drilling activities as a means to reduce disturbance to wintering

deer. Mitigation measures designed to minimize disturbance to wintering mule deer in natural gas fields should consider all human activity across the entire project area and not be restricted to developing wells.

Attachment 75 at 4-20.

Site visits to wells by operators (“well tripping”), large truck traffic associated with condensate removal, human activity at the wellsites, and casual public vehicular use in crucial winter range during the sensitive season would in fact be allowed to continue.

Overall,

Restricting surface disturbing activities and other disruptive activities within crucial winter range during the winter months would reduce the stress to big game during critical times. However, loss or alteration of this habitat outside these periods would not be restricted. This prohibits disturbance to big game [from construction- and drilling-related activities only] during critical time periods but affords no protection to the habitat.

FEIS at 4-470. Timing stipulations for big game parturition areas have much the same effect. *Id.* For the current Jep Canyon ACEC, established in part to protect elk winter range,

Year-round access to interim drilling pods has increased human presence and activity along the western boundary of the ACEC, especially during the winter. In addition, the 20-Mile access road, associated CBNG [coalbed methane] pipelines, and ancillary facilities have become avoidance areas for wintering elk on the western portion of the area....With levels of anticipated development and associated outward expansion, it is unlikely that all sensitive or important habitats necessary for big game populations can be sustained and maintained at current objectives....However, until the human presence and oil and gas disruptive activities are concluded along the western boundary, wildlife may not occupy the entire Jep Canyon ACEC in predisturbance numbers.

FEIS at 4-227. The Atlantic Rim coalbed methane project, approved in 2007 and responsible for the disturbance increases noted above, is projected to have human presence and disruptive activities that last for 20 to 30 years (BLM 2006: 1-1).

In the context of the Upper Muddy Creek/Grizzly WHMA, BLM states,

Disruptive activities from mineral development within big game crucial winter range would result in the loss of habitat, displacement, and physiological stress occurring from human presence and activity....Operational activity from oil and gas development occurring during the winter on crucial winter range contribute, in varying degrees, to direct and indirect impacts to wildlife when the animals are most vulnerable.

FEIS at 4-316. In addition, the inadequacy of mitigation measures to protect migration corridors in this area is also conceded by BLM:

Migration routes would be altered or eliminated, changing some traditional patterns on a local level. Seclusion areas for wildlife would become smaller and more dispersed in some areas....This would increase adverse effects to wildlife as increased demands for use of public lands occur.

FEIS at 4-317. In the context of the Cow Butte/Wild Cow WHMA, BLM states “displacement of elk is extremely likely under all phases of development” and links displacement to “increased stress, energy loss, decreased reproductive rates, and increased mortality of the animals.” FEIS at 4-332.

Clearly, currently proposed mitigation measures are insufficient to protect crucial winter ranges or prevent major impacts to wintering big game herds. BLM needs to consider stronger mitigations to protect crucial big game winter ranges, and implement them in the Rawlins RMP.

## **Raptors**

According to EPA,

the DEIS (page 4-222) indicates no disruptive activities will occur within 1,200 feet of active ferruginous hawk nests. We understand that FWS protocols indicate a radius of 2 mile is required to protect active ferruginous hawk nests.

DEIS Comments and Responses at Row 3250.

## **THE PROPOSED PLAN VIOLATES THE NATIONAL HISTORIC PRESERVATION ACT**

Under ‘Impacts Common to All Alternatives,’ BLM states that Best Management Practices would be implemented along with site specific analysis in the case of sites eligible for the National Register of Historic Places (“NRHP”), in order to minimize impacts to the setting of the property in cases where the setting contributes to the site’s eligibility. FEIS at 4-15. However, for all alternatives, “Significant impacts would occur if developments could not be mitigated to eliminate adverse effects to the setting.” *Id.*

About 174 miles (or 27%) of historic trails overlap areas with high or moderate potential for oil and gas development, where “Significant impacts would occur in areas where the BLM must allow the lease holder to develop the lease and where adverse effects to the historic trails cannot be avoided.” FEIS at 4-290, *and see* 4-304. Here, BLM (and the proposed Plan) gets the legal priorities exactly reversed. The leaseholder has the right under the Mineral Leasing Act to explore for, develop, and transport leasable minerals, but only if such activities do not violate other federal laws. The agency’s position misconstrues governing law and runs counter to recent authority confirming that lease issuance does not convey absolute, inalterable rights in the lessee.

BLM regulations . . . subject [lessees'] right to three reservations: “[1][s]tipulations attached to the lease; [2] restrictions deriving from specific, nondiscretionary statutes [such as the ESA]; and [3] reasonable measures . . . to minimize adverse impacts to other resource values” not addressed in the stipulations. . . The second reservation ensures that the BLM and the Forest Service may impose restrictions required by the ESA, a “nondiscretionary statute,” including those restrictions that could “cause a portion of the leased land to be restricted from operational activities or . . . deny access to the leased area without the requirement of a lease stipulation.”

*Wyoming Outdoor Council v. Bosworth*, 284 F.Supp.2d 81, 91 (D.D.C. 2003) (citing 43 C.F.R. § 3101.1-2). “[T]he ‘investment-backed rights’ of holders of oil and gas leases are not absolute.” *Northern Plains Resource Council v. U.S. Bureau of Land Management*, No. CV 03-69-BLG-RWA, slip op. at 16 (D. Mont. Feb. 24, 2005).

Federal oil and gas leases confer no right to explore or develop in cases where such activities would violate other federal laws, including the NHPA, a nondiscretionary statute. Thus, if a mineral lease exists in an area where development would result in impacts to an NRHP-eligible site or trail or its setting, then BLM can (and should) impose limitations in the RMP activities that would significantly impact the site or setting, and the lessee holds no rights to pursue such developments. Because the NHPA requires BLM to develop and evaluate alternatives or modifications to proposed projects that would avoid the adverse effects of the project on historic properties, then blm does have the authority--consistent with the lease rights at issue--to impose avoidance measures on the lessee at the APD stage (e.g., directional drilling or, if the lease contains a restrictive cultural resource stipulation, denial of the APD application). Under section 106 of the NHPA, BLM has both the authority and obligation to consider avoidance measures whether or not a lessee holds development rights. The protection of the historic property, not the right to develop the lease, then takes precedence in cases where the two are in conflict. BLM has failed even to consider such adequate protective measures.

These are illegal outcomes for all alternatives, placing them in clear violation of the National Historic Preservation Act (“NHPA”). Similarly, with regard to historic trails with NRHP eligibility, BLM would implement mitigation measures that would “reduce the potential” for significant impacts or strive for “minimization” of significant effects, but not eliminate them. FEIS at 4-289. This Act requires that NRHP-eligible sites, and their settings, be protected entirely; significant impacts are not allowed under any circumstances. Thus, each of the four proposed alternatives violates the NHPA by failing to provide mitigation measures that guarantee that significant impacts to NRHP-eligible historic properties will not occur under any circumstance. According to the Department of Interior, “Directional drilling and other techniques could be used to reach subsurface mineral resources inside the trail boundary without disturbing surface resources’ [sic] however, some resources could still be affected by extraction activities. The possible impacts of mining or drilling road or pipeline construction across trail segments, increases in ambient noise levels, and the degradation of air quality.” USDI (1998) at 336. In order to comply with the NHPA, the final plan must include specific requirements that if impacts to the setting of NRHP-eligible sites cannot be reduced below the significance threshold, the proposed project leading to the impacts cannot proceed. In addition, it is a violation of NEPA’s

'range of alternatives' requirement that the BLM has failed to provide even one alternative with sufficiently strong mitigation requirements to prevent significant impacts to historical and cultural resources eligible for the NRHP. Such an alternative is not only reasonable, but its adoption is required by federal law.

Impacts from wind farm development, discussed under lands and realty, near historic trails under the new plan would be "similar to Alternative 1" (FEIS at 4-302), in which

Because of the large-scale nature of these types of developments, there would be the potential to adversely affect the historic trails, where settings contribute to the properties' NRHP eligibility....large-scale projects such as these dominate the landscape, compromising the integrity of the setting and the feeling of the historic trails, values that make these resources eligible for the NRHP. Best management practices are generally not sufficient to mitigate these types of effects. This is because many of these developments are visually obtrusive at distances greater than those identified for avoidance which would detract from the contributing setting.

FEIS at 4-292, 293. Under the proposed plan, "Development activities associated with wind energy, utility/transportation systems, and communication sites would significantly impact the historic trails where the setting contributes to the properties' NRHP eligibility." FEIS at 4-304. This is a legally unacceptable outcome under the NHPA.

EPA has pointed out that no alternative provides adequate protections for historical and cultural resources, yet BLM's response to this comment did not address the substance of the criticism, in violation of NEPA. DEIS Comments and Responses at Row 590. In addition, significant new information has come to light regarding the impacts of dust and magnesium chloride used for dust suppression on petroglyphs. Attachment 77. The RMPPA contains significant rock art resources, particularly in the Baggs area and near Red Rim, yet the impacts of dust and magnesium chloride associated with oil and gas development are not analyzed in the EIS. In response to concerns raised by BCA, historical groups, agencies, and Native American tribes that proposed measures under all 4 alternatives of the DEIS are inadequate to protect historical and cultural resources in the RMPPA, BLM blithely and repeatedly states (in the absence of any supporting analysis), "The protections mandated by law, regulation, and policy for cultural resources, supplemented by the management actions in the FEIS will adequately protect significant and/or sensitive cultural resources within the Rawlins RMPPA." See, e.g., DEIS Comments and Responses at Row 505. However, the BLM admits that only 11% of the federal lands have been surveyed for archaeological and cultural sites, and leaves the protection of as-yet-undiscovered sites up to the proponents of future industrial projects. Of BLM's three proposed types of cultural resource inventories, only Class III inventories (FEIS at A5-1) provide adequate certainty of identifying an important resource prior to its potential destruction.

The NHPA requires that BLM make a "reasonable and good faith" effort to identify historic properties prior to approving projects. Because the proposed RMP does not require Class III surveys prior to the issuance of APDs (or other ground disturbing activities), the plan prescribes

an unreasonable identification effort in light of the known significance of historic resources in the area planned for oil and gas development. Additionally, Section 110 of the NHPA requires BLM to develop a program for identifying and evaluating historic properties under its control and management. 16 U.S.C § 470(h)(2). Because BLM hasn't addressed sec. 110 and has not put forth a coherent program in the final plan for identifying and evaluating historic properties, the agency has not complied with section 110.

There are many problems with this approach. Project proponents conducting surface-disturbing activities using heavy equipment such as bulldozers, ditch witches, vibroseis equipment (also known as “thumper trucks”), and other heavy machinery may not even see an important historical or cultural resource (archaeological evidence can be quite small) from their seat in a noisy heavy equipment cab. Second, even if personnel are present near the bulldozer blade or vehicle wheels as they cross the landscape (and this is rarely the case due to safety considerations), it is entirely likely that historical or archaeological artifacts about to be bulldozed or run over by other equipment would be recognized by untrained eyes. See Attachment 78 at 6, describing the same issue for fossil resources. For these reasons, in the absence of block clearances of project areas by trained archaeologists, impacts to some important sites are inevitable.

Even if an important archaeological site is correctly identified by operator personnel, BLM has no way to enforce the proposed mitigation measures of reporting the find to BLM and providing subsequent conservation and recovery. Indeed, two factors militate against operators reporting the find: (1) Individuals may be prone to take artifacts for their own personal collections in lieu of reporting them. (2) Companies with a vested interest in completing surface-disturbing projects would have an incentive to leave major finds unreported to avoid delays and/or project alteration or even cancellation. These issues are discussed in detail by Dr. Jason Lillegren in the context of fossil resources, and his conclusions are equally applicable to archaeological resources. *See* Attachment 78 at 6.

BLM concedes, in the context of ROW actions under all alternatives, that inventory and mitigation measures would “protect most cultural resources from significant damage,” but “[a] small but proportional number of these sites would be adversely impacted as a result of unanticipated discoveries, potentially resulting in significant impacts.” FEIS at 4-15. Indeed, for all alternatives,

any surface disturbance has the potential to damage and/or destroy cultural properties potentially eligible for the NRHP through unanticipated discoveries (i.e., cultural resources discovered during ground-disturbing activities). Unanticipated discoveries would result in loss of some or occasionally all of the cultural resource involved.

FEIS at 4-21, *and see* 4-24, 4-28, and 4-31. Because inventories by trained professionals are not required before surface-disturbing activities take place, unanticipated sites will be subjected to significant impacts (presumably including sites eligible for the National Register of Historic Places, because project proponents will have no way of controlling whether sites are potentially

eligible for the Register as they bumble across them). Thus, the BLM's failure to require systematic field inventories by trained professionals will necessarily lead (according to BLM's own analysis) to significant impacts to historical sites and their settings which are NRHP-eligible and therefore protected by the National Historic Preservation Act (as outlined below).

The fact that consultation with tribal bodies has been inadequate in the Rawlins RMP EIS process has been widely recognized. It has been recognized by Native American groups themselves: the Northern Arapaho Council of Elders (DEIS Comments and responses at Row 692) and the WY MT Tribal Leaders Council (DEIS Comments and Responses at Row 645) both note this deficiency quite forcefully in resolutions. Communication is a two-way street, and if the Native American tribes say that they have not been adequately consulted, then they have definitively not been adequately consulted, regardless of the opinion of BLM experts. EPA comments pointedly criticize BLM for failing to adequately garner tribal input pursuant to NHPA, mischaracterizing comments from tribal members, and for failing to accurately map significant sites. DEIS Comments and Responses at Row 592.

The Final RMP should include a standard that upon initiation of scoping for a given project that involves surface-disturbing activities or other actions that may affect historic or cultural properties, a full block survey for archaeological and historical sites and/or complete field delineation of historic trails prior to release of the Draft EA or EIS, so that the full baseline information on these resources is before the agency and a range of reasonable alternatives to manage these resources can be developed and considered. This should be an ironclad guarantee that is inserted into the final plan, binding all future project-level activities. This approach was also recommended at the Draft EIS stage by EPA. DEIS Comments and Responses at Row 590. This protection measure apparently was not even considered in any of the alternatives.

In addition, BLM has determined that the Cherokee, Overland Trails and Rawlins-Baggs Wagon Road are NHRP-eligible trails. FEIS at A5-4. The Wyoming sections of the Overland and Cherokee Trails have been recommended for further study for federal protection as national historic trails (USDI 1998, p. 73). Bills have appeared before Congress in recent sessions nominating these trails for designation as national historic trails. According to the Department of Interior (1998, p. 68),

Adequate protection of national historic trails would require more than the protection of ruts and sites. Maintaining the physical integrity of the trail landscape would be essential to preserving the overall context of the trails' history and ensuring a rich and evocative visitor experience.

The agency implies that some segments do not contribute to the eligibility of the trail, so they can be left unprotected. *Id.* However, all identified trail segments for these trails by definition meet Criteria A and B (i.e., 50% of the criteria). This constitutes a predominance of the criteria. In addition, as pointed out by commentors, visitors following the historic trails value the ability to experience all trail segments in their historic settings. It is arbitrary and capricious and an abuse of discretion for BLM to exempt portions of NRHP-eligible trails from full protection under the NHPA.

### **THE PROPOSED PLAN FAILS TO ADEQUATELY PROTECT PALEONTOLOGICAL RESOURCES**

The proposed Rawlins RMP does not include, nor does the FEIS even consider, mitigation measures adequate to protect paleontological resources from significant adverse impacts. Under ‘Impacts Common to All Alternatives,’ BLM states,

Unanticipated subsurface discoveries (paleontological resources discovered during ground disturbing activities) would occur from surface disturbing and other disruptive activities. Unanticipated discoveries would result in displacement or loss (either complete or partial) of the paleontological resource involved.

FEIS at 4-127. The same impacts would obviously result to paleontological resources destroyed but never recognized by operators during surface disturbing activities. The likelihood of fossil resources being accurately identified and reported by untrained industrial operators is quite small. Attachment 78 at 6. Appropriate mitigation measures for geophysical projects are described in Attachment 78 at 7; these same measures are equally applicable to all surface-disturbing activities.

No alternative requires paleontological surveys prior to surface-disturbing activities in all Probable Fossil Yield classifications. FEIS at 2-41. The weakness of the Probable Fossil Yield Classification is that it is biased toward protection of formations where vertebrate fossils are abundant; the value to science of rare fossils found in formations where fossils are not abundant may be disproportionately greater compared to common types of fossils found in fossil-rich strata. Attachment 78 at 5. The BLM failed to consider even one alternative that requires on-the-ground surveys prior to surface disturbance for all areas with at least some fossil potential; in doing so, the agency assures significant impacts to (potentially irreplaceable and priceless) fossil resources under all alternatives. BCA specifically requested consideration of such an alternative in our Draft EIS comments. Attachment 62 at 107, 150. BLM lends credence to the effectiveness of block-clearing project areas with paleontological surveys, stating,

Potential impacts to paleontological resources identified in a discovery situation would be greater than impacts to resources that were previously identified (and thereby avoided or subjected to mitigation measures) because damage to discovered sites occurs prior to the recordation and evaluation, thereby complicating mitigation procedures.

*Id.* In failing to provide at least one alternative that requires the reasonable (and indeed, commonsense) mitigation measure of requiring field clearance by trained professional paleontologists for areas proposed for surface disturbance, BLM has violated NEPA’s ‘range of alternatives’ requirements. This measure should be required in the final RMP.

### **THE EIS FAILS TO MET NEPA’S REQUIREMENTS REGARDING BASELINE INFORMATION**

Overall, the Rawlins RMP FEIS suffers from a deficiency of baseline information for many important resources, and as a result of the absence of baseline data, the impacts analysis suffers accordingly. BLM states,

RFO uses the best available wildlife data (in cooperation with the WGFD); this data is collected by RFO and WGFD wildlife biologists and is kept [sic] up to date as possible. In addition, we retain a GIS wildlife data layer to record data at a landscape scale.

DEIS Comments and Responses at Row 3092. For sage grouse, BLM states,

RFO [Rawlins Field Office] & WY G&F [Wyoming Game and Fish] biologists monitor leks each year for activity. Selected leks are targeted for intensive “count monitoring” to gain statistical trends over time.

DEIS Comments and Responses at Row 3121. If these data are readily available to the Rawlins BLM and in common use, then the agency’s failure to present these data in the Rawlins RMP EIS is a particularly egregious violation of NEPA’s baseline information requirements.

According to the WGFD, “Unfortunately, the RMP, specifically Chapter 3, does not provide a satisfactory inventory or quantitative description of the current condition of resources within the RMPPA. This is a **fatal flaw** in the RMP analysis, and would preclude any meaningful cumulative effects analysis.” DEIS Comments and Responses at Row 700, emphasis added. The state agency criticized the deficiency in baseline information more strongly in the context of wildlife:

The Rawlins RMP generally lacks quantitative descriptions of the existing condition of natural resources managed by the BLM throughout the area covered by this plan. There is no quantitative assessment, or reference to a quantitative assessment of the condition and status of ecosystems, rangelands, or wildlife habitats. This step is critical to support an effective planning effort. The CEQ Regulations specify, “Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements” [40 CFR 1502.24]. “Data and analyses in a statement shall be commensurate with the importance of the impact ...” [40 CFR 1502.15]. With respect to incomplete information, “If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives, and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement [40 CFR 1502.22(a)]. The descriptions of the existing resource conditions in the RMP are not adequate. The development of appropriate management prescriptions to achieve desired conditions must be based on an adequate assessment of existing conditions.

DEIS Comments and Responses at Row 2635. These concerns were echoed by the U.S. EPA, and amplified in the context of species not protected under the Endangered Species Act:

Evaluation of existing wildlife populations or trends is provided in the DEIS/RMP only for T&E species (in the Biological Assessment). However, adverse impacts - direct, indirect, and cumulative - are not quantified and cumulative impacts are stated to be "not known." There is inadequate information to evaluate existing habitat and other fish and wildlife needs. This information is essential for the public and decision-makers to assess management direction and other decisions that protect fish and wildlife.

DEIS Comments and Responses at Row 3241. In the specific case of rare BLM Sensitive Species, WGFD notes,

The Rawlins RMP covers some of the most significant habitats in the United States for species such as the black-footed ferret, swift fox, white-tailed prairie dog and mountain plover. Yet, these significant areas are not identified in the RMP and adequate management attention or planning for these habitats is lacking in the RMP.

DEIS Comments and Responses at Row 2638. For birds of prey, WGFD notes,

The RMP notes that BLM has conducted studies of nesting raptors for over two decades. Yet, there are no quantified data presented as to the number of nesting pairs known for specific areas with proposed development. This oversight is especially troublesome for ferruginous hawks, a species which has received national concern and attention.

DEIS Comments and Responses at Row 2639. Despite the multitude of comments from agencies and the public regarding the paucity of baseline information in the EIS, the BLM elected not to correct this problem in the FEIS.

According to WGFD, "There are many statements throughout the DEIS about the large amount of dead and decadent sagebrush in the resource area. However, there are no data or maps presented to show where this is a problem." DEIS Comments and Responses at Row 2255. Yet BLM fails to provide these data, critical for determining habitat potential and trends for sagebrush obligate species (many of which are BLM Sensitive) including sage grouse, sage sparrow, Brewer's sparrow, sage thrasher, pygmy rabbit, and pronghorn. See also DEIS Comments and Responses at Row 2268 for importance to mule deer. This failure to present baseline data on sagebrush health forecloses the option of the legally required 'hard look' at direct and cumulative impacts of all activities to be permitted under the new RMP on sagebrush habitats.

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 has failed to take steps to gather needed information in all but the narrow range of exceptions permitted by the CEQ regulations. BLM has failed to be explicit regarding information in may not view as essential to reasoned consideration of alternatives, its views on

whether the cost of obtaining the information is exorbitant, or make any determination regarding whether the means for acquiring the information are unknown. According to BLM, “The BLM has developed an EIS that includes data and analysis pertinent to the decision making process and comparison of alternatives, is not a needless encyclopedic collection of data, discusses only briefly issues other than significant ones, and emphasizes data in the EIS that is useful to decision makers and the public while reducing emphasis on background material.” DEIS Comments and Responses at Row 1923.

BLM observes that “Mitigation requirements to avoid or reduce impacts to Special Status Plants may be limited because of specific habitat requirements or lack of necessary biological information to make such an assessment.” FEIS at A24-1, emphasis added. This statement indicates that the BLM has failed to gather adequate baseline information on special status plants to adequately plan for mitigation. The Rawlins RMP will approve oil and gas leasing, which carries with it an implied right to explore or develop at lease somewhere on the leasehold, unless otherwise specified by NSO stipulations. BLM indicates that “As unique plant communities, such as the sand hills bitterbrush/silver sagebrush, cushion plant, and chain lakes alkaline wetland communities, are identified, protection measures are developed.” Id. However, in the context of this EIS, these communities have in fact been identified to BLM by citizens and recognized by the agency, but the proposed RMP does not develop and require protection measures. Defined inventories have even been undertaken, and are referenced by BLM. DEIS Comments and Responses at Row 2330. The RMP is the appropriate place for programmatic direction of this sort; deferral to later project-level NEPA is not acceptable, because BLM in Wyoming has an especially poor track record of implementing additional (and adequate) protection measures at the project stage. Indeed, virtually always in the past, the BLM has tiered back to the RMP in question at the project-level NEPA stage and has historically declined to add additional protections not required in the RMP (even arguing in many cases that the RMP measures guaranteed adequate protection for the resources in question, so that significant impacts would not occur).

According to Wyoming DEQ, “An effort should also be made to identify saline springs, seeps and abandoned and orphaned wells and recommend measures to address those sources of salinity within the Basin.” DEIS Comments and Responses at Row 2474. This observation points out a significant hole in BLM’s baseline information, which is necessary to evaluate the ability of the various alternatives to comply with the Colorado Basin Salinity Control Act.

### ***Baseline Information on Groundwater***

The FEIS fails to present adequate baseline information on groundwater characteristics. According to Wyoming DEQ,

The DEIS fails to describe the character, quality, and use of the groundwater resource within the planning area. DEQ's groundwater susceptibility maps should be used as a tool to identify areas where precautions are needed to protect groundwater. These maps can be accessed on the DEQ web page.

DEIS Comments and Responses at Row 2477. As these sources of information are readily available at no cost to BLM, it is baffling why the BLM, having been notified by several commentators that its baseline information on groundwater is deficient and cannot support a ‘hard look’ under NEPA, has failed to bring this critically important information to bear so that it can have an informed analysis of impacts to groundwater. Surface water quality and quantity are discussed in the FEIS at 3-129, but a corresponding section on groundwater quality, flow rates and patterns, and uses is entirely missing from the document. Groundwater quality information and data are clearly available to the BLM, as they have been presented for other large-scale environmental impact statements in the RMPPA (BLM 2006: 3-65). There is therefore no excuse for BLM to fail to present these data in the context of the Rawlins RMP EIS process and use it in the environmental analyses therein.

These baseline data are of elevated importance in light of the coalbed methane (CBM) development projected for this area, most immediately along the Atlantic Rim, surrounding Seminole Reservoir, and in the Hanna Draw area, all of which have NEPA documents approved or underway. CBM production requires dewatering of groundwater from coal seams, often highly saline and/or filled with heavy metals and other toxic compounds, and (for this plan) potential for surface discharge of these groundwaters outside the Colorado River Basin. In addition, dewatering of aquifers can lead to springs and seeps drying up, and loss of hyporheic flows to rivers and streams, a major impact on vegetation, wildlife and livestock in such an arid region. For these reasons, a lack of baseline information on groundwater quality, flows, and surface discharge points cripples BLM’s ability to undertake an informed analysis of permitted impacts on water quality and wildlife, or to formulate appropriate protective measures for inclusion in the RMP.

### ***Baseline Information on Soils***

The FEIS fails to provide adequate levels of baseline information on soil characteristics within the RMPPA. The FEIS includes only a very generic spatial representation of soil types in the planning area, a representation that does not portray the distribution of soils that are unstable, have excess salinity, are highly prone to erosion and/or compaction, or have productivity problems. These data are readily available to BLM and have been presented in other large-scale EISs within the RMPPA. The Atlantic Rim FEIS, which covers more than a quarter million acres within the RMPPA, contains geographically explicit map analysis of topsoils with excess salts (BLM 2006: 3-25), soils with severe road ratings (BLM 2006: 3-29), soils with elevated runoff potential (BLM 2006: 3-31), soils with poor to fair topsoil ratings (BLM 2006: 3-32), and also presents tabular data on acreage of soils with various vulnerabilities to impact that cause resource concerns (BLM 2006: 3-26 and 3-27). These data assisted BLM to estimate the level of impacts under the various alternatives for this project. Clearly these data were readily available to the BLM, likely at an RMPPA scale, as it prepared its Rawlins RMP FEIS.

These data are critically important in evaluating the relative magnitude of impacts of the proposed alternatives in the FEIS on vegetation productivity in regard to reclamation potential following surface disturbance, salt inputs to the Colorado River system to gauge impacts for downstream salinity loads to Endangered fishes and to users under the Colorado River salinity forum, erosion and siltation impacts to both soil productivity and surface water quality, wind

erosion potential to impact both soil productivity and particulate air pollution levels, and loss of vegetation productivity and corresponding impacts to livestock and wildlife. Because the impacts that will be permitted under the plan, and where they will be allowed to occur, are spatially explicit (e.g., lands open to oil and gas leasing, surface mining, wind farm construction, communication site and utility corridor siting), the degree of impacts and how they vary among alternatives will be heavily dependent on the acreage of sensitive soils, by type, that fall within the zones open to various types of surface disturbance by alternative. The failure to gather, present, and analyze specific baseline information on the distribution of sensitive soils thereby prevents the BLM from undertaking a meaningful 'hard look' at the impacts of activities by alternative.

As a direct result, the BLM's analysis of impacts to soils under each alternative is extremely limited. For the proposed plan, impacts specific to soils are boiled down to two sentences. FEIS at 4-438.

### ***Baseline Information on Roads***

BLM's presentation of its road network is grossly incomplete in the FEIS, and this shortcoming hampers the ability of the agency to conduct a meaningful assessment of the impacts of habitat fragmentation by roads and other facilities on wildlife species. According to the FEIS, Map 1-4 shows Interstates, highways, and county roads; in fact, even county roads are not shown on Map 1-4. Not shown (even purportedly) are the sprawling maze of wellfield trunk, collector, and wellside access roads which often achieve very high densities. These types of roads have been shown in scientific studies to have major impacts on wildlife,<sup>27</sup> and are the primary source of habitat fragmentation, which is a major source of impacts to wildlife ranging from big game to small mammals such as the BLM Sensitive pygmy rabbit.<sup>28</sup> Commentors specifically requested that BLM provide a spatial analysis of the current state of habitat fragmentation in the FEIS. See DEIS Comments and Responses at Rows 3089, 3006, and see Rows 2605, 3864. On BLM lands, the agency permits all road construction and rights-of-way; the data for all permitted road locations in the RMPPA resides in the Rawlins Field Office. Baseline information for roads is therefore readily available to BLM. There is no real cost or penalty (other than the time required to perform an analysis) which could excuse BLM from this bedrock requirement of NEPA.

### ***Baseline Information on Off-Highway Vehicle Use***

BLM states, "the number of unauthorized roads pioneered within the RMPPA is expanding rapidly." FEIS at 3-47. Clearly, BLM has information about the unlawful creation of new vehicle routes off existing vehicle routes, which are open to motorized use under current BLM regulations. The EIS does not disclose the mileage of known routes that have been unlawfully

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<sup>27</sup> See, e.g., Ingelfinger, F.M. 2001. The effects of natural gas development on sagebrush steppe passerines in Sublette County, Wyoming. M.S. Thesis, Univ. of Wyoming, 110 pp.

<sup>28</sup> Knick, S.T., and J.T. Rotenberry. 1995. Landscape characteristics of fragmented shrubsteppe habitats and breeding passerine birds. *Conserv. Biol.* 9:1059-1071.

Knick, S.T., D.S. Dobkin, J.T. Rotenberry, M.A. Schroeder, W.M. Vander Haegen, and C. van Riper III. 2003. Teetering on the edge or too late? Conservation and research issues for avifauna of sagebrush habitats. *Condor* 105:611-634.

pioneered by motor vehicles, nor does it disclose particular problem areas or geographic distribution of illegally pioneered routes. New vehicle routes tend to have impacts on a number of resources, including wildlife, soundscapes, soil and water resources (through acceleration of erosion and siltation), non-motorized recreation, historical and cultural resources, and many other resources.

### ***Baseline Information on 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.

BLM notes that "Visual resources are often associated with recreational activities," and that "Much of the RMPPA contains natural settings with limited development, open spaces with panoramic vistas, and scenic views." FEIS at 3-120. BLM adds, "The highest quality scenic views in the RMPPA are the WSAs, Adobe Town and the Ferris Mountains, are particularly high-value visual resources, particularly the Ferris Mountains and Adobe Town WSAs because of their unique geological formations." *Id.*

Yet nowhere does BLM map the location of areas with high-value visual resources. BCA provided maps of areas with valuable visual resources that were uncovered by our own inventories, and submitted these as attachments to our Draft EIS comments. See Attachment 79 at 35. But BLM not only failed to incorporate this baseline information into the EIS process, but they also failed to undertake their own mapping of important visual resources. A baseline inventory of visual resources is a necessary prerequisite to establishing appropriate Visual Resources Management designations, and exercise which is undertaken in the FEIS.

Commentors specifically requested that BLM undertake an analysis of the viewshed of the Adobe Town WSA and citizens' proposed wilderness lands in this EIS. Comments of BCA et al. on the Rawlins RMP DEIS, Attachment 62, at 59. BLM ignored this request in the FEIS, and failed to supply any explanation for why such an analysis was undertaken in response to these public comments. Clearly, this analysis was feasible to undertake, and is not prohibitive in cost – BCA performed this analysis for Adobe Town at no cost to the organization, and it took approximately 1 hour to complete. The resulting spatial analyses are appended to these comments as Attachments 80-83.

As a result of this failure, BLM was not able to conduct an analysis of impacts of various activities to visual resources in general and Adobe Town visual resources in particular for each alternative in the EIS.

### ***Baseline Impacts on Wildlife Populations and Habitats***

Also absent from the EIS is readily available baseline information on wildlife populations and habitats, which would have aided BLM in undertaking a credible impacts analysis. The spatial

locations of sage grouse and Columbian sharp-tailed grouse leks are readily available to BLM from the WGFD, and these data are parsed by active, inactive, and historic leks. It is common practice for BLM to present these data in EISs, but they are missing from the Rawlins RMP FEIS. Failures to present baseline information on BLM Sensitive Species are addressed elsewhere in this Protest.

### **CUMULATIVE IMPACTS**

To provide an adequate cumulative impacts analysis, the EIS must provide data on the "time, type, place, and scale" of past disturbance activities and explanation of how they affected the environment. *The Lands Council v. Powell*, 395 F.3d 1019, 1028 (9th Cir. 2005) (requiring explanation of what data a conclusion is based on, or why objective data cannot be provided). At a minimum, for BLM to conduct an appropriate cumulative effects analysis it must consider and evaluate the projects presented in Tables 4-5 and 4-6 alongside the projected activities that are presented in Appendix 33) and make a determination of what cumulative impacts are possible, tying that determination to data regarding impacts of the projects, or a rational explanation of why such data is not available or cannot be obtained. 40 C.F.R. §§ 1502.22, 1502.24. It should be noted that BLM itself has determined that these projects at a minimum are relevant to a proper cumulative impacts analysis, thus they must be considered in a proper cumulative impacts analysis. *See Utahns for Better Transportation v. U.S. Dep't of Transportation*, 305 F.3d 1152, 1172-73 (10th Cir. 2002).

What data these conclusions are based on is not explained. They are nothing more than unsupported narratives. Again, this fails to meet the requirements of NEPA. *Klamath-Siskiyou Wildlands Center v. Bureau of Land Management* 387 F.3d 989, 993-94 (9th Cir. 2004).

It appears that the FEIS defers most of its cumulative impacts responsibilities to the project phases; however, analysis at this stage is of no use to leasing decisions, which are made in the RMP. In addition, WGFD observes, "Our experience has been that BLM often avoids meaningful cumulative impacts analysis during project level analysis." DEIS Comments and Responses at Row 699. This statement agrees very well with our own experience with project-level NEPA analyses undertaken by the BLM in Wyoming. With this in mind, it is inappropriate for BLM to defer any cumulative impact analysis which might reasonable be undertaken at the programmatic RMP stage to a later project-level analysis. WGFD concludes, "We find the current analysis of cumulative impacts for the Rawlins Field Office (11.2 million acres, 3.4 million acres BLM lands) shown on the 23 pages dedication to this topic to be superficial, inadequate and inconsistent with the CEQ definition of the term." DEIS Comments and Responses at Row 702.

WGFD provided a good example for how the BLM could create a credible cumulative impacts analysis at the RMP level:

"We believe the Rawlins BLM has a unique opportunity to evaluate cumulative impacts of gas development on wildlife resources. With the existing extensive energy development around Wamsutter, an analysis on that area (perhaps a 10-mile radius) should provide a good indication of what could be expected if similar

development were allowed to occur in other portions of the Resource Area. What are actual road densities in a developed area? How has that affected wildlife populations, like sage-grouse? How effective have existing mitigation measures been? Have they succeeded in abating the spread of noxious weeds, or maintaining sage-grouse broods, ferruginous hawk nesting success, or antelope winter densities? How effective is reclamation? Have roads been laid out in a manner than minimizes disturbance, or have they simply followed the most cost-efficient paths? How often have exceptions and exemptions been granted to mitigation measures? A look at the track record that has been laid out by the Rawlins Field Office should provide a good quantitative means of predicting effects to expect in the rest of the RFO.”

But the RMP does not undertake such an analysis; indeed, BLM refused to even honor these very specific questions with a direct response pursuant to NEPA’s requirements. DEIS Comments and Responses at Row 701.

For big game, the BLM has a very good example of the synergistic nature of cumulative impacts in the elk die-off that occurred southwest of Rawlins in 2004. These are summarized in Attachments 84 and 85. In this case, displacement of elk from traditional ranges by a late cow hunt (and possibly also activity associated with CBM exploratory drilling in the Atlantic Rim project area) pushed hundreds of elk into an area not traditionally used as winter range. Due to a number of cattle that had not been pulled from the allotment for the winter by the permittee, grass was overgrazed and absent from the area, and the elk foraged on vagrant lichens instead. Ultimately, over 500 elk are estimated to have died from poisoning associated with ingesting the lichens. This event demonstrates the cumulative impacts of displacement of big game from winter ranges together with livestock practices that do not always meet optimal objectives. Yet this sort of synergistic impact is not even mentioned in the FEIS, much less does BLM analyze the comparative levels of risk and impact from these sorts of cumulative impacts among alternatives.

In addition, for Forest Management, BLM failed to identify an appropriate cumulative impacts analysis area (“CIAA”). There are a number of interior forest species within the RMPPA that would be expected to use forested BLM lands as well as national forest lands; these include BLM Sensitive Species such as the northern goshawk as well as Threatened species such as the lynx. The entire forest ecosystem, including (at minimum) all National Forest lands within and adjacent to the RMPPA, would therefore be the appropriate CIAA. Instead, BLM considered only “some forest fringes of USFS forest lands within and/or intersecting the RMPPA. FEIS at 4-498. The cumulative impact analysis should have included at least an analysis of forest fragmentation (considering effects of BLM-permitted clearcutting) at the level of the forest ecosystem as well as cumulative effects of human disturbance (particularly federally permitted USFS and BLM projects) on sensitive wildlife and old growth forest habitats. These analyses were never even attempted in the EIS. FEIS at 4-498.

#### **THE FEIS FAILS TO TAKE THE LEGALLY REQUIRED HARD LOOK AT IMPACTS TO CERTAIN RESOURCES AND VALUES**

One of the principal failures of the Rawlins RMP EIS is its failure to take a hard look at the impacts of actions that will be approved or governed under the plan (including but not limited to oil and gas and leasing, oil and gas and coalbed methane exploration and development, wind energy development, siting of communication sites, transmission lines, and pipeline corridors) on other resources and land uses in the planning area, most particularly wildlife, watersheds, wilderness, and recreation. With regard to wildlife, the EPA states:

There is no quantified data and little qualitative information regarding the expected impacts on fish and wildlife. With the Preferred Alternative, there will likely be increased land disturbance, habitat fragmentation, noise disturbance, air emissions, potentially emissions of water pollutants, and other impacts. With minimal information about the magnitude of likely impacts to fish and wildlife, the public and decision-makers lack key information to determine whether resources that currently are viable or protected will remain so, and how additional adverse impacts to land and water resources may affect those species. Please provide data on fish and wildlife impacts in the FEIS.

DEIS Comments and Responses at Row 3240. Disappointingly, BLM chose not to remedy these shortcomings in the FEIS.

The FEIS fails to provide a meaningful examination of the impacts of oil and gas leasing and development that will be approved over the life of the plan. BLM quantifies the acreage of surface disturbance projected by alternatives, for instance, but provides no estimates of the acreage of wildlife habitat that will suffer loss of habitat function as a result of this disturbance. According to EPA,

Total oil and gas disturbance by wells is only 57,545 acres. However, 90% of the RMPPA is available for oil and gas development. Please estimate how much fish and wildlife habitat will be adversely impacted by oil and gas development. Please evaluate the potential impacts to wildlife from those total habitat impacts. From the information provided it appears that nearly all of the RMPPA's wildlife habitat will be adversely impacted to some degree, because of habitat fragmentation, migration and movement corridor disruption, noise and other disturbances, road collisions and other human-wildlife conflicts, etc.

DEIS Comments and Responses at Row 3246. For the Cow Butte/Wild Cow WHMA, BLM itself states,

The amount of vegetation disturbed from gas development is not as important as the noise and activity levels that would still occur and would result in displacement of elk. With the increase in roads and potential recreational access to the area, displacement of elk is likely during all phases of development...Displacement would result in elk moving into adjacent occupied habitats and into areas with deeper snow. Both of these changes would lead to

increased stress, energy loss, decreased reproductive rates, and increased mortality of the animals.

FEIS at 4-332.

Although NEPA does not require BLM to achieve complete certainty regarding the environmental impact of a proposed project, the Act does require all federal agencies to make every reasonable effort to obtain the requisite information to make an informed and environmentally sound decision. 42 U.S.C. § 4332(2)(C). CEQ's regulations implementing NEPA expressly mandate that "[i]f .. incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency SHALL include the information in the environmental impact statement." 40 C.F.R. § 1502.22(a) (emphasis added).

The FEIS fails to address the following issues, even after they were raised in comments at the Draft EIS stage:

- Noise impacts on public recreation. See DEIS Comments and Responses at Row 1931. While BLM addresses disruptive activities in the context of wildlife disturbance, it fails to assess impacts of noise associated with permitted industrial activities or off-road vehicles on other recreationists within the planning area.
- How connectivity between important wildlife habitats will be maintained or impacted under the various alternatives. DEIS Comments and Responses at Row 3242.
- Impacts of locatable mineral development on wildlife habitats and populations. DEIS Comments and responses at Row 3247.
- Impacts of off-road vehicle use on wildlife habitats and populations. DEIS Comments and responses at Row 3248. BLM admits that ORV use does impact wildlife (FEIS at 3-143).

The FEIS also states that the Rawlins Field Office contains uranium deposits that have received mining attention in the past. FEIS at 3-40. Past activity and a potential future mine are outlined in Table 3-6. Uranium prices are presently rising, and there is a major increase in uranium claims being filed at this time. Attachment 86. Yet there is no 'hard look' at the impacts, direct and cumulative, of uranium mining and processing in the EIS.

***The FEIS Fails to Take a Hard Look at Impacts to Nesting Raptors***

The BLM has a comprehensive database of raptor nest success and locations:

The long-term database on nest locations is very effective in characterizing the raptor species that nest in the RMPPA and their nests. The data show not only the relative number of nests of each species, but the height and type of substrate on which they are built. This study provides extremely well-documented information on many of the species, especially the ferruginous hawk, which has been the primary focus of this effort.

FEIS at 3-145. This database includes spatially explicit data on nest occupancy as well as nest success. Id. BLM also has comprehensive data on the location of all existing well locations as well as road and pipeline rights-of-way on federal lands and for projects involving federal minerals. In order to quantify the current level of impact of oil and gas drilling and production operations, the BLM should have done a GIS-based analysis using the data they currently possess to determine (1) if long-term nest abandonment is linked to proximity to roads and wellpads, and if so, what distance from a road or wellpad results in no significant increase in nest abandonment, and (2) if nest success and fledging rates are linked to proximity to roads and wellpads, and if so, what distance from a road or wellpad results in no significant decrease in fledging rates and nest success. This sort of analysis was recommended in comments. See e.g., DEIS Comments of BCA et al., Attachment 62, at 61. BLM's analysis of baseline conditions only compares artificial nests versus natural nests, and does not address proximity to or intensity of oil and gas development. See FEIS at 3-145.

#### ***The FEIS Fails to Take a Hard Look at Impacts to Air Quality***

The Clean Air Act and the State of Wyoming have developed National Ambient Air Quality Standards and Wyoming Air Quality Standards, which may not be violated by permitted activities. While the FEIS presents gross tonnage of airborne pollutants that will be released under each alternative (FEIS at 4-10), as well as increases by pollutant (FEIS at 4-7), the analysis does not present any analysis by alternative on whether NAAQS and WAAQS attainment criteria will be exceeded, and if so, by which pollutants. In addition, projected air pollutant emissions for ozone are not presented for any of the alternatives. FEIS at 4-7. Data from the region indicates that ozone levels are perilously close to being exceeded even at present levels of development. FEIS at 3-4. Given the high levels of Volatile Organic Compounds and other ozone precursors projected in BLM's estimates of air pollution by alternative (FEIS at Figures 4-5 through 4-25), BLM should have at least estimated the levels of ozone by alternative, to determine if stronger mitigation measures should be emplaced in the RMP to prevent exceedences of Clean Air Act standards. Scientifically accepted modeling methodologies are readily available to BLM, as outlined in Attachment 106. In addition, the BLM fails to present a 'hard look' at pollution impacts to visibility thresholds and other pollutant limits for neighboring Class I airsheds, including national parks and wilderness areas.

#### ***Failure to Take a Hard Look at Impacts to Global Climate Change***

Global climate change has emerged as a major environmental issue between the Draft and Final EIS for the Rawlins RMP, yet the BLM has not addressed impacts to global climate in the FEIS in a meaningful way. Indeed, global warming has been demonstrated in Wyoming, not far from the RMPPA. Attachment 87. A major new report links significant global warming to human activities, and specifically fossil-fuels related air pollution of the type that is closely linked to activities that will be permitted under the new Rawlins RMP; this study is so significant that it won the Nobel Prize for 2007.<sup>29</sup> In addition, climate change is likely to have impacts on the RMPPA (see Attachment 97), impacts which would be cumulative with the impacts of projects permitted by BLM. Given the tremendous significance of this new information, BLM should

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<sup>29</sup> The report and Nobel Prize announcement are available online at [www.ipcc.ch](http://www.ipcc.ch); site last visited 1/28/08.

have incorporated a thorough analysis of the impacts under the various alternatives within the FEIS.

NEPA requires the BLM to make a number of considerations that were overlooked in the FEIS. NEPA requires the BLM to “insure that presently unquantified environmental amenities and values” are given consideration, “recognize the worldwide and long-range character of environmental problems and thus support international efforts to prevent declines in the world environment” (particularly the effects on global climate of burning produced fossil fuels, in this case), 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. The Rawlins RMP FEIS predicts the number of wells that will be drilled, but it does not predict the overall direct and cumulative effect of both production-related emissions and combustion of oil, gas, and coal on carbon dioxide output and thereby global climate change. Conversely, the effect of reasonably foreseeable shifts in climate at the local level on various resources and land uses also is needed.

The courts have considered the requirements of NEPA in the context of climate change, and have ruled

When the nature of the effect is reasonably foreseeable but the extent is not...the agency may not simply ignore the effect

*Mid States Coalition for Progress v. Surface Transportation Board*, 345 F.3d 520, 549. Furthermore, the court found

That it would be irresponsible for the [Surface Transportation Board] to approve a project of this scope without first examining the effects that may occur as a result of the reasonably foreseeable increase in coal consumption.

345 F.3d 520, 550. Permitted activities will involve the burning of fossil fuels, the production of fossil fuels that will be sold and ultimately burned as commodities, and the venting of methane as a result of coalbed methane production; all three will increase carbon dioxide and methane outputs to the atmosphere and thereby exacerbate global climate change. BLM should also consider whether the development of wind energy will be additive to fossil fuel production or whether it would actually cause a compensatory reduction in fossil fuel output and, if the latter, wind energy should be factored in to the impact analysis.

BLM does provide some baseline information indicating that over the long-term, the RMPPA is experiencing a steady change in average degrees Fahrenheit per decade. FEIS at Figure 3-2. Unfortunately, due to the fact that both negative and positive changes are mapped in identical colors, the magnitude of the shift can be discerned, but it is impossible for the reader to determine whether the temperature is increasing or decreasing. *Id.*, see legend.

In the context of the Atlantic Rim CBM project (within the RMPPA), EPA stated,

The EIS should include an evaluation of project greenhouse emissions and their potential control technologies to provide public disclosure of this environmental impact. Analysis of the CO<sub>2</sub> emissions is consistent with the Administration's policies to reduce U.S. greenhouse emissions over the next 10 years without sacrificing economic growth. (See the Council on Environmental Quality's Climate VISION web site). An analysis of this reduction of CO<sub>2</sub> emissions, covering the expected design life of the project, would seem appropriate. Addressing CO<sub>2</sub> emissions in proposed federal actions subject to NEPA is consistent with the 2005 decision from the 8<sup>th</sup> Circuit Court of Appeals on the proposed DM&E Railroad as analyzed in the Final EIS prepared by the Surface Transportation Board (*Mid States Coalition For Progress, et al. v. Surface Transportation Board*, 345 F.3d 520 (8<sup>th</sup> Cir. 2003)).

Attachment 88 at 6 of 8. The same responsibilities that require BLM to address methane seeps in the Atlantic Rim EIS also apply to the Rawlins RMP EIS. These can have a major impact on global warming, and an analysis of global warming impacts would be incomplete without carefully examining methane loss. Attachment 115 at 2. In order to comply with NEPA, a full analysis (by alternative) of the impacts of the various alternatives on global climate change is needed.

#### ***Failure to Take a Hard Look at Impacts to Vegetation***

The Rawlins RMP EIS does not present information on the impacts to vegetation communities needed to underpin a reasoned choice among alternatives. Because vegetation is at the root of many other resource values—wildlife habitat, livestock grazing, even recreation in some cases—a thorough impacts analysis for vegetation is a prerequisite for a thorough impacts analysis on these other values. BLM notes that “Mineral development actions would also fracture continuous vegetation communities, change plant community structure and diversity, and alter vegetation landscapes.” FEIS at 4-374. The relative magnitude of these impacts needs to be evaluated by alternative and presented; BLM's failure to do so violates NEPA.

The impacts of dust pollution on vegetation as a result of permitted activities also has not been evaluated by BLM. BLM states that, under all alternatives, “Lack of adequate compaction, road surface, and type of materials used in construction affect the amount of dust that settles out on vegetation and results in reduced palatability, production, and eventually species composition.” FEIS at 4-374. In addition, “Dust is carried in the wind from ¼ mile to several miles, coating vegetation and reducing growth rates, palatability, and use patterns by livestock.” FEIS at 4-500. Obviously, the same would be true for native wildlife. Increased erosion and decreased vegetation cover would also result. FEIS at 4-374. Noxious weeds are also spread by minerals-related activities. FEIS at 4-375. On the other hand, special designations of protected areas would protect vegetation by varying degrees among alternatives. FEIS at 4-376. The FEIS outlines acreages of surface disturbance, a useful index in direct physical destruction of vegetation by alternative. However, the EIS nowhere provides a useful comparison of the impacts of dust and noxious weed invasion on the vast majority of the landscape that would be directly impacted by these factors, but which are not subjected to surface disturbance.

BLM has presented the areas with oil and gas and other mineral potential in the FEIS (Map 4-7), and BLM's LR 2000 database provides spatially explicit data on current location of oil and gas leases. In addition, the Wyoming Oil and Gas Conservation Commission has an online map server that displays location of current and past oil and gas wells throughout the Rawlins Field Office at <http://wogcc.state.wy.us/>. Given the number of wells projected to be drilled, roads to be constructed, and acreage of surface disturbance under each alternative (see, e.g., FEIS at 4-379), BLM should reasonably be expected to provide at least baseline data and a qualitative analysis of the magnitude of impact on vegetation communities, alternative by alternative, from dust and invasive weeds across the planning area. These are, by far, much greater and more widespread impacts than the impacts resulting from direct surface disturbances. The acreage of lands affected by these impacts, and the locations of impacts, could readily be derived using data already available to BLM. Indeed, in other EISs that the BLM considers programmatic in nature, and for which the BLM also did not present site-specific locations of roads, wellpads, and other impacts, BLM has presented some very specific impact analyses related to dust:

Indirect impacts due to dust from roads is expected to affect vegetation adjacent to roads, resulting in additional impacts across 15 to 30 percent of the ARPA.

BLM (2006: 4-53). Clearly, this level of impact analysis is possible for the Rawlins Field Office, as they have done it before. However, these analyses by alternative are completely absent from the Rawlins RMP EIS. FEIS at 4-381, 4-383, 4-387, and 4-389.

Given this information, paired with the spatial mapping of vegetation communities across the planning area (FEIS at Map 3-10) as well as locations of known rare plant and plant community localities, it is also reasonable to expect BLM to analyze and present the level of impact to various plant communities by alternative, including an assessment of which plant associations or individual species are at greatest risk of loss of viability. All that is provided is a brief and generic statement that impacts would occur, and a few location-specific impact estimates related to special management areas. See, e.g., FEIS at 4-380, 4-386. However, these analyses by alternative, too, are otherwise completely absent from the EIS. FEIS at 4-381, 4-383, 4-387, and 4-389.

***The FEIS Fails to Take a Hard Look at CBM Development Impacts on Methane Seeps***

Methane seeps caused by or accelerated by coal aquifer dewatering as a result of CBM development are an increasingly important environmental issue in the RMPPA. In addition, methane venting or loss from CBM or other oil and gas-related activities also constitutes a major issue in the planning area. The direct and cumulative impacts of methane seeps, leaks, and venting on vegetation, wildlife, recreation, air quality, and global climate change should have been addressed in detail in the Rawlins RMP EIS. Instead, a verbal description of types of impacts is provided, but not even a qualitative comparison by alternatives.

Methane seeps associated with CBM along the Atlantic Rim have become a major issue. In January 2007, BCA was anonymously informed by a Rawlins BLM employee of dangerous methane seeps that were cropping up along the Atlantic Rim area as coalbed methane production got underway. In March of 2007, geologist Walt Merschatt accompanied BCA on a site visit to

mud pots along the Atlantic Rim to measure the level of methane seepage and ascertain its connection with coalbed methane exploratory pods nearby. Attachment 89 at 1. Explosive levels of methane existed at several of the seeps, and some of the methane seeps were rated by Merschat as “among the largest-volume methane seeps I have ever seen in the world.” Attachment 89 at 1, 2. These methane seeps, according to Little Snake River Conservation District representative Larry Hicks, are a new phenomenon that have increased markedly since the onset of coalbed methane production in the area. Attachment 90. This is confirmed by methane seep surveys undertaken by Ron Richards in 2002-2003. Attachment 115. Thus, many of the methane seeps in this area are of recent origin (Attachment 115 at 2), corresponding to the development of CBM exploratory pods in the Atlantic Rim project area. In April of 2007, Wyoming Outdoor Council requested additional NEPA analysis in the context of the Atlantic Rim project to explore potential impacts of this newly identified environmental problem. Attachment 91.

In May of 2007, the BLM and state Department of Environmental Quality held a public meeting in Rawlins to address these methane seeps. The DEQ’s powerpoint presentation is attached as Attachment 92. Importantly, while the methane seeps do not appear to be linked to the injection of produced water (Attachment 92 DEQ at Slide 14), they do appear to be linked with dewatering of coal aquifers during coalbed methane production operations. Attachment 92 at Slide 9. Mud pots have also been identified in the Chain Lakes area (FEIS at 4-25), an area with unique alkaline plant communities and of importance to waterfowl and shorebirds.

Impacts analysis on methane seeps is limited to one short paragraph in Impacts Common to All Alternatives:

The development of CBNG [coalbed methane] would reduce pressures in coal seams by withdrawing water. CBNG development would lower water levels and hydrostatic pressure in springs geologically connected to the producing formations. Changing pressure regimes in groundwater aquifers would potentially increase natural gas migration updip and along conduits such as faults or old well bores. This increased migration would kill vegetation in some locations, change the beneficial uses of existing springs and may, in some circumstances, be a hazard if the gases are flammable or coals are exposed to oxygen.

FEIS at 4-412. While this paragraph provides some basic background as to how problems arise from methane seeps, it does nothing to illuminate the magnitude of methane seep problems under the varying alternatives, each of which forecasts a different level of coalbed methane development. BLM also does not disclose in the EIS that methane is a greenhouse gas, linked with global climate change, that is 22 times as potent as carbon dioxide in contributing to increasing temperatures.

There is a broad amount of information currently available to BLM regarding the methane seeps in the project area, combined with the availability of information concerning the location of coal deposits, faults and abandoned wells that would likely transmit migrating methane to the surface, and the areas most likely to be hit with coalbed methane development proposals over the 20-year

life of the plan. Thorough analyses of methane seeps have been conducted in the past in other areas of coalbed methane production. See Attachment 76. It is therefore incumbent on the BLM to conduct a thorough analysis of impacts, by alternative, concerning exacerbation or causation of methane seeps as a result of BLM activities permitted under the new RMP. In failing to do so, BLM has violated NEPA's hard look requirements.

***The BLM Fails to Take a Hard Look at Impacts of Wind Energy Development***

We support the responsible development of wind energy in the Rawlins Field Office. BLM itself notes, "By its very nature wind energy development is one of the most visually and environmentally intrusive management actions authorized on the public lands." DEIS Comments and Responses at Row 1273. Wind energy development, including the erection of anemometer stations to test for wind potential, should occur with full public notice and comment and full NEPA analysis, and this requirement should be codified in the forthcoming RMP. Areas proposed for wilderness in the planning area, including Adobe Town (with expansions), Kinney Rim South, Ferris Mountains (with expansions), Wild Cow Creek, Bennett Mountain (with expansions), Pedro Mountains, Prospect Mountain (with expansions), Encampment Canyon (with expansions), and other lands with wilderness characteristics should be exclusion areas for wind energy development, but are not in the proposed Plan. In addition, lands within 5 miles of the Cherokee and Overland historic trails and other NHPA-eligible sites must be exclusion areas for wind energy development, because wind farms have particularly heavy impacts on the settings of historic properties. Areas managed for no leasing or No Surface Occupancy for oil and gas development should similarly be managed as exclusion areas for wind energy development.

BLM has not undertaken a legally sufficient analysis of the direct and cumulative impacts of wind energy development that would allow a reasoned choice among alternatives in terms of avoidance and exclusion areas versus areas open to wind energy development. BLM expects "at least one new thousand-turbine wind power facility...to be constructed. FEIS at 4-372. The agency admits that wind energy development would likely be incompatible with VRM Class II and III management, with significant impacts occurring in cases where wind energy facilities were built in these areas. FEIS at 4-392. Yet the agency has failed to map important viewsheds and visual resource areas, for comparison against wind area avoidance and exclusion areas. For this reason, it is not surprising that the agency has been unable to put together a credible analysis of impacts of wind energy development on visual resources.

In addition, BLM has not taken an adequate hard look at the impacts of wind energy development on wildlife. On the Foote Creek Rim facility in the RMPPA, wind turbine development along the southern part of the rim caused the area to be abandoned as nesting habitat by mountain plovers:

Reduced use of the southern portion of Foote Creek Rim by mountain plovers may be related to behavioral avoidance of operating turbines and/or construction and maintenance activities, reduced habitat effectiveness caused by the presence of roads, turbine pads, and other ground disturbance, or a combination of the above.

Attachment 48 at 31. A comprehensive review of bird collision impacts of wind turbines is available to BLM online at [http://www.west-inc.com/reports/avian\\_collisions.pdf](http://www.west-inc.com/reports/avian_collisions.pdf). Attachment 93 at 5. A second literature review on these impacts is also available to BLM. Attachment 94 at 49. Yet the full extent of impacts to wildlife from wind turbines in the FEIS boils down to the following list:

Habitat loss, degradation, fragmentation, and species placement from linear features (e.g., power lines, roads, and pipelines) and other permitted facilities (e.g., communication sites and wind turbines) would occur. ROW-approved actions for power lines, communication sites, and wind turbines would the potential of injury and death to bats, raptors, and other migratory birds as a result of collisions. Appropriate mitigation measures, such as adjusting the location, height, spacing, coloration, and density of development, would avoid or reduce disturbance to migration routes, wintering areas, and other sensitive habitats.

FEIS at 4-453. Descriptions of impacts by alternative shed no additional light on this issue. FEIS at 4-465, 4-473, 4-476, 4-482. First of all, this non-specific listing of potential impacts is pitifully insufficient to constitute the ‘hard look’ required by NEPA as the underpinning of the plan that zones where wind turbine facilities will (and will not) be allowed to be sited. Secondly, the application of mitigation measures described in this section is not required under any alternative in the FEIS. The U.S. Fish and Wildlife Service has designed a Potential Impact Index (“PII”) analysis to aid in the siting of wind turbines. Attachment 94 at 5. A thorough analysis of suitable lands for siting wind energy facilities would have included PII ratings for the RMPPA in order to determine the magnitude of impacts by alternative. This was not done, failing NEPA’s ‘hard look’ test.

The U.S. Fish and Wildlife Service has made a number of recommendations on the placement of wind energy facilities. See Attachment 94 at 3-4. Many of these recommendations, such as not siting wind energy developments within 5 miles of prairie grouse habitats, clearly are not represented in the range of alternatives presented in the Rawlins RMP EIS. This information is readily available to BLM; indeed, it is posted on a BLM website at [http://www.blm.gov/nhp/what/lands/realty/FWS\\_wind\\_turbine\\_guidance\\_7\\_03.pdf](http://www.blm.gov/nhp/what/lands/realty/FWS_wind_turbine_guidance_7_03.pdf). There is no excuse for BLM to have ignored this guidance when preparing its analysis and alternatives for wind farm siting. These recommendations should be required standards in at least one alternative, and siting recommendations for grouse should be implemented in the final RMP to avoid contributing to the need to list sage grouse under the ESA.

The Killpecker Dune Field traverses a significant portion of the Rawlins Field Office to the north of Interstate 80, from the western field office boundary to Seminoe Reservoir. This is the longest actively migrating dune field in North America,<sup>30</sup> and provides habitat for the Endangered blowout penstemon. This wildflower “depends on moving dunes for its existence.” FEIS at 4-305. According to BLM, “Within limits, activities or processes promoting wind erosion would

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<sup>30</sup> <http://publiclands.org/visitorcenter/exhibits.php?e=Lands&s=Killpecker>; site last visited 1/21/07

favor the continuation of the species.” FEIS at 4-306, citation omitted. All four alternatives allow a significant portion of the Killpecker Dunes corridor to remain open to wind energy development, including most if not all of the proposed Blowout Penstemon ACEC. *See* FEIS at Maps 2-30 through 2-33. It is obvious that wind farms, which convert wind energy to electricity, necessarily reduce wind velocities and/or change wind patterns in the localities where they are sited. According to Keith (2004), “Wind turbines can change wind patterns which can in turn change the climate by (slightly) altering amount of heat and moisture transported by the winds.” *And see* Keith et al. (2004). Yet BLM has undertaken no analysis of the potentially significant impacts that such a reduction or change in the wind velocities that keep the Killpecker Dunes moving might be on the actively migrating nature of the dunes, the persistence of the unique plant and animal communities that depend on them. If the legally required ‘hard look’ at these impacts was taken, the BLM would likely have adopted the rational choice of making the entire Killpecker Dunes corridor a wind power exclusion (or at least avoidance) area. This shows how the failure to take a hard look at direct and cumulative impacts can subsequently result in the failure to examine a full range of reasonable alternatives, including (in this case) an alternative to prevent wind power generation from impacting the Killpecker Sand Dune complex.

#### ***BLM has Failed to Take a Hard Look at Impacts of Uranium Development***

NEPA requires an agency to take a “hard look” at the environmental consequences of proposed actions. In addition, BLM is required by NEPA and the implementing regulations to consider three types of impacts in its environmental analysis: direct, indirect, and cumulative. *See* CEQ regulations at 40 C.F.R. § 1508.25(c). “Cumulative impact” is defined in the regulations as an “impact on the environment which results from the incremental impact of the action when added to other past, present, and ***reasonably foreseeable future actions*** regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” 40 C.F.R. § 1508.7. (Emphasis added.)

Under its mandate to fully analyze reasonably foreseeable future actions, the BLM must identify and assess known and reasonably anticipated activities within the area of analysis which will have cumulative impacts on the environment. One of the known, and certainly reasonably foreseeable, activities which will occur in the area encompassed by the Great Divide RMP is uranium mining. The extent of area where uranium might be mined in economic quantities is not presented as baseline information. Although BLM has in a few places in the FEIS acknowledged that there will be uranium mining in the Plan Area (e.g., FEIS analysis of impacts to wild horses at p. 4-441), it has not conducted analysis of what the impacts will be to wildlife, recreation, soils, vegetation, air quality, public health, groundwater quality, and surface waters; of the extent of those impacts; and what mitigation measures will be needed. Consequently, the direct and cumulative impacts analysis does not meet the NEPA’s ‘hard look’ standards. Further, the data and analysis in the FEIS are inadequate, failing to establish baseline conditions.

The BLM has completely ignored its duty to assess and evaluate the impacts to soils, water resources, plants, wildlife, and air from uranium mining in general, and in particular in situ leaching uranium mining.

In the Alternative 1 analysis of the Chain Lakes proposed ACEC, BLM states that the potential for locatable minerals is low “with the exception of uranium.” FEIS at page 4-251. This would imply that the potential for uranium in the ACEC could be high. None of the other Alternatives discusses the potential impacts of uranium mining at all. The further statement is made that, “Uranium exploration using in situ techniques would potentially impact the quality of groundwater resources important for wetlands in the area.” *Id.* No other environmental analysis is discussed with regard to the impacts from uranium mining in the Chain Lakes proposed ACEC. At a minimum, there would be direct impacts to soils, plants, and wildlife from in situ mining methods, as well as indirect impacts if, for example, groundwater is polluted. The FEIS contains no discussion of impacts to other resources from uranium mining. This violates the hard look requirement of NEPA.

Similar circumstances exist in the analysis for the Red Rim-Daley WHMA/ACEC. The FEIS states that although there have been no exploration or development proposals submitted, the Red Rim-Daley WHMA/ACEC, “Currently it has several uranium claims located.” FEIS at p. 4-262. No other discussion of the impacts of uranium mining is included in the analysis of Alternative 1. Indeed, no other discussion of the impacts of uranium mining is incorporated in the NEPA analysis of any of the Alternatives for the Red Rim-Daley WHMA/ACEC. As with the Chain Lakes ACEC, there clearly would be impacts from uranium mining. With claims already existing, it is not merely a remote possibility that such mining would occur within the Red Rim-Daley WHMA/ACEC. NEPA therefore requires that BLM assess the environmental impacts of uranium mining.

Additionally, a uranium processing plant, the Sweetwater Uranium, Mill, already exists northwest of Rawlins. If this plant were to be activated, it could become a draw for increased uranium mining; conversely, uranium mining would likely result in the reasonably foreseeable reopening of this uranium mill, the impacts of which are not even mentioned in the FEIS. It is likely more uranium mining activity will occur in the foreseeable future; an expanding amount of uranium-related leasing has been recorded for the RMPPA. See Attachment 95; this information has been readily available to BLM online at [http://www.ewg.org/sites/mining\\_google/US/search.php?statemap=WY](http://www.ewg.org/sites/mining_google/US/search.php?statemap=WY). BLM has failed to analyze and assess the potential environmental impacts from uranium mining, in violation of NEPA.

### ***Failure to Take a Hard Look at Impacts to Sage Grouse***

The BLM has failed to provide "credible scientific evidence" relative to reasonably foreseeable significant adverse impacts to sage grouse 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). The approaches generally accepted by the scientific community are synopsized in Attachment 107.

BLM is relying on the recommendations of the WGFD sage grouse conservation strategy and its National Sage Grouse Strategy to validate the effectiveness of ¼ mile NSO stipulations for lek sites with an additional timing stipulation for nesting habitat on surrounding lands. It is important

to note that neither of these two documents tested the hypothesis that these mitigation measures have a beneficial effect on sage grouse and/or prevent major impacts. The BLM, National Sage-Grouse Habitat Conservation Strategy (Attachment 110) contains no guidance on conservation buffers in energy development fields in sage-grouse habitat (although the strategy references many agency orders, memoranda and guidance documents that may give direction on conservation buffers). Essentially, this document provides recommendations for the BLM to cooperate with state and local agencies, but itself does not venture any recommendations, much less provide scientific or expert support for any particular conservation measures.

BLM states,

“The work of Connelly et al. (2000) has been a key component of the BLM National Sage Grouse Strategy, and the WY Greater Sage Grouse Conservation Plan. These works as well as knowledge of local resource conditions and sage-grouse behavior have guided the development of sage-grouse protections proposed within the RMP.”

DEIS Comments and Responses at Row 3020. On the other hand, Dr. Clait Braun, one of the authors of Connelly et al. (2000), states that the BLM’s mitigation measures (based on the BLM National Sage Grouse Strategy) do not take into account the recommendations of this piece:

Present mitigation measures to protect sage-grouse and their habitats in the existing Rawlins Resource Area DEIS are minimal (Appendix #1) and have little scientific basis. The BLM should endorse and follow the "Guidelines to manage sage grouse populations and their habitats" (Connelly et al. 2000).

DEIS Comments and Responses at Row 2753. When considering whether the BLM Sage Grouse Strategy actually implements the recommendations of the study in question, agency experts will need to defer to the experts who authored the study in the first place. The BLM’s insistence that the recommendations of Connelly et al. (2000) are incorporated into the proposed mitigation measures in the face of such pointed criticism from an author of the study unnecessarily exposes the agency to ridicule. Perhaps BLM’s inability to correctly interpret scientific results and recommendations is at the root of the agency’s misguided assertion that its sage grouse mitigation measures are in accord with the best available science.

The WAFWA Greater Sage-Grouse Comprehensive Conservation Strategy failed to include any guidance on conservation buffers or evaluations of their effectiveness, either ¼ mile NSO buffers for lek sites or timing stipulations for nesting habitats. *See* Attachment 112. Thus, none of the documents cited by BLM provides any support, in the form of scientific studies or expert opinions, on the effectiveness of sage grouse conservation measures proposed for approval under the Rawlins RMP FEIS.

Fortunately, scientific studies in the Powder River Basin and the Upper Green River Valley did test this hypothesis, and found that when these mitigation measures are applied in the context of full-field development, major sage grouse declines occur. Attachment 66, Attachment 67. Thus,

the “expert opinion,” if any, that may have been brought to bear on BLM’s two policy documents is trumped by actual hard science proving that these measures simply don’t work.

**THE RAWLINS RMP DEIS FAILS NEPA’S REQUIREMENT OF SCIENTIFIC INTEGRITY**

The FEIS does not live up to NEPA’s requirements for scientific integrity. Federal regulation requires,

NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.

40 CFR § 1500.1(b), emphasis added. The courts have established a high standard of scientific credibility for fulfilling the NEPA “hard look” requirement:

NEPA requires that an agency charged with preparing an [EIS] take a "hard look" at the environmental consequences of the project, and that it disclose the risks, present the alternatives, and respond with reasoned analysis to the opinions of reputable scientists concerning the hazards.

*Kleppe v. Sierra Club*, 427 U.S. 390, 410 n. 21 (1976).

NEPA directs federal agencies to conduct environmental review processes with a high level of scientific credibility and integrity. Federal regulations state,

Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement.

40 C.F.R. § 1502.24. In addition, regarding the content of an environmental analysis,

The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA.

40 CFR § 1500.1(b).

The courts have upheld these requirements, stating that the detailed environmental analysis must “utiliz[e] public comment and the best available scientific information.” *Colorado*

*Environmental Coalition v. Dombek*, 185 F.3d 1162, 1171-72 (10<sup>th</sup> Cir. 1999) (citing *Robertson v. Methow Valley Citizens' Council*, 490 U.S. 332, 350 (1989); *Holy Cross Wilderness Fund v. Madigan*, 960 F.2d 1515, 1521-22 (10<sup>th</sup> Cir. 1992); and 40 C.F.R. § 1500.1). Furthermore, "The agency may...rely on the opinions of its own experts, **so long as the experts are qualified and express a reasonable opinion.**" *Sabine River Authority v. U.S. Dept. of Interior*, 951 F.2d 669, 678 (5<sup>th</sup> Cir. 1993), emphasis added. The NEPA documents surrounding the Rawlins RMP, from start to finish, have failed to satisfy these directives.

NEPA documents must address "responsible opposing views," in effect, credible scientific and professional opinions that diverge from agency views, in weighing the merits of the proposed actions and alternatives in a NEPA document. Federal regulation states, "The agency shall discuss at appropriate points in the final statement any responsible opposing view which was not adequately discussed in the draft statement and shall indicate the agency's response to the issues raised." 40 CFR § 1502.9(b). The courts have held:

A court should ensure that an EIS contains sufficient discussion of the relevant issues and opposing viewpoints to enable the decisionmaker to take a "hard look" at environmental factors, and to make a reasoned decision.

*Izaak Walton League of America v. Marsh*, 665 F.2d 346, 371 (D.C. Cir. 1981). This is particularly relevant to BLM's assertions about the effectiveness of mitigation measures for crucial sage grouse and big game habitats, assertions which are contradicted by scientific hypothesis testing. Furthermore,

NEPA requires that an agency charged with preparing an [EIS] take a "hard look" at the environmental consequences of the project, and that it disclose the risks, present the alternatives, **and respond with reasoned analysis to the opinions of reputable scientists** concerning the hazards.

*Kleppe v. Sierra Club*, 427 U.S. 390, 410 n. 21 (1976), emphasis added.

The amount of scientific literature referenced in the EIS is shockingly thin for the impacts analyses for many different resources. For example, the following studies directly examine the impacts of oil and gas development on big game in similar habitats and the same region as the Rawlins Field Office:

Johnson, B.K., and D. Lockman, 1979. Response of elk during calving to oil/gas drilling activity in Snider Basin, Wyoming. WDGf report, 14 pp.

Johnson, B., and L. Wollrab, 1987. Response of elk to development of a natural gas field in western Wyoming 1979-1987. WDGf Report, 28 pp.

Neither of these important studies is referenced in the Rawlins RMP DEIS. In another example, the BLM has failed to consider the following key studies on sage grouse:

Braun, C. E., O. O. Oedekoven, and C. L. Aldridge. 2002. Oil and gas development in western North America: effects on sagebrush steppe avifauna with particular emphasis on sage-grouse. *Transactions of the North American Wildlife and Natural Resources Conference* 67: 337-349.

Connelly, J. W., S. T. Knick, M. A. Schroeder, and S. J. Stiver. 2004. Conservation assessment of greater sage-grouse and sagebrush habitats. Western Association of Fish and Wildlife Agencies, Cheyenne, Wyoming, USA.

Rowland, M. M. 2004. Effects of management practices on grassland birds: greater sage-grouse. U.S. Department of the Interior, Geological Survey, Northern Prairie Wildlife Research Center, Jamestown, North Dakota, USA.

Schroeder, M. A., C. L. Aldridge, A. D. Apa, J. R. Bohne, C. E. Braun, S. D. Bunnell, J. W. Connelly, P. A. Deibert, S. C. Gardner, M. A. Hilliard, G. D. Kobriger, S. M. McAdam, C. W. McCarthy, J. J. McCarthy, D. L. Mitchell, E. V. Rickerson, and S. J. Stiver. 2004. Distribution of sage-grouse in North America. *Condor* 106: 363-376.

This failure to consider the best available science appears to be a willful attempt to ignore the scientific findings that cast doubt on the wisdom of the BLM's proposed alternatives in the FEIS. And the BLM cannot claim ignorance as an excuse, because BCA has referenced several of these studies in past submissions to the BLM concerning the Rawlins RMP.

The BLM's analysis too seldom contains references to the relevant scientific literature, that the Final EIS contains many assertions and conclusions that have no basis in the scientific literature, or even the opinions of qualified experts. A brief comparison of the Literature Cited section of these comments against the Literature Cited section of the Final EIS is sufficient evidence that the BLM has failed to account for a vast body of science that is readily available to the agency and yet which has apparently not been considered during the Final EIS.

#### **ADDITIONAL ISSUES OF CONCERN**

There are a number of additional issues that remain unresolved by the Final EIS and need to be addressed prior to issuance of the ROD.

#### **Adequacy of Monitoring**

A number of legal requirements apply to plan monitoring, but they have not been carefully adhered to. See, e.g., 43 C.F.R. §§ 1610.4-9, 1610.5-3; BLM Handbook H-1601-1.IV-VII. The proposed RMP provides for wildlife monitoring but does not provide an adequately rigorous or specific monitoring protocol to ensure that (1) data gathering techniques are repeatable; (2) data from one area will be comparable to data gathered from another; and (3) the monitoring data will be sufficiently rigorous to be incorporated into scientific study. WGFD pointed out these shortcomings in its comments. DEIS Comments and Responses at 1293.

Raptor nest occupancy needs to be monitored annually. BLM's proposed plan only offers raptor nest occupancy surveys every 2-5 years. FEIS at A17-10. This is not adequately frequent to allow adaptive management to correct a downward trend in nest occupancy.

## **Deficiencies in the Socioeconomic Analyses**

### ***A. The lack of variability in the range of alternatives considered by the BLM does not reflect the full spectrum of tradeoffs among balanced multiple use management options.***

Because all three alternatives and the Proposed Plan would open between 98 and 99 percent of the planning area to oil and gas drilling and OHV use, there is little variability in the economic impacts of each alternative. Public lands provide numerous values, some of which are realized when natural resources are extracted, and others which require that the natural ecosystems remain intact. The benefits of these various values often flow to different groups or individuals. Given that some of the benefits from public lands are more likely to flow to individuals or companies (market benefits), and others are available for the entire population (non-market benefits) it is important that the BLM examine a range of alternatives with varying levels of both market and non-market benefits. This means that some alternatives must produce larger levels of non-market benefits, such as those that accrue when wild lands are protected from development and motorized recreation. These benefits must be measured and compared with the market benefits that accrue to companies and individuals when natural resources are extracted and sold. Only when a true range of alternatives are thoroughly examined and compared can an informed decision about public land management be made.

The current alternatives do not provide such a range. Essentially all of the lands in the Rawlins Field Office are open to oil and gas drilling (market values) and motorized recreation (which provides both market and non-market values, but which is also mutually exclusive with other non-market values). As BLM notes, oil and gas leasing is discretionary. The agency must recognize that this single use may not be the highest and best use of such a high proportion of the planning area. And in any case there is no way to know what is highest and best use since alternatives which provide more wilderness and less oil and gas were never even considered.

As the world's population approaches 7 billion, places where one can almost forget this number are becoming increasingly rare and valuable. The Proposed Plan would make almost the entire RMPPA available for industrial development – permanently impairing the wilderness qualities of many of the areas in the planning area. This is not multiple use, nor is it balanced.

The BLM describes multiple use: “the management of public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people.” The Proposed Plan is not likely to meet the present and future needs of the American people.

In its response to comments, as well as in the descriptions of the alternatives, the BLM frequently notes that it has achieved a balance with its Proposed Plan. Yet elsewhere it has justified its rejection of the Western Heritage Alternative due to an excessive amount of land placed under “no surface occupancy” stipulations for oil and gas drilling. The Western Heritage Alternative does not make this land unavailable for the oil and gas industry, but rather seeks to

achieve the balance to which the agency aspires, by proposing a compromise that makes the majority of the oil and gas resources available and also protects the other multiple uses and values associated with public lands.

***Requested Remedy:*** BLM should develop a broader range of alternatives which includes a full spectrum of possible management for both market and non-market benefits. These alternatives should be examined fully to assess the tradeoffs between all economic values (both market and non-market) for all alternatives. The economic analysis should consider the net (rather than gross) benefits of a full range of management alternatives. BLM should analyze the market and non-market benefits associated with the Western Heritage Alternative and compare the net economic benefits with the other alternatives proposed.

***B. The proposed plan fails to address the potential costs of oil and gas development.***

The analysis of the proposed plan does not address specific concerns raised by several parties about the negative impacts of oil and gas drilling. These include the predisposition of the oil and gas industry to cycles of boom and bust and the impact that this will have on communities, the negative impact from the decrease in economic diversity that is likely to result from an increase in oil and gas drilling, the potential impacts that increased oil and gas drilling will have on the quality of life for local residents, the increased cost that oil and gas drilling will impose on local governments, and the non-market costs of the degradation of the environment.

**1. The FEIS fails to evaluate trade-offs between consumptive and nonconsumptive uses of the public lands**

WGFD has pointed out that the EIS contains no evaluation of the economic trade-offs between industrial development and less consumptive land uses such as recreation and wildlife-related economic values. DEIS Comments and Responses at Row 2076, 2094. BLM responds that there are methodologies available to undertake such an analysis, but that will be no major impacts to recreation and wildlife, so no analysis is needed. Id, and see Row 2078. The assertion by BLM that activities permitted under the RMP will not exceed the significance criteria are directly contradicted by other BLM analyses of permitted activities within the planning area. For instance, for the Atlantic Rim project, recently approved for 278,000 acres within the Rawlins RMP planning area,

“Impacts to greater sage-grouse and Columbian sharp-tailed grouse would be significant under all the action alternatives. For big game, including mule deer and elk, significant effects are expected under all the action alternatives....Under all the action alternatives displacement of wildlife and the loss of a naturally-appearing setting would make the ARPA [Atlantic Rim Project Area] less desirable for hunting or wildlife viewing. Visitors would be displaced and impacts would be significant. Impacts to scenery, noise, dust, and human activity would reduce the ARPA’s desirability as a place to camp significantly under all the action alternatives....For pleasure driving and mountain biking, impacts would be significant for the Proposed Action....”

BLM (2006: ES-5). In addition, the FEIS itself acknowledges long-term significant impacts to recreation in areas of high and moderate oil and gas potential, which covers most of the solid public land ownership areas, particularly the eastern Red Desert (Great Divide and Washakie Basins). FEIS at 4-143, 4-157, *and see* Map 4-7. It is interesting to note that projects are currently in the approval process for Seminole Road (1,240 wells) and Continental Divide-Creston (8,950 wells) that will entail comparable levels of impact to these resources over comparable (and even larger) land areas within the RMPPA. It is arbitrary and capricious and an abuse of discretion pursuant to the Administrative Procedures Act for BLM to dismiss the potential for significant impacts to recreation and wildlife in the context of the Rawlins RMP, while clearly acknowledging the significance of such impacts from permitted activities under the plan on a much smaller scale. BLM's badly botched analysis of impact significance then leads to a failure to take the legally required 'hard look' at socioeconomic impacts of the major losses of wildlife and recreation resources to the economy pursuant to NEPA.

It is also instructive that BLM, while recognizing the importance of recreational use in the planning area, with tens of thousands of recreation visitor-days in three comparatively small Special Recreation Management Areas alone (FEIS at Table 3-9, *and see* FEIS at 3-76), the agency makes no attempt to quantify the economic contributions of recreation- and tourism-related industries to the local or regional economy. See FEIS at Table 3-17. According to WGFD, wildlife-related recreation within the Rawlins Field Office contributes \$115 million annually to the Wyoming economy (WGFD 2004). If, as BLM suggests, wildlife-related recreation makes up 55% of all recreation visitor-days in the planning area (FEIS at 3-55), and one assumes that all forms of recreation result in similar expenditures of money per visitor-day, then direct recreational contributions within the Rawlins Field Office would total approximately \$209 million annually.

The litany of major impacts to wildlife and recreation, the bases of the recreation and tourism economy, have been outlined in other comments from the public. *See, e.g.*, DEIS Comments and Responses at 2080. BLM's failure to address such impacts also fails to address the degradation of quality of life, which also has economic value. See DEIS Comments and Responses at Rows 2081, 2113. While BLM addresses some of the social implications of this degradation (FEIS at 4-511), the agency makes no attempt to quantify impacts to the economy when retirees and business owners start to leave the area due to the degradation of amenity values in the area.

In response to several comments asking for a detailed analysis of some of these costs the BLM replies:

A study of the nonmarket values would need to be conducted to fully address the tradeoffs associated with energy development. This could be accomplished by using a Contingent Valuation Methodology (CVM) to estimate nonmarket values. However, in view of the fact that there were no major impacts identified to the other resources, such as recreation or wildlife, this approach was considered beyond the scope of the analysis. (p. A38-141, and others)

First we want to make clear to the BLM that recreation and wildlife are not the only resources or values that are potentially impacted by the Proposed Plan. Residents' quality of life will most certainly be decreased by the level of oil and gas development being proposed. The fact that 99 percent of the planning area is proposed for oil and gas leasing will most certainly have negative impacts on as yet undisturbed wilderness quality lands in the planning area, the natural amenities of the local communities will decline (and this will have both market and non-market consequences), and the culture and lifestyle of the communities in the planning area are certainly likely to be impacted, wildlife habitat will be degraded and other resources will be negatively impacted by the oil and gas development proposed.

It is also not true that "no major impacts" were identified. The BLM notes several instances where resources in the Rawlins Field Office will be impacted by the Proposed Plan:

- a. " "It is anticipated that **significant impacts** (emphasis added) to cultural resources would occur." (p. 4-31)
- b. " Regarding impacts to paleontological resources, the BLM notes that the impacts under the Proposed Plan would be similar to those under Alternative 1, which are summarized, "It is anticipated that **adverse impacts** (emphasis added) to paleontological resources would occur, but, with the proper application of mitigation measures, impacts are expected to be minimal." (p. 4-133). The DEIS goes on to note that "The potential for significant impacts would be directly proportional to the amount of surface disturbance." (p. 4-133) Oil and gas leasing will be allowed on 99 percent of the planning area, as will OHV use. Both of these activities have the potential to result in a great deal of surface disturbance.
- c. " "Oil and gas development would result in long-term reduction of recreation use in areas of high or moderate oil and gas potential, which would have **significant impacts** (emphasis added) to recreation." (p. 4-157)
- d. " Regarding the Sand Hills ACEC and potential JO Ranch Expansion, "Surface disturbing activities resulting from lands and realty management, minerals management, OHV management, recreation management, and some aspects of watershed, water quality, and soils management would remove and degrade portions of the **unique** (emphasis added) bitterbrush/silver sagebrush vegetation community. Intensive management of these activities would help reduce, but would not eliminate, these impacts." (p. 4-225)
- e. " Regarding the Shamrock Hills ACES/WHMA "Surface disturbing activities... would remove and degrade portions of the vegetation communities that support numerous raptor pairs, pronghorn during critical times, and grouse. Intensive management of these activities would help reduce, but would not eliminate, these impacts. The limited restrictions on surface disturbing and disruptive activities under this alternative would allow for **degradation of wildlife habitats** (emphasis added) resulting in **displacement from large segments of the area.**" (p. 4-243)
- f. " Regarding the Cave Creek Cave Potential ACEC, "The 1/4 -mile buffer would prevent surface disturbing activities from occurring in close proximity to the cave

- system. However, this distance would not completely eliminate all potential " alterations to the cavy system as a result of land use activities." (p. 4-281) "
- g. " Regarding the Historic Trails Potential ACEC, "Under Alternative 4, development activities where disturbance could not be mitigated through the use of avoidance or other BMPs would result in **significant impacts** (emphasis added) to the historic trails. Development activities associated with wind energy, utility/transportation systems, and communications would **significantly impact** (emphasis added) the historic trails...Large-scale projects such as these dominate the landscape, compromising the integrity of the setting and feeling of the historic trails..." Furthermore the BLM notes that much of the area is already leased, "**Significant impacts** (emphasis added) would occur in areas where the BLM must allow the lease holder to develop the lease, and adverse effects to the historic trails cannot be avoided. (p. 4-304)
  - h. " Regarding the Cow Butte/Wild Cow Potential WHMA, "The continued human presence associate with development would result in a **loss of function to large areas of the critical habitat** (emphasis added)" Furthermore, the loss of vegetation would "...potentially reduce the number of wildlife species that inhabit the region, rendering it unacceptable as a WHMA." (p. 4-340)
  - i. " Regarding Visual Resources, "Oil and gas and wind energy developments would create large areas with contrasting visual elements of form, line, color, and texture against the natural landscape, which would alter the existing visual qualities." It is also noted that, "...energy development would exceed these prescribed levels [of visual impacts], which would alter the natural landscape into an **industrial setting**. This would be a **significant impact** to visual resources (emphasis added)." (p. 4-406 to 4-407)
  - j. " "Under Alternative 4, the combined input from surface disturbing activities on a watershed scale would at some point and in some locations degrade water quality beyond the designated use of receiving waterbodies." (p. 4-438)
  - k. " Also under the Proposed Plan, "Soil disturbing activities would result in **significant impacts** (emphasis added) to soils." (p. 4-438)
  - l. " The FIES discusses at length the impacts to wildlife from the Proposed Plan. These include habitat degradation and loss, fragmentation of habitat, loss of genetic diversity, and reproductive potential to name a few. The FEIS notes that the impacts of minerals management on wildlife species under the Proposed Plan would be similar to those under the continuation of current management, "Impacts to wildlife and fish species from minerals management (leaseable, locatable, common variety minerals) would include habitat loss, degradation, fragmentation, species displacement, and death from collisions associated with increased traffic." (p. 4-466)
  - m. The FEIS also notes that that cumulative analyses of the air quality impacts, "...suggests that RMPPA activities could contribute to **significant impacts** (emphasis added) to visibility in Bridger, Fitzpatrick, Mount Zirkel, and Rawah Wilderness Areas." (p. 4-496)

While this list is by no means exhaustive it does illustrate that the Proposed Plan, by the BLM's own analyses will have impacts on the other (besides oil and gas) multiple uses and resources in the Rawlins Field Office. Any time that unique or irreplaceable resources or values are at risk there will be a strong component of nonmarket value which must be assessed. One of the primary purposes of the public lands system is the provision of public goods such as the protection of unique landscapes, ecological diversity, wildlife habitat, wilderness, cultural and archeological resources.

The impacts on this list will have both market and nonmarket components, with the nonmarket values being potentially significant for such things as irreplaceable cultural and paleontological resources, for wildlife habitat, quality of life and the general loss of wilderness quality lands, especially in light of the fact that many of the proposed ACECs will not be designated, therefore increasing the likelihood that the loss of nonmarket values will occur.

**Requested Remedy:** The BLM should conduct a scientifically valid study of the nonmarket costs of these and other impacts using one or more of the tested and accepted economic techniques such as Contingent Valuation, Conjoint (choice) Analysis, or Hedonic Analysis.

The attached brief, "The Economic & Social Impacts of Oil and Gas Development," discusses some of these costs in more detail. Attachment 108.

2. BLM was also asked to specifically address the impacts of the inevitable boom and bust cycles associated with oil and gas development. The FEIS does mention note that, "... the intensity and duration of the boom will vary depending on the pace [of oil and gas development] and the resultant bust will be heightened if pace is accelerated." The document goes on to note that, "... it is likely that communities within the study area will be affected by the "boom and bust" cycle and the intensity of this cycle will be a function of the pace.

A mere mention of the possibility of boom and bust cycles does not address the concerns raised in the comments. Economies which are overly dependent on industries prone to boom and bust cycles have been shown to experience lower wages, higher rates of unemployment and slower economic growth than areas with more diverse economies. The impacts of such over-reliance on extractive industries has long-term economic and social consequences (lower investment in education, high rates of long-term poverty, etc.). The Proposed Plan has the potential to perpetuate of the dominance of the oil and gas industry in the local economies of the RMPPA. This will have real long-term consequences that must be measured. To fail to do so presents a one-sided view of the outcomes of increasing oil and gas development in the region.

The BLM goes on to characterize the hardships associated with these cycles as consisting only of the costs that might accrue to local governments, "...it is anticipated that this phenomenon will likely cause hardships for areas that must improve or expand infrastructure and services to accommodate the large, temporary increases in population." (p. 4-510). The BLM goes on to dismiss these costs with an unsubstantiated claim, "However, to some extent, these hardships will be offset by the tax revenues generated by the oil and gas activity." (p. 4-510) First, this is not the full extent of the costs of boom and bust cycles on economies. The actual impacts of these cycles go beyond mere funding for infrastructure. Second, the proposition that extra tax

revenues can offset local government costs has not been demonstrated by any of the analyses done by the BLM.

**Requested Remedy:** BLM must conduct an analysis of the long-term economic and social consequences of perpetuation of a boom and bust resource-extraction dependent economy in the region.

3. The analysis does not consider the economic benefits of natural amenities to local economies and therefore ignores the costs that oil and gas drilling will impose as a result of reduced natural amenities.

Several comments pointed out that, while less tangible, the natural amenities of the surrounding public lands, including the BLM lands managed by the Rawlins Field Office are an important economic attribute for local communities.

More and more evidence has accrued indicating that the West is not a resource-dependent region. The public lands, including those managed by the BLM in the Rawlins Field Office are increasingly important for their non-commodity resources – scenery, wildlife habitat, wilderness, recreation opportunities, clean water and air. A vast and growing body of research indicates that the economic prosperity of rural Western communities depends more and more on these amenities and less and less on the extraction of natural resource commodities.<sup>31</sup>

**Requested Remedy:** The BLM should re-evaluate the impacts that the Proposed Plan will have on local communities by including an assessment of the role that natural amenities has played in attracting entrepreneurs, retirees, an educated workforce and in diversifying the local economies. The agency should assess the impact that increasing the level of oil and gas drilling will have on the attractiveness of the local communities for these other industries and include that in a net analysis of the Proposed Plan. Some suggested analyses and sources of data can be found in “*Socio-Economic Framework for Public Land Management Planning: Indicators for the West’s Economy.*” Attachment 109.

### ***C. The analyses of the tax impacts of the alternatives are inadequate.***

1. The analysis of the changes in tax revenues for the alternatives is a gross rather than net analysis which is deliberately misleading since it fails to consider the reduction in tax revenues from certain sources that will likely result from the implementation of the Proposed Plan.

This deficiency was pointed out to the BLM in comments on the Draft EIS, but the request for a complete analysis was dismissed as “beyond the scope of the analysis.” (p. A38-146). This is

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<sup>31</sup> Examples of peer-reviewed studies showing the impact that natural amenities and protected public land have on local economies include: Bennett and McBeth 1998, Deller et al. 2001, Duffy-Deno 1998, Johnson and Rasker 1993 and 1995, Johnson 2001, Lorah 2000, Lorah and Southwick 2003, McGranahan 1999, Morton 2000, Nelson 1999, Power 1995 and 1996, Rasker et al. 2004, Reeder and Brown 2005, Rudzitis 1999, Rudzitis and Johansen 1989, Shumway and Otterstrom 2001, Snepenger et al 1995, Vias 1999 and Whitelaw and Niemi 1989. These and other studies are discussed in more detail in Haeefele et al. 2007.

inappropriate. The analysis must show the impacts of the Proposed Plan and the other alternatives considered. This is impossible without a net analysis (that is, one which includes costs as well as benefits, losses of tax revenues as well as gains).

**Requested Remedy:** The BLM must conduct an analysis of the net tax impacts of the Proposed Plan and the other alternatives.

2. The Proposed Plan will have negative impacts on residential property values which have not been estimated. While we realize that these impacts fall within the net analysis discussed above, we feel that decreases in residential property values merit special attention. “Residential property” means people’s homes which are often a family’s single largest asset or investment. A decrease in the value of residential property will be a real and negative impact of the Proposed Plan and is therefore well within the scope the analysis.

The FEIS analysis devotes nine and a half pages in Chapter 3 to the estimation and discussion of tax revenues in the planning area. Within this lengthy discussion, the impacts to residential property values and thus local property taxes is given one dismissive sentence. “Other sources of tax revenue” are also given only cursory examination. This lopsided analysis indicates that the agency has already decided that oil and gas drilling is “beneficial” and has not adequately analyzed the impacts on the other sources of tax revenue in the planning area, or on the other resources on the BLM lands in the Rawlins Field Office.

The proposed plan acknowledges that “... if oil and gas development creates a degradation of the surrounding environment, residential property values are likely to suffer (p. 33-66)” but dismisses this as “... beyond the scope of this analysis (p. 3-66).”

Since the environmentally damaging oil and gas drilling will take place on both BLM surface and private split estate lands in the planning area **as a direct result of the Proposed Plan** it can certainly be considered an impact of the Proposed Plan on socioeconomics and must be analyzed in the same manner and to the same thorough degree applied to the potential increases in oil and gas property taxes.

Furthermore, given the realities of tax distribution and the distribution of the government services funded by taxes, the estimated increases in the revenue to the local and state governments are not logically going to replace these investment losses to homeowners in most cases.

**Requested Remedy:** BLM should estimate the potential decline in property values and include these losses to the residents of the planning area as one cost of the Proposed Plan. The BLM should also estimate the subsequent decrease in residential property taxes that will accrue to the local governments in the planning area as a result of the decline in residential property values.

***D. The discussion of the economic methods does not provide adequate explanation of certain aspects of the analysis.***

Appendix 35, “Economic Impact Analysis Methodology” includes a section titled “Modifications of IMPLAN for RMPPA.” This section states, “To better reflect local production practices, the

oil and gas and cattle production sectors of the four-county IMPLAN model for the Rawlins Resource Management Plan (RMP) were modified.” (p. A35-3) No further explanation of this modification is given. This creates considerable suspicion about the methods used to estimate the impacts of these industries.

***Requested Remedy:*** BLM must provide explicit details of exactly how these sectors were modified. What attributes were modified? What were the original numbers or inputs and what were the modified numbers? What justification (other than “to better reflect local production practices”) is used to make these modifications? We expect the BLM to cite specific peer-reviewed studies showing that local production practices are different, how they are different and providing quantitative evidence to support the modifications performed. It would be preferred if these studies were conducted in the four-county planning area. If not, a justification for using them rather than local studies must also be provided.

***E. The analysis of recreation uses and impacts in the RMPPA is incomplete.***

The recreation analysis in the Draft EIS focused exclusively on ORV use and wildlife recreation (hunting and non-consumptive wildlife uses). There are many more activities engaged in by visitors to BLM and other public lands. The impact of all recreation activities (including, but not limited to, backpacking, hiking, bicycling, nature study, viewing scenery, etc.) in addition to those analyzed in the FEIS must be examined in order to make a complete assessment of the impacts of the Proposed Plan and the other alternatives on recreation.

The BLM has not examined the potential, and likely significant costs associated with off-road motorized recreation. Furthermore, the BLM relied on recreation data from a study commissioned by a motorized-recreation advocacy group to assess the impacts of such recreation on the planning area. The study was apparently not peer-reviewed. This reliance might be reflected in the Proposed Plan which opens 99 percent of the planning area to motorized recreation despite the potentially significant costs that such activities have on the land.

The analysis implies that OHV users are spending over three times the amount spent by “other nonconsumptive” users. This finding is suspect and highlights the problems with using such a limited number of studies. Stynes and White (2005) find that non-motorized recreation users spend the same amount per day as motorized users.

Study after study of Americans’ recreation activities shows that the vast majority of people participate in non-motorized recreation – not motorized. A national study by Roper (2003) looked at participation rates over time (1995-2003) and found that off-road vehicle activities consistently ranked below non-motorized activities with walking, hiking and backpacking accounting for two-thirds or more of recreation visits, while OHV driving accounted for less than ten percent.

Data from several states as well as national studies (the USDA Forest Service National Visitor Use Monitoring Program, the National Survey on Recreation and the Environment [see Cordell et al. 2004], and BLM’s Public Lands Statistics)<sup>32</sup> all show that motorized use is consistently a

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<sup>32</sup> National Forest Visitor Use Monitoring Program National Project Results, January 2000 through September 2003. [http://www.fs.fed.us/recreation/programs/nvum/national\\_report\\_final\\_draft.pdf](http://www.fs.fed.us/recreation/programs/nvum/national_report_final_draft.pdf)

smaller portion of total public lands recreation visits than non-motorized use. Data from the Recreation Management Inventory System (RMIS) for the state of Wyoming show that in Fiscal Year 2006 motorized recreation accounted for 15% of total visits, while non-motorized recreation visits were 20% of the total.<sup>33</sup> It should be noted that nearly half of the motorized visits are “driving for pleasure” which is a somewhat different sort of motorized recreation. If these visits are left out, off-road motorized recreation accounts for just 8% of visits to BLM lands in Wyoming.

***Requested Remedy:*** The BLM must include a comprehensive analysis of recreation which includes all forms engaged in within the Rawlins Field Office, not just the limited set examined in the FIES. This analysis must include input from non-motorized user groups in order to more fully and accurately represent the contribution of all types of recreation in the planning area.

In addition, the BLM should also examine the potential costs associated with off-road motorized recreation. A brief discussion and literature review of these costs is included in Appendix A – Costs of Off-Road Motorized Recreation. Attachment 111.

***F. The BLM makes unsubstantiated assertions about the relative importance of the oil and gas industry for local employment and income.***

In response to requests to clarify comments about oil and gas employment trends, the BLM asserts that the industry has been increasing in importance in the planning area, citing absolute increases in industry employment. This is misleading. While absolute employment in the industry has increased since 1969, so have total employment and population. Oil and gas employment (and income) have declined in *relative importance* over this time period measured as either a percentage of total employment (or income) and in terms of per capita employment (see figures below). This trend indicates that the economies of the local communities have changed over time. This change means that there are many more industries which may be negatively impacted by the increased oil and gas development in the Proposed Plan.

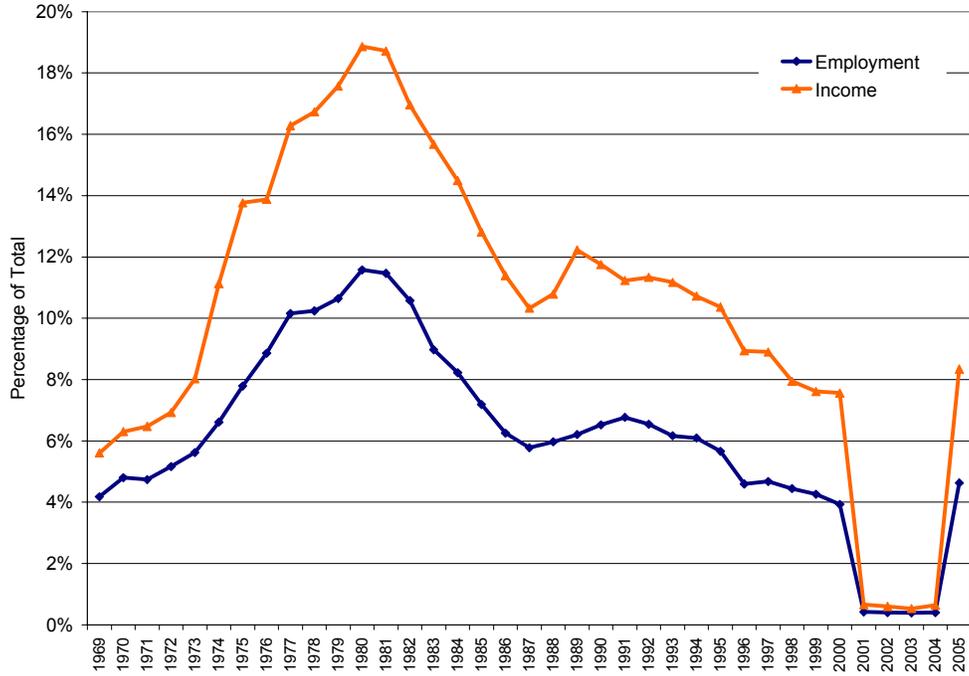
By continuing to assume that the oil and gas industry is more important than it actually is in the planning area, the analysis does a disservice to the other industries in the area. This has led the agency to conclude that opening almost the entire planning area to drilling will benefit the communities in the area. Other industries will be harmed as the economy becomes more and more specialized. Ultimately this will be detrimental to long-term economic health.

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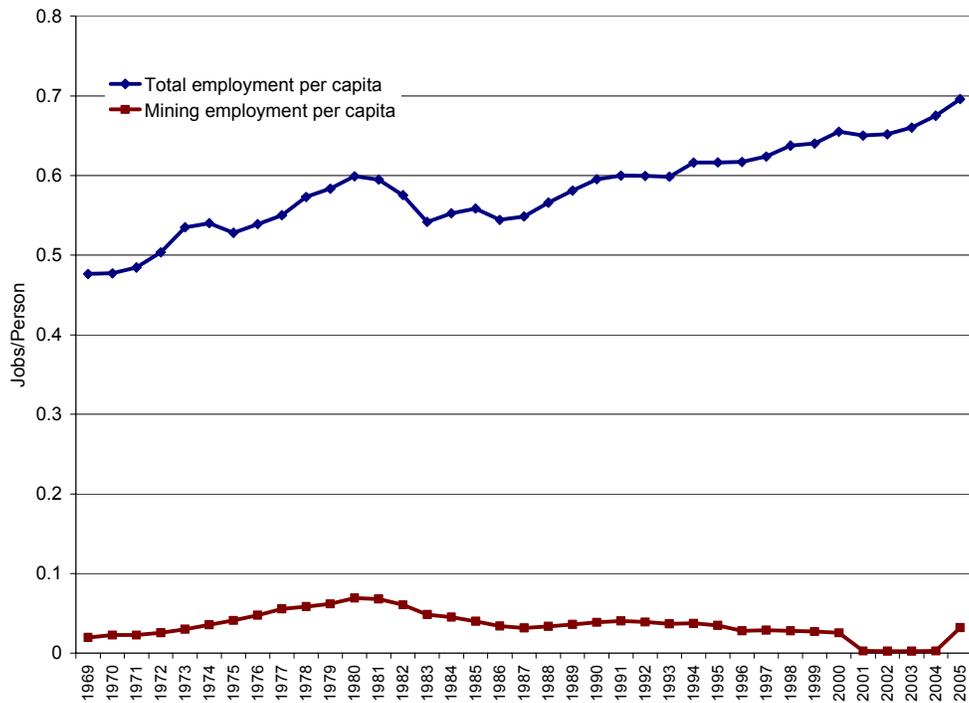
National Survey on Recreation and the Environment: <http://www.srs.fs.usda.gov/trends/Nsre/nsre2.html>  
U.S. Department of the Interior, Bureau of Land Management, Public Lands Statistics:  
[http://www.blm.gov/wo/st/en/res/Direct\\_Links\\_to\\_Publications/ann\\_rpt\\_and\\_pls/2006\\_pls\\_index.html](http://www.blm.gov/wo/st/en/res/Direct_Links_to_Publications/ann_rpt_and_pls/2006_pls_index.html)

<sup>33</sup> Source: Tina McDonald, Outdoor Recreation Planner, Recreation Management Information System (RMIS) Project Manager, USDI Bureau of Land Management, 2850 Youngfield St., Lakewood, CO 80215, Email [Tina\\_McDonald@blm.gov](mailto:Tina_McDonald@blm.gov)

Mining Employment and Income Albany, Carbon, Laramie and Sweetwater Counties, Wyoming



Employment per Capita in Albany, Carbon, Laramie and Sweetwater Counties, Wyoming



**Requested Remedy:** The BLM must make a credible effort to assess the impact that the increased oil and gas drilling in the Proposed Plan will have on all the industries within the planning area, including those which are not directly dependent on extracting natural resources from the BLM lands or on guiding or supplying recreation visitors, but rather dependent on the presence of these lands as a general setting for the communities. This includes an analysis of the potential impact on investment and retirement income. As the area becomes degraded by the increasing oil and gas drilling it is highly likely that those whose income is not tied to a job in the area (and perhaps others as well) may leave, taking their income with them. This will have an impact on the area's economy which is directly attributable to the Proposed Plan and it should be included in the analyses.

The lands of the Rawlins Field Office produce more than just livestock forage and minerals, they also provide natural amenities which have been shown to be a strong drive of many rural economies in recent years.

***G. The BLM makes unsubstantiated claims about local support for oil and gas development.***

“...residents within the RMPPA have long held opinions that a need exist to balance conservation of natural resources with the economic viability of resource-based industries. As such, residents generally support the development of minerals and energy as long as the se activities to not damage wildlife habitat or degrade the quality of recreational experiences.” (p. 4-510)

Despite a request for documentation, the BLM does not cite any source for this claim. Such statements must be supported with credible, peer-reviewed scientific survey results or other analyses. Otherwise they amount to “personal observations lacking any specific data or research to back it up.” Such statements made by members of the public commenting on the Draft EIS were dismissed by the BLM.

**Requested Remedy:** BLM should acquire detailed, credible data on the views and beliefs of the local residents upon which to base such statements. Furthermore, BLM must recognize that these lands belong to the American public. Additional detailed, credible data on the views of the broader stakeholder universe should also be collected and considered in making the land management decisions affecting the public lands in the Rawlins Field Office.

***H. BLM should consider requiring directional drilling for oil and gas resources in order to minimize surface disturbance.***

The BLM received a comment that noted that the Draft EIS “...states that the BLM may in some cases require the lessee to drill a well to reduce drainage of federal mineral resources...” (p. A38-78) and while the comment goes on to make a very valid suggestion that the overall benefit of allowing the drainage might be positive when one considers that the public land surface might retain some measure of protection, of interest is the fact that the agency considers such drainage to be a probable and serious enough threat that it would take measures to prevent it.

This threat implies that such “off-site” drainage is possible and that it in fact takes place which means that it is possible to extract oil and gas resources from a location that is horizontally displaced from the resource. Which in turn implies that directional drilling would certainly be feasible. The attached report, “*Directional Drilling: The Key to the Smart Growth of Oil and Gas Development in the Rocky Mountain Region*” (Kreckel 2007), contains detailed information on directional drilling and its economic feasibility in the West. Attachment 52.

**Requested Remedy:** Directional drilling should be required in cases where well locations would in any way harm other public resources, by imposing no surface occupancy stipulations to protect other public resources.

### ***1. The BLM failed to provide promised analyses and documentation.***

#### **1. Economic and Community Profiles not provided.**

In response to a request for a detailed analysis of the impacts of oil and gas development on other industries (p. A38-141), the BLM responded, “There will be detailed Economic and Community Profiles for the counties and communities in the study area added to Appendix 35.” (p. A38-141). These were not in fact added, nor would such profiles actually address the need to conduct a thorough, quantitative analysis of the impacts that oil and gas drilling will have on recreation and other industries in the planning area.

**Requested Remedy:** BLM must provide the promised profiles. In addition, BLM must also conduct a thorough assessment of the social and economic costs associated with oil and gas drilling as discussed above.

#### **2. Documentation for recreation analyses methods not provided**

Responding to a request for documentation on how the BLM made its determination of resident and non-resident recreation visits, the BLM promised that “A narrative will be added to Appendix 35 to answer this question.” (p. A38-149)

No such explanation can be found in Appendix 35. The document states, “Residents and nonresidents participating ... were based on observations of BLM staff for this area.” (p. A35-7) This is an inadequate explanation of what one can only assume is an inadequate method for determining recreationists’ place of residency. What did the BLM staff observe? Did they categorize a person as non-resident if they didn’t recognize them?

**Requested Remedy:** Given that the BLM has limited its analysis of recreation spending to include only non-resident spending (which we feel is inappropriate since resident oil and gas workers’ spending is considered), it must, at the very least, provide detailed methodology explaining exactly how recreationists were separated into resident and non-resident. If this was actually based on “observations of BLM staff” the analysis is inadequate and must be re-done using a verifiable, documented method.

## **Water Resources**

We remain concerned that impacts to water resources have not yet been thoroughly evaluated. According to the U.S. EPA,

EPA believes that the EIS should disclose water quality impacts to aquatic resources more clearly and quantitatively. By not evaluating water quality impacts, the DEIS does not fully discuss significant environmental impacts and inform decision-makers and the public about reasonable alternatives that can avoid or minimize adverse impacts.

DEIS Comments and Responses at Row 2491, *and see* Row 2501. We concur with EPA's analysis. There is no evidence in the FEIS that this deficiency was addressed through improved analysis.

We concur with WGFD that no new dams and impoundments should be constructed in the Muddy Creek drainage, and that existing impoundments should be prioritized for removal under the RMP. DEIS Comments and Responses at Row 2359, 2363. This alternative is partly considered in Alternative 3, but not in the Preferred Alternative. It should be implemented in the final Plan to ensure that BLM Sensitive fishes in the Muddy Creek watershed do not continue to suffer from water depletions.

The Wyoming Department of Environmental Quality (DEQ) pointed out at the DEIS stage that nonpoint source pollution along Class I waters and tributaries of Class I waters needed special management above and beyond standard BLM practices to safeguard water quality. DEIS Comments and Responses at Row 2472. BLM issued an inappropriate response to this comment, basically stating that Wyoming DEQ and State Engineers Office have the real jurisdiction here. In fact DEQ, approves point discharges of water, and the NPDES permit system does not regulate nonpoint sources of pollution such as salt or sediment runoff from roads or wellpads. The State Engineer's Office's jurisdiction over water rights similarly does not address pollutant runoff. In fact, it is the BLM who has primacy in regulating surface-disturbing activities and other permitted actions that lead to pollution runoff from nonpoint sources, and therefore it is the BLM's primary responsibility to ensure that nonpoint source pollution does not degrade the quality of 303(d) impaired waters or Class I waters designated pursuant to the Clean Water Act. The proposed RMP does not provide adequate management of BLM-permitted activities on federal lands (over which BLM has complete regulatory authority) for Class I waters and their tributaries and 303(d) impaired waters. This deficiency must be corrected in the final plan in order to prevent violations of the Clean Water Act.

DEQ cautions the BLM to consider implementing groundwater quality protections at the RMP stage as follows:

We must strongly encourage BLM to not re-invent the wheel on each EIS. For example, in the PRB, a working group approach was taken to define groundwater protection strategies after it was realized that CBNG discharges had the potential to adversely affect high quality groundwater aquifers. From lessons learned, these kinds of strategies should be developed before intense development is underway.

Several of the guidance documents for groundwater protection can be found on DEQ's web page at <http://deq.state.wy.us/wqd/groundwater/pollution.asp>

DEIS Comments and Responses at Row 2480. In response, BLM undertakes the exact opposite of the DEQ recommendations, proposing not only to defer groundwater quality impacts evaluation and remediation to the project stage, but proposing to “reinvent the wheel” with its APWG approach at that time instead of learning from the experiences with this issue in the Powder River Basin.

### **Air Quality**

Baseline levels of ozone are currently at 72% of NAAQS/WAAQS levels under the Clean Air Act, and at 94% of acceptable limits at the 8-hour exposure levels. FEIS at 3-4. It is interesting to note that while the BLM projects to exceedences of Clean Air Act standards for many pollutants, ozone is not among the pollutants estimated, even though the agency recognizes the high present concentrations of ozone in the same section. FEIS at 4-494. Ozone precursors, including Volatile Organic Compounds, nitrogen oxides, and sulfur oxides, are estimated by alternative. FEIS at Figures 4-5 through 4-25. Having gone to all of the trouble to estimate output of ozone precursors, it is reasonable to expect a corresponding estimate of ozone production by alternative. This falls within BLM’s responsibility to take a hard look at direct, indirect, and cumulative impacts pursuant to NEPA. Although BLM asserts that levels of ozone, atmospheric deposition, and visibility are too complex to predict in the context of cumulative impacts (*id.*), the BLM immediately contradicts this assertion by subsequently providing cumulative impacts analyses for ozone and atmospheric deposition from project-level NEPA. FEIS at 4-495.

Baseline levels of particulate pollution are only presented for Cheyenne. FEIS at 3-6. There are very few, scattered BLM lands near Cheyenne, and virtually no BLM-permitted activities that are related to dust pollution. On the other hand, heavy levels of oil and gas activity west of Rawlins, where BLM land ownership is predominant, are currently causing severe dust pollution problems. In its cumulative impacts analysis on grazing, BLM states, “Impact [of dust] to forage resources and, subsequently, livestock operators, would be more severe in the western portion of the CIAA where development is more intense.” FEIS at 4-500. Yet BLM has not presented any baseline information on particulate matter pollution in this area in the FEIS. FEIS at 3-6.

### **Response to Comments**

In many cases, BLM has been asked very specific questions in public comments that demand answers, yet the agency provided a form reply that is not responsive to the question. This is the case for:

- Cumulative effects of air quality, considering pollution sources excluded from BLM’s analysis (DEIS Comments and responses at Row 709);
- Stipulations attached to oil and gas leases (DEIS Comments and responses at Row 1310);
- Under what conditions Best Management Practices will be applied (DEIS Comments and responses at Row 1321);

In other cases, the BLM listed comments, but provided no responses. This was the case for:

- Failure to provide baseline information on water quality (DEIS Comments and Responses at Row 2414, 2415);
- Failure to provide baseline water quality measures for groundwater (DEIS Comments and Responses at Row 2416);

Response to cooperating agencies invited to planning meeting for the RMP appears no better. According to Governor Freudenthal,

“Many cooperators felt that there was a predetermined outcome for the preferred alternative and that, relative to the final EIS, no involvement or information by any cooperator was going to change the outcome. This is disconcerting and flies in the face of public and cooperator participation. Although I recognize that the final decision is the responsibility of the BLM, I believe that important information was and is being brought to the BLM’s attention throughout the plan revision process. If the information were being adequately incorporated, surely the direction of the preferred alternative would have been altered. But, to date, we have seen little shift in the preferred alternative. If competing resource uses and values are to be addressed in a combination that will be meet the present and future needs of Wyoming residents and the American people, the input of state and local cooperators must be encouraged, liberally considered and included in the analysis.”

DEIS Comments and Responses at Row 961.

### **Adaptive Management**

A solid and repeatable monitoring program, well-defined and quantified benchmarks triggering management changes, and explicit remedial steps in the case that benchmarks are exceeded are the prerequisites to an effective adaptive management program. BLM’s Rawlins RMP does not meet the latter two criteria. According to WGFD,

The Rawlins RMP lacks measurable, quantitative objectives for managing ecosystems toward desired conditions. Resource condition objectives should be based upon properly functioning ecological conditions. BLM discusses "proper functioning condition" (PFC) only in the context of riparian communities, but does not apply the concept to terrestrial ecosystems. By BLM definitions, riparian communities are limited to areas associated with "permanent" water and do not include mesic sites associated with intermittent or ephemeral water sources. BLM discusses "desired plant community" (DPC), but does not provide any quantitative composition, cover, production, or diversity criteria. Nor does BLM explain how its concept of "DPC" may relate to a properly functioning ecosystem. BLM discusses "Wyoming Standards ...for Healthy Rangelands," but these are largely subjective and therefore are not measurable or verifiable.

DEIS Comments and Responses at 2636. BLM's response to this criticism is as follows: "RFO is currently meeting with cooperators involved in the RMP process to formulate quantifiable objectives. For example, RFO will not allow habitats in crucial winter ranges to be degraded below a target threshold (which is currently under discussion with WY Game and Fish and other interested parties)." Id. However, it is impermissible for BLM to withhold component parts of the RMP from review in the FEIS. Having identified the need for quantitative benchmarks, a range of alternatives needs to be presented in the FEIS to satisfy NEPA's public notice and comment, range of alternatives, and hard look requirements. BLM's statement is indicative of the fact that parts of the proposed RMP are not being circulated for public review and comment, in violation of NEPA.

### **Best Management Practices**

Best Management Practices only have worth in land management to the extent they are applied. BMPs that are essentially voluntary on the part of the operator have a tendency to only be expressed in cases where their application improves the profitability of operations. Governor Freudenthal framed the problem succinctly:

The Wyoming Game and Fish Department reviewed the Best Management Practices (BMPs) that are included in the DEIS and found that the array of recommended wildlife BMPs is excellent. The problem however, is that there is not certainty as to when, where or if they will be applied. Although the word "intensively managed" is mentioned fifty-four times in the document and defined in the Glossary, as discussed previously, there are very few assurances as to how the BMPs will actually be applied.

DEIS Comments and Responses at Row 1738.

According to BLM, the Best Management Practices (BMPs) that will generally be required are as follows:

'BMPs to be considered in nearly all circumstances include the following:

- Interim reclamation of well locations and access roads soon after the well is put into production;
- Painting of all new facilities a color which best allows the facility to blend with the background, typically a vegetated background;
- Design and construction of all new roads to a safe and appropriate standard, "no higher than necessary" to accommodate their intended use; and
- Final reclamation re-contouring of all disturbed areas, including access roads, to the original contour or a contour which blends with the surrounding topography

DEIS Comments and Responses at Row 1317. Of all BMPs listed on the Washington Office website, these are the measures that offer the least environmental protection and mitigation value. Indeed, in terms of visual resources, wildlife habitat, and public recreation resources, the application of these BMPs makes essentially no measurable difference, because they do not mitigate the industrialization of the landscape in a full-field development scenario, the level of development projects for most of the consolidated-ownership BLM lands that have good public access in the field office.

BLM states, “Using two-track routes for access in lieu of engineered roads is not appropriate for most situations.” DEIS Comments and Responses at Row 1320. But using two-track roads for wellfield access is a standard practice on the Thunder Basin National Grasslands (e.g., USFS 2004). It is arbitrary and capricious and an abuse of discretion for the BLM to refuse to consider two-track vehicle routes for primary wellfield access when other federal agencies with similar authorities and multiple-use mandates are already practicing this environmentally preferable method of development.

The agency further states that “Use of flare-less completions is not possible under current federal regulations, changes in State requirements could modify this at some time in the future.” Id. However, flareless completions are in common use in the Pinedale Field Office, so obviously it is possible to use these methods under federal regulations. BLM states that a certain amount of venting is allowed under federal regulations (DEIS Comments and Responses at Row 1521), but if green completions were required as a standard in the new RMP, that would also comport with federal regulations. If BLM were to require this practice as a standard in the new RMP, then operators would certainly be bound by this term and condition of drilling within the Rawlins Field Office. Because the requirement of both of these Best Management Practices would materially reduce the impacts of oil and gas development, and they are beyond doubt reasonable measures to expect, BLM is required by NEPA to consider their implementation in at least one alternative. In failing to do so, the agency has violated federal law.

For mountain plovers, a suite of “guidelines” is provided, one or more of which will be implemented in active mountain plover nesting habitat. FEIS at A16-1. Some of these measures, such as requiring directional drilling, piping of condensates, moving oil and gas facilities at least ½ mile from nesting areas, are biologically meaningful and should be applied in all cases. However, token measures, such as carpooling through plover nesting habitat, seasonal restrictions, and timing management are “implemented more frequently” than their biologically sound counterparts. Id. This illustrates the fundamental problem with discretionary application of BMPs: BLM has the demonstrated tendency to implement BMPs that have little mitigative effect on the resource in question while causing minimal inconvenience to the operator, while avoiding BMPs that result in substantial inconvenience to the operator but have a significant chance of solving the problem posed by potential impacts. This demonstrates how BLM consistently fails to uphold FLPMA’s multiple-use mandate, using discretionary BMPs as cover to prioritize energy production over wildlife conservation, even for the most sensitive types of wildlife that have a high likelihood for Endangered Species listing.

## **Forestry**

There does not appear to be a significant demand for commercial logging on BLM lands in the RMPPA. According to BLM, “Due to the current timber industry decline within the RMPPA there has only been 1 successful timber sale within the RMPPA in the past 5 to 6 years. There is no demand or market for commercial timber within the RMPPA at the present time.” DEIS Comments and Responses at Row 906. We therefore concur with the BLM’s proposal not to offer commercial timber sales in its proposed Plan.

There are several misleading statements in BLM’s response to concerns about invading species. BLM indicates that limber pine tend to encroach into stands of lodgepole pine, where they contribute to fuel loading due to a disproportionate susceptibility to white pine blister rust and dwarf mistletoe. DEIS Comments and Responses at Row 917. This is used as a primary justification for “forest health” related logging, but we can find no information that indicates that this is a credible contention. First of all, while limber pine certainly are susceptible to white pine blister rust and lodgepole pine are not, lodgepole pine are equally if not more susceptible to dwarf mistletoe parasitism. Indeed, it may be that lodgepole pine are the source of dwarf mistletoe outbreaks that then move outward into limber pine woodlands. Secondly, limber pine have the tendency to occupy lower elevation, more arid sites than lodgepole pine, and we are unaware of any issue of limber pine “encroaching” into pre-existing limber pine stands; indeed, it seems likely that limber pine are unlikely to take root in the shaded forest floor beneath closed-canopy lodgepole pine woodlands. If BLM can provide any scientific studies indicating that limber pine encroachment into lodgepole pine woodlands is an actual phenomenon, please provide the references. If not, please remove any and all references to this occurrence from the analysis.

According to WGFD, “The Shirley Mountains have been shown to have an inadequate amount of hiding cover for elk, a condition that will only be exacerbated by any further loss of timber.” DEIS Comments and Responses at Row 2644. BLM responds that populations are above herd objectives, and infers that hiding cover must therefore be adequate. Id. This is not necessarily so. A lack of hiding cover could contribute to a lack of resiliency should the herd be subjected to other, unrelated stressors, speeding population declines and inhibiting population recoveries.

BLM advocates for clearcutting because it is the best way to perpetuate stands of lodgepole pines, which germinate best in open sunlight. FEIS at 4-47. However, BLM does not provide any analysis to determine that lodgepole pine forest acreage needs to be maintained or increased; if left undisturbed, forest succession will typically replace colonizer stands of lodgepole pine with spruce-fir stands with old-growth characteristics that provide habitat for forest species that is markedly superior to that provided by lodgepole pine stands, often viewed by ecologists as a “biological desert.”

Under ‘Forest Health,’ BLM uses an inappropriate Action Trigger for changes to management. BLM’s Action Trigger includes insect outbreaks and diseases that threaten forest health. FEIS at A17-5. In fact, outbreaks of native diseases and insects are a natural, periodic phenomenon and these natural processes play an important role in maintaining the health of forest ecosystems over the long term. Indeed, some forest species (e.g., woodpeckers) depend heavily on beetle

outbreaks to allow for periodic population increases and range expansions that dampen the problems associated with population isolation and inbreeding. The action trigger should be reworded to address non-native insects and diseases only.

It is far from clear that mountain pine beetle outbreaks represent a forest health problem. According to the British Columbia Forest Practices Board, lodgepole pine forests recover nicely 25 years post-beetle outbreak:

These residual stands have developed unique structural and vegetative characteristics. There is a remarkable tree growth release and regeneration. Lodgepole pine regeneration under the forest canopy has led to a multi-age and multi-size stand structure. Stocking density on some of these sites exceeds the target stocking for lodgepole pine clearcuts. The mix of understory and overstory trees, the standing and downed coarse woody debris, and the vigorous understory plants have created a diverse plant community with significant structure. This is a positive result for recovery of the forest and its associated values....In fact, they may provide more wildlife habitat than a mature lodgepole pine forest or a stand regenerating after clearcut or fire. These stands also provide an intermediate level of hydrological benefit, compared to clearcutting, buffering watersheds against peak flow effects.

BC Forest Practices Board (2007: 1). Indeed the Forest service has recently stated that logging cannot halt or slow beetle outbreaks once they reach epidemic proportions. Attachment 96. Thus, outbreaks of native beetles should not trigger 'forest health' logging, as such logging can actually exacerbate forest health problems, and there is no evidence presented to show that logging can solve forest health-related problems.

The Shirley Mountains have been excluded from areas where wildland fire use will occur. FEIS at Map 2-1. This is an area where wildland fire use is highly appropriate (indeed, the lodgepole pine, prevalent in this area, is known as a fire-dependent tree species), and there is a distinct lack of wildland-urban interface in this area.

### ***Failure to Provide for Mature Forest Types***

Although provisions appear to be in place to promote old-growth forest habitats, the proposed RMP does not adequately provide for the management and recruitment of mature interior forest types. BLM's impact analysis indicates, "The condition of the commercial forest stands would improve over the long term because mature and overmature stands would be removed and replaced with younger, healthier stands." FEIS at 4-47 (note that impacts are the same for the Proposed Alternative, see 4-54). Furthermore, management for "forest health objectives" is expected to result, among other things, in "earlier seral plants and communities," (FEIS at 4-372), the antithesis of mature forests. We applaud BLM's commitment to maintain old growth stands where they occur in the RMPPA. FEIS at A19-20. The Desired Target Mosaic also appears to be appropriate given the historic range of variability for the RMPPA. FEIS at A19-18.

Interior forest species found in this region that are adversely affected by logging include cavity-nesting birds (Scott and Oldemeyer 1983), bole- and canopy-feeding birds (Franzreb and Ohmart 1978), red-breasted nuthatch and brown creeper (Chambers et al. 1999), American martens (Thompson 1994, Potvin and Breton 1997, Hargis and Bissonette 1997), mountain lions (Van Dyke et al. 1986), and northern goshawks (Crocker-Bedford 1990). Koehler (1990) suggested that logging (and in particular, clearcutting) interferes with lynx dispersal. Keller and Anderson (1992) found that brown creeper, red-breasted nuthatch, and hermit thrush declined in response to clearcutting on the nearby Medicine Bow National Forest; Mannan and Meslow (1984) found that these species and the golden-crowned kinglet were significantly more abundant in old-growth than in managed forests.

The decline of interior forest species leads directly to a forestwide decrease in species diversity. Although clearcuts may initially show small-scale increases in species diversity, logging has been shown to cause significant reductions in old-growth obligates such as red-backed voles (Sullivan et al. 1999). A similar relationship has been shown for birds (Rosenburg and Raphael 1986) and insects (Niemela et al. 1993). Hejl et al. (1995) reviewed the scientific literature and found that 11 species of forest birds were always less abundant in clearcut-logged forests. Thus, although on-site diversity may increase as edge-adapted and open-country species invade the forest, overall species diversity declines as interior forest species disappear altogether. Yet the FEIS contains no analysis of logging impacts on interior forest wildlife or old-growth obligate species, in violation of NEPA's 'hard look' requirements.

### **Prescribed Fire**

In response to concerns that livestock grazing be delayed following prescribed or natural fires to allow seedling establishment and minimize noxious weed invasion, BLM states, "While two years is the standard rest period post fire/burn, allowance must be made for longer or shorter periods. Determination of the length of rest is analyzed during the NEPA process for individual fires/burns. See Prescribed Fire Treatment Guidelines in Appendix 19 - Vegetation Treatments, Forest Practices, and Range Improvements - Design of Vegetation Treatments." DEIS Responses and Comments at Row 921. However, a guideline for delaying livestock use in burned areas does not occur in Appendix 19 (see FEIS at A19-2 through 3), and we cannot locate such provisions elsewhere in the FEIS. This provision should be explicitly added to the Final RMP as a standard practice in order to preclude major noxious weed impacts and long-term loss of vegetative productivity on burned sites.

### **Water Quality**

Mitigation measures sufficient to protect water quality for all surface waters in the planning area, but particularly for waters on the 303(d) list of impaired waters under the Clean Water Act, need to be developed. BLM notes that oil and gas activity is expected to be concentrated in the Colorado River and Great Divide Basins. FEIS at 4-421. BLM notes that "impacts to water resources from roads and pads can be long term and are not necessarily removed by BMPs or successful interim reclamation." FEIS at 4-421. For all alternatives, BLM notes, "The combined input from surface disturbing activities on a watershed scale would at some point and in some locations degrade water quality beyond the designated use of receiving waterbodies or contribute to the listing of 303d reaches." See, e.g., FEIS at 4-428, 4-438. The BLM has clearly failed to

develop reasonable alternatives that protect water quality in the context of oil and gas development. It is legally impermissible for BLM to contribute to the continued degradation of 303(d) waters as a result of permitted activities; prevention of further impairment is mandatory.

BLM notes that “fire retardants can cause short-term toxicity to the aquatic environments if applied on open water or in sufficient quantity.” FEIS at 4-417. With this in mind, a provision needs to be applied in all watersheds that bear BLM Sensitive fishes (including, but not limited to, Muddy Creek, other perennial tributaries of the Little Snake River, and certain Laramie Range streams) that aerial spraying of chemical fire retardants not be permitted in these watersheds under the new Rawlins RMP. This should be a nondiscretionary standard in the new RMP.

### **Drainage of Fluid Minerals**

From an environmental/wildlife/visual resources/public recreation perspective, the drainage of federal minerals through wells on adjacent state or private lands is a desirable outcome, preventing unnecessary impacts on public lands while allowing oil and gas – putatively needed to feed our national energy appetite – to be produced. We understand the BLM’s unwillingness to let federal minerals “escape” with no royalties to the federal treasury (see DEIS Comments and Responses at Row 1519) (although many citizens might argue that the benefits of the royalties are dwarfed by the value lost through impacts); unitization agreements allow state and fee wells to produce federal minerals through drainage while providing full federal mineral royalties, thus solving the problem without superfluous drilling on public lands.

### **Wildlife**

BLM bears the primary responsibility for managing wildlife habitats on BLM-managed federal lands within the RMPPA, and also bears the responsibility to ensure that BLM-permitted projects on BLM minerals comply with applicable law and regulations regarding the maintenance of wildlife habitat. Wildlife and fish are explicitly listed as multiple uses for which the BLM must manage its lands under FLPMA. 43 C.F.R. § 1702(c). In addition, for priority populations, species, or habitats of fish and wildlife, BLM must take the following actions:

Identify actions and areawide use restrictions needed to achieve desired population and habitat conditions while maintaining a thriving natural ecological balance and multiple-use relationships.

BLM Land Use Planning Handbook H-1601-1, Appendix C at 7. Under Standard 4 of the Wyoming Standards and Guidelines for Healthy Rangelands, adopted into this RMP as regulation,

Rangelands are capable of sustaining viable populations and a diversity of native plant and animal species appropriate to the habitat. Habitats that support or could support threatened species, endangered species, species of special concern, or sensitive species will be maintained or enhanced.

FEIS at A8-3. It is important to note that Healthy Rangeland standards apply not only to permitted livestock grazing activities, but also to oil and gas development and other BLM-permitted land uses. See, e.g., DEIS Comments and Responses at 2492, *and see* FEIS at 8-1. We are concerned that the BLM's proposed plan does not meet the requirements for many types of big game and BLM Sensitive Species in this regard, particularly the sage grouse, Columbian sharp-tailed grouse, sage sparrow, Brewer's sparrow, sage thrasher, pygmy rabbit and Wyoming pocket gopher.

For the Rawlins-to-Baggs geographic area, which supports a "higher than normal wildlife species richness" (FEIS at 3-98), the proposed plan would establish several special management areas. "However," BLM notes, "piecemeal protection of the higher value areas will not adequately protect all the wildlife species that use and depend on this area." FEIS at 3-99. BLM concedes that habitat fragmentation and associated species displacement will occur under all alternatives. FEIS at 4-453. BLM provides a synopsis of displacement distances from disturbance in Table 4-5. FEIS at 4-451. In sum, based on surface-disturbing activities, "Wildlife dependent on the affected habitats would be displaced, and populations would be reduced as carrying capacity of the range is reduced." FEIS at 4-533. Given the importance of this area, BLM should have developed at least one alternative that prevented the habitat fragmentation and wildlife displacement described above.

### ***Native Fishes***

Water depletions from permitted projects under the new RMP remain an unresolved concern. According to the U.S. Fish and Wildlife Service,

Federal agency actions resulting in water depletions to the Colorado River system may affect the endangered Bonytail (*Gila elegans*), Colorado pikeminnow (*Ptychocheilus lucius*), Humpback chub (*Gila cypha*), and Razorback sucker (*Xyrauchen texanus*) downstream in the Green and Colorado river systems. In addition, depletions may contribute to the destruction or adverse modification of designated critical habitat for these four species.

DEIS Comments and Responses at Row 2675. Yet BLM fails to provide mitigation measures under any alternative that would reduce or eliminate such water depletions. We are concerned that, in light of the fact that operators can resolve a jeopardy finding on Colorado River Endangered fishes with a mere cash payment and without altering the development that is causing jeopardy, that BLM does not recognize that it needs to require mitigation measure that prevent jeopardy for Endangered Species in the first place. BLM has full authority to explore and develop such measures, and should require them in the final RMP.

The road network required to support intensive oil and gas development also is projected to have a major negative impact of rare native fishes. In the upper Muddy Creek watershed, home to the best remaining assemblage of rare native fishes in the Field Office,

Impacts from transportation and access and the associated road network on fisheries would result from accelerated erosion throughout the area. This would

impact native fish habitat by increasing sediment delivery to the streams. Impacts to riparian function would also occur and reduce the availability of hard substrate (gravels, cobbles) required by many native fishes.

FEIS at 4-317. These are the impacts projected under all alternatives (*id.*, and see FEIS at 4-457), indicating that the BLM has failed to consider the implementation of mitigation measures sufficiently effective to prevent impacts to the roundtail chub, flannelmouth sucker, and bluehead sucker. This plan will therefore accelerate their slide toward Endangered Species listing, in violation of the policies set forth in BLM Handbook 6840.

***The FEIS Presents a Scientifically Unsound Analysis of Prohibitions on Predator Control***

Under Alternative 3, BLM considered a prohibition on predator control on federal lands within the RMPPA. BLM's impact analysis of this provision consists of 3 sentences:

Impacts from wildlife management actions would be similar to Alternative 1, except that prohibiting the United States Department of Agriculture (USDA) Wildlife Services from animal damage control activities would result in a reduction or elimination of sheep operations on public lands in 17 allotments because of unacceptable livestock loss due to predation. This would result in an inability to use between 20,000 and 30,000 AUMs for sheep, with limited potential to convert these AUMs to cattle use. There would also be an increase in the loss of cattle to predation, especially during calving.

FEIS at 4-80. This three-sentence analysis appears to be founded more in folklore than fact. First of all, it assumes that animal damage control activities actually decrease the rate of predation on domestic livestock. Coyotes are the primary (and only important) predators on livestock in the RMPPA, and their population dynamics are limited by territoriality and social structure: In each territorial pack, only the "alpha pair" breeds. Thus, predator control activities that kill the alpha pair release social controls on breeding, resulting in more than one breeding pair within the territory and often a net increase in coyotes. Furthermore, coyotes are prolific breeders, and readily increase output of young in response to population depletions due to predator control. For this reason, predator control efforts in the West are often "feel good" measures that placate livestock permittees without actually affecting predation rates. In the absence of scientifically credible evidence that animal damage control activities actually depress the rate of livestock losses to predation, it is arbitrary and capricious to conclude that a significant loss of AUMs for sheep (or cattle) would occur.

Secondly, BLM's assertion that conversion from sheep to cattle AUMs has "limited potential" in some way is also unsupported by any data or evidence. Cattle graze throughout the RMPPA, and we are unaware of any domestic sheep allotments that are unsuitable for cattle grazing. If any such allotments exist, BLM should have provided data to support their contention.

Because BLM's analysis of this proposed plan measure is faulty, the agency was unable to make a reasoned evaluation of whether it should be included in the final RMP.

## **Recreation**

BLM's adaptive management triggers address only impacts of recreation on other resources, but fail to address adaptive changes to be made when other permitted activities begin to have unacceptable impacts on recreation opportunities. FEIS at A17-5. Under FLMPA, BLM has an obligation to provide and maintain multiple uses, including recreation, on the public lands. This means providing adaptive management that protects recreation opportunities, and Action Triggers that address the loss or degradation of recreation resources.

### ***Continental Divide National Scenic Trail ("CDNST")***

Under all alternatives, areas within ¼ mile of the CDNST would be managed for oil and gas leasing under an NSO stipulation (FEIS at 2-44; lands beyond the quarter-mile buffer would receive no special protections. Clearly, oil and gas development that is within the viewshed of the trail but beyond the ¼ mile buffer would be allowed at industrial scales, impacting the recreational experience of travelers along the CDNST. BLM acknowledges this. Under 'Impacts Common to All Alternatives,' BLM states, "Development of oil and gas in or near the CDNST corridor would degrade the scenic quality along the trail resulting in a less desirable recreational experience for some people." FEIS at 4-157.

And while BLM states that oil and gas development is unlikely in this area (*id.*), it has been our experience that many areas of no recognized development potential have been the target of leasing and heavy industrial development in recent years. For example, the Jonah Field in western Wyoming, though to be uneconomic in the 1990s, has turned into the most heavily impacted gas field in Wyoming. Similarly, the Upper North Platte Valley areas surrounding the town of Encampment, rated by USGS as having low to no oil and gas potential, were nominated for a major lease offering in the December 2007 lease sale (these parcels were subsequently deferred by BLM). Thus, while oil and gas potential might be seen as negligible in the vicinity of the CDNST, advances in oil and gas recovery technology or new information revealed by geophysical surveys in the CDNST area (e.g., Hatfield seismic project, BLM 2005a) might make the CDNST area a target for heavy drilling activity at some point in the 20 year life of the Rawlins RMP. The BLM can therefore not afford to assume that the area is safe from oil and gas development, and bears the responsibility to take affirmative management action to protect the scenic resources of the CDNST.

In order to fulfill NEPA's range of reasonable alternatives requirements, the BLM needed to consider at least one alternative that protects the entire viewshed of the CDNST (at least BLM lands and minerals portions thereof) from industrialization. It is reasonable to expect the BLM to have developed and presented a GIS-based viewshed analysis of the CDNST in the FEIS; the agency's failure to undertake this analysis undercuts its ability to properly evaluate the magnitude of impacts to the viewshed of the CDNST, because it is unable to assess the proportion of scenic resources visible for the Trail that are protected by NSO or (conversely) open to industrial use. In this respect, the EIS violates NEPA's baseline information requirements.

The Western Heritage Alternative, endorsed by BCA and many other individuals and organizations, specifically provided for the protection of the viewshed of the CDNST and historic trails:

1. " Areas may be leased only under a No Surface Occupancy Stipulation with appropriate buffers to guarantee protection of the special resources in question, and will be excluded from surface development. Waivers may be granted for surface disturbances and developments *if* they will be completely invisible by line-of-sight from the site in question. These include:
  - a. " Lands within 5 miles of the Overland and Cherokee historic trails, the Continental Divide National Scenic trail, Native American Trails, or a site eligible for the National Register of Historic Places.

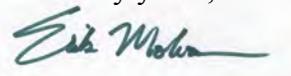
Attachment 42 at 98. Indeed, the visual horizon for most types of projects is three miles. FEIS at A5-8. BLM has never contended that such a provision would be 'unreasonable' as an alternative for consideration in the EIS, yet the agency failed to analyze its potential impacts (positive and negative) in any of the alternatives. The FEIS therefore violates NEPA's 'range of reasonable alternatives' requirements. In addition, the CDNST SRMA should have been considered for withdrawal from other leasable and locatable mineral entry; it was not, leaving the Trail open to impacts from this source of industrial use. FEIS at 4-160. In light of the boom in uranium prospecting and mining claims, this reasonable measure should have been considered, and should be implemented in the final Plan.

#### **CONCLUSIONS AND REQUEST FOR RELIEF**

For the foregoing reasons, the protesting parties have protested the following provisions in the FEIS on the bases stated above. As indicated, these decisions are wrong for the reasons stated in the full text of this protest, generally because the decisions would be based on the faulty NEPA and FLPMA compliance noted, and because the decisions would be based on analyses and actions that violate the other legal requirements identified above in the full text of the protest. Because of the flaws identified above, provisions contrary to the law cannot be adopted. Furthermore, since the specifically protested provisions noted above are based on and depend on the faulty analyses and conclusions identified throughout the FEIS, the entire Casper RMP FEIS is subject to protest pursuant to 43 C.F.R. § 1610.5-2, and is in fact protested by the parties.

To correct these problems the Protestors request that BLM supplement the FEIS and/or issue a notice of significant change. Until BLM has an approved ROD for the Rawlins planning area it must refrain from taking any action in the planning area not authorized by the Great Divide RMP ROD.

Sincerely yours,



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*signing on behalf of*

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