September 2, 2008

Director (210)
Attention: Brenda Williams
P.O. Box 66538
Washington, D.C. 20035

Sent via U.S. Post, Certified Mail with Return Receipt Requested

Re: Protest of the Moab Field Office Proposed Resource Management Plan and Final Environmental Impact Statement, released August 2008

To Ms. Williams:

Please accept this timely protest of the Bureau of Land Management's Moab Field Office Proposed Resource Management Plan and Final Environmental Impact Statement (PRMP). This protest is submitted by the following protestants:

Southern Utah Wilderness Alliance
(SUWA)
425 East 100 South
Salt Lake City, Utah 84111
(801) 486-3161

The Wilderness Society (TWS)
1660 Wynkoop St., Suite 850
Denver, Colorado 80202
(303) 650-5818

Grand Canyon Trust
HC 64 Box 1801
Moab, Utah 84532-9610
(435) 259-5284

Sierra Club – Utah Chapter
2159 South 700 East, Suite 210
Salt Lake City, Utah 84106
(801) 467-9297

Public Employees for Environmental
Responsibility (PEER) – Southwest Chapter
738 N. 5th Ave., Suite 210
Tucson, Arizona 85705
(520) 906-2159

Center for Native Ecosystems
1536 Wynkoop St., Suite 303
Denver, Colorado 80202
(303) 546-0214

Glen Canyon Institute
1520 Sunnydale Lane
Salt Lake City, Utah 84108
(801) 363-4450

Red Rock Forests
90 West Center Street
Moab, Utah 84532
(435) 259-5640

Great Old Broads for Wilderness
649 E. College Drive
Durango, Colorado 81302
(970) 385-9577

SUWA and TWS have a long-standing interest in the management of Bureau of Land Management (BLM) lands in Utah and often participate in the decision-making process for project proposals and actions that could potentially affect lands included in the Utah Wilderness Coalition's wilderness proposal—America's Red Rock Wilderness Act (ARRWA). SUWA members and staff enjoy a myriad of recreation on BLM-managed public lands, including hiking, biking, nature-viewing, photography, and the quiet contemplation in the solitude offered by wild places. SUWA and TWS have and will continue to participate in the planning process for the Moab PRMP. *See, e.g.,* SUWA's comments to the Draft RMP (attached as Exhibit A[1]). The additional co-protestants also have interests in BLM's management of the Moab area and have also participated in the planning process for the Moab PRMP.[2]

We are protesting several different issues and aspects of the PRMP; these issues are listed below along with the location of these discussions in this document. Our discussion of each of these issues concisely states why we believe the State Director's decisions are wrong and the corresponding portions of the PRMP at issue.

[1] The attachments and exhibits originally submitted with SUWA's comments to the Draft RMP are not attached here as hard copies, but are included on the accompanying CD, and were submitted along with SUWA's comments to the Draft RMP on January 10, 2008.

[2] In addition, Grand Canyon Trust protests the fact that it submitted timely comments on the Draft RMP, however, BLM did not provide a response to the issues raised as required under NEPA. 40 C.F.R. § 1503.4. When asked about this omission, BLM admitted to overlooking the comments. BLM must remedy this error by responding to the comments and providing the opportunity for Grand Canyon Trust to review and protest any response.

I. Applicable 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 and will refer to and/or rely upon the information set out below.

A. National Environmental Policy Act

The National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 *et seq*., requires, among other things, agencies to conduct environmental analysis of the direct, indirect, and cumulative impacts of proposed actions, as well as mitigation measures, consider a range of reasonable alternatives (including an alternative that minimizes environmental impacts), and solicit and respond to public comments.

1. Reasonable Range of Alternatives Must Be Considered

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), 1508.25(c). "An agency must look at every reasonable alternative, with the range dictated by the nature and scope of the proposed action." Nw. Envtl. Defense Center v. Bonneville Power Admin., 117 F.3d 1520, 1538 (9th Cir. 1997). 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 (9th 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 1094,1122–23 (9th Cir. 2002) (and cases cited therein). For this PRMP, the consideration of more environmentally protective alternatives is also consistent with the Federal Land Policy and Management Act's (FLPMA) requirement that BLM "minimize adverse impacts on the natural, environmental, scientific, cultural, and other resources and values (including fish and wildlife habitat) of the public lands involved." 43 U.S.C. §1732(d)(2)(a).

NEPA requires that an actual "range" of alternatives is considered, such that the Act will "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)." Col. Envtl. Coal. v. Dombeck, 185 F.3d 1162, 1174 (10th Cir. 1999), citing Simmons v. U.S. Corps of Engineers, 120 F.3d 664, 669 (7th Cir. 1997). This requirement prevents the environmental impact statement (EIS) from becoming "a foreordained formality." City of New York v. Dep't of Transp., 715 F.2d 732, 743 (2nd Cir. 1983). *See also* Davis v. Mineta, 302 F.3d 1104 (10th Cir. 2002).

2. Hard Look Must Be Appropriate to Proposed Action and Include Direct, Indirect, and Cumulative Impacts

NEPA dictates that BLM take a "hard look" at the environmental consequences of a proposed action and the requisite environmental analysis "must be appropriate to the action in question."

Metcalf v. Daley, 214 F.3d 1135, 1151 (9th Cir. 2000); Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 348 (1989). In order to take the "hard look" required by NEPA, BLM is required to assess impacts and effects that include: "ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, **whether direct, indirect, or cumulative**." 40 C.F.R. § 1508.8. (emphasis added). NEPA regulations define "cumulative impact" as:

> the impact on the environment which results from the **incremental impact of the action when added to other past, present, and reasonably foreseeable future actions** regardless of what agency (Federal or non-Federal) or person undertakes such other actions. **Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time**.

40 C.F.R. § 1508.7 (emphasis added).

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

3. Baseline Information Must Be Sufficient to Permit Analysis of Impacts

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 (9th 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 "[t]he 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."

4. Mitigation Measures Must Be Described with Specificity and Must Include Commitments for Action

NEPA requires that BLM discuss mitigation measures in an EIS. 40 C.F.R. §§ 1502.14, 1502.16. Also, under NEPA, BLM's Finding of No Significant Impact (FONSI) is lawful only if "BLM has made a convincing case that no significant impact will result therefrom or that any such impact will be reduced to insignificance by the adoption of appropriate mitigation measures." *Defenders of Wildlife*, 152 IBLA 1, 6 (2000) (citations omitted). In general, in order to show that mitigation will reduce environmental impacts to an insignificant level, BLM must

discuss the mitigation measures "in sufficient detail to ensure that environmental consequences have been fairly evaluated." Communities, Inc. v. Busey, 956 F.2d 619, 626 (6th Cir. 1992). Simply identifying mitigation measures, without analyzing the effectiveness of the measures, violates NEPA. Agencies must "analyze the mitigation measures in detail [and] explain how effective the measures would be . . . A mere listing of mitigation measures is insufficient to qualify as the reasoned discussion required by NEPA." Nw. Indian Cemetery Protective Ass'n v. Peterson, 764 F.2d 581, 588 (9th Cir. 1985), *rev'd on other grounds*, 485 U.S. 439 (1988). NEPA also directs that the "possibility of mitigation" should not be relied upon as a means to avoid further environmental analysis. Council on Environmental Quality, *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*, *available at* http://ceq.hss.doe.gov/nepa/regs/40/40p3.htm; Davis v. Mineta, 302 F.3d 1104, 1125 (10th Cir. 2002).

Further, general statements that BLM will conduct monitoring are also not an appropriate form of mitigation. Simply monitoring for expected damage does not actually reduce or alleviate any impacts.

5. BLM Must Assess Alternatives Using Quality Data and Scientifically Acceptable Methods of Analysis, Which Are Disclosed to the Public for Comment

BLM cannot evaluate consequences to the environment, determine avoidable or excessive degradation, and assess how best to designate and protect Areas of Critical Environmental Concern (ACECs) without adequate data and analysis. NEPA's hard look at environmental consequences must be based on "accurate scientific information" of "high quality." 40 C.F.R. § 1500.1(b). Essentially, NEPA "ensures that the agency, in reaching its decision, will have available and will carefully consider detailed information concerning significant environmental impacts." Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989). The Data Quality Act and BLM's interpreting guidance expand on this obligation, requiring that influential scientific information use "best available science and supporting studies conducted in accordance with sound and objective scientific practices." Treasury and General Government Appropriations Act for Fiscal Year 2001, Pub.L. No. 106-554, § 515. *See also* Bureau of Land Management, Information Quality Guidelines, *available at* http://www.blm.gov/nhp/efoia/data_quality/guidelines.pdf.

BLM's internal guidance also recognizes the importance of accumulation and proper analysis of data. The agency's Land Use Planning Handbook emphasizes the importance of using sufficient, high quality data and analytical methods, and making those available to the public. Appendix H of the Land Use Planning Handbook also directs: "The data and resultant information for a land use plan must be carefully managed, documented, and applied to withstand public, scientific, and legal scrutiny." Appendix F-1 of the Handbook emphasizes the importance of providing a clear explanation of how analysis was conducted, stating: "Regardless of its source, sufficient metadata (data about data) should be provided to clearly determine the quality of the data, along with any limitations associated with its use." In other words, appropriate analysis of data is as important as the accumulation of sufficient data.

Further, both data and analyses must be disclosed to the public, in order to permit the "public scrutiny" that is considered "essential to implementing NEPA." 40 C.F.R. § 1500.1(b). BLM's guidelines for implementing the Data Quality Act also reiterate that making data and methods available to the public permits independent reanalysis by qualified member of the public. In this regard, NEPA "guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision." *Robertson v. Methow Valley Citizens Council*, 490 U.S. at 349. NEPA not only requires that BLM have detailed information on significant environmental impacts, but also requires that the agency make this information available to the public for comment. Inland Empire Public Lands Council v. U.S. Forest Service, 88 F.3d 754, 757 (9th Cir. 1996).

Where there is scientific uncertainty, NEPA imposes three mandatory obligations on BLM: 1) a duty to disclose the scientific uncertainty; 2) a duty to complete independent research and gather information if no adequate information exists unless the costs are exorbitant or the means of obtaining the information are not known; and 3) a duty to evaluate the potential, reasonably foreseeable impacts in the absence of relevant information, using a four-step process. Unless the costs are exorbitant or the means of obtaining the information are not known, the agency must gather the information in studies or research. 40 C.F.R. § 1502.22. Courts have upheld these requirements, stating that the detailed environmental analysis must "utiliz[e] public comment and the best available scientific information." Col. Envtl. Coal. v. Dombeck, 185 F.3d 1162, 1171–72 (10th Cir. 1999) (citing *Robertson v. Methow Valley Citizens Council*, 490 U.S. at 350); Holy Cross Wilderness Fund v. Madigan, 960 F.2d 1515, 1521–22 (10th Cir. 1992).

As the Supreme Court has explained, while "policymaking in a complex society must account for uncertainty," it is not "sufficient for an agency to merely recite the terms 'substantial uncertainty' as a justification for its actions." Motor Vehicle Manufacturers Ass'n v. State Farm Mutual Automobile Ins. Co., 463 U.S. 29, 52 (1983). Instead, in this context, as in all other aspects of agency decision making, "[w]hen the facts are uncertain," an agency decision maker must, in making a decision, "identify the considerations he found persuasive." Small Refiner Lead Phase-Down Task Force v. EPA, 705 F.2d 506, 520 (D.C. Cir. 1983), *quoting* Ind. Union Dept., AFL-CIO v. Hodgson, 499 F.2d 467, 476 (D.C. Cir. 1974).

BLM must provide the public with an explanation of both the data used in analyzing the potential effects of management alternatives and the methods used to conduct the analysis, as well as an opportunity to provide comments and propose corrections or improvements.

6. BLM Must Respond to Public Comments and Specifically Address Scientific Uncertainty and/or Differing Scientific Opinions

Under Council for Environmental Quality (CEQ) regulations implementing NEPA, BLM must respond to substantive comments made during the public comment period for the EIS. 40 C.F.R. § 1503.4. 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.

NEPA requires that, in preparing a final EIS, BLM must discuss "any responsible opposing view which was not adequately discussed in the draft statement and indicate the agency's response to the issue raised." 40 C.F.R. § 1502.9. The Council on Environmental Quality interprets this requirement as mandating that an agency respond in a "substantive and meaningful way" to a comment that addresses the adequacy of analysis performed by the agency. Council on Environmental Quality, *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*, *available at* http://ceq.hss.doe.gov/nepa/regs/40/40p3.htm.[3] BLM's NEPA Handbook elaborates upon this requirement, providing that: comments relating to inadequacies or inaccuracies in the analysis or methodologies used must be addressed; interpretations of analyses should be based on professional expertise; and where there is disagreement within a professional discipline, "a careful review of the various interpretations is warranted." Handbook H-1790-1, Section V.B.4.a., p. V-11.

Failure to disclose and thoroughly respond to differing scientific views violates NEPA and obligates an agency to perform a compliant environmental analysis prior to approving a proposed action. *See Robertson v. Methow Valley Citizens Council*, 490 U.S. 332 (1989) (EIS should reflect critical views of others to whom copies of the draft were provided and respond to opposing views); Sierra Club v. Bosworth, 199 F.Supp.2d 971 (N.D.Cal. 2002) (failure to disclose and analyze scientific opinion that opposed post-fire logging violates NEPA); Seattle Audubon Society v. Lyons, 871 F.Supp. 1291, 1381 (W.D.Wash. 1994) (an EIS must "disclose scientific opinion in opposition to the proposed action, and make a good faith, reasoned response to it"); Seattle Audubon Society v. Moseley, 798 F.Supp. 1473, 1482 (W.D.Wash. 1992) (NEPA requires that the agency candidly disclose in its EIS the risks of its proposed action and that it respond to the adverse opinions held by respected scientists.).

Further, as discussed above, where there is scientific uncertainty, BLM cannot simply dismiss opposing scientific opinion and authority, but must provide a discussion of the support for its decision not to rely upon it. Accordingly, BLM must complete a conforming NEPA analysis that fully considers and responds to public comments, including opposing scientific opinion, and justifies any contradicting conclusions.

[3] The U.S. Court of Appeals for the Tenth Circuit has found that the "Forty Questions" are "persuasive authority offering interpretive guidance" on NEPA from CEQ. Davis v. Mineta, 302 F.3d 1104, 1125 (10th Cir. 2002).

B. Federal Land Policy and Management Act

The Federal Land Policy and Management Act (FLPMA), 43 U.S.C. § 1701 *et seq*., is BLM's organic act and guides the agency in managing public lands, drafting land use plans, and ensuring that the public has been involved in such decisions.

1. Duty to Inventory and Land Use Planning Requirements

FLPMA imposes a duty on BLM to identify and protect the many natural resources found on public lands. FLPMA requires BLM to inventory its lands and their resources and values, "including outdoor recreation and scenic values." 43 U.S.C. § 1711(a). FLPMA also obligates BLM to take this inventory into account when preparing land use plans, using and observing the principles of multiple use and sustained yield. *See* 43 U.S.C. § 1712(c)(4), (1). Through management plans, BLM can and should protect wildlife, scenic values, recreation opportunities, and wilderness character in the public lands through various management decisions, including by excluding or limiting certain uses of the public lands. *See* 43 U.S.C. § 1712(e). This is necessary and consistent with FLPMA's definition of multiple use, which identifies the importance of various aspects of wilderness characteristics (such as recreation, wildlife, and natural scenic values) and requires BLM's consideration of the relative values of these resources but "not necessarily to the combination of uses that will give the greatest economic return." 43 U.S.C. § 1702(c).

BLM's obligations in developing a land use plan include: applying principles of multiple use and sustained yield, prioritizing designation and protection for ACECs, considering the relative scarcity of values involved and the availability of alternative means and sites for realization of those values, weighing long-term benefits against short-term benefits to the public, and complying with pollution control laws.

2. Unnecessary or Undue Degradation Standard

FLPMA requires that: "In managing the public lands the [Secretary of Interior] shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands." 43 U.S.C. § 1732(b). In this context, because the imperative language "shall" is used, "Congress [leaves] the Secretary no discretion" in how to administer FLPMA. Natural Resources Def. Council v. Jamison, 815 F.Supp. 454, 468 (D.D.C. 1992). BLM's duty to prevent unnecessary or undue degradation (UUD) under FLPMA is mandatory, and BLM must, at a minimum, demonstrate compliance with the UUD standard. *See* Sierra Club v. Hodel, 848 F.2d 1068, 1075 (10th Cir. 1988) (the UUD standards provides the "law to apply" and "imposes a definite standard on the BLM").

C. Off-Road Vehicle Regulations and Executive Orders

BLM must ensure that it is in compliance with Executive Orders and agency regulations implementing these Orders in relation to off-road vehicle (ORV) use on public lands. Executive Order 11644 (1972) as amended by Executive Order 11989 (1977) and BLM's regulations (43 C.F.R. § 8342.1) require BLM to ensure that areas and trails for off-road vehicle use are located:

- to minimize damage to soil, watershed, vegetation, air, or other resources of the public lands, and to prevent impairment of wilderness suitability;
- to minimize harassment of wildlife or significant disruption of wildlife habitats, and especially for protection of endangered or threatened species and their habitats;
- to minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands; and
- outside officially designated wilderness areas or primitive areas and in natural areas only if the agency determines that off-road vehicle use will not adversely affect their natural, aesthetic, scenic, or other values for which such areas are established.

These Executive Orders put the burden of proof on BLM to ensure that sensitive and protected conservation lands are not harmed by ORV use. Under these directives, BLM should start from the position of evaluating all uses of lands that may harm or conflict with the values mentioned above as closed to ORV use. The next step is to take a hard look at a reasonable range of alternatives under NEPA with adequate consideration of public input. BLM should provide ample evidence to show how they have located ORV areas and trails to minimize harm, or otherwise keep these areas closed to ORV use. Only after such deliberation has occurred can the agency sufficiently state that they have complied with their legal obligations in deciding how to designate certain ORV management areas.

D. National Historic Preservation Act

BLM has special stewardship responsibilities with respect to cultural resources on land that is under the agency's "jurisdiction or control" under the National Historic Preservation Act (NHPA), 16 U.S.C. § 470 *et seq*. A federal "undertaking" triggers the Section 106 process under NHPA, which requires the lead agency to identify historic properties affected by the action and to develop measures to avoid, minimize, or mitigate any adverse effects on historic properties. 16 U.S.C. § 470f; 36 C.F.R. §§ 800.4, 800.6. Because the drafting of a land use plan is an "undertaking," Section 106 review must occur prior to approving the plan in the record of decision.

The NHPA stipulates that consultation among agency official(s) and other parties with an interest in the effects of the undertaking on historic properties commence at the early stages of project planning, focusing on the opportunity to consider a broad range of alternatives. 36 C.F.R. § 800.1(c). Compliance with Section 106 is applicable "at *any stage* where the Federal agency has authority . . . to provide meaningful review of . . . historic preservation goals." Morris County Trust for Historic Preservation v. Pierce, 714 F.2d 271, 280 (3d Cir. 1983) (emphasis added); Vieux Carre Property Owners v. Brown, 948 F.2d 1436, 1444–45 (5th Cir. 1991). Therefore, the agencies cannot rely on later review process as a justification for refusing to comply with the NHPA.

To satisfy the Section 106 compliance requirement, the Responsible Agency Official must consult with the State Historic Preservation Officer(s) (SHPO) and appropriate Tribes and/or

Tribal Historic Preservation Officer(s) (THPO). In addition, Section 106 regulations require BLM to "make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey." 36 C.F.R. § 800.4(b)(1). As part of this duty, BLM must account for information communicated to it by parties expressing an interest in historic properties affected by the undertaking. Pueblo of Sandia v. United States, 50 F.3d 856, 860–61 (10th Cir. 1995).

Section 110 of the NHPA obligates agencies to identify sites that may be eligible for listing on the National Register. BLM should analyze the information obtained to identify eligible sites and commit to or require commitments for further inventory and submissions of proposals for listing. BLM should maximize the opportunity to obtain and use information on cultural resources to fulfill its obligations under the NHPA and increase our knowledge and protection of our cultural heritage.

E. Endangered Species Act

Congress enacted the Endangered Species Act (ESA) as "a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." 16 U.S.C. § 1531(b). As the Supreme Court observed, the statute "afford[s] endangered species the highest of priorities." Tenn. Valley Authority v. Hill, 437 U.S. 153, 194 (1978). To achieve its objectives, Congress directed the U.S. Fish and Wildlife Service (FWS) to list species that are "threatened" or "endangered," as defined by the ESA. 16 U.S.C. §§ 1533, 1532(6) & (20).

Once a species is listed, Section 7 of the ESA mandates that every federal agency "consult" with FWS or the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (collectively referred to as FWS) when taking any action that "may affect" listed species." 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(a). *See also* Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv., 422 F.3d 782, 790 (9th Cir. 2005). The purpose of the Section 7 consultation process is to insure that no agency actions "jeopardize the continued existence" of a listed species. *Id.* To facilitate the consultation process, the "action agency" prepares a "biological assessment," which identifies the listed species in the action area and evaluates the proposed action's effect on the species. 16 U.S.C. § 1536(c); 50 C.F.R. §§ 402.02, 402.12. The ESA defines agency action broadly. 16 U.S.C. § 1536(a)(2). *See also* Lane County Audubon Soc'y v. Jamison, 958 F.2d 290, 294 (9th Cir. 1992). It includes "*all* activities or programs *of any kind* authorized, funded, or carried out, in whole or in part, by Federal agencies." 50 C.F.R. § 402.02 (emphasis added). Agency actions include those "actions directly or indirectly causing modifications to the land, water, or air." 50 C.F.R. § 402.02.

Through a biological assessment, the agency determines whether formal or informal consultation is necessary. 50 C.F.R. § 402.13(a). When formal consultation is necessary, FWS prepares a "biological opinion" that determines whether the agency's action will result in jeopardy to the species. 16 U.S.C. § 1536(b)(3)(A); 50 C.F.R. § 402.14(g). If there is jeopardy, FWS sets forth "reasonable and prudent alternatives" aimed at avoiding jeopardy. 16 U.S.C. § 1536(b)(3)(A). If there is no jeopardy, FWS identifies the reasonable and prudent mitigation measures. 16 U.S.C. § 1536(b)(4).

Moreover, all federal agencies are obligated to conserve listed species by "carrying out programs for the conservation of endangered species and threatened species." 16 U.S.C. § 1536(a)(1). Under the ESA, "conserve" is defined as recovering a species. Therefore, the agencies are not only obligated to avoid jeopardizing the survival and recovery of listed species, but are also required to take steps within its purview to recover these species. 16 U.S.C. § 1532(3) (definition of "conserve").

F. Clean Air Act and Clean Water Act

FLPMA and its implementing regulations—along with the applicable land use plans—require that BLM comply with all federal, state, and local environmental laws. *See* 43 U.S.C. § 1712(c)(8); 43 C.F.R. §§ 1610.3-2, 2920.7(b)(3). BLM is obligated, by FLPMA to comply with the environmental standards established in the Clean Air Act, 42 U.S.C. §§ 7401, *et seq*., and the Clean Water Act, 33 U.S.C. §§ 1251, *et seq*. This means, for example, that BLM may not permit development that will result in exceedances of national ambient air quality standards, prevention of significant deterioration increment limits, air quality related values, and standards for hazardous air pollutants. BLM must conduct a full-scale quantitative analysis of the air quality impacts in the planning area and model these impacts. BLM must also model impacts to water quality and ensure that national and state standards will not be exceeded.

II. Air Quality

As an initial matter, the Moab PRMP has completely ignored and failed to respond to SUWA's air quality comments submitted on the Draft RMP. That being the case, SUWA now reiterates everything that it stated previously and specifically incorporates both its comments and those prepared by Ms. Megan Williams and submitted on SUWA's behalf regarding air quality issues in the Moab DRMP. BLM never acknowledged or responded to any of these comments. Ms. Williams advised BLM that in order to understand the impacts of the activities that it was permitting in the Moab RMP it would need to rectify certain inadequacies in its air quality analysis. These comments included a recommendation that BLM prepare a full-fledged, comprehensive quantitative analysis; acknowledge and quantify background concentrations of pollutants in the planning area; analyze whether the activities permitted in the Moab RMP would lead to a significant deterioration of air quality; prepare a more comprehensive inventory and then perform dispersion modeling to understand impacts; and include plans for protecting and restoring air quality in the region. Ms. Williams also pointed out numerous additional details and flaws that would need repair in the RMP so that BLM could understand the impacts of the activities that it was permitting. BLM must take all of these steps.

The Moab PRMP also ignores information submitted by SUWA in a June 18, 2008 comment letter providing useful methods for preparing an inventory of emissions and fugitive dust generated by off-road vehicle travel on routes designated in the Moab PRMP. SUWA now reiterates those comments.

The Moab PRMP fails to model the impacts of the activities that it permits on air quality in the planning area. Both NEPA and FLPMA require that BLM prepare such analysis. Without preparing near-field, far-field, and cumulative air quality analyses BLM will not understand the effects of the pollutants that it has attempted to partially inventory in the Moab PRMP, thereby violating NEPA and its requirement that BLM understand the environmental impacts of the activities it is permitting. In addition, BLM must model pollution concentrations in order to understand if this plan will comply with federal and state air quality standards, as required by FLPMA.

FLPMA and the Moab PRMP require that BLM manage the planning area according to federal and state air quality standards. *See* Moab PRMP at 2-3; 43 C.F.R. § 2920.7(b)(3) (requiring that BLM "land use authorizations shall contain terms and conditions which shall . . . [r]equire compliance with *air . . . quality standards* established pursuant to applicable Federal or State law") (emphasis added). *See also* 43 U.S.C. § 1712(c)(8) (requiring BLM in land use plans—which would therefore require implementation in daily management—to "provide for compliance with applicable pollution control laws, including State and Federal air . . . pollution standards or implementation plans"). These air quality standards include both the national ambient air quality standards (NAAQS) and the prevention of significant deterioration (PSD) increment limits. Both the State and Federal standards are based on ambient concentrations of various air pollutants. For this reason, the Moab PRMP has failed to satisfy its FLPMA obligation: it permits activities (e.g. oil and gas development, route designation, vehicle travel on designated routes, mining) without modeling the effect that these activities will have on ambient *concentrations* of NAAQS and PSD pollutants.

Not only has BLM has prepared an incomplete emissions inventory for the Moab PRMP, but it has also failed to conduct modeling that analyzes the likely concentrations of pollutants that will result. *See, e.g.,* Moab PRMP at 4-17 to -33 (predicting likely quantities in tons per year or grams per second—not ambient concentrations—of various pollutants that will result from plan implementation). As discussed below, the Moab PRMP emissions inventory suffers from a number of flaws that have led to underestimates for various pollutants. With such flaws the emissions inventory cannot be used to accurately quantify and model pollutant concentrations in the planning area. Furthermore, even if the emissions inventory were accurate, it does not inform BLM and the public as to what the resulting pollution concentrations will be for the pollutants relevant to NAAQS and the PSD increments. The emissions inventory does not include any inventories or modeling for NAAQS criteria pollutants likely to be generated by the use of motorized vehicles on designated routes in the planning area. The use of these vehicles on designated routes and in areas open to cross country travel will generate emissions from the vehicle engines and from fugitive dust. BLM must quantify these emissions in order to fully understand their likely impact on air quality in the planning area.

Notably, BLM has prepared inventories for HAPs and NAAQS criteria pollutants, and precursors, likely to be generated by oil and gas development activities in the planning area. *See, e.g.,* Moab PRMP at 4-22 to -23. However, BLM has failed to prepare such inventories for the use of motorized vehicles on the extensive and sizeable network of routes identified for travel in the Moab PRMP. In addition, the Moab PRMP and its inventory do not discuss or examine PSD increment limits (particulate matter, nitrogen oxides, carbon monoxide, sulfur dioxide). These federal air quality standards are also the State of Utah's air quality standards. Thus, there is no evidence, certainty, or indication that the Moab PRMP will comply with federal and state air quality standards as NEPA and FLPMA require.

NEPA also requires that BLM model the impacts from the various activities—and fully inventory the pollutants generated by these activities—permitted by the Moab PRMP. "NEPA 'prescribes the necessary process' by which federal agencies must 'take a "hard look" at the environmental consequences' of the proposed courses of action." Pennaco Energy, Inc. v. U.S. Dep't of the Interior, 377 F.3d 1147, 1150 (10th Cir. 2004) (quoting Utahns for Better Transp. v. U.S. Dep't of Transp., 305 F.3d 1152, 1162–63 (10th Cir. 2002)) (internal citation omitted). The fundamental objective of NEPA is to ensure that that an "agency will not act on incomplete information only to regret its decision after it is too late to correct." Marsh v. Or. Natural Resources Council, 490 U.S. 360, 371 (1990) (citation omitted). Without preparing modeling to determine what the ambient concentrations of NAAQS- and PSD-regulated pollutants will be, BLM cannot understand or disclose the impacts of these pollutants on humans, wildlife, vegetation, water bodies, or climate. Since it is actual ambient concentrations that will impact these various components of the ecosystem, BLM must model concentrations to understand these impacts. BLM's deficient emissions inventory does not satisfy NEPA's hard look requirement.

The emissions inventory prepared for the Moab PRMP suffers from numerous deficiencies. SUWA detailed the important contributors to air pollution likely to result from the activities authorized in the PRMP, the proper methodology for quantifying those emissions, and the necessary modeling to fully understand the impacts of those emissions in its expert's November

29, 2007 comment letter on the Draft RMP and in its June 18, 2008 supplemental comments—neither of which are dealt with or acknowledged in the Moab PRMP.

As mentioned above, BLM has failed to inventory the particulate matter pollution, differentiated for particulate matter 2.5 microns in diameter or smaller ($PM_{2.5}$) and for particulate matter ten microns in diameter or smaller (PM_{10}), which will be generated by fugitive dust. The existence of designated routes and travel of automobiles and ORVs on designated routes and in open cross-country travel areas will generate significant amounts of fugitive dust which will negatively affect air quality in the region. The Moab PRMP and its air quality emissions inventory have completely failed to consider such emissions. The Richfield Field Office Proposed Resource Management Plan and Final Environmental Impact Statement (August 2008) (Richfield PRMP) acknowledges that ORVs are significant contributors of fugitive dust. *See, e.g.,* Richfield PRMP at 4-6, 4-9, 4-11. The Kanab Field Office Proposed Resource Management Plan and Final Environmental Impact Statement (August 2008) (Kanab PRMP) also attempts to quantify at least some of the engine emissions expected from ORV use in the planning area. *See, e.g.*, Kanab PRMP at 4-7 to -11. SUWA alerted Moab BLM to the importance of such quantification and modeling in its November 29, 2007 comments. To further guide BLM in how such quantification and modeling could be conducted, SUWA sent a letter on June 18, 2008 with examples of air quality modeling for fugitive dust from vehicular travel on unpaved roads. This modeling was conducted for the West Tavaputs Plateau Natural Gas Full Field Development Plan, Draft Environmental Impact Statement, UT-070-05-055 (Feb. 2008) (West Tavaputs DEIS), and the Enduring Resources' Saddletree Draw Leasing and Rock House Development Proposal, Final Environmental Assessment UT-080-07-671 (Dec. 2007) (Rock House EA). In both cases, BLM itself attempted to estimate fugitive dust emissions from the passage of vehicles on unpaved roads. Furthermore, it then modeled these emissions to arrive at predicted ambient concentrations of various pollutants. The Moab PRMP contains no such analysis; this quantification and modeling must be conducted in order to understand where BLM's plans will comply with federal and state air quality standards and to know what impact they may have on human health, wildlife, vegetation, water bodies, and climate.

The models for these other projects demonstrate that fugitive dust from vehicular travel on unpaved roads can create significant levels of ambient pollution. As SUWA explained in its June 18, 2008 comments, the levels of $PM_{2.5}$ predicted in the Rock House EA *alone* were so high that they exceeded NAAQS. It is likely that most of the predicted $PM_{2.5}$ was the result of fugitive dust generated by vehicular traffic. Furthermore, dirt roads and ORV routes may generate fugitive dust even when not being traveled by vehicles (e.g., wind blown dust). Thus, it is vital that the Moab PRMP quantify all of the routes that it is designating, estimate the rate at which they will generate fugitive dust when not being traveled by vehicles, estimate the number of vehicles that will use each route and the likely fugitive dust generation rate, and then model those figures to understand the true impacts of fugitive dust emissions.

These necessary preparations and background data highlight the inadequacies of the Moab PRMP's emissions inventory in its current form. Aside from failing to analyze the fugitive dust generated by routes and ORVs and other vehicles that will travel on the routes identified in this plan, the Moab PRMP has failed to inventory engine emissions (e.g., sulfur dioxide, nitrogen

oxides, ozone precursors) that will be generated by these machines. Without this information these pollutants cannot be modeled.

BLM must actually estimate the number of vehicles that will travel these routes and the number and mileage of routes that will be open so that it can correctly inventory the fugitive dust that is likely to result. If every unpaved route identified in the Moab PRMP were closed, and subsequently the soil stabilized, there would be much less fugitive dust than is now likely to result from the plan. If only one or two unpaved routes were open to vehicular travel in the entire planning area the fugitive dust generated by these roads would likely be much less than the fugitive dust that will be generated by the thousands of miles of designated routes that are proposed for vehicular traffic in the Moab PRMP. It is therefore likely that fugitive dust levels are related to mileage of routes open, for this reason the air quality modeling in the Rock House EA and the West Tavaputs DEIS calculate particulate matter pollution from fugitive dust as a function of miles traveled on unpaved roads. BLM must improve the Moab PRMP by including a comprehensive inventory of fugitive dust generated by designated routes (both when being traveled by vehicles and as a result of wind erosion) and the engine emissions generated by the vehicles traipsing these routes.

The Moab PRMP has performed some fugitive dust calculations for vehicle travel related to the construction and servicing of oil and gas wells. *See* Calculations of Projected Air Emissions within the Moab Planning Area, "Fug Dust Assumptions" Tab, http://www.blm.gov/ut/st/en/fo/moab/planning/final_rmp_eis.html. It must do the same for ORVs and other vehicles that will be traveling on designated routes and in areas open to cross country travel. Recent surveying by BLM demonstrates that large numbers of people visiting the planning area use motorized trails and designated ORV areas. *See* BLM, National Visitor Use Monitoring Results for Moab Field Office 4, 14 (Dec. 2007) (listing visitation figures and percentage of people who used particular facilities). BLM should also apply this to any activity that will cause fugitive dust (e.g., mining, grazing) in order to estimate total dust emissions. This information is necessary for understanding the likely contributions to regional climate change caused by this plan from eolian dust deposition and its tendency to cause premature snowpack melt.

The fact that the implementation of the PRMP will result in air pollution (e.g., through approval of motorized use on designated routes and in the White Wash sand dunes) requires that such modeling and quantification be undertaken. Importantly, the routes identified in this plan as "open" to vehicular travel will never face further analysis whereby better estimate might be developed. *Now is the time that BLM must conduct such analyses.* As SUWA pointed out, BLM has prepared models and more comprehensive emissions inventories in its Farmington, New Mexico; Vernal, Utah; and Roan Plateau, Colorado RMPs. NEPA's "hard look" requirement *demands* that BLM determine baseline conditions so that it, and the public, can fully understand the implications of proposed activities. BLM has failed to do this here.

In summary, the Moab PRMP does not adequately analyze the impacts to air quality that will result from the activities planned and permitted in this document. These failures are contrary to both FLPMA, which requires that BLM observe air quality standards, and NEPA, which requires that BLM disclose the impacts of the activities it is analyzing. BLM must prepare a comprehensive emissions inventory, which includes fugitive dust emissions, and then model

these figures in near-field, far-field, and cumulative analyses. Without doing so BLM cannot know what impact these activities will have and whether it is complying with federal and state air quality standards.

III. Climate Change: The PRMP Violates NEPA in Several Respects By Failing To Analyze the Impacts of Climate Change

Because BLM chose to treat this issue with such a superficial and abbreviated discussion, important information about the effects of climate change, and the management options available to BLM in this changing environment, are missing from the PRMP. The PRMP provides no estimate of how much temperatures will increase in the Moab Resource Area, or even in the Colorado Plateau generally, or how that increase may affect natural resources such as water, vegetation, wildlife, or any other resource managed by BLM. It is reasonable to expect, given that the area will get even hotter under credible climate predictions, that water will become more scarce, native plant and animal life will suffer, and wildfire will become more prevalent. And in light of those consequences, BLM should have provided management alternatives which addressed these predicted impacts.

The PRMP addresses climate change for the first time—the draft resource management plan did not discuss climate change or its impacts on the public lands within the Moab Field Office at all. However, the extent of the discussion of this important issue in the proposed plan is superficial at best. In a total of just six paragraphs, the PRMP simply provides a generalized description of the phenomenon and notes that the Intergovernmental Panel on Climate Change predicted global increases of 1 to 4.5 degrees Fahrenheit over the next 50 years. *See* PRMP at 3-8.

The PRMP attempts to explain away its lack of analysis by noting that "BLM does not have an established mechanism to accurately predict the effect of resource management-level decisions from this planning effort on global climate change." PRMP at 4-10. However, the PRMP makes no attempt to utilize existing studies as the basis for any further information about how climate change—with expected warmer weather—may affect the resources of the Moab Field Office, noting only that drier soils may be less stable and that species ranges may move north or to higher elevations in response to climate stress. *Id.*

SUWA provided BLM with comments on the Draft RMP that highlighted this gap in the climate information, and included studies with specific information about the impacts of climate change on the Colorado Plateau—which includes the Moab Field Office. These impacts are described more fully below, but include shrinking water resources, dust-covered snowpack with earlier, faster snowmelt, invasion of more flammable non-native plant species, soil erosion, loss of wildlife habitat, and larger, hotter wildfires. As discussed below, BLM ignored these studies in the Moab PRMP.

Since the deadline to submit comments on the draft Moab RMP and the release of the Moab PRMP, several federal entities have published additional studies that confirm and reinforce the impacts discussed in SUWA's comments on the draft and the studies cited in those comments. These recent studies include: 1) U.S. Climate Change Science Program Final Report, Synthesis and Assessment Product 4.4, "Preliminary Review of Adaptation Options for Climate-Sensitive Ecosystems and Resources" (June 2008), *available* at http://www.epa.gov/ord/npd/pdfs/gcrp-factsheet_SAP-4-4.pdf; 2) Committee on Environment and Natural Resources, National Science and Technology Council, "Scientific Assessment of the Effects of Global Change on the United States" (May 2008), *available at* http://www.climatescience.gov/Library/scientific-assessment/;

and 3) U.S. Climate Change Science Program, Synthesis and Assessment Product 5.2, "Best Practice Approaches for Characterizing, Communicating and Incorporating Scientific Uncertainty in Climate Decision Making," (April 2008), *available at* http://www.climatescience.gov/Library/sap/sap5-2/public-review-draft/default.htm. These studies provide significant new information about the impacts of climate change on lands like those in the Moab Planning Area, as well as emerging new best management practices to employ in the face of climate change. The June 2008 report, prepared by the Environmental Protection Agency, specifically "identifies strategies to address management challenges posed by climate change for a subset of federally protected lands and waters. These strategies can also be broadly applied to other lands and waters managed by governmental or nongovernmental entities." U.S. Climate Change Science Program Final Report, Synthesis and Assessment Product 4.4, "Preliminary Review of Adaptation Options for Climate-Sensitive Ecosystems and Resources" (June 2008), *available at* http://www.epa.gov/ord/npd/pdfs/gcrp-factsheet_SAP-4-4.pdf. This information should have been included in the analysis of the RMP alternatives in order to adequately address climate change.

A. Failure to Take a Hard Look

As the U.S. Geological Survey explains, "understanding interactions of landscape with changing environmental conditions, and their relative influence on the severity of drought, are important for natural resources planning and land use sustainability." USGS, Drought Conditions, 1996 to 2006: USGS Navajo Nation Studies, http://geomaps. wr.usgs.gov/navajo/drought.html (last visited Sept. 1, 2008). Yet, despite the brief acknowledgment in the PRMP that the existence of climate change is no longer a matter of debate but a matter of scientific consensus, the PRMP does not take the logical—and required—next step and analyze what this means for the Moab Field Office.

This is an important step. A description of the effects of climate change on existing conditions such as the prevalence of exotic plant species, the availability of water, the health of riparian areas, zones of soil erosion or vulnerability to erosion all provide critical baseline information necessary to BLM's ability to determine whether the resources can withstand any of the proposed alternatives. Without this basic foundational information about the existing health of the land, it is impossible to make any informed decision about the level, location, and kind of activities it can support in the future.

The Intergovernmental Panel on Climate Change noted in 2001 that

> for the future of rangelands, it is important to reduce the vulnerability of these systems to climate change. This is likely to be achieved by considering social and economic factors that determine land use by human populations . . . . Soil stability and thus maintenance of water and nutrient cycles are essential in reducing the risk of desertification. Any changes in these processes could make rangelands particularly vulnerable to climate change.

Intergovernmental Panel on Climate Change, Climate Change 2001: Impacts, Adaptation and Vulnerability, *available at* http://www. grida.no/climate/ipcc_tar/wg2/241.htm (internal citations omitted).

SUWA's comments on the draft RMP provided specific information about federal studies that had been recently published about the impacts of climate change on public lands and grasslands like those in the Moab Field Office. *See* SUWA's Comments to the DMRP, at 63–67. For example, the U.S. Climate Change Science Program working group published a report on September 11, 2007 which predicts and elaborates on the widespread impact of climate change on public lands in areas like the cold deserts of the Colorado Plateau. *See* U.S. Department of Agriculture, *The effects of climate change on agriculture, land resources, water resources and biodiversity*, *available at* http://www.climatescience.gov/Library/sap/sap4-3/default.php. That report notes that "the climate changes that we can expect are very likely to continue to have significant effects on the ecosystems of the United States." *Id*. at 3. These impacts include:

- Climate effects on disturbances such as fire, insect outbreaks and wind and ice storms are very likely important in shaping ecosystem structure and function;
- Grasslands will transform into woody shrublands with reduced capacity for water absorption and greater vulnerability to channelization and erosion;
- Droughts early in the 21st Century are likely to increase rates of perennial plant mortality in arid lands, accelerate rates of erosion and create opportunities for exotic plant invasions;
- Proliferation of non-native annual and perennial grasses are virtually certain to predispose sites to fire. The climate-driven dynamics of the fire cycle is likely to become the single most important feature controlling future plant distribution in U.S. arid lands;
- Climate change is likely to result in shrinking water resources and place increasing pressure on montane water sources to arid land rivers, and increase competition among all major water depletions in arid land river and riparian ecosystems;
- Major disturbances like floods and droughts that structure arid land river corridors are likely to increase in number and intensity (with associated increases in erosion and native plant loss);
- Land use change, increased nutrient availability, increasing human water demand and continued pressure from exotic species will act synergistically with climate warming to *restructure* the rivers and riparian zones of arid lands;
- Climate change will increase the erosive impact of precipitation and wind;
- Surface soils will become more erodible;
- Increases in wind speed and gustiness will likely increase wind erosion.

The report also notes that

> [g]iven that many organisms in arid lands are near their physiological limits for temperature and water stress tolerance, slight changes in temperature and precipitation . . . that affect water availability and water requirements could have

> substantial ramifications for species composition and abundance, as well as the ecosystem goods and services these lands can provide for humans.

Id. at 9. While these findings are dramatic, the report further notes that "[i]t is likely that these changes will increase over the next several decades in both frequency and magnitude, and it is possible that they will accelerate." *Id.* at 23.

BLM should have discussed all of these predicted effects of climate in Chapter 3's assessment of existing conditions and in Chapter 4's discussion of the impacts of the various alternatives.

At a minimum, a description of the effects of climate change on existing conditions such as the prevalence of exotic plant species, the availability of water and the health of riparian areas, zones of soil erosion or vulnerability to erosion, all provide critical baseline information necessary to BLM's ability to determine whether public land resources can withstand any of the proposed management alternatives, including over 6,000 miles of newly-designated ORV routes and roads, and new mining and oil and gas development. Without this basic foundational information about the existing impacts of climate change on the land, and future expected impacts, it is impossible to make informed decisions about the level, location, and kind of activities the land and its ecosystems can support in the future.

This omission is a significant oversight given that federal departments and agencies including the Department of Interior, the Environmental Protection Agency, and U.S. Geologic Survey have all published documents and/or provided public statements and even congressional testimony acknowledging the impacts of climate change on public lands resources. All of this information was readily accessible to BLM. Together with the failure to incorporate the newer studies cited above, this oversight amounts to a failure to take the necessary "hard look" at the challenge of resource management in the MFO, and an important aspect of that challenge.

Importantly, leaders of both the Department of Interior and BLM have elsewhere gone further than simply acknowledging that climate change is a well-accepted phenomenon. On April 26, 2007, over a year before BLM released the Moab PRMP, Department of Interior Deputy Secretary Lynn Scarlet testified before the House Interior Appropriations Subcommittee that global climate change could dramatically reshape America's public lands with increased species extinctions and wildfire. As she put it, "On the ground, we're seeing a lot of changes . . . some of them dramatic." Dan Berman, *'Dramatic' effects of rising temps being seen on public lands*, earthnews, http://www.earthportal.org/news/?p=93. Ron Huntsinger, BLM's own science coordinator, said,

> [w]e can anticipate further reductions in the level of allowable uses on public lands due to the loss of productivity and capacity . . . . The results are more fragile ecosystems, a greater susceptibility to the outbreaks of attacks by parasites and disease, increased vulnerability to wildland fire and erosion and an overall reduction in the carrying capacity of the land.

Id.

Clearly, information about the impacts of climate change and the need to make adjustments in land use plans to address climate change were circulating in the Department of Interior and available to BLM at the same time it was developing the Moab PRMP. Failure to incorporate this information in the PRMP amounts to a failure to take a hard look at a crucial aspect of the land use plan.

BLM's bare statement regarding the presence of a level of uncertainty about the precise degree of future change in climate conditions in the Moab Field Office does not excuse this failure. First, some degree of uncertainty does not justify a wholesale failure to address an issue. As the EPA report explained:

> It is not possible to *predict* the changes that will occur, but managers can get an indication of the *range* of changes possible. By working with a range of possible changes rather than a single projection, managers can focus on developing the most appropriate responses based on that range rather than on a 'most likely' outcome.

U.S. Climate Change Science Program Final Report, Synthesis and Assessment Product 4.4, Preliminary Review of Adaptation Options for Climate-Sensitive Ecosystems and Resources 9-14 (June 2008), *available at* http://www.epa.gov/ord/npd/pdfs/gcrp-factsheet_SAP-4-4.pdf.

Additionally, NEPA contains specific requirements governing the treatment of uncertain conditions and imposes an obligation to state that existing evidence is inconclusive and to summarize the conclusions of that evidence. With respect to incomplete or unavailable information, 42 C.F.R. § 1502.22 provides in full:

> When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking.
>
> (a) 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.
>
> (b) If the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known, the agency shall include within the environmental impact statement:
>
> 1. A statement that such information is incomplete or unavailable;
>
> 2. a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment;

> 3. a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment, and
>
> 4. the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community. For the purposes of this section, "reasonably foreseeable" includes impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.

Given these regulations, BLM cannot rely on the so-called "uncertainties" relating to the impacts of climate change on the area to end the analysis with a simple acknowledgement of the phenomenon and a passing reference to BLM's claimed inability to "predict the effect of resource management-level decisions from this planning effort on global climate change." PRMP at 4-10. BLM must do more, even where information is uncertain (and in this case, SUWA emphasizes that the information, with the detailed studies cited above, is not particularly uncertain).

But even BLM's bare-bones excuse has it backwards. The point is not that BLM should predict how "management-level decisions" affect global climate change, but that ***BLM should factor how climate change affects the Moab Field Office and develop management options that reflect the reality of the dramatic change that warming will cause all the resources in the Moab Field Office.*** In other words, the predicted warmer, drier conditions will create fundamental change to the Moab Field Office and BLM has simply ignored those coming changes, choosing instead to manage for the past, rather than for the future.

NEPA regulations require that NEPA documents address not only the direct effects of federal proposals, but also "reasonably foreseeable" indirect effects. These are defined as:

> Indirect effects, which are caused by the action and are later in time or farther removed in distance, *but are still reasonably foreseeable*. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems."

40 C.F.R. § 1508.8(b).[4]

[4] This regulation provides:

> Effects include . . . Direct effects, which are caused by the action and occur at the same time and place. . . . Effects and impacts as used in these regulations are synonymous. Effects include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative.

Again, the impacts of climate change were simply not discussed; such an omission violates this section of the NEPA regulations. Thus, it is clear that BLM has failed to take a hard look—or virtually any look—at the impacts of climate change on the public lands resources in the Moab Field Office.

We have noted elsewhere that the PRMP has not discussed the cumulative effects of various uses like ORV area and route designations, motorized recreation, and grazing on important components of the Moab Field Office's native ecosystems like riparian areas. These cumulative effects should be considered in the context of climate change and how these uses act synergistically with climate change to impact the resources of the Moab Field Office.

B. Failure to Include an Alternative that Captures Mitigation Options for Climate Change

An understanding of the predicted impact of climate change should, in turn, shape in important ways the various alternatives under consideration by BLM. For example, given that so many of the predicted outcomes of climate change center on increased soil erosivity, dust storms, shrinking water resources, drier riparian areas, invasion of exotic plants, and the spread of hotter, larger wildfires, it is entirely reasonable to expect BLM to design alternatives that minimize soil disturbance as much as possible. And given that ORVs are associated with both the ignition of wildfires and the spread of exotic weeds, it is likewise reasonable to expect that BLM would design—and even designate as preferable—an alternative with far fewer than the six thousand miles of backcountry ORV routes that the PRMP contains. As noted above, BLM's own science coordinator noted that the effects of climate change should result in a reduction in the allowed use of certain activities on BLM lands—yet such an option was not presented in management plan options.

Instead, without information about the effects of climate change in the area, the plan proposes a mix of exactly the kinds of actions that would *compound* the deleterious effects of a warming climate. This is most notable in BLM's overly-expansive network of roads and ORV trails, which was adopted without objective analysis after county officials and ORV groups presented the agency with trail map "wish lists." Yet experts note that the "response of arid lands to climate change will be strongly influenced by interactions with non-climatic factors at local scales" including pressure related to the use of motorized off-road vehicles and grazing. *See* Ryan, MG "Land Resources" Section of the Climate Change working group report at 8, Attachment P to SUWA's comments of the DRMP; *See also id*. at 35 (noting that grazing may reinforce and accentuate the effects of climate change, a result that is probably true for ORV use as well).

In this regard, BLM's failure to consult the scientific literature, and in particular EPA's report, resulted in a fatally flawed document with none of the required options for managing a significant impact that will likely have systemic impacts throughout the Moab Field Office. U.S. Climate Change Science Program Final Report, Synthesis and Assessment Product 4.4, Preliminary Review of Adaptation Options for Climate-Sensitive Ecosystems and Resources 9-14 (June 2008), *available at* http://www.epa.gov/ord/npd/pdfs/gcrp-factsheet_SAP-4-4.pdf.

BLM should have drawn on EPA's own research and consulted with EPA staff whose report "provides information on how existing practices could be adjusted, or new strategies developed, to address the effects of climate change on natural resources." EPA, Global Change Research Program, Science in Action: Building a Scientific Foundation for Sound Environmental Decisions, *Assessment Provides Strategies for Managing Natural Resources in a Changing Climate: Findings of the U.S. Climate Change Science Program Synthesis and Assessment Product 4.4* at 2, *available at* http://www.epa.gov/ord/npd/pdfs/gcrp-factsheet_SAP-4-4.pdf. According to the report itself, these strategies involve increasing the resilience of ecological systems to climate change. Specific strategies include:

- Identifying and protecting key ecosystem features;
- Reducing anthropogenic stresses like developments which affect native vegetation and cause erosion;
- Protecting a "portfolio" of several slightly different species or ecosystems, which increases these chances that one or more will be suited to the new climate conditions;
- Protecting more than one example of a particular kind of ecosystem, which increases the chance of survival of that type if one or more others are lost in a catastrophic event;
- Restoring key intact ecosystems with important functions, like wetlands or riparian areas which confer resilience to flooding and provide necessary habitat for most native plants and wildlife;
- Identifying refugia where key species and ecosystem types have the highest likelihood of survival of climate change.

U.S. Climate Change Science Program Final Report, Synthesis and Assessment Product 4.4, Preliminary Review of Adaptation Options for Climate-Sensitive Ecosystems and Resources 9-18 to -21 (June 2008), *available at* http://www.epa.gov/ord/npd/pdfs/gcrp-factsheet_SAP-4-4.pdf.

Importantly, the first option, reducing human-caused stressors, was judged to be the most effective strategy for increasing resilience to climate change among the three types of terrestrial ecosystems studied in the report. *Id.* at 9-61. This is also a defining aspect of the plan's purpose—to manage human impact on the resources in the Moab Field Office. Thus, BLM has abdicated an important part of its responsibilities by failing to present valid management options that can, over the long term, best ensure the sustainability of the full range of resources in the Moab Field Office.

C. Violation of Secretarial Order 3226

Secretarial Order No. 3226 specifically requires BLM

> *to consider and analyze potential climate change impacts when undertaking long-range planning exercises*, when setting priorities for scientific research and investigations, when developing multi-year management plans, and/or when

> making major decisions regarding the potential utilization of resources under the Department's purview.[5]

Section 3 of Secretarial Order No. 3226 is comprehensive and includes every type of land management activity under the Interior Department's jurisdiction. In addition to the provision cited above, the order defines the activities that will trigger a climate change analysis:

> Departmental activities covered by the Order include, but are not limited to, programmatic and long-term environmental reviews undertaken by the Department, *management plans and activities developed for public lands*, planning and management activities associated with oil, gas and mineral development on public lands, and planning and management activities for water projects and water resources.

Id. (emphasis added).

As noted above, no analysis of potential climate change impacts was provided in the plan and EIS. BLM simply ignored the Secretarial Order.

D. BLM Must Prepare a Supplemental Draft Which Addresses the Issue of Climate Change and its Impacts on the Moab Planning Area

As noted above, BLM briefly discussed climate change in the PRMP, but entirely failed to mention it in the Draft RMP. But 40 C.F.R. § 1502.9(c)(1) requires BLM to prepare an SEIS if "[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impact." The new climate change information should warrant an SEIS because it meets the threshold for "significant" new information, as outlined in 40 C.F.R. § 1508.27.

Whether new information is significant is a function of both context and intensity. 40 C.F.R. § 1508.27. Context means that:

> the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.

40 C.F.R. § 1508.27(a).

Intensity refers to "the severity of impact," and should take into account several factors:

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[5] *See* http://elips.doi.gov/app_so/act_getfiles.cfm?order_number=3226 (emphasis added). By its terms the "Order is effective immediately and will remain in effect until its provisions are converted to the Departmental Manual or until it is amended, superseded or revoked, whichever comes first." *Id*. at Section 4. The Order has not been amended, superseded, or revoked.

(1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

(2) The degree to which the proposed action affects public health or safety.

(3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

(4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

(6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

(8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

(10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

40 C.F.R. § 1508.27(b).

In a recent Ninth Circuit case, *Center for Biological Diversity v. National Highway Traffic Safety Administration*, 508 F.3d 508, 555 (9th Cir. 2007), involving an NHTSA rule for corporate average fuel economy standards for light trucks, the court found that climate change satisfied several of the "intensity" factors in 40 C.F.R. § 5108.27(b). First, the court found that although the NHTSA rule at issue may have an "individually insignificant" effect on climate change, it may nonetheless have a "cumulatively significant" impact, thereby satisfying 40 C.F.R.

§ 1508.27(b)(7). In addition, the court found that climate change will affect public health and safety, satisfying 40 C.F.R. § 1508.27(b)(2).

Caselaw underscores the importance of agency disclosure and public participation in an agency's decision-making process. *See, e.g.*, Wilderness Watch v. Mainella, 375 F.3d 1085, 1094 (11th Cir. 2004); Am. Iron and Steel Inst. v. U.S. Envt. Prot. Agency, 568 F.2d 284, 291 (3d Cir. 1977) (emphasizing that public participation "enables the agency . . . to educate itself before establishing rules which have a substantial impact on those regulated"); Big Hole Ranchers Ass'n, Inc. v. U.S. Forest Service, 686 F. Supp. 256, 260 (D. Mont. 1988); North Buckhead Civic Ass'n v. Skinner, 903 F.2d 1533, 1540 (11th Cir. 1990). If a proposed action does not fully undergo the NEPA process, NEPA's purpose is undermined and the agency decision is insulated because final NEPA documents are not subject to a comment period. California v. Block, 690 F.2d 753, 771 (9th Cir. 1982).

Here, BLM introduced an important issue concerning the future management of the Moab Field Office for the very first time in the final plan. The public, interested parties, and those with expertise in climate change had no opportunity to review the information before the release of the final plan and provide input to BLM about its accuracy or completeness. This is a violation of NEPA's objective to educate both the public and the decision maker, and as a result, the climate information should be improved and released for public comment in a draft plan and EIS. *See* Westlands Water Dist. v. U.S. Dep't of Interior, 275 F. Supp. 2d 1157 (E.D. Cal. 2002) (NEPA process "broke down" where agency's discussion of impact was not presented until after closure of comment period on draft EIS). *See also* 40 C.F.R. §§ 1500.2(d), 1503.1(a)(4), 1506.6 (2007) (all requiring public notice and availability of environmental documents so that interested persons and the agencies can be informed); Anderson v. Evans, 371 F.3d 475, 487 (9th 2004) (CEQ regulations require that the "public must be given an opportunity to comment on draft EAs and EISs, and public hearings are encouraged to facilitate input on the evaluation of proposed actions").

IV. Cultural Resources

As noted in SUWA's DRMP comments, SUWA incorporated the comments submitted by the Colorado Plateau Archaeological Alliance (CPAA) for the DRMP into SUWA's DRMP comments. Based on CPAA's comments and the management decisions in the PRMP (which did not change significantly from the DRMP) and BLM's responses to CPAA's comments, SUWA has the following concerns regarding cultural resource management as proposed in the PRMP.

A. Federal Law

FLPMA, 43 U.S.C. §§ 1701(a)(8), 1702(c), obligates BLM to protect cultural, geologic, and paleontological resource values, whereas the National Historic Preservation Act of 1966 (NHPA), 16 U.S.C. § 470 et seq., provides for enhanced consideration of potential impacts to these resources through a cooperative federal-state program for the protection of historic and cultural resources. In particular, Section 106 (16 U.S.C. § 470f) obligates BLM to consider the effects of management actions on historic and cultural resources listed or eligible for listing to the National Register of Historic Places, as provided under the NHPA. Section 110 of the NHPA requires BLM to assume responsibility for the preservation of historic properties it owns or controls and to manage and maintain those resources in a way that gives "special consideration" to preserving their historic, archaeological, and cultural values. 16 U.S.C. § 470h-2(a). Section 110 also requires BLM to ensure that all historic properties under the jurisdiction or control of the agency are *identified*, evaluated, and nominated to the National Register of Historic Places. *Id.* § 470h-2(a)(2)(A).

B. Deficiencies in the PRMP

The PRMP has minor and major deficiencies as they relate to cultural resources, both in terms of general theoretical assumptions applied throughout the document, as well as specific strategies identified for addressing cultural resource concerns. As was noted in CPAA's comments on the DRMP, general concerns include the absence of a meaningful and representative statistical sample of inventoried lands within the Moab Field Office whereby the density, diversity, and distribution of cultural resources could be adequately considered during the planning process; and the failure of the agency to adequately consider the indirect and cumulative effects of various activities on the integrity of historic properties (acknowledgement of such effects does not constitute thorough consideration of such effects).

Among the more specific concerns are the absence of a clearly stated intent to initiate Section 106 compliance prior to the designation of off-road vehicle (ORV) routes; the designation of ORV routes in areas known to have high archaeological site densities but little or no baseline inventory data, and the failure of the agency to more aggressively embrace its Section 110 responsibilities to evaluate and nominate properties under its management jurisdiction to the National Register of Historic Places.

C. The PRMP Did Not Rectify CPAA's and SUWA's Concerns

1. Inadequate Statistical Sample

As discussed in Section 4.3.2, potential impacts to specific cultural resources are difficult to quantify in light of the fact that the location of all cultural resources remains unknown. DEIS 4-30 to -31. The paucity of statistically valid data on the nature, diversity, and distribution of historic properties within the MFO prompted BLM staff to develop its own site density model based on the existence of one or more of seven environmental variables. Of the 4,259 archaeological sites documented within the MFO, some 3,103 (73%) were located in areas with medium or high probability. The Draft EIS acknowledges the model is imperfect as a predictor of site density, but one that is accurate enough to gauge the impacts of the various alternatives on those areas with a greater probability of cultural resources. DEIS 4-30.

Although SUWA agrees that it is difficult to plan for and manage cultural resources that remain largely unknown and undocumented, and acknowledges that the site density model may be a valuable tool in identifying some areas with higher potential for cultural resources, SUWA agrees with CPAA that the model is fundamentally flawed as a primary planning tool in that the data used to create the model are derived from previous archaeological inventories that do not comprise a meaningful and statistically valid sample. These investigations were driven by the location of extraction projects and other site-specific uses of federal lands that did not result in the investigation of all environmental and ecological ranges where cultural resources are likely to occur. Hence, the predictive model used by BLM staff to identify probability zones for cultural resources is actually a reflection of the amount of Section 106 compliance in a particular area and may not reflect actual site densities. A review of archaeological site data on file with the Antiquities Section of the Utah Division of State History reveals astonishingly few archaeological block surveys within the MFO that would contribute to an understanding of potential site densities or to the distribution of archaeological sites across entire landscapes.

BLM asserts in its response to CPAA comments that it used "the best available information to form the basis for the cultural resource analysis." BLM Response to Comments, sorted by Commentor, at 1-1. This does not mitigate the fact the data upon which PRMP is based is flawed. BLM cannot properly manage cultural resources it does not know exist, and hence the absence of a statistically valid sample militates against adequate consideration of potential impacts to unknown cultural resources. In effect, the database is little more than a *de facto* corroboration of the failure of BLM over the past two decades to take seriously its Section 110 responsibilities to implement a proactive preservation program for the identification, evaluation, and National Register nomination of historic properties under its jurisdiction or control.

CPAA stated in its DRMP comments that the EIS should be revised to reflect a meaningful and statistically valid inventory of representative lands within the MFO whereby the diversity, distribution, and density of cultural resources can be properly considered in future land management decisions. It is laudable that the proposed plan states BLM's intent to prioritize specified areas for proactive Class II and Class III surveys, and SUWA supports these efforts as an important first step toward ameliorating deficiencies in the current database. However, the

issue of a meaningful statistical sample survey of prehistoric land-use patterns across entire landscapes, including areas of low probability, was not addressed in the proposed plan. It is emphasized that one out of every four known sites in the MFO is located in areas of *low* probability for site density, as determined by the model used by BLM planners, suggesting that significant numbers of National Register-eligible sites will be located in areas not prioritized for Class II and Class III surveys.

The probability model, as implemented by BLM planning staff, is also incapable of predicting the significance of sites eligible for listing on the National Register, only that more sites may be located in some areas than others. Hence, management considerations articulated in the various action alternatives are predicated on site quantity rather than actual site significance. This approach fails to recognize that sites of tremendous scientific and cultural significance may be located in areas deemed to have a low probability for archaeological sites and that the rarity of such sites may actually accentuate the importance of those sites within the context of broader cultural landscapes. A good example of this is the Green River Desert, where site density is generally low but there are numerous Paleoindian sites that have contributed important insights into the first inhabitants of western North America. BLM's response to CPAA comments states "the prioritization of areas does not mean that other areas won't be surveyed." PRMP Response to Comments, sorted by Commentor, at 1-11. However, the proposed plan also does *not* state that other areas will be surveyed or how those areas will be prioritized. The issue of site significance was not addressed in the proposed plan or in responses to CPAA.

The inadequacy of the current archaeological database for the MFO was demonstrated during the course of recent CPAA studies (Spangler and Boomgarden 2007; Spangler and Yentsch 2008) of a small section of Tenmile Canyon below Dripping Springs. Previous inventories in the region had identified only three sites in the area examined: two artifact scatters and one alcove with prehistoric residential detritus. A brief intuitive reconnaissance by CPAA crews identified 35 sites in this same area, including important rock art sites, open encampments, storage facilities, and large alcoves with deep cultural deposits of Archaic and Formative age.

Although the surveys were not systematic, the CPAA data demonstrate a potential of 12.5 to 15.5 archaeological sites per linear kilometer within the drainage—or a total of 310 to 385 sites. Furthermore, sites in Tenmile Canyon will likely be located in natural alcoves and rockshelters, on bench areas abutting the canyon bottom and at the base of the first cliff level, and on both sides of the canyon. A more comprehensive Class III survey of the drainage that included higher ledges, canyon rims, and a more thorough examination of areas along the canyon bottom could demonstrate an even greater density of sites than demonstrated during the limited CPAA investigations.

Although the model used by BLM planners had identified Tenmile Canyon as an area of potential high site density, the model was clearly incapable of predicting the astounding number and significance of sites within such a small area of the canyon, and that PRMP management decisions related to Tenmile Canyon are predicated on previous research that is clearly inadequate. It is considered highly probable that previous research in other areas of the MFO is likewise insufficient to allow informed management decisions related to the density, distribution, and nature of cultural resources.

2. Section 106 Inventories of ORV Area and Route Designations

CPAA cited the requirement of the NHPA Sec. 106 inventories in its comments on the DRMP, noting BLM's intent to establish thousands of miles of ORV designated trails, and that BLM position is that Section 106 compliance (e.g., Class III inventories) will not be required prior to designation of existing routes. As CPAA noted in its comments, the failure of BLM to conduct adequate analysis in the past related to ORV impacts along routes currently being used by motorized vehicles was and still remains an abrogation of the agency's Section 106 responsibilities, and the failure of the agency to recognize or correct this deficiency in the proposed plan appears to validate and perpetuate the agency's failure to comply with Section 106 requirements in the past. Furthermore, the failure to require Class III inventories along routes prior to designation suggests the agency official has already made a determination, as per 36 C.F.R. § 800.3(a), that travel route designations in such instances are not an undertaking as defined in 36 C.F.R. § 800.16(y).

SUWA agrees with CPAA that any determination that *designates* routes *is* a federal undertaking. Section 36 C.F.R. § 800.16(y) clearly states that an undertaking is "a project, *activity* or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency" (emphasis added). CPAA contends that ORV route designation is an activity managed by BLM and that BLM resources are being expended to plan for ORV route designation and enforce ORV travel restrictions. As such, it is an activity funded in whole or in part under the direct jurisdiction of a federal agency and clearly meets the definition of an undertaking. Therefore, the agency official has a responsibility to determine whether this activity has the potential to cause effects on historic properties under 36 C.F.R. § 800(a) and to initiate the Section 106 process.

BLM's response to CPAA's concern states that the agency will follow the guidelines set forth in an internal memo (BLM IM-2007-030) and a Utah protocol agreement, and that according to the IM, a Class III inventory is not required prior to route designations on "existing" routes. BLM Response to Comments, at 1-3. It is important to note that the BLM's response and the IM are silent as to whether the guidance set forth in the IM applies to all "existing routes" or only those that have been the subject of a Class III inventory in the past for a specific project that created the route in the first place (i.e. seismic exploration, oil and gas development, etc). If BLM's interpretation is that no surveys are required on *all* existing routes, the IM would be in direct conflict with the mandates in the statutes and federal regulations that require a Class III inventory for "undertakings." Route designations are certainly undertakings and if the individual routes have not been surveyed prior to the designation, then BLM must conduct a Class III inventory.

The proposed plan clearly acknowledges a conundrum of "conflicting policies," noting that revised NHPA regulations state ORV permits are considered an undertaking subject to Section 106 review, but that the statewide protocol agreement with the Utah SHPO, as well as Utah BLM handbooks, indicate that such permits are exempt from Section 106 review. PRMP at 3-23. Federal law takes precedence over BLM guidelines and state protocol agreements that are in direct conflict with federal law and implementing regulations. According to federal court decisions, the Advisory Council on Historic Preservation (ACHP), the independent federal

agency created by Congress to implement and enforce the NHPA, has exclusive authority to determine the methods for compliance with the NHPA's requirements, not BLM.

While acknowledging the PRMP makes numerous important improvements over the draft, SUWA reiterates CPAA's comments that were not addressed and/or accommodated in the PRMP:

- Designation of all ORV routes must be based on full Section 106 reviews of all direct and indirect adverse effects resulting from increased availability of route maps, and the associated increased access to backcountry areas and increased use of travel corridors resulting from formal designations (see discussion above).
- The PRMP should articulate that Class III inventory and site evaluations along designated routes will include all areas of indirect impacts, with specific focus on cultural resources in adjacent topographic settings that could be impacted by increased vehicular access. This should include, but not be limited to, the identification of sites with potentially intact cultural deposits that are visible from a designated route regardless of distance and to all localities within 200 meters of an existing route (cf. Spangler, Arnold and Boomgarden 2006). BLM's response to CPAA that areas of potential effect (APE) will be determined in consultation with the SHPO reflects an unwillingness on the part of BLM to address indirect impacts resulting from management decisions. BLM Response to Comments at 1-3.
- Route or area closures are an appropriate and proven management tool to mitigate the adverse impacts of ORVs on and around archaeological sites. The plan should clearly specify such a management strategy. Modifications to the proposed RMP (PRMP 3-23) that "activities that contribute to site degradation may have to be limited" are a significant improvement, but the statement should be modified to include "or prohibited" or other provisions that allow for area closures.
- The PRMP should clearly state that Class III inventories, site assessments, and site mitigations will be completed prior to the designation of ORV routes, including existing routes and open ORV areas, and that cultural resource protection will be a fundamental goal of any transportation planning.

3. Tenmile Canyon and White Wash Sand Dunes Should be Closed to ORV Use; Lack of Section 106 Inventories

SUWA strongly recommends that Tenmile Canyon and White Wash sand dunes be closed to ORV use. The PRMP recognizes that Tenmile is an area of potential high site density, yet BLM proposes no protection for this area, but rather proposes to designate ORV routes down the center of the canyon, as well as on the canyon rims. CPAA's surveys have identified numerous sites in a limited segment of the Tenmile directly below Dripping Springs and concludes that there could be nearly 400 archaeological sites in the canyon. In addition, there are likely additional sites along the canyon rims and upper ledges. CPAA's DRMP comments note that its surveys document that large numbers of individuals left the signed trail in Tenmile, using ORVs to gain access to bench areas above the trail where they directly impacted four sites, three of them concentrations of surface artifacts and the other cultural deposits in front of an alcove with

storage cists. Indirect impacts were observed at 12 other sites where vehicle tracks were observed within 50 meters of archaeological sites. CPAA DRMP comments at 9. There is no reason to believe that officially designating this currently signed trail in Tenmile will have any effect on ORV users who ride off of the trail, and impact cultural resources.

As CPAA noted in its DRMP comments, BLM must conduct Class III inventories for areas proposed for cross-country ORV use, due to the unavoidable destruction that can occur from such use. CPAA DRMP comments at 11-12. This recommendation is particularly relevant for White Wash Sand Dunes. These dunes are known to contain large and important archaeological sites, primarily evidence of hunting and gathering during all periods of human occupancy of the region. These adaptations remain largely uninvestigated and poorly understood. Even if the management of open travel areas were structured to avoid known archaeological sites, the nature of subsurface deposits in sand dunes is such that many archaeological sites may not be identified until after the ground surface has been altered, either through natural erosion or human factors. Hence, vehicular traffic may subsequently expose cultural materials that were not visible at the time a Class III inventory was conducted, enhancing the need for ongoing monitoring and future data recovery. This will require a significant ongoing commitment of limited BLM resources to ensure that damage to sites exposed in the future is avoided, minimized and/or mitigated. Furthermore, data recovery is an adverse effect that must be properly considered through the Section 106 process.

Closure of open play areas to protect cultural resource values is entirely consistent with Executive Orders 11644 and 11989 that mandate federal land managers "protect the resources of (federal) lands" and that agency heads who determine that the use of off-road vehicles is causing or will cause adverse impacts to cultural or historical resources shall "immediately close such areas or trails to the type of off-road vehicle causing such effects, until such time as he determines that such adverse effects have been eliminated and that measures have been implemented to prevent future recurrence." Exec. Order No. 11989. Given the likelihood that hunting and gathering camps in the White Wash Sand Dune area are likely to yield considerable information about all periods of prehistory, the mitigation of adverse effects to known and unknown eligible properties can only be accomplished through site avoidance, in effect a closure of open travel areas to ORV travel.

4. Section 110 Deficiencies

Section 110 of the National Historic Preservation Act unequivocally specifies the responsibilities of federal agencies to proactively identify, evaluate, and nominate National Register-eligible historic properties under their jurisdiction or control. Section 110(2)(a) specifically mandates that BLM implement a program to ensure "that historic properties under the jurisdiction or control of the agency are identified, evaluated *and nominated* to the National Register." (emphasis added). CPAA commented that the PRMP should include more robust Section 110 compliance efforts and expanded priority lists for National Register nominations. BLM's response was to eliminate the priority list altogether. PRMP Response to Comments, at 1-26. BLM now contends, citing BLM land-use planning handbook 1601-1, that prioritization of sites for nomination is not a land use planning decision.

SUWA disagrees with this interpretation. As evidenced by controversy surrounding the recent National Register nomination of Nine Mile Canyon, Utah, to the National Register, local officials there clearly perceived National Register designations as a planning issue that could impact their county land-use plans and inhibit economic development. *See* Carbon County Commission letter to BLM state director Selma Sierra (2008) (opposing the Nine Mile Canyon nomination). Given that Section 110 of the NHPA unequivocally states federal agencies will identify, evaluate, and nominate properties to the National Register, any BLM *post hoc* efforts to actually nominate properties not identified in the RMP could be perceived by opponents as activities beyond the scope of the RMP and in conflict with local land-use plans. SUWA agrees with CPAA that prudent planning warrants the identification of those sites and districts BLM intends to nominate to the National Register.

As noted in CPAA's DRMP comments, many known archaeological sites in the MFO are clearly eligible under Criterion A in that the are associated with broad patterns of human prehistory on the Colorado Plateau; are eligible under Criterion C in that they embody distinctive characteristics of type, period, or method of construction, or represent a significant and distinguishable entity, even if the individual sites lack distinction; and most importantly are eligible under Criterion D in that they have yielded or are likely to yield important information about the prehistory of the region. Euroamerican historic sites in the MFO would also be eligible under these three criteria and potentially under Criterion B if they are associated with important individuals. Since enactment of the National Historic Preservation Act more than 40 years ago, only two sites have been listed on the National Register through the initiative of BLM in Moab.

The stated intent expressed in the PRMP that the MFO will more aggressively pursue its Section 110 responsibilities through proactive surveys is laudable. However, the historic practice in BLM field offices throughout the West has been to prioritize budgets based on greatest demand, usually to the neglect of non-consumptive management initiatives. Given that non-energy-related BLM budgets have been static or have declined in recent years, there would appear to be little incentive for the MFO to prioritize funding for non-project-driven initiatives, including National Register nominations and non-project-driven Class II and Class III surveys.

As noted in CPAA's DRMP comments, the PRMP reflects reluctance on the part of the agency to fully embrace BLM's responsibilities under Section 110, as it does not identify those eligible properties the agency will nominate to the National Register, nor does it indicate the willingness of the agency to prioritize properties under its jurisdiction for National Register nominations. Given the federal agency's mandate to actually "nominate" properties to the register, the PRMP should reflect the commitment of BLM to actually nominate eligible sites and archaeological districts where the cultural resources have been determined eligible for National Register listing.

In light of the concerns discussed above, SUWA reiterates CPAA's comments that were not addressed and/or accommodated in the PRMP:

- The PRMP should explicitly recognize that proactive cultural resource work is a critical need accentuated by increased ORV use. The prioritization of 30,000 acres for proactive survey is a significant improvement, but BLM's intent should

be augmented with statements that Section 110 inventories will be prioritized within the field office budgets.

- In the absence of a priority list of sites to be nominated, the PRMP should indicate the MFO will aggressively pursue the nomination to the National Register of historic properties under its jurisdiction, including archaeological sites and archaeological districts of local, regional, and national significance.
- BLM should aggressively seek public input regarding which sites should be prioritized for nomination. This could include discussions with interested Native American tribes, the Utah Professional Archaeological Council, local and statewide historical societies, and historic preservation advocacy organizations such as the National Trust for Historic Preservation.

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V. Oil and Gas Development

A. BLM Must Analyze A "No Leasing" Alternative

BLM has failed to consider a no leasing alternative in the Moab PRMP. As part of its analysis BLM must consider a no leasing alternative—in addition to a no action alternative. Federal courts have made clear that a no leasing alternative should be a vital component in ensuring that agencies have all reasonable approaches before them. *See, e.g.,* Bob Marshall Alliance v. Hodel, 852 F.2d 1223, 1228 (9th Cir. 1988). The Moab PRMP does not analyze the possibility of a no leasing alternative. The existing management plans, three different management framework plans, are not NEPA documents and thus do not constitute adequate pre-leasing analyses that considered a no leasing alternative. *Southern Utah Wilderness Alliance et al.*, 164 IBLA 118 (2004). Finally, the brief mention and rejection in the 1976 Oil and Gas Leasing Program, Moab District, Environmental Analysis Report (EAR) of the no leasing alternative was facially insufficient and cannot be relied upon now for that necessary analysis. *See* Southern Utah Wilderness Alliance v. Norton, 457 F. Supp. 2d 1253, 1262–64 (D. Utah 2006) (concluding that Price and Richfield EARs failed to adequately analyze the no leasing alternative). Hence, BLM has *never* had before it the possibility of totally abandoning oil and gas leasing in the Moab planning area, something it is required to consider. *See Bob Marshall Alliance*, 852 F.2d at 1228.

The Moab PRMP appears to ignore the difference between a no action alternative and a no leasing alternative. The no action alternative evaluated in the Moab Draft RMP, Alternative A, would simply be a continuation of the existing management plans. Moab Draft RMP at 2-2. The Moab PRMP dismisses the no leasing alternative by mischaracterizing its implications and conflating it with the no action alternative. *See* Moab PRMP at 2-118 to -119. The no leasing alternative does not require BLM to buy back all existing leases. *See* Moab PRMP at 2-118. It simply requires that BLM analyze a program in which no future leases are offered. This is not a useless exercise; it allows BLM to compare the difference in impacts between the no leasing alternative and the development alternatives. BLM must fully analyze the no leasing alternative. The present analysis is insufficient.

B. The RFD Is Inaccurate

BLM must also modify its reasonably foreseeable development (RFD) scenario figures in the Moab PRMP to better reflect actual productive regions and historical rates of development. As SUWA demonstrated in its comments on the Moab Draft RMP, the RFD is improperly high due to the use of inaccurate and unreasonable assumptions in its calculation. As discussed above, the agency is required to use high quality data and methods for analyses; the inaccurate RFD must be corrected. The Moab PRMP incorrectly argues that there is no correlation between known oil and gas fields and where development is likely to take place. Moab PRMP, Comments of the Draft EIS by Resource Type at 185. SUWA pointed out that BLM's RFD scenario treated each acre in the planning area as equally likely to produce oil and gas. This argument ignores topographical impossibilities—such as much of the Behind the Rocks area—and the fact that development is much more likely to take place in areas of known oil and gas fields. These proven fields already have the necessary infrastructure and subterranean mapping to facilitate

greater development than remote, undeveloped areas. BLM must change the RFD scenario to better reflect the fact that productive areas are more likely to produce oil and gas during the time horizon examined in the PRMP in contrast to remote, undeveloped regions. Based on this correction, BLM must also: 1) correct the projected benefits from permitting oil and gas development in remote areas in comparison to the substantial benefits that could be gained from managing them to protect their natural values, as discussed in SUWA's comments on the Draft RMP and in this protest regarding socioeconomic analyses; 2) reassess management and potentially applicable special designations for these areas; and 3) make appropriate adjustments to the lease stipulations and conditions of approval required to ensure protection of affected resources in those areas where higher production rates are reasonably foreseeable.

C. BLM Must Thoroughly Consider SUWA's Proposed Alternative to Protect Sensitive and Important Areas in light of the Revised RFD

Changing the proposed oil and gas leasing stipulations to reflect SUWA's comments on the Draft RMP, regarding different leasing stipulations in the Cisco Desert area, would allow for development of the planning area well above historic rates while still protecting a large number of sensitive areas. In addition, making the RFD scenario more accurate in terms of likely development (i.e. weighting known oil and gas fields heavier than undeveloped, unknown areas) would highlight the fact that the most of the oil and gas leasing stipulations—either the no surface occupancy (NSO) stipulations or the areas closed to leasing—in areas with wilderness characteristics would have very little effect on likely development in the planning area. To this end, SUWA proposed an additional, reasonable, feasible alternative. Analysis of this alternative is consistent with BLM's obligation to consider a reasonable range of alternatives and to thoroughly assess more environmentally protective alternatives. BLM did not fully analyze SUWA's proposed alternative. BLM must rectify this failure.

D. BLM Must Assess Impacts of Wastes and Waste Disposal

There is a growing demand by industry for disposal of produced water from oil and gas exploration and production (E&P water). There are currently two disposal facilities either in construction or operation for disposal of this produced water in the Moab planning area. They are both on private land, however, the impacts are not strictly limited to private land and the RMP should address the possible impacts to surface and ground water, wildlife, and air quality. It is likely that more such facilities will be built in the future involving the disposal of many millions of barrels of wastewater. The waste disposal issue from oil and gas development must be addressed in the RMP.

The PRMP states at 3-30:

> The various producers of hazardous waste pose a potential impact to the health and safety of area residents, visitors, and to the physical environment itself. Both commercial and illegal activities can lead to the creation of hazardous waste sites. Spills, illegal dumping, and the discovery of abandoned hazardous materials are likely to occur within the MPA. Contaminants from these sites can pose an imminent threat to public safety and negatively impact the environment by

> impacting soils, ground water flows, air, and water quality. Potential hazardous material generators within the MPA include the following: oil and gas drilling operations, natural gas pipelines, mining operations, uranium tailings, storage tanks, landfills, illegal dumps, and the Utah Launch Complex of the White Sands Missile Range near Green River, Utah.

The above referenced section is then followed by a discussion of how abandoned mines can pose hazards and how those hazards will be handled. There is no discussion that includes all of the other possible hazardous waste sources listed above and how they will be dealt with. They should be included with special emphasis on oil and gas development which is becoming more prevalent in the Moab Planning Area. Quite often the oil and gas industry is largely exempt from existing regulations, yet the drilling and development of wells often involves the use of large quantities of hazardous materials. And even though the handling, storage, disposal, transport, etc. of these materials may be authorized de facto by issuance of a drilling permit, the drilling operators and oilfield services industry has a policy of not disclosing the makeup of these products. Consequently, there can be real problems in cases involving exposure of workers or citizens to these chemicals, when emergency or medical staff needs to determine appropriate treatment without full disclosure of the chemicals involved. Full disclosure of the chemicals to be used for oil and gas exploration and development should be made a condition of issuing a permit to drill. Additionally, these chemicals end up being present in produced water, so any facilities permitted for disposal of this water should have a full waste stream characterization performed prior to commencing operations.

VI. Recreation

A. General Recreation Management

1. The PRMP Fails to Incorporate the Findings of the Moab Field Office National Visitor Use Survey and Must Perform a Supplemental Analysis in Light of Significant New Information

This National Visitor Use Monitoring Program (NVUM) for the Moab Field Office was developed through an interagency agreement with the Forest Service to be useful, in part, for making decisions during the planning process. BLM's website on the program explains the NVUM's relevance and applicability:

> Such visitor monitoring information enables BLM to incorporate statistically valid visitor use monitoring information into planning and management decisions as well as long-term monitoring assessment. The FS NVUM system provides BLM with accurate data with high confidence levels for reporting to Congress and constituents, thereby building credibility and establishing legal protection in decision-making.

BLM, Visitor Use Surveys & Research, http://www.blm.gov/wo/st/en/prog/Recreation/national_recreation/visitor_use_surveys.html (last visited Aug. 26, 2008).

Because the NVUM is the best data BLM has on recreational uses in the Moab Field Office to date, its findings and conclusions should have been incorporated into BLM's management decisions in the PRMP. However, BLM did not rely on this data for its management decisions and also failed to provide an adequate analysis of the effects of recreation and on recreationists in the PRMP.

In our comments on the Draft RMP, we stated that the information provided from the NVUM shows that motorized use is a small portion of recreation activity on public lands. BLM's response was that we did not interpret the findings of the NVUM as a whole:

> The commentor selectively cites NVUM findings specific to its argument, while ignoring NVUM conclusions which may run counter to its argument. For example, over half of the respondents indicated some form of motorized activity as one in which they participated in during their BLM visit.

BLM Response to Comments, sorted by Commentor, at unpaginated p. 632. This generalization that BLM makes on motorized activity in no way undercuts our point on the Draft RMP. As BLM knows, ORV use is not the same as the broader category of motorized activity. The NVUM distinguishes ORV use in a separate table stating, "[i]n order to address concerns about off-highway vehicle use, information about the amount of type of motorized activity was collected as well as information about popular facilities." NVUM at 14. This information includes, for example, the statistic that 14.2% of visits to the Field Office used designated ORV

play areas, although only 6% responded that this was their the main activity, as provided in Table 16 of the NVUM. *Id*.

The data provided in the NVUM speaks for itself. Table 16 of the NVUM provides information on activity participation by use in the Moab Field Office. As stated in the NVUM:

> In terms of total participation, the top five recreation activities of the visits to the Moab Field Office were viewing natural features, hiking/walking/trail running, relaxing (hanging out, escaping heat and noise), viewing wildlife and driving for pleasure (Table 16). Each visitor also indicated what activity was their main reason for coming to the BLM for that visit. The top main activities were hiking/walking/trail running, bicycling (including mtn. bikes), driving passenger cars for pleasure, viewing natural features, and non-motorized water travel.

NVUM at 12. In addition, Table 16 has the following relevant and significant findings:

- Of survey respondents, around 43% participate in strictly non-motorized activities, including hiking, biking, non-motorized water travel, rock climbing, fishing, horseback riding, and camping in primitive areas.
- Adding in activities that were most likely non-motorized, but could have also been motorized (e.g. viewing natural features, relaxing, visiting historic sites, and viewing wildlife), the number jumps to 59%.
- Only 18% of respondents said that their main activity is a strictly motorized activity such as driving a passenger vehicle for pleasure, riding a dirt bike or ATV, driving a 4WD vehicle, motorized water activities, camping in undeveloped sites, and snowmobiling. If limited to riding a dirt bike, ATV, or 4WD vehicle as their main activity, the number drops to 6% of the respondents.

The survey shows that non-motorized recreation is unequivocally favored by a wide margin in the Moab Field Office. However, the PRMP does not reflect these findings and instead heavily favors motorized recreation as well as extraction uses, which often directly conflict with non-motorized activities. These inadequacies, which are detailed below, must be remedied before the record of decision is issued.

The regulations implementing NEPA require a supplemental environmental statement when "[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(c). The BLM Handbook describes situations when a land use plan should be changed, including, the need to "consider significant new information from resource assessments . . ." BLM Handbook H-1601-1 at 45.

The assessment of visitor use for the Moab Field Office provided in the NVUM is precisely the kind of significant new information contemplated in the NEPA regulations and BLM Handbook. The comments for the Draft RMP were due on November 30, 2007. Although the survey data was collected during FY2006, the final report of the survey results was not released until December, 2007. This is significant new information about recreation and must be analyzed accordingly under NEPA

a. Requested Remedy

Due to this significant new information since the Draft RMP, BLM must provide a supplemental analysis of impacts to recreation from decisions made in the PRMP under NEPA.

2. BLM Has Not Taken All Relevant Data Into Account and Has Ignored Its Own Data in Analyzing Impacts

NEPA and the Data Quality Act require BLM to "carefully consider detailed information" concerning impacts and that the "best available science and supporting studies" will be used to do so. *See* Legal Authorities Section, *supra*. The NVUM provides the following explanation of its creditability and reliability:

> The NVUM methodology is a well-recognized, tested, and proven visitor monitoring system capable of dealing with the inherent difficulties associated with measuring dispersed recreation use. The intent of the study is to determine the viability and applicability of this visitor use methodology for Bureau-wide implementation in its current, or an adjusted form.

NVUM at 1. BLM recognizes the NVUM as the best data it currently has on visitor recreational uses.

> Since the inception of the planning process, the Moab BLM office was a pilot office for the implementation of the National Visitor Use Monitoring study that is standard operating procedure in Forest Service areas. Preliminary data were available at the time of the DRMP/EIS. Since the largest unknown recreation factor was activity use levels, the preliminary data were supplied from the NVUM study in Table 4.67 regarding the percentage of BLM visitors engaging in various activities on Moab BLM lands . . . . The data in Table 4.67 represents the *best information that the BLM has regarding the activities that its visitors engage in during their stays in the Moab area*.

BLM Response to Comment, sorted by Resource, at unpaginated p. 292 (emphasis added). Not only is the NVUM a current and reliable scientific survey of recreational uses in the area, but also it is the best data available at this time. BLM lists activities by use in Table 3.18. PRMP at 3-85. This table not only fails to provide accurate information regarding the actual use or impacts of recreational activities in the planning area, but also relies on findings from personal communication from over five years ago. *Id*.

a. Requested Remedy

In order to fulfill agency obligations under NEPA and the Data Quality Act, BLM must rely on the NVUM as the most current and scientifically reliable data in analyzing and making planning decisions on recreation, and alter its analysis of environmental consequences and management decisions accordingly.

3. BLM Has Failed to Rely on the Current Inventory of Public Lands in Violation of FLPMA

Under FLPMA, BLM is required to continue to perform and keep current an inventory of public land resources and values. 43 U.S.C. § 1711(a). FLMPA goes on to mandate that "[i]n the development and revision of land use plans, the Secretary shall . . . rely, to the extent it is available, on the inventory of the public lands, their resources, and other values." 43 U.S.C. § 1712(c)(4).

The most recent inventory of recreational resources for the Moab Field Office is the NVUM. However, BLM has not relied on this information even though it has been available during this planning process. Had BLM done so, the agency would have restricted motorized and other uses in order to avoid conflicts among users and to prevent harm to natural, cultural, and recreational values.

a. Requested Remedy

BLM must go back and rely on the NVUM as the most recent inventory of recreational resources and values under FLPMA, and alter its analysis of environmental consequences and management decisions accordingly.

4. BLM Is In Violation of Applicable Law for Failing to Minimize Conflict Among Recreational Users

BLM has an obligation under its ORV regulations "to minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands." 43 C.F.R. § 8342.1. The NVUM provides BLM with the information to manage the planning area to provide recreation opportunities that are representative of the interests expressed in the NVUM. Instead, the PRMP heavily favors motorized use, which will aggravate, rather than minimize conflicts.

Many people use the Moab Field Office as a destination for recreation. In fact, according to Figure 1 of the NVUM, 81% of those who agreed to be interviewed said they came to the Moab Field Office for recreation. NVUM at 6. Of those, a smaller sample of only recreationists was interviewed about their primary purpose for coming to the Field Office. 68% of those survey respondents said that their primary purpose for coming to this area is as a recreation destination, as opposed to a side trip, a recreation trip where the destination was somewhere else, or other trip purposes. NVUM at 16. When asked what they would do if they could not come to the Moab Field Office for recreation, 62% said they would have gone elsewhere for the same activity. *Id*. Thus, recreation is an extremely important value to those who come to lands within this particular field office.

Although motorized recreationists and non-motorized recreationists are not always at odds with one another, there are often conflicts that arise when an area is used heavily by both types of users. The PRMP acknowledges that recreation conflicts with other resources and other

recreationists, noting numerous examples where the conflict stems from the presence of motorized vehicles. PRMP at 3-90 to -92. However, BLM does not establish adequate safeguards to minimize these evident conflicts that will occur from management decisions in the PRMP. BLM has the burden of showing how it will minimize these conflicts under the ORV regulations before issuing the record of decision.

a. Requested Remedy

Currently, the results of the NVUM show that BLM is actually increasing the potential for conflicts. BLM must show how it has minimized conflicts among recreational users in the planning area or revise the PRMP to do such under the ORV regulations.

B. Special Recreation Management Areas (SRMAs)

Citing increasing recreation trends over the past two decades and the need to avoid user conflicts, BLM has designated a number of SRMAs within the Moab Field Office. However, the agency's designation process fails to adequately analyze the environmental, social, and economic consequences of these designations.

1. The PRMP is in Violation of NEPA for Failing to Conduct a Thorough Analysis of Impacts and Considering a Reasonable Range of Alternatives in the Designation of SRMAs

BLM is in violation of NEPA because it has not evaluated all reasonable direct, indirect, and cumulative environmental impacts from its designation of SRMAs. The agency underestimates the impacts of ORV use and does not conduct a sufficient analysis of the specific lands included within the designated SRMAs, even though this information is readily available.

First, BLM does not take the "hard look" at the environmental implications of its SRMA designations as required by NEPA. Some basic consequences were acknowledged; the likelihood of soil compaction leading to surface runoff and site-specific reduction of forage material for livestock were among the most highlighted. However, even these impacts were not given serious consideration. There is no site-specific analysis of these impacts and the extent to which they would occur and adversely affect other recreational users, wildlife, or the quality of the habitat itself.

Second, due to the disproportionate levels of ORV use allowed within the management planning area, BLM is not maximizing the benefits that will be received by recreational users of all types. As stated above, available data from the 2007 National Visitor Use Monitoring (NVUM) study for the Moab Field Office shows that non-motorized recreation constitutes the majority of use within the Moab Field Office. In addition, the Recreation Management Inventory System (RMIS) for the state of Utah show that in Fiscal Year 2004, non-motorized visits made up more than 50% of all visits. 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 10%. Nationally, regionally, and locally, the

trend of recreational use is fairly constant; the majority of recreation occurring on public lands is non-motorized. Stynes and White (2005) have shown that motorized and non-motorized visitors spend the same amount per day on tourism-related services. Therefore, due to higher rates of non-motorized recreation, it is easily extrapolated that traditional recreation forms create greater injections for local economies. Another study has shown that the economic value of a day of non-motorized recreation is, on average, higher than the value for the same day of motorized recreation. *See* Kaval and Loomis (2003).

Although SRMAs are designated to provide ample recreation opportunities for users of different types (motorized, equestrian, biking, hiking), the land management plan lacks true balance in the designation of allowable activities within the SRMAs. Of the 658,642 acres proposed within 10 SRMAs, a considerable majority is open to motorized recreation. Only 50,528 acres are designated specifically for non-motorized recreation (although within some of these SRMAs, vehicle camping is allowed). Thus, only 7.7% of the total land area specifically identified for emphasis of recreation opportunities will be managed to preserve a non-motorized recreation experience. The remaining land is open either for shared use (non-motorized and motorized) or specifically for motorized use. This is not a balanced management approach for a field office steeped so deeply in recreational use.

The trails needed for motorized recreation are more established and motorized users create considerable noise and effluence. All of this detracts from the natural experience. On the other hand, non-motorized recreation has very little adverse effect on ORV use, if any. As a result, non-motorized users will actively seek out areas where ORVs are known not to go. Therefore, SRMAs designated for 'shared' use (both motorized and non-motorized recreation) would primarily be used by ORVs. Based upon the recreation trends and data collected by BLM, and BLM's own projection that both types of recreation will increase in coming years, the current management plan does not appropriately allocate and designate SRMAs for recreation purposes.

A majority of the land area designated as SRMAs is sanctioned for ORV use of some kind. Once again, BLM seems to have ignored the ORV regulations as well as its own concept of multiple-use. From the statistics provided by the 2007 National Visitor Use Monitoring (NVUM) study for the Moab Field Office as well as other sources of more general data, non-motorized use makes up the majority of recreation time spent within the planning area. This plan places a disproportionately high level of importance on, and allocation of public lands for, motorized use, despite it being established that motorized recreation has lower economic value and far-greater environmental impacts in general.

In addition, the range of alternatives promoted by the Draft RMP was poorly developed and the PRMP does not correct this flaw. A true range needs to represent the interests of all stakeholders for the specified lands, not just a limited demographic. Most areas for specialized recreation are targeted towards ORV use and only areas designated for non-motorized use varies at all considerably between alternatives. This PRMP lacks sufficient opportunities for non-motorized recreation, providing virtually no balance for which SRMAs are designed in the first place.

a. Requested Remedy

BLM should develop a reasonable range of alternatives. These alternatives should be examined fully to assess the tradeoffs between all economic values (both market and non-market) for all alternatives. The alternatives should consider in greater depth the impacts of different recreation types on one another, and especially to the land itself. Also, the statistics collected by the agency itself should be considered within the development and analysis of alternatives.

C. Special Recreation Permits (SRPs)

1. The PRMP Must Seriously Consider Impacts From SRPs at the RMP Level Rather Than Deferring This Analysis

The PRMP states that "[t]he effects of SRPs on various categories of land management are analyzed at the site specific level." BLM Response to Comments, sorted by Commentor, unpaginated p. 670. However, site-specific projects will tier to the NEPA analysis performed in the RMP; BLM's analysis is circuitous and the indirect and cumulative impacts of future SRPs will never be fully analyzed. In response to our comments on the Draft RMP, BLM stated that "[l]and use planning is a tiered process ranging from broad general allocations and management prescriptions to subsequent site-specific authorizations." BLM Response to Comments, sorted by Commenter, unpaginated p. 319. However, the possibility of future analysis does not justify BLM avoiding an assessment of the potential environmental consequences of the action that it is approving in the RMP. As a matter of NEPA policy, compliance with the Act must occur "before decisions are made and before actions are taken." 40 C.F.R. § 1500.1(b). For purposes of NEPA compliance, "it is not appropriate to defer consideration of cumulative impacts to a future date when meaningful consideration can be given now." Kern v. U.S. Bureau of Land Management, 284 F.3d 1062, 1075 (9th Cir. 2002).

It is also apparent that the Moab Field Office may never analyze the impacts of SRPs if not in the RMP due to its broad use of categorical exclusions. The chapter on BLM NEPA process in the Department of Interior's Manual (516 DM 11) was revised on August 14, 2007 to include the following categorical exclusion:

> H. Recreation Management. Issuance of Special Recreation Permits for day use or overnight use up to 14 consecutive nights; that impacts no more than 3 staging area acres; and/or for recreational travel along roads, trails, or in areas authorized in a land use plan. This CX cannot be used for commercial boating permits along Wild and Scenic Rivers. This CX cannot be used for the establishment or issuance of Special Recreation Permits for "Special Area" management (43 CFR 2932.5).

The Moab Field Office has already used this categorical exclusion several times in the past year, including for guided Hummer tours and numerous ORV events, including large and multi-year events such as Jeep Safari, that have and will continue to cause great harm to public lands. Such intensive use for an SRP was not intended to be categorically excluded from NEPA and even if

interpreted broadly, extraordinary circumstances would prevent such an action. This is indicative of the lack of analysis that SRPs truly get at the site-specific level.

Furthermore, depending solely on site-specific analysis does not allow for cumulative impact analysis as required by NEPA. The NEPA regulations define "cumulative impact" as:

> the impact on the environment which results from the *incremental impact of the action when added to other past, present, and reasonably foreseeable future actions* regardless of what agency (Federal or non-Federal) or person undertakes such other actions. *Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.*

40 C.F.R. § 1508.7. (emphasis added). A failure to include a cumulative impact analysis of actions within a larger region will render NEPA analysis insufficient. *See, e.g.,* Kern v. U.S. Bureau of Land Management, 284 F.3d 1062, 1078 (9th Cir. 2002) (analysis of root fungus on cedar timber sales was necessary for an entire area).

In addition, the BLM Handbook on Recreation Permit Administration clearly states that field offices can and should develop guidelines for issuing SRPs. H-2930-1. The Handbook states: "Field Offices are encouraged to develop thresholds through land use planning for when permits are required for organized groups and events for specific types of recreation activities, land areas, or resource settings." H-2930-1 at 13.

On the issue of Special Area Permits, the Handbook states: "Applications for Special Area Permits issued to individuals are processed according to the area-specific land use and/or business plan, or guidelines approved by the State Director." H-2930-1 at 17. The Moab Field Office therefore must provide clear guidelines for processing Special Area Permits, because in this situation the Handbook tiers to the RMP.

As discussed in our comments, the Price Field Office Draft RMP provides an excellent example for evaluating SRP applications and issuing such permits. It classifies SRPs into four distinct classes, ranging from least intensive to most intensive, based on specific factors such as type of equipment, size of area used, number of participants, et cetera. Because the RMP is very specific (for example, surface disturbance of 5–40 acres ranks as "medium intensity"), BLM can easily determine whether to issue an SRP and where, and can better estimate cumulative impacts from such permits.

As can be seen from the Handbook and RMPs for other field offices, not only does BLM have the discretion to establish SRP guidelines, but it has the obligation to do so in order to protect the resources that the RMP is intended to protect and sustain.

a. Requested Remedy

BLM must fully and critically analyze impacts from SRPs at the RMP level. This means that BLM should take into consideration all comprehensive, reasonable, and specific criteria for issuing SRPs, including criteria included in our comments on the Draft RMP, at 56–73. BLM

must provide clear guidelines for issuing SRPs in the RMP, including an outright prohibition or at least strict limitations on using CXs for their approval. BLM should use the Price RMP as a model for processing.

2. There is No Evidence to Support BLM's Assertion That Increasing the Number of SRPs Issued Will Increase Protection of Resources

In response to our comment on the Draft RMP that BLM has not provided a range of alternatives for the issuance of SRPs, the PRMP states:

> SRPs provide protective stipulations for public land users. These stipulations do not apply to the general public. Therefore, increasing the number of SRPs would be more beneficial in terms of reducing user conflict and protecting resources because there would be more protection and preservation related stipulations on cultural and natural resources.

BLM Response to Comments, sorted by Resource, at 124-111.

While it is true that SRPs are intended to provide protective stipulations for public land users, it is a fallacy to assert that therefore more permits will lead to more resource protection. To reiterate our comments on the Draft RMP, BLM does not substantiate this claim with any data or evidence, and does not adequately discuss environmental or cultural impacts of increasing SRP issuance.

It is not that the stipulations will lead to more protections, it is instead the fact that activities requiring SRPs are naturally more destructive and in need of these stipulations. Because SRPs are issued for large group activities, which have more adverse environmental impacts than those of small groups or single individuals, the fewer SRPs that are issued, the more protected the area's resources will be. In fact, the reason SRPs are necessary is to mitigate the negative impacts from large group activities.

Not only is the statement flawed that more SRPs will lead to more protection, BLM actually recognizes the need for SRPs to be limited in the PRMP due to constraints on BLM to adequately monitor and enforce the SRPs and their stipulations:

> Due to recent increases in recreational use in the MPA that exceed monitoring capability and available space, priority for authorization of new SRPs for land-based commercial and competitive events is given (where conflicts exist) to applicants proposing uses that:
>
> - Do not duplicate existing uses;
> - Take place outside the months of March, April, May and October;
> - Use lands and facilities off public lands for overnight accommodation of guests;

- Display and communicate the Canyon Country Minimum Impact Practices; and
- Focus visitation on sites and areas capable of withstanding repeated use.

The great number of visitors to public lands during peak periods led to the promulgation of these rules in order to protect resources and to disperse visitation. Other factors are also considered including the public demand for the proposed use, the capability of the applicant to carry out the proposed use, projected government revenues, and past performance.

PRMP at 89.

Not only is BLM's response to our comment unsupported and unsupportable, but statements in the PRMP refute statements in the agency's response. This arbitrary and capricious conclusion and approach to management of SRPs must be remedied before the record of decision is issued.

a. Requested Remedy

BLM must go back and look at a reasonable range of alternatives for limiting SRPs issued for the Moab Field Office and base the selected alternative on an accurate and realistic discussion of the impacts of activities that will occur based on the issuance of SRPs.

VII ORV Area and Trail Designations, and Travel Plan Decisions

A. Federal Law Governing Off-Road Vehicle Management Focuses on Protection of Resources

As SUWA noted in its comments on the DRMP, off-road vehicle (ORV) use on BLM lands is governed by FLPMA, its implementing regulations, and executive orders. Each of these governing authorities is based on concerns about the destructive effects of ORV routes and the use of ORVs, and the need to manage these impacts to protect the environment and other users of the public lands. *See, e.g.,* 43 C.F.R. § 8340.0-2 ("[t]he objectives of these regulations are to *protect* the resources of the public lands, to promote the safety of all users of those lands, and to minimize conflicts among the various users of those lands") (emphasis added). *Thus, the guiding principle of these authorities is built on the assumption that ORV use may only be approved under certain circumstances and based on specific analysis and findings*. Any presumption in favor of ORV use in a particular area, or the approval of ORV use without the requisite findings or analyses, violates the very foundation of these governing authorities.

Other laws and policies also come into play regarding BLM's management of off-road vehicles and the designation of ORV areas and trails, including NEPA, the National Historic Preservation Act, the Clean Air Act, the Clean Water Act, the Utah Riparian Management Policy, and the BLM's 2006 "Clarification Guidance" for the development of ORV areas and trails.

B. The Moab PRMP Fails to Comply with FLPMA and its Implementing Regulations

FLPMA requires that "[i]n managing the public lands the [Secretary of Interior] shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands." 43 U.S.C. § 1732(b). BLM's duty to prevent unnecessary or undue degradation (UUD) under FLPMA is mandatory, and BLM must, at a minimum, demonstrate compliance with the UUD standard. *See* Sierra Club v. Hodel, 848 F.2d 1068, 1075 (10th Cir. 1988) (FLPMA land use standards provide the "law to apply" and "imposes a definite standard on the BLM"). FLPMA also mandates that the public lands be managed "without permanent impairment of the productivity of the land or quality of the environment." 43 U.S.C. § 1702(c).

In addition, BLM's ORV regulations, which incorporate Executive Orders 11644 and 11989, state that the "objectives of these regulations are to *protect* the resources of the public lands . . . and to *minimize conflicts* among the various uses of those lands (emphasis added)." 43 C.F.R. § 8340.0-2. These regulations require BLM to ensure that areas and trails for ORV use are located "to minimize damage to soil, watershed, vegetation, air, or other resources of the public lands, and to prevent impairment of wilderness suitability." *Id.* § 8342.1(a). Areas and trails "shall be located to minimize harassment of wildlife . . . . Special attention will be given to protect endangered or threatened species and their habitats." *Id.* § 8341.2(b). Areas and trails "shall be located to minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands . . . taking into account noise and other factors." *Id.* § 8342.1(c). Finally, BLM is also obligated to close routes to ORV use if ORVs are causing or will cause considerable adverse effects upon soil, vegetation, wildlife, wildlife habitat,

cultural resources, historical resources, threatened or endangered species, wilderness suitability . . . or other resources." *Id.* § 8341.2.

The Moab PRMP travel plan and ORV area and trail designations fail FLPMA's UUD standard. The proposed travel plan and ORV designations will harm natural resources in a number of important ways, including: unnecessarily increasing fugitive dust and degrading air quality; unnecessarily fragmenting wildlife habitat; causing unnecessary damage to riparian areas, floodplains, and cultural resources; unnecessarily reducing naturalness in areas with identified wilderness characteristics; and impairing Wilderness Study Areas.[6]

The PRMP's states that the "goal" of the travel plan designation process "is to develop . . . a travel plan that provides access to public lands." *Id.* at G-2. This statement fails to characterize BLM's responsibility pursuant to FLPMA and the ORV regulations. The PRMP must be corrected to inform the public and the decision maker of BLM's overriding duty to "*protect* the resources of the public lands . . . and to *minimize* conflicts among the various uses of those lands." 43 C.F.R. § 8340.0-2. BLM is required to locate ORV areas and trails to "*minimize* damage to soil, watershed, vegetation, air, or other resources of the public lands, and to prevent impairment of wilderness suitability . . . [and] to minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands . . . taking into account noise and other factors." 43 C.F.R. § 8342.1(a), (c). BLM's own 8340 manual explains that "minimizing" means that the agency should reduce impacts to the maximum extent feasible. *See* BLM Manual 8340 – Off-Road Vehicles (General) (1982).

The PRMP states that designated routes will be identified in the Travel Plan accompanying the RMP and that "[t]hese identified routes would be available regardless of other management actions." *Id.* at 2-50. This ambiguous statement, added between the DRMP and the PRMP, appears to be in conflict with 43 C.F.R. § 8341.2, the federal regulation that requires BLM to close an area or route to ORV use if such use is causing or will cause adverse effects to soils, wildlife, and other natural and cultural resources. The PRMP must be modified to delete this newly added decision.

The PRMP fails to include a provision in the Transportation section for a "closed unless posted open" policy, to minimize adverse effects to resources and other users in areas that are not open for ORV use. Unfortunately, BLM proposes to take the opposite approach, and sign as "closed" "routes that are not baseline routes." PRMP at 2-50. Although BLM might issue route and ORV area designation maps, the agency must ensure that its ORV management decisions are being observed on the ground; signing routes "closed" encourages sign removal by ORV users who want to ride a closed route. Implementing a "closed unless posted open" policy will assist BLM in enforcing its area and route designations (ORV users will not be removing "open" signs), and contribute to BLM's mandate of minimizing impacts from ORV designations to natural and cultural resources.

[6] The PMRP includes a new management decision that states that BLM will grant the State reasonable access across public lands for economic purposes, in accordance with the *Cotter* decision. The PRMP should include a statement that BLM *must* comply with the Interim Management Policy (IMP) for wilderness study areas, and access can be provided that is consistent with the IMP as well as *Cotter*.

In addition, the PRMP contains no evidence that BLM has tried to minimize impacts of ORV designations and the travel plan to soils and water resources. In fact, the PRMP acknowledges that there will be adverse impacts to 1,866 acres of soils (in the open area) under the proposed plan. *Id.* at 2-88. Alternative B has no ORV routes in water and wind erodible areas and no open ORV play area, which would appear to better comply with the ORV regulations minimization criteria than BLM's proposed plan. *See Id.* at 4-297.

Moreover, the PRMP fails to minimize conflicts with other users of the public lands, specifically non-motorized recreationists. The Moab Field Office (MFO) has conducted a user survey (Moab National Visitor Use Monitoring survey) for the public lands managed by the MFO, yet failed to incorporate the results from this survey into the PRMP. Of particular relevance to the PRMP is the relative use of non-motorized versus motorized recreation.[7] *See* SUWA's comments to the DRMP; http://www.suwa.org/site/DocServer/BLMNVUMsurveyMoab.pdf?docID=2821. This survey shows that non-motorized recreation is utilized by vastly more visitors to the Moab BLM-managed lands than motorized (ORV-based) recreation. In fact, the Moab survey found that motorized use accounted for less than 7% of visitors' main activity. Having actual visitor information is essential to guide BLM's long-term recreation management decisions and ORV area and route designation decisions.

For the reasons discussed above and detailed in Section C.2, below, for individual resources, the PRMP does not comply with FLPMA, the minimization requirements of Executive Order 11644, and BLM's ORV regulations. Specifically, the PRMP fails to minimize impacts to riparian and wetland areas, cultural resources, soils, vegetation, air quality, water quality, wildlife and wildlife habitat, wilderness character areas, and other users. The PRMP, including Appendix G and the Response to Comments, fails to disclose the purpose and need for the specific ORV area designations and the individual route designations, and fails to provide BLM's analysis supporting a determination that each designated ORV area and trail and the travel plan decisions minimize impacts to natural and cultural resources, and minimizes conflicts among users. BLM must conduct this analysis and share it with the public before areas and routes are designated and determined available for use.

C. The Moab PRMP Fails to Comply with NEPA

1. Alternatives

"An agency must look at every reasonable alternative, with the range dictated by the nature and scope of the proposed action." Nw. Envtl. Defense Center v. Bonneville Power Admin., 117 F.3d 1520, 1538 (9th Cir. 1997). 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 (9th 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, 1122–23 (9th Cir. 2002) (and cases cited therein).

[7] Although BLM attempts to cast a shadow of doubt on the findings of this survey by suggesting that developed campground might have been oversampled and dispersed recreation might have been undersampled (*see* PRMP Response to Comments at 124-2, sorted by Commentor), this survey is the best information available to BLM.

NEPA requires that an actual "range" of alternatives is considered, such that the Act will "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)." Col. Envtl. Coal. v. Dombeck, 185 F.3d 1162, 1174 (10th Cir. 1999) (citing Simmons v. U.S. Corps of Eng'rs, 120 F.3d 664, 669 (7th Cir. 1997)). This requirement prevents the EIS from becoming "a foreordained formality." City of New York v. Dep't of Transp., 715 F.2d 732, 743 (2d Cir. 1983). *See also* Davis v. Mineta, 302 F.3d 1104 (10th Cir. 2002). The ORV use area designations and the travel plan decisions included in this EIS are key examples of the aforementioned citations, with each alternative posing significant resource harms and no alternative that effectively mitigates those harms (i.e. all alternatives designate ORV areas and routes in riparian areas, culturally significant areas, wilderness character areas, and WSAs).

BLM should have fully considered and analyzed more environmentally protective alternatives consistent with FLPMA's requirement that BLM "minimize adverse impacts on the natural, environmental, scientific, cultural, and other resources and values (including fish and wildlife habitat) of the public lands involved." 43 U.S.C. § 1732(d)(2)(A). Specifically, BLM should have fully analyzed the following three alternatives (or a combination of one or more alternatives that incorporated the resource protections inherent in each of these three alternatives): 1) the Redrock Heritage Proposal (RHP) alternative designed to protect wilderness character areas and WSAs, and minimize conflicts among users, submitted by SUWA during the public participation process; 2) an alternative that would have minimized impacts to riparian areas by not designating routes or ORV use areas in or near riparian areas as requested by ECOS Consulting's DMRP comments; and 3) an alternative that would have minimized impacts to cultural resources by not designating ORV use areas and trails before completing comprehensive surveys for cultural resources for the proposed ORV use areas and routes as requested in CPAA's DRMP comments.[8]

BLM refused to include the RHP as an alternative because the RHP purportedly did "not meet the purpose and need for this RMP/Draft EIS." DRMP at 2-119. *See also* BLM's Response to Comments, sorted by Commentor, at 124-45. Rather than assess this reasonable and comprehensive alternative for ORV route designations and travel plan, BLM came up with a handful of reasons to rationalize its arbitrary decision to ignore this proposed alternative. These excuses are clearly inadequate since they were dismissed without a rational evaluation of the relevant facts. For example:

1. BLM states that the RHP fails to designate routes in wilderness character lands or additional lands proposed for wilderness designation, and the RHP

[8] In the discussion of BLM's failure to analyze the impacts of climate change, we also argue in this protest that BLM should have developed an alternative that would have addressed the predicted impacts and challenges of climate change. Development of such an alternative would have likely included the protection of large tracts of undisturbed ecosystems, as recommended by a study by the Environmental Protection Agency, released in June of 2008. U.S. Climate Change Science Program Final Report, Synthesis and Assessment Product 4.4, "Preliminary Review of Adaptation Options for Climate-Sensitive Ecosystems and Resources" (June 2008), *available* at http://www.epa.gov/ord/npd/pdfs/gcrp-factsheet_SAP-4-4.pdf. Such an alternative may have resembled the RHP in significant respects, and more effectively protected valuable riparian areas.

proposes to close several B roads.[9] *See* PRMP at 2-120. There is nothing unreasonable about not designating ORV routes in WC lands or in other areas proposed for wilderness, and there is no reason that B roads cannot be closed, especially if the routes are rarely used, do not serve a compelling public purpose or need, and are causing adverse impacts to natural and/or cultural resources.

2. BLM states that the RHP includes SITLA lands. *See id.* It is true that the RHP's maps included SITLA lands. However, BLM's own maps include routes crossing SITLA lands—exactly the same as RHP maps. Thus, it was irrational for BLM to dismiss this alternative on these grounds.
3. BLM states that the RHP's analysis is focused on lands south of I-70. *See id.* Although SUWA admits that more emphasis was placed on the lands south of I-70, the RHP proposal route map depicts route designations for the entire MFO area. That RHP included specific analysis for the public lands south of I-70 is not reason to dismiss it as a reasonable alternative. BLM, likewise, divides the MFO area into separate areas in the PRMP discussion, i.e. East of Highway 191, West of Highway 191, Utah Highway 313, Sand Flats area, etc. *See id.* at 3-77 to -83. Although SUWA acknowledges that there are large areas north of I-70 for non-motorized recreation, the desirability of those areas for many forms of primitive recreation and the majority of non-motorized users visiting the MFO area is not addressed by BLM's superficial response. The RHP's analysis indicates that approximately 90% of public lands south of I-70 (the most popular and desirable areas for recreation in the Moab area) are within 0.5 miles of a route. BLM could improve the opportunities for non-motorized recreationists by not designating a handful of routes in a few canyon areas, as suggested by the RHP. User conflicts would be reduced, yet total number of miles available for ORV use would not decrease noticeably (i.e. the decrease would be approximately 150 miles of route, out of nearly 4,000 miles of route, or about 4%).
4. BLM states that the RHP analysis compares only to the Grand County route inventory, rather than all of the other alternatives carried forward in the PRMP. *See id.* at 2-120. RHP analysis is in comparison to the Grand County route inventory, as well as its route proposal (which nearly mirrors BLM's proposed alternative). However, even if the RHP analysis was focused solely on the county inventory map, that is not a reason to exclude the RHP from full consideration in the PRMP.
5. BLM states that the RHP suggests that 25% of the MFO be more than a mile from a road, and BLM contends this is an "unsubstantiated percentage to achieve." *Id.* This is a reasonable proposal to help minimize user conflicts and to minimize impacts to roadless wild lands, and it was arbitrary for BLM to exclude, without a rationale basis, the RHP from full consideration in the PRMP.
6. BLM states that the RHP used "only a portion" of the Recreation Opportunity Spectrum (ROS). *Id.* However, BLM admits that it did not use any of the

[9] The PRMP states that the RHP proposed to close "several hundred miles of County 'B' roads." However, this is not the case and BLM must have been misread the RHP maps.

ROS in its decision making. *Id.* It is arbitrary for BLM to exclude the RHP on whether it used some, all, or none of the ROS criteria, as the ROS criteria are not unreasonable criteria to apply.

7. BLM states that the RHP discusses "numerous specific routes, as well as areas, that it recommends" not designating as available for ORV use. *Id.* BLM's rationale for not fully considering this site-specific and detailed route information is because some were B roads, most "lie within the [] wilderness proposal" and resource concerns were not accompanied by data (i.e. riparian area, wildlife area, etc). *Id.* The RHP included a very detailed map, similar to maps that other "groups and individuals" submitted, and information about dozens of routes and areas. BLM refused to verify the RHP map and resource information, although it did verify other, less complete proposals which proposed *more* ORV use. *See id.* at G-16 ("BLM received a communication from Ber Knight to the effect that he had GPS data on routes . . . . No information was provided on purpose and need for these routes, but simply on their existence." BLM, however, conducted elaborate GIS verification and ground-truthing on this "communication."). It appears clear that BLM took the initiative to gather information on citizen proposals regarding ORV routes—but only when those proposals were for *more*, not fewer, ORV routes. It is clearly arbitrary for BLM to do so.

Rather than digging for excuses to avoid assessing the RHP as a reasonable alternative, BLM should have complied with NEPA's mandate to consider a true range of alternatives, by including the RHP's route designations and travel plan in its alternative analysis. As discussed above, all of the reasons proffered by BLM for not including the RHP in the DMRP and PRMP are arbitrary and an abuse of discretion. BLM must issue a supplement that includes the RHP and alternatives that protect riparian areas and cultural resources, and allow the public and the decision maker to review and comment on these alternatives for ORV area and route designations and travel plan decisions.[10]

2. Hard Look

NEPA requires that BLM take a "hard look" at the environmental consequences of a proposed action and the requisite environmental analysis "must be appropriate to the action in question." Metcalf v. Daley, 214 F.3d 1135, 1151 (9th Cir. 2000); Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 348 (1989). In order to take the required "hard look, BLM must assess impacts and effects that include: "ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative." 40 C.F.R. § 1508.8. (emphasis added). The NEPA regulations define "cumulative impact" as

> the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future

[10] SUWA incorporates into this protest our comments that were submitted for scoping and the DRMP, including our route-specific comments, as the BLM's responses were not responsive, especially to our route-specific comments. *See* PRMP Response to Comments, sorted by Commentor, at 124-1 through 124-273.

> 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.

A failure to include a cumulative impact analysis of actions within a larger region will render NEPA analysis insufficient. *See, e.g.,* Kern v. BLM, 284 F.3d 1062, 1078 (9th Cir. 2002). Indirect effects are those that are "caused by the action later in time or farther removed in the distance, but are still reasonably foreseeable," including related effects on air and water and other natural systems, and growth inducing effects (i.e. publishing and distributing route maps will encourage increased ORV use on these designated routes, designating routes and ORV use areas in remote areas that have not been inventoried for cultural resources could be expected to increase damage and vandalism of cultural resources). 40 C.F.R. § 1508.8.

In the context of the Moab PRMP, the decisions made with regard to designation of ORV areas and trails and the travel plan fail to fully analyze all effects of those decisions on riparian and wetland areas, cultural resources, soils, vegetation, air quality, water quality, wildlife and wildlife habitat, wilderness character areas, and other users, as discussed below.

a. Riparian Resources

Although FLPMA, the ORV regulations, and the Utah Riparian Policy require BLM to *protect and minimize* impacts to riparian areas, the PRMP's Goals and Objectives for managing riparian areas fail to incorporate these standards. *See* PRMP at 2-30 ("where feasible and consistent with user safety, developed travel routes would be located/relocated away from sensitive riparian/wetland areas."). White Wash, Hell Roaring, and Tenmile are listed in a group of streams in which 76% is functioning at risk and 3% are non-functioning, *id.* at 3-95, yet BLM proposes to designate ORV routes in each of these riparian areas. *Id*. at Map 2-10-C, 2-11-C, 2-11-E(C).[11] *See also* EPA's concerns and BLM's responses, which ignore EPA's concerns regarding ORV use and routes in riparian areas, PRMP Response to Comments, sorted by Commentor, at 479-6, -7, -16.

The PRMP states, without support, that the SRMA designations will generally "reduce" impacts to riparian resources. PMRP at 4-247; *see also* 2-81 (touting "beneficial impacts" from SRMA management, but offering no evidence that impacts to riparian area will be minimized). While "reducing" impacts is laudable, BLM must *minimize* impacts, and the PRMP fails to disclose how these ORV designation decisions will minimize impacts to riparian areas, especially when ORV use will be allowed within the SRMAs, and there are routes designated directly within riparian areas.

[11] BLM's response to comments from the Ruby Ranch, private property owner and permittee on the White Wash allotment regarding needed protection for the White Wash riparian area: "There are some washes [White Wash], however, that would be designated for motorized travel in the Travel Plan." PRMP Response to Comments, sorted by Commentor, at 264-6.

As discussed in comments submitted by ECOS Consulting on the DRMP, and confirmed by the USGS literature noted in the PMRP, *see id.* at 4-247, routes and ORV use cause significant impacts to riparian areas and can have "negative impacts on water quality [and] soil properties and vegetative cover, which can result in accelerated rates of erosion and sedimentation and elevated levels of turbidity in affected watersheds." *Id.* These impacts can be minimized and often avoided by prohibiting routes and ORV use in and near riparian areas, yet BLM is doing just the opposite by proposing to designate routes within riparian areas.

Although the PRMP includes a list of MFO's riparian areas and proper functioning condition assessments, PMRP at 3-95, it fails to notify the public which specific riparian areas will be impacted by the ORV area and trail designations, and the travel plan, and it fails to analyze the impacts of the ORV area and trail designations on the specific riparian areas affected. *See id.* at 4-249 ("[T]here are 321.9 miles of designated routes with possible riparian conflicts . . . 50.1 miles of these routes are not identified for travel."). BLM contends, again with no supporting analysis or data, that "[t]he impacts of limiting OHV use to designated roads and trails would be the same as closure of riparian areas to OHVs." *Id.* at 4-247. However, by BLM's own admission, approximately 270 miles of ORV routes would be designated in riparian areas, *see id.* at 4-249; this is clearly not the "same as closure." BLM's conclusory statement is not persuasive and falls short of NEPA's hard look requirement.

b. Cultural Resources

The PRMP states that approximately 77% of lands with a high density of cultural sites and 73% of medium density lands would have ORV routes designated in them. *Id.* at 4-51. The PRMP reports that 238 miles of ORV trails in high-density areas would be closed to travel, but it fails to disclose how many miles of route would be *designated* in the high and medium density areas, other than to report that 19 miles of motorcycle route would be designated in high-density areas and 26 miles would be designated in medium density areas. *Id.* Since Alternative B would close 327 miles of ORV trails in high-density areas, it is obvious that the proposed area and trail designations do not *minimize* potential impacts to cultural resources.[12] Cultural resource decisions "under the Proposed Plan would have potential for adverse impacts between those in Alternative B and those in Alternative D." *Id.* at 4-509. Although this statement might be true, it is no substitute for rigorous quantitative analysis of potential impacts, required by NEPA's hard look requirement.

The PRMP states that a limited percentage of lands within the MPA have been physically inspected for the presence of cultural resources and such an effort is cost-prohibitive as part of preparing the RMP"; therefore, site density potential was estimated for areas in the MFO. *Id.* at 3-22. Although it might be cost-prohibitive to inventory the entire MFO during the RMP process, BLM must inventory all proposed ORV routes prior to officially designating them in the

[12] It is not clear what is meant by the statement: "There are 148.2 miles of designated routes with possible cultural conflicts. In the Proposed Plan, 16.6 miles of these routes are not identified for travel." PRMP at 4-51. In Alternative B, it states the same thing, except that "46.5 miles of these routes are not identified for travel." *Id.* at 4-46. Although the statement is confusing regarding "designated" routes not being identified for travel, what is clear is that the Proposed Plan has more miles of route with possible cultural conflicts, indicating that the Proposed Plan does not minimize impacts to cultural resources.

RMP and travel plan, to comply with NEPA's hard look requirement. If it is cost-prohibitive to inventory all of the proposed routes, BLM must refrain from designating those routes that have not been inventoried, especially those routes in the high and medium probability areas, in order to comply with FLPMA's UUD mandate, as well as the ORV regulations minimization criteria.[13] Moreover, if BLM is going to base its decision on cost, it must also weigh the high cost of the cultural artifacts that would be lost due to ORV access, damage, and looting.

As the PRMP notes, "[p]otential areas of high site density or significant site types may need to be closed to vehicular travel." *Id.* at 3-23. Without first completing cultural resource surveys for each ORV area and trail that is designated in the PRMP including the White Wash Sand Dunes proposed "open" play area, BLM cannot have the adequate information on which to base ORV area and trail designation decisions, rendering the PRMP not in compliance with NEPA's hard look requirement and FLPMA's UUD and minimization mandates.

c. Soil and Water

The goals listed in the PRMP include improving water quality, soil quality, and long-term productivity. Proposed management includes: precluding surface-disturbing activities within floodplains and near springs, minimize surface disturbance in sensitive soils, address fugitive dust, minimize damage to soils, restore watersheds, and reduce erosion and stream sedimentation. *See id.* at 2-31. These goals are consistent with FLPMA's mandates as well as with the governing executive orders (discussed above).

BLM goes off the rails, however, after this point. The PRMP subsequently notes that "recreation and travel management decisions—primarily regarding OHV use—would affect soils, biological soil crusts, and water quality. Surface disturbance from OHV use would increase soil erosion, decrease soil productivity and infiltration rates, and may decrease water quality." *Id.* at 4-296. The PRMP further erroneously states "[b]ecause closure and limiting OHVs to designated routes both generally result in no additional surface disturbance that impacts soil and water resources, these two OHV use categories were analyzed together for each alternative." *Id.*

But there is nothing in the PRMP that supports BLM's contention that ORV routes and use of designated ORV routes do not impact soil and water resources. Fugitive dust from ORV routes impacts streams and water quality. In addition, the mere existence of designated routes increases fugitive dust when compared to fewer, or no, designated routes.

The PRMP also makes the nonsensical assumption that closed areas have the same impact on soils and water as areas in which ORV use is limited to designated routes. *See Id.* at 4-297. First, BLM presented no data to support that contention. Second, if there were data, it would probably show just the opposite. In fact, SUWA's comments and supporting materials

[13] Although BLM's response to comments (124-25 sorted by commentor) notes that Instruction Memorandum 2007-030 (IM) states that a Class III inventory is not required for the designation of existing routes," there is no indication that the IM applies to existing routes that have not been surveyed for cultural resources. In order to comply with the NHPA and federal regulations that require Class III inventory for an "undertaking," BLM must conduct Class III inventories on each route to be designated, as ORV area and trail designations are clearly "undertakings" pursuant to the NHPA.

demonstrate that inviting ORV use, even on trails, leads to the creation of new trails pioneered by ORV riders who cannot resist the attraction of cross-country travel. Several studies by universities in the region confirm that ORV riders routinely, and knowingly, violate trail designations. *See, e.g.*, SUWA's comments to the DRMP, Attachment I at 156, Attachment K at 342. Enforcement is clearly the linchpin to effective trail designations, but because BLM makes no commitment to enforcing the designations there is no rational reason to assume that trail designations will create no surface disturbance in addition to that resulting from ORV closures.

As noted above, there is no basis for the assumption that closing ORV routes and use of designated ORV routes do not impact soil and water resources. BLM must analyze the impacts from these two separate and distinct designations. Although the PMRP cites to a recent USGS synopsis of reports that discuss the impacts of ORV use on soil and water resources, including soil compaction, accelerated erosion rates, diminished water infiltration, and diminished presence of beneficial soil crusts, the PRMP contains no quantitative analysis of the potential impacts on soil and water that can be expected from BLM's ORV designations and travel plan. The "analysis" of soils and water is generally limited to a chart that shows the acreage of various soil types for the various alternatives, which does not comply with NEPA's hard look requirement. *See id.* at 4-298; *see also* EPA comments (and BLM's non-responsive reply) regarding BLM's analysis of impacts to water quality. PRMP Response to Comments, sorted by Commentor, at 479-22.

As noted above, the PRMP contains no evidence that BLM has tried to minimize impacts of ORV designations and the travel plan to soils and water resources. For instance, the PRMP acknowledges that there will be adverse impacts to 1,866 acres of soils (in the White Wash open area) under the proposed plan. *Id.* at 2-88. In addition, Alternative B has no ORV routes in water and wind erodible areas and no open ORV play area, which would appear to better comply with the ORV regulations minimization criteria, than BLM's proposed plan. *See id.* at 4-297.

d. Vegetation

The PRMP summarizes the potential impacts of ORV route and ORV use to vegetation from a recent USGS literature review of impacts of ORV use on public lands resources. *Id.* at 4-437. Impacts include soil compaction, decreased infiltration of water, which, in turn, impacts vegetation, and wind erosion which impacts the nutrient cycling process leading to reduced soil fertility and reduced vegetation. *Id.* at 4-437. The PRMP subsequently notes that vegetation would benefit from designated routes rather than continuation of the current management strategy (open to cross-country travel). The PRMP also noted that Alternative B would offer reduced impacts to vegetation than the proposed plan, as it has fewer ORV routes and no open play area. *See id.* at 2-110. Alternative B does more to minimize impacts to vegetation than the proposed plan.

The PRMP notes that the proposed ORV designations and travel plan "could negatively impact Jones' cycladenia and other sensitive plants due to indirect affects [sic] from fugitive dust and incursions of invasive weeds associated with OHV use." PMRP at 4-407. This is one of the very few places in the PRMP that mentions the introduction and spread of invasive species via ORV use, a concern that SUWA raised in its DRMP comments. However, the PRMP fails to

include a quantitative analysis of the invasive species issue or the impacts on the Jones' cycladenia and other plant species.

The PRMP contends that managing the White Wash sand dune area as an open play area would have "negligible impacts on vegetation resources" as the area is "sparsely vegetated." *Id.* at 4-438. This is not the case, as the dunes are heavily vegetated with endemic dune plants and there are mature and young cottonwood and willow trees sprinkled generously throughout. *See* nine photographs of White Wash dunes depicting vegetation throughout the dunes, attached as Exhibit B; PRMP Response to Comments, sorted by Commentor, at 479-6, -10 (Comment by EPA).

As the discussion above illustrates, BLM's proposed plan fails to minimize impacts to vegetation from ORV designations and the travel plan, and the PRMP fails to adequately analyze and disclose the impacts of the ORV designations and travel plan on vegetation resources, as required by NEPA.

e. Air Quality

The PRMP is conspicuously silent on the impacts to air quality as a result of the ORV designations and travel plan. There is no discussion of these impacts in Table 2.2, "Impacts Summary Table." *See* PRMP at 2-60 for summary of impacts to air quality. There are two (2) sentences in Chapter 4: Environmental Consequences regarding the impacts of ORV designations and travel management on air quality, that can be summed up by saying that BLM expects the proposed plan to have less impacts to air quality than the existing management strategy due to the "minor additional restraints" to motorized vehicle use. *See* PRMP at 4-26. EPA requested that BLM provide more specific information on the role that ORV use has on air quality. BLM responded: "Specific quantifiable details on the impacts of OHV use are not available." PRMP Response to Comments, sorted by Commentor, at 479-21.

BLM must model the fugitive dust emissions from the designated routes in order to assess the impacts of the ORV area and trail designations. Variables in such modeling would include wind movement data from the local region and dust production data (gathered at incremental distances from the routes). Similar studies have been conducted on public lands in the Mojave Desert. Thus, BLM does not have to invent the model, but merely gather the data to apply the model. In addition, the PRMP is silent on the fugitive dust as well as petrochemical emissions caused by the thousands of ORVs that will use the designated trails. BLM must model the fugitive dust and pollution emissions from ORV use of these designated routes.

BLM's meager treatment of the impacts on air quality from its ORV designations and travel plan does not comply with NEPA's hard look requirement or with the ORV regulations' minimization requirement.

f. Wildlife and Wildlife Habitat

The PRMP notes that impacts of travel decisions on wildlife depend largely on the "number of acres open and closed to OHV use . . . . OHV use can cause damage to vegetation used as

wildlife forage and cover, as well as cause noise disturbance. OHV use therefore generally has adverse impacts on wildlife species, especially birds." *Id.* at 4-479. ORV use contributes to habitat fragmentation and the spread of noxious weeds. *See id.* Potential impacts from travel management include direct, indirect, short- and long-term impacts on all habitat types. *Id.* at 4-405. The PRMP continues "MSO, SWFL and other sensitive birds could . . . be negatively impacted due to the potential increase of human presence associated with OHV use." *Id.* at 4-407. The PRMP presents Table 4.1.33 and Table 4.155 that show the amount of acreage within select sensitive species' habitats and other wildlife habitat that would be closed to ORV use. The PMRP acknowledges that Alternative B would be slightly "more beneficial" to wildlife. *Id.* at 4-481. Thus it is doubtful that BLM's proposed plan has minimized impacts to these sensitive species. As presented in the PRMP, there are known impacts to wildlife from ORV routes and use, yet the PRMP fails to adequately analyze the potential impacts to wildlife and wildlife habitat from the ORV area and trail designations and the travel plan. Stating that the ORV use area and trail designations "improve the condition and quality of wildlife habitats and provide more benefits to wildlife species and their habitats" than the existing management strategy, without data or any other basis for these conclusions, is not sufficient analysis under NEPA's hard look mandate. *See id.* at 4-481.

g. Non-WSA Lands with Wilderness Characteristics

The PRMP states that the goals and objectives for managing non-WSA lands with wilderness characteristics (WC lands) are to "protect, preserve and maintain wilderness characteristics." *Id.* at 2-16. The BLM acknowledges that "[m]otorized uses in these areas detract from opportunities for both solitude and primitive forms of recreation." *Id.* at 4-115. Nevertheless, *the proposed plan includes ORV route designations in all of the non-WSA lands with wilderness characteristics*—in addition to and outside of BLM's cherry-stemmed routes identified on BLM's GIS data. More troubling is that BLM is proposing ORV routes (8.36 miles) within the smaller subset of WC lands the agency is proclaiming to manage to protect and preserve the WC values—Beaver Creek and Mary Jane Canyon WC areas (WC lands not being managed to protect wilderness character will have 158.54 miles of route). *See id.* at 4-154, Map 2-11-C, Map 2-24-C; *see also* PRMP Response to Comments, sorted by Commentor, at 479-15 (EPA's comment urging protection of the WC lands and BLM's response that overstates the actual protection these areas will receive under the proposed plan).

The PRMP includes a short disclosure—buried in Chapter 4, rather than in the Executive Summary where it states that "47,461 acres of non-Wilderness Study Area (WSA) lands (in 3 areas) would be managed to protect, preserve and maintain their wilderness characteristics"—of the fact that these so-called "protected" WC lands will have ORV routes designated within them. *Id.* at ES-3, 4-154. The PRMP concludes that limiting travel to designated routes would "result in no additional change to the natural character of the non-WSA lands" but that it would reduce the opportunity for visitors to find solitude in proximity of the routes and would conflict with primitive and unconfined recreation opportunities in those areas. *Id.* at 4-155. The statement that routes in WC lands will not impact the area's natural character flies in the face of BLM's 1980 wilderness inventory documentation that included numerous statements regarding the existence of a route detracting from the naturalness of the area—which subsequently led BLM to drop the area from further wilderness consideration. BLM cannot have it both ways.

Designating routes in WC lands will encourage more motorized use of the trail and the existence of a well-used trail bare of vegetation affects the naturalness of the area and its future eligibility for wilderness designation.[14]

The PRMP does not minimize the impacts to the WC lands and does not adequately assess the impacts to the WC lands from ORV routes and use. The impacts from ORV designation and the travel plan on WC lands would be minimized if managed for non-motorized use, rather than managed for motorized use on designated routes that were not inventoried as routes in the WC inventory. *See* Map 2-24-B.

h. Wilderness Study Areas

The PRMP fails to analyze and disclose any adverse effects to the wilderness resources from the designation of "ways" in the Behind the Rocks and the Lost Spring Canyon WSAs, as official ORV routes (0.9 and 0.8 miles, respectively). The PRMP notes that Alternative B "adversely impacts wilderness values the least," which is the equivalent of saying that the proposed plan will impact wilderness values to some extent, and that the proposed plan does not minimize these impacts. *Id.* at 4-355. The PRMP presents no evidence that motorized use on these "ways" are currently not causing impairment to the WSAs. BLM's decision to designate these ways as official routes appears to be arbitrary and capricious.

i. Other Users

As noted above, the PRMP fails to minimize conflicts with other users of the public lands, specifically non-motorized recreationists and its failure to include information which demonstrates that the vast majority of visitors to the MFO use non-motorized recreation, leaves out information that would be crucial to any reasoned approach to ORV travel planning.

MFO has conducted a user survey (Moab National Visitor Use Monitoring survey) for the public lands managed by the MFO, yet failed to incorporate the results from this survey into the PRMP. Of particular relevance to the PRMP is the relative use of non-motorized versus motorized recreation.[15] *See* SUWA's comments to the DRMP, and http://www.suwa.org/site/DocServer/BLMNVUMsurveyMoab.pdf?docID=2821. This survey shows that non-motorized recreation is utilized by vastly more visitors to the Moab BLM-managed lands than motorized (ORV-based) recreation. In fact, the Moab survey found that motorized use accounted for less than 7% of visitors' main activity. Having actual visitor information is essential to guide BLM's long-term recreation management decisions and ORV area and route designation decisions.

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[14] The same can be said of the 0.9 miles and 0.8 miles of route BLM proposes to designate in the Behind the Rocks and Lost Spring Canyon WSAs, respectively. Designation will encourage motorized use and such use will eventually denude the trails of all vegetation. These trails will then become a noticeable impact to the casual visitor and will effect the naturalness of the areas—which could rob these WSAs of future wilderness designation. Saying the Proposed Plan is more restrictive than Alternatives A and D is not adequate analysis under NEPA. *See* PRMP at 4-356.

[15] Although BLM attempts to cast a shadow of doubt on the findings of this survey suggesting that developed campground might have been oversampled and dispersed recreation might be undersampled, *see* PRMP Response to Comments, sorted by Commentor, at 124-2, this survey is the best information available to BLM.

To comply with NEPA's hard look requirement and the ORV regulations' minimization mandate, BLM must incorporate the information gathered in the Moab Visitor Use Monitoring Survey into the PRMP's affected environment and environmental consequences analysis sections. This data should be used to analyze the impacts to non-motorized users of ORV area and route designations and travel plan decisions.

j. Inventory of Existing Ways and Routes

Appendix G contains many pages of text describing MFO's process of creating the travel plan proposal, including verification of Grand and San Juan counties' road maps, private individuals' maps and route proposals, "team" meetings, and issue identification. None of this sheds light on BLM's site-specific ORV area and trail designations or travel plans decisions, as it is just general background on how BLM verified route proposals submitted by counties and individuals or groups (with the conspicuous exception of the RHP submitted by SUWA).

The Appendix notes that when resource conflicts were identified, some routes were recommended for non-designation in the "Conservation" alternative, but were included in the "Commodity" alternative. Whether or not to designate a route in the Balanced alternative [proposed plan] was decided by a weighing of the route's importance against the severity of the identified resource conflicts." Appendix G at G-21. The ORV regulations state that BLM must *minimize* impacts to resources; BLM's "weighing" process fails to do that. There is no information in the PRMP that discloses which routes proposed for designation were found to have resource conflicts but were nevertheless included in the proposed plan because BLM found a route's "importance" outweighed the resource conflict and impacts.[16] In addition, although Appendix G has a generic list of "purpose and need" criteria purportedly applied by the MFO, the PRMP fails to include a discussion and analysis of the purpose and need for the ORV area designations and the individual routes designated in the travel plan.[17] *See id.* at G-10. Finally, the PRMP fails to include an analysis of whether the proposed area and route designations are sustainable over the long term. To ensure that the agency has taken the required hard look, its analysis must be supplemented and provided for public review before the ROD is issued.

Appendix G mentions BLM IM 2004-005, which advises BLM to choose individual roads and trails for designation, rather than "using inherited roads and trails." *Id.* at G10. Unfortunately, however, there can be little argument that BLM's proposed ORV routes and travel plan are

[16] Appendix G, Table 10 shows miles of route designated/not designated due to resource conflict, but this does not suffice for disclosure of the specific routes designated with known resource impacts, and an analysis of the potential impacts. In addition, Appendix G states that route by route information can be found in the GIS records, which can be obtained upon request. *See* Appendix G at G-2. Allowing the public to request the technical and complex raw GIS data fails to meet NEPA's requirement for disclosure and public scrutiny. SUWA has a copy of the BLM's GIS data. The data includes a huge spreadsheet (approximately 20,000 lines with 44 columns) with numbers in the columns. There is no legend for the GIS data spreadsheet. This GIS information in not instructive to those not versed in GIS data. This information must be disclosed in the EIS, in a manner that is comprehensible to the general public. *See* 40 C.F.R. § 1502.24, § 1502.22(s).

[17] To the extent that BLM adopted the county road plans, including alleged R.S. 2477 routes, this would violate BLM's own non-binding determination (NBD) process, which requires that the counties submit evidence beyond mere GIS data to support and *prove* their road claims. BLM must follow its own NBD process.

nearly identical to San Juan and Grand counties route proposals.[18] *See* PRMP Appendix G at G-3, G-14. MFO did exactly what it was cautioned not to do—designating routes based on lines on a map or GPS data that was collected during "ground truthing," rather than choosing individual routes that serve an important purpose and need, and that minimize impacts to resources and other users.[19]

k. Incomplete Information

The federal regulations address incomplete or unavailable information at 40 C.F.R. § 1502.22. The Moab PRMP and DRMP's lack of information on impacts to air quality, water quality, soils, riparian areas, vegetation, and cultural resources, and other users, cannot be used as an excuse by BLM for not providing analysis of the potential and expected impacts from its ORV area and trail designations. BLM must do more *before* it authorizes motorized use in designated areas and on designated trails. Were it otherwise, agencies could simply, and easily, undercut NEPA's insistence on informed decision making by failing to gather data relating to key determinative issues and then arguing that the information is unavailable or too difficult to obtain. That is precisely what BLM is attempting to do here.

For the reasons discussed above, BLM has failed to minimize impacts to natural and cultural resources and other users as required by FLPMA's ORV regulations, and to take the requisite "hard look" at the impacts of its ORV area and trail designations and travel plan decisions on the natural and cultural resources it is entrusted to protect.

3. The PRMP Does Not Describe the Existing Baseline Conditions and the Impacts of ORV Use in the Moab Field Office

In order to evaluate the broad range of impacts required by a NEPA analysis, it is critical that BLM adequately and accurately describe the environment that will be affected by the proposed action under consideration—the "affected environment." 40 C.F.R. § 1502.15. The affected environment represents the baseline conditions against which impacts are assessed.

As SUWA noted in its comments on the DRMP, an accurate description of the baseline conditions of the Moab Field Office is crucial to BLM's analysis and description of the environmental impacts from the proposed action and various alternatives. *See* SUWA DRMP Comments at 14. All management decisions and strategies flow from the description of the

[18] To the extent that BLM simply adopted wholesale the counties' map of R.S. 2477 claims, its decision is arbitrary and capricious and circumvents established procedures for the recognition of such claims, including the Quiet Title Act and the Department of Interior's own process for reviewing and issuing applications for non-binding administrative determinations of such claims.

[19] The PRMP includes several ORV and motorcycle routes in the Book Cliffs and Sand Flats areas that were not disclosed in the DRMP. 40 C.F.R. § 1502.9(c)(1) requires BLM to prepare an SEIS if "[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impact." *See also* 40 C.F.R. § 1503.1(a)(4) ("After preparing a draft environmental impact statement and before preparing a final environmental impact statement the agency shall: Request comments from the public, affirmatively soliciting comments from those persons or organizations who may be interested or affected."). The fact that the proposed plan adds several new vehicle routes is new information that the public and decision maker should be able to review and assess prior to BLM issuing the PRMP.

current conditions. And unless BLM has an accurate, well-informed understanding of the current conditions, it cannot possibly begin to plan for future resource demands and needs. BLM cannot objectively decide how much ORV use to allow in the future, and which areas and routes to designate, as BLM does not know how much and what kind of damage such use has caused in the past, and is causing right now.

One of the most obvious and consequential flaws in the PRMP is its failure to assess the ongoing impact of existing ORV use in the Moab Field Office. Instead of analyzing the current impacts of ORV use, BLM essentially treats existing ORV use as a given. BLM simply presumes that ORV use will continue and contends that such use will cause no damage over and above that which occurs now, and that the existing damage does not need to be studied. *In other words, BLM has concluded that current levels of ORV use and the existing trails are consistent with FLPMA, including the UUD and non-impairment standards, even though it does not know what the impacts are*. *See also* PRMP at 3-88, 4-438 ("The impacts of travel along designated routes would have negligible impacts on vegetation because past and current use has already impacted these areas."); *id.* at 4-237 (The impacts [of ORV travel] on recreation would be negligible, as B- and D-Class routes are currently being used for recreation access."). As noted in SUWA's DRMP comments, this is a circuitous argument, it is not analysis.

The PRMP also makes a fundamental mistake by placing Class B roads outside of its impacts analysis. *See PRMP* at 4-415 ("these routes were not used as analysis criteria because they are maintained San Juan County and Grand County roads that currently provide motorized access throughout the MPA and whose travel function or designation would not change under any of the proposed alternatives.") Although it is not clear why BLM uses Utah State road class categories in its route designation process, *see, e.g.,* Table ES2 Designated Routes (miles) in Inventory vs. Proposed Plan, at PMRP ES-4, Table 4.136 OHV Designations by Alternative, PRMP at 4-419, these Class B routes are no different than other routes on BLM lands. Class B and D routes are located on public lands and few, if any routes of either class, have ever been subject to NEPA analysis for impacts to the natural and cultural resources or other users, and their cumulative effects have never been considered. Although many of these routes are, indeed, maintained routes, others are little more than tracks in the sand with unknown purpose and need, potentially impacting natural and cultural resources. Thus, the impacts of the Class B routes must be analyzed. In addition, the federal regulations' minimization criteria apply to the Class B routes, just as it does to any other route on BLM lands.

Another example of BLM failing to accurately describe the existing baseline is when the PMRP disingenuously states that there are 4,673 miles (D routes) or 6,199 miles (B and D routes) of *designated route* that exist "at the time of EIS publication." PRMP at 4-419. Thus, when the public and the decision maker compare this alleged mileage of designated routes with the 2,519 miles of proposed designated "D" routes or the 3,693 miles of "D" and "B" routes combined, it appears that BLM is proposing to reduce the number of miles of designated routes. This is grossly misleading, as there are not 4,673 or 6,199 miles of designated route in the Moab FO. In fact, SUWA knows of no designated route in the MFO, except perhaps in the Sand Flats area. The current RMP (adjusted for ORV restriction orders published in the Federal Register) has 1,196,920 acres designated as "*limited to existing*" routes, 5,062 acres closed to ORV use, and

620,212 acres open to cross-country ORV use.[20] *See* PRMP Table ES1 OHV Categories, Table ES2 Designated Routes (miles) in Inventory vs. Proposed Plan at ES-3-4, Table 3.20 Comparison of 1985 RMP OHV Designations and Present OHV Designations, at 3-88, and Table 4.4126 OHV Designations by Alternative, at 4-419. BLM must disclose accurate baseline information to the public and decision maker regarding the impacts of current ORV use, Class B routes, and current miles of route designated for ORV use and allow public comment *before* issuing final decisions for ORV area and trail designations and the travel plan.

4. Scientific Integrity and Public Scrutiny

The agency 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 that is essential to a reasoned choice among alternatives shall be included in an EIS if the costs of obtaining it are not exorbitant. *Id.* § 1502.22(a). In addition, NEPA requires that environmental information be made available to the public. "The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA." *Id.* § 1500.1(b). This type of information and analysis is wholly lacking with regard to off-road vehicle area designations and the travel plan decisions in the PRMP.

BLM must include site-specific documentation of the agency's own analysis of the purpose and need for the area and trail designations, and the potential impacts associated with the *designation* and *use* of all proposed ORV areas and trails. This is critical information for the public and the decision maker to determine if BLM's decisions comply with the mandates of FLPMA, the ORV regulations, and Executive Orders—all of which require that BLM locate ORV areas and trails to *minimize* damage to riparian areas and floodplains, soils, vegetation, wildlife and wildlife habitat, cultural resources, air and water quality, and to *minimize* conflicts with other recreationists—and BLM's obligations under the Clean Air Act, Clean Water Act, Endangered Species Act, and National Historic Preservation Act.

The DRMP failed to present this information with respect to the various ORV area and trail designations and the travel plan under consideration and the PRMP did not correct these gross omissions. Without this information and data, the public has no way of discerning the basis for BLM's decisions regarding the specific area and trail designations and travel plan decisions, and cannot confirm that BLM has, in fact, ensured that these designations comply with the minimization requirements and other legal and policy obligations set out above.

To address these deficiencies, BLM must provide specific information on the purpose and need for the routes incorporated in each alternative, the justification for designating the area and route, the potential impacts on natural and cultural resources, the potential conflicts with other users, how those impacts can be mitigated or avoided, enforcement and monitoring requirements and schedules, and the manner in which designation of the areas and routes for ORV use is consistent with the agency's obligations under FLPMA and BLM's ORV regulations and policy.

[20] The original 1985 RMP ORV decisions include 1,183,660 acres designated as open to ORV use, 596,234 acres designated as limited to existing roads and trails, 24,454 acres designated as closed to ORV use, and 15,206 acres in the Mill Creek area designated as limited to designated roads and trails. *See* PRMP at 3-169.

In order to provide high quality information for the public to review and assess, the PRMP's ORV area and route designation maps (PRMP Maps 2-10-C, 2-11-C, and 2-11E-Proposed Plan) must be modified to display the proposed ORV area and route designations with other resource inventories and/or management decisions, such as riparian areas, potential ACECs, wildlife habitat, wilderness character areas, wilderness character areas proposed to be managed to protect wilderness character attributes, and WSAs. *See* ACEC and Proposed Routes Map, attached as Exhibit C; Wildlands and Proposed Routes Map, attached as Exhibit D. Otherwise, the public and decision maker do not have adequate information on which to assess BLM's proposed ORV area and trail designations. BLM has this information at its disposal, it merely needs to combine various resource map layers with its proposed ORV area designation and travel plan maps. These maps must be modified and re-issued for public review and comment so that this input can be taken into account *before* issuance of a Record of Decision.

The PRMP fails to adequately analyze and inform the public and the decision maker as to the potential indirect and cumulative impacts to the natural and cultural resources from the ORV area designations and travel plan decisions. *See* PRMP at 4-512 ("OHV travel management would have beneficial cumulative effects on recreational experiences . . . The Proposed Plan would contribute an amount in between Alternative B and Alternative D to the cumulative impacts on recreation."). There is no discussion of specific ORV designations or travel plan decisions in the cumulative impact analysis for riparian areas, *see id.* at 4-513, soil and water, *see id.* at 4-514, or non-WSA lands with wilderness character, *see id.* at 4-511. The cumulative impacts analysis for cultural resources, air quality, wildlife, and vegetation merely mention ORV use and/or conclude that the cumulative impacts would be minimal. *See id.* at 4-507-516. In general, the PRMP fails to adequately assess the impact that the dense network of routes (nearly 90% of public lands south of I-70 are within 0.5 miles of a route) have on wildlife, soils, vegetation, riparian areas, air and water quality, WC lands, cultural resources, and other users. BLM must supplement the PRMP and provide a scientific and quantitative analysis of the cumulative and indirect impacts of the ORV designations and travel plan decisions, and provide the public a chance to review and comment on the supplementary information before a decision is issued that could significantly affect the very resources BLM is entrusted to protect.

VIII. Riparian Resources

As noted in SUWA's comments to the Draft RMP, we incorporated the comments that ECOS Consulting submitted for the DRMP into SUWA's DRMP comments. Again, SUWA incorporates the comments to the Draft RMP and the protest submitted by ECOS Consulting into our protest, and we also discuss our further concerns below.

The important role riparian and wetland areas occupy in the health and integrity of ecosystems throughout Utah and the West is provided special protection by several Executive Orders and the Utah BLM Riparian Management Policy. As the Utah BLM Riparian Policy explains, "[r]iparian areas comprise less than one percent . . . of public lands . . . in Utah . . . these small but unique areas are among the most important, productive, and diverse ecosystems in the state." Utah BLM Riparian Management Policy, Instruction Memorandum No. UT 2005-091 at 1. *See also* PMRP at 3-93. The Utah BLM Riparian Policy continues:

> The objective of the policy is to establish an aggressive riparian area management program that will *identify, maintain, restore, and/or improve riparian values* to achieve a healthy and productive ecological condition . . . .

Utah BLM Riparian Management Policy, Instruction Memorandum No. UT 2005-091 at 1 (emphasis added).

To meet this objective, field offices are responsible for "ensuring that all new or revised management plans contain objectives and management actions to maintain or improve riparian resources," and to the extent possible, "[m]aintain and/or improve riparian areas to Proper Functioning Condition (PFC) by incorporating riparian resource needs in Resource Management Plans (RMPs)." Utah BLM Riparian Policy at 2–3. This policy is binding on the BLM Moab Field Office and provides the framework for the RMP process. Further, Executive Order 11990 mandates that "[e]ach agency provide leadership and shall take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities." Exec. Order No. 11,990, 42 Fed. Reg. 26,961 (May 24, 1977).

Despite BLM policy to aggressively protect riparian areas, the Moab PRMP misses the mark. The Utah Riparian Policy clearly states that "[r]iparian areas are to be improved at every opportunity." Utah BLM Riparian Policy at 4. The Moab Field Office, however, fails to utilize most of the opportunities before it in this RMP process to improve riparian areas. While the Moab PRMP repeatedly explains the benefits of protecting riparian areas, it fails to adequately impose such protections on riparian resources in the Moab Field Office. Further, the PRMP repeatedly explains the serious damage OHV use, grazing, and other interference inflicts on riparian areas, but still allows such activities in many riparian areas. These failures illustrate that BLM is falling short of meeting its responsibility to "maintain or improve riparian resources" and to "provide leadership . . . to preserve and enhance the natural and beneficial values of wetlands."

For example, the PRMP states that

> livestock grazing, recreational uses (including OHVs, non-motorized recreation, etc), mineral exploration and development . . . . have all had cumulatively adverse impacts on riparian health . . . [and] have led to surface disturbance, soil compaction, removal of riparian vegetation, bank trampling, and alteration of riparian areas' physical structure. They have also result[ed] in the widespread introduction of invasive weeds.

PMRP at 4-513.[21] The PRMP goes on to explain that "riparian resources would benefit from management for Properly Functioning Condition . . . . This would mitigate many of the adverse impacts from the past, present, and future actions . . . . [C]ontinuing closure . . . would continue the restoration and enhancement of riparian resources." *Id.* Elsewhere, the PRMP explains that "[r]iparian/wetland habitats are fragile resources" and lists several of the benefits of a healthy riparian area, including maintaining clean water supplies, supporting special status species, and soil stability. *Id.* at 3-93.

Yet despite this demonstration that the Moab Field Office understands the fragile ecological state of riparian areas and the importance of protecting them, the PRMP allows a great deal of disturbance and repeatedly prioritizes other conflicting uses that damage riparian resources. Despite the fact that 43% of riparian areas in the Moab Field Office are Functioning at Risk or Non-Functioning, the PRMP excludes only 12% of riparian areas from grazing, allows continued use of previously created OHV routes in riparian areas, imposes a buffer from new surface-disturbing activities that is much smaller than that recommended by the Environmental Protection Agency, and reports that many of the Functioning at Risk or Non-Functioning riparian areas are not receiving corrective restoration efforts. *See, e.g., id.* at 3-95, 2-81; *see* 3-98, Table 3.24: Watersheds and Issues Receiving Corrective Restoration Action.

The PRMP states that it is "closing all riparian areas to OHVs or limiting travel." *Id.* at 2-81. While at first glance this statement seems to indicate a significant amount of protection for riparian areas, it is unfortunately misleading. "Limiting travel," in this context, means that OHV use will be allowed on designated roads and trails. *See id.* at 4-247; *see also* Charles Schelz, ECOS Consulting, Comments on the BLM Draft Moab RMP/EIS 6 (Nov. 2007). In its response to a comment made by ECOS Consulting about the Moab Draft RMP, the Moab Field Office explains that it will allow continued OHV use of previously created designated routes in riparian areas because while the Utah Riparian Policy bars "new surface disturbing activities . . . within 100 meters of riparian areas," the Field Office can allow continued use of previously created routes because, according to BLM's tortured reading of the policy, that does not constitute "*new* surface disturbing activities." PRMP response to comments, sorted by Commentor, unpaginated p. 513. The Moab Field Office further justifies this reasoning by stating that "the majority of the impacts occur when the route was constructed." *Id.* The PRMP even states that "[t]he impacts of limiting OHV use to designated roads and trails would be the same as closure of riparian areas

[21] As set forth in the section on climate change, *supra*, some of these expected impacts, such as those from ORVs, will be exacerbated by a regional climate that is predicted to be hotter and drier. These conditions will lead to scarcer water supplies, soil erosion, the spread of non-native plant species, and the likelihood of larger, hotter wildfires. The cumulative effect of climate change, together with these existing impacts, is not discussed in the PRMP.

to OHVs." PRMP at 4-247. This reasoning ignores the real impacts from continued OHV use of an already designated trail and is an arbitrary and irrational departure from the Utah Riparian Policy. While the creation of an OHV route through a riparian area does indeed cause significant damage, the continued use of that route also inflicts serious negative impacts. The PRMP itself often discusses the harmful impacts of any kind of OHV use, regardless of whether the route has already been established. *See, e.g.,* PRMP at 3-82 ("Resource damage from OHV use includes damage to soils, scenic quality, vegetation, cultural, and paleontological resource degradation as well as to damage to riparian resources.").

One specific example of the PRMP's allowance of so-called limited OHV use in riparian areas that is particularly troubling is the PRMP's treatment of Ten Mile Wash. In its comments to the Draft Moab RMP, the State of Utah Department of Natural Resources, Division of Wildlife Resources (UDWR) urged the Moab Field Office to close the mouth of Ten Mile Wash to camping and other recreational users during summer months in order to protect southwestern willow flycatchers and blue herons. Letter from James F. Karpowitz, Director, UDWR, to Carolyn Wright, Public Lands Policy Coordination, Office of the Governor (Oct. 31, 2007) at 4. Although SUWA discovered through a Government Records Access and Management Act (GRAMA) request that this portion of the UDWR comments was redacted by the Resource Development Coordinating Committee (RDCC) before it was submitted to BLM, the Moab Field Office was later informed of the UDWR's recommendation that the Ten Mile Wash should be protected by adequate closures. The PRMP states that the Ten Mile Wash is receiving unspecified "corrective restoration action," but is still apparently allowing OHV use on designated routes in the riparian area. *See* PRMP at 3-98, Table 3.24: Watersheds and Issues Receiving Corrective Restoration Action. As discussed above, OHV use—even on designated routes—in a riparian area causes serious negative impacts. This management strategy contradicts any supposed intent to restore or protect this riparian habitat and disregards UDWR's concerns.

Aside from allowing continued use of existing OHV routes in riparian areas, the PRMP generally prohibits "new" surface disturbing activities within 100 meters of riparian areas. Both the Environmental Protection Agency (EPA) and ECOS Consulting asserted in their comments to the Moab Draft RMP that a 100 meter riparian buffer zone is insufficient. The Utah Riparian Policy states that "[n]o new surface disturbing activities will be allowed within 100 meters of riparian areas," unless one of three exceptions are met. Utah BLM Riparian Policy at 4. There is nothing in the Utah Riparian Policy, however, that requires the 100 meter buffer zone to be interpreted as a maximum ceiling. Indeed, EPA's comments explained that

> The EPA believes that the 100 meter riparian buffer zone, while affording some degree of protection, is not sufficient. The EPA believes that the ¼ mile buffer zone created when a river is found suitable for Wild and Scenic River status should be considered for all wetlands 1) not in PFC, 2) vulnerable to impacts from oil and gas production, recreation and grazing, and 3) along stream segments with steeper slopes.

PRMP response to comments, sorted by Commentor, unpaginated p. 175. Echoing this same concern, ECOS Consulting urges a buffer of at least 1500 meters. Charles Schelz, ECOS

Consulting, Comments on the BLM Draft Moab RMP/EIS 4 (Nov. 2007). ECOS Consulting explained in its comments to the Draft RMP that "[w]hen there is nearby surface disturbance, the proposed BLM buffer of '100 meters' is inadequate in this dry desert environment, because of the ease of the spread of soil disturbance and erosion, vegetation loss, and soil and water contamination that can spread into the floodplain and riparian habitat." *Id.* at 5.

Additionally, the PRMP fails to provide all the information required by the Utah Riparian Policy and the information required for the public to understand the current condition and proposed management of each riparian area. FLPMA, 43 U.S.C. §§ 1701–1785, § 1701(a)(2) (2000), declares that "the national interest will be best realized if the public lands and their resources are periodically and systematically inventoried." The Utah BLM Riparian Policy explains that each field office is "responsible for . . . mapping and inventorying all riparian areas in [its] jurisdiction" and "will, to the extent possible . . . [i]nventory and map riparian areas within each office." Utah BLM Riparian Policy at 3. The policy further explains that this responsibility

> will normally be completed during the Resource Management Planning (RMP) process. In order to be useful, the RMP, at a minimum will:
>
> - Contain the Field Office riparian area priority list.
> - Identify key riparian areas using PFC inventory and determine whether or not they are properly functioning systems.
> - Identify riparian areas for possible acquisition.
> - Identify riparian areas which meet policy tests for disposal or exchange.
> - Identify easement acquisition which will improve Bureau management of existing riparian areas.
> - Identify riparian areas with outstanding qualities to be considered for special designation or management.
> - Contain planning and monitoring objectives for riparian area management.

Utah BLM Riparian Policy at 7–8.

While the PRMP does provide the total acreage and percentage of riparian areas in the Moab Field Office that are labeled under each category of riparian status (Proper Functioning Condition, Functioning at Risk, and Non-Functioning) and lists the names of the riparian areas, it does not provide other relevant information necessary for the reader to understand the relationship between a riparian area's category status and how it will be managed under the RMP. *See* PRMP at 3-95, Table 3.22: 2003 Condition Status of Riparian Areas by Watershed within the MPA. For example, Table 3.22 provides that the Upper Colorado-Dolores-Westwater Stream System includes Agate Wash, Bitter Creek, Cisco Wash, Coates Creek, Colorado River, Cottonwood Canyon, Cottonwood Wash, Danish Wash, Diamond Ck, Dolores River, Dry Gulch,

East Canyon, Hay Canyon, Jones Canyon, Little Dolores, Marble Canyon, Nash Wash, Pinto Wash Renegade Ck, Ryan Ck, Sagers Wash, Star Cyn, Sulphur Canyon, and Westwater Creek, and that 62% or 6,753.21 acres are in Properly Functioning Condition, 14% or 1,502.91 acres are Functioning at Risk, and 25% or 2,692.47 acres are Non-Functioning. *Id.* This information is helpful, but this table leaves the reader completely in the dark about which riparian area in the Stream System is classified as fitting within each functional status category, such as the particular condition of Jones Canyon or Nash Wash. Further, while the PRMP elsewhere provides which riparian areas will be closed to grazing, it does not provide which areas will be closed to OHV use or that will allow "limited" OHV use. *See* PRMP at 4-82, Table 4.42: Acres Unavailable for Grazing and AUMs of Forage under the Proposed Plan.

Presumably BLM created a list of each riparian area, its status, and whether it is closed to OHV use when gathering the information presented in Table 3.22 and elsewhere in the PRMP; this information should have been included in the PRMP. The Moab Field Office simply failed to provide the information necessary for the public to understand the status of each riparian area and how the Moab Field Office is going to manage those areas. Apparently the Moab Field Office made such information available only upon public request, but should have included it in the PRMP to satisfy NEPA's requirement and the purpose of the planning process that information be provided to the public sufficient to inform the public and decision makers of all alternatives and the proposed management plan. In its response to comments to the Draft Moab RMP submitted by ECOS Consulting, the Moab Field Office asserts that "riparian conflict is identified on a route by route basis for about 33,000 routes in the attribute table for the GIS database. This data are part of the administrative record and are available to the public upon request." Comments to the Draft RMP, sorted by Commentor, unpaginated at 512. In the PRMP, the Moab Field Office explained that the "[c]ompletion of inventory of riparian and wetland areas and the use of monitoring and mitigation to help protect these resources" did not need a "detailed analysis in this planning effort" and was "already addressed by administrative actions." PRMP at 1-8 to -9. While perhaps it is helpful for the public to know, generally, that the BLM did complete such an inventory and monitoring, such information must be included in the PRMP so that the public can fully understand the Field Office's assessment of the condition of each riparian area and how the Field Office proposes to manage it. Otherwise, the public is uninformed and cannot submit constructive comments on this important aspect of the planning process.

IX. Socioeconomic Resources

Several deficiencies in the socioeconomic analyses in the DRMP/DEIS were noted in comments submitted by SUWA and others. None of these deficiencies have been addressed, nor do the responses by BLM sufficiently justify this lack of action on the part of the agency. As discussed above, these deficiencies violate numerous provisions of NEPA and its implementing regulations.

Specific areas of concern are listed below and discussed in detail in the following sections:

A. BLM must analyze the costs associated with increased emissions of air pollutants resulting from oil and gas operations.
B. The analysis of social and economic impacts relies on speculative and unsubstantiated predictions and assumptions.
C. The assumption that BLM would have the funding and work force to implement the selected alternative is dubious.
D. The total planning area acreage varies by alternative, indicating inaccuracy in analysis and conclusions.
E. BLM should analyze any additional leasing in the alternatives (including any in the "no action" alternative) as *gains* to the oil and gas industry, in order to provide a true baseline of oil and gas development from which to compare the rest of the alternatives.
F. The socioeconomic analyses focus almost exclusively on the potential benefits of oil and gas drilling and off-road motorized recreation in the Moab Planning Area, rendering the analyses and BLM's conclusions flawed and unreliable.
G. The PRMP fails to adequately address the impacts that the preferred alternative will have on the local economy.
H. The PRMP does not account for the non-market values associated with undeveloped wild lands.
I. The significance criteria are incomplete because they only consider employment and population.
J. Impacts of management decisions for Non-WSA Lands with Wilderness Characteristics on social and economic conditions are not taken into consideration in Section 4.3.12.2.8.
K. Section 4.3.12.2.10 (Impacts of Recreation and Travel on Social and Economic Conditions) does not accurately evaluate the benefits of non-motorized recreation and the costs of motorized recreation.
L. The Moab PRMP does not account for errors and inadequacies of the Draft RMP/EIS that were identified in comments addressed to BLM for the land management plan.

These specific issues are discussed in detail in the following sections.

A. BLM Must Analyze the Costs Associated with Increased Emissions of Air Pollutants Resulting from Oil and Gas Operations

BLM concludes that oil and gas drilling and other activities in the Moab planning area will result in increased emissions of several regulated pollutants including ozone precursors. PRMP Section 4.3.1. There is a well-established case in support of the economic benefits of clean air and, by symmetry, the economic costs of deteriorating air quality. This case is demonstrated by a review of three major studies of the economic benefits of air quality improvements. These studies indicate that improvements in air quality have resulted in significant benefits, well in excess of the costs of achieving the improvements. The studies, released in 1997, 1999, and 2005, show five patterns clearly, each of which is explained below.

Substantial economic costs are likely to occur if air quality in the areas surrounding BLM lands continues to deteriorate as the result of proposed actions and developments such as increased oil and gas exploration and production. There are tools readily available to assist BLM in conducting a thorough analysis of the health-related costs of increased ozone exposures for citizens living near and visitors to BLM lands, so that these costs can be given due consideration in land management decisions.

1. Improvements in Air Quality Result in Substantial Economic Benefits well in Excess of Economic Costs

Considering only the health-related benefits of reduced ozone pollution, estimated benefits range from $409 billion over a single decade for ozone reductions resulting from initial implementation of the Clean Air Act (EPA 1997) to $7 billion in benefits for a single year from simply meeting the .80 ppm NAAQS standard for ozone (Hubbell et al. 2005). By symmetry, it is likely that deteriorating air quality resulting from accelerated oil and gas development and other pollution-generating activities will result in substantive economic costs

2. The Range of Known and Scientifically-valid Health Consequences from Polluted Air in General, and Elevated Ozone Levels in Particular, is Increasing

Especially notable is the attribution of some premature mortality to elevated ozone exposure. Premature mortality was attributed solely to elevated particulate matter in both EPA studies reviewed here (EPA 1997 and EPA 1999). Improved understanding of the adverse consequences of ozone exposure, and the associated economic costs, has led the EPA to promulgate increasingly strict ozone standards and prompted Hubbell et al. (2005) to include reductions in premature mortality as one of the health consequences of meeting the 8-hour NAAQS ozone standard.

3. The Increasing Breadth and Depth of Valuation Research in Economics Provides Evidence that can be used to Quantify and Monetize the Health-related Benefits of Reduced Air Pollution

The research increasingly allows monetization to be specifically targeted to affected populations, both in terms of age and location.

4. High Levels of Inflation for Goods and Services Related to Health Care Suggest that the Economic Costs of Ozone Exposure Will Grow Rapidly in the Future, Even If NAAQS Standards are not Further Tightened

While all of the monetized values reported here are in constant 2005 dollars, it should be noted that in 2005 the Consumer Price Index for all medical services stood at 323.2 compared to 162.8 in 1990, an increase of nearly 100% (U.S. Census Bureau 2008). The costs of medical care are increasing much faster than the costs of other consumer items.

5. There is a Well-stocked Tool Box Available to BLM to Use in Estimating the Economic Costs of the Increased Air Pollution Likely to Result From Accelerated Energy Development

Although they differ in details, all three papers use a common methodology to arrive at an estimate of monetized benefits of improved air quality. The methodology consists of four steps (*see* EPA 1997, p. 29): 1) estimate changes in air quality between a control scenario (e.g. the status quo) and an alternative scenario (e.g. reductions in ozone; 2) estimate the human population exposed to the change in air quality; 3) apply a series of concentration-response equations which translate changes in air quality to changes in physical health and health endpoints (e.g. asthma attacks); and 4) multiply changes in health endpoints aggregated over the affected population by an estimate (or range of estimates) of the monetized value of the health endpoints. BLM could apply the four steps outlined above to estimate the economic costs of its proposed actions. The studies, especially the 2005 study, show how BLM would be able to apply existing and proven methodologies to estimate the economic costs any proposed implementation or expansion of oil and gas development on BLM lands. The software necessary to conduct a simulation of increased ozone levels (BenMAP) is available from EPA and discussed in Hubbell et al. (2005).

6. Detailed Review of Three Studies of the Economic Benefits of Air Quality Improvements

While improvements in the nation's air quality have been expensive, it is well established that the economic benefits of improving air quality have exceeded the costs of those improvements, in many cases by large multiples. As mandated by Congress in Section 812 of the 1990 Clean Air Act Amendments, EPA has produced two studies examining the benefits and costs of the Clean Air Act and its later amendments. The first study, EPA (1997), found that the benefits resulting from air quality improvement engendered by the Clean Air Act between 1970 and 1990 totaled $5.6 to $49.4 *trillion*, with a central tendency of $22.2 trillion. The costs of compliance with the Clean Air Act were estimated to be $523 billion. This yields a benefit cost ratio between 10.7 and 94.5.

The measured ozone-related health and worker productivity benefits found in EPA (1997) are summarized in Table 1.

Table 1 Economic Benefits of Ozone-Related Health and Worker-Productivity Effects of the Clean Air Act 1970-1990

Health Consequence*	Affected Population	Number of Cases Prevented	Value Per Case (2005 dollars)	Present Value (billions of 2005 dollars)
Hospital Admissions				
All Respiratory	≥65	89,000	$16,081	$17.9
Cardio Pulmonary and Pneumonia	≥65	62,000	$15,684	$17.9
Respiratory Related Ailments				
Any of 19 Acute Symptoms	18-65	130,000,000	$10.52-$89.34	$91
Asthma Attacks	Asthmatics	850,000	$63.5	$107
Minor Restricted Activity Days (MRAD)	18-65	125,000,000	$75.4	$169
Decreased Worker Productivity	Those in the labor force	Not given	$1.98 per hour for each 10 % reduction in ozone	$5.95
Total Economic Benefits				$408.75

Source: Tables 6, 10, 13, and I-3 of EPA 1997; U.S. Census Bureau, 2008.
*EPA 1997 also attributes improvements in all listed health consequences to reductions in particulate matter (PM) and ozone.

In its 1999 peer-reviewed study, EPA used sophisticated computer models and the latest epidemiological research. EPA (1999) found that the 1990 Clean Air Act Amendments will prevent 23,000 Americans from dying prematurely, avert over 1,700,000 incidents of asthma attacks and aggravation of chronic asthma, 67,000 incidents of chronic and acute bronchitis, 91,000 occurrences of shortness of breath, 4,100,000 lost work days, and 31,000,000 days of restricted physical activity, due to pollution related illnesses. Moreover, EPA expects the Act to avert 22,000 respiratory-related hospital admissions, 42,000 cardiovascular hospital admissions, and 4,800 emergency room visits related to asthma.

EPA (1999) also used the latest economic research on measuring costs and benefits to conclude that the total benefits of the 1990 Clean Air Act Amendments from 1990 to 2010 would be $110 billion, while the costs of applying the Amendments would be $27 billion. Thus the benefit/cost ratio is 4.07.

The measured ozone-related health and worker productivity benefits found in EPA (1999) are summarized in Table 2.

Table 2 Economic Benefits of Ozone-Related Health and Worker-Productivity Effects of the Clean Air Act 1990-2010

Health Consequence*	Affected Population	V Number of Cases Prevented	Value per Case (2005 dollars)	Annual Value (millions of 2005 dollars)
Chronic Asthma	NA	7,200	$49631	$357.3
Hospitalizations				
All Respiratory	NA	22,000	$13,698	$258.1
All Cardiovascular	NA	42,000	$18,850	$774.3
Asthma Attack	NA	1,700,000	$64	$109.2
Acute Respiratory Symptoms	NA	NA	$36	$2.2
Minor Restricted Activity Days	NA	31,000,000	$75	$2,382.3
Emergency Room Visits for Asthma	NA	4,800	$385	$2.0
Total Economic Benefits				$3,885.4

Source: Tables 5-3, 6-1, 6-3 of EPA 1999; U.S. Census Bureau, 2008.
*EPA 1997 also attributes improvements in some listed health consequences to reductions in particulate matter (PM) and ozone.

EPA (1999) quantified and monetized health benefits related to respiratory symptoms, minor restricted activity days, hospital admissions, asthma-related emergency room visits, and asthma attacks. However, EPA was not able to quantify ozone-related benefits from reduced premature mortality, lung inflammation, chronic respiratory damage, increased susceptibility to respiratory infection, and non-asthma related emergency room visits (EPA 1999, Table 5.1, p. 53). In addition, EPA (1999) included discussions of both monetized and non-monetized benefits accruing from increased agricultural productivity, increased forest productivity, and improved ecological outcomes.

Hubbell, et al. (2005) estimate the economic benefits of reducing ozone levels in such manner that there would be compliance with the then-existing NAAQS of .80 ppm for the 4th highest maximum 8-hour ozone concentration at all the >1000 monitoring stations throughout the country. The Hubbell, et al. methodology includes spatial modeling of the effects of reduced ozone, allowing for the estimation of ozone exposure for various segments of the population (e.g. ≥ age 65).

Hubbell et al.'s quantification of economic benefits is summarized in Table 3 below.

Table 3 Economic Benefits of Attaining the 8-Hour Ozone Standard

Health Consequence	Affected Population	Economic Value per Case (2005 dollars)	Number of Cases Avoided	Economic Value (2005 dollars)
Premature Mortality	All	$8,055,000	750-840	$5.8-$6.8 billion
Respiratory Hospital Admissions	≥65 years	$22,744	2000-2300	$43-$53 million
	0 to <2 years	$9593	1900-2100	$15-$20 million
Asthma Related Emergency Medical Visits	All	$354.43	460-510	$150,000-$190,000
Minor Restricted Activity Days (MRAD)	Aged 18-65	$64	1,200,000-1,400,000	$64-$84 million
School Days Lost	Aged 5-17	$93	890,000-970,000	$72-$84 million
Total Economic Value				$6.7-$7.1 billion

Source: Hubbell et al. (2005) Tables 4 and 6; U.S. Census Bureau, 2008.

As seen in Table 3, the major contributor to the total economic benefits of meeting the former NAASQ ozone standard is the reduction of premature mortality following reduced ozone exposure. The monetized value of the 750–840 cases of premature death avoided as a result of meeting the .80 ozone standard makes up 87 to 96% of total monetized health benefits. This health benefit has been not been included as a benefit of reduced ozone in the previous EPA studies (EPA 1997 and EPA 1999).

However, Hubbell et al. are convinced that the weight of scientific evidence supports the inclusion of the monetized value of this health consequence:

> Although particulate matter is the air pollutant most clearly associated with premature mortality, recent research suggests that repeated ozone exposure likely contributes to premature death. . . . Although [recent scientific studies] do not constitute a database as extensive as that for particulate matter, these recent studies provide supporting evidence for including mortality in ozone health benefits analysis.

Hubbell et al. 2005 at 75.

The weight of scientific evidence supporting this conclusion has been confirmed in a recent study released by the National Research Council (2008).

Hubbell et al. (2005) also note limitations to their study which tend to *understate* the economic benefits of meeting the ozone standard. First, the authors do not include monetized benefit estimates for endpoints that are not health relate but

> . . . may significantly contribute to monetized benefits. These include decreased outdoor worker productivity, decreased yields for commercial and noncommercial

> crops, decreased commercial forest productivity, damage to urban ornamental plants, impacts on recreation demand from forest aesthetics, and damage to ecosystem functions.

Hubbell et al, 2005 at 75.

Second, the authors note that benefits associated with reduced mortality may be much higher than they report.

> Our estimates of mortality-related benefits of attaining the standards may change, based on emerging meta-analyses of the ozone mortality literature. If these meta-analyses confirm [emerging results] . . . the mean mortality benefits may increase by a factor of 2, suggesting that reductions in premature mortality associated with attainment of the ozone standards might be as high as 1,600 premature deaths avoided annually. This increase would substantially increase the economic value of health impacts as well, potentially up to $10 billion [$12.4 billion in 2005 dollars].

Hubbell et al. 2005 at 81.

Also, the authors note that recent research suggests that reduced ozone exposure would increase the monetized benefits of reduced emergency room care by a factor of 4.5 (Hubbell et al. 2005, p. 81).

Third, the estimates used to monetize the value of avoided hospital admissions and emergency room visits are downward biased. In the absence of estimates of willingness to pay to avoid these events, Hubbell et al. (2005) used estimates of total medical costs plus the value of lost productivity. These are lower bound estimates of the proper measures, which are willingnesses to pay to avoid the pain and suffering (see Hubbell et al. 2005, p. 78).

This review clearly shows that there are readily available tools to assist BLM in conducting a thorough analysis of the health related economic costs of increased ozone exposures for citizens living near and visitors to BLM lands. It also shows that substantial economic cost are likely to occur if air quality in BLM managed and adjacent lands continues to deteriorate as the result of proposed actions and developments such as increased oil and gas exploration and production. BLM should take advantage of the existing tools and scientific research to conduct the proper analysis.

7. Requested Remedy

BLM should apply all available tools and analyses, including the studies reviewed above to assess the cost of increased air pollution associated with the proposed plan and discuss the results in a supplemental draft environmental impact statement.

B. The Analysis of Social and Economic Impacts Relies on Speculative and Unsubstantiated Predictions and Assumptions

The PRMP repeatedly makes vague and unsubstantiated predictions that do not have any support, either from actual data collected in the planning area or any evidence from other research results. This is inadequate and inappropriate. These land management decisions will have very real and lasting social and economic impacts that must be assessed much more thoroughly. If primary data are not available, efforts must be made to collect such data and/or to use other data from relevant research to support the assumptions upon which the PRMP is based.

Examples are numerous, and we document a few here. In discussing the potential impacts to socioeconomic conditions from cultural resource decisions BLM says these impacts "could include" increases or decreases in visitor spending, "could lead to" degradation of sites, and concludes by stating: "For the purposes of this analysis, it is suggested that a greater emphasis on restoration, preservation, and inventories of cultural sites within the MPA would maintain and/or enhance recreationists' experience, leading to greater long-term beneficial impacts." PRMP at 4-257. To simply assume that this is the case is unacceptable. It is clear that no attempt whatsoever was made to quantify the impacts associated with the greater risk of degradation acknowledged in the PRMP. Even the qualitative assertions are extremely weak.

The section on the impacts of livestock grazing on social and economic conditions also makes speculative and unsupported assumptions about the impacts:

> Reductions in ranching-based income could make it more difficult for families to earn a living on ranching alone. Family members may have to get second jobs or work off the farm to bring in additional income. If ranchers are unable to continue operations, effects to local communities could include loss of business activity and/or the businesses themselves, and a decline in population if individuals have to relocate to earn a living.

PRMP at 4-260

This assertion reveals the bias toward natural resource extractive industries and the attempt by BLM to ensure that these activities are portrayed as important to the local economy regardless of the existence of data or research results to support these assumptions.

BLM's discussion of the impacts on non-WSA lands with wilderness characteristics on social and economic conditions also contains assertions that negate the small steps the agency takes toward acknowledging the importance of these lands. After a credible, if citation-free discussion of the potential positive impacts of managing a small portion of the MPA to maintain wilderness characteristics, BLM asserts: "For some current residents, however, the restrictions on mineral extraction in Alternative B and the Proposed Plan, with any corresponding loss in employment opportunities or local tax revenues, could pose an additional economic hardship." PRMP at 4-269. This is ridiculous considering that this alternative makes up almost two thirds of the planning area available for oil and gas development.

It is inadequate for BLM to dismiss SUWA's request that the agency analyze the impacts of the proposed plan on non-extractive industries (and on individuals not associated with resource extraction) while supporting a heavily pro-extractive plan based largely upon unsubstantiated assertions.

1. Requested Remedy

Rather than relying on unsubstantiated assumptions and speculation to justify the proposed plan, BLM must collect and analyze actual data on the economic impacts of the alternatives.

C. The Assumption that BLM Would Have the Funding and Work Force to Implement the Selected Alternative is Dubious

BLM states that "there is no NEPA requirement to do the detailed analysis SUWA request[s] . . ." BLM Response to Comments, sorted by Resource, at 455. According to a Council of Environmental Quality memorandum on NEPA requirements [cited in NEPA Compliance Manual, 2nd Edition (1994)]:[22]

> [T]o ensure that environmental effects of a proposed action are fairly assessed, the probability of the mitigation measure being implemented must also be discussed. Thus the EIS and the Record of Decision should indicate the likelihood that such measures will be adopted or enforced by the responsible agencies.

Section 1502.16(h), and 1505.2.

The "probability of mitigation measures being implemented" is directly related to how much the mitigation will cost and how those costs relate to the expected budget available. In order to fully comply with NEPA, BLM must include an analysis of the costs of implementing each alternative, and the costs of the mitigation plans contained within each alternative. These costs must then be compared to the expected budget level to assess the probability of mitigation measures being fully implemented.

BLM responds that the CEQ guidelines do not require a cost-benefit analysis. This is not what is being requested. It is clear that if the PRMP is implemented there will be impacts on the land and surrounding community. BLM asserts that these impacts will be monitored, that stipulations and other regulations and protections will be enforced, and negative impacts will be mitigated. However the likelihood that sufficient funds will be available to accomplish this mitigation is unclear. BLM's assertion that it is assumed that sufficient funding will be available is just that—an assumption which is not necessarily true and is not substantiated with any evidence. In fact, considerable evidence exists that funding and/or staffing time will not be adequate. A recent report by the Government Accountability Office documents a lack of enforcement of environmental protection by BLM as a direct result of the recent emphasis on extractive industries (US GAO 2005). It is clear that once lands are leased for oil and gas development or

[22] Freeman, L.R.; March, F.; Spensley, J.W. 1994. NEPA Compliance Manual, 2nd Edition. Government Institutes, Inc., Rockville MD.

made available to off-highway motorized recreation, these activities will proceed regardless of whether or not monitoring, enforcement, or mitigation are possible given available funds.

If, in fact, the funding is not available or not sufficient to adequately accomplish the monitoring, enforcement, and mitigation that BLM assumes will take place and subsequently reduce negative impacts and costs, the costs (to surrounding communities and to the environment) associated with the PRMP will be much higher than estimated in the FEIS.

1. Requested Remedy

BLM must include a fiscal analysis of alternative implementation and mitigation costs. In order to fully comply with NEPA, BLM must include an analysis of the costs of implementing each alternative, and the costs of the mitigation plans contained within each alternative. These costs must then be compared to the expected budget level to assess the probability of mitigation measures being fully implemented. The agency should include a reasonable budget limitation and evaluate a set of management alternatives that are constrained by that budget level.

D. The Total Planning Area Acreage Varies by Alternative, Indicating Inaccuracy in Analysis and Conclusions

The DRMP/DEIS states that variation in acreage totals may exist between disciplines, however in the tables summarizing both the OHV designations (Summary Table A, p. 2-2) and the oil and gas designations (Summary Table C, p. 2-3) by alternative, the total acres is higher for each action alternative than for the "no action" alternative. This cannot be explained by variances between the methods or data used by the different resource specialists. While these additional acres (apparently created by the various alternatives) are not large, they do imply systematic inaccuracy in the acreage reported by alternative.

BLM did not address this in the responses to comments, and these inconsistencies remain in the PRMP.

1. Requested Remedy

BLM should carefully examine and correct the inconsistencies in the acreage totals used to evaluate the impacts of the alternatives. These inconsistencies also indicate that there is a possibility that other less readily apparent data may also be inaccurate or inconsistent throughout the analysis. The agency should also make corrections to its analysis and management approach as indicated by the corrected data.

E. BLM Should Analyze Any Additional Leasing in the Alternatives (Including Any in the "No Action" Alternative) as *Gains* to the Oil and Gas Industry, in Order to Provide a True Baseline of Oil and Gas Development From Which to Compare the Rest of the Alternatives

When BLM assumes that leasing will continue along a certain trajectory, it incorrectly assumes that these development activities are the "status quo" and biases the comparison of the

alternatives toward those which favor development by presenting the opportunity costs of protecting other multiple values under an assumption that they represent a "loss" to the oil and gas industry. This is not the case if the areas have not yet been leased, regardless of whether the existing RMP would allow leasing. Rather, additional leasing (regardless of whether it occurs under the current RMP or the new one) should be analyzed as a "gain" for the oil and gas industry with potential costs to other multiple use values that provide direct and indirect benefits to the local and regional economy.

Rather than respond to this comment, BLM actually included even more egregious assumptions that Alternative B would be a loss to the oil and gas industry by inserting analysis requested by the counties that estimates "lost" revenues. *These revenues are not lost*. If oil and gas drilling takes place, any revenues accruing to the local governments should be treated as a *gain*. And in order to analyze the net benefits, the losses associated with the development to other multiple uses and resource values should also be included.

1. Requested Remedy

In order to accurately assess the potential impacts of the alternatives, BLM must treat any additional oil and gas leasing (regardless of whether it would have occurred under the existing management plan) as an industry *gain*, rather than assuming that leasing is a given. The currently leased land should be regarded as the status quo, not any additional leasing that may take place under any of the alternatives. Comparisons of all the alternatives should be made against this status quo.

F. The Socioeconomic Analyses Focus Almost Exclusively on the Potential Benefits of Oil and Gas Drilling and Off-Road Motorized Recreation in the Moab Planning Area, Rendering the Analyses and BLM's Conclusions Flawed and Unreliable

BLM's response to the request to examine the costs associated with both off-road motorized recreation and oil and gas drilling misses the point. Both of these activities *will* result in costs. Regardless of whether or not the proposed plan "reduces" the level of open access for off-road motorized recreation, it still makes this activity available on over 80% of the planning area. Furthermore, 80% of the planning area will be open for additional oil and gas leasing, with 600 new wells projected over the next 15 years. This is an *increase* in oil and gas activity.

These activities will both result in ecological damages. The consequential damage may have economic and social costs in the surrounding area which have not been accounted for by BLM.

BLM notes that a recent USGS study ". . . was unable to find any published studies on the socioeconomic costs produced by OHV use, but concluded that such costs could exist." PRMP at 4-271. This assertion fails to recognize the myriad environmental impacts which the USGS did conclude would result from OHV use. These include impacts to soil, water, plants, and wildlife. All of these impacts will have socioeconomic costs. Furthermore, there are numerous studies documenting these costs. While they may not focus specifically on the origin of the particular environmental degradation, they are nonetheless relevant as documentation of the costs

of the degradation likely to be caused by off-highway motorized recreation. These impacts are documented amply in the USGS study as well as numerous other studies described in the comments on the DRMP from SUWA and others.

1. Requested Remedy

BLM must quantitatively analyze all the costs associated with oil and gas drilling and off-road motorized recreation. These costs should be used to estimate the net (rather than gross) benefits of the Proposed Plan. BLM must make a full assessment of the social and economic costs that will accrue as a result of implementing the oil and gas drilling in the alternatives, and reassess the appropriate alternative to adopt, as well as design mitigation measures.

G. The DRMP/DEIS Fails to Adequately Address the Impacts that the Preferred Alternative Will Have on the Local Economy

BLM dismisses SUWA's request to examine the impacts to other sectors of the economy by stating, "The Wilderness Society is an advocacy group, and their recommendations are understandably focused towards their specific objectives. BLM on the other hand, must take a broader view under its multiple-use, sustained yield mandate." BLM Response to Comments, sorted by Resource, at 455. This is absurd and contrary to the agency's obligations under NEPA and its own guidance, including the Land Use Planning Handbook. The management plan proposed by the agency takes a rather narrow view, focusing only on the market values of the commodities that may be extracted from these publicly owned lands by private companies for private profit. An examination of the indirect impact that the presence of protected public lands has on the local economy is, in fact, a much broader view.

BLM says that "SUWA implies that BLM's preferred alternative will negatively affect the local economy, but offers no evidence to support that claim." BLM Response to Comments, sorted by Resource, at 459–60. First, the comments submitted by SUWA request that BLM examine the impacts that the actions will have on sectors of the economy which do not extract resources from BLM lands, but rather rely on the presence of these lands. This request is entirely reasonable given that the economy of the area does not rely on the extractive industries for anything like a majority of jobs or income. The assertion which BLM attributes to SUWA does not appear in SUWA's comments. Rather, the request was made of BLM to *examine* the impacts that may occur. In fact, BLM's response implies an unfounded assumption that the PRMP will *not* impact the local economy if the amenities and environmental quality of surrounding BLM lands deteriorates. Furthermore, a recent study of the impacts of oil and gas development in northwest Colorado (BBC Research and Consulting 2008) does find that many of the potential impacts described in the comments on the Moab DRMP/DEIS have been occurring, including a repellant effect on retirees and tourism.

We are simply asking that BLM estimate these potential impacts with at least the same thoroughness and rigor with which they estimate the equally speculative benefits of coal mining, oil and gas development, livestock grazing, and off-road motorized recreation. We redirect the agency's attention to the comments submitted on the Moab DRMP. These comments provide a detailed summary of the extensive literature concerning the role of public lands in local

economies throughout the region; the comments provide ample support for our request that BLM must expand this analysis.

1. Requested Remedy

BLM must make a thorough examination of the full socioeconomic impacts likely to occur if the management alternatives are implemented. These analyses must take into account the impacts that BLM land management actions will have on the surrounding communities, including the added cost of providing services and infrastructure, the long-term costs of the likely environmental damage, and the impacts on other sectors of the economy. BLM must examine the role that protected public lands (including lands with wilderness characteristics) play in the local economy.

H. The DEIS Does Not Account for the Non-Market Values Associated with Undeveloped Wild Lands

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. A proposed management plan which opens 80% of the resource management area to oil and gas development and off-road motorized recreation most certainly puts these resources at risk.

BLM dismisses requests to examine non-market values by stating that studies of designated wilderness values cannot be generalized to non-wilderness lands with wilderness characteristics. First, this is not necessarily true. Many early studies were conducted based on the limited number of designated wilderness acres and then generalized to assess the values associated with protecting other undeveloped lands, such as roadless areas (*See* Walsh et al. 1984). These techniques can and should be used to estimate the intrinsic value to all Americans of the similarly undeveloped lands in the Moab Field Office. For example, the Price, Utah Field Office of BLM has included estimates of the non-market values associated with full field natural gas development for the West Tavaputs Plateau (BLM 2008).

Second, if BLM feels that existing research cannot be used, then the agency should conduct appropriate primary research on the non-market values associated with the lands in the Moab Field Office. Unlike the brief qualitative assessments performed, this would provide clear information on the values derived by all stakeholders.

Because all three alternatives and the Proposed Plan would open the majority of the planning area to oil and gas drilling and off-road motorized recreation use, there is little variability in the economic impacts of each alternative. The three action alternatives make available between 63% and 81% of the planning area to oil and gas development. Similarly, between 81% and 97% of the planning area is available for off-road motorized recreation. For both of these intensive uses (both of which are often mutually exclusive with other uses) the only alternative which offers a significantly different level of land available is the so-called protective alternative and even this alternative opens nearly two thirds of the planning area for oil and gas drilling and over 80% to off-road motorized recreation. This is not an adequate range, but rather reflects the agency's pre-

determined outcome and a "token" conservation alternative which was never really seriously considered.

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 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 off-road 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 is thoroughly examined and compared can an informed decision about public land management be made.

The current alternatives do not provide such a range. Under the Proposed Plan, the majority of the lands in the Moab Field Office are open to oil and gas drilling (market values) and off-road 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 large proportion of the planning area. And in any case, there is no way to know what is the highest and best use since alternatives which provide more undeveloped lands and less oil and gas drilling 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 Moab Field Office available for industrial development and off-road motorized recreation—permanently impairing the wilderness qualities of many of the areas in the planning area. This is not multiple use, nor is it balanced.

BLM has described multiple use as "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." Proposed Resource Management Plan and Final Environmental Impact Statement for Public Lands Administered by the Bureau of Land Management Rawlins Field Office Rawlins, Wyoming, at 1-6. The Proposed Plan is not likely to meet the present and future needs of the American people. In its response to our request for an analysis of the budget and the likelihood of achieving the mitigation and resource protections described in the preferred analysis, BLM defines Multiple Use: ". . . Harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output," BLM Response to Comments, sorted by Resource, at 456. This clearly implies that non-market values must be considered.

BLM must recognize that some uses of the public lands entrusted to the agency are mutually exclusive. Oil and gas development and off-road motorized recreation are two uses which are not compatible with many other forms of use, such as non-motorized recreation, wilderness recreation, protection of watersheds, wildlife habitat, and endangered species conservation. A plan which proposes to open the majority of the planning area to these sorts of industrial and/or exclusive uses does not fulfill the multiple use mandate of FLPMA.

1. Requested Remedy

BLM should develop and analyze 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.

I. The Significance Criteria are Incomplete Because They Only Consider Employment and Population

BLM responds to this comment by claiming that SUWA and others have ". . . asked the BLM to close these lands to commercial use (see response to comment 124-112), which would presumably negatively impact those businesses (such as guides and outfitters) whose incomes are most closely [sic]." BLM Response to Comments, sorted by Resource, at unpaginated p. 463. This is untrue. First, SUWA and others have asked that the agency assess the impacts created by off-road motorized recreation and oil and gas drilling on the very businesses BLM cites (guides and outfitters). Reducing the amount of the Moab Planning area that is available for oil and gas drilling will more likely improve the conditions for guides and outfitters. SUWA has *never* asked that these lands be closed to guides and outfitters.

Furthermore, lands which are closed to development such as oil and gas drilling do in fact produce economic benefits to surrounding communities. This has been demonstrated in decades worth of peer-reviewed economic research, much of which has been reviewed for BLM by SUWA and others and has been included in comments on the Moab DRMP/DEIS to which we refer the agency.

BLM claims that it is not possible to project non-labor income: "BLM is unaware of any methodology which reliably projects non-labor income and its components in a specific area over a 20 year period, let alone any method which cold predict changes in these components likely to result from BLM"s action alternatives." BLM Response to Comments, sorted by Resource, at unpaginated p. 426. If this is the case, perhaps BLM should reconsider the confident assertions it has made regarding the likely changes in oil and gas employment and income as well as income to the local area from off-road motorized recreation, as these are also based on projections using methodology which has been shown to be unreliable for predicting long-term economic impacts.

The use of IMPLAN is insufficient to predict future economic impacts from the management of the Moab Field Office lands. While the IMPLAN model can be useful as a tool to develop static analyses of the regional economy, the agency and local communities must be aware of the shortcomings and poor track record of the model as a predictive tool. IMPLAN models do not

consider the impacts of many important variables that affect regional growth in many rural communities, especially in the West. Attributes such as natural amenities, high quality hunting, fishing and recreational opportunities, open space, scenic beauty, clean air and clean water, a sense of community, and overall quality of life are not measured or accounted for in IMPLAN models; however, these amenities are associated with attracting new migrants as well as retaining long-time residents. Many residents of Western communities (both long-time and new) earn retirement and investment income, and while it is technically feasible, most IMPLAN models completely fail to consider the important economic role of retirement and investment income.

Many economists have offered constructive critiques of the IMPLAN model. *See, e.g.,* Krikelas (1991), Tiebout (1956) (a critique of IMPLANS underlying theory), Haynes and Horne (1997), Hoekstra, et al. (1990), Richardson, 1985, and the Office of Technology Assessment (1992). As Haynes and Horne (1997) note:

> Where the economic base approach gets into trouble is when it is *used inappropriately as a tool for planning or predicting impacts* of greater than one year in duration; a snapshot of current conditions tells little about the form a region's future economy may take.

Haynes and Horne (1997) at 1812 (emphasis added).

These models inherently favor development because of the relative ease of data acquisition for resource extractive sectors contrasted with the difficulty of estimating the impacts of non-labor income and recreation and tourism.

1. Requested Remedy

BLM should include the changes in total personal income (including non-labor income) in the significance criteria. BLM should review the economic literature on economic base models and other methodologies for projecting complete economic impacts and apply these to the analysis of land management activities in the PRMP.

J. Impacts of Management of Non-WSA Lands with Wilderness Characteristics Decisions on Social and Economic Conditions Are Not Taken into Consideration in Section 4.3.12.2.8

This section merely mentions a briefing paper by The Wilderness Society without actually doing any of the analyses requested in the paper. It is almost certain that the difference in the amount of lands managed to maintain wilderness characteristics from 15.2% in Alternative B to only 2.6% in the PRMP will result in vastly different social and economic conditions in the planning area. BLM must conduct the analysis of these impacts on the income of businesses in the area which do not rely on extraction of resources but rather on the presence of protected public lands.

BLM's response to this request is inadequate. To simply state that they are "unaware" of methods does not eliminate the responsibility that the agency has to ensure that every aspect of the potential impacts of proposed actions is examined.

Research shows that rural economies depend upon the surrounding public lands, such as those in the Moab planning area, as important amenities which drive much of the modern rural economy. BLM should recognize this and attempt to assess these impacts. To do otherwise is to remain rooted in outdated assumptions about the role that public lands and especially those protected from development play in the 21st Century economy of the West.

1. Requested Remedy

BLM must examine the role that protected public lands (including non-WSA lands with wilderness characteristics) play in the local economy.

K. Section 4.3.12.2.10 (Impacts of Recreation and Travel on Social and Economic Conditions) Does Not Accurately Evaluate the Benefits of Non-motorized Recreation and the Costs of Motorized Recreation

This section fails to acknowledge that the majority of recreation visits to public lands are non-motorized and makes broad, unsupported assumptions about the positive impacts of motorized recreation versus non-motorized. There are several instances where the contribution to local revenues from hotel taxes, restaurants, and other sales and services is implied to be attributable to solely to motorized recreation. Nowhere in the document do the analysts actually break spending down among motorized and non-motorized recreationists.

The fact that the following unsubstantiated assertion, which was highlighted in the comments on the Moab DRMP/DEIS by SUWA and others, remains in the PRMP, illustrates this clear bias toward motorized recreation:

> Given the continuing increase of OHV use within the MPA, a decrease in use by motorized uses could be of greater significance than a decrease in use by non-motorized users. Although it is not certain how much money each user group contributes on a daily basis in the Moab area, it is possible that local government revenue from hotel, restaurant, and sales tax on goods purchased would be reduced under Alternative B, should OHV use decline.

PRMP at 4-273.

These conclusions are utterly without merit and reflect the bias on the part of BLM toward off-road motorized recreation despite the fact that this activity represents a minority of users. BLM does not present any data, research results, or any other evidence that would support such an assumption, and yet continues to base the analysis of the economic impacts of recreation use on this unfounded assumption. The economic analyses presented for the National Visitor Use Monitoring (NVUM) data for the Moab Field Office (BLM 2007) do not distinguish between activities. No statement about the amount of money each user group might spend or the amount of economic impact each group might have can be made on the basis of these analyses. The statement above is absolutely unsubstantiated. Given that the majority of visits are for non-motorized activities, and in the absence of any analysis by activity, the only logical conclusion

one can draw is that it is in fact more likely that non-motorized users will have a larger economic impact.

Seven-hundred respondents to the NVUM Moab Field Office survey (BLM 2007) reported that the activity they were pursuing was the primary purpose of their trip. "Driving a passenger vehicle for pleasure" accounts for 60 of these visits and is an activity which, while motorized, does not take place on trails or on undeveloped BLM lands.[23] Of the remaining 640 respondents, 64% were clearly non-motorized and 11% were motorized. The rest of the participants were engaged in activities which could be either motorized or non-motorized and account for 25% of the total.

Recreation Participation in the Moab Field Office

Activity	# Respondents as Main Activity
Hiking/Walking/Trail run	218
Bicycling/Mt. bikes	118
Non-motorized water travel	40
Rock climbing, canyoneering	22
Other non-motorized	4
Horseback riding	3
Camping in primitive areas (non-motorized)	2
Skiing, snowboarding, snowshoeing	0
Total non-motorized	407 64%
Riding a dirt bike or ATV	18
Driving a 4WD vehicle	41
Motorized water activities	5
Camping in undeveloped sites (motorized)	6
Snowmobiling	1
Other motorized activity	0
Total motorized	71 11%
Viewing natural features	80
Relaxing	24
Developed Camping	20
Visiting historic sites	12
Gathering forest products	4
Fishing	2
Viewing wildlife	9
Picnicking	4

[23] Including "Driving for pleasure" among the motorized activities does not substantially change the conclusions. If this activity were included non-motorized recreation still accounts for 58%, motorized 19%, and the undetermined activities 23%.

Recreation Participation in the Moab Field Office

Activity	# Respondents as Main Activity
Some other activity	6
Resort use	0
Nature center activity	1
Nature study	0
Hunting	0
Total undetermined	162 25%

Source: Table 16. Activity Participation in Moab Field Office (NVUM FY2006 data) in Bureau of Land Management. 2007. *National Visitor Use Monitoring Results for Moab Field Office.* National Visitor Use Monitoring Program.

These results clearly indicate that the majority of recreation visits to the Moab Field Office are for *non*-motorized activities; this becomes increasingly valid when one considers that some proportion of the activities left "undetermined," such as hunting, fishing, and viewing wildlife, are also likely to be non-motorized.

All recreation use is increasing—to open 80% of the planning area to a group which represents at most 19% of total users is illogical and imprudent. And to imply that the meager protections provided in Alternative B (which also opens 80% of the planning area to motorized users) would somehow harm the off-road motorized recreation community or reduce revenues is simply false.

Stynes and White (2005) have shown that motorized and non-motorized visitors spend the same amount per day on tourism-related services. Given the preponderance of evidence that most visitors are engaging in non-motorized recreation, it is likely that most of the benefits to the local communities from hotel and restaurant spending, as well as other spending by visitors, are due primarily to the non-motorized recreation opportunities in the area. It is also likely that as the landscape becomes degraded and overrun by off-road vehicles, the "cash cow" tourists seeking non-motorized opportunities are likely to choose other destinations. The impact on the local economy of this shift must be assessed as part of the RMP analysis.

Study after study of Americans' recreation activities shows that a significant 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 10%.

Data from several states as well as national studies all show that motorized use is consistently a small portion of total public lands recreation visits. 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; 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; Cordell et al. 2004.

Data from the Recreation Management Inventory System (RMIS) for the state of Utah show that in Fiscal Year 2004 motorized recreation accounted for just 15% of total visits, while non-motorized recreation visits were over 50% of the total. Interview with Tina McDonald, Outdoor Recreation Planner, Recreation Management Information System (RMIS) Project Manager, USDI Bureau of Land Management, in Lakewood, Colorado. National Visitor Use Monitoring System data for the Moab Field Office show a similar pattern, with just 18% of visitors engaging in motorized recreation as their primary activity and 42% participating in non-motorized activities (BLM 2007).

Making 80% of the planning area open to off-road vehicles is inappropriate given the smaller numbers of participants, the important values which will be lost to all Americans, and the potential high costs that will be imposed on Utah and the rest of the region from higher levels of off-road motorized recreation in the Moab planning area. Furthermore, off-road motorized recreation has well documented costs and these have been completely ignored in the DRMP/DEIS. In fact, on page 4-268 the BLM reveals its bias toward motorized recreation by noting that there are "Recreational users who *require* motorized access . . ." (emphasis added). It is highly unlikely that most, if any, of the visitors who *choose* to use off-road vehicles are required to do so.

Furthermore, motorized recreation has well-documented and potentially significant costs which the analysis in the DRMP/DEIS fails to address. These costs include fragmentation of wildlife habitat, spread of noxious weeds and other invasive plants, erosion of soils, siltation of streams and other water bodies, and air pollution. These costs and others are documented in the comments provided by SUWA and others on the Moab DRMP/DEIS.

1. Requested Remedy

BLM must collect and analyze more thorough and accurate data on the costs of off-road motorized recreation in order to make an accurate assessment of the impacts of the alternatives. BLM must include an analysis of the economic impacts associated with non-motorized recreation which is based on more than unsubstantiated beliefs.

L. The Moab PRMP Does Not Account for Errors and Inadequacies of the DRMP/DEIS that were Identified in Comments Addressed to BLM for the Land Management Plan

There are instances where BLM attempts to ignore relevant data that was either provided by the agency itself, or that is immediately available to the agency. First, within the agency Response to Comments from SUWA, BLM frequently claims that SUWA's assertion of the proportion of the planning areas available to oil and gas drilling and off-road motorized recreation are not accurate: "SUWA's comment is too general, and it relies on a false premise that BLM's alternatives 'open' 80% of the planning area to oil and gas leasing and OHV use." BLM Response to Comments, sorted by Resource, at unpaginated p. 453. This claim is reiterated several times throughout the document. *See* Summary Tables A and C in the Moab DRMP and Moab PRMP (at 2-2 and 2-3 respectively in both documents). These tables are reproduced

below with added clarification showing the amount of the planning area being made available for these activities. By BLM's own analysis, the acres in the planning area on which either limited or cross-country off-road motorized recreation may take place do in fact amount to 81% of the planning area. These acres will be impacted by off-road motorized recreation. BLM's assertion that 80% of the planning area is not "open" to oil and gas leasing is completely disingenuous. Unless the area is explicitly "closed" to oil and gas leasing, it is available for this activity, regardless of any protective stipulations that are placed on the industry.

Summary Table A. OHV Categories (acres), by Alternative (page 2-2 Moab Draft RMP and Moab PRMP)

Category	Alternative A	Alternative B	Alternative C*	Alternative D
Closed (not available to ORVs)	5,062 = 0.28% of 1,822,194	347,424 = 19.06% of 1,822,498	339,298 = 18.62% of 1,822,498	57,351 = 3.15% of 1,822,498
Limited (available to ORVs)	1,196,920 = 65.69% of 1,822,194	1,475,074 = 80.94% of 1,822,498	1,481,334 = 81.28% of 1,822,498	1,762,083 = 96.69% of 1,822,498
Miles of D routes designated	4,673	2,144	2,519	2,671
Open (available to ORVs')	620,212 = 34.04% of 1,822,194	0	1,866 = 0.10% of 1,822,498	3,064 = 0.17% of 1,822,498
Total acres available to ORVs (sum of Open and Limited)	1,817,132 = **99.72%** of 1,822,194	1,475,074 = **80.94%** of 1,822,498	1,483,200 = **81.38%** of 1,822,498	1,765,147 = **96.85%** of 1,822,498
Total acres considered (calculated by commenter)	1,822,194	1,822,498	1,822,498	1,822,498
* Identified in the DRMP as the Preferred Alternative and Identical to the Proposed Plan				

Summary Table C. Oil and Gas Leasing Stipulations (acres), by Alternative (page 2-3 Moab Draft RMP)

Stipulation	Alternative A	Alternative B	Alternative C*	Alternative D
Standard (available for oil and gas)	1,038,344 = 57.05% of 1,820,154	264,344 = 14.50% of 1,822,470	427,273 = 23.45% of 1,821,997	797,031 = 43.73% of 1,822,464
TL/CSU (available for oil and gas)	389,605 = 21.41% of 1,820,154	543,751 = 29.84% of 1,822,470	806,994 = 44.29% of 1,821,997	590,442 = 32.40% of 1,822,464
NSO (available for oil and gas)	38,912 = 2.14% of 1,820,154	342,931 = 18.82% of 1,822,470	217,480 = 11.94% of 1,821,997	84,772 = 4.65% of 1,822,464
Closed (not available for oil and gas)	353,293 = 19.41% of 1,820,154	671,444 = 36.84% of 1,822,470	370,250 = 20.32% of 1,821,997	350,219 = 19.22% of 1,822,464
Total acres available for oil and gas (sum of Standard, TL/CSU and NSO)	1,466,861 = **80.59%** of 1,820,154	1,151,026 = **63.16%** of 1,822,470	1,451,747 = **79.68%** of 1,821,997	1,472,245 = **80.78%** of 1,822,464
Total acres considered (calculated by commenter)	1,820,154	1,822,470	1,821,997	1,822,464
* Identified in the DRMP as the Preferred Alternative and Identical to the Proposed Plan				

Second, BLM has attempted to refute SUWA's comments that the majority of recreation within the Moab Field Office is non-motorized. S*ee* BLM Response to Comments, sorted by Resource, at unpaginated p. 464. Recreation data within the 2007 NVUM study for the Moab Field Office (BLM 2007) is listed for only the *main* recreation activity. The study acknowledges that visitors often participate in other activities as well. However, this is no grounds to disregard the obvious reality present in the study, that non-motorized users represent the majority of recreationists in the Moab Field Office. As discussed within Section J above, the NVUM study is not the only source of information that supports this conclusion. The Recreation Management Inventory System (RMIS) data for the state of Utah show that in Fiscal Year 2004, non-motorized visits made up more than 50% of all visits. A number of other studies, cited above in Section J, show that non-motorized recreation represents the majority of use on public lands. Despite the fact that these studies are more general, the trends of recreational use are the same. BLM attempts to disregard these trends using uncertainties in the existing methodologies. However, the agency has provided no substantive evidence to support their position which leaves 80% of land within Moab Field Office open to some form of ORV use.

In a related comment response, BLM claims that there is no data or evidence showing that local economies benefit more from non-motorized recreational users. *See* BLM Response to Comments, sorted by Resource, at unpaginated p. 465. However, a study by Stynes and White (2005) shows that motorized and non-motorized users tend to spend the same amount for tourism-related services per day. As nearly all relevant data shows that non-motorized use exceeds motorized recreation, it is clear that the majority of tourism-related injections into local economies are likely to come from traditional (non-motorized) recreation activities. Further, studies have shown that the economic value of a day of non-motorized recreation is, on average, higher than the value for the same day of motorized recreation. *See* Kaval and Loomis (2003). Overall, the market and non-market economic benefits from non-motorized recreation are notably more substantial than from motorized recreation. As such, BLM's decisions regarding land open to ORV use as well as oil and gas development are suspect at best.

BLM does make it clear that it has removed 2500 miles of routes available for motorized use from the land management plan. This reduces total route mileage to a level lower than that in the Redrock Heritage Proposal, the travel plan endorsed by SUWA. *See* BLM Response to Comments, sorted by Resource, at unpaginated p. 467. This is admirable, but mileage figures do not tell the whole story. BLM's travel management plan has 79.6% of all lands in the Moab Field Office within a half mile of motor vehicle routes, and 91.4% within one mile. Only 2.4% of land area is greater than 2 miles of a route, with 0.6% of land farther than 3 miles from a route. The Redrock Heritage Proposal would have 59.8% of land within a half mile of a route, and 75.4% within a mile. 12.1% of land would be farther than 1 mile away from a motorized route, with 7.4% lying more than 3 miles away from routes. *See* Redrock Heritage Plan, Recreational Opportunity Spectrum Analysis, Moab Field Office-BLM and SITLA lands only, http://redrockheritage.org/road_stats/ (last visited Aug. 25, 2008). While a significant majority of the land under the Redrock Heritage Plan is fairly close to a motor route (within 1 mile), this plan certainly offers more balance than the plan presented by BLM. ORVs create air pollution and noise, the effects of which can be noticed even a mile away from the source. Areas that are removed from these effects are necessary in the formation of a plan designed for *multiple use*.

Third, BLM claims that "non-market values to which [SUWA] refers are not available to the BLM." *See* BLM Response to Comments, sorted by Resource, at unpaginated p. 461. However, there are several reports and publications, including those published by the EPA and The Wilderness Society, which clearly show otherwise. This information is free and easily accessible, and although they do not apply to specific sites within the Moab Field Office, the concepts can easily be extended to this land management plan.

NEPA requires that BLM discuss "any responsible opposing view which was not adequately discussed in the draft statement and indicate the agency's response to the issue raised" in preparing a final EIS. 40 C.F.R. § 1502.9. The Council on Environmental Quality interprets this requirement as mandating that an agency respond in a "substantive and meaningful way" to a comment that addresses the adequacy of analysis performed by the agency.[24]

Many of the responses to comments on the Moab DRMP failed to address the issues cited in a substantive, meaningful manner. If presented with a comment referring to an inadequacy of a particular aspect of the plan, BLM's response often simply refers back to the section in which the methodologies were described. For example:

> *SUWA Comment*:
>
> > New businesses will be harmed or deterred from locating in the Moab planning area "by the potential single-use industrialization of vast public lands" under the preferred alternative in the DRMP/DEIS.
>
> *BLM's Comment Summary Response*:
>
> > BLM agrees that communities in the West rely less on natural resource extraction and more on non-commodity resources such as scenery and recreation opportunities. In its discussion of the impacts of minerals on socioeconomics, BLM emphasizes that the predicted activities would be relatively minor, and not likely to have significant impacts on local communities. In its discussion on the impacts of travel and recreation decisions on socioeconomics, Chapter 4, pp. 266–272, BLM outlines many of the potential benefits (and costs) to both local communities and visitors of the various action alternatives.

BLM Response to Comments, sorted by Resource, at unpaginated p. 459. For this specific example, the pages referred to by BLM discuss only *market* benefits of management decisions. In addition, only revenues produced from oil/gas development and Special Recreation Permits were considered quantitatively. The remainder of the economic impacts was judged qualitatively, and without any specific evidence to support the agency's decisions. Another similar comment was answered in an almost identical fashion:

> *SUWA Comment*:

[24] The U.S. Court of Appeals for the Tenth Circuit has held that the "Forty Questions" are "persuasive authority offering interpretive guidance" on NEPA from CEQ. Davis v. Mineta, 302 F.3d 1104, 1125 (10th Cir. 2002).

> The BLM must make a thorough examination of the full socioeconomic impacts likely to occur if the management alternatives are implemented. These impacts include impacts on the surrounding communities, including the costs of providing additional services, the long-term costs of the likely environmental damage, and the impacts on other sectors of the economy.

BLM's Comment Summary Response:

> BLM has analyzed the socioeconomic impacts of its alternatives in Chapter 4. SUWA asserts that surrounding communities will have additional costs of providing services, but provides no evidence to support this claim. SUWA asserts that long-term environmental damage from BLM actions are "likely", but provide no specifics in this comment, let alone evidence. The socioeconomic section of Chapter 4 does analyze the impacts of BLM actions on the "other "(undefined by SUWA) sectors of the economy; that is the purpose of that section.

BLM Response to Comments, sorted by Resource, at unpaginated p. 460. Once again, BLM has simply referred back to the section in question. Within the comment document sent to BLM, SUWA presented the agency with sources of literature that discuss the socioeconomic consequences of extractive resource development, especially from impacts on amenity-based economic development. This research presents solid evidence linking oil/gas development to a variety of costs that are inflicted on local communities. However, BLM seems to ignore the data and evidence presented by SUWA. BLM claims to acknowledge the "New West Economy" and how it should affect land management decisions, yet the agency makes no attempt to present any economic effects that are not immediately available to it. Simply because research does not deal directly with the Moab Field Office does *not* mean that the concepts cannot be applied to the Moab Field Office and the land management plan. Further, the agency provides no evidence that the indicated development will be minor (as they claim, *see* BLM Response to Comments, sorted by Resource, at unpaginated p. 459), except by inadequate and superficial qualitative assessment. Where the public comment discusses problems with a specific section, BLM's response referring to its analysis (in which the validity of the analysis has been questioned by the commentor) simply does not address the underlying issue in any kind of a substantive or meaningful way.

There are also a number of cases where in response to a comment criticizing an aspect of the research or methods behind a management decision, BLM has responded by stating "SUWA's comment is too general. SUWA offers no specifics as to what 'actual' data BLM failed to use, nor does SUWA provide any detail as to where BLM erred in its analysis" or "SUWA provides no specifics as to where the BLM erred in its analysis, either for specific routes or specific resources." *See* BLM Response to Comments, sorted by Resource, at unpaginated p. 454, 467. However, concerning the comments submitted by SUWA, this is often plainly untrue. Specific suggestions were made to improve particular aspects of management decisions and strategies, as well as to describe the inadequacy of BLM's analysis.

BLM's responses to comments are also inadequate because of the way that the PRMP presented those comments. In selecting individual comments from SUWA for response, BLM picked out incomplete parts from the comprehensive comment document that was submitted. This allowed

the agency to respond to the comment piece by piece, disregarding a great deal of relevant information that was provided in the comment document as an entirety.

Presented below is an example of a comment submitted, the revised comment posted by BLM, and the agency's response.

SUWA comment:

> The socioeconomic analyses conducted for the Draft EIS focus almost exclusively on the potential benefits of increased oil and gas drilling and off-road motorized recreation in the Moab Planning Area. There is no corresponding analysis of the costs associated with these activities, both of which damage certain resources and can have negative economic consequences. See Morton et al. (2004) and the attached document *"The Economic and Social Impacts of Oil and Gas Development"* for more details on the potential costs of oil and gas development. A detailed discussion of the costs associated with off-road motorized recreation appears later in this comment document.
>
> Section 4.3.12.2.7 – Impacts of Minerals on Social and Economic Conditions does not include any analysis of the economic and social costs of mineral extraction. It is utterly irresponsible for the BLM to exclude this analysis from this section. All mineral extraction will impose social and economic costs on the communities in the planning area and these must be assessed and accounted for in the Final RMP EIS.
>
> The costs of oil and gas drilling are not mere abstractions. The communities of the Rocky Mountain region have been experiencing many economic and environmental costs over the last several years. These costs include the increased traffic from the oil and gas fields – which increases wear and tear on the area's roads necessitating additional public expenditures. Increased traffic also results in more accidents, which means greater demand for emergency services such as police, ambulance and hospital services. This increased traffic also means there is a need for additional traffic-related law enforcement efforts. These are but a few of the socioeconomic costs associated with increased oil and gas drilling. Other negative impacts include the documented difficulty that local business in towns with high levels or oil and gas drilling are experiencing in hiring and retaining employees, increased housing costs, increased costs of other goods and services, and an overall loss of the quality of life that long-time residents and newcomers alike have come to appreciate in the area. The analysis in the Draft RMP EIS fails to adequately address these and other costs and thus presents a biased picture of the long-term impacts of the proposed management.
>
> The BLM must make a full assessment of the social and economic costs that will accrue as a result of implementing the oil and gas drilling in the

alternatives as described in *"The Economic and Social Impacts of Oil and Gas Development"* (attached).

SUWA Comments to the DRMP at 72; DRMP at Attachment F.

BLM's revised SUWA comment:

BLM's socioeconomic analyses focus almost exclusively on the potential benefits of increased oil and gas drilling and off-road motorized recreation, without corresponding analysis of the costs associated with these activities. These costs include social impacts on local communities for example police and hospital services.

BLM's Comment Summary Response:

SUWA's premise in this comment is that the DRMP's "increase' the potential for leasing and for OHV recreation. (This alleged increase is presumably in comparison to SUWA's leasing and travel plan alternatives provided during scoping and not to any of the action alternatives in the DRMP). As described in detail throughout the DRMP. BLM's action alternatives place additional restrictions on leasing relative to the No Action alternative. Similarly, all action alternatives identify for non-motorized use more than 2500 miles of vehicle routes currently available for motorized use. Additionally, BLM reduces the amount of acreage "open" to unrestricted OHV use to zero or close to zero in all action alternatives. These actions would reduce the litany of alleged costs that SUWA enumerates in its comment. These reductions are in response to the potential resource conflicts identified in Chapter 4.

BLM summarizes the (minor) costs and benefits associated with oil and gas development on local communities in Chapter 4, p. 260-264. SUWA's reference to the impacts such activities have had in other parts of the West is unlikely to apply to the MPA. The RFD predicts relatively few wells will be drilled, would employ relatively few people and produce negligible adverse social impacts. SUWA seems to be confusing the MPA with the large-scale development that has occurred in certain areas. BLM's analysis is based on the RFD; SUWA has provided no evidence that the RFD is incorrect. A recently completed study by the University of Utah concludes that less than 1 percent of the Grand County's economy is dependent on oil and gas activities, which corresponds closely to BLM's analysis in Chapter 3.

BLM Response to Comments, sorted by Resource, at unpaginated p. 457.

In its comment, BLM dismisses SUWA's argument, once again referring back to its own 'analysis.' The agency has not responded or analyzed any of the factors recommended by SUWA. These include: increased traffic, employee retention, costs of housing and other goods/services, and impaired quality of life. While the analysis that SUWA recommends does

not deal specifically with the Moab Field Office, the concepts are easily applied to a variety of social, economic, political, and geographical settings. It is BLM's responsibility to take these factors into account, and if it improves the quality of analysis performed, should gather relevant data specific to the Moab Field Office.

BLM has chosen to ignore much of the data and information presented by SUWA within its comments. It appears that they do this as an attempt only to disregard or evade available information that points out inadequacies and flaws in the management plan. BLM attempts to justify this lack of consideration by stating, "The document . . . is not a peer-reviewed manuscript, but an advocacy position published by the Wilderness Society." BLM Response to Comments, sorted by Resource, at unpaginated p. 457 (similar response at unpaginated p. 455). However, in order to comply with NEPA, BLM must adequately discuss any opposing point of view in a substantive and meaningful way. The agency's excuse does not change the validity of the science, data, and other information presented in response to the land management plan.

BLM has failed to comply with NEPA's mandate to disclose opposing views, make a careful review of differing professional interpretations and analysis, and then provide substantive and meaningful responses to such views. BLM was provided with detailed recommendations, based on scientific opinion that contradicts the basis for the agencies' findings and management approach in both the Draft and Proposed RMPs. The PRMP does not discuss this independent information or justify its decision not to alter its conclusions based on these scientific opinions.

1. Requested Remedy

BLM must complete a conforming NEPA analysis that fully considers the opposing scientific opinion and justifies its contradicting conclusions. BLM must take into account the full scope of the comments, and not specific points taken out of context. The agency must then revise the Proposed Plan as needed.

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X. Water Quality

The Moab PRMP fails to analyze and model the impacts of the activities that it permits on water quality in the planning area. Both FLPMA and NEPA require that BLM prepare such analysis. BLM must analyze and model pollutant concentrations in order to understand if the PRMP will comply with federal and state water quality standards, as required by FLPMA. Without conducting water quality analyses and modeling, BLM will not understand the effects of the pollutants generated from activities authorized by the PRMP, and will thereby violate NEPA and its requirement that BLM understand the environmental impacts of the activities it is permitting.

A. BLM's Failure to Analyze and Model Water Quality Violates FLPMA

FLPMA, and the Moab PRMP, require that BLM manage the planning area according to federal and state water quality standards. *See* Moab PRMP at 2-31; 43 C.F.R. § 2920.7(b)(3) (requiring that every BLM "land use authorization shall contain terms and conditions which shall . . . [r]equire compliance with . . . *water quality standards* established pursuant to applicable Federal or State law") (emphasis added). *See also* 43 U.S.C. § 1712(c)(8) (requiring BLM in land use plans—which would therefore require implementation in daily management—to "provide for compliance with applicable pollution control laws, including State and Federal . . . *water* . . . *pollution standards* or implementation plans") (emphasis added).

The above-mentioned water quality standards and water pollution standards include the Clean Water Act's (CWA's) water quality standards (WQS) and accompanying Total Maximum Daily Loads (TMDL) limits for waters that do not meet WQS, as well as anti-degradation requirements for waters that do meet WQS. WQS are based on ambient water concentrations of various pollutants. Because the Moab PRMP permits activities (e.g. oil and gas development, vehicle travel on designated routes, mining, etc.) without modeling the effect that these activities will have on ambient concentrations of pollutants in water, the PRMP fails to satisfy its FLPMA obligation.

In order to comply with FLPMA, the PRMP should provide a summary of water quality analyses for the water bodies in the planning area. This summary should provide monitoring of water quality indicators, including temperature, alkalinity, specific conductance, pH, dissolved oxygen, turbidity, hardness, dissolved solids, and suspended solids, as required by the CWA. For an example of appropriate analysis and modeling, see West Tavaputs DEIS, Natural Gas Full Field Development Plan, February 2008, at 3-56 to -64 (attached as Exhibit E). The PRMP should state what the current baseline water quality is, as measured by these indicators, for each water body in the Moab planning area. Knowing the baseline water quality is essential to understanding whether the activities permitted in the PRMP will violate WQS. *See* 43 C.F.R. § 2920.7(b)(3); 43 U.S.C. § 1712(c)(8).

Furthermore, BLM must quantify the various pollutant levels (e.g. phosphorus, dissolved oxygen, aluminum, nitrate, chloride, ammonia, etc.), as identified in the CWA, which will result from the decisions made in the PRMP, in order to comply with FLPMA. Likewise, the PRMP fails to quantify contaminant levels to be expected from cumulative impacts in the area. After determining the baseline pollutant concentrations, BLM must model the effects on water quality

that will result from the activities authorized in the PRMP. These results should then be compared to the CWA standards for protection of WQS. Only in this way can BLM know whether it is complying with federal and state water quality standards, as FLPMA requires. BLM must continue to monitor water quality throughout the life of the PRMP. If any exceedances occur, BLM should prohibit the exceedance-causing activities until compliance with the CWA and other federal and state water quality standards is met and maintained.

Although BLM briefly acknowledged that the activities the PRMP authorizes, including oil, gas, and mining development, as well as the designation of ORV routes, will increase erosion and surface disturbance, BLM failed to quantify the impact these activities will have on water quality. *See* PRMP at 4-281. By designating over 4,000 miles of ORV routes, BLM invites excessive amounts of sand and dust into the water bodies in the planning areas, as well as additional run-off and erosion impacts. BLM must address how these impacts would be managed to maintain compliance with the CWA.

In addition, BLM must disclose whether any public drinking water systems currently violate Federal Drinking Quality Standards, Primary Maximum Contaminant Level, and Federal Drinking Quality Secondary Standards, as well as the accompanying Utah Drinking Water Standards. *See* Safe Drinking Water Act (SDWA), 42 U.S.C. § 300(f), *et seq*.; Utah Admin. Code R309-200, *et seq*. BLM inadequately addresses public drinking water concerns and fails to ensure that drinking water supplies will not be contaminated by activities permitted in the PRMP. BLM states only that several municipalities have water sources that are located on BLM lands. PRMP at 3-124. However, BLM fails to provide any quantitative analysis demonstrating how it will comply with safe drinking water standards. By opening over 4,000 miles of designated routes to ORV traffic and permitting other activities, BLM will increase various water contaminants in the planning area that may exceed CWA and SDWA standards. To comply with the CWA and the SDWA, BLM must analyze and disclose what the baseline drinking water quality for every public drinking water system is, and model the anticipated impacts from PRMP activities.

Although the PRMP discloses which water bodies in the Moab planning area (i.e. Onion Creek, Mill Creek, Castle Creek, and Ken's Lake) have approved TMDLs, it should also disclose what the quantitative TMDL limits are for each pollutant. *See* PRMP at 3-128 to -129. The PRMP should also address anti-degradation limits for water bodies that meet WQS. BLM must monitor and analyze water quality in these river segments to ensure that PRMP activities do not violate the TMDLs or the anti-degradation requirements for the listed water bodies. A sizable number of the designated ORV routes in the PRMP are located near rivers and streams, and could significantly impair water quality. In fact, BLM states that the TMDL for Onion Creek "recommends better management of vehicle travel." PRMP at 3-129. BLM must not designate routes until it provides analysis and modeling that ensure compliance with FLPMA and the CWA's TMDL and anti-degradation requirements.

Because BLM failed to analyze water quality baselines and similarly failed to model the water-quality effects of activities in the PRMP, there is no evidence that the Moab PRMP will comply with federal and state water quality standards, as required by FLPMA.

B. BLM's Failure to Analyze and Model Water Quality Violates NEPA

NEPA requires that BLM model the impacts from the various activities—and fully inventory the pollutants generated by these activities—permitted by the Moab PRMP. "NEPA 'prescribes the necessary process' by which federal agencies must 'take a "hard look" at the environmental consequences' of the proposed courses of action." Pennaco Energy, Inc. v. U.S. Dep't of the Interior, 377 F.3d 1147, 1150 (10th Cir. 2004) (quoting Utahns for Better Transp. v. U.S. Dep't of Transp., 305 F.3d 1152, 1162–63 (10th Cir. 2002)) (internal citation omitted). The fundamental objective of NEPA is to ensure that an "agency will not act on incomplete information only to regret its decision after it is too late to correct." Marsh v. Or. Natural Resources Council, 490 U.S. 360, 371 (1990) (citation omitted).

All of the shortcomings mentioned in the FLPMA section immediately above also constitute NEPA failures on the part of BLM because it does not understand the impacts of those activities it is permitting on water and water quality standards. Without analyzing baseline concentrations and preparing modeling to determine what the baseline concentrations of relevant pollutants will be, BLM cannot understand or disclose the impacts of these pollutants on water quality. For an example of appropriate analysis and modeling, see Exhibit E. BLM's lack of water quality analysis does not satisfy NEPA's hard look requirement. BLM must analyze and model water quality to understand these impacts.

Among other things, BLM has failed to discuss the impacts of fugitive dust, engine fluids, run-off, and erosion from increased travel of ORVs on thousands of miles of new designated routes. The Moab PRMP and its lack of water quality analysis have completely failed to consider such pollutants and their impact on the local water bodies and safe drinking water. Because dust, engine fluids, run-off, and erosion can all contribute to exceedances of total dissolved and suspended solids counts, it is vital that BLM quantify all of the routes that it is designating in the PRMP, estimate the natural background level of these contaminants, estimate the number of vehicles that will use each route and the level of contaminants generated by that use, and then model those figures to understand the true impacts of fugitive dust emissions, run-off, and erosion on water quality. Quantitative analysis and modeling must be conducted in order to understand where the PRMP will comply with federal and state water quality standards and to know what impact travel on designated routes may have on water quality and associated uses.

The Moab PRMP fails to quantify ORV-related release of contaminants in the water bodies of the Field Office. Although BLM admits that resource damage is occurring within some areas in the Moab planning area, BLM nonetheless increases the number of designated routes without providing analysis as to how these routes will impact resources and water quality. *See* PRMP at 3-168. The PRMP improperly estimates the potential damage from routes and open areas by simply stating that the impacts are a factor of the number of miles of routes and the number of acres of open and closed routes. *See* PRMP at 4-415. However, the PRMP entirely fails to quantify the number of users on these routes, or the percent increase in use that is expected. BLM must account for the actual estimated ORV-usage figures for the planning area by estimating the number of vehicles that will travel these routes and the number and mileage of routes that will be open so that it can correctly inventory the dust, engine fluids, run-off, erosion,

and the accompanying impact on water quality, as measured in part by total dissolved and suspended solids, that is likely to result.[25]

In addition to an assessment of baseline contaminants and the additional release attributable to ORV use BLM must also conduct an analysis of the cumulative effects of any other activity that will cause fugitive dust, run-off, and erosion (e.g. mining, oil and gas development, grazing). Only then can BLM accurately estimate total dust emissions and run-off and erosion concentrations that reach the water. This information is also necessary for understanding the likely contributions to regional climate change caused by this plan from eolian dust deposition and its tendency to cause premature snowpack melt.

The implementation of the PRMP will result in water pollution; therefore, modeling and quantification must be undertaken to ensure compliance with NEPA and the CWA. BLM must prepare a comprehensive pollutant analysis, which includes fugitive dust, engine fluids, run-off, and erosion rates that will impact water quality, and then model these figures to determine how water quality will be impacted. Without doing so, BLM cannot know what impact these activities will have and whether it is complying with federal and state water quality standards. For these reasons, BLM violated NEPA by failing to take a hard look at how its activities will impact water quality.

In summary, the Moab PRMP does not adequately analyze the impacts to water quality that will result from the activities planned and permitted in this document. These failures are contrary to both FLPMA, which requires that BLM observe water quality standards, and NEPA, which requires that BLM disclose the impacts of the activities it is analyzing.

[25] As discussed elsewhere in this protest, ORV impacts such as these are inconsistent with the protective objectives of BLM's Riparian Area Policy. At any rate, it is hard to see how BLM can judge the impact of ORV use on riparian areas without information about the existing and projected level of water contaminants they cause.

XI. Areas of Critical Environmental Concern

When developing a land use plan, such as the Moab PRMP, FLPMA mandates that BLM "*give priority* to the designation and protection of areas of critical environmental concern." 43 U.S.C. § 1712(c)(3). Such areas, or 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." *Id.* § 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. 43 U.S.C. § 1702(a). 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 (those that BLM has identified as meeting relevance and importance), management prescriptions are to be "fully developed" in the RMP. Manual 1613, Section .22 (Develop Management Prescriptions for Potential ACECs). If an area is 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).

A. BLM Failed to Give Priority to Designation and Protection of ACECs

A critical aspect of the statutory language cited above is FLPMA's requirement that BLM "give priority" to ACEC designation *and* protection. 43 U.S.C. § 1712(c)(3). In essence, FLPMA directs BLM to prioritize protection and designation of ACECs across all alternatives under consideration, not simply the "conservation" alternative. In the Moab PRMP, BLM has neither recognized nor carried out this statutory mandate. To resolve this, once BLM has determined that certain areas in the Moab Field Office contain the requisite relevant and important values (R&I values) and that the PRMP does not protect all of the R&I values—which the Moab Field Office has already done—the agency must give priority to the designation of those areas as ACECs over other competing resource uses and likewise give priority to the protection of those areas over other competing resource uses. BLM has violated FLPMA by failing to give protection to the designation and protection of ACECs. *See, e.g.*, PRMP 4-316 (acknowledging that proposed management will likely result in development in the Proposed Bookcliffs ACEC that met the R&I criteria).

BLM has determined that 613,077 acres comprising fourteen ACECs meet the R&I criteria for ACEC designation. *See* PRMP 4-310 to -311; PRMP, Appendix I at I-1. However, the PRMP

proposes to designate only five ACECs, totaling 63,232 acres, just 10% of the acres nominated and found eligible. *See* PRMP at 4-310 to -311. By only designating this small fraction of the eligible acreage, BLM violates FLPMA's mandate that "priority" be given to designation of ACECs. Likewise, for the 90% of acreage that BLM did not designate as ACECs, BLM fails to give priority to the protection of the identified R&I values. Instead, BLM prioritizes oil and gas development and ORV route designation over protecting critical R&I values, in direct violation of FLPMA.

B. The Threats from Oil and Gas Leasing and Development and Off-Road Vehicles Highlight the Need to Designate ACECs to Protect Relevant and Important Values

FLPMA requires BLM to prioritize designation and protection of ACECs. Accordingly, as discussed above, where BLM has found special values that meet the R&I criteria, and where impacts could or would occur to these identified values if no special management prescriptions are implemented, BLM then violates its FLPMA obligations by failing to even designate the areas or large enough areas. BLM has improperly ignored or discounted the threats to special places from oil and gas development and off-road vehicle (ORV) use, and so has failed to designate and/or failed to incorporate sufficient protections for proposed ACECs to protect R&I values from the irreparable harm that is likely to result from these other activities.

BLM has repeatedly acknowledged the damage from oil and gas development and improper or excessive ORV use to the values of the public lands that can and should be protected by ACECs (spectacular scenic values, endangered species, geologic formations, cultural resources, and naturalness). *See, e.g.*, PRMP at Appendix I-10, I-21. Furthermore, the Interior Board of Land Appeals (IBLA) has found that even ongoing use of existing motorized recreational routes can lead to more damage to other resources, especially as interest in an area increases. *See Southern Utah Wilderness Alliance*, 164 IBLA 33 (2004). In other words, it is unavoidable and expected that, when BLM establishes routes for ORVs, there will be use beyond those routes, even in violation of route and area designations. As a result, BLM's failure to limit ORV access to the sensitive lands and special places nominated for ACEC protection is likely to endanger their unique R&I values.

The maps attached as Exhibits C and F show the potential and proposed ACECs overlaid with designated ORV routes and oil and gas designations. These maps illustrate the extent to which BLM disregards the R&I values identified in the potential ACECs, and prioritizes development and ORV use over critical environmental concerns, in direct violation of FLPMA. *See* ACEC and Proposed Routes Map, attached as Exhibit C; Moab ACEC and Oil and Gas Map, attached as Exhibit F; 43 U.S.C. § 1712(c)(3).

Where ACEC or potential ACEC values include unique or rare scenic resources or naturalness, they are even more susceptible to irreparable damage from these activities. In some cases, the PRMP proposes an unconscionably high ORV route density within potential ACECs. *See, e.g.*, Exhibit C; Cisco White-tailed Prairie Dog Potential ACEC, Upper Courthouse Potential ACEC, and Canyon Rims Potential ACEC. These excessive route densities would impair and potentially eliminate the scenic, wildlife, and other R&I values identified in these critical areas. BLM must develop a manageable travel plan that will protect all of the potential ACECs and their R&I

values from the damage directly associated with ORV use. BLM's failures to protect R&I values in the Moab PRMP may mean that these values are lost forever.

Areas with R&I values that are jeopardized by oil and gas drilling and ORV use should be designated as ACECs and provided with protective management prescriptions that would include road closures, restoration, and closure to oil and gas development, and/or application of best management practices where lands are already leased (such as no surface occupancy stipulations and timing limitations, which can be imposed by the agency and/or negotiated with leaseholders). Without these protections, BLM violates FLPMA's mandate to prioritize the designation *and protection* of ACECs and their identified R&I values.

C. Wilderness Study Area Status and Managing for Wilderness Character Status Are Not a Substitute for ACEC Designation

As discussed above, BLM has acknowledged the threats to lands with wilderness characteristics. However, BLM has failed to designate ACECs to protect these values. In fact, the PRMP points to the existing Behind the Rocks WSA and its management prescription as a justification for only designating the portion of the proposed Behind the Rocks ACEC that does not overlap with the WSA. *See* PRMP 4-313 to -314. In addition, the PRMP notes that much of the Bookcliffs, Colorado River Corridor, Mill Creek Canyon, and Westwater are within WSAs, and uniformly fails to manage these areas as ACECs. PRMP 4-315 to -316, 4-320, 4-322, 4-328 to -329. However, ACECs may be designated for a range of other values, as listed in FLPMA, which may not be protected by focusing on protecting wilderness character (although they will likely benefit). Consequently, BLM cannot dismiss its obligations under FLPMA with regard to ACECs based on the existence of a WSA.

ACEC designation is also important in the event that WSAs are released by Congress. The PRMP fails to adequately address what would happen in the event that a WSA is released from its status, although the PRMP does note that WSA protection is only an "assumption." PRMP at 4-307. Delaying designation and thorough consideration until the areas are released by Congress could jeopardize the scientific values of these potential ACECs. The PRMP must be explicit that BLM will manage released lands to protect their important values, including wilderness characteristics and the other R&I values that the PRMP acknowledges, according to the same standards (IMP) as analyzed and contemplated in the plan. Without asserting this, BLM's failure to designate the Bookcliffs, Colorado River Corridor, Mill Creek Canyon, and the entirety of Behind the Rocks Potential ACECs that meet the R&I criteria runs afoul of its own ACEC Guidance—cited in BLM Response to Comments at 653—which requires that the agency must specifically detail the "other form of special management" relied upon as support for not designating a potential ACEC. *See* Areas of Critical Environmental Concern; Policy and Procedures Guidelines, 45 Fed. Reg. 57,318, 57,319 (Aug. 27, 1980).

In addition, there is no *per se* bar to managing and protecting R&I values through overlapping designations such as WSAs and ACECs. For example, BLM's Jarbidge RMP (and subsequent amendments) in southern Idaho designated the Bruneau/Jarbidge River ACEC and the Salmon Falls Creek ACEC, which overlap the Bruneau River-Sheep Creek WSA, Jarbidge River WSA, and Lower Salmon Falls Creek WSA. *See* BLM, Jarbidge Field Office, Idaho, Analysis of the

Management Situation for the Jarbidge Resource Management Plan: Resource Management Plan/Environmental Impacts Statement at 206, (July 2007), *available at* http://www.blm.gov/pgdata/etc/medialib/blm/id/plans/jarbidge_rmp/documents/analysis_of_the_management.Par.59385.File.dat/part13.pdf (attached as Exhibit G); *see also id.* at Figure 39: Locations of Current ACECs, *available at* http://www.blm.gov/pgdata/etc/medialib/blm/id/jarbidge/rmp/maps.Par.16971.File.dat/Locations%20of%20Current%20ACECs.pdf (attached as Exhibit H); Figure 40: Wilderness Study Areas, *available at* http://www.blm.gov/pgdata/etc/medialib/blm/id/jarbidge/rmp/maps.Par.75489.File.dat/Locations%20of%20Current%20Wilderness%20Study%20Areas.pdf (attached as Exhibit I). These overlapping designations ensure that BLM protects R&I values both through current management and in the event WSAs are released during the life of the plan.

There is also resistance to layering ACEC and WSA designations—even when such a layering of protection would make good policy to protect all lands in a potential ACEC and ensure that they are consistently managed (since IMP management of WSAs might differ greatly from the special management attention envisioned for the R&I values of a particular ACEC or in the event of Congressional WSA release). This is clearly evident in the Mill Creek and Behind the Rocks ACEC boundaries. *See* PRMP at Map 2-14-C. BLM claims that because of IMP management of the WSA acreages, the protection is the same *whether or not* the WSA portion of the potential ACEC is designated or not. *See* PRMP at 4-314.

In addition to conflicting with the directives of FLPMA regarding ACECs and the IMP, BLM's approach is also belied by the Moab Field Office's answer to San Juan County's formal comment that it is "opposed to 'layering' or the establishment of ACECs or SRMAs over WSAs and Wild and Scenic Rivers."

To which the BLM responds, appropriately:

> "Layering" is planning. Under FLMPA's multiple use mandate, BLM manages many different resource values and uses on public lands. Through land use planning BLM sets goals and objectives for each of those values and uses, and prescribes actions to accomplish those objectives. Under the multiple use concept, the BLM doesn't necessarily manage every value and use on every acre, but routinely manages many different values and uses on the same areas of public lands. The process of applying many individual program goals, objectives, and actions to the same area of public lands may be perceived as "layering." The BLM strives to ensure that the goals and objectives of each program (representing resource values and uses) are consistent and compatible for a particular land area. Inconsistent goals and objectives can lead to resource conflicts, failure to achieve the desired outcomes of a land use plan, and litigation. Whether or not a particular form of management is restrictive depends on a personal interest or desire to see that public lands are managed in a particular manner. All uses and values cannot be provided on every acre. That is why land use plans are developed through a public and interdisciplinary process. The interdisciplinary process helps ensure that area resource values and uses can be considered together to determine what mix of values and uses is responsive to the issues identified for

> resolution in the land use plan. Layering of program decisions is not optional for BLM, but required by the FLMPA and National BLM planning and program specific regulations.
>
> For example, the BLM has a separate policies and guidelines as well as criteria for establishing ACEC as when the WSAs were established. These differing criteria make it possible that that same lands will qualify for both an ACEC and a WSA but for different reasons. The BLM is required to consider these different policies.
>
> The values protected by the WSA management prescriptions do not necessarily protect those values found relevant and important in ACEC evaluation, and vice versa. The relevant and important values of ACECs within or adjacent to WSAs were noted in ACEC evaluations (Appendix I). The ACECs are evaluated and ranked on the presences and absence of the state R&I values. None of these values include wilderness characteristics. Additionally, the management prescriptions for the ACECs are limited to the scope to protect the R&I values and the BLM maintains that the size of the ACEC areas is appropriate to the R&I values identified.

PRMP Response to Comments, at 121-9.

SUWA cannot make this argument any better than BLM does in the preceding paragraphs. However, we reiterate that BLM must revise the decisions in the PRMP to comply with this accurate statement of the agency's policies and obligations.

D. Wilderness Characteristics Can Be Protected Through ACEC Designation

While managing to protect wilderness characteristics will not protect all types of R&I values that may justify designation of ACECs, ACEC designation is a significant option. Conversely, management of most common R&I values would preclude most surface disturbing activities, thereby simultaneously giving a significant level of protection to wilderness characteristics—even if wilderness characteristics are not specifically one of the R&I values warranting designation as ACEC. BLM has admitted that it retains the ability to value wilderness character and protect it, including through ACEC designations. The Instruction Memoranda (IMs) Nos. 2003-274 and 2003-275, which formalize BLM's policies concerning wilderness study and consideration of wilderness characteristics, contemplate that BLM can continue to inventory for and protect land "with wilderness characteristics," which are identified as natural or providing opportunities for solitude or primitive recreation, and specifically references ACEC designation.

Indeed, BLM's guidance in IM-2003-275 states that "where ACEC values and wilderness characteristics coincide, the special management associated with an ACEC, if designated, may also protect wilderness characteristics." Similarly, in a February 12, 2004 letter to William Meadows, President of The Wilderness Society, Assistant Secretaries of the Interior Rebecca Watson and Lynn Scarlett stated that "through the land use planning process, *BLM uses the*

ACEC designation or other management prescriptions to protect wilderness characteristics or important natural or cultural resources." (emphasis added) (attached as Exhibit J).

As discussed above, BLM has acknowledged the threats to lands with wilderness characteristics from other activities, including ORV use and oil and gas development. However, the Moab PRMP fails to support designation of ACECs to protect these values, as FLPMA requires. BLM has identified 620,100 acres of lands with wilderness character. There are an additional 193,492 acres of lands with wilderness characteristics that are included in America's Redrock Wilderness Act; detailed descriptions and supporting data have been submitted to BLM proving the wilderness character of these lands.

All of these lands represent special resources and values that warrant corresponding protection. Proposed ACECs with wilderness characteristics that BLM failed to protect in the PRMP include: Bookcliffs Wildlife Area, Westwater Canyon, Colorado River Corridor, Labyrinth Canyon, and Canyon Rims. BLM should designate these ACECs and consider designating others to protect lands with wilderness characteristics; and these ACECs should include protective management prescriptions, such as closure to oil and gas leasing and ORV use, in order to protect wilderness characteristics.

E. BLM's Proposed Management Will Not Protect Relevance and Importance Values for Potential ACECs

1. Bookcliffs Wildlife Area Potential ACEC

The R&I values for the Bookcliffs Potential ACEC are cultural resources and habitat for wildlife including mountain lion, black bear, Rocky Mountain bighorn sheep, mule deer, and elk. PRMP at 4-314; *see id.* at Appendix I-8. BLM admits that

> [h]uman disturbance and/or development would permanently alter the unfragmented, remote and undisturbed nature of this wildlife habitat. This makes the Bookcliff proposed ACEC highly vulnerable to adverse change. The habitat is also irreplaceable, exemplary and unique due to the rareness of large, unfragmented and undisturbed habitat for both plants and animals.

Id. at Appendix I-8. Despite this robust description of the area's R&I values, the PRMP directly threatens these values by opening most of the land to woodland harvest and mineral development that would likely threaten more than 800 acres, and rights-of-way that could be granted anywhere outside of the WSA. PRMP at 4-316.

In addition, the PRMP would designate hundreds of miles of routes through the potential ACEC. *See* Exhibit C. Yet BLM fails to disclose that it plans to designate hundreds of miles of ORV routes within the potential ACEC, and fails to explain how wildlife habitat and cultural resources will be protected from ORV damage. *See* PRMP at 4-314 to -316. Furthermore, the PRMP would open parts of the potential ACEC to oil and gas leasing, subject only to minor constraints. *See* Exhibit F. These actions directly threaten wildlife habitat, including habitat for endangered, threatened, and Utah sensitive species, by fragmentation and disruption caused by surface-

disturbing activities. *See* PRMP at Appendix I-8; Exhibits C and F. Because the PRMP authorizes development, BLM puts not only wildlife, but valuable cultural resources at risk, even though BLM admits that these resources "have special worth because their remoteness has left them largely undisturbed, and thus of great importance to scientific study." PRMP Appendix at I-8.

As discussed above, the fact that approximately 81% of the proposed ACEC overlaps with WSAs does not preclude its designation as an ACEC. *See* PRMP at 4-310. Designating the entire potential ACEC would grant enhanced protection to lands within and outside of the Bookcliffs WSA in the event of congressional release from WSA status. Manual 1613, Section .33.D provides that ACEC designation within a WSA is permitted to protect the R&I values.

BLM Manual 1613 requires that, for potential ACECs (those that BLM has identified as meeting relevance and importance), management prescriptions are to be "fully developed" in the RMP. Manual 1613, Section .22 (Develop Management Prescriptions for Potential ACECs). If an area is 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, BLM has not provided a sufficient explanation as to how the proposed management for this potential ACEC will protect the R&I values and thus cannot justify its decision not to propose designation of the Bookcliffs ACEC. Because BLM's proposed management would allow development within the potential ACEC, thereby adversely impacting the R&I values, and because BLM failed to *prioritize* the designation of the Bookcliffs ACEC and failed to provide a sufficient rationale supporting its decision, BLM must designate the Bookcliffs ACEC.

2. Colorado River Corridor Potential ACEC

The PRMP acknowledges that, under the Proposed Plan, "some adverse impacts" to the R&I scenic, fish, wildlife, and plant values in the Proposed Colorado River Corridor Potential ACEC would occur. PRMP at 4-322. Nevertheless, in violation of FLPMA's requirement that BLM give *priority* to the designation and protection of ACECS, the Proposed Plan permits surface-disturbing and other activities that adversely impact the R&I values, and prioritizes route designations and development over ACEC values. The guidance is clear that if BLM acknowledges that the proposed management regime will harm the identified R&I values without special management attention, then BLM must designate this ACEC. Manual 1613, Section .33.E.

The area within the potential ACEC is home to threatened, endangered, and sensitive plants, fish, and wildlife species, including the Schultz stickleaf which occurs nowhere else in the world, endangered razorback sucker, bonytail chub, humpback chub, and Colorado pikeminnow, and includes critical desert bighorn sheep lambing and rutting areas. PRMP at 4-320; *id.* at Appendix I-11. BLM admits that this wildlife habitat "is rare and irreplaceable." PRMP at Appendix I-11. Furthermore, BLM admits that "[t]his area has some of the most significant, internationally recognized scenery in the Western United States . . . . The visual resources in this area are very rare, and do not exist anywhere else in the world." PRMP at Appendix I-11.

Despite these admissions, BLM, in the proposed management of this area, fails to protect these R&I values. *See* PRMP at 4-322. Indeed, the PRMP designates hundreds of miles of ORV routes in the proposed ACEC and would open the northwest part of the proposed ACEC to surface-disturbing activities including oil and gas leasing. *See* Exhibits C and F. Opening the area to increased ORV use and oil and gas development is antithetical to the protection of scenic and wildlife values—i.e. special management attention is warranted and necessary to protect the R&I values.

BLM cannot use the existing Three Rivers Withdrawal or the Negro Bill WSA to justify its failure to designate the Colorado River Corridor ACEC. *See* PRMP at 4-320. As discussed above, BLM violates FLPMA by failing to give priority to the designation of ACECs and failing to recognize that Congress can release WSAs from IMP standards. BLM must provide sufficient protections in the event of congressional release from WSA status.

In violation of BLM Manual 1613 .21 and .22, BLM has not provided a sufficient explanation and cannot justify its failure to designate the Colorado River Corridor ACEC. BLM's decision to permit significant ORV use and to open part of the area to oil and gas leasing instead of designating the area as an ACEC violates FLPMA's mandate that the agency give priority to ACEC designation and protection; BLM has erred in its failure to designate this potential ACEC.

3. Labyrinth Canyon Potential ACEC

The R&I values for Labyrinth Canyon are fish and scenic resource values. PRMP at 4-327. However, BLM fails to include historic values that also meet the R&I criteria. In the BLM Relevance and Importance Evaluations of ACEC Nominations, August 2004, at 19 [hereinafter BLM R&I Evaluations], BLM found that "the history along the river is of far more than local significance, which give it special worth and meaning . . . . The historic resources are unique and irreplaceable, telling the story of the early settlement of this region." *Id.* at 19. Nonetheless, the PRMP omits this importance finding for history in its listing of R&I values for this potential ACEC. *Cf.* PRMP at I-16. In order to be consistent with the 2004 R&I Evaluations, BLM must include historic values as an R&I value in the PRMP, since the outstanding historical values remain present. BLM must then prioritize the protection of historic values by designating the Labyrinth Canyon ACEC.

Labyrinth Canyon currently offers a beautiful roadless area with wilderness character. BLM admits that the scenery in Labyrinth Canyon is "outstanding," but nevertheless plans to designate dozens of miles of ORV routes within and leading to Labyrinth Canyon. PRMP at Appendix I-16; *see* Exhibit C. BLM asserts, without support, that "[r]oute designation would beneficially impact the relevant and important values by preventing the visual scarring of multiple travel routes." PRMP at 4-328. BLM's analysis is inaccurate because the agency is designating and cementing a legacy of "visual scarring of multiple travel routes." In order to actually prevent this "visual scarring" BLM would need to substantially reduce the density of routes, most of which are unnecessary and redundant, that crisscross the Labyrinth area. Clearly, scenery and other R&I values would be better protected were BLM to close the area to ORV use or meaningfully reduce the route density. Instead, BLM plans to designate ORV routes that run along the rim of the canyon and will adversely impact the scenery without having justified its

rationales for route designations (nowhere in the PRMP is the justification, purpose and need, or potential conflicts for specific route decisions addressed). *See* Exhibit C.

BLM disregarded SUWA's comprehensive management proposal for Labyrinth Canyon (*See* SUWA's Comments to DRMP at Exhibit C); nor did BLM satisfactorily address these concerns in its response to comments. *See* BLM Response to Comments, at 659. Labyrinth Canyon is a unique and stunning area, and must be protected through ACEC designation. Furthermore, designating the east side of Labyrinth Canyon as an ACEC would complement the Price Field Office's ACEC evaluation for the west side of the Green River through Labyrinth Canyon. *See* PRMP at Appendix I-15; Price DRMP, Appendix 26. Finally, BLM cannot use the existing Three Rivers Withdrawal to justify its failure to designate the Labyrinth Canyon ACEC. *See* PRMP at 4-327. The Three Rivers Withdrawal precludes the development of locatable minerals, but does not protect the R&I values to the extent that ACEC designation would, since the ORV and energy development currently proposed by the PRMP would leads to irreparable harm. *See* PRMP at 4-327.

In violation of BLM Manual 1613 .21 and .22, BLM has not provided a sufficient explanation and cannot justify its failure to designate Labyrinth Canyon ACEC. The PRMP and its proposed ORV routes will adversely impact the R&I values inherent in the area, while ACEC designation would assure that these R&I values are protected. Again, the PRMP management regime will damage and degrade the R&I values enumerated in the original ACEC report of 2005 and the incomplete ACEC sections within the PRMP. Therefore, the inescapable conclusion is that special management attention is required to protect Labyrinth Canyon from BLM's own decision making. Because BLM failed to give priority to the designation of the Labyrinth Canyon ACEC, it violated FLPMA and the BLM Manual, and its decision must be reversed.

4. Westwater Canyon Potential ACEC

BLM admits that the scenery of Westwater Canyon is "visually unique" and an "irreplaceable canyon . . . which visitors from all over the world vie to enjoy." PRMP at Appendix I-20. In addition, four species of endangered fish inhabit the Colorado River section within Westwater Canyon, making Westwater an important and beautiful area. Under the priority mandate, BLM must protect the stunning scenery and the endangered fish by designating Westwater an ACEC.

As previously stated, BLM cannot justify its failure to designate Westwater Canyon ACEC by citing to the fact that the proposed ACEC lies within the existing Westwater WSA. Congress can choose to remove the land from WSA protections at any time. Furthermore, BLM admits that the designation of the ACEC could serve to prevent surface-disturbing activities on existing inholdings. PRMP at 4-334. This scenario clearly contemplates how the current and proposed management approach will not be protective of the R&I values; special management attention is required.

BLM also admits that "vehicle use on existing routes could result in adverse impacts to scenery as routes proliferate." PRMP at 4-334. BLM cannot permit the proliferation of routes within a WSA and must protect the R&I scenery of this area. ACEC designation would aid in the protection of the scenic values, and in the protection of endangered fish. In violation of BLM

Manual 1613 .21 and .22, BLM has not provided a sufficient rationale for its failure to designate Westwater Canyon ACEC. Because BLM failed to give priority to the designation and protection of Westwater Canyon ACEC and because one can contemplate how the proposed management regime might undermine the R&I values, the agency violated FLPMA and the BLM Manual, and its decision must be reversed.

5. Behind the Rocks Potential ACEC

SUWA supports BLM's designation of the Behind the Rocks ACEC, but the 5,201 acres included in the designation are not sufficient to protect the R&I values. The designated acreage accounts for only about 30% of the nominated acreage, and none of the area within the Behind the Rocks WSA. As discussed above, the fact that a potential ACEC lies within an existing WSA is not justification for BLM's failure to designate the ACEC. Designating the entire potential ACEC would enhance protection to lands both within and outside of the Behind the Rocks WSA, in the event of congressional release from WSA status and to ensure consistent management for the R&I values. Exclusion of the WSA from this ACEC is confusing to the public and incoherent with regard to protection of the R&I values.

BLM lists the R&I values for the Behind the Rocks Potential ACEC as cultural, scenic, and plant values. PRMP at 4-312. However, the 2004 BLM R&I Evaluations found that wildlife also met the R&I criteria. BLM R&I Evaluations at 11. Indeed, the area is home to peregrine falcons, southwest willow flycatchers, spotted bats, and big free-tailed bats. *Id.* at 10. The 2004 Evaluations determined that wildlife met the R&I criteria, and BLM cannot reasonably ignore the existence of these values or concerns with survival now. Instead, BLM must comply with FLPMA and prioritize the designation of this ACEC and the resulting protection of wildlife and other values, including significant cultural rock art and habitation sites, scenic slickrock fins, domes, and arches ("the best example of Navajo sandstone fins in the world"), and special status plant species.

In violation of BLM Manual 1613 .21 and .22, BLM has not provided a sufficient explanation and cannot justify its failure to designate the Behind the Rocks ACEC. Because BLM failed to give priority to the designation and protection of Behind the Rocks ACEC, it violated FLPMA and the BLM Manual, and its decision should be reversed.

6. Canyon Rims Potential ACEC

The R&I values identified in the Canyon Rims Potential ACEC are spectacular scenic values that draw visitors from around the world. PRMP at Appendix I-8. BLM admits that oil and gas development and ORV use threaten this potential ACEC. PRMP at Appendix I-8. Despite this admission, the PRMP would designate many miles of ORV routes in this area. *See* Exhibit C. Furthermore, BLM proposes to open this area to oil and gas leasing, subject only to minor constraints. *See* Exhibit F. Designating ORV routes and opening this area to oil and gas development is incompatible with the R&I values identified by BLM and will irreparably mar the scenic vistas in the area. So again, the proposed management regime will undermine, damage and possible degrade the R&I values—therefore special management attention is

required. Under this circumstance, the BLM, according to the guidance, has little choice but to designate this ACEC to give "priority" to these R&I values.

In violation of BLM Manual 1613.21 and .22, BLM has not provided a sufficient rationale for its failure to designate Canyon Rims ACEC. Because BLM failed to give priority to the designation and protection of Canyon Rims ACEC, the PRMP violates FLPMA and the BLM Manual, and it must be reconsidered. BLM must designate Canyon Rims ACEC to protect the spectacular scenic values.

7. Cisco White-tailed Prairie Dog Complex Potential ACEC

The Cisco White-tailed Prairie Dog ACEC would protect the threatened white-tailed prairie dog. BLM admits that "[l]arge tracts of land are needed to maintain populations of this animal and of the predator species [including the endangered black-footed ferret] which depend on it. White tailed prairie dog habitat is fragile and *very sensitive* to OHV abuse, overgrazing, drought and oil and gas disturbance." PRMP at Appendix I-10 (emphasis added). Nevertheless, BLM plans to designate hundreds of miles of ORV routes in the potential ACEC, threatening the existence of this threatened species. *See* Exhibit C. Furthermore, BLM plans to open this area entirely to oil and gas leasing, subject only to minor constraints in some places. *See* Exhibit F. These actions are completely incongruous with protecting the wildlife values identified in this potential ACEC, and with BLM's admission that oil and gas development can have devastating effects on prairie dogs and their habitat. By opening this area to oil and gas development and increased ORV use, BLM threatens the existence of the white-tailed prairie dog, and the highly endangered black-footed ferret as well. BLM must designate the Cisco White-tailed Prairie Dog Complex to protect these species.

BLM also improperly reduced the acreage of this potential ACEC from 125,620 acres that BLM originally determined met the R&I values, to 117,481 acres in the PRMP. *See* BLM R&I Evaluations at 25; PRMP at 4-310. As noted above, BLM's manual requires that a designated ACEC should be as large as is necessary to protect the important and relevant values. Manual 1613, Section .22.B.2. At a minimum, this requires the inclusion of all of the acreage where the R&I values have been documented. BLM must increase the acreage noted in the PRMP to match the 125,620 acres that meets the R&I criteria.

The adverse impacts from energy development in the Cisco Desert are already being seen. The current and proposed management regime will damage and degrade the R&I values of this potential ACEC. The danger to the white-tailed prairie dogs is clear and present– not abstract and distant. Special management attention is required to preserve this species and the habitat upon which its survival depends.

In violation of BLM Manual 1613 .21 and .22, BLM has not provided a sufficient explanation and cannot justify its failure to designate Cisco White-tailed Prairie Dog ACEC. Because BLM failed to give priority to the designation and protection of Cisco White-tailed Prairie Dog ACEC, it violated FLPMA and the BLM Manual, and its decision should be reversed.

8. Mill Creek Canyon Potential ACEC

SUWA supports BLM's designation of the Mill Creek Canyon ACEC, but the 3,721 acres included in the designation are not sufficient to protect the R&I values. These acres account for only about 27% of the potential acreage as described in Alternative B in the DRMP, and do not include any of the area within the Mill Creek Canyon WSA. As discussed above, the fact that a nominated ACEC lies within an existing WSA is not a justification for not designating the ACEC. Designating the entire nominated ACEC would give enhanced protection to lands within and outside of the Mill Creek WSA, in the event of congressional release from WSA status.

Similarly, the fact that the non-designated acreage also falls within the South Moab SRMA under the Proposed Plan does not preclude the designation of the area as an ACEC. BLM identified several R&I values, namely cultural resources, fish and wildlife habitat, riparian/watershed, and scenic values in the area that must be protected. PRMP at 4-328. ACEC designation would benefit these R&I values, ensure consistent management for the identified values across all the proposed acreage, and complement the SRMA designation, as well as the WSA status.

At odds with the purpose of the potential ACEC, BLM plans to designate motorized routes in the proposed ACEC. *See* Exhibit C. In order to comply with FLPMA and Manual 1613, BLM must not designate routes within a proposed ACEC if those routes will harm R&I values, and must prioritize the designation of the remaining 9,780 acres as an ACEC in order to protect the R&I values which BLM lauds as "the lifeblood of Moab." PRMP at Appendix I-16 to -17.

In violation of BLM Manual 1613 .21 and .22, BLM has not provided a sufficient rationale for its failure to designate the additional acres of Mill Creek Canyon as an ACEC. Because BLM failed to give priority to the designation and protection of Mill Creek Canyon ACEC, it violated FLPMA and the BLM Manual, and its decision must be reversed.

9. Upper Courthouse Potential ACEC

The R&I values for Upper Courthouse Potential ACEC are cultural resources, paleontological resources, and plant values. PRMP at 4-322. BLM endangers these sensitive and valuable resources by designating a spider web of ORV routes within the potential ACEC. *See* Exhibit C. Designating these routes without any apparent inventory puts deposits of dinosaur bone, two rare plant species, and significant cultural resources at risk. *See* PRMP at Appendix I-18 to -19. Furthermore, BLM plans to open most of the area to oil and gas leasing with only minor constraints. *See* Exhibit F. Recklessly opening this area to ORV use and oil and gas development will impact the spectacular cultural, paleontological, and sensitive plant resources in the area. The recreation pressures on this popular and accessible area—coupled with the damage likely to follow under the proposed management regime—indicate that special management attention is required to preserve the R&I values.

In violation of BLM Manual 1613 .21 and .22, BLM has not provided a sufficient explanation and cannot justify its failure to designate Upper Courthouse ACEC. Because BLM failed to give

priority to the designation and protection of Upper Courthouse ACEC, it violated FLPMA and the BLM Manual, and the proposed RMP must be changed to include this ACEC.

10. White Wash Potential ACEC

The fact that the White Wash Potential ACEC also falls within an SRMA does not preclude the designation of the area as an ACEC. The SRMA regulates recreation, but does not necessarily protect the R&I values identified by the BLM in this potential ACEC. BLM identified the riparian dune systems as an R&I value. PRMP at 4-334. ACEC designation would benefit this value and complement the SRMA designation.

BLM recognizes that the White Wash riparian dunes are "highly unusual, rare, sensitive and vulnerable to degradation from surface disturbances, especially OHV riders." PRMP at Appendix I-21. Despite this recognition, BLM plans to designate routes within this area and also designate this area as an "open" area for ORVs, putting the sensitive and valuable natural system at risk. *See* Exhibit C; PRMP at Map 2-10C. BLM must not designate routes and must not allow cross-country ORV use within this unique ecosystem. Instead, BLM must *prioritize* the designation of this area as an ACEC in order to comply with FLPMA and the BLM ACEC Manual.

The proposed management of this area continues BLM's misguided management approach for White Wash—that all dunes should be open as ORV play areas. The exceptional R&I values are being harmed and will continue to be harmed by this proposed management. Special management attention is required to protect this unique dune ecosystem.

In violation of BLM Manual 1613 .21 and .22, BLM has not provided a sufficient explanation and cannot justify its failure to designate White Wash ACEC. Because BLM failed to give priority to the designation and protection of White Wash ACEC, it violated FLPMA and the BLM Manual, and its decision must be reversed.

11. Wilson Arch Potential ACEC

Wilson Arch meets the R&I criteria for scenery. PRMP at 4-336. Nonetheless, BLM plans to designate several routes within the potential ACEC. *See* Exhibit C. And, BLM plans to open the area to oil and gas leasing with only minor constraints. *See* Exhibit F. This popular roadside attraction faces encroachment from residential development on several sides. BLM should prioritize keeping the BLM lands around Wilson Arch managed in a way to preserve the R&I values. In violation of BLM Manual 1613 .21 and .22, BLM has not provided a sufficient explanation and cannot justify its failure to designate Wilson Arch ACEC. In order to protect the valuable scenic resources and to comply with FLPMA's *prioritizing* mandate for ACECs, BLM must designate the Wilson Arch ACEC.

F. BLM Fails to Correctly Identify Relevant and Important Values for Newly Nominated ACECs

1. Highway 313 Nominated ACEC

BLM responded to this ACEC nomination submitted along with SUWA's DRMP comments in the PRMP at 124-87. BLM acknowledges that this ACEC nomination meets relevancy criteria, but contends that the values are not more than locally significant and therefore do not meet the importance criteria. However, the significance of the scenic values associated with the Highway 313 corridor have led to its designation as a Scenic Byway. This designation runs counter to the BLM's assertion that the scenic values are not more than locally significant. Additionally, because of new energy and recreation development in the area, special management attention is required to preserve these R&I values. The Highway 313 ACEC should be designated.

2. Upper Labyrinth Nominated ACEC

BLM responded to this ACEC nomination submitted along with SUWA's DRMP comments in the PRMP at 124-86. BLM Response to Comments, sorted by commentor, unpaginated p. 658-59. The BLM interdisciplinary team found the nomination to meet the relevancy criteria for fish, historical and natural processes, but not scenic values. However, BLM claims that these relevant values do not meet the importance criteria: the agency does not find the historical resources to be historic enough, and the agency alleges that the natural processes and fish habitat are not fragile or irreplaceable. BLM Response to Comments, sorted by commentor, unpaginated p. 658-59.

BLM's findings to support its failure to designate this nominated ACEC are at odds with the findings of the Price RMP—which identified R&I values for the Lower Green River congruous with the MFO Upper Labyrinth ACEC nomination. The Price DRMP states:

> The exemplary integrity of the river system should be protected; the riparian areas and wetlands provide an oasis of rare and lush vegetation as well as water in an otherwise arid environment. The corridors created along the river are not only essential [to] the survival of the total species of the region, but also provide habitats for a large number of special status species.

Price DRMP at Appendix 26.

SUWA maintains that the values do meet the R&I criteria as the Price planning process correctly identified—and that the Moab RMP errs in not correctly identifying these values. SUWA further asserts that the preservation of these R&I values are threatened by energy development (e.g. recent development near the river in the Crystal Geyser areas and in Salt Wash) and ORV use threatens the quiet and riparian processes in the area. Special management attention is required to protect the R&I values associated with this nominated ACEC. BLM should correctly identify the R&I values and designate this ACEC.

XII. Wild and Scenic Rivers

The Wild and Scenic Rivers Act (WSRA) requires federal agencies, including BLM, to consider the potential for national wild, scenic and recreational river areas in all planning efforts, including in the Moab RMP process. 16 U.S.C. § 1276(d)(1). During the first WSRA review phase, BLM must determine which river segments are "eligible" to be considered part of the National Wild and Scenic Rivers System (NWSRS). 16 U.S.C. § 1273(b). Eligible river segments are those that are free-flowing and have at least one Outstandingly Remarkable Value (ORV), including but not limited to "scenic, recreational, geologic, fish and wildlife, historic, and cultural" values. 16 U.S.C. § 1271; *id.* § 1273(b). Eligible segments are then given a tentative classification of "wild," "scenic," or "recreational," based on the level of human development associated with that segment. *Id.*. § 1273(b)(1)–(3); BLM Manual § 8351.32. Eligibility involves solely river values; no other concerns, e.g. manageability or resource conflicts, are considered at this stage.

BLM has determined that twenty-eight[26] river segments within the Moab planning area, totaling 287.5 miles, are eligible for inclusion in the NWSRS. PRMP, 2-4 to -5. Once BLM determines that a river segment is eligible, "its outstandingly remarkable values shall be afforded adequate protection, subject to valid existing rights, and until the eligibility determination is superseded, management activities and authorized uses shall not be allowed to adversely affect either eligibility or the tentative classification." BLM Manual § 8351.32(C).

After determining which river segments are eligible, and protecting them accordingly, BLM must then determine which eligible segments are "suitable" for inclusion in the NWSRS. The PRMP recommends eleven river segments, totaling 155 miles[27] for suitability designation. PRMP at 4-338 to -339, 4-352 to -353. The "suitability" determination considers tradeoffs between river protection and corridor development, including the environmental and economic results of designation. 16 U.S.C. § 1275(a); PRMP at Appendix J-11. Once BLM determines a segment is suitable, it must manage it so as to preserve the ORVs and not impair any future suitability decision. BLM Manual § 8351.32(C).

After BLM makes its suitability determinations, the agency must coordinate with the State of Utah, local and tribal governments, and other federal agencies to recommend segments to Congress for inclusion in the NWSRS. Only Congress can designate rivers as part of the NWSRS. 16 U.S.C. §§ 1273(a), 1275(a). To date, not a single river segment in Utah has been included in the NWSRS. Despite Utah's critical desert riparian habitats and stunning river corridors, Utah is one of only ten states without a single river in the NWSRS. In order to adequately protect Utah's valuable and spectacular rivers, BLM should emphasize the designation of suitable rivers.

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[26] There is some discrepancy in the PRMP. For example, PRMP at 2-4 states both that "[t]wenty-eight river segments were found to meet the eligibility criteria" and that "the 29 river segments identified for eligibility would remain in eligibility." PRMP at 2-4. BLM must explain this discrepancy and correctly identify the number of eligible river segments and the total eligible river miles.

[27] Again, there is some discrepancy in the PRMP. For example, PRMP at 2-5 notes that ten river segments totaling 127.3 miles are suitable, while the PRMP at 4-352 and 4-339 state that eleven river segments totaling 155 miles are suitable. BLM must explain this discrepancy and correctly identify the number of suitable river segments and the total suitable river miles.

A. BLM's Failure to Designate Rivers Segments Within WSAs as Suitable Violates the Wild and Scenic Rivers Act

BLM violates the WSRA by failing to recommend a river segment that otherwise qualifies for inclusion in the NWSRS simply because the river is already within a WSA. *See* 16 U.S.C. § 1275(a); PRMP at 4-307; *see, e.g.*, Rattlesnake Canyon, Cottonwood Canyon, North Fork and South Fork Mill Creek, and Negro Bill Canyon. Likewise, BLM violates the WSRA by relying on WSA status and accordingly failing to classify river segments as "wild," "scenic," or "recreational," assuming instead that IMP protections will apply. *See* 16 U.S.C. § 1273(b); PRMP at 4-307; *see, e.g.*, Negro Bill Segment 2 recreational classification, PRMP at Appendix J-47; Cottonwood Canyon scenic classification, PRMP at Appendix J-41. Wild and Scenic Rivers Act classifications and suitability determinations are factual determinations that the agency is required to make; the existence of a designated WSA does not obviate this duty, although the existing evaluation of the area's wilderness characteristics can also provide indications of the character of the river segments.

By failing to designate river segments within WSAs that otherwise qualify as suitable, BLM defeats the purpose of the WSRA, which is to protect rivers and their ORVs, including through continuing inventory, evaluation, and protection. 16 U.S.C. §§ 1271, 1272, 1276(d). Because the purpose of the WSRA is to protect rivers and the identified ORVs, the WSRA offers the best protection for rivers and their ORVs. *See* PRMP at Appendix J-11 to J-12. Indeed, WSRA designation would protect rivers and their identified ORVs in the event that WSAs are released by Congress. Although the PRMP recognizes that continued WSA protection is only an "assumption," the PRMP entirely fails to address what would happen in the event that a WSA is released from its status. *See* PRMP at 4-307.

Further, management to protect ORVs of river segments within other designated areas will not only provide specific management for the river segments that might not otherwise be as clearly defined, but is also most consistent with protecting the other natural values involved. Cottonwood Canyon, Negro Bill Canyon, North Fork Mill Creek, most of South Fork Mill Creek, and Rattlesnake Canyon are all within WSAs and thus should be managed to the Interim Management Policy (IMP) standard for non-impairment. *See* Interim Management Policy for Lands Under Wilderness Review (IMP), at 2. In addition, the easternmost part of segment 1 of the Colorado River is adjacent to the Black Ridge Wilderness Area. *Id.* Development of these areas would impair the classifications of these river segments. Likewise, the fact that the North and South Forks of Mill Creek are proposed to be managed as an ACEC does not preclude further protections. *Cf.* BLM Response to Comments, at 867. Rather, the complementary ACEC and WSA designations highlight the values and sensitivity inherent in Mill Creek.

In order to best protect rivers and the identified ORVs, and to comply with the WSRA's fact-based criteria for eligibility classifications and suitability determinations, BLM must conduct a factual determination of which river segments have outstandingly remarkable values and acknowledge those that meet the suitability criteria, including those that are within WSAs or ACECs, and then forward its determinations to Congress.

B. Downgrading the Classification of Segment 6 of the Colorado River and Segment 2 of the Dolores River from "Wild" to "Scenic," and Segments 1 and 3 of the Dolores River from "Scenic" to "Recreational" Violates the WSRA and the BLM Manual

In violation of the WSRA and its own manual, and in disregard of SUWA's comments on the draft RMP, BLM chose to downgrade the classification of Segment 6 of the Colorado River and Segment 2 of the Dolores River from "wild" in the eligibility study to "scenic" in the PRMP, and Segments 1 and 3 of the Dolores River from "scenic" in the eligibility study to "recreational" in the PRMP. PRMP at 2-40; *id.* at Appendix J-67, J-68; *see* BLM Manual § 8351.32(C); 16 U.S.C. § 1273(b). It is BLM's own policy to protect the values identified in the eligibility process by protecting the ORVs and tentative classifications, yet BLM disregarded its policy and failed to designate certain river segments as eligible with the proper criteria. *See* BLM Manual Section 8351.32C.

The change in management from wild to scenic changes the emphasis: "The basic distinctions between a 'wild' and a 'scenic' area are the degree of development, types of land use, and road accessibility." BLM Manual 8351.5(B)(1). Thus, the classification of a river as wild or scenic is a factual assessment of the degree of development in the river corridor and should not change between the eligibility study and the PRMP. *See* PRMP at Appendix J-8. By initially classifying Segment 6 of the Colorado River and Segment 2 of the Dolores River as wild, BLM acknowledged that these segments are "free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted." 16 U.S.C. § 1273(b)(1). The change in classification is contrary to the BLM Manual, inadequately protects the ORVs that led to the original classification, is contrary to the facts, and is an inaccurate portrayal of the degree of development in these segments of the Colorado and Dolores Rivers.

Similarly, "[t]he basic distinctions between a 'scenic' and a 'recreational' river area are the degree of access, extent of shoreline development, historical impoundment or diversion, and types of land use." BLM Manual 8351.5(C)(1). Therefore, the classification of a river as scenic or recreational is a factual assessment of the degree of development in the area and should not change between the eligibility study and the PRMP. *See* PRMP at Appendix J-8. By initially classifying Segments 1 and 3 of the Dolores River as scenic, BLM acknowledged that these segments are "free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads." 16 U.S.C. § 1273(b)(2). Because these classifications are factually-based, the level of classification should not change between the draft and PRMP. The change in classification is contrary to the BLM Manual, inadequately protects the ORVs that led to the original classification, and is an inaccurate portrayal of the degree of development in these segments of the Colorado and Dolores Rivers that indicates the agency's failure to comply with the mandates of the WSRA.

BLM apparently based its decision to downgrade the classification of Segment 6 of the Colorado River on "evidence of past human activities." BLM Response to Comments, at 661. However, the eligibility study noted that there was "[n]o development present within the river corridor," and the PRMP provides no explanation of what these activities are, or why the evidence came to light between the draft and PRMP, and not before. PRMP at Appendix J-39. Furthermore,

tentative classifications may only be superseded by a BLM determination of nonsuitability, typically made in the PRMP process or by congressional action to study the river segment further. BLM Manual §§ 8351.3, 8351.32(C), 8351.33(A), 8351.52(C). In this case, BLM determined that the segment was suitable, but nonetheless downgraded the classification level. Therefore, BLM's decision to downgrade the classification, and resulting protection, of Segment 6 of the Colorado River violates the BLM Manual and stated policy. *See* BLM Response to Comments, at 126-27. Indeed, the eligibility study found several ORVs, including fish, cultural, wildlife, ecological, scenery, and recreational values for this segment of the Colorado, and in order to protect these ORVs, this spectacular river segment must be classified as wild. The PRMP must describe the new evidence found of human activities, and clarify why this information was not reported in the eligibility study. Absent compelling socioeconomic reasons that would change the suitability, the suitability determinations and tentative classifications should correspond to the eligibility findings.

Thus, BLM's unsupported reclassification of river segments must be corrected. Segment 1 of the Dolores River should be classified as scenic due to the primitive nature and lack of significant development along this segment. Segment 2 of the Dolores River should be classified as wild because there is no development in this primitive segment. Segment 3 should be classified as scenic because there are some minor mining impacts.

C. All of the Segments of the Green River in the Moab Planning Area Should be Designated Suitable, and, Where Applicable, the Segment Classifications Should be Elevated

The Price Field Office found that Segment 3(a) of the Green River, between Swasey's Beach and the San Rafael River confluence (at Mile 97) had wild and scenic values and recommended it for suitability designation, but the Moab FO found it not suitable. Price DRMP, Appendix 3, Table 3 & Table 7. The FOs apparently worked together and determined that the segment was not suitable even though the eligibility study described values that would qualify the segment as suitable and the Price FO originally found unequivocally that the river had wild and scenic values. However, no explanation is given as to how the FOs arrived at this conclusion. *See* BLM Response to Comments, at 661-62. The PRMP must explain the rationale for this decision, and BLM should give more weight to the Price FO decision and to the values identified in the eligibility study.

BLM's non-suitable decision for Segment 4 of the Green River apparently rests on its intention to designate routes along the rim and within the river corridor to off-road vehicles and perhaps due to the presence of several private inholdings. PRMP J-81 to J-85. Permitting and encouraging vehicle use within the corridor would impair the values that the Price FO found to be outstandingly remarkable, and would compromise the river's inclusion in the NWSRS, in violation of the WSRA and BLM's Manual. BLM Manual § 8351.32(C); *see* 16 U.S.C. § 1273(b). Intent to develop an area cannot and should not influence a suitability determination. The purpose of the WSRA is to protect rivers in their free-flowing condition and protect the water quality of these rivers. 16 U.S.C. § 1271. Indeed, the WSRA states that federal agencies "shall give priority to those rivers" that face "the greatest likelihood of developments which, if undertaken, would render the rivers unsuitable for inclusion in the national wild and scenic rivers

system." *Id.* § 1275(a). Thus, rivers that are threatened with development, including the designation of motorized routes, should be the first ones recommended for inclusion in the NWSRS, in order to ensure that the values they currently possess remain free-flowing and unimpaired by development. Therefore, BLM's decision to make a non-suitability determination based on intent to develop flies in the face of the purpose and regulations of the WSRA. BLM must designate Segments 3(a) and 4 of the Green River as suitable in order to comply with the Price FO's original assessment of the river, and the WSRA.

Furthermore, it is not exactly clear which segments of the Green River BLM proposes to designate as suitable. The PRMP recommends Segment 4(a) of the Green River, from the confluence with the San Rafael River to Canyonlands National Park as suitable. PRMP 2-41 to -42. However, on the same pages, BLM states that Segments 4, 5, and 6, which are included in Segment 4(a) are not suitable. *Id.* BLM must explain this discrepancy and ensure that all of Segments 4(a), 5 and 6 are designated suitable.

In addition to designating the entirety of Segment 5, which is the wild and primitive section of Labyrinth Canyon, as suitable, this segment should be classified as wild. There are no impacts or development within this section past Ruby Ranch. Indeed, Labyrinth Canyon is an iconic section of the Green River that has long been a mainstay of boaters and has much support from outfitters, private boaters, and the community at large. In the eligibility study, BLM found many ORVs, including cultural, recreational, scenic, fish, and paleontology values. PRMP at Appendix J-63 to J-64. In order to adequately protect these values, BLM should designate Labyrinth Canyon as suitable with a "wild" classification.

More particularly, the motorized route to Hey Joe should be eliminated from continued vehicle use due to the known and demonstrated user-conflicts and resource conflicts. *See* 43 C.F.R. § 8342.1; BLM Manual 8340 – Off-Road Vehicles (General) (1982); *see also* State of Utah – Public Lands Policy Coordination Comment, BLM Response to Comments, at 110. According to 43 C.F.R. § 8342.1 and BLM Manual 8340, BLM is required to minimize this user-conflict; but BLM has violated these regulations by making no attempt to minimize conflict. To rectify this situation, BLM should establish a trailhead and gate at the fork near the mouth of Spring Canyon to allow motorized access to the river corridor, but keep traffic out of the actual river corridor. This route and some mining impacts are not significant impacts relative to the scale of Labyrinth Canyon. In addition, the route along the river north from Mineral Bottom should be also eliminated from continued motorized use to preserve natural resources and minimize user conflicts.

In addition, Segment 2 of the Green River should be classified as scenic, not recreational. Although there is a route visible at times along this section, it is a primitive route and there are no significant developments above Swasey's campground. According to the WSRA, scenic river areas are "accessible in places by roads." 16 U.S.C. § 1273(b)(2). Thus, the presence of a primitive road should not remove Segment 2 from scenic classification. Finally, Segment 3 of the Green River should be designated as suitable in order to protect Endangered Colorado River Fish Critical Habitat. *See* PRMP at Map 2-17.

For the above-listed reasons, the entirety of the Green River has ORVs and should be designated as suitable for inclusion in the NWSRS.

D. River Segments that Run Through Private Land Should Be Given a Greater Priority for Suitability Designation, Not a Lesser Priority

The WSRA requires the Secretaries of the Interior and Agriculture to *prioritize* the suitability designation for rivers that run through private land. 16 U.S.C. § 1275(a). The Act states that federal agencies "shall give priority to those rivers . . . which possess the greatest proportion of private lands within their areas." 16 U.S.C. § 1275(a). Nonetheless, BLM has indicated that it is *deprioritizing* the designation of rivers that run through private lands. For example, BLM determined that segment 3(a) of the Green River was not suitable, in part because it contains "a large amount of private land. This large amount of private ownereship [sic] along these river segments would make manageability difficult." BLM Response to Comments, at 841; *see also id.* 2, 903-04. This determination violates the priority requirements in the WSRA. *See* 16 U.S.C. § 1275(a).

Similarly, BLM changed the classification of Segment 3(b) from scenic to recreational because the segment contains large amounts of private land and, "[t]he classification change was intended to accommodate the potential for development on private lands." BLM Response to Comments, at 660-61. Again, this determination conflicts with the priority language of the WSRA. *See* 16 U.S.C. § 1275(a). BLM cannot use the presence of private land as an excuse to decline appropriate management of rivers with wild and scenic values. Instead, BLM must obey the mandates of the WSRA and prioritize the suitability designations and classifications of river segments that run through private land.

E. The Colorado River Should Receive Elevated Protection

The Colorado River is a nationally recognized and iconic river. BLM should manage the river to preserve and protect it as a national treasure. The entirety of Segment 1 of the Colorado River, including the easternmost portion of the river, adjacent to Colorado, should be suitable and classified as scenic because BLM's eligibility study identifies regionally significant scenery, recreation, and regionally and nationally significant wildlife, fish, and cultural resources. In addition, the entire stretch of the river, including Segments 3(b) and 4 should be classified as scenic. Although there are occasional roads, suitability designations should not be affected by the presence of roads. BLM Response to Comments, at 841. And although there is some farm development in the second half of segment 3(b), it is minor to the extent that the "shorelines or watersheds [are] still largely primitive and shorelines largely undeveloped." *See* 16 U.S.C. § 1273(b); BLM Manual § 8351.32(A)(2). Additionally, the more protective scenic designation affords more protection to the rare and outstandingly remarkable nesting site for the bald eagle located along this stretch.

F. BLM Should Designate Additional Suitable Segments

Appendix J provides compelling documentation that additional stream segments including Cottonwood Canyon, North and South Forks of Mill Creek, Negro Bill Canyon, Rattlesnake Canyon, Onion Creek, Professor Creek, and Thompson Canyon possess ORVs, including scenery, fish, wildlife, geology, ecological, recreation, and cultural values that meet suitability requirements. *See* Appendix J at J-41-53, J-64-65. These streams should be designated suitable in order to better manage the ecosystems and protect watersheds of the planning area.

BLM ignored SUWA's comments asking for elevated classifications for most rivers and suitability designations for additional river segments. The PRMP classification flies in the face of the eligibility/suitability analysis detailed in Appendix J. Failing to protect these segments and permitting development in these areas would impair the eligible status of the rivers in violation of the WSRA and BLM's Manual. 16 U.S.C. § 1273; BLM Manual § 8351.32(C).

In addition, these rare desert streams will become increasingly important as the devastating effects of climate change progress. The outlook for the climate of the Colorado Plateau, in the context of global climate change, is warmer and drier. Watershed conservation is becoming a paramount concern and wild and scenic river protections are an important tool available to protect watersheds. And, perennial streams are a rarity in the desert southwest. The presence of these streams and the riparian ecosystems they support are an outstandingly remarkable value. Finally, many of these streams are popular destinations for hikers (many cherished by local hikers avoiding crowds at the National Parks or motorized disturbances elsewhere in the Moab planning area) and ought to be recognized for their outstanding recreational opportunities.

G. Tenmile Canyon is Eligible and Suitable

Tenmile Canyon should be found eligible and suitable for inclusion in the NWSRS and classified as wild. Tenmile Canyon has several ORVs that BLM has failed to identify: 1) it is a perennial stream and riparian ecosystem in an otherwise dry corner of the planning area, and 2) it possesses nationally and regionally significant cultural and archaeological resources. These resources are documented by Colorado Plateau Archaeological Alliance submissions and acknowledged by BLM in the Moab PRMP. This action should also be taken in concert with NOT designating a motorized route below Dripping Spring. The suitability designation should extend from Dripping Spring to the Green River.

XIII. Wilderness Study Areas and Lands with Wilderness Characteristics

A. Wilderness Study Area

The Interim Management Policy (IMP) that provides BLM with management direction for wilderness study areas (WSAs) states that in order for an activity to meet FLPMA's non-impairment mandate, and thus be permitted to proceed in a WSA, two criteria must be met. First, the activity must be temporary and not cause surface disturbance. H-8550-1.I.B.2.a. ("Surface disturbance is any new disruption of the soil or vegetation requiring reclamation within a WSA. Uses . . . necessitating reclamation (i.e., recontouring of the topography, replacement of topsoil, and/or restoration of native plant cover) are definitely surface disturbing and must be denied."). Second, after the activity ends, "the wilderness values must not have been degraded so far as to significantly constrain the Congress's prerogative regarding the area's suitability for preservation as wilderness." H-8550-1.I.B.2.b. Thus, the non-impairment test is not an "either/or" proposition and a proposed activity must meet *both* criteria to be permitted to take place. H-8550-1.I.B.2.

1. The PRMP's Designation of "Ways" in WSAs Does Not Comply with the IMP

Given the legal and policy framework set out above, BLM's decision to continue permitting motorized use on so-called "inventoried ways" in WSAs is arbitrary. First, to the extent that BLM fully knows the location of inventoried ways in WSAs, SUWA disputes that BLM will follow the proposed action in the PRMP to discontinue use of these routes in the event that "use and/or non-compliance are found through monitoring efforts to impair the area's suitability for wilderness designation." PRMP at 2-45. The PRMP fails to include a monitoring schedule for the "ways" that will be designated as open routes in the Behind the Rocks and Lost Spring Canyon WSAs. In addition, the PRMP completely fails to analyze and disclose any adverse effects to the wilderness resources from the designation of these "ways," other than noting that Alternative B "adversely impacts wilderness values the least," which appears to be a backhanded way of saying that the proposed plan will impact wilderness values to some extent. *Id.* at 4-355. As the PRMP presents no evidence that motorized use on these "ways" currently are not causing impairment to the WSAs, BLM's decision to designate these ways as official routes appears to be arbitrary and capricious. In addition, BLM's proposal to designate 0.9 miles and 0.8 miles of "ways" in the Behind the Rocks and Lost Spring Canyon WSAs will certainly encourage motorized use, and such use will eventually denude the trails of all vegetation. These trails will then become a noticeable impact to the casual visitor and will effect the naturalness of the areas—which could deprive these WSAs of future wilderness designation.

2. PRMP Must Include Alternative Designating New Wilderness Study Areas

As discussed in SUWA's comments on the Moab DRMP, BLM violated FLPMA and NEPA when it failed to even mention—let alone fully analyze—an alternative that would designate new wilderness study areas pursuant to the agency's broad authority under 43 U.S.C. § 1712. *See* SUWA Comments to the DRMP, at 28.

B. Wilderness Character Areas

Pursuant to FLPMA, "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. This inventory shall be kept current so as to reflect changes in conditions and to identify new and emerging resource and other values." 43 U.S.C. §1711(a). Wilderness character is a resource for which BLM must keep a current inventory. As the U.S. Court of Appeals for the Ninth Circuit recently held: "wilderness characteristics are among the 'resource and other values' of the public lands to be inventoried under § 1711. BLM's land use plans, which provide for the management of these resources and values, are, again, to 'rely, to the extent it is available, on the inventory of the public lands, their resources, and other values.' 43 U.S.C. § 1712(c)(4)." Oregon Natural Desert Ass'n v. Bureau of Land Management, 531 F.3d 1114, 1119–1129 (9th Cir. 2008). BLM has identified "wilderness characteristics" to include naturalness and providing opportunities for solitude or primitive recreation. *See* Instruction Memoranda 2003-274, 2003-275, Change 1. These values are to be *identified and protected* in the land use planning process. *See* BLM Land Use Planning Handbook (H-1601-1, 2005); Oregon Natural Desert Ass'n v. Bureau of Land Management, 531 F.3d 1114, 1119–1129 (9th Cir. 2008). Further, BLM's national guidance provides for management that emphasizes "the protection of *some or all* of the wilderness characteristics as a priority" 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 5000-acre parcels or a requirement that the lands have *all* of the potential wilderness characteristics in order to merit protection.

As SUWA explained in its comments on the Moab DRMP, BLM should recognize the wide range of values associated with lands with wilderness character, including scenic values, recreation, wildlife habitat, riparian areas, and cultural resources, as well as balanced use of the lands and resources. *See* SUWA comments to the DRMP, at 26–28; *see also* 43 U.S.C. § 1711(a), § 1702(c), § 1712.

1. PRMP Ignores Significant New Information Provided by SUWA

BLM's failure to consider and/or the agency's rejection of numerous SUWA-nominated wilderness character areas that were submitted to BLM with supporting narrative, maps, photographs, and other information is arbitrary and capricious. In addition, Appendix P of the PRMP and the DRMP, which addresses the identification of wilderness characteristics of non-WSA lands, states that BLM received no new information from SUWA regarding WC lands since December 2003, when SUWA submitted a list of proposed WC areas. PRMP at Appendix p-2. The PRMP is mistaken, however, as SUWA explained in its comments on the DRMP. *See* SUWA comments to the DRMP, at 30.

Specifically, prior to the release of the DRMP, SUWA provided the MFO with detailed narratives, maps, and photographic documentation for the following units: Dome Plateau, Hell

Hole Canyon, Mexico Point, Hideout Canyon, and the Hatch/Harts/Lockhart Basin wilderness character units.

SUWA likewise provided new information concerning several areas that had not been identified as retaining wilderness character in the agency's initial wilderness inventories (conducted in the late 1970's and early 1980's), or in the current Grand RMP. The information SUWA provided to BLM included extensive narratives, maps, and photographs documenting the follow areas' wilderness character: Duma Point, Horsethief Point, Arches Adjacents, Big Triangle, and Renegade Point wilderness character units.

Upon the release of the DRMP, SUWA provided extensive comments to BLM regarding non-WSA lands with wilderness character. *See* SUWA comments to the DRMP and Exhibit D – Supplemental and New Information, attached to SUWA's comments to the DRMP. This supplemental and new information included site-specific information on wilderness values, detailed maps, and additional aerial photographs of many of the areas where BLM had yet to identify all or a portion of the lands with wilderness characteristics. SUWA submitted new information for the following areas: Arches Adjacents, Beaver Creek, Behind the Rocks, Big Triangle, Coal Canyon, Coyote Wash, Dead Horse Cliffs, Dome Plateau, Fisher Towers, Granite Creek, Hatch/Harts/Lockhart Basin, Horsethief Point, Hunter Canyon, Labyrinth Canyon, Mary Jane Canyon, Mexico Point, Mill Creek Canyon, Negro Bill Canyon, Porcupine Rim, Renegade Point, Westwater Canyon, and Yellow Bird wilderness character units.

Based on the plethora of new information in the form of narratives, photographs, maps, and on-the-ground assessments provided to BLM by SUWA, BLM's statements at Appendix P-2 are perplexing at best, and disingenuous at worst. The issues raised in SUWA's DRMP comments (including the new information on non-WSA lands with wilderness character) have not been addressed by BLM in the PRMP.

In another case before a federal court, the 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 re-inventoried 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); Order (D.Or. Dec. 12, 2006), 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. It concluded:

> The court finds BLM did not meet its obligation under NEPA simply by reviewing and critiquing [a local environmental group'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 [environmental analysis] 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 [Administrative Procedure Act].

Id. (emphasis added). In this planning process, SUWA submitted significant new information regarding the errors in the initial inventory and the wilderness characteristics of the UWC proposal, but BLM has improperly and illegally ignored this vital data.

2. BLM Failed to Consider Significant New Information Regarding Boundaries

One of the more common issues SUWA raised and submitted corroborating evidence in support of, concerned BLM's erroneous use of a natural feature (i.e. ridge, cliff face), a section line, ½ section line, ¼ section line, or a "BLM-created" line across the natural landscape, as a wilderness characteristic boundary. As a result, BLM failed to include the full extent of BLM lands with naturalness and a wilderness resource.

A typical example of SUWA's information provided to BLM includes the Fisher Towers wilderness character unit, where SUWA noted that the boundary used to separate lands having wilderness character and lands that lack wilderness character were arbitrary, BLM-created straight lines running across the natural landscape, rather than a legitimate human impact. BLM's use of these arbitrary boundaries excludes wilderness characteristics, including an impressive scenic cliff face north of Cottonwood Canyon, and large stands of native pinyon-juniper trees free of any significant human impacts. BLM should use the edge of the human disturbances in Fisher Valley along the route that eventually climbs onto Sevenmile Mesa as the boundary for the wilderness characteristics area. SUWA submitted photographs of this area to support its narrative. BLM responded:

> The area to which the commentor refers has not been presented to the BLM as an area possessing wilderness characteristics until the date that this comment was received (11-30-07). It was not part of the lands proposed for wilderness in HR 1500 as assessed in the 1999-2003 reinventory. It was not part of the new proposals analyzed in the 2007 wilderness characteristics review. It is not included in the map of lands in the Red Rock Wilderness Act which is on SUWA's website. The commenter provides no information other than a low-resolution aerial photo to support its assertion that previous inventories were in error. The BLM stands by the findings of its wilderness characteristics inventory maintenance.

BLM Response to Comments, sorted by Commentor, at 124-241.

This is BLM's typical, catchall response to SUWA's new information that the agency used time and time again in the PRMP. BLM's generic response failed to acknowledge that SUWA's comments were detailed, included a supplemental map of the area in question detailing BLM's arbitrary section line and/or "created line" boundary (a feature that could not be located or identified on the ground), as well as an aerial photograph detailing this information. Rather than using this information to ground-truth the wilderness characteristics of the particular area, the BLM effectively ignored SUWA's information.

In other instances, BLM relied extensively on its 2007 cursory wilderness character review. SUWA submitted information that demonstrated BLM's wilderness characteristics boundaries did not follow a significant impact or a human feature at all, yet BLM failed to perform the necessary adjustments to the wilderness characteristics inventory.

For example, SUWA submitted new information about the Horsethief Point wilderness characteristics area, noting that while BLM did find wilderness characteristics for a portion of the area, the agency erroneously omitted other areas due to arbitrarily using sections lines across natural areas, excluding large tracts of wilderness character lands. SUWA urged BLM to conduct field evaluations to properly assess the wilderness values and conditions on the ground, and to move the boundary to the north until human impacts are encountered. SUWA submitted a detailed map in support of its recommendation, and incorporated the comprehensive wilderness character information (narrative, maps, photos) submitted to BLM in June 2007.

BLM's response fails to address the concern that arbitrary and capricious boundaries were utilized. Instead, BLM issued the following non-responsive, generic statement that merely restates its wilderness inventory process:

> As part of its wilderness characteristics inventory maintenance, the BLM used a combination of field checks, ID team reviews, BLM and county GIS data, range files, and review of high resolution 2006 aerial photographs. The BLM's findings are described in the 1999-2003 wilderness reinventory documentation as well as the 2007 wilderness characteristics review process. These findings are available on the MFO planning website, and in the administrative record. The BLM stands by its findings of its wilderness characteristics inventory maintenance.

BLM Response to Comments, sorted by Commentor, at 124-248.

BLM used this generic response for numerous concerns raised by SUWA. *See* BLM Response to Comments, sorted by Commentor, at 124-207 through 124-274. BLM provides this summary response to SUWA's new information and concerns regarding BLM's previous wilderness character inventories, including the 1999 to 2003 inventory and the 2007 review. As was noted in SUWA's DRMP comments, BLM has yet to address SUWA's new information regarding boundaries and areas that have wilderness characteristics for areas listed below (the letter indicates SUWA's specific comment in the information submitted with its DRMP comments):

> Arches Adjacent Wilderness Character Unit: Comment A, B, C, D, E, F, and G
> Beaver Creek Wilderness Character Unit: Comment A, B, C, D, E and G

Behind the Rocks Wilderness Character Unit: Comment A
Big Triangle Wilderness Character Unit: Comment A
Coal Canyon Wilderness Character Unit; Comment A, B, C, D, E, F, G and J
Coyote Wash Wilderness Character Unit: Comment A
Dead Horse Point Wilderness Character Unit" Comment A and B
Dome Plateau Wilderness Character Unit: Comment A and B
Fisher Towers Wilderness Character Unit: Comment A
Granite Creek Wilderness Character Unit: Comment A
Hatch/Harts/Lockhart Basin Wilderness Character Unit: Comment A, B, C and D
Horsethief Point Wilderness Character Unit: Comment A, B and D
Hunter Canyon Wilderness Character Unit: Comment A
Labyrinth Canyon Wilderness Character Unit: Comment A, B, C and D
Mary Jane Canyon Wilderness Character Unit: Comment A, B and C
Mexico Point Wilderness Character Unit: Comment A
Mill Creek Wilderness Character Unit: Comment A and B
Negro Bill Canyon Wilderness Character Unit: Comment A
Porcupine Rim Wilderness Character Unit: Comment A
Renegade Point Wilderness Character Unit: Comment A
Westwater Canyon Wilderness Character Unit: Comment A, B and C
Yellow Bird Wilderness Character Unit: Comment A and B

BLM's failure to consider this new information was arbitrary and capricious and must be reversed, as it violates FLPMA's mandate to maintain a current inventory of resources. BLM must revisit each of these proposed wilderness units and consider SUWA's information concerning arbitrary boundaries and consider whether the areas—after appropriate boundary adjustments using human impacts—have the requisite attributes to be wilderness character areas (including areas of less than 5,000 acres).

In *Committee for Idaho's High Desert*, 85 IBLA 54, 57 (1985), the Interior Board of Land Appeals discussed the standard of review for challenges to factual BLM determinations regarding the wilderness qualities of inventory units (i.e. naturalness, solitude, opportunities for primitive and unconfined recreation):

> Suppose an appellant establishes that BLM failed to follow its guidelines, or otherwise creates doubt concerning the adequacy of BLM's assessment, and the record does not adequately support BLM's conclusions. In such a situation the BLM decision must be set aside and the case remanded for reassessment. We must point out that evidence of failure to follow guidelines alone is insufficient to require reassessment. An appellant must also point out how the errors affect the conclusions and show that a different determination might result from reassessment.

Id. (quoting *Utah Wilderness Ass'n.*, 72 IBLA 125, 129 (1983)) (internal citations omitted). SUWA meets this standard because SUWA has demonstrated that not only did BLM arbitrarily draw *ad hoc* boundaries using natural features, section lines, and/or BLM-created lines, but these decisions also had a real and immediate effect on BLM's conclusion that hundreds of thousands

of acres of public lands documented by SUWA and listed above, lack wilderness character.[28] If remanded to the Moab Field Office, with instructions to reevaluate the areas found not to have wilderness character, it is likely BLM would determine that the areas do retain their wilderness character.

3. Management of Wilderness Character Lands Does Not Provide Sufficient Protection

The PRMP states that 47,761 acres out of 266,485 acres identified as having wilderness characteristics will be managed to "*protect, preserve and maintain* their wilderness characteristics." PRMP at ES-3, 2-26 (emphasis added). BLM acknowledges that "[m]otorized uses in these areas *detract from opportunities for both solitude and primitive forms of recreation*." *Id.* at 4-115 (emphasis added). Nevertheless, the PRMP includes ORV route designations in *all* of the identified non-WSA lands with wilderness characteristics—158.54 miles of route. *See id.* at 4-154, Map 2-11-C, Map2-24-C. More egregious is that BLM is proposing ORV routes (8.36 miles) *within two of the three wilderness character areas the agency is proclaiming to manage to protect and preserve the wilderness character values*—Beaver Creek and Mary Jane Canyon WC areas. *See id.* The PRMP states "there would be no impacts from Travel management decisions in Fisher Towers as no routes would be designated. Impacts from Travel Management decisions in Mary Jane would be minimized" and the 8.16 miles of route in Beaver Creek wilderness character area "minimizes the impacts from Travel Management decisions . . ." *Id.* at 4-154.

BLM's apparent reasoning is that because in other alternatives there were more routes proposed for designation in Mary Jane and Beaver Creek than the 8.36 miles of route in the PRMP, designating fewer miles of route than proposed in other alternatives somehow "minimizes" impacts to the wilderness characteristics of these areas. This reckoning fails for obvious reasons. Clearly, not designating routes in wilderness character areas—especially the areas BLM proposes to manage to "protect and preserve wilderness characteristics"—would minimize impacts from ORV use on wilderness characteristics, based on BLM's own acknowledgement that motorized uses impact opportunities for both solitude and primitive recreation. *See also* BLM Response to Comments, sorted by Commentor, at 479-15 (EPA urged protection of the wilderness character lands, BLM's response overstates the actual protection these areas will receive under the proposed plan and fails to address the impacts caused by designated routes in these areas). BLM must revise the PRMP to accurately reflect the impacts to all of the wilderness character lands from route designations within these areas, with particular attention to the impacts to the areas that BLM is claiming to manage to protect and preserve the wilderness characteristics.

[28] As noted in SUWA's DRMP comments, it has requested, on several occasions, BLM's inventory records for various boundary routes that would indicate that BLM has performed on the ground assessments to make determinations that the routes were "substantially noticeable." To date, BLM has not provided this data to SUWA. SUWA comments to the DRMP, at 30.

XIV. Visual Resources

BLM is directed by federal statutes and BLM policies to protect visual resources. FLPMA directs BLM to prepare and maintain inventories of the visual values of all public lands, 43 U.S.C. § 1711(a), and manage public lands "in a manner that will protect the quality of . . . scenic . . . values," §1701(a)(8). NEPA further requires BLM to "assure for all Americans . . . aesthetically . . . pleasing surroundings." 42 U.S.C. § 4331(b)(2). BLM has interpreted these mandates as a "stewardship responsibility" to "protect visual values on public lands" by managing all BLM-administered lands "in a manner which will protect the quality of the scenic (visual) values." BLM, BLM Manual 8400 – Visual Resource Management .02, .06(A).

BLM utilizes visual resource inventories during the RMP process to establish management objectives, organized into four classes. These objectives are as binding as any other resource objectives contained in the RMP. *See Southern Utah Wilderness Alliance et al*., 144 IBLA 70, 84 (1998). BLM may not permit any actions that fail to comply with these objectives.

These statutory and regulatory responsibilities are especially important to the areas managed by the Moab Field Office, which includes lands world famous for their scenic vistas. BLM should establish Visual Resource Management (VRM) objectives that limit surface disturbance within these special viewsheds.

All WSA lands and non-WSA lands managed for wilderness characteristics should be managed as Class I, and other non-WSA lands with wilderness characteristics, such as those contained in the proposed America's Red Rock Wilderness Act, should be managed as Class II. BLM guidelines for assigning VRM Classes clearly states that "Class I is assigned to those areas where a management decision has been made previously to maintain a natural landscape. This includes areas such as national wilderness areas . . . and other congressionally and administratively designated areas where decisions have been made to preserve a natural landscape." BLM, BLM Manual 8410 – Visual Resource Inventory at V(A)(1).

Lands with popular and easily accessible vantage points should be managed for visual resources, such as VRM Class II, to "retain the existing character of the landscape," including clear provisions dealing with oil and gas development and other human disturbance. Indeed, the BLM guidelines for assigning VRM Classes require protecting such areas "where decisions have been made to preserve a natural landscape" as Class I and includes distance zones as one of the three factors considered when assigning VRM Classes. BLM, BLM Manual 8410 – Visual Resource Inventory at V(A)(1).

ACECs and other special management designations and prescriptions should be used to protect scenic landscapes and viewpoints within the resource area with stipulations specifically addressing and managing human development impacts, including VRM Class I to "preserve the existing character of the landscape" or VRM Class II to "retain the existing character of the landscape" as appropriate. Without such classification assignments, the PRMP fails to protect the viewsheds in ACECs.

Specifically, the Moab Field Office should utilize every opportunity to limit the negative impacts that OHV use has on visual resources, including completely closing areas to OHV use where appropriate. The PRMP discussion of visual resources repeatedly notes the damage caused by OHV use, but does not mention concrete measures the Moab Field Office will take to ensure prevention of such damage during the life of the management plan. For example, the PRMP states that "[t]he greatest impacts are being created by recreational activities and OHV use," "[a]n increasingly utilized network of two-track roads and routes are creating conditions that allow OHV users, campers, and woodcutters to expand surface disturbances and impact visual resources," and "[t]he increased use of OHVs, the increase in dispersed camping, and increases in trail use are having an impact on visual resources." PRMP at 3-175, -176. The Moab Field Office will have to actively limit OHV use to put in place its assurance in the PRMP that "recreation activities and off-road travel would be managed to limit surface disturbances by greatly reducing areas open to OHV use so that areas inventoried as having high scenic quality would be preserved." PRMP at 4-517.

XV. Habitat Fragmentation

SUWA incorporates by reference the protest to the Moab PRMP submitted by ECOS Consulting, including its discussion of habitat fragmentation. SUWA wishes to raise further concerns, as discussed below.

A. BLM Must Not Only Conduct a Thorough Analysis of the Impacts of Habitat Fragmentation, But Also Use this Information to Adopt a Management Alternative that Mitigates these Impacts

While we appreciate BLM's use of scientific data and methodology to provide analysis of habitat fragmentation, we reiterate that BLM must take into consideration additional factors as stated in our comments on the Draft RMP. SUWA comments to the DRMP, at 82–87. Further, BLM should create and make available habitat fragmentation maps from the GIS data used to analyze fragmentation in order to depict a thorough evaluation and provide an opportunity for public review and comment. In addition, BLM should take advantage of the scientific knowledge and data on the impacts of motorized routes to develop and select appropriate desired conditions and management actions.

We realize it may not be feasible to produce an alternative that provides completely unfragmented habitat. However, it is necessary for BLM to provide sufficient favorable habitat for the species it is charged with managing and to take steps to reduce and mitigate fragmentation where possible.

BLM states that "the fragmentation analysis is not an attempt to quantify the specific impacts from the fragmentation that has or will result from existing or new road use and energy exploration and development." BLM Response to Comments, at 124-140. However, in order to comply with the requirements of NEPA to conduct a thorough analysis of the direct, indirect, and cumulative impacts of the management alternatives, BLM must thoroughly analyze the *specific impacts* of habitat fragmentation on affected species and provide a comparison of the management alternatives. Only by thoroughly analyzing reasonably foreseeable future impacts can BLM take protective measures to preserve habitat.

1. Requested Remedy

BLM should perform a more detailed analysis of habitat fragmentation using the factors proposed in our comments on the Draft RMP. BLM should also make available maps of habitat fragmentation as the Vernal Field Office did during the planning process. Finally, BLM must incorporate the results of its habitat fragmentation analyses into reconsideration of the selected management approach and mitigation measures in the Proposed RMP.

B. BLM Should Protect Wildlife Habitat and Reduce Fragmentation by Managing More Lands to Protect Wilderness Characteristics

The PRMP acknowledges the many benefits to wildlife, including special status species, from managing areas to maintain wilderness characteristics, including by reducing fragmentation. *See*

PMRP at 4-388, 4-471. The management alternatives, including the Preferred Alternative, should include managing more lands outside WSAs to maintain wilderness characteristics based on the benefits to wildlife.

BLM identifies 33 areas totaling more than a quarter million acres that have wilderness characteristics, but proposes to manage only 3 areas totaling 47,761 acres to protect these values. This does not represent a balanced approach to land management. Furthermore, the Proposed RMP designates over 150 miles of routes in lands with wilderness characteristics and opens 60% of these lands to oil and gas development. BLM should take advantage of management prescriptions, such as managing all lands with wilderness characteristics to fully protect and preserve the wildlife resource, and to reduce habitat fragmentation and its impacts on wildlife in the Moab planning area.

Managing non-WSA land to maintain wilderness characteristics would generally benefit wildlife by reducing habitat degradation and fragmentation. The management of these areas would prohibit surface-disturbing activities in areas managed as NSO or closed. Management of non-WSA lands with wilderness characteristics includes limiting vehicles to designated roads, and excluding or avoiding new ROWs. PRMP at 4-471.

1. Requested Remedy

The Proposed RMP should include managing more lands outside of WSAs to protect wilderness characteristics, thereby improving habitat and reducing fragmentation.