Director's Protest Resolution Report

Lower Sonoran Field Office & Sonoran Desert National Monument Resource Management Plan

September 13, 2012



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Reader's Guide

How do I read the Report?

The Director's Protest Resolution Report is divided into sections, each with a topic heading, excerpts from individual protest letters, a summary statement (as necessary), and the Bureau of Land Management's (BLM) response to the summary statement.

Report Snapshot Issue Topics and Responses Topic heading Submission number NEPA Protest issue number Issue Number: PP-AZ-Sonoran-12-0020-10 **Organization:** The Forest Initiative – Protesting organization Protester: John Smith Protester's name Direct quote taken from the submission **Issue Excerpt Text:** Rather than analyze these potential impacts, as required by NEPA, BLM postpones analysis of renewable energy development projects to a future case-by-case analysis. **Summary** General statement summarizing the issue excerpts (optional). There is inadequate NEPA analysis in the PRMP/FEIS for renewable energy projects. Response BLM's response to the summary statement or issue excerpt if there is no summary. Specific renewable energy projects are implementation-level decisions rather than RMP-level decisions. Upon receipt of an application for a renewable energy project, the BLM would require a site-specific NEPA analysis of the proposal before actions could be....

How do I find my Protest Issues and Responses?

- 1. Find your submission number on the protesting party index which is organized alphabetically by protester's last name.
- 2. In Adobe Reader search the report for your name, organization or submission number (do not include the protest issue number). Key word or topic searches may also be useful.

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List of Commonly Used Acronyms

ACEC	Area of Critical Environmental		
	Concern		
AGFD	Arizona Game and Fish Department		
APA	Administrative Procedures Act		
ATV	All-Terrain Vehicle		
AUM	Animal Unit Month		
AWC	Arizona Wilderness Coalition		
BA	Biological Assessment		
BH	Big Horn		
BLM	Bureau of Land Management		
BMP	Best Management Practice		
BO	Biological Opinion		
CEQ	Council on Environmental Quality		
CFPO	Cactus ferruginous pygmy-owl		
CFR	Code of Federal Regulations		
DOI	Department of the Interior		
DRMP/D	EIS Draft Resource Management Plan/Draft Environmental Impact Statement		
EIS	Environmental Impact Statement		
ESA	Endangered Species Act		
FLPMA	Federal Land Policy and Management Act of 1976		
FR	Federal Register		
GAO	Government Accountability Office		
GHG	Greenhouse Gas		
IM	Instruction Memorandum		
LS	Lower Sonoran		
LSFO	Lower Sonoran Field Office		

LUA	Land use Authorization			
LV	Lower Vekol			
NEPA	National Environmental Policy			
	Act of 1969			
NRCS	National Environmental Policy Act			
PBI	Pacific Biodiversity Institute			
PRMP/F	EIS Proposed Resource Management Plan/Final Environmental Impact Statement			
RFD	Reasonably Foreseeable Development			
RFFA	Reasonably Foreseeable Future Action			
RMP	Resource Management Plan			
RMZ	Recreation Management Zone			
ROD	Record of Decision			
R&PP	Recreation & Public Purpose			
SCRMA	Special Cultural Resources Management Area			
SDNM	Sonoran Desert National Monument			
SSS	Special Status Species			
TNC	The Nature Conservancy			
VRM	Visual Resource Management			
WMC	Wilderness Migration Corridor			
WWP	Western Watersheds Project			

Protesting Party Index

Protester	Organization	Submission Number	Determination
Gail Griffin	Official	PP-AZ-Sonoran-12-01	Dismissed – Comments Only
Ronald G. Martin	Individual	PP-AZ-Sonoran-12-02	Dismissed – Comments Only
Fennemore Craig PC for Freeport-McMoRan Corporation	Organization	PP-AZ-Sonoran-12-03	Denied – Issues and Comments
Western Watersheds Project & Sierra Club	Organizations	PP-AZ-Sonoran-12-04	Denied – Issues and Comments
Michael DeRosier	Individual	PP-AZ-Sonoran-12-05	Dismissed – Comments concerned implementation decision
The Wilderness Society, Arizona Wilderness Coalition, National Trust for Historic Preservation, Archaeology Southwest, Sierra Club, & Western Watersheds Project	Organizations	PP-AZ-Sonoran-12-06	Dismissed – Issues and Comments
Jason Keith	Individual	PP-AZ-Sonoran-12-07	Denied – Issues and Comments
Town of Gila Bend	Official	PP-AZ-Sonoran-12-08	Dismissed – Comments concerned implementation decision
Arizona Cattle Grower's Association	Organization	PP-AZ-Sonoran-12-09	Dismissed – Comments Only

Section 1 - National Environmental Policy Act (NEPA) Section 1.1 – NEPA – Impacts Analysis

Protest Issue: PP-AZ-Sonoran-12-03-38 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

BLM Has Failed to Adequately Analyze the Direct, Indirect and Cumulative Effects of Avoidance and Exclusion Areas and Mineral Withdrawal Throughout the Planning Area.

The lack of any meaningful direct, indirect or cumulative effects impact analysis in the PRMP/FEIS resulting from the proposed closure of public lands to mineral entry for locatable, leasable and saleable minerals and the adoption of substantial land use authorization ("LUA") avoidance and exclusion zones violates NEPA. See 40 C.F.R. § 1502.16 (a) and (b).

Protest Issue: PP-AZ-Sonoran-12-03-39 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

Direct Effects - BLM fails to fully analyze the effects of exclusion and avoidance areas on mineral development in the proposed [Area of Environmental Concern] ACECs and in other special management areas. The effects analysis regarding special management designations states only that "the ACECs would place an emphasis on protecting sensitive cultural and biological resources and could require additional stipulations and mitigation for minerals development." [Proposed Resource Management Plan/Final Environmental Impact Statement] PRMP/FEIS at 4-317. BLM's own policy manual recognizes the importance of discussing the effect of the management of the ACEC stating that "the management prescriptions for the ACEC (i.e., the special management attention) will result in effects ... the likelihood of controversy can be reduced by conducting a thorough and well-documented estimation of effects analysis." BLM Manual 1613 (Areas of Critical Environmental Concern), § .22 (C). BLM's analysis is neither thorough nor well documented and instead is non-existent.

One simple example requiring a discussion of effects is the BLM planned exclusion and/or avoidance of land use authorizations and route systems in the ACEC. In this case, BLM declares that land-disturbing activities would be prohibited in the ACEC and that the impacts would be "moderate." PRMP/FEIS at 4-364. No analysis is provided with respect to the impact on mining, where no water, power or utility lines or roads will be authorized yet mineral rights are supposedly recognized. The mere classification of impacts (i.e., low, moderate, or significant) is not sufficient and a meaningful discussion of the direct effects and their significance is required. 40 C.F.R. § 1502.16 (a).

Protest Issue: PP-AZ-Sonoran-12-03-40 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

Indirect Effects - There is no apparent evaluation of any indirect effects of the proposed action in the PRMP/FEIS. This omission is in violation of 40 C.F.R. § 1502.16 (b) **Protest Issue:** PP-AZ-Sonoran-12-03-6 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

BLM's analysis of direct, indirect and cumulative impacts of the PRMP/FEIS does not comply with [National Environmental Policy Act] NEPA regulations (Chp. 4).

Summary

There is no evaluation of any indirect effects of the proposed action in the Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS).

The BLM failed to analyze the direct and indirect effects of the proposed action, including the proposed closure of public lands to mineral entry and the effects of Area of Critical Environmental Concern (ACECs) and other special management areas on minerals development.

Response

The PRMP/FEIS provides an adequate discussion of the environmental consequences of the Proposed Plan and alternatives, including direct and indirect effects, throughout Chapter 4 of the PRMP/FEIS. As required by 40 CFR § 1502.16, the PRMP/FEIS provides a discussion of "the environmental impacts of the alternatives including the proposed action, any adverse environmental effects which cannot be avoided should the proposal be implemented, the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and any irreversible or irretrievable commitments of resources which would be involved in the proposal should it be implemented." The PRMP/FEIS presented the decision-maker with sufficiently detailed information to aid in determining whether to proceed with the proposed plan or make a reasoned choice among the other alternatives in a manner such that the public could have an understanding of the environmental consequences associated with the alternatives.

Land use plan-level analyses are typically broad and qualitative rather than quantitative or focused on site-specific actions. To identify impacts (direct, indirect, and cumulative) for analysis, Reasonable Foreseeable Development Scenarios (RFDs) were developed, including those for ACECs and special management areas on minerals development. By addressing impacts in context to these RFDs, the BLM has met the requirements of impact analysis at the broad landscape level. A more quantified or detailed and specific analysis would be completed if the scope of the decision is a discrete or specific action. As specific actions that may affect the area are considered, the BLM will conduct subsequent NEPA analyses that include site-specific project and implementation-level actions, such as for oil and gas development, realty actions,

allotment management plans, and public land use authorizations, or other ground disturbing activities proposed. These activity plan-level analyses will tier to the RMP analysis and expand the environmental analysis when more specific information is known. The public will be offered the opportunity to participate in the process for any site-specific actions, as required by NEPA.

Proposed Closure of Public Lands to Mineral Entry

For the Lower Sonoran planning area, the direct and indirect effects of the proposed closure of public lands on the Federal mineral estate, including locatable, leasable, and salable minerals, is described on page 4-316 of the PRMP/FEIS. For locatable minerals, the analysis describes the additional areas that will be recommended for withdrawal, and states that because there is low potential for locatable minerals within the recommended withdrawal areas, the impacts under the proposed action would be negligible. Regarding salable minerals, the PRMP/FEIS describes that the closures would reduce the availability of crushed stone, decorative rock, boulders, and related products by 30 percent, and the availability of sand and gravel, aggregate, fill material, and related products by 20 percent. For leasable minerals, Section 4.17 of the PRMP/FEIS describes that there is a relatively low potential for oil and gas development in the Lower Sonoran, coupled with an absence of resource development interest. Therefore, impacts of the closures would be expected to be negligible. For geothermal resources, Section 4.17.7.2 of the PRMP/FEIS describes how only nine percent of the closed lands have high potential for geothermal resources, and therefore, how impacts on geothermal resources is expected to be minor. In the Sonoran Desert National Monument (SDNM), because the Monument has been withdrawn from mineral entry, no impacts of the closure of public lands to mineral entry were analyzed (PRMP/FEIS Section 4.17.7.3).

Effects of Proposed ACECs and Other Special Management Areas on Minerals Development

As required by NEPA, the direct and indirect effects of the ACECs and other special management areas in the proposed action on minerals development are described in Section 4.17.7.2 of the PRMP/FEIS. Recognizing the impacts on minerals management, the acreages associated with certain ACECs has been reduced to avoid areas with locatable mineral potential. Because an area designated as an ACEC is not necessarily closed to mineral development, the section states that there are areas where additional stipulations and mitigation for minerals development could be required. Additional stipulations and mitigation would be analyzed during site-specific NEPA analysis. The section describes that two recently active mineral materials sites are located within proposed special designation areas (although both are areas in which permits have expired), and describes that in one of these areas, there are no significant resource conflicts, so the location would be available for mineral materials disposal if the operator expressed an interest in entering into a new permit. Although the areas at issue are not currently permitted for minerals development, it is reasonably foreseeable that in the future the BLM could receive a request for these areas to be available. Because the SDNM has been withdrawn from mineral entry, the impacts of the proposed ACECs and other special management areas on mineral resources were not analyzed (PRMP/FEIS Section 4.17.7.3).

Protest Issue: PP-AZ-Sonoran-12-03-41 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

Cumulative Impacts - The cumulative impacts analysis in the PRMP/FEIS consists of a newly added single paragraph that declares the significant effects in the event of any mineral withdrawal without any substantive analysis of how the proposed action relates to other past, present, and reasonably foreseeable future actions:

"Locatable minerals, such as uranium, gold, and copper, are less influenced by local planning, but could be significantly affected if the planning decisions are to recommend or propose withdrawal of the mineral from development. Withdrawal would remove developers' opportunity for access to the mineral resources; these types of actions are very location specific and simply moving to another location is largely out of the question."

BLM goes through the process to identify reasonably foreseeable future actions (PRMP/FEIS at Section 4.1.6) but then fails to connect the dots and analyze the impacts resulting from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions ("RFFA") as required by NEPA. 40 C.F.R. § 1508.7.

In fact, there is a complete absence of consideration of RFFA in the cumulative impacts analysis on minerals management in the Alternative E (the PRMP) section. The following example illustrates this point. There is no evaluation of the cumulative

impacts on mining (or other industry) resulting from the established land use exclusion and avoidance zones and utility corridor removals. The RFFA for locatable minerals contemplates up to 10 exploration level operations every year, three to five new small mines every 10 years, and one to two larger operations. PRMP/FEIS at 4-7. A review of the analysis section for lands and realty decisions on minerals management shows a complete void of analysis relative to how the establishment of thousands of acres of avoidance and exclusions zones and the elimination of hundreds of miles of utility corridors will impact the development of all of the RFFA related to locatable minerals projects. PRMP/FEIS at 4-317. Instead, there is the following statement "[e]ight multiuse utility corridors could interfere with or eliminate mineral exploration and development within their boundaries" which contains the extent of the cumulative effects analysis. The absence of analysis of the cumulative impacts of the PRMP and RFFA on mine development in the ACECs resulting from BLM management actions is equally apparent. PRMP/FEIS at 4-317 and 4-377.

Protest Issue: PP-AZ-Sonoran-12-03-6 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

BLM's analysis of direct, indirect and cumulative impacts of the PRMP/FEIS does not comply with NEPA regulations (Chp. 4).

Protest Issue: PP-AZ-Sonoran-12-04-64 **Organization:** Western Watersheds Project Protester: Greta Anderson

Issue Excerpt Text:

The PRMP/FEIS fails to analyze and disclose cumulative impacts. NEPA requires agencies to analyze and disclose cumulative impacts. 40 C.F.R. § 1508.25. Western Watersheds Project raised the issue of BLM's failure to consider the cumulative impacts of livestock grazing in comments. Comment #100136-46. BLM simply responds that it conducted a Land Health Evaluation. PRMP/FEIS at 6-280. This is different than a discussion of cumulative detrimental impacts of livestock grazing, which includes the addition of livestock induced soil compaction, the spread of nonnative species, GHG emissions, fence lines and other infrastructure, water resource impairment, trampling and harming archeological sites and damaging and destroying desert tortoise burrows, etc. Because the proposed action changes grazing use to a seasonally-intensive system, the BLM should have considered the cumulative impacts of this to the other affected elements on the SDNM.

Western Watersheds Project asked BLM to analyze and disclose whether, on lands

failing to meet Land Health standards, adding livestock grazing to those already degraded conditions would hinder the attainment of land health standards in the future. BLM did not answer this question, nor did it analyze and disclose the cumulative impacts of allowing livestock grazing to continue. This is true for both the [Lower Sonoran Field Office] LSFO and the SDNM.

In sum, the PRMP/FEIS violates NEPA because it failed to comply with mandates to consider the best available science, to take a hard look at all of the evidence, to consider impacts to sensitive status species and monument objects, to consider a full range of reasonable alternatives or fully disclose the how the proposed management compares to current use, to fully and meaningfully respond to substantive comments, to discuss the cumulative impacts of livestock grazing on the alreadystressed resources of the drought-stricken Sonoran Desert, to consider all best available science, and, because ultimately, the BLM came to arbitrary and capricious conclusions about the proposed action. The PRMP/FEIS fails on these counts in its analysis of the SDNM and the LSFO.

Summary

The PRMP/FEIS failed to adequately analyze the cumulative effects of the proposed action relating to minerals management and livestock grazing.

Response

As described in Section 4.25 of the PRMP/FEIS, the cumulative impact analysis considered the present effects of past actions to the extent that they are relevant, present and reasonably foreseeable (not highly speculative) Federal and non-Federal actions, taking into account the relationship between the proposed action and these reasonably foreseeable actions. The information presented is sufficient to enable the decision-maker to make an informed decision.

Protester alleges that the BLM's cumulative impact analysis contained no substantive analysis of how the proposed action relates to other past, present, and reasonably foreseeable future actions. However, Section 4.25.1.2 states that all of the reasonably foreseeable development scenarios cited in Section 4.1.6 would occur over the timeframe for the cumulative impact analysis (20 years), including RFD scenarios for both minerals management and livestock grazing.

Minerals Management

The cumulative impacts analysis describes the impacts of closing areas to leasable, locatable, and salable minerals. For leasable minerals, the cumulative effects analysis acknowledges that closing or adding constraints to an area in the proposed action would have impacts on development. However, as stated in the BLM's impact analysis (see PRMP/FEIS Section 4.17 and Section 6.1 of this report), because there is low potential for locatable minerals in the areas recommended for withdrawal, impacts (including cumulative impacts) from the closure of public lands would be negligible. Similarly, for leasable minerals, because they are a "a minor component of the mineral development in the planning area" (PRMP/FEIS Section 4.1.6.5), and because there is low potential for oil and gas in areas proposed for closure, and only high potential for geothermal development in 9 percent of areas proposed for closure (Section 6.1 of this report), the cumulative impact analysis is sufficient in stating that closure or major or moderate constraints could influence development. For salable minerals, the cumulative impacts analysis states that the removal of availability would result in the development of the resource at other locations, whether local or regional. The cumulative impacts analysis also states that there could be significant impacts from having to transport these salable minerals from outside the market area.

Livestock Grazing

The BLM discussed the cumulative impacts of allowing grazing to continue, both in the Lower Sonoran Field Office (LSFO) and the Sonoran Desert National Monument (SDNM). The additive effects of livestock grazing with other past, present, and reasonably foreseeable activities was assessed for greenhouse gas production, effects to water resources, effects to wilderness characteristics, effects to cultural resources, wildlife and special status species, and to resources and monument objects on the SDNM. Impacts of livestock grazing to other resources, such as air quality, vegetation, and others were assessed in the context of the RFD scenarios throughout the EIS. The protester suggested that the BLM should "analyze and disclose whether, on lands failing to meet Land Health standards, adding livestock grazing to those already degraded conditions would hinder the attainment of land health standards in the future." Standards are not met on lands for various reasons, and the potential actions needed to return them to standard also may vary specifically to each site. Thus the methods to recover lands determined to not meet the standard for which the causal factor was not livestock grazing were not proposed or analyzed in this document. In the LSFO, the cumulative impacts analysis describes that the proposed action would reduce the need for mitigation efforts to reduce impacts both on and from livestock grazing. It also describes the likelihood of future Animal Unit Month (AUM) reduction and season of use restrictions (to be identified during site-specific NEPA analysis), and also describes the reduction of available land for other resources. In the SDNM,

the cumulative impacts analysis for the proposed action (PRMP/FEIS Section 4.25.7.3) describes effects to forage, water, and space, concluding that the combined impacts of closure, recreation, and public use of the allotments could eventually make grazing on the entire allotments unmanageable and cost-prohibitive. These impacts are based on the land health evaluations (LHE) cited by the BLM in its response to comments to this issue in the Draft Resource Management Plan/Draft Environmental Impact Statement (DRMP/DEIS) (see Appendix E).

Protest Issue: PP-AZ-Sonoran-12-03-2 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

BLM failed to reinitiate scoping for the preparation of the LS (Lower Sonoran)-SDNM Management Plan and to evaluate all reasonable alternatives in violation of the National Environmental Policy Act ("NEPA") and BLM planning regulations (Chp. 1).

Protest Issue: PP-AZ-Sonoran-12-03-9 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

Failure of the BLM to Reinitiate Scoping and Evaluate All Reasonable Alternatives.-Scoping for the proposed revised LS-SONM management plan was completed in 2003. The notice of availability of the DRMP/DEIS was published over eight years later yet BLM did not reinitiate scoping at any time during that hiatus. In a response to Freeport's notification of this defect, BLM stated that "the public comment period on the DRMP/DEIS was another opportunity for the public to provide comments and raise issues" and the scope and the "purpose and need" for the resource management plan ("RMP") had not changed since 2002, so no new scoping was required. PRMP/FEIS at 6-18.

BLM's assertion is wrong because the public comment period for a DEIS is not scoping. BLM's own NEPA handbook confirms this fact. BLM National Environmental Policy

Act Handbook H-1790-1 at 38 (2008) ("The public comment period for a DEIS or public review of an EA are not scoping."). Moreover, the identification of the purpose and need for a federal action merely enhances scoping by describing the reason for consideration of the proposed action. The scoping process itself is intended to identify significant issues, which in turn drives the development of a reasonable range of alternatives. 40 C.F.R. § 1501.7. In a DEIS, in contrast, the agency has already developed alternatives. The fact that the BLM still needed to complete an update to existing RMPs in 20 II, after starting the process in 2002, has nothing to do with whether the public was given a full and fair opportunity to identify significant issues leading to the development of alternatives of the RMPs.

NEPA requires that federal agencies "encourage and facilitate public involvement in decisions which affect the quality of the human environment." 40 C.F.R. § 1500.2. Further, agencies are required to "make diligent efforts to involve the public in preparing and implementing their NEPA procedures" and must "solicit appropriate information from the public." 40 C.F.R. § 1506.6 (a). These provisions of the Council on Environmental Quality ("CEQ") regulations are mandatory, and BLM failed in its duty by electing to revise the RMPs with stale scoping data foreclosing the development of new alternatives arising from consideration of matters of recent significance. Public sentiment regarding the utilization of public lands has changed over the course of the past decade, particularly in light of the 2007-2010 recession and current economic conditions. Currently, job creation, business development, and domestic security concerns are important

public issues along with the development of domestic minerals and other natural resources. In addition, border security issues have taken center stage in the past five years yet there is minimal reference in Chapter 5 to specific consultation regarding land management plans in the PRMP/FEIS with the Borderlands Management Taskforce other than the fact "BLM works with them." PRMP/FEIS at 5-7.

Protest Issue: PP-AZ-Sonoran-12-04-62 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

The PRMP/FEIS was based on improper NEPA procedure. NEPA requires that federal agencies "Encourage and facilitate public involvement in decisions which affect the quality of the human environment." 40 C.F.R. § 1500.2 (d). Agencies "[s]hall revise the determinations made under paragraphs (a) and (b) [regarding scoping] of this section is substantial changes are made later in the proposed action, or if significant new circumstances or information arise which bear on the proposal or its impacts." § 1501.7(c).

The BLM claims that the public was given an opportunity to provide input on what issues should be addressed in the plan during the scoping phase of the planning process. PRMP/FEIS at 6-127. Scoping was announced in 2002 and conducted in 2002-2003. PRMP/FEIS at ES-7. Public comments requested additional time for scoping. Comment #100137-3. BLM declined, saying that the scope and need for the LSFO and SDNM have not changed since publication of the Notice of Intent in 2002. PRMP/FEIS at 6-18. That is incorrect. Since the [Notice of Intent] NOI, Congress had designated the National Landscape Conservation System in 2009, of which the SDNM is a part. The agency objectives for these special places and a specific strategy for their protection have been developed. New species have been provided Endangered Species Act protection, and new science about land use impacts has emerged. BLM's claims that the scope and need are unchanged in over a decade fails to acknowledge just how much things have changed.

Summary

The public scoping process for the RMP was insufficient, as the BLM failed to reinitiate scoping in response to significant changes in the planning area subsequent to the publication of the Notice of Intent in 2002. The BLM relied on the comment period on the DRMP/DEIS for the public to provide comments and raise issues rather than conducting a new scoping period.

Response

As stated in the BLM's response to comments on the DRMP/DEIS, the scope, purpose and need for this RMP/EIS have not changed since the publication of the Notice of Intent in 2002. The purpose of the plan is "to provide guidance for managing the use of BLM-administered lands and to provide a framework for future land management actions within the Planning Area" (PRMP/FEIS, p. 1-2). The need for the plan was and continues to be "to respond to the establishment of the SDNM" and to "address changing conditions" (p. 1-3). The scoping process

evaluated more than 6,000 comments, which helped the BLM develop six major planning issues, including travel management, wilderness characteristics, wildlife, livestock grazing, energy development, and recreation. Many of the public comments received during the public comment period for the Draft RMP/EIS addressed these same issues. The BLM addressed all substantive comments and the comments helped the BLM further refine the issues and analysis for publication in the PRMP/FEIS.

Protest Issue: PP-AZ-Sonoran-12-03-10 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

The BLM's selection of alternatives for analysis in the DRMP/DEIS and PRMP/FEIS reflects the failure to consider the current significant issues. None of the alternatives explored the opportunity for the enhanced development of mineral (locatable, leasable and saleable) resources in a vast planning area with well-established existing and potential resources. PRMP/FEIS Maps 3-18 thru 3-22. Federal law and policy encourages federal agencies to increase utilization and development of domestic mineral resources. BLM has not met its responsibility to do so in this PRMP/FEIS. For example, the Federal Mining and Minerals Policy Act (84Stat.1876; 30 U.S.C.§21 (and the Domestic Minerals Program Extension Act of 1953 (50 U.S.C. § 2181) set forth United States Congressional policy to foster and encourage mineral development, including mineral deposits located on public lands

Likewise, NEPA requires that

environmental impact statement ("EIS") documents include discussions of "energy requirements" and "natural or depletable resource requirements." See 40 C.F.R. § 1502.14 (e) and (f). BLM's failure to include this information and evaluate all reasonable alternatives to the proposed action violates the BLM's own planning regulations (43 C.F.R. § 1610.4-5) as well as applicable NEPA regulations. See 40 C.F.R. § 1502.14 (a) & (c) (mandate to rigorously explore and evaluate all reasonable alternatives including those not within the jurisdiction of the lead agency). Accordingly, BLM has not taken the requisite "hard look" at available and reasonable alternative options for land management.

Protest Issue: PP-AZ-Sonoran-12-03-2 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

BLM failed to reinitiate scoping for the preparation of the LS-SDNM Management Plan and to evaluate all reasonable alternatives in violation of the National Environmental Policy Act ("NEPA") and BLM planning regulations (Chp. I).

Protest Issue: PP-AZ-Sonoran-12-04-63 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

The PRMP/FEIS fails to consider a reasonable range of alternatives. Under NEPA, an environmental impact statement must contain a discussion of "alternatives to the proposed action." 42 U.S.C. 4332(2)(D). As interpreted by binding regulations of the CEQ, an environmental impact statement must "(r)igorously explore and objectively evaluate all reasonable alternatives." 40 C.F.R. 1502.14(a). The importance of this mandate cannot be downplayed; under NEPA, a rigorous review of alternatives is "the heart of the environmental impact statement." 40 C.F.R. 1502.14. Certainly, BLM is not required to analyze an unlimited number of alternatives, but it is required to analyze reasonable alternatives.

While Western Watersheds Project supports Alternative D, No Grazing, for livestock management on the SDNM and the LSFO, we and others commented that the agency should have considered an "Ephemeral Only" grazing alternative. Comments #100136-30, 100053-1. BLM responded by stating that during the LHE process on each LSFO, BLM would determine if the allotments meet the criteria for Ephemeral Only designation and could modify allotment designations based on its findings. PRMP/FEIS at 2-15. The PRMP/FEIS is the place for these kinds of decisions, not down the line in an allotment Environmental Assessment, where the BLM will surely say, "The RMP authorizes perennial use, and so we have to do that "

For the SDNM, the BLM punts the decision down the road as well, claiming "an alternative to convert all allotments to ephemeral was not analyzed at this time. However, in the future, BLM could modify the designation based on future findings, and in coordination and cooperation with the permittee and interested publics, as required by NEPA." PRMP/FEIS at 2-16. BLM claims that the analysis was intended to satisfy the SDNM proclamation requirement to determine the extent of livestock grazing that would be compatible with protection of the Monument objects. Ibid., emphasis added. As BLM was informed numerous times by Western Watersheds Project and by the science it contracted [The Nature Conservancy] TNC to conduct, "The BLM's use of ephemeral allotments could be an appropriate starting point for a Sonoran Desert-specific livestock grazing management strategy." Hall et al. 2005 at ES.4. After a comprehensive literature review of grazing management systems, TNC stated, "Only grazing in response to winter rains may be feasible [on the

SDNM]." Ibid. "Based on our review of the literature of grazing management strategies, we conclude that no currently described approach, including continuous grazing and each of the specialized grazing systems, is completely application to or appropriate for the Sonoran Desert ecosystem... We conclude that continuous grazing in which livestock are maintained on fenced allotments yearlong is not a feasible management strategy on Sonoran Desert public lands....The conclusion that continuous grazing is not feasible does not imply that seasonal grazing or any particular specialized grazing system ... is appropriate." Ibid.

In a 1991 government report on desert livestock grazing, the Government Accountability Office (GAO) recommended classification of all allotments as ephemeral and to discontinue desert grazing entirely. GAO 1991, in Hall et al. 2005 at 1.2. As described above, there are deep flaws with the compatibility determination that undermine the integrity of that entire process, so BLM's conclusions that yearlong grazing is acceptable on most of the lands of the SDNM is built on shaky grounds, at best.

Western Watersheds Project had commented that there was not enough perennial forage on the SDNM to support yearlong livestock grazing. Comment #100136-21. BLM says that "Recent monitoring data supports the level of use" suggested in the Lower Gila South RMP. PRMP/FEIS at 6-252. Recent monitoring data also support the statement that there is not enough forage on the Monument. In 2009, when conducting use pattern mapping, a number of areas were marked, "No Forage Spp." present. See Exhibit A. The [Pacific Biodiversity Institute] PBI reports revealed difficulty even finding grass to measure in xeroriparian areas. BLM chose to ignore this

and undermines the reasonableness of the proposed alternative.

Summary

The PRMP/FEIS's range of alternatives failed to take a "hard look" at all available and reasonable alternatives for land management; explore the opportunity for the enhanced development of mineral resources; and consider an ephemeral grazing alternative.

Response

The PRMP/FEIS considered a reasonable range of alternatives designed to meet the BLM's legal duties and purpose and need for the action. The purpose of the agency action includes compliance with all applicable laws, including the Sonoran Desert National Monument Proclamation (see Section 1.1, Purpose and Need).

Hard Look

The BLM took a "hard look" at all available and reasonable alternatives for land management. The BLM's range of alternatives in the PRMP/FEIS represented a full spectrum of options (see Sections 2.4.2 and 2.4.3). Alternatives analyzed include a No Action Alternative, three action alternatives, and the Proposed Plan. The No Action Alternative is a continuation of current management as written. Alternative B would identify the greatest extent of public land suitable for the widest potential array of uses and would emphasize opportunities for those uses. Alternative C represents a balance of resource protection with human use and influence by providing opportunities for a variety of uses, while placing an emphasis on resource protection and conservation. Alternative D would place the greatest emphasis on resource protection/conservation. The Proposed Plan (Alternative E) balances human use and influence with resource protection. The BLM included a no-grazing alternative and considered but eliminated from detailed analysis an alternative that proposed ephemeral use (see Section 2.4, Summary of Alternatives, Alternative D, and Section 2.5, Alternatives Considered but not Further Analyzed, Livestock Grazing, respectively).

Enhanced Development of Mineral Resources

As stated in Table 2-28, the No-Action Alternative describes the existing closed areas for mineral activity, which include the SDNM, wilderness areas within the planning area, the Sentinel Plain, Fred J. Weiler Green Belt, and Painted Rock Dam areas, and recreation and public purpose (R&PP) leases.

As explained in the FEIS in Chapter 6, Response to Comments on the DRMP/DEIS, Section 6.2.23.1, "The intent of [the Federal Land Policy and Management Act] FLPMA's multiple-use mandate is not to promote any one resource or resource use, but rather to balance uses of the public land with productivity of natural resources." The only areas closed to mineral activity in

the planning area are those that have been presidentially, congressionally, or administratively withdrawn. The SDNM was withdrawn from mineral entry through the 2001 Presidential Proclamation creating the Monument. Congress withdrew the wilderness areas in the planning area from mineral entry when designating these areas as wilderness (PRMP/FEIS Section 3.3.1.2). The Secretary of the Department of the Interior withdrew the Sentinel Plain (see Public Land Order 106-65), Fred J. Weiler Green Belt (see Public Land Order 1015), Painted Rock Dam (see Public Land Order 5741), and R&PP leases, and closed those areas to mineral entry (Map 2-9a and represented on BLM Master Title Plats). The Federal government does not explore for mineral deposits, and actively market those deposits for commercial development. Because the only areas that are closed to mineral activity are those areas that have been withdrawn for many years to serve other purposes, it was not reasonable for the BLM to consider an alternative that would increase development of mineral resources beyond that as described in the No Action Alternative.

Ephemeral Grazing Alternative

Conversion of all or some allotments to ephemeral use only would be done at the site-specific implementation-level and was therefore properly not considered as an alternative for detailed analysis in the PRMP/FEIS. As described in Section 2.5.5, an alternative that would convert all or some allotments to ephemeral use only was considered but eliminated from detailed analysis because these decisions would be determined on an individual allotment basis based on monitoring findings and through an LHE process, which was not conducted for this plan. During the LHE process, the BLM would determine if the allotments meet the criteria described in the Special Ephemeral Rule as described in Table 2-27, Management Actions and Allowable Uses for Grazing Administration, and could modify the designation based on their findings, in coordination and cooperation with the permittee and the interested public, as required by NEPA.

Protest Issue: PP-AZ-Sonoran-12-03-16 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

Improper Designation of the Cuerda de Lena [CDL] as Area of Environmental Concern: BLM has not met the requisite statutory and regulatory criteria for the designation of the CDL ACEC. The agency's determination of the "relevance" and "importance" criteria for the CDL ACEC is not supported by any documented evidence in the record or analysis in the FEIS, and both criteria must be met.

As a matter of fundamental NEPA compliance, BLM is required to identify the environment of the area affected by its decision and to concentrate effort and attention on the discussion of important issues in the PRMP/FEIS. 40 C.F.R. § 1502.15 (data and analysis in an EIS must be commensurate with the importance of the impact). Chapter 3 (Affected Environment) of the PRMP/FEIS should contain relevant data and analysis regarding each of the "relevance" and "importance" criteria in order for BLM to justify the identification and application and to support a significance determination. The FEIS is wholly deficient in this regard and, in certain instances, there is factual information to the contrary (discussed below) that BLM failed to disclose [Footnote 10 - The failure of an agency to disclose and discuss all major points of view on the impacts of the alternatives is another violation of NEPA. See 40 C.F.R. § 1502.9 (a)]. In addition, BLM has an independent and mandatory obligation under NEPA to "insure the professional integrity, including scientific

integrity, of the discussions and analyses" in any EIS and must "identify any methodologies used and make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement." 40 C.F.R. § 1502.24. BLM has not met its burden. Accordingly, the BLM's related determination of the significance of the "relevant" and "important" resource values is arbitrary and capricious.

The same deficiency was present in the DRMP/DEIS and was raised in Freeport's comments to BLM. In the PRMP/FEIS, the BLM responded that it had "reevaluated the relevance and importance criteria and management actions" and "determined the area satisfies ACEC designation criteria." PRMP/FEIS at 6-211. However, the BLM provided no additional explanation of, or support for, its decision regarding the "relevance" or "importance" values, made no boundary adjustments and stated instead that the "[r]ationale for all ACEC decisions would be provided in the [Record of Decision] ROD and supported by analysis in the EIS." Id. There is no supporting analysis in either the DEIS or the FEIS. BLM may not supply a post-hoc rationalization for its decision in the ROD.

Protest Issue: PP-AZ-Sonoran-12-03-17 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

In addition, there is no documentation in the record that BLM followed its own policy procedures applicable to ACEC designation. BLM Manual 1613 (Areas of Environmental

Concern) (1988), § .21 sets forth that areas may be identified for consideration if, as a result of inventory and monitoring, there is evidence the area may meet the relevance and importance criteria." Further, information on "relevance and importance will usually be obtained from inventory and data collection." Id. at § .21 (B). Evidence of "more-than-local significance of resource values or conditions include, but is not limited to, written comments and expert opinions from officials representing regional or national interest or inclusion of an area on an official State, regional, national or international listing." Id. at § .21(B)(I). No such evidence is contained in the PRMP/FEIS and the document is replete with references throughout indicating that resource data and information are lacking.

Protest Issue: PP-AZ-Sonoran-12-03-19 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

"Relevance" Value – Significant Historic, Cultural, or Scenic Value: BLM Rationale For Determination PRMP/FEIS - Appendix V - "Adjacent to Tohono O'odham Nation and part of their traditional homelands."

Failure to Meet Statutory and Regulatory Criteria for Designation - No evidence is provided that the proposed ACEC is part of the Nation's traditional homeland. Even if the purported statement is true, there is no evidence provided of the historic significance of that fact.

Chapter 5 (Consultation and Coordination) fails to document any specific request by the Tohono O'odham Nation to have this area designated to protect cultural resources or that the Nation was extensively concerned about threats to significant cultural resources. Further, based on a review of comments on the DRMP/DEIS posted on BLM's web-site, it appears the Nation made no comment at all on the DRMP/DEIS. See also PRMP/FEIS at 6-230.

Protest Issue: PP-AZ-Sonoran-12-03-20 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

"Relevance" Value – Significant Historic, Cultural, or Scenic Value: BLM Rationale For Determination PRMP/FEIS - Appendix V - "A broad variety of cultural sites dating from the Middle Archaic period, thousands of years ago, to the late 19th century are represented in the area. "

Failure to Meet Statutory and Regulatory Criteria for Designation - No documentation of known Middle Archaic period resources is identified in the cultural resources section of Chapter 3 (Affected Environment). PRMP/FEIS at 3-12 through 3-17. Similarly no important tribal interests in the proposed ACEC area are documented in the tribal interest section of Chapter 3. PRMP/FEIS at 3-100 through 3-101.

Protest Issue: PP-AZ-Sonoran-12-03-21 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

"Relevance" Value – Significant Historic, Cultural, or Scenic Value: BLM Rationale For Determination PRMP/FEIS - Appendix V - "The density of sites is greater in these areas than in surrounding areas."

Failure to Meet Statutory and Regulatory

Criteria for Designation - This determination is inconsistent with PRMP/FEIS, which states only 4% of the BLM administered land in the Lower Sonoran planning area has ever been surveyed. PRMP/FEIS at Table 3-16 and 4-13. In fact, the PRMP/FEIS states, "Little of the Planning Area has been inventoried for cultural resources, and there is no predictive modeling or sensitivity mapping available to estimate or quantify resource density. There is potential for cultural resources on most of the Planning Area, but the presence and significance of resources and impact cannot be quantified." PRMP/FEIS at 4-38.

Protest Issue: PP-AZ-Sonoran-12-03-22 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

"Relevance" Value – Significant Historic, Cultural, or Scenic Value: BLM Rationale For Determination PRMP/FEIS - Appendix V -"One of the most important prehistoric obsidian sources for tool materials is located in this area."

Failure to Meet Statutory and Regulatory Criteria for Designation - No documentation or analysis of any prehistoric obsidian resources is referenced anywhere in the PRMP/FEIS. In fact, this singular statement in Appendix V is the only reference to obsidian in the entire PRMP/FEIS.

Protection of specific areas of concern could be addressed via use of a specific cultural use allocation in the RMP or a Special Cultural Resource Management Area. See BLM Manual 8110.4. Special management consideration is not warranted due to the availability of other statutory protection. **Protest Issue:** PP-AZ-Sonoran-12-03-23 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

"Relevance" Value – Fish and Wildlife Resources: BLM Rationale For Determination PRMP/FEIS - Appendix V -The proposed ACEC is the "only area within the Lower Sonoran Field Office that is managed for endangered Sonoran pronghorn antelope."

Failure to Meet Statutory and Regulatory Criteria for Designation: his statement conflicts with PRMP/FEIS Map 3-15, which shows vast expanses of land in the Lower Sonoran area designated as [Endangered Species Act] ESA 10(j) areas or other reintroduction areas. It is in these 10(j) and reintroduction areas where species reintroduction efforts are being focused by USFWS/AGFD (KOFA National Wildlife Refuge and the Barry Goldwater Range), not in areas south of Ajo.

In addition, USFWS recently issued a BO for a U.S. Border Patrol project within the proposed ACEC containing compiled Sonoran pronghorn survey data from 1994-20 II. The data shows only seven occurrences within the proposed ACEC and hundreds of occurrences outside of the proposed ACEC (west of SR-85 and south of the BLM Ajo Block). See BO map attached as Tab B.

Not only has BLM failed to support its justification, 35 years of compiled survey data exists, which indicates that the species does not occupy the proposed ACEC. The existence of this survey data combined with BLM's failure to disclose it and to complete a [Biological Assessment] BA is verification of BLM's failure to insure the scientific integrity of its analyses in the FEIS in violation of NEPA. 40 C.F.R. § 1502.24.

"There are currently Sonoran pronghorn that take up residence on public lands within the proposed bounds of the ACEC."

Chapter 3 makes only a general reference to the fact that the species has been observed in "recent years" on the Cameron Allotment within the proposed ACEC. PRMP/FEIS at 3-57. BLM provided no survey data to verify this generalized reference but did reference a 1997 [U.S. Fish and Wildlife Service] USFWS biological opinion ("BO") for the Ajo Block grazing allotments. A review of that BO evidences survey data from 1968 to 1988 showing that "all but 6" members of the species occurred outside BLM administered land in the Ajo block (i.e., the ACEC area).

Protest Issue: PP-AZ-Sonoran-12-03-24 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

"Relevance" Value – Fish and Wildlife Resources:

BLM Rationale For Determination PRMP/FEIS - Appendix V - The proposed ACEC also contains "suitable and occupied habitat for the Candidate species Cactus ferruginous pygmy-owl ("CFPO")."

Failure to Meet Statutory and Regulatory Criteria for Designation: CFPO is not a candidate species and listing of the species is not warranted as recently determined by USFWS. See 76 Fed. Reg. 61856 (Oct. 5, 2011). CFPO is otherwise protected by the Migratory Bird Treaty Act (16 U.S.C. § 703-712). No evidence of CFPO occupation or habitat suitability is provided in Chapter 3 (Affected Environment, Wildlife and Special Status Species). PRMP/FEIS at 3-62. If CFPO survey or habitat data is available, BLM has failed to disclose and discuss this data.

Protest Issue: PP-AZ-Sonoran-12-03-25 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

"Relevance" Value – Fish and Wildlife Resources: BLM Rationale For Determination PRMP/FEIS - Appendix V -The area contains "saguaro cactus forest situations which are foraging habitat for the endangered lesser long-nosed bat."

Failure to Meet Statutory and Regulatory Criteria for Designation: The presence of suitable/foraging habitat for a single endangered species absent a demonstration the plant species within that habitat are "endangered, sensitive, or threatened plant species; rare, endemic or relic plants or plant communities which are terrestrial, aquatic, or riparian" is not sufficient to support ACEC designation. In fact, the vegetation resources section of Chapter 3 (Affected Environment) documents that the palo verde-mixed cacti vegetative community is the second most prevalent on public lands in the Planning Area, covering over 44 percent of public lands in the planning area. PRMP/FEIS at 3-24 and Table 3-3.

Protest Issue: PP-AZ-Sonoran-12-03-26 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

"Relevance" Value – Fish and Wildlife Resources BLM Rationale For Determination: PRMP/FEIS - Appendix V - The proposed ACEC contains "suitable and occupied habitat for the Candidate species Cactus ferruginous pygmy owl."

Failure to Meet Statutory and Regulatory Criteria for Designation: See comment above in Fish and Wildlife Resources section.

Protest Issue: PP-AZ-Sonoran-12-03-27 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

"Relevance" Value – Fish and Wildlife Resources: BLM Rationale For Determination PRMP/FEIS - Appendix V -The proposed ACEC contains "important fawning, breeding, loafing and foraging habitat for Sonoran pronghorn."

Failure to Meet Statutory and Regulatory Criteria for Designation: No documentation or evidence is provided to support this conclusion. In fact, 2006-2011 Sonoran pronghorn distribution data compiled by [Arizona Game and Fish Department] AGFD and USFWS for a recent U.S. Border Patrol project consultation for a project near Ajo evidences no pronghorn use for fawning within the proposed ACEC. See map attached as Tab C.

Protest Issue: PP-AZ-Sonoran-12-03-28 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

"Importance" Value – Greater than locally significant qualities....: BLM Rationale For Determination PRMP/FEIS - Appendix V -Adjacent to Tohono O'odham Nation and part of their "traditional homelands." Broad varieties of cultural sites are represented in the area in higher density than surrounding areas. One of the "most important" prehistoric obsidian sources for tool materials are located in this area.

Failure to Meet Statutory and Regulatory Criteria for Designation: No descriptive information is provided in the PRMP/FEIS regarding the nature of known cultural sights or the pre-historic or current cultural affiliation.

No summary of known cultural sites in the proposed ACEC is provided nor is there any summary of completed surveys in the proposed ACEC. Similarly, there are no references to reports or citations of any kind that would facilitate an independent verification of the importance of the purported sites or the veracity of BLM's density claim.

No demonstration is provided of how the significance of the cultural resources is anything greater than local or how the purported cultural sites provide special "worth, consequence, meaning or distinctiveness."

Protest Issue: PP-AZ-Sonoran-12-03-29 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

"Importance" Value – Qualities or circumstances...: BLM Rationale For Determination PRMP/FEIS - Appendix V -Contains significant wildlife resources for three endangered (priority) species (Sonoran Pronghorn, lesser long-nosed bat, and CFPO. Failure to Meet Statutory and Regulatory Criteria for Designation: First, obviously, the CFPO is not an endangered species, nor is the CFPO proposed for listing or a candidate species (see comment above). There is no documented evidence of the presence of significant habitat resources within the proposed ACEC. The area is not utilized by Sonoran pronghorn based on 35 years of population surveys, it is not the target of any proposed pronghorn reintroduction efforts, and it contains habitat common to 44% of the planning area. There is no evidence that the ACEC contains any known bat roosts or high densities of foraging habitat for lesser long-nosed bats. Larger washes in the ACEC are significantly impaired, and there is no evidence provided of use by CFPO or existence of threats to the species within the proposed ACEC is provided. PRMP/FEIS at 3-62 (threats identified as livestock grazing and residential development).

Protest Issue: PP-AZ-Sonoran-12-03-30 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

"Importance" Value – Qualities or circumstances...: BLM Rationale For Determination PRMP/FEIS - Appendix V -Area was proposed as critical habitat for CFPO and includes a proposed recovery area for the CFPO. Several large washes provide suitable CFPO habitat.

Failure to Meet Statutory and Regulatory Criteria for Designation: As stated, CFPO is not a listed species, nor is it critical habitat proposed or designated. No recovery plan for the species was ever finalized. The only large named wash traversing the proposed ACEC is the Cuerda de Lena Wash, and Chp. 3 of the PRMP/FEIS explains that this wash is significantly impaired.

Protest Issue: PP-AZ-Sonoran-12-03-31 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

"Importance" Value – Qualities or circumstances...: BLM Rationale For Determination PRMP/FEIS - Appendix V -"The area provides important fawning habitat for the Sonoran pronghorn."

Failure to Meet Statutory and Regulatory Criteria for Designation: No documentation or evidence is provided to support this conclusion. In fact, 2006-20 II Sonoran pronghorn distribution data compiled by AGFD and USFWS for a recent U.S. Border Patrol project consultation for a project near Ajo evidences no pronghorn use for fawning within the proposed ACEC. See map attached as Tab C. No demonstration that the land proposed is "fragile, sensitive, rare, exemplary, or unique" is provided.

Protest Issue: PP-AZ-Sonoran-12-03-32 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

"Importance" Value – Qualities or circumstances...: BLM Rationale For Determination PRMP/FEIS - Appendix V -Foraging habitat for lesser long-nosed bat.

Failure to Meet Statutory and Regulatory Criteria for Designation: Foraging habitat is not determinative that land is "sensitive, rare or irreplaceable." The PRMP/FEIS documents that this vegetation community occurs on 44% of the federal land within the planning area. PRMP/FEIS at 3-24 and Table 3-3. In fact, BLM states in Chapter 3 that the threats to food plants only "indirectly threaten the lesser long-nosed bat" and the most significant threat to the survival of the bat is the "loss of roosting habitat." PRMP/FEIS at 3-56.

No information is provided to document that the purportedly important foraging habitat is within suitable range of any known roosting location. In fact, on Map 3-14 BLM depicts an arbitrary 40 mile circle around the Ajo Block which purports to be the "Bluebird Foraging Area" without any related discussion, documentation or attribution in Chapter 3. On the contrary, a review of the recovery plan for the bat shows study data from the Blue Bird mine (known roosting site in southern Arizona) evidencing maximum forage distances of 15 miles from roost to feed (with typical distances of 8-10 miles).

Protest Issue: PP-AZ-Sonoran-12-03-33 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

"Importance" Value – Qualities or circumstances....: BLM Rationale For Determination PRMP/FEIS - Appendix V -ACEC contains habitat for Sonoran desert tortoise and rosy boa.

Failure to Meet Statutory and Regulatory Criteria for Designation: Neither of the two reptile species are listed species: the Sonoran desert tortoise is presently a candidate species (75 Fed. Reg. 78094 (Dec. 14, 2010)) and the rosy boa is not even on the BLM sensitive species list. See 1M No. AZ-20 11-005 and Appendix J.

The mere existence of habitat for any particular reptile species is not determinative

of the "fragile, sensitive, rare, irreplaceable, exemplary, unique, or endangered status" of the habitat.

There is no evidence provided of current or future use of the ACEC habitat by either species. In fact, the habitat for the Sonoran desert tortoise is not even designated by the BLM as Category I habitat (i.e., habitat necessary to maintain populations with the highest densities, which are stable or increasing). Instead, the proposed ACEC consists primarily of Category II (may support stable populations and/or are contiguous with medium to high-density habitat) and Category III habitat (least manageable and contain medium to subpar habitats). PRMP/FEIS at 3-61 and Map 3-14. By BLM's own habitat classification system, the ACEC habitat is not "fragile, sensitive, rare, irreplaceable, exemplary or unique."

With regard to the rosy boa, Chapter 3 contains no references that species is present in the ACEC area and mentions only that rosy boas prefer "dense brushy or rocky areas." PRMP/FEIS at 3-63

Protest Issue: PP-AZ-Sonoran-12-03-34 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

"Importance" Value – Qualities or circumstances....: BLM Rationale For Determination PRMP/FEIS - Appendix V -Strong cultural resource component associated with the area as part of traditional Tohono O'odham homeland and contains much important information about prehistoric settlement and subsistence.

Failure to Meet Statutory and Regulatory Criteria for Designation: This justification is unsupported by the BLM and is nothing more than a matter of local significance. Any cultural resources that may, in fact, be present within the proposed ACEC benefit from protection under NHPA among other federal statutes. No special management protection is required and there is not a single specific mitigation action identified in Table 2-38 (Management Actions and Allowable Uses for ACECs) designed to preserve this purportedly "important information."

Moreover, there is no consultation evidencing State Historic Preservation Office's concurrence with this assessment which may have demonstrated significance or importance.

Protest Issue: PP-AZ-Sonoran-12-03-35 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

"Importance" Value – Qualities or circumstances....: BLM Rationale For Determination PRMP/FEIS - Appendix V -Area is popular with local residents and seasonal winter visitors from U.S. and Canada for dispersed recreation including camping and sightseeing.

Failure to Meet Statutory and Regulatory Criteria for Designation: BLM provides no factual basis for the conclusion that the proposed ACEC is vulnerable to "adverse change" from the seasonal winter visitors engaging in camping and sightseeing. In fact, the Visitor Use section of Chapter 3 (Affected Environment, Travel Management) identifies the primary travelers in the Ajo Block as "local visitors us[ing] four-wheel drive and ATVs" and that "day use is popular for recreational pursuits." PRMP/FEIS at 3-91.

In fact, the only reference to camping use in the Ajo Block was a newly added statement indicating that camping for social gathering is "popular in the Gunsight Wash area south of Ajo" and BLM provided unsupported estimates of demonstrated usage. PRMP/FEIS at 3-83 thru 3-84. Gunsight Wash is actually located directly south of Why, Arizona and appears to be excluded from the ACEC designation, (now established as a Special Recreation Management Area ("SRMA")). See PRMP/FEIS Appendix R-8 and R-9. The bottom line being that camping and recreational use in an SRMA adjacent to the proposed ACEC is not sufficient to support designation of the ACEC.

Protest Issue: PP-AZ-Sonoran-12-03-36 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

"Importance" Value – Protection to satisfy national priority concerns or to carry out mandates of FLPMA: BLM Rationale For Determination PRMP/FEIS - Appendix V -"BLM is mandated to protect threatened, endangered and candidate species and their habitats under the ESA."

Failure to Meet Statutory and Regulatory Criteria for Designation: BLM has made no demonstration that ESA compliance is a "substantially significant" national priority concern or critical to carrying out the mandates of FLPMA (which is primarily the prevention of "unnecessary and undue degradation" to federal lands). BLM has an independent duty to comply with the ESA which is only one of many federal laws applicable to federal agency actions (e.g., NEPA, NHPA etc.). **Protest Issue: Protest Issue:** PP-AZ-Sonoran-12-03-37 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

BLM Has Not Fully Disclosed the Proposed Management Actions and Mitigating Measures for the CDL ACEC. The PRMP/FEIS contains conflicting information relative to the proposed land management within the ACECs. BLM states in the PRMP/FEIS that "[f]uture management of the ACECs [will] be outlined in a subsequent ACEC management plan." PRMP/FEIS at 3-99. How the new management plans will be implemented in conjunction with the identified ACEC management actions in Table 2-38 is something the public is left to ponder. PRMP/FEIS at 2-201. The failure to fully identify management plans for the CDL ACEC is a violation of BLM regulations. An approved plan revision or an1endment "must include the general management practices and uses, including mitigating measures, identified to protect the designated ACEC." 43 CFR § 1610.7-2 (b).

The minerals management actions for Alternative E state that within ACECs, minerals-related actions "would be approved in a manner and with mitigation that maintains the resource values for which the special designation or allocation was made while not denying valid existing rights for locatable minerals." PRMP/FEIS at 2-136 (Table 2-29, MM-1.1.4). Again, this summary statement without further analysis of what those mitigation measures might be or how they relate to the specific management prescriptions for the CDL ACEC violates the regulations for ACEC establishment. All management actions and mitigation measures must be disclosed in advance of designation. 43 CFR § 1610.7 (2)(b).

Protest Issue: PP-AZ-Sonoran-12-03-4 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

BLM's designation of the 58,500 acre Cuerda de Lena Area of Critical Environmental Concern ("CDL ACEC") within the Lower Sonoran Planning does not meet the statutory and regulatory criteria for designation (Chp. 2 and Appendix V).

Protest Issue: PP-AZ-Sonoran-12-03-5 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

BLM failed to fully disclose proposed management actions for the CDL ACEC in the PRMP/FEIS (Chp. 2 and Appendix V).

Summary

The BLM improperly designated the Cuerda de Leda (CDL) as an ACEC because it did not meet the requisite statutory and regulatory criteria for designation.

The relevance values for the ACEC were not met because:

- The BLM provided no evidence that the proposed ACEC is part of the Tohono O'odham Nation and part of their traditional homelands
- The BLM provided no documentation of known Middle Archaic period resources in the cultural resources section of Chapter 3
- The BLM's failure to survey lands in the planning area casts doubt on its conclusion that the density of culturally important sites is higher in the proposed ACEC than in surrounding areas
- The BLM provided no documentation of any prehistoric obsidian resources in the PRMP/FEIS
- The area is not the only area within the LSFO that is managed for endangered Sonoran pronghorn antelope
- The Cactus ferruginous pygmy-owl is not an Endangered Species Act (ESA) candidate species, nor is the proposed ACEC critical habitat proposed or designated for the species
- The BLM provided no evidence of Cactus ferruginous pygmy-owl occupation or habitat suitability is provided in Chapter 3
- The presence of suitable/foraging habitat for the lesser long-nosed bat is not sufficient to support ACEC designation
- The BLM provided no documentation or evidence of Sonoran pronghorn use for fawning, breeding, loafing, and foraging within the proposed ACEC

The important values for the ACEC were not met because:

- The BLM did not provide that the area had more than locally significant qualities as relating to the Tohono O'odham Nation and associated cultural values
- There is no significant wildlife resource or critical habitat for three endangered species; the Sonoran pronghorn, lesser long-nosed bat, and Cactus ferruginous pygmy-owl
- There is no showing that the area provides important fawning habitat for the Sonoran pronghorn
- There is no information provided to document that the area contains foraging habitat for lesser long-nosed bat, and foraging habitat is not determinative that an area meets that importance criteria
- Neither the Sonoran desert tortoise nor the rosy boa are ESA listed species, and the existence of their habitat in the proposed ACEC is not provided
- There is no justification that there is a strong cultural resource component associated with the area as part of the traditional Tohono O'odam homeland
- The BLM provides no factual basis that the proposed ACEC is vulnerable to adverse change from dispersed recreation
- The BLM made no demonstration that ESA compliance is a substantially significant national priority concern or critical to the mandates of FLPMA

The BLM failed to fully disclose the proposed management action and mitigation features for the CDL ACEC.

Response

The FLPMA requires the BLM to "give priority to the designation and protection of areas of critical environmental concern." 43 USC § 1712(c)(3). To be designated as an ACEC, the area must meet the criteria of relevance and importance (as defined in BLM Manual 1613).

Per BLM Manual 1613, an area meets the "relevance" criterion if it contains *one or more* of the following (emphasis added):

- A significant historic, cultural, or scenic value (including but not limited to rare or sensitive archaeological resources and religious or cultural resources important to Native Americans).
- A fish or wildlife resource (including but not limited to habitat for endangered, sensitive or threatened species, or habitat essential for maintaining species diversity).
- A natural process or system (including but not limited to endangered, sensitive, or threatened plant species; rare, endemic, or relic plants or plant communities which are terrestrial, aquatic, or riparian; or rare geological features).
- Natural hazards (including but not limited to areas of avalanche, dangerous flooding, landslides, unstable soils, seismic activity, or dangerous cliffs). A hazard caused by human action may meet the relevance criteria if it is determined through the resource management planning process that it has become part of a natural process.

Similarly, the BLM Manual provides that an area meets the "importance" criterion if the value, resource, system, process, or hazard is characterized by *one or more* of the following (emphasis added):

- Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource
- Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change
- Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA
- Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare
- Poses a significant threat to human life and safety or to property

As stated in the response to comments on the DRMP/DEIS, page 6-211, the BLM re-evaluated the relevance and importance criteria and management actions for the CDL area in response to comments received on the draft and determined that the area satisfied the ACEC designation criteria. Appendix V of the PRMP/FEIS describes each of the ACEC evaluations in detail, including that for the proposed CDL ACEC. The evaluation found that the CDL area met the relevance and importance standards by satisfying one or more of the criteria in accordance with BLM Manual 1613. Specifically, the area met relevance criteria 1, 2, and 3, and importance criteria 1, 2, and 3. The BLM's rationale in the PRMP/FEIS for determining the CDL area met the relevance and importance criteria was appropriate.

Regarding Relevance Criterion

Significant historic, cultural, or scenic values:

The BLM's evaluation found that the area met the cultural resource relevance standard. This determination was based on BLM personnel's professional expertise and familiarity with the area and is supported by numerous publicly-available references. The personnel who participated in the BLM's evaluation of the area and in the planning process have personal knowledge of the area garnered from many years of working in and around the area, numerous discussions and consultations with area tribes, and participation and awareness of studies and research efforts in the CDL area.

For example, BLM personnel who participated in the ACEC evaluation also participated in a mid-1990s study of the Darby Wells Village, the last village site in the area inhabited by O'odham speaking people and within the CDL area (this study led to a short report entitled Darby Wells Village: An Hia Ced O'odham Settlement near Ajo, Arizona, by Jane Pike Childress and Lorraine Marquez Eiler, 1998). During this period, the BLM also sold to the Hia-Ced O'odham Alliance a parcel of land located near the Darby Wells Village known to have been used traditionally by the local Hia-Ced as a cemetery.

The BLM's determination is also supported by a recent study on data recovery investigations in the proposed ACEC area entitled Ajo's Earliest Visitors (edited by Rick Martynec, Shelby Ballard, Sandy Martynec, and Rich Davis, 2011). This report documents the results of data recovery on three sites that have Middle and Late Archaic components and artifacts.

The BLM should have provided a citation in the PRMP/FEIS to this recent report and to the Darby Wells Village study to further support the determination. While providing these citations in the PRMP/FEIS would have added to the documentation of the BLM's determination, the studies only complement and support the statements made in the ACEC Evaluation Report and the PRMP/FEIS. Thus, the studies would not have had any bearing on the outcome of the BLM's ACEC review or the BLM's analysis of related environmental concerns. In response to the protest, the BLM will explain the oversight and include these citations in the Record of Decision (ROD) and ACEC Evaluations report.

Fish and wildlife resource:

The BLM's evaluation found that the area met the fish and wildlife resource relevance standard because of the existence of the endangered Sonoran pronghorn antelope as well as suitable and occupied habitat for the Cactus ferruginous pygmy-owl (p. V-3).

As shown on Map 3-15, compared with Map 2-16e, the CDL ACEC area contains a large amount of the BLM-managed lands in the planning area that overlap with the current range of the Sonoran pronghorn antelope. Further, Figure 2-1 of protester's letter displays the historical Sonoran pronghorn location data, and shows some species distribution across the proposed ACEC. The existence of additional range for the species outside of the ACEC does not lessen

the relevance of the fish and wildlife resource within the ACEC, particularly as a majority of the current range for the species falls outside of the BLM's planning authority. The PRMP/FEIS relies on the 2003 Sonoran Pronghorn Abstract from the U.S. Fish and Wildlife Service to determine that the proposed ACEC contains important fawning, breeding, loafing, and foraging habitat for Sonoran Pronghorn (Section 3.2.13.3, p. 3-57).

The BLM acknowledges that the Cactus ferruginous pygmy-owl is not a candidate species under the ESA; however, it was delisted in 2006 following litigation. While not currently listed, the species has been petitioned for listing under the ESA (PRMP/FEIS Section 3.2.13.3, p. 3-62). The species is also currently listed as a BLM-sensitive species (see Appendix J). As explained in BLM Manual 1613, the ACEC relevance criterion is not solely limited to ESA listed or candidate species.

Natural process or system:

Protester alleges that the presence of suitable/foraging habitat for a single endangered species (the lesser long-nosed bat) absent a demonstration the plant species within that habitat are "endangered, sensitive, or threatened...." The BLM Manual 1613 states that the standard includes but *is not limited to* endangered, sensitive, or threatened species. The BLM properly determined that the existence of foraging habitat for an endangered species may meet the natural process or system relevance criteria.

The protester also challenges the BLM's assertion that the proposed ACEC contains important fawning, breeding, loafing and foraging habitat for Sonoran pronghorn. Again, as noted above, the PRMP/FEIS relies on the 2003 Sonoran Pronghorn Abstract from the U.S. Fish and Wildlife Service to determine that the proposed ACEC contains important fawning, breeding, loafing, and foraging habitat for Sonoran Pronghorn (p. 3-57).

Regarding Importance Criterion

More than locally significant qualities:

Please refer to the Relevance section above for a discussion of how the proposed ACEC is part of the traditional homelands of the Tohono O'odham Nation. The BLM's determination that the area has more than locally significant cultural qualities was based on BLM personnel's extensive professional expertise and familiarity with the CDL area. The personnel who participated in the BLM's evaluation of the area and in the planning process have personal knowledge of the area garnered from many years of working in and around the area, numerous discussions and consultations with area tribes, and participation and awareness of studies and research efforts in the CDL area.

As noted above, the BLM should have provided citations to publicly available information that would further support the determination of the importance of the values found in the CDL. Two sources of information that support the BLM's determination include a recent survey of the northern portion of the CDL which documents 43 cultural sites in the area (a larger than expected number), 26 of which were recommended as eligible for the National Register of Historic Places

(Archaeological Resources of the Ajo Region: A Cultural Resources Inventory of 2,928 Acres of BLM Land in Western Pima County, Arizona by John M.D. Hooper (2011)) and a 2005 cultural survey within the area that again exceeded expectations with recorded 32 new cultural sites, 21 of which have characteristics to make them eligible for the National Register of Historic Places (Ajo's Earliest Visitors, Based on the Black Mountain Survey, edited by Rick Martynec and Jane Thompson).

The BLM will note in the ROD that these two citations should have been included in the PRMP as supporting documentation of the BLM's review of the CDL area. The ROD and ACEC Evaluation report will include these citations. While providing these citations in the PRMP/FEIS would have added to the documentation of the BLM's determination, the studies only complement and support statements made in the PRMP/FEIS and ACEC report. Thus, the studies would not have had any bearing on the outcome of the BLM's ACEC review or the BLM's analysis of related environmental concerns.

Qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change:

Refer to the Relevance section above for a discussion relating to the relevance determination for the Sonoran pronghorn antelope and the Cactus ferruginous pygmy-owl. In addition, the ACEC determination for the proposed CDL area also states that several other species of varying protection statuses fall within the proposed ACEC. The BLM acknowledges the Cactus ferruginous pygmy-owl is not an endangered species; however, whether the species is listed under the ESA is not the single determinative factor for establishing whether the importance criterion is met. Similarly, the fact that neither the Sonoran desert tortoise nor the rosy boa is listed under the ESA does not mean that the area cannot meet the importance criteria.

As explained in the PRMP/FEIS, no one factor is determinative that the area is fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change. However, taken as a whole, the existence of habitat for endangered species such as the Sonoran pronghorn antelope, BLM-sensitive species such as the Sonoran desert tortoise, and other species such as the rosy boa (see PRMP Sections 3.2.13.3 and 3.2.13.4), and the potential presence of significant cultural resources (see PRMP Section 3.2.4.3), and the fact that the area is popular for recreation supports the BLM's determination that the area had the necessary qualities and circumstances and therefore met the importance criterion.

Protection to satisfy national priority concerns or to carry out FLPMA mandates:

The FLPMA Section 202 requires that "the public lands be managed in a manner that will...preserve and protect certain public lands in their natural condition [and] will provide food and habitat for fish and wildlife and domestic animals." The FLPMA Section 203 defines multiple use in part as "a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and non-renewable resources, including...wildlife and fish." The protection of endangered species clearly falls within the BLM's multiple-use mandate under FLPMA and satisfies the national priority concerns of importance criteria standard.

Disclosure of the proposed management actions and mitigating measures for the CDL ACEC:

Protester alleges that the BLM failed to fully disclose the proposed management action and mitigation features for the CDL ACEC, stating that the PRMP/FEIS contains conflicting information relative to the proposed land management within the ACECs. According to BLM regulations, an approved plan revision or amendment "must include the general management practices and uses, including mitigating measures, identified to protect the designated ACEC." (43 CFR § 1610.7-2 (b)). These general management practices and uses were properly identified in Table 2-38 of the PRMP/FEIS. A specific ACEC management plan, including more specific management actions and mitigation measures that would maintain resource values would be developed at the implementation level stage when a specific ACEC management plan is developed. This ACEC management plan would follow and be developed in accordance with the general management practices and uses identified in the RMP.

The protester cites one specific management action which states that minerals-related actions "would be approved in a manner and with mitigation that maintains the resource values for which the special designation or allocation was made while not denying valid existing rights for locatable minerals." Again, this is a general management practice, identified as required by BLM regulations (43 CFR § 1610.7(2)(b)). Specific management direction, including mitigation measures that would maintain the resource values while not denying valid existing rights for locatable minerals would be developed at the subsequent implementation-level ACEC management plan.

Section 3 - Air Resources

Protest Issue: PP-AZ-Sonoran-12-06-88 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

BLM has failed to incorporate pertinent information regarding climate change into its RMP. Under Secretarial Order 3289. BLM is required to "consider and analyze potential climate change impacts when undertaking long range planning exercises ... (and) developing multi-year management plans." As BLM admits, the agency has failed to complete a cumulative carrying capacity for the region and how the planning area fits into that picture. PRMP at 6-36. The PRMP has also failed to demonstrate how BLM is managing lands within the broader landscape to promote ecological connectivity and resilience in the face of climate change and as is directed in Secretarial Order 3289 (http://www.doi.gov/archive/climatechange/ SecOrder3289.pdf).

Protest Issue: PP-AZ-Sonoran-12-06-90 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

In Response to Comment No. 100126-38, BLM stated that it "may incorporate information from the REA analysis and findings into the FEIS if it is available and appropriate to EIS analysis prior to publication of the FEIS." PRMP at 6-76. It is incredibly important that BLM have the most up-to-date information to understand the nature of impacts of global climate change to the planning area. The REAs should provide much of that information and should be available to BLM now. BLM has failed to utilize the climate change and other data in the Sonoran Desert REA to inform management and is thus in violation of Secretarial Order 3289 and its mandate to take a "hard look" at environmental impacts under NEPA.

Summary

The PRMP/FEIS does not comply with the requirements of Secretarial Order 3289. The PRMP/FEIS does not take a "hard look" at climate change.

Response

The BLM gathered the necessary data essential to make a reasoned choice among the alternatives analyzed in detail in the PRMP/FEIS. The BLM analyzed the available data and disclosed the potential environmental consequences of the preferred alternative and other alternatives. The BLM has taken a "hard look" as required by NEPA and considered and analyzed potential climate change impacts in the planning process consistent with Secretarial Order 3289.

The PRMP/FEIS discusses the effects of climate change on resources present in the planning area, as well as the link between the emission of greenhouse gases and climate change impacts. (PRMP/FEIS, pp. 3-8 through 3-12). The PRMP/FEIS analyzes the effects of each alternative on

climate change, primarily through the identification of management activities that emit and/or sequester greenhouse gases. (PRMP/FEIS, pp. 3-33 through 3-35). As directed by Section 6.8.1.2 of the BLM NEPA Handbook, the PRMP/FEIS relied on the best available science to support NEPA analyses. The PRMP/FEIS did not utilize data from the Sonoran Desert Rapid Ecoregional Assessment since it was not available at the time the PRMP/FEIS was published.

The NEPA directs that data and analyses in an EIS must be commensurate with the importance of the impact (40 CFR § 1502.15). The BLM concluded that the contribution of the proposed action to climate change "would be a very small portion of the total from other sources of a regional and global nature." (PRMP/FEIS, p. 4-33). The effects analysis enabled the decision-maker to make an informed decision, and thus it is not necessary to complete a cumulative carrying capacity for the region.

The PMRP/FEIS discusses how the BLM is managing lands within the broader landscape to promote ecological connectivity and resilience in the face of climate change. The PRMP/FEIS establishes the significance, vision and overarching goals for each decision area, which incorporates the preservation of broader landscapes:

"In concert with other large landowners and managers in southwestern Arizona, these lands [Lower Sonoran Decision Area] provide large landscapes that help sustain healthy populations of wildlife for the long term....The Lower Sonoran Decision Area will retain its wide-open spaces and healthy functioning Sonoran Desert ecosystems, while providing opportunities for a multitude of public uses." (PRMP/FEIS, pp. 1-15 and 1-16).

"Protect, restore, maintain, and manage the native biological diversity and associated values of the Monument [Sonoran Desert National Monument Decision Area] within their broader ecosystem context, with particular attention to retaining connectivity with other natural areas and conserving habitats for viable populations of a full range of native species." (PRMP/FEIS, p. 1-22).

The BLM considered the significance, vision, and overarching goals of each decision area when developing management alternatives. For example, the BLM identified Wildlife Movement Corridors in cooperation with Arizona Game and Fish Department and developed management actions "to manage wildlife movement corridors in a manner that would assist wildlife in safe passage from one area to another." (PRMP/FEIS, p. 2-92).

Protest Issue: PP-AZ-Sonoran-12-06-63 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

BLM has not followed laws and policies regarding land use planning for cultural resource management. BLM has failed to take a hard look at impacts to cultural resources under NEPA - BLM has failed to take a hard look at impacts to cultural resources from the designation of the Saddle Mountain ERMA as required by NEPA. PRMP at 4-63. BLM states that there would be minor or negligible impacts on cultural resources in camping and day use areas and where vehicle-based exploration is encouraged. To the contrary, on the north side of Robbins Butte, a number of petroglyph panels at the base of the butte are riddled with shooting damage and the area is regularly trashed from group camping. Similarly, BLM states that vehicle incursions, trampling and possible exposure to unauthorized collection of artifacts would be minor and localized impacts in the Gila Bend Mountains [Extensive Recreation Management Area] ERMA. PRMP at 4-64. However, Red Rock Canyon in the Gila Bend Mountains ERMA is a highly abused petroglyph area and has experienced irreparable damage to cultural resources from the named uses. The following photographs provide evidence of damage from overuse and mismanagement of this area and show that BLM's analysis of impacts are understated.

Protest Issue: PP-AZ-Sonoran-12-06-65 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

In response to comments on the Draft RMP, BLM states that it "considers actions to address vandalism on archaeological sites to be administrative and outside the scope of an RMP." PRMP at 6-44. While BLM may not list actions in an RMP that it will take to investigate a specific vandalism event, BLM has a duty under NEPA and FLPMA to analyze the impacts of management actions (such as allocating certain areas to uses that may cause damage to cultural resources) and taking appropriate measures to protect areas with important cultural resources in the RMP (such as designating areas for protection with appropriate protective management prescriptions).

As stated in the Proposed RMP, only around 5-6% of the planning area has been surveyed for cultural resources. PRMP at 3-15. Given the recognized impacts to cultural resources and the fact that these resources have special priority status as objects of interest in the Sonoran Desert National Monument, BLM should have a more complete inventory before allowing uses that impact these resources to continue. As stated in our comments on the Draft RMP, BLM should have prioritized the most sensitive, important, and at-risk areas for cultural resources, and should have committed to performing surveys before making final resource allocations in the RMP. This includes areas in close proximity to routes proposed for designation in the RMP.

Protest Issue: PP-AZ-Sonoran-12-06-67 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

BLM has failed to come up with a strategy for compliance of Section 106 going forward.

"[t]he data available for cultural resources site locations and types remain insufficient to develop reliable predictive or sensitivity models. This means that the impacts related to cultural resources resulting from landscape-level decisions normally made in an RMP cannot be quantified. Targeted surveys would be conducted, primarily within the SDNM, as funding and staffing allow." Thus, by BLM's own admission, it does not have enough scientific data but instead is relying on personal knowledge for the other 94% of the planning area that has not been surveyed to allocate uses that may cause direct harm to cultural resources.

Summary

The PRMP/FEIS fails to take a hard look at impacts to cultural resources under NEPA as it relates to the designation of the Saddle Mountain Extensive Recreation Management Area (ERMA) and the Gila Bend Mountains ERMA and associated vandalism. The BLM does not have adequate inventory of cultural resources and has not created a strategy for performing cultural resource inventory.

Response

The BLM complied with NEPA and the National Historic Preservation Act in assessing impacts of the proposed planning decisions on cultural resources in the SDNM. The BLM gathered the necessary data essential to make a reasoned choice among the alternatives analyzed in the RMP/EIS. The BLM analyzed the available data that led to an adequate disclosure of the potential environmental consequences of the preferred alternative and other alternatives. As required by NEPA, the BLM has taken a "hard look" at the environmental consequence of the alternatives to enable the decision-maker to make an informed decision.

The PRMP/FEIS discloses the BLM's assumption that "increased access to areas where cultural resources are present can raise the risk of vandalism or unauthorized collection of cultural resources." (PRMP/FEIS, p. 4-38). In general, the PRMP/FEIS notes that "recreational settings could change over the long-term in ERMAs due to increasing use, urban growth, and damage to natural resources, and increased vandalism." (PRMP/FEIS, p. 4-395). The BLM applied the above concepts when conducting the effects analysis for the designation of the Saddle Mountain ERMA and Gila Bend Mountains ERMA in terms of vandalism. The PRMP/FEIS states that the designation of the Saddle Mountain ERMA and Gila Bend Mountain ERMA and Gila Bend Mountains ERMA in terms of vandalism. The PRMP/FEIS states that the integrity of cultural resources directly by vehicle incursions, trampling, and possible exposure to the threat of unauthorized collection of artifacts." (PRMP/FEIS, pp. 4-63 through 4-64).

The BLM correctly determined that impacts to cultural resources from the designation of the Saddle Mountain ERMA and Gila Bend Mountains ERMA in terms of vandalism would be minor. As outlined in Table 4-1, the PRMP/FEIS defines an impact to be minor when "direct effects are apparent, measurable, small, localized, and contained within the footprint of the action" and "indirect effects are undetectable." (PRMP/FEIS, p. 4-4). Site-specific incidences of

vandalism documented by the protester and considered by the BLM meet this definition. The impacts from these site-specific incidences are not readily apparent and measureable over a larger area, nor are there indirect effects that are apparent and measurable.

The data available for cultural resources site locations and types remain insufficient to develop reliable predictive or sensitivity models. This means that the impacts related to cultural resources resulting from landscape-level decisions normally made in an RMP cannot be quantified. Although the BLM realizes that more data could always be gathered, the baseline data provides the necessary basis to make informed land use plan-level decisions. Land use plan-level analyses are typically broad and qualitative rather than quantitative or focused on site-specific actions.

The PRMP/FEIS address the BLM's strategy for performing cultural resource inventory in the future. The PRMP/FEIS states that "inventory and evaluations on cultural resources in SCRMAs [Special Cultural Resource Management Areas] would be increased and emphasized." (PRMP/FEIS, p. 2-29). In addition, the BLM would "focus proactive (Section 110) inventories on areas defined as SCRMAs, ACECs, and areas along historic trail routes." (PRMP/FEIS, p. 2-31). In response to public comment, the PRMP/FEIS also noted that "upon implementation of the RMP, site-specific inventories would be conducted for any activity proposal that would potentially affect cultural resources. Potential impacts on sites would be avoided or mitigated before any activity was approved. Surveys would continue in the Monument as funds and staffing allow, and would be prioritized based on the management questions the survey is intended to explore." (PRMP/FEIS, p. 6-44).

The BLM Handbook 1601-1 establishes that route designation is an implementation-level decision. (BLM Handbook 1601-1, p. C-18). Therefore, issues regarding route designation are not addressed through the protest process, but are generally appealable to the Office of Hearings and Appeals under 43 CFR § 4.410. The PRMP/FEIS also states that route designation is an implementation-level decision and is not protestable. (PRMP/FEIS, p. 2-3).

Section 5 - Fish, Wildlife, Plants, & Special Status Species

Protest Issue: PP-AZ-Sonoran-12-03-12 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

Here, BLM has ignored its obligations under ESA Section 7. According to the PRMP/FEIS, BLM is "currently working on the BA and has had one meeting with the USFWS to explain the proposed action and the form used for the effects determinations for the four listed species in the Lower Sonoran-SDNM BA from the preferred alternative." PRMP/FEIS at 5-6 (emphasis supplied). In other words, although the proposed action was initiated in 2002 -some 10 years ago - BLM has not bothered to prepare a BA and is just now getting around to speaking with USFWS about the action after the RMP amendment process has been completed! This is a flagrant violation of the ESA.

Protest Issue: PP-AZ-Sonoran-12-03-14 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

In addition to failing to prepare a BA and consult with USFWS, BLM has violated its own planning criteria, which are the backbone for the development of an RMP. Planning criteria are required under 43 C.F.R. § 1610.4-2(a)(b). Here, BLM established a planning criteria commitment that "[c]onsultation with the USFWS will take place throughout the planning process in accordance with Section 7 of the ESA and the National Memorandum of Agreement (August 30, 2000) to identify conservation actions and measures for inclusion in the plans." DRMP/DEIS at 22-23. Meeting only once with USFWS over a 10-year period violates BLM's own criteria, and even more so the procedural requirements imposed by the ESA.

Protest Issue: PP-AZ-Sonoran-12-03-15 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

The BLM's failure to complete consultation with USFWS is particularly problematic here because the basis for designation of multiple ACECs is evidently that special management is required for fish and wildlife resources. See PRMP/FEIS at Appendix V (Fish and Wildlife sections of the ACEC designations). It remains a mystery how BLM could have made "importance/significance" determinations regarding fish and wildlife resources and developed appropriate management and mitigation measures for each ACEC without completing consultation with the USFWS.

Protest Issue: PP-AZ-Sonoran-12-03-3 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

BLM failed to complete Section 7 consultation with the United States Fish and Wildlife Service ("USFWS") as required under the Endangered Species Act ("ESA") 16 U.S.C. 1536 and to adhere to its own planning criteria (Chp. 3 and Chp. 5).

Summary

The BLM failed to complete consultation as required under Section 7 of the Endangered Species Act.

Response

The BLM complied with Section 7(a)(2) of the ESA and its planning criteria, which requires Federal agencies to consult with the U.S. Fish and Wildlife Service (FWS) to ensure that their actions are not likely to jeopardize the continued existence of any listed species or adversely modify critical habitat. The BLM prepared a Biological Assessment (BA) for the PRMP, which was provided to FWS for their review and comment on May 23, 2012. The BLM used the same information and biological data to prepare both the BA and to analyze the environmental impacts on affected endangered species in the EIS.

The Biological Opinion (BO) is the formal opinion of the FWS on whether a Federal action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. On August 28, 2012, the FWS issued a BO for the PRMP and the BLM's consultation with FWS was completed.

For information regarding the determination for relevance and importance for ACECs, please see the ACEC Section of this report.

Section 6.1 – Grazing – Federal Land Policy & Management Act

Protest Issue: PP-AZ-Sonoran-12-04-11 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

To make the Compatibility Determination for the SDNM, the BLM conducted a Land Health Evaluation (LHE) by doing allotment-by-allotment evaluations using objectives it developed using ecological site guides and the Arizona Standards for Rangeland Health. PRMP/FEIS at F-15. The objectives were tied to correlate ecological sites on the Barry Goldwater Range and Area A where livestock grazing had been excluded since the 1940s. Ibid. The amount of trespass livestock or burro use on those reference plots was not established in the PRMP/FEIS, and BLM was advised that its use of PBI plots as reference areas was inappropriate because of current and historical grazing use. Comment #100161-4. BLM's response to comments does not address this substantial problem with the reference areas but rather repeats boilerplate about how it selected key areas. PRMP/FEIS at 6-270. BLM says, "Proclamation suggested BLM use area A as comparison," but that doesn't reduce BLM's requirement of due diligence in ascertaining whether something is scientifically appropriate for the LHE, especially when researchers who conducted the study say it isn't! Appendix F.9 does not provide a rationale that supports its failure to consider the appropriateness of using these sites reference areas.

Protest Issue: PP-AZ-Sonoran-12-04-14 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

[Use Pattern Mapping] A key issue then is whether the Use Pattern Mapping was sufficiently supported by data. Comment #100136-22. Public comments questioned whether the landscape appearance method was appropriate and whether the BLM appropriately adopted the method and monitoring techniques, and asked for information about how the BLM established transects or what kind of actual data were collected. Ibid. BLM responded by revising Appendix F of the LHE to, "include a description of the methodology use [sic] to collect utilization data during use-pattern mapping and on utilization transects." PRMP/FEIS at 6-244.

However, nothing in the LHE identifies when this Use Pattern Mapping occurred or whether it was conducted more than once across the SDNM. See PRMP/FEIS at F-29, F-33. The method is used to identify utilization patterns for proportions of annual production that has been consumed or destroyed by animals. Ibid. Nothing in the LHE describes the number of animals or the duration of grazing on the pastures that were evaluated, linking the evidence of use with the level of use that was permitted. The LHE itself does not provide a map of the data points that were evaluated. This information is critically important, because BLM used it, in part, to establish whether livestock are a causal factor in the allotments not meeting

Arizona Standards for Rangeland Health. PRMP/FEIS at F-32. If it was not done in a way that supports the conclusions, that is important for the public and the decisionmakers to know.

Apparently, it was not. Western Watersheds Project requested and received a copy of BLM's use-pattern map and there are glaring inconsistencies between what the data show and what the BLM reports, making the conclusions about livestock causality unsupported and the entire Compatibility Determination on shaky ground. See Exhibit A4 and PRMP/FEIS Appendix F, Map 5 at F-64.

Protest Issue: PP-AZ-Sonoran-12-04-16 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

[Use Pattern Mapping] First and foremost, there are issues with BLM having classed major "Unsurveyed areas" as having only "Slight use," on each and every allotment. Because the BLM is using the use levels to assign causality, it cannot claim that livestock are not responsible for impacts where they have not looked for evidence of livestock. See Figure 2. This classification error is so widespread that anyone looking simply at the information contained in Map 5 of Appendix F of the PRMP/FEIS would be greatly misled about the extent to which use levels were evaluated on the SDNM and thus about the information on which the compatibility determination was based.

For example, on the Beloat allotment, BLM found that although the allotment is not fully achieving Standard 3, because more than half the allotment failed to meet it, "Current livestock management is not a significant factor for those sites because Use Pattern mapping for 2008 indicate a general pattern of slight and light use... The majority of the Beloat Allotment within the SDNM falls within the slight use category. PRMP/FEIS at F-44. Map 5 corresponds with this description. PRMP/FEIS at F-64. The actual data do not.

The actual data map shows the majority of the allotment is "Unsurveyed." Exhibit A, See Figure 2. Of the key areas not meeting the standards on the Beloat allotment, B-2 and B-8 (Sandy Wash) are in area on the map described as "No Forage Spp." and "Creosote Flats- Annuals only." Exhibit A. BLM did not measure the impacts of livestock on annuals, only perennial vegetation for the Use Pattern Mapping. Thus, in the areas of $B\neg 2$ and B-8, it would have been difficult - indeed impossible- to find evidence of livestock use on species that are not present. BLM used this absence of evidence to conclude that livestock are not causing the failures to meet the rangeland health standards. This is arbitrary, at best, and malfeasant at worst. Western Watersheds Project raised the issue of unsupported conclusions for the Beloat allotment in comments. Comment #100136-70.

Similarly, in Beloat PBI sites #40, 43, and 45 (Limy Fan, all of which failed to meet Standard 3, PRMP/FEIS at F-42), BLM did not conduct Use Pattern Mapping at all, and this general area is classed as "Unsurveyed" on the data map. Exhibit A at 4, Figure 2, above. Thus, the Summary of the Ecological Site Analysis in the LHE for the Beloat allotment is unsupported at best and patently untrue at worst.

The implications of the inconsistencies of the Use Pattern Mapping and the LHE become clear in the Compatibility

Determination, which states on the Beloat allotment. "Because livestock utilization was less than 40 percent [on the creosotebursage vegetation community's limy fan], grazing is determined not the be a causal factor for failing to achieve Standard 3." PRMP/FEIS at E-25. For the desert wash, a specially protected Monument object, and failing Standard 3, "Grazing management practices are not factors in failing to achieve Standard 2, as use levels were negligible to slight." Ibid. BLM has indemnified livestock grazing on the Beloat allotment in these important ecological sites where it has no data to do so, and the Proposed Action to leave the entire Beloat allotment open to livestock use is without basis. PRMP/FEIS at 2-125.

Protest Issue: PP-AZ-Sonoran-12-04-17 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

[Use Pattern Mapping] On the Hazen allotment, the logic about causality gets even stranger. Two of the four ecological sites are failing Standard 3. PRMP/FEIS at F-50. BLM claims, "It is more likely than not that the failure of these sites to meet Standard 3 is not due to existing grazing management practices or levels of grazing use, as livestock use levels were at negligible and slight levels." PRMP/FEIS at F-52. Key Area H-4 on the Sandy Wash is apparently outside of the Monument boundary. Appendix F, Map 4. PBI sites #230 (Sandy Wash), #227 and #229 (Limy Fan) are either within the negligible zone or the unsurveyed area; the lack of georeferenced overlays makes comparison difficult. However, there is only a single data point in the area of those three sites, relating use on ... Ambrosia dumosa..., a

species described as only moderately palatable to cattle, with use during years of low precipitation and when winter production of annuals is low. The PRMP/FEIS doesn't include precipitation data from 2009 (PRMP/FEIS at F-32) but more importantly, there was no livestock use on the allotment when the use pattern mapping was conducted. See Appendix F, Map 3, and PRMP/FEIS at F-33; Comment #100136.

Again, rather than analyzing whether livestock would harm monument objects if they were turned out onto an already failing allotment, BLM used the absence of livestock evidence to conclude that livestock grazing is compatible and the entire allotment should be available for livestock use. PRMP/FEIS at 2-126. This logic is inconsistent, and the management perspective is inappropriate for a National Monument.

Moreover, on the Hazen allotment, while the Use Pattern Map placed the key areas in areas of negligible/slight use (which were, for the most part, unsurveyed), the Use Pattern Mapping was conducted in the spring of 2009. Comment #100136-54. BLM used data from PBI sites 228, 230, 227, 229 in its determination that two ecological sites (5,699 acres) were failing to meet the standards. PRMP/FEIS at F-50. BLM states that "It is more likely than not that the failure of these sites to meet Standard 3 is not due to existing grazing management practices or levels of use, as livestock use levels were at negligible and slight levels." PRMP/FEIS at F-52. However, fieldwork to assess ecological conditions on the PBI sites was done in 2003. See Morrison et al 2003. This temporal disconnect was true for every PBI plot matched with livestock use in the entire LHE. On the Hazen allotment, the BLM

used a lack of evidence of current grazing use (because there were not livestock on the allotment at the time) to say that livestock weren't responsible for the failure to achieve land health standards on sites evaluated seven years prior. This is unscientific, unsystematic, and illegal under FLPMA.

Protest Issue: PP-AZ-Sonoran-12-04-18 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

[Use Pattern Mapping] On the Bighorn allotment, 31 percent of the allotment is not achieving Standard 3, the limy upland deep ecological site. PRMP/FEIS at F-39. On the limy upland deep ecological site, the BLM states that "Use pattern mapping indicates 0-5 percent use on key species at PBI sites 59 and 60," and therefore, current livestock is not the causal factor on the sites not achieving objectives. PRMP/FEIS at F-38. (BLM does admit that livestock is a significant causal factor on 2,974 acres within the limy upland deep ecological site. PRMP/FEIS at F-40.) Thus, of the 29,384 acres of this ecological site that are failing to meet standards, less than 10 percent of the failing acres are attributed to livestock. But, in reality, BLM has no idea.

Figure 3. Image of Use Pattern Mapping data set showing mapping on the Bighorn allotment (left) and the PRMP/FEIS version of the Use Pattern Mapping (Map F-5) data for the purpose of attributing causality (right). What field observers state was unsurveyed (crosshatching), the PRMP/FEIS describes as slight or negligible use. What field observers marked in red ("severe use" 81-94%) during the April surveys, the PRMP/FEIS shows as yellow and orange (moderate or heavy). Key area map (F-4) inset from PRMP/FEIS shows PBI plot locations.

There are multiple problems with this conclusion. First and foremost, the PRMP/FEIS does not include utilization data from PBI sites 59 and 60, so it is impossible to know how BLM reached the determination.

Table F-8, PRMP/FEIS at F-33. The Use Mapping data map shows this area was "Not Surveyed," (See Exhibit A, Figure 3), in contrast to BLM's visual claims on Appendix F, Map 5; See Figure 3. (Indeed, the adjacent surveyed area to the south of PBI sites 59 and 60 is marked red, which was classed by the on-the-ground observers as "Severe Use." The PRMP/FEISs map does not accurately convey this classification to the view of Map 5 in Appendix F, and has inexplicable reclassified the severe use as "Heavy" and "Moderate.") Rather than "Not Surveyed," the BLM has classed the whole area as "Slight" or "Negligible," once again using the absence of evidence method to render livestock blameless for failing to meet the standards. By doing so, the agency has subverted its own methodology.

There are three other key areas on the limy upland deep ecological site ([Big Horn] BH-5, BH-13, and PBI 61), and only one of those (BH-5) had actual utilization data reported in the PRMP/FEIS. PRMP/FEIS at F-33. (We note that, at 39 percent utilization on white ratany, the utilization is well within 80 percent achievement of "Moderate Use" of 40 percent, which would have triggered a livestock-as-cause determination for BH-5, but BLM did not apply its "range around the absolute value" method anywhere that would have implicated livestock.) Thus, of five key areas used by BLM in the LHE, BLM includes actual utilization data for just one of them. If the BLM has utilization data for the other sites (PBI 59 and 60), as it claims, they weren't disclosed to the public. The agency apparently does not have any utilization data for BH-13 or PBI 61. Despite only providing data for 20 percent of the key areas on the ecological site, the BLM is confident that grazing isn't the cause of harm on 90 percent of the acres on that site.

The Use Pattern Map is less confident. For Key Area BH-13, BLM's Appendix F Map 4 doesn't correspond with the actual on-theground mapping data. See PRMP/FEIS at and Exhibit A. The southeastern portion of the Big Horn allotment has areas of solid red (Severe Use, 81-90 %), solid orange (Heavy Use, 61-80%), and solid yellow (Moderate Use, 41-60%). Exhibit A. There are not the "slight" or "light" use indicators at all on the original map, and it is therefore very unclear how Map 4 in Appendix F was generated. More importantly, it's unclear how Key Area BH-13, which is solidly in the orange and yellow parts of the map, was ignored entirely in the attribution of causality. PRMP/FEIS at F-37.

Thus, in this one example, there is a profound disconnect between what the BLM actually knows (or, rather, doesn't know) and what it is saying about the cause of impacts. It is erring, once again, on the side of continuing livestock use rather than applying a precautionary principle (based on the preponderance of actual scientific evidence) to the areas where it has no data. Where there are data (e.g., the Use Pattern Mapping data, Exhibit A), BLM has ignored the overwhelming evidence that, on the Bighorn allotment, very few of the places BLM actually surveyed for livestock use were not at least at the level of moderate use. (PBI's research came to similar conclusions.)

The BLM reports that use-pattern mapping indicates a general pattern of moderate utilization in areas surrounding livestock waters, but as distance from waters increases, use moves from light to slight. "The majority of the Big Horn allotment within the SDNM falls within the slight use category." PRMP/FEIS at F-39. This claim is not supported by any evidence that the agency has actually evaluated the areas it is classifying as "slight." There are no key areas where utilization has been evaluated within "the majority" of the Big Horn allotment. See Map F-4 and Table F-8. More importantly, approximately half of the Big Horn allotment has not even been surveyed. Exhibit A.

Protest Issue: PP-AZ-Sonoran-12-04-19 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

[Use Pattern Mapping] Where the BLM did find heavy or severe use doing the ocular monitoring, it completed utilization transects to verify if livestock utilization had "clearly caused the findings during the Landscape Appearance Method." Exhibit A. The BLM conducted these on the Bighorn and Conley allotments in June 2009. Ibid. (Livestock were not authorized on the Bighorn allotment after March 1, 2009.) These utilization data study locations are described narratively, with no correlation to geospatial data otherwise provided to the public or to the Use Pattern Mapping. But a few telling notes describe heavy or severe use nonetheless:

• Platt Area #1: While Krameria was at 31 percent utilization, the notes say that ... Pleuraphis rigida... had use at 30 percent but that it is all within ... Cylindropuntia leptocaulis;

• cholla, a plant that prevents herbivory on grasses underneath it), and 60 percent use on ...Hymenoclea salsola.... Bosque Well Area: Use on Krameria at 57.9 percent. "Forage extremely sparse, hard to find enough samples for util."[Hymenoclea salsola]... rare, used ~40 percent.

There were four additional sites with limited utilization recorded on Krameria and no additional notes about utilization on other species. It is unclear how this would have provoked changes to the Use Pattern Mapping, but it does not appear that the sites of the follow-up transects followed the same methods of following roads and stopping "every one-half to one mile interval," as the original data were collected. Exhibit A. Rather, it seems BLM intentionally set out to disprove the observations of the earlier monitoring and to change the results of the Use Pattern Mapping, which has implications for determining whether livestock are harming monument objects. (Notably, the BLM did not go "doublecheck" the areas where slight or negligible use was found, or the Heavy Use areas on the Lower Vekol allotment.)

Figure 4. Lower Vekol allotment use pattern mapping data set (left), key area locations (upper right) and use pattern map included in the PRMP/FEIS as the basis for livestock causality for rangeland health determinations (lower right). For the Lower Vekol allotment, the failure of the Sandy Wash ecological site to meet Standard 3 is not attributed to livestock because, "Use pattern mapping at the key area was light use, indicating current livestock grazing may not be the causal factor for non-achievement

of the standard." PRMP/FEIS at F-53. Key Area #LV-3 is identified using Map F-4 and Map F-5 as within the "Light" use category, consistent with BLM's claims. Except, there are no data on the Use Pattern Data Map from that section of the Lower Vekol allotment. Exhibit A, See Figure 4. The nearest actual data point to the north of Key Area LV-3 is marked yellow, or "Moderate Use" on the Use Pattern Data Map. Ibid. This is inconsistent with the map produced for the PRMP (Map F-5) and with BLM's claims that this site has only experienced "light use" and therefore livestock are not a cause of the failure to meet standards. (Moderate use is sufficient to pin causality on livestock under BLM's compatibility scheme.)

Protest Issue: PP-AZ-Sonoran-12-04-20 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

[Use Pattern Mapping] Similarly, for the Limy Upland site (LV-4), which failed to meet Standard 3, BLM states that "Use pattern mapping indicated light use at the key area; therefore current livestock grazing is not the causal factor for non-achievement of the standard." PRMP/FEIS at F-54. Key Area LV-4 is shown on Map F-4 on the northeastern edge of the allotment within the Monument boundaries. On the Use Pattern Map included in the PRMP/FEIS, it occurs just at the edge of "light" and "moderate" use. Map F-5. There are no data points on the Use Pattern Mapping map associated with this area of the Lower Vekol allotment. Exhibit A. (The scanned copy provided by BLM is dark and we regret this.) The nearest data points are colored orange and yellow, making the observations of use moderate or heavy. BLM's claims that livestock use is

"light" and therefore livestock aren't a causative factor are therefore without data to back it up.

Thus, two of the three key areas on the Lower Vekol allotment (the Sandy Wash and the Limy Upland) are failing to achieve standards and BLM either doesn't actually know the impact cows are having (because the areas are unsurveyed) or BLM has failed to accurately transfer the data from the onthe-ground Use Pattern Mapping to its analysis. In either case, the conclusions on which the Compatibility Determination are based are incorrect (PRMP/FEIS at E-29) and the range of alternatives inaccurately developed. PRMP/FEIS at 2-126. Map 2-8e was corrected to show exclusion of livestock on 607 acres of desert washes following WWP comments. Comment #100136-8, PRMP/FEIS at 6-242. The desert washes on the allotment extend all the way to the eastern boundary of the SDNM. The only use pattern data BLM has for that entire section of the Lower Vekol allotment registers livestock use at a level of greater than 40 percent. Exhibit A. It is not clear, then, how BLM justifies leaving the remaining 6,433 acres of this portion of the allotment open.

Protest Issue: PP-AZ-Sonoran-12-04-21 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

[Use Pattern Mapping] Peer review of the Use Pattern Mapping data identified the following problems, problems that the BLM did not correct in the 2011 LHE or as the basis of the PRMP/FEIS: The use pattern data and utilization data are problematic for reaching a conclusion that livestock use is not the causal factor in non-achievement.

The first and largest problem is that the argument evaluates the correlation between a single year's single observation of livestock use data and a subset of the available condition data. Arguments based on correlation tend to be weak and do not readily implicate a causative factor. The use of a single year's data further weakens the argument because the effect of livestock use may take multiple years for recovery in this region. While it is not clear when the data were collected or what time period the common grazing season spans, this area commonly has year round use and the pattern of use can vary greatly throughout the year and between years so a single observation within the year may also not be sufficient. This is not to say that an effective correlative argument cannot be made, just that these data as presented make that more difficult.

The second problem is that the use pattern data appear to have been collected in an ephemeral use year. While not enough information is presented to assess the differences, one could reasonably argue that this would substantially change livestock use patterns especially by reducing the use of the plots further from water or further upland due to increased forage availability elsewhere.

The third issue is that key area plots, per the report, are selected to represent the most common conditions on an area of interest to include representative livestock grazing pressure. The establishment of many of these is recent so adherence to these selection factors could be expected. To later argue that poor conditions on the site are unlikely to be caused by livestock, implies that either the key areas were located incorrectly or the use pattern data does not reflect common conditions. A cynical perspective would be that the key sites were selected with a bias would be toward sites that do not show livestock impacts but this seems unlikely. But with this perspective in mind, discounting the impacts of any site seems difficult and would more likely bring doubt upon the use pattern survey data rather than the site selection. The use pattern data seems more likely to not to represent average conditions due to the reasons outlined above.

The final problem is that some of the data most likely to show livestock impacts, the PBI plot data from near disturbances, have been excluded from the analysis. As it stands this set of data seem highly biased and of limited use in answering any question about livestock because the plots that had livestock impacts were purposefully removed from consideration. Fehmi 2009, emphasis added.

In response, BLM did not reevaluate its use pattern mapping data, consider the abundance of ephemeral vegetation that might have reduced grazing pressure on key species but nonetheless caused livestock to have impacts on the landscape, or reconduct monitoring in subsequent years to make the assessment more robust. BLM did not compare use levels in 2009 with the use levels of 2002 when PBI's analysis was conducted.

Protest Issue: PP-AZ-Sonoran-12-04-22 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

[Use Pattern Mapping] Thus, Use Pattern Mapping as the basis of the LHE and the basis of Compatibility Determination is deeply flawed and unsupported by actual data. The Compatibility Determination's conclusion, "Livestock grazing practices negatively affect 3.4 percent of the Monument north of I-8. Current livestock grazing is determined to be incompatible on 3.4 percent of the Monument," is unfounded, ungrounded in the actual data, and weak. PRMP/FEIS at E-36. As the basis of the range of alternatives, this is inadequate and will not protect the resources of the monument as specified by FLPMA or the Proclamation.

When Western Watersheds Project raised the issue of the insufficiency of "Use Pattern Mapping" as a method of attribution in our comments (Comment #100136-69), we did not know (because the PRMP/FEIS did not disclose) how the agency generated Map F-5. BLM has subsequently clarified the text and provided the original use pattern map to WWP upon specific request. PRMP/FEIS at 6-254. Unfortunately, this only raises more questions about the veracity of the data (and the interpretations of the data) that support BLM's compatibility determination.

Protest Issue: PP-AZ-Sonoran-12-04-23 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

Support for the determination - As discussed above, BLM used some key area data (production, composition, cover, utilization, etc.) in conjunction with the use pattern map to determine whether or not livestock grazing was a causal factor in not achieving Arizona Standards for Rangeland Health. PRMP/FEIS at F-32. However, this is not the standard protocol for making these determinations. Rather, the BLM Handbook for Rangeland Health Standards (H-4180-1) says, "To determine which activit(ies) is/are significant factors resulting in failing to meet the Standards, use the best data and resource information available... The grazing related questions your team must answer as part of the determination process are listed below: Is it more likely than not that existing grazing management practices or levels of grazing use are significant factors in failing to achieve the Standards or conform with the guidelines? Yes/No." As we demonstrated above, where BLM didn't have data to support causality because it didn't survey a certain area, it could have looked to the adjacent use levels to determine a reasonable approximation of level of use. In each instance we outlined, the answer would have been "Yes, it is likely that livestock is a significant factor." Despite this, BLM always, always, leaned away from attributing problems to livestock grazing. Based on the scientific evidence provided to it by Pacific Biodiversity Institute and the literature review of the impacts of livestock grazing on the resources of the SDNM, the agency should have regarded the preponderance of evidence that livestock were likely have adverse impacts.

Moreover, though the BLM claims that it used the utilization and use-pattern mapping to attribute causality to areas of the monument not meeting standards (PRMP/FEIS at F-32), in reality, never the 'twain shall meet. BLM did not evaluate rangeland health in areas proximate to water developments, areas most likely to experience heavy use. Key areas are established away from water sources in areas of "representative use." Of course, those areas only represent diffuse livestock impacts. The BLM discarded PBI data sets that showed adverse impacts from livestock grazing because they were collected in areas of high livestock use. Ignoring data that show impacts does not prove that livestock are not having impacts. Rather, it shows that BLM made arbitrary decisions about which data it would even accept when considering livestock impacts. There is no justification for ignoring the portions of the Monument that experience heavy use.

Protest Issue: PP-AZ-Sonoran-12-04-26 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

[Methods for determining attainment of key area objectives] The BLM does not provide a citation for this new threshold, or point to a specific place in the administrative record where there is support for this decision. Half of the peer reviews ("Technical reviews") do suggest that there is a range of sampling variability that should be accommodated (see Ruyle 2009, Pieper 2009), but in no case do the peer reviewers propose or provide support for "80 percent" attainment equaling full attainment of the objectives. One reviewer suggests the adoption of "some guidelines" so that "there would be fewer cases of standards not being met," (Pieper 2009), and suggests a 2 percent window, but there is no basis for the 80 percent attainment that the agency relies on extensively to justify its changed conclusions and to support its rangeland health determination. PRMP/FEIS at F-34. It is not explained why BLM concurs that there should be fewer cases of standards not being met, but the agency's adoption of these new parameters is not based on any science available to the public during the comment period or since.

As Western Watersheds Project [WWP] noted in comments (WWP Comments on DRMP/DEIS at 8), the BLM's use of an average value from the NRCS site guides already reflected the range of natural variability within a site. Additionally, the agency only required half of more of the key areas to meet objectives for each ecological site to be meeting overall standards. PRMP/FEIS at F-42, See WWP Comments on DRMP/DEIS at 8; see below. Thus, there was already plenty of leeway built into an "absolute" objective.

Protest Issue: PP-AZ-Sonoran-12-04-28 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

Resource condition objectives as moving targets - Western Watersheds Project also commented that BLM changed the objectives for ecological sites, making the criteria for meeting objectives lower. For example, Comment #100136-14, Comment #100136-52. The BLM responded to this comment by invoking the unsupported rationale for a range around the absolute value being an acceptable what to judge achievement. PRMP/FEIS at 6-238. The BLM missed the point, and has still not explained why the objective itself (and not the determination) was lowered.

Western Watersheds Project commented that BLM's objectives for ecological sites were not consistent across allotments, even where the ecological site was the same. Comment #100136-99. For example, where BLM set an objective of 2 percent cover for saguaro on the Big Horn allotment, it had set an objective of just 1 percent cover for saguaro on the Lower Vekol allotment on the same ecological sites. BLM's response to comments does not explain why the objectives for the same ecological sites vary by allotment. PRMP/FEIS at 6-243. As shown above, there was plenty of leeway built into BLM's determination. Changing the actual objectives should not have been one of them.

Protest Issue: PP-AZ-Sonoran-12-04-29 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

Actual use - Where Western Watersheds Project commented that the DRMP/DEIS did not contain actual use data, the BLM claims that existing grazing permits within the LSFO and SDNM planning areas do not require permit holders to provide information about actual use, but that as permits are reissued, this may be an added term and condition in the future. PRMP/FEIS at 6-124. We certainly hope the BLM will definitely include this in future permit renewals. Because the BLM has not required it, the agency has not had sufficient information to determine impacts pertaining to grazing intensity. Without this information, the BLM is reluctant to adjust grazing use. The agency has basically bound its own hands, which is either an egregious mistake of a clever way of getting around acknowledging the detrimental impacts of livestock use.

In the case of the SDNM Compatibility Determination, because BLM has not maintained records of how many livestock are where and when on these allotments, and has very limited utilization data, the attributions of causality where there are impaired conditions are difficult to make. For example, if heavy use on the Bighorn allotment occurred in a year when stocking was relatively light, how can BLM be sure that the full stocking rate authorized in the PRMP/FEIS will not cause grazing harm to monument objects? The BLM only conducted use pattern mapping once (hardly a "pattern") by ocular monitoring; key area achievement of objectives like cover or canopy are affected on much longer continuums. The actual stocking rates are required before BLM or the decision-maker can know anything definitive about the effects of livestock on the resources of the SDNM.

Protest Issue: PP-AZ-Sonoran-12-04-30 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

Maintaining an Inventory - BLM jettisoned data between the 2009 Draft LHE that is circulated to peer reviewers and the 2011 Draft LHE that is presented to the public in the Draft RMP. Western Watersheds Project provided the earlier draft LHE as an Exhibit with our comments, and raised many issues regarding the BLM's failure to consider data included in that draft in the 2011 DRMP/DEIS. See Comments #100136-18, 100136-15, etc. or generally PRMP/FEIS at 6-251 to 6-252, among others. Western Watersheds Project was particularly concerned where the discarded data showed downward trends. Ibid.

The BLM's response to these comments was, "Comparison of transect data collected over several years in key areas by BLM was not appropriate, in this case, for assessments of long-term trend analysis. The 2009 data were the most recent data for the area. The 2004 and 1980 transects used different study designs, and therefore were not comparable to 2009 transects and could not be used to measure trend in the LHE." PRMP/FEIS at 6-252. Given FLPMA's requirement to maintain inventories and use science, BLM's failure to repeat monitoring using the same methods in 2009- when it specifically was evaluating land health for

the purposes of the compatibility determination- is inexplicable. BLM does not explain the differences in the study designs in response to comments or in the PRMP/FEIS and, indeed, never even admits to having other data sets for the same key areas. The BLM also did not distinguish methods when it provided the full 2009 Draft LHE to peer reviewers, and instead provided them with the full set of data. One peer reviewer said, "There are 19 past to present transects with data comparing 1980/1982 to 2004/2007/2009. This is the strongest available evidence for trend on in the allotment and should be given more space in the analysis and weighted accordingly." Fehmi 2009 at 6. Instead, BLM threw the evidence away.

BLM did use the earlier data sets for the purposes of comparing "production." PRMP/FEIS at 6-247, F-26. The BLM says that the data show virtually no change in vegetation production over a 28 year period. PRMP/FEIS at F-26. The PRMP/FEIS does not include the 2008/2009 production studies that it claims to have to support the forage allocation of the Lower Gila South RMP. PRMP/FEIS at F-26. Thus, BLM's use of earlier data sets is selective: when it supports continued livestock grazing, BLM uses them. When it doesn't, BLM doesn't.

BLM's explanation for changes in the drafts of the LHE is also, "The 2008 LHR was a preliminary draft that was subsequently revised based upon peer review. Baseline information was collected through 2010." PRMP/FEIS at 6-251. As show above, revisions were uni-directional, and not all the peer-review recommendations were adopted. Moreover, where BLM says that it collected more baseline data through 2010, it has failed to include them in the PRMP/FEIS. When responding to the DRMP/DEIS during the 2011 comment period on the plan, Western Watersheds Project identified at least twenty discrepancies between the 2009 LHE earlier version of the draft LHE and the version included in the DRMP/DEIS, with all of the changes leading to a more favorable view of the effects of livestock grazing on public lands. Of these, many of the changes reflect a "downgrading" of resource objectives, making the extant data sufficient to meet the revised objectives where they had previously failed. In some cases, these discrepancies related to the expanded range for which key areas could be considered to be meeting objectives, but not all. Sometimes, BLM simply removed and replaced conclusions without changing the underlying data.

Additionally, Western Watersheds Project has identified at least five dozen instances where evidence of downward trend in cover or composition by native vegetation was obscured by BLM's failure to reveal the complete data in its analysis. Where BLM now claims that those data were gathered using different methods and so it discarded them, this violates the agency's obligation to take a hard look at all the data in the inventory and figure out a way to integrate all of the information available about rangeland health.

There were an additional sixteen indications of decreased vegetation cover, decreased cryptogam cover, and increased bare ground that the BLM failed to analyze and disclose in the revised LHE by omitting earlier data sets. The BLM's excuse that it decided to use canopy cover instead, doesn't explain the downward trend that it otherwise chose to ignore.

BLM also failed to maintain an adequate

inventory of the lands within the LSFO in order to explain what the LHE status was for those allotments.

Protest Issue: PP-AZ-Sonoran-12-04-31 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

Omission of geographic areas - The BLM has arbitrarily and capriciously excluded a significant portion of the SDNM from any analysis of livestock grazing impacts. Rather than use randomly distributed point, or even stratified randomly distributed sample points, in the LHE, the BLM used specifically selected key areas and a subset of PBI data to evaluate the impacts of livestock use.

For example, one PBI study was designed to explicitly address the impact of livestock watering sources, by collecting data along linear transects around a number of water sources. For each water source, PBI sampled four or more plots, including a plot within the disturbance area, the second at 50 meters from the disturbance, the third at 100 meters, a fourth at 500 meters, and in some cases additional plots at additional 500 meter intervals. The LHE process used only data from plots that were 1,000 meters or farther from disturbance sites, excluding the majority of sample points. By doing so, the BLM also excluded analysis of livestock impacts to monument objects within the 1246 impacted acres around each water development. Comment #100136-73, 88. The only information about the number of water developments on the allotment is provided in Map F-4. PRMP/FEIS at 6-248. It is not entirely clear from the scale of the map, but it appears that Bighorn allotment has at least five water developments (6230 acres; 7 percent of the allotment), Beloat has 3 water developments (3738 acres;11 percent of the allotment), Hazen has one (1246 acres; 4 percent of the allotment), Lower Vekol has one (1246 acres; 8 percent of the allotment). There are also several water developments outside the boundaries of the SDNM on continuous allotments that surely also have impacts on monument lands. (Information about water developments may or may not be current or accurate, as PBI studies found a number of inconsistencies with functional and nonfunctional water sources during their surveys.)

In total then, by arbitrarily excluding areas of heavy impacts on at least 12,460 acres of 144,508 acres on the allotments that remain open under the proposed action, the BLM is utterly ignoring the effect of those heavy impacts to monument objects on 9 percent of the entire monument. BLM did not evaluate the impacts of livestock grazing within livestock concentration areas, but it used its absence of evidence to claim an absence of evidence that livestock were harming monument objects. This is insufficient under NEPA.

In fact, BLM used data from 48 plots measured by PBI, out of 320 plots for which PBI gathered a full set of quantitative data. By leaving these scientifically-derived and statistically-validated data out of the Land Health Evaluation, it is apparent that the agency was unwilling to consider PBI's conclusions that livestock grazing was having a deleterious impact on monument resources on most of the plots it evaluated.

One of the PBI studies was explicitly designed to evaluate whether their analysis of ecological conditions assessed in the second phase of the project could compare with BLM's Standards for Rangeland Health and Guidelines for Grazing Administration.

It was determined that the studies were sufficient to determine the health of watersheds, ecological processes, and habitat conditions, three of four variables that are used by the agency to assess rangeland health conditions. Morrison et al 2003 at 99. Based on these observations and field data, PBI indicated that the rangeland health of SDNM lands would not be met on many of the plots they sampled. The BLM did not include these findings in the Land Health Evaluation, and instead states that the sample points weren't acceptable under the Key Area criteria. As stated above, peer reviewers also expressed concerns about the bias implicit in this decision. See Fehmi 2009.

By failing to consider the protection of and impacts of livestock grazing to all of the acres of the SDNM, the PRMP/FEIS fails to comply with FLPMA.

Protest Issue: PP-AZ-Sonoran-12-04-32 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

Monument objects - To the extent that BLM's LHE is flawed, and its compatibility determination is flawed, the BLM is allowing harm to the specially-protected Monument objects, including vegetation and wildlife. We disagree that the LHE is a sufficient measure of harm to monument objects since it was not designed to measure this- it was designed to measure rangeland health, which does not capture the needs of cultural resources, wildlife, vegetation communities, etc. Still, where BLM's analysis of harms to monument objects hinges entirely on the findings of the LHE, in every instance where the LHE has been weakened, altered, or incorrect, the BLM's analysis is insufficient to protect the desert

tortoise (Gopherus agassizii), the saguaros (Carnegiea gigantea), the lesser long-nosed bat (Leptonycteris curasoae), the desert bighorn sheep (Ovis canadensis nelson), the archeological sites, and all the other identified monument objects. This is a violation of FLPMA, which requires the agency to protect and preserve resources for future generations, and violates the provisions and intention of the monument proclamation.

In sum, BLM has violated FLPMA at Sec. 302(a) because the PRMP is not in compliance with the Proclamation that directs it to protect the objects of the Monument. BLM's PRMP/FEIS fails to comply with FLPMA because it fails to protect the precious lands and resources of the SDNM, and because, at every step of the way, BLM lowered the threshold that livestock grazing had to pass. Early scientific studies by PBI and The Nature Conservancy (TNC) were de-emphasized in favor of BLM's new design. Key areas were non-randomly distributed and data sets revealing heavy livestock use were thrown out. To meet objectives, each key area only had to meet 80 percent of an objective that was already an average of values for the ecological site. Objectives were revised post hoc and new methods were adopted so fewer key areas would fail to meet objectives. To meet standards, each ecological site only had to have 50 percent of the key areas meeting objectives. To find livestock at fault, each key area had to occur in an area where livestock use was greater than 40 percent on key species in 2009.

None of these methods were supported in the scientific literature or are even common practice on Land Health Evaluations within the BLM. They were specifically designed for and adopted by the SDNM LHE and Compatibility Determination, and, at every step of the way, the lowered threshold advanced an agenda of continued livestock grazing rather than ensuring compatibility with resource protection or ensuring against harm to Monument objects.

Protest Issue: PP-AZ-Sonoran-12-04-73 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

[Grazing-FLPMA Methods for Determining Attainment of Key Area Objectives] As stated above, BLM also used "more than 50 percent" of key areas on an ecological site to be meeting objectives before it would determine that ecological site overall to be meeting the standards. PRMP/FEIS at F42. Nowhere in any of the peer reviews or anywhere in the PRMP/FEIS is the 50 percent arbiter explained, and BLM does not explain why it didn't simply apply the test to each key area and then look at use pattern/level to ascertain whether livestock were causing the problems at each key area.

By lumping all the key areas within a broader ecological site and then looking at causality, BLM is ignoring key areas that profoundly failed to meet objectives and all of the acres that those key areas "represent." For example, two of six key areas on the Granitic Hills on the Beloat allotment are failing to meet desired community objectives. PRMP/FEIS at F-42. Since four other sites are meeting canopy cover objectives, the entire key area was determined to be meeting standards. In truth, only 66 percent of the ecological site was meeting standards. This is not reflected in Table E-8, where BLM reports that 6,710 acres of the site are achieving standards. It is also not accurate then to say, as BLM does, that there are zero acres where livestock use is a causal factor in the failure to attain the

standards. PRMP/FEIS at E-28. For the 33 percent of lands on the granitic hills ecological sites failing objectives, BLM has not even looked to see if livestock are causing the problem.

Protest Issue: PP-AZ-Sonoran-12-06-84 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

In our comments on the Draft RMP, we pointed out the shortcomings of BLM Land Health Evaluations (LHE) to assess compatibility with the protective mandates of the monument proclamation. BLM responded to our comments on this issue in the Draft RMP in the following way: The land health standards, specifically Standard 1 and Standard 3, directly address and measure indicators associated with the biological and ecological objects identified for protection in the Monument's proclamation. These findings led to management recommendations for livestock grazing on the Monument and development of the alternatives in the DEIS. As described in Appendix E, section E.2.3, BLM chose the LHE as an appropriate tool in the compatibility because the LH standards are measurable and attainable goals for the desired condition of biological resources and physical components/characteristics of desert ecosystem found within the Monument. PRMP at 6-276.

We disagree. The significant difference between the Arizona Rangeland Health Standards and the proper evaluation of compatibility with protecting Monument

objects is highlighted by looking at Standards 1 and 3, identified as used in the compatibility analysis, which do not look at protection of the monument resources, but only at maintaining rangeland health. PRMP at Appendix E-13. In conducting an evaluation of the compatibility of grazing with protecting monument objects in the Cascade-Siskiyou National Monument, BLM contrasted the findings using rangeland health standards and using a test of compatibility with protection. See, Determination of Compatibility of Current Livestock Grazing Practices with Protecting the Objects of Biological Interest in the Cascade-Siskiyou National Monument, Table 1, p. 5 (available on-line at: http://www.blm.gov/or/resources/recreation/ csnm/csnm-grazing.php). An examination of the approach used in the Cascade-Siskiyou National Monument will demonstrate the contrast between rangeland health and a compatibility assessment to evaluate whether livestock grazing is compatible with the paramount purpose of protecting monument objects.

Protest Issue: PP-AZ-Sonoran-12-06-86 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

The rangeland health standards and land health evaluation that relies upon them to yield a compatibility determination are not consistent with the BLM's obligations to protect monument objects or the purposes acknowledged in the Proposed RMP and Appendix E.

Summary

Use Pattern Mapping - The Use Pattern Mapping conducted by the BLM to determine whether livestock grazing was a causal factor for non-achievement of land health standards was not

sufficiently supported by data.

Methods for Determining Attainment of Key Area Objectives – The BLM's methodology for determining whether key areas met land health standards was flawed.

Resource Condition Objectives as Moving Targets – The BLM changed objectives for ecological sites, making the criteria for meeting these objectives lower.

Actual Use – The BLM did not maintain records of actual use of grazing intensity, and therefore, do not have sufficient information to determine impacts pertaining to grazing intensity.

Maintaining an Inventory – The BLM ignored data that was provided and failed to maintain an adequate inventory of the lands within the LSFO in order to explain what the LHEs were for those allotments.

Omission of Geographic Areas – The BLM arbitrarily and capriciously excluded a significant portion of the SDNM from any analysis of livestock grazing impacts.

Harm to Monument Objects – The flaws in the BLM's LHEs and compatibility determinations have allowed harm to the specially-protected Monument objects, including vegetation and wildlife in violation of FLPMA and the Monument's Proclamation.

Responses

<u>Use Pattern Mapping</u> - The Use Pattern Mapping conducted by BLM to determine whether livestock grazing was a causal factor for non-achievement of land health standards was not sufficiently supported by data.

The BLM followed guidance for use-pattern mapping found in Technical Reference (TR)1734-3. The methodology used to collect utilization data on the SDNM allotments was the Landscape Appearance Method (referred to by the protester as "Ocular Estimate Method" and formerly the Modified Key Forage Plant Method; Utilization Studies and Residual Measurements, Interagency TR 1734-3, 1996).

A summary of the methodology is provided in Section F.6.2 of the PRMP/FEIS: "Mapping utilization patterns involves traversing the management unit or pasture to obtain a general concept of these patterns. Mapping proceeds as the pasture is traversed. Utilization classes (or zones) were used to determine use at each stop. When another use zone is observed, the approximate boundary of the zone is recorded on the map. The gathered data is assembled and plotted on maps. Data points having the same use levels are linked together to form polygons. Each use category (negligible to severe) is assigned a distinct color." (PRMP/FEIS, p. F-29).

The results of the Use Pattern Mapping are displayed in Map 5 of Appendix F. (PRMP/FEIS, p. F-64). The data set produced by field observers conducting the Use Pattern Mapping has been

available for public inspection at the Phoenix District Office throughout the planning process.

The data set produced by field observers is consistent with the digital dataset represented in Map 5 of Appendix F. In accordance with guidance provided in TR 1743-3, the BLM considered certain factors such as topography, rockiness, size of the area, location of salt, and distance from water when conducting Use Pattern Mapping, since all of these factors affect foraging habitats. (TR 1743-3, p. 23). The areas identified on the use pattern field map as "unsurveyed" were generally mountainous areas, with steep and rocky slopes, primarily in the Granitic Hills Ecological Site. These areas were not surveyed for livestock use with the landscape appearance method because those lands were deemed inaccessible to livestock grazing based on allotment observations of cattle use.

The BLM conducted Use Pattern Mapping in 2009. As stated in Section F.7.4 of the PRMP/FEIS, 2009 was an average year for forage production. Use Pattern Mapping was conducted across the entire Monument, with the exception of the southern portion of the Hazen Allotment (because no cattle had been turned out into that allotment recently). Furthermore, Use Pattern Mapping was conducted at the end of the growing/grazing season to measure use on that year's forage production, not historic use. (Section F.7.4)

The LHE ascertains the number of animals present on the allotments being evaluated based on the permittees' billed amount for each year, which is provided in Table F-4. Table F-5 compares the amount of permitted AUMs versus the average amount of billed AUMs actually used. This information enabled the BLM to link the evidence of use with the level of use that was permitted.

Methods for Determining Attainment of Key Area Objectives

The site was considered achieving the objective if the canopy cover or the composition vegetative attributes measured were within 80 percent of the attribute value. (PRMP/FEIS, p. F-34). This approach accommodates ecological site variability when making a determination if a site is meeting land health objectives: "Peer reviewers suggested that a range around the absolute value rather than the absolute value is more acceptable to judge achievement of the resource management objectives. The 80 percent threshold captures the variability that occurs within the Sonoran Desert Natural [sic] Monument for plant canopy cover and plant abundance." (PRMP/FEIS, pp. 6-238 and F-35).

The BLM determined that 80 percent was an appropriate threshold based on the professional judgment of BLM specialists. Specifically, the BLM judged that most of the variation in canopy cover and vegetation composition on Sonoran Desert ecological sites that had not been grazed by livestock for nearly 70 years, would lie within 80 percent or greater of the average value.

As explained in Section F.8 of the PRMP/FEIS, at the landscape level, the BLM "determined that more than 50 percent of the key areas and Pacific Biodiversity Institute (PBI) plots representing an ecological site had to be achieving all of the desired plant community (DPC) objectives for the ecological site within an allotment to be considered achieving Standard 3." This is referred to as a "preponderance of evidence approach." The BLM took this approach because a "statistical approach was not feasible, as the number of key areas and PBI plots on

each ecological site were not adequate to statistically analyze each ecological site." (PRMP/FEIS, pp. F-34 and F-35).

Resource Condition Objectives as Moving Targets – *BLM changed objectives for ecological sites, making the criteria for meeting these objectives lower.*

The protester raises concerns with the BLM's resource condition objectives. The protester's concerns regarding the criteria for meeting the ecological site objectives are addressed above. Numerous changes were made to the preliminary LHE document referred to by the protester. The 2011 draft LHE included in Appendix F of the DRMP/DEIS included changes from the 2008 preliminary draft LHE based on new information and in response to internal reviews (including the peer review) and was refocused to specifically address impacts to Monument objects.

The vegetation conditions for the Sandy Wash, Limy Fan, Limy Upland Deep, and Granitic Hills ecological sites on allotments north of Interstate 8 were compared against the average vegetation conditions existing on the same ecological sites that had not been grazed by livestock for nearly 70 years, or compared against potential vegetation described in ecological site descriptions. Average vegetation conditions on the ecological sites that had not been grazed by livestock for nearly 70 years, or potential vegetation described in ecological site descriptions, were used as the vegetation conditions the BLM would like to produce as the desired plant communities and were considered to be the habitat conditions that would satisfy the needs of biological objects identified in the Presidential Proclamation.

The desired plant community objectives for key areas and ecological sites do not vary by ecological site or allotment. These objectives are based on average values of total vegetative canopy cover, palatable browse composition, ratany-bursage shrub group composition, or perennial grass composition for the Sandy Wash, Limy Fan, Limy Upland Deep, and Granitic Hills ecological sites on the Barry M. Goldwater Range and Area A which were used as the basis for formulating desired plant community objectives for these same ecological sites on allotments north of Interstate 8. The vegetation attribute objectives for the Sandy Wash areas containing potential pigmy owl habitat were set higher to satisfy the habitat needs for pigmy owl (p. F-17).

The protester also raises an issue regarding what the BLM presents as saguaro cover in the Lower Vekol and Big Horn allotments. The data used by the BLM in Table F-17 (Vegetation Composition Data) that is listed as "percent allowed in the ecological site description" is in fact the percentage of composition that could be present ("allowed") on each site and is not an objective for cover. As noted on page F-22, these ecological site descriptions estimate the potential or capability of the site to produce different kinds and amounts of vegetation.

<u>Actual Use</u> – *BLM did not maintain records of actual use of grazing intensity, and therefore, does not have sufficient information to determine impacts pertaining to grazing intensity.*

The BLM acknowledged that actual use reports from grazing permittees were not required under their terms and conditions for permitted use. The ten-year average actual use was derived from billing statements and field observations by BLM range conservationists and was utilized during the planning process because it represents the best available actual use information. The information was sufficient to determine the impacts relating to grazing intensity. The BLM recognizes the limitations of available data sets and has accounted for those in its analysis and, as stated on page F-33 of Appendix F, expresses the need to collect additional years of utilization data.

<u>Maintaining an Inventory</u> – In completing the LHE, the BLM ignored available data and failed to maintain an adequate inventory of the lands within the LSFO.

The protester raises three issues relating to the BLM's maintenance and use of inventory data for the LHE.

First, the BLM utilized different studies during these time periods due to different field protocols related to different goals (e.g., the need for baseline inventory data, the need for monitoring data). The 1980 data was obtained to use for rangeland management planning, mapping of soils and vegetation, forage production inventory, and ecological sites identification. In 2004 and 2007, the BLM stratified the Monument by ecological sites and established key areas. In addition, field staff inadvertently used different transect locations in the 2007 and 2009 field studies, and therefore, the data was incompatible for comparison. As stated at page 6-252 of the FEIS, "Comparison of transect data collected over several years in the key areas by BLM was not appropriate, in this case, for assessments of long-term trend analysis. The 2009 data were the most recent data for the area. The 2004 and 1980 transects used different study designs, and therefore, were not comparable to 2009 transects and could not be used to measure trend in the LHE."

Second, the BLM did use components of all the data sets, including PBI. Information about the BLM's methodologies is included in Appendix F.6 of the PRMP/FEIS. As stated in Appendix F.6.1 and on page 6-247, the 1980 inventory was utilized as baseline vegetation data and monitoring data obtained in 2004 through 2009 gave indication to "very little change in vegetation conditions since the 1980 inventory. The BLM does not have information that livestock grazing as currently authorized is the causal factor in not meeting Standard 3, except where indicated in Appendix E and F and subsequently brought forward into the alternative." As noted on page F-26, the BLM utilized production data collected in 2008 and 2009 in this evaluation.

Third, as noted by the protester, the PRMP/FEIS states on page 6-251 that "Baseline information was collected through 2010." This statement is incorrect. The BLM completed data collection in 2009 and worked into 2010 to analyze and interpret that data; no new data was collected after 2009. This error and correction will be noted in the ROD.

<u>**Omission of Geographic Areas**</u> – *BLM arbitrarily and capriciously excluded a significant portion of the SDNM from any analysis of livestock grazing impacts.*

The protester alleges that the BLM did not comply with FLPMA because the BLM did not evaluate impacts of livestock grazing in areas around livestock waters. The protest point relates primarily to the BLM declining to use portions of the PBI study. As adequately stated in the

BLM's responses to protester's comment on the DRMP/DEIS (comment #100136-73, pp. 6-247 through 248), the methodology for key area selection is stated in Section F.6.2, and was conducted in accordance with BLM guidance TR-1734-4. In this response, the BLM notes that PBI plots in close proximity to livestock waters do not meet three of four criteria for key area selection, and that the areas are not representative of the overall landscape level conditions within the Monument. The BLM considered this analysis and, for these reasons described, could not use some of the PBI data north of Interstate 8 that used study plots in close proximity to water.

The protester also alleges that BLM did not comply with FLPMA because it only used data from 48 plots out of 320 measured by PBI in the LHE and thus, was unwilling to consider PBI's conclusions regarding impacts to livestock grazing. This comment was previously raised by the protester when commenting on the DRMP/DEIS. The BLM adequately considered the comment and provided an appropriate response in the PRMP/FEIS (pp. 6-253 and 254, and 257 through 259).

<u>**Harm to Monument Objects</u>** - *The flaws in BLM's land health evaluations and compatibility determinations have allowed harm to the specially-protected Monument objects, including vegetation and wildlife.*</u>

The protester alleges that the LHE was an insufficient measure of harm to monument objects since it was not designed to measure them. However, the LHEs and the Grazing Compatibility Analysis were thoroughly linked to the objects protected by the Monument in a number of places in the PRMP/FEIS. Table F.2 of Appendix F of the PRMP/FEIS describes the land health objectives by Monument object. As stated in this Section "[t]he Monument objects are defined at the landscape level, while biological indicators for identified at the site-specific level." Furthermore, Section E.1.8.2 of Appendix E describes the effects of livestock grazing on Monument objects. As part of the LHE process, DPC objectives were established for the biological objects of the Monument. The DPC objectives were used as an indicator of ecosystem function and land health. This was accomplished by identifying indicators for the biological objects, which are identified in Table E-2 of Appendix E. Protester also alleges that none of the methods used by the BLM were supported in the scientific literature or are common practice. There is no common practice or guidance regarding compatibility analyses. The Proclamation did not specify a method for determining compatibility, but left it to the discretion of the BLM. The BLM used the best tool available, the LHE process, to determine what areas were compatible with Monument objects. In the LHEs, Section E.1.7 states that comprehensive literature reviews were conducted and included sources provided by interested parties outside the BLM, that the BLM conducted a thorough review of pertinent scientific literature specific to livestock grazing in the Sonoran Desert, and that the review considered documents that had a close relationship to Monument objects.

The BLM complied with FLPMA, the Proclamation and other laws and regulations and the management actions in the PRMP/FEIS are consistent with the Proclamation by managing and protecting the monument objects and other resources of the SDNM. The Proclamation allows grazing north of Interstate 8 only to the extent that the BLM determines that grazing is compatible with the paramount purpose of protecting the objects identified in the Proclamation.

To determine compatibility, the BLM completed a compatibility determination for grazing. (PRMP/FEIS Appendix E). As stated on page E.37 of Appendix E, the grazing compatibility analysis concluded that "current livestock-grazing practices negatively affect 3.4% (8,498 acres) of the Monument north of I-8 and grazing is therefore incompatible with protection of monument objects in that area. This 8,498 acre figure includes the one 10-acre site determined to not be compatible with protecting archeological and historic monument objects." Based on the compatibility determination, the PRMP included planning level decisions for livestock grazing, making those areas where grazing was determined to be incompatible with the paramount purpose of protecting the objects identified in the Proclamation unavailable to grazing. The PRMP/FEIS also included grazing decisions identified as "implementation-level decisions" in the PRMP/FEIS – decisions regarding level of use and season of use. The implementation level decisions must be implemented consistent with the BLM regulations at 43 CFR Subpart 4160. In order to comply with these regulations, the BLM has determined not to address the implementation-level decisions for grazing previously identified in the PRMP/FEIS in the ROD. BLM expects to issue a decision for grazing implementation decisions before the next grazing year. The management direction and future implementation decisions for grazing will ensure continued protection of the monument objects.

Protest Issue: PP-AZ-Sonoran-12-04-34 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

We protest the failures to comply with NEPA, 42 U.S.C. § 4321 et seq. The PRMP/FEIS does not provide a "hard look" at the actions of the BLM for the SDNM or the LSFO.

Protest Issue: PP-AZ-Sonoran-12-04-38 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

We protest that the BLM did not provide a hard look at the impacts of the proposed action on the various natural and cultural resources in the planning area, even where public comments during the planning process revealed the agency's oversight. In the PRMP/FEIS, significant issues were not disclosed, conclusions about rangeland health are unsupported, and, to a large degree the current and site-specific conditions of the ecosystems and species on the SDNM and LSFO are unknown.

Proposed Action - The BLM failed to take a hard look at the impacts of the proposed action. BLM repeatedly claims that Alternative E will be similar to Alternative A (Current Management) for most actions, but it has failed to accurately or adequately assess the differences in shifting grazing use to a 65/35 percent split seasonally. Western Watersheds Project identified this problem in comments. Comment #100136-64. BLM claims it revised Section 4.9.8.3. to disclose the effects of Alternative E. PRMP/FEIS at 6-246. There is no section 4.9.8.3. See PRMP/FEIS at 4-141, 4-142. BLM did add a few sentences about the impacts of livestock grazing on visual resources. PRMP/FEIS at 4-141. But this does not respond to the substance of our comment: "Where BLM is proposing to adjust grazing authorizations under the preferred alternative, it has not explicitly admitted or analyzed the change in grazing this entails. By shifting the majority of grazing (65 percent of the [Animal Unit Month] AUM) to winter use, the BLM is actually increasing seasonal grazing use." This is a significant change from current management and has implications for wildlife, vegetation, recreation, air quality, etc., not just visual resources. Thus, the analysis of Alternative E is insufficient in each and every instance where the analysis points to Alternative A as a model.

Protest Issue: PP-AZ-Sonoran-12-04-40 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

[Proposed Action] When WWP raised the issue that BLM had not even adequately described current management in order to make a valid estimation of the effects of the proposed action (Comment #100136-64), BLM deflected this NEPA failing by claiming RMPs are broad in scope and do not "require exhaustive gathering and monitoring of baseline data." PRMP/FEIS at 6-245. This strikes at the heart of NEPA's requirement to "rigorously explore and objectively evaluate all reasonable alternatives" and to assure that federal agencies are fully aware of the present and future environmental impacts of their decisions. A NEPA document must provide the decision-maker with adequate information to fully assess the impacts of the action. Here, BLM brushes off comments that it doesn't even know what the current stocking rates are on the SDNM and that it hasn't predicted the effect of changing current management to a seasonallyemphasize regime by saying RMPs are broad in scope. PRMP/FEIS at 6-246. Maybe so, but the RMP for the SDNM entails a site-specific look at impacts to monument objects; the proposed action should describe the potential impact changing the management regime will have.

Protest Issue: PP-AZ-Sonoran-12-04-41 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

Wildlife, Including Special Status Animal Species - In response to comments regarding the agency's failure to appropriately analyze the proposed action's impacts on wildlife and special status species, the BLM "made revisions, where appropriate." PRMP/FEIS at 6-57. These revisions do not address the fundamental issue that, "BLM doesn't analyze the requirements for "space" or "water," [for bighorn sheep], just minor considerations of forage availability," or the failure to "analyze or disclose the effects of the permitted levels of livestock grazing on [the imperiled Sonoran desert tortoise.]" Comment 100136-80, Comment 100136-91. The revisions do not remedy the flaws of the original DRMP/DEIS and nothing in the proposed management plan addresses the

social intolerance of bighorn for livestock.

According to the PRMP/FEIS, Alternative E represents a combination of Alternatives A and C. In the LSFO, "Impacts from grazing on wildlife would be very similar to those described in Alternative C because AUMs would remain unchanged.... Ephemeral use and associated impacts would be similar to those described in Alternative A." PRMP/EIS at 4-250. In the SDNM, the impacts analysis describes impacts of livestock grazing on wildlife and special status species as moderate, and it discusses the proposed plan's similarity to Alternative A or Alternative C. PRMP/EIS at 4-252.

However, the PRMP/FEIS only describes impacts from domestic sheep and goat grazing (PRMP/FEIS at 4-252) to bighorn and not the impacts of cattle. It describes the prohibition on sheep and goat grazing within 9 miles of bighorn sheep habitat. PRMP/FEIS at 4-241. The BLM does not discuss how overlap between bighorn sheep and livestock will be managed on the SDNM or the LSFO. Rather, the BLM excuses itself for not analyzing livestock use at high elevation areas and the potential for bighorn/cattle interactions because it expects social interactions between livestock and bighorn "to be rare." PRMP/FEIS at 6-61. This is unsupported in the record. The BLM has been provided with evidence of livestock using high elevation areas, especially during drought periods. Morrison and Smith 2006 described significant impacts in mountain monitoring plots and recommended BLM study the effects of grazing in high elevation areas. BLM has apparently not studied this and simply assumed the contrary to be true. This potential impact of interaction should have been analyzed and disclosed. The BLM claims there are "no rangeland developments in the 'high country' to

interfere with bighorn movement," (PRMP/FEIS at 6-61), but it has not disclosed the livestock water sources that are proposed or exist in the SDNM or LSFO within bighorn habitat.

Moreover, the BLM does not discuss how migratory wildlife such as bighorn sheep will be assured sufficient forage along movement corridors. The impact of livestock on bighorn movement corridors being fragmented or eliminated (a major impact) was not evaluated. If there is social intolerance in the uplands, there will also be social intolerance as the bighorn try to move across valleys into adjacent mountain ranges.

The impacts assessment of the seasonal adjustment of permitted use does not make sense. The PRMP/FEIS says, "Requiring a seasonal adjustment in permitted use (approximately 65 percent during the winter-spring season [October 1st to April 30th] and approximately 35 percent during summer season [May 1st to September 30th]) would result in minor improvements to wildlife habitats by increasing available habitat for wildlife during the winter, spring and summer season." PRMP/FEIS at 4-241. In effect, this increases livestock use during the fall, winter, and spring and decreases it during the summer. It is not at all clear that this change "would result in minor improvements to wildlife habitats" or that it would increase "available habitat for wildlife during the winter, spring, and summer season." Instead, it would increase competition and overlap during those seasons when livestock use increased. Moreover, "available habitat" is not the issue. Habitat quality is the issue, and BLM has not identified the improvements adding more livestock to the landscape for 7 months of the year will diminish competition with special status species.

The BLM's analysis of impacts to wildlife on the Arnold Allotment as "negligible" because the Arnold allotment is only ephemerally-authorized is deeply flawed. PRMP/FEIS at 4-573. Ephemeral grazing occurs when sufficient forage becomes available. "An analysis of environmental impacts must at least assume that some ephemeral grazing would occur, and then at least briefly discuss what impacts would ensue. Cattle are not ghosts. They are a lot bigger and heavier than any native wildlife." See Western Watersheds Project v. BLM, AZ-LLAZCO1000-09-01. The Arnold allotment contains both bighorn sheep and Category I desert tortoise habitat. Appendix F, Map 3. The impacts analysis of the PRMP/FEIS is woefully insufficient for the Arnold allotment, part of the SDNM and the LSFO.

The analysis of impacts of the PRMP on wildlife is limited to an analysis of general forage availability. PRMP/FEIS at 4-573. The minor to moderate improvements the agency alleges under the proposed alternative are not based on a "hard look" at the impacts of changes in the seasonal distribution of Animal Unit Months (AUM), nor at the impacts of fences on wildlife movement, changes in predation, etc. We raised the issues of range developments in our comments (WWP Comments on DRMP/DEIS at 7, 33), and the lack of specific analysis of seasonally-intensive use under the proposed plan. WWP Comments on DRMP/DEIS at 19. BLM did not alter the analysis in response to these significant issues, and we protest on this basis.

Protest Issue: PP-AZ-Sonoran-12-04-43 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

[Special Status Species Management] Commenters raised numerous issues with the BLM's insufficient analysis and management of special status species. PRMP/FEIS at 6-63 to 6-66. BLM's response to comments regarding the pronghorn is inconsistent with the agency's policy. PRMP/FEIS at 6-66. BLM states that if the U.S. Fish and Wildlife Service (USFWS) determines to reintroduce pronghorn on the SDNM, the BLM would then comply, assist, and would manage the habitat accordingly. Ibid. This is inconsistent with the overarching guidance to initiate proactive measures and to recover ESA-listed species and the ecosystems on which they depend, as well as parts of the policy that identify BLM's obligations during land use planning. See § 6840.22.A.

We specifically noted BLM's duties under the ESA and identified the failure of the DRMP/DEIS to take a "hard look" at the impacts of livestock grazing on pronghorn. WWP Comments at 32. The BLM's failure to analyze the effects of management on the potential reintroduction of this species is a failure to discuss fairly and fully the impacts of the proposed action.

It is unclear why the BLM claims that the Gila monster (Heloderma suspectum) is not a management issue within the planning area. PRMP/FEIS at 6-66. BLM claims that management actions described in Chapter 2, Section 2.10.12 are designed to maintain their populations throughout the planning area. PRMP/FEIS at 6-66. That section of the PRMP/FEIS references Appendix J for a complete list of priority wildlife that were considered. PRMP/FEIS at 2-75. Appendix J does not list Gila monster.

A 2008 report on sensitive species and habitat loss in the Gila Bend-Sonoran Desert National Monument-Sierra Estrella area developed a Linkage Design Plan that included Gila monster. That report shows optimal habitat for the species within the SDNM and potential corridors for the species to move to optimal habitat in the Sierra Estrella Mountains. BLM did not discuss the habitat needs of Gila monster or consider the impacts of the proposed action on this special status species. This fulfills neither NEPA's mandate of a "hard look" or the BLM's obligations under its own policy. There is no evidence that BLM's management actions are designed to maintain this species population or ability to move throughout the planning area, contrary to agency claims. PRMP/FEIS at 6-66.

Protest Issue: PP-AZ-Sonoran-12-04-44 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

Livestock impacts to visual resources -Western Watersheds Project commented that the DEIS/DRMP lacks adequate analysis of grazing impacts to visual resources, and noted the inappropriateness of classifying the effects as minor. Comment 100136-27. BLM augmented the PRMP/FEIS in response, but did not discuss the substantive claims of the comments, which discussed the numerous visual impacts of livestock grazing operations. PRMP/FEIS at 6-86. BLM's response was limited to a brief discussion of range developments. Ibid. Neither the response nor the FEIS discusses the cow trails, vegetation removal, dead cows, erosion, cow pies, etc., that were raised in comments. See WWP comments on DRMP/DEIS at 26. These comments

were also regarding the effects of livestock on wildflower displays which are a popular tourist attraction on the Monument.

BLM erroneously claims that range developments tend to be localized and difficult to see from a long distance, and as such, impacts on the visual landscape are expected to be minor. PRMP/FEIS at 4-128. The BLM clearly has not conducted a sitespecific analysis or inventory. See Figure 5. BLM's response to our comments and the full and fair discussion of the visual impacts of livestock grazing were inadequate under NEPA, and we protest the PRMP/FEIS on this basis.

The BLM claims that on the SDNM, developments associated with livestock management would be required to meet Visual Resource Management (VRM) objectives. PRMP/FEIS at 4-130. The description of visual resource management for the action alternatives does not describe retroactive adjustments to existing livestock infrastructure, only design criteria going forward for future surface-disturbing activities. PRMP/FEIS at 2-51.

Figure 5. Range development on the Big Horn allotment, SDNM. This range development is one of several on the monument that is visible from a great distance. Impacts to visual resources are neither localized nor minor.

Protest Issue: PP-AZ-Sonoran-12-04-45 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

Air Quality - As we discussed in our comments, the LHE process and key area data are insufficient for indicating the level

of dust created by livestock, because none of this monitoring takes place at areas with the highest degree of livestock concentration and impacts. Comment 100136-85. BLM modified the PRMP/FEIS to include more information to describe the potential dust impacts that could result from the removal of vegetation cover and destruction of soil crusts by livestock. PRMP/FEIS at 6-31. In so doing, the BLM admitted that fugitive dust emissions would be "particularly true around water developments and areas where livestock concentrate." PRMP/FEIS at 4-17.14 The agency then states that the level of impact would depend on the type of soil disturbed, the amount of disturbance, and localized wind condition, and speculates, "Impacts would be minor." Ibid.

The BLM refers to Appendix H, Best Management Practices and Standard Operating Procedures, and guidelines for grazing administration of Appendix L for BLM's plan for soil resources and livestock grazing. PRMP/FEIS at 6-31 and 6-33. However, none of the Standard Operating Procedures specifically address soil health or the types of monitoring that will address soil health around livestock grazing concentration areas. While the guidelines are supposed to apply to all areas where grazing occurs (PRMP/FEIS at L-1), the reality is the monitoring that is conducted on grazing allotments (i.e., where conformance with the standards and guidelines is assessed) occurs at key areas. None of BLM's key areas are located in areas of livestock concentration, and most are in areas with grazing use classified as "slight" or "unsurveyed." See Maps 4 and 5 in Appendix F. In fact, the BLM admits that key areas are typically established approximately one mile from a water source to prevent arbitrarily skewing the data towards heavy impacts or towards fewer impacts. PRMP/FEIS at F-26.

Taken together, BLM's conclusion that impacts from livestock grazing to air quality would be minor is unfounded and speculative. The BLM does not know, and does not propose to know, the level of soil disturbance around livestock concentration areas within the SDNM or the LSFO. The agency's conclusion and impact analysis is therefore the very definition of arbitrary, and violates NEPA.

The BLM does not identify the acres of soils with potential for wind erosion by grazing type for the SDNM. PRMP/FEIS at 4-72. The agency has apparently not conducted an analysis of highly erodible soils compared to various grazing management regimes for soils of the SDNM. PRMP/FEIS at 4-18, 4-19. This is a failing under NEPA, which requires the agency to be thorough, and also demonstrates that the agency is simply guessing at the effects of livestock grazing on air quality within the monument.

Protest Issue: PP-AZ-Sonoran-12-04-46 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

Climate Change - Despite several comments pertaining to the need to evaluate the entire proposed plan in context of greenhouse gas emissions (GHGs) and in terms of the destruction of carbon sinks (Comment #100126-90) and the need to restore resilience to the lands of the SDNM (Comment #100123-2), the BLM's proposed plan does not account for the impacts of livestock grazing either as emitters of GHGs or for the reduced ability of the desert landscape as a carbon sink when vegetation is removed as forage, i.e., "carbon pools" that are extracted and turned into methane in livestock intestines. Despite recommendations from the U.S. Environmental Protection Agency to "identify options for minimizing and mitigating GHG emissions," (Comment #100140-5) and despite livestock being a major emitter of harmful GHGs, the analysis has not improved to incorporate these suggestions.

Rather, the BLM's revisions to Chapter 4 that incorporate a qualitative analysis for climate change, has found that overall impacts would be minimal. PRMP/FEIS at 6-36. The BLM's revised analysis incorrectly assumes/claims that grass fed cows result in fewer methane emissions. PRMP/FEIS at 4-34. There is no basis for this assumption, and in fact, it is the opposite of the best available science. See Capper 2012, attached as Exhibit B. BLM references no science in support of its assumption. The BLM also provides no evidence that livestock would "likely be moved to other lands to meet demand" or any support for the "likelihood," or an analysis of what permittees on the LSFO or SDNM would actually do were livestock to be removed. PRMP/FEIS at 4-34.

The revised analysis includes no discussion of the impacts to the carbon sequestration or storage of the lands themselves, nor any discussion regarding the effect of allowing livestock to utilize an unspecified percentage of the vegetation each year. PRMP/FEIS at 4-34.15. Though the BLM claims that vegetation and wildland fire management "could" also mitigate climate changes by creating healthy vegetation and soils that sequester greenhouse gases (PRMP/FEIS at 6-36), there is no evidence that BLM intends to monitor GHG sequestration or to manage for carbon sequestration. Because there is no quantitative monitoring of soils or soil properties, BLM's claims here are

speculative, and the response to comments is empty. We protest the failure to address the impacts of the proposed management on the public lands in context of climate change.

Protest Issue: PP-AZ-Sonoran-12-04-47 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

Xeroriparian areas - Western Watersheds Project raised the issue of BLM's having failed to consider the PBI studies on xeroriparian areas in the compatibility determination. Comment #100136-74. The studies were specifically designed to measure livestock grazing impacts on this monument object. BLM discounted the studies because "it was of limited use because it did not address the intensity. frequency, timing, class of livestock, season of use, ecological sites, precipitation patterns, and other variables BLM needs to address the effects of current livestock grazing practices." PRMP/FEIS at 6-256. This is a different standard than BLM applied to its own LHE, which also did not relate the findings from ecological sites to livestock intensity, frequency, timing, class of livestock, season of use, etc. The LHE and the subsequent compatibility determination assessed the influence of livestock grazing based on utilization and use pattern mapping. If BLM had intended to take a hard look, it could have simply subjected the xeroriparian plots to the same criteria, attributing the degradation Morrison and Smith encountered to livestock based on whether or not it was located in an area with greater than 40 percent use, following the same (flawed) methodology it used on every other data point in the LHE. The failure to do so was arbitrary and capricious, and does not constitute a "hard look" at relevant and important scientific evidence.

Protest Issue: PP-AZ-Sonoran-12-04-48 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

The PRMP/FEIS relies on poor quality, inaccurate, and inappropriate scientific analysis to justify pre-formed conclusions, and discards and dismisses high quality information that was readily available to it.

Protest Issue: PP-AZ-Sonoran-12-04-50 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

[Inaccurate Scientific Analysis] Wildlife and the LHE data analysis - Despite our many comments describing the insufficiencies of using the Land Health Evaluation (LHE) process to assess the protection of wildlife and special status animal species (Comments 100136-2 *et seq.*), the BLM has failed to substantively revise its analysis methods or conclusions.

In response to comments about the vegetation data that were collected on the desert tortoise monitoring plot on the Bighorn allotment, BLM claims, "Use of vegetation data collected by researchers on a plot is not applicable to determining if vegetation is meeting objectives." PRMP/FEIS at 6-60. On the contrary, federal regulations require the authorized officer to take appropriate action to ensure that the Fundamentals of Rangeland Health are being met. 43 C.F.R. § 4180.1. The Fundamentals of Rangeland Health require Standards and Guidelines to be developed in ways that are consistent with habitats being restored or maintained for federal threatened and endangered species, federal proposed or candidate threatened and endangered species, and other special status species. Ibid. The purpose of the LHE on the SDNM was to "gauge whether the Arizona Standards for Rangeland Health are being met on the Monument." PRMP/FEIS at E-13. The Guidelines for Grazing Administration say that the LHE review will use, "A variety of data, including monitoring records, assessments, and knowledge of the locale in making a significant progress determination." See PRMP/FEIS at L-3. The BLM's failure to consider all available data in making the LHE determination is only one shortcoming of the LHE; BLM seemed to simply ignore the data it didn't like.

Where we noted that the LHE was insufficient to measure the direct impacts of livestock grazing on desert tortoise, the BLM responded by claiming that it wasn't required to conduct an analysis of direct impacts because BLM "has no evidence that those impacts are significant or have an effect on desert tortoise populations." PRMP/FEIS at 6-61. This is a circular argument, and one that demonstrates that BLM did not take a hard look at all of the impacts of livestock grazing on monument objects. To determine the significance of an impact, the BLM must first conduct an impacts analysis.

BLM's claims that it has no evidence that direct impacts to tortoise are significant or effect tortoise populations is also problematic because the BLM did have a comprehensive literature review available to it that enumerated this threat: "Where livestock and desert tortoise habitat overlap, livestock can cause direct impacts to juvenile and adult tortoises by trampling and crushing individuals." See Hall et al 2005 at 8.10. The BLM also had the Candidate Species Listing Determination that indicated trampling, crushing of tortoise burrows, and other direct impacts are a threat to the species. 75 FR 78118. If the BLM, "has no evidence that [direct] impacts are significant or have an effect on desert tortoise populations" as it claims (PRMP/FEIS at 6-61) it can only be for lack of taking a hard look.

We commented about the lack of analysis of annual vegetation in terms of the food preferences and nutritional requirements of Sonoran desert tortoise. Comment 100136-83. The BLM justifies its failure to assess livestock impacts on annual vegetation by stating that the fluctuation of annual production and their ephemeral nature make them an inappropriate indicator for longterm monitoring. PRMP/FEIS at 6-61. We were noting that the LHE wasn't sufficient to assess the needs of this species, and BLM's response reinforces this point: the established long-term monitoring used in the LHE doesn't measure annual vegetation. PRMP/FEIS at 6-61. The PRMP does not establish any monitoring or provide any evidence that the BLM has, in fact, analyzed the impacts of livestock grazing on Sonoran desert tortoise in terms of annual forage availability, measured in terms of cover, composition, or availability. Under the proposed action, BLM intends to shift a greater percentage of livestock to the winter months. PRMP/FEIS at 2-120. This is because, a "Majority of desirable forage species [for livestock] are perennial browse species and winter/spring annuals." PRMP/FEIS at 2-131.

The BLM claims that it sets utilization targets that are intended to assure sufficient forage availability for all wildlife. PRMP/FEIS at 6-61. There are no utilization targets identified in the description of alternatives. PRMP/FEIS at 2-117 to 2-132.

The utilization guidelines of the SDNM LHE only pertain to perennial browse, forage, or grass species. PRMP/FEIS at F-25. Utilization estimates used in Use Pattern mapping were only provided for perennial species. PRMP/FEIS at F-33. The Special Ephemeral Rule does not limit the amount of ephemeral forage that can be used by livestock. PRMP/FEIS at 2-128. There are no utilization targets for annual vegetation, despite it being both desirable forage for livestock and a key component of tortoise diets, and despite Guidelines 3-5, which requires, "sufficient" vegetation to remain on site. PRMP/FEIS at F-74. Annual vegetation is not considered in assessments of rangeland health, and was not considered in the Use Pattern Mapping that ultimately was the basis for concluding livestock weren't incompatible with tortoise protection.

Where the PRMP/DEIS now describes, "Use pattern mapping" as having been conducted across the entire monument and that this mapping qualitatively assesses proportions of annual production that has been consumed or destroyed by animals. PRMP/FEIS at F-29. The new description of "Use Pattern Mapping" does not identify when it was conducted or link to any data sets that identify what "control" sites the BLM used to compare consumption/ destruction of annual vegetation. PRMP/FEIS at F-29. It also does not make any attempt to distinguish between livestock and wildlife. The new description of "Use Pattern Mapping" does not cite a methods reference; the previous version claimed to use the "landscape appearance method" found in Technical Reference 1734-3 (1996). DRMP/DEIS at 1106. (This is still the reference cited for "utilization" studies, which the BLM distinguishes from the Use Pattern Mapping.) The technical manual states that utilization data and residual

measurements are used for assessing "use." Here, we have demonstrated that BLM did not gather utilization data on annual species, and there is no evidence that BLM took residual measurements. Indeed, there is no evidence whatsoever that use pattern mapping was based on anything other than the utilization data gathered on just two allotments.

Even experts compensated by the BLM for their knowledge about and determinations about the veracity of the data used to support the LHE had strong doubts about the conclusions that "Use Pattern Data" were a sufficient basis for establishing livestock are causative factors in achievement or nonachievement of grazing standards. This is because the LHE doesn't summarize when the data were collected or what time period the grazing season spanned or what level of use corresponded to the level of residual vegetation. See Jeff Fehmi's Technical Review of the LHE at 4. Thus, as early as 2009, BLM was made aware of the insufficiencies of the Use Pattern Mapping data, but did not, apparently, seek to correct these inadequacies or gather more information.

So, even while admitting that the proposed management plan will purposefully shift grazing seasons in order to utilize winter/spring annuals, and even while knowing that these winter/spring annuals are a key component of desert tortoise diets, even after admitting that the LHEs don't assess the cover/composition or trend of winter/spring annuals, even without clearly identifying how the BLM created its use pattern maps and upon which criteria these maps were based, and even without establishing utilization limits on annual vegetation in the PRMP, the BLM is still asserting, "The LHE and the Utilization/Use Pattern Mapping provide a means to

determine where those targets have been met and sufficient forage is available for desert tortoise and other wildlife species." PRMP/FEIS at 6-61. It is simply not true, and we protest the BLM's failure to take a "hard look" at the impacts of forage competition between desert tortoise and livestock in the planning area.

Protest Issue: PP-AZ-Sonoran-12-04-51 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

[Inaccurate Scientific Analysis] Soils and the LHE assessment - Western Watersheds Project commented that BLM ignored multiple years of data when reaching conclusions about soil health on the SDNM. Comment 100136-19. BLM responded that Council on Environmental Quality (CEQ) regulations that require an EIS to "succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration. The description shall be no longer than necessary to understand the effects of alternatives. Data and analyses in a statement shall be commensurate with the importance of the impact, with less important material summarized, consolidated, or simply referenced." 40 C.F.R. § 1502.15; PRMP/FEIS at 6-74. A succinct description and a complete omission are different. Western Watersheds Project succinctly summarized the findings of Draft LHE in our comments, as evidenced by the bullet-point list BLM was responding to. PRMP/FEIS at 6-73. The BLM's failure to even mention the other data is a failing under NEPA.

The BLM claims that the reason it completely omitted consideration of earlier data sets is that the 2009 transects did not follow the same methodology as either the 2004 or 1980 transects. PRMP/FEIS at 6-75. The key areas were established to monitor vegetative and soil conditions beginning in 2004. PRMP/FEIS at F-26. The PRMP/FEIS describes the methods for monitoring vegetation and soil over time, based on a technical manual released in 1996. PRMP/FEIS at F-27. It is unclear why the BLM did not use these methods in 2004, as it now claims. PRMP/FEIS at 6-75. The response to comments should have elaborated upon the differences between the two monitoring events.

Moreover, BLM did use the 1981 Soil and Vegetation Inventory Method (SVIM) data from four allotments to compare with production data collected in 2008/2009. PRMP/FEIS at F-26. The BLM cannot simultaneously claim the previous monitoring data are both irrelevant and relevant. The fact that BLM didn't even succinctly mention the earlier data sets data that were provided to experts for their opinions about the extent to which all the data supported the BLM's conclusions - is suspect, and the conclusions based on a subset of the data are inadequate for ensuring that the agency took a hard look at all of the information it possessed.

BLM claims that it did not summarize overall cover data in the FEIS because vegetation canopy cover data were determined to be the most appropriate measures for future monitoring. BLM's response to this point also doesn't address the changes in cryptogamic crusts that the agency also ignored, but which are important aspects of soil health. Comment 100136-19. The Arizona Standards for Rangeland Health and Guidelines for Grazing Administration require the maintenance and promotion of "ground cover" and that "ground cover should maintain soil organisms and plants and animals to support the hydrological and nutrient cycles, and energy flow." PRMP/FEIS at L-1. If BLM chooses to ignore the data it does have about ground cover and cryptogams, it is not taking a hard look at the impacts of livestock grazing on the public lands affected by the proposed action.

The BLM's decision to use vegetation canopy cover and jettison overall cover data is also problematic because of the issues raised by one of BLM's hired experts. Mr. Jeff Fehmi indicated to BLM in 2009 that canopy cover is sensitive to small differences in the time at which sampling occurs, and that the term is ambiguous, at best. See Fehmi 2009 at 7. PRMP/FEIS at 6-75. BLM acknowledged no such nuance in its measurements, even though public comments repeatedly raised issues of low/high precipitation years when data were collected. BLM did not respond to this in the PRMP/FEIS by defining what it meant by "canopy cover" or standardizing monitoring events, and nor did it explain its choices in the response to comments. We protest that BLM did not take a "hard look" at the impacts of livestock grazing on cover, even where experts and the public encouraged them to do so in order to make the analysis more robust.

Protest Issue: PP-AZ-Sonoran-12-04-52 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

[Inaccurate Scientific Analysis] Vegetation communities and LHE data - Once again, the BLM incorrectly referenced the CEQ regulations about succinctness in order to justify its obfuscation of fact, omission of history, flawed and biased analysis, and failure to even summarize, consolidate or reference relevant data regarding resource conditions on the SDNM. PMRP/FEIS at 6-79. In the response to Western Watersheds Project's comments regarding the agency's failures to include all the aspects of rangeland health or to summarize, consolidate, or reference the range of data it did have, BLM simply argues that it collected data in greater detail than it presented. Ibid. This does not serve to meet the succinctness criteria, as the description in the DEIS should have been long enough to understand the effects of the alternatives.

Once again, the BLM claims that the 2004 and 1980 transects followed different study designs and therefore were not comparable to 2009 and could not be used to measure trends. PRMP/FEIS at 6-79. If this is true, why did the BLM provide all of the monitoring data to the experts it used to evaluate the conclusions of the LHE? And why did is shift methods in the first place? And why doesn't it explain this in more depth in the response to comments?

BLM claims to have collected and compiled only a certain list of vegetation data, as identified on PRMP/FEIS 6-79. It does not even reference the data it gathered in 2004. It is not clear why BLM omitted this data, which were available for many of the allotments.

BLM claims that the PBI study on ecological conditions was of limited use because it did not address the intensity, frequency, timing, class of livestock, season of use or other variables that BLM needs to address the effects of current livestock practices on objects of the Monument. PRMP/FEIS at 6-80. PBI's data were correlated with cow prints, cow dung, cow trails, horse prints, and horse dung in order to quantify grazing pressure. In response to comments, BLM states, "[O]ne year of [Pacific Biodiversity Institute] data, in itself, is not enough to support sound conclusions." PRMP/FEIS at 6-12.

However, BLM's LHE data did not address the intensity, frequency, timing, class of livestock, season of use or other variables either. BLM's determination of causal factors for non-achievement of standards was tied to a single ocular monitoring episode for most of the lands of the monument. PRMP/FEIS at E-16. BLM had a single year of quantitative utilization data for just two allotments. PRMP/FEIS at F-29. BLM's actual use data were based on grazing billing statements, not site visits or headcounts of livestock. PRMP/FEIS at F-31. The PRMP/FEIS discloses the total perennial and ephemeral AUM on the entire SDNM. PRMP/FEIS at F-30.

BLM's single episode utilization monitoring does not address the overall intensity, frequency, timing, class of livestock, or season of use, especially since most of the allotments never had formal utilization studies conducted. BLM rejected the PBI data sets on that same bases we argued that the agency should reject its own data sets because they are insufficient to demonstrate that grazing isn't harming monument objects. See WWP Comments on DRMP/DEIS at 2. Thus, the BLM's "full and fair" discussion of grazing impacts, and the reasons it neglected to include relevant scientific data, are both inadequate under the requirements of NEPA.

The BLM intimates that the PBI data only provide evidence of historical impacts of livestock grazing, and that the agency needed to conduct site-specific assessments and monitoring of current livestock grazing practices on Monument objects. PRMP/FEIS at 6-13. As stated above and in comments, BLM's data about current livestock grazing practices aren't any better or more substantial, and are certainly not the high quality data or scientific analyses required by NEPA.

BLM also claimed that some of PBI's plots were too close to livestock waters to be representative of overall landscape-level conditions within the Monument. PRMP/FEIS at 6-80. Overall, landscapelevel conditions are not the bar that an authorized use must pass. As we noted in our comments (see WWP Comments on DRMP/DEIS at 23), BLM was supposed to be analyzing harm to Monument objects, not a gradient of harm to Monument objects. BLM knows that livestock grazing has a profound impact on Monument objects and causes a direct loss of vegetation and soil disturbance surrounding rangeland developments. PRMP/FEIS at 4-106. It even describes these impacts to vegetation within ¹/₄ mile of livestock waters as "major." PRMP/FEIS at 4-102. BLM intentionally doesn't measure these impacts, but has designed its monitoring system to measure only diffused impacts. PRMP/FEIS at F-26.

Even where key areas do not meet objectives, half of the key areas on any given ecological site need to fail objectives for the ecological site to be failing standards. If the overall ecological site isn't failing to meet the standards, BLM never looks to see if livestock are causing individual key areas to fail to meet objectives. Since Monument objects are not evenly distributed over ecological sites, the BLM is clearly overlooking harms to monument objects at key areas. This is insufficient under NEPA.

Hence, as Western Watersheds Project has stated numerous times, using the LHE and the methods of BLM for the SDNM, which are designed to give general and average estimates of impacts, is not the same as ensuring against harm to Monument objects at specific areas. The basis of the PRMP/FEIS is flawed, and the discussion and full and fair analysis required under NEPA is therefore flawed.

Protest Issue: PP-AZ-Sonoran-12-04-53 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

[Inaccurate Scientific Analysis] Livestock impacts - BLM claims it has no evidence to support the premise that eliminating livestock grazing would reduce non-native species, thereby reducing fire risk. PRMP/FEIS at 6-83. BLM has been provided with evidence that the presence of livestock increases non-native species. See WWP comments at 40-41 and the multiple scientific reports provided to the agency electronically as exhibits. PBI's Phase 4 report provided to BLM reported statistically-significant evidence that exotic grass cover increased near water sources (areas of heavy livestock use), across grazing allotments, evidence of livestock (dung, hoof prints, etc.), and an inverse relationship to the occurrence of native grass. Thus, BLM's failure to make the logical and inverse connection based on this evidence from the SDNM and desert in general is problematic. Instead, the agency cites to a USDA Forest Service General Technical Report and claims that it shows livestock grazing can shift grassland fuel models from high fire-spread models to a low intensity and low spread rate. PRMP/FEIS at 6-83. The referenced report says no such thing. See USDA Forest Service General Technical Report RMRS-GTR-153, 2005. Hence, BLM's analysis

references irrelevant science and ignores relevant science. This is insufficient under NEPA.

Similarly, while the BLM did use some of the raw data from the PBI studies, it did not analyze or disclose relevant findings of those reports. Comment #10036-39. The Compatibility Analysis used PBI data in development of a baseline inventory for the SDNM. PRMP/FEIS at E-15. The BLM used some of these data in the LHE. PRMP/FEIS at F-29. However, BLM did not analyze or discuss the key findings of the PBI research as they pertain to livestock grazing anywhere in the PRMP/FEIS. despite the fact that reports were provided to BLM explicitly for the purposes of evaluating livestock grazing impacts on vegetation communities of the SDNM. Key conclusions of those reports were:

• Difficulty identifying species due to grazing having reduced grasses to short stubble (Morrison and Snetsinger 2003 at 10, 36; Morrison, Smith, and Snetsinger 2003 at 8.

• Intensive grazing had affected the structure of the grassland community, resulting in large and small patches of bare ground. Morrison and Snetsinger at 36.

• In the mesquite bosque community, sampled areas were extensively modified and heavily grazed. Id. at 40.

• Many of the mesquite bosques were altered by water developments for livestock operations. Id. at 37.

• Aerial imagery of the SDNM and adjacent lands that showed significant ongoing and progressive changes in the vegetation communities over several decades due to intensive grazing and hydrological alteration. Morrison, et al. 2003 at 81, 82.

• Vegetation composition and structure in areas in close proximity to

livestock waters was highly altered, as were soil structures. Id. at 97.

• The influence of livestock in the creosote-bursage desert scrub community (one of the major ecological zones on the SDNM) was widespread.

• Off-road vehicle stresses on the SDNM were not as statistically significant as the impacts of livestock grazing, and that off-road vehicle use during the field season was much more localized that stresses related to livestock use. Id. at 116.

• Studies confirmed that the low elevation areas of the SDNM had low grass cover. This was in contrast to the high abundance of native grasses on low elevation areas of the East Tactical Area of the Barry Goldwater Air Force Range, immediately adjacent and highly similar to the SDNM. Grazing had been excluded from the "East Tac" for several decades. Snetsinger and Morrison 2004 at 37.

• The study also revealed areas with disappearing native grass communities and noted that this receding natural community occurred in the vicinity of intense grazing pressure. Ibid.

• A study designed specifically to study vegetation impacts of livestock grazing in the xeroriparian areas of various grazing allotments showed statistically significant relationships between native grass species composition, density, and cover and grazing allotment, as well as the native grass composition and the amount of exotic grass cover. Smith and Morrison 2006 at 5.

• The researchers found statistically significant relationships between exotic grass cover and distance from a water source, total grass cover and grazing allotment, exotic grass cover and grazing allotment, evidence of livestock and distance from a water source, evidence of livestock and allotment, and native grass cover and the amount of livestock sign. Id. at 5.

• There is a negative correlation between native grass cover and amount of grazing activity. Id. at 5.

• The amount of native perennial grasses measured within the 56 sample plots was extremely low, such that the researchers we were not able to conduct adequate statistical analyses on this category of grass. Perennial native grass cover within the northern part of the SDNM was less than previously found in the same natural community types in the nearby Barry M. Goldwater Range.... Id. at 6.

• The Bighorn allotment on the SDNM had far less native grass cover, diversity, and density that the other three allotments north of the interstate, and the analysis indicated that higher levels of livestock use was occurring on this allotment relative to the other allotments. This supported the inference that native grass cover and density were being reduced due to this activity. Id. at 62.

• The report included observations of the numerous cattle carcasses encountered on the Bighorn allotment, and noted PBI's suspicion that cattle mortality was due to drought and absence of forage. Id. at 62.

• The report concluded with an acknowledgement that the most significant finding in the study was that, on the parts of the SDNM north of interstate 8, the abundance of exotic grasses is very high and abundance of native grasses is very low. This is not characteristic of Sonoran Desert xeroriparian areas at large, and earlier studies indicated that ungrazed areas have higher abundance of native grass species. Id. at 64.

• In sum, PBI observed a high degree of livestock impacts within 1 km of a water development, including many denuded and bare patches of soil and an increase in exotic species canopy. The impacts are reduced to moderate intensity 3-4 km from water sources and then taper off as the distance increases.

• In 2005 and 2006, there was evidence of grazing impacts even at the very tops of the highest mountains, a departure from earlier observations about livestock being limited to lowlands within the monument. Morrison and Smith 2006 at 43.

See Comments #100161-1, 4, 5, 6, et. seq. In the PRMP/FEIS, BLM never discusses these conclusions or the findings of the studies themselves, never analyzes whether BLM's own LHE disputes these conclusions, never suggests that it has better statistically-validated science to demonstrate contrary findings, and, in fact, neither the LHE or the Compatibility Determination, or the FEIS even mention the reports, despite claims to the contrary. PRMP/FEIS at 6-12. This contrasts with BLM's Summary of the literature review conducted in the same period, which highlights key findings. PRMP/FEIS at E-8. BLM's response to comments that CEQ regulations require an EIS to be succinct and that materials be summarized is not a sufficient explanation for the agency's wholesale neglect of studies the BLM itself contracted, oversaw, and edited. PRMP/FEIS at 6-12. This also fails NEPA's requirement to incorporate by reference. 40 C.F.R. § 1502.21. The PBI studies were not even referenced or summarized. 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. The failure to take a hard look at the PBI findings in the Compatibility Determination or the PRMP/FEIS fails NEPA. **Protest Issue:** PP-AZ-Sonoran-12-04-54 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

The PRMP/FEIS does not include important information that would inform the public and the decision-makers about the impacts of the proposed action and the details of the underlying analysis.

Protest Issue: PP-AZ-Sonoran-12-04-57 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

[Exclusion of Information] Livestock Grazing - Western Watersheds Project commented that BLM didn't have enough information about livestock grazing in the LSFO to make determinations about the impacts of livestock grazing, and therefore wasn't able to adequately analyze or disclose the effects of the proposed action. Comment 100136-88. BLM responded that land use planning decisions are broad in scope and do not require exhaustive gathering and monitoring of baseline data. PRMP/FEIS at 6-123. However, BLM did not respond to comments about whether the agency has conducted any monitoring of livestock grazing impacts in the LSFO. Because the BLM did not collect the needed data to take a hard look at the current environment, it could not logically make a determination about the effects of livestock grazing on the environment.

BLM claims, "Periodic or year-round grazing are implementation-level decisions not normally made during resource management planning." PRMP/FEIS at 6-128. According to the grazing regulations, "Land use plans shall established allowable resource uses (either singly or in combination), related levels of production or use to be maintained, areas or use, and resource condition goals and objectives to be maintained. The plans also set forth program constraints and general management practices needed to achieve management objectives. Livestock grazing activities and management actions approved by the authorized officer shall be in conformance with the land use plan." § 4100.0-8. Ephemeral/Perennial grazing authorizations are exactly the types of decisions made during resource management planning, contrary to BLM's claims. See 43 U.S.C. § 1732(a); § 1752(c)(1). BLM's claim that decisions regarding overarching use levels are site-specific decisions is contrary to law and policy, and its excuse for not thoroughly evaluating appropriate grazing authorizations in this PRMP/FEIS is inadequate.

Protest Issue: PP-AZ-Sonoran-12-04-58 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

[Exclusion of Information] Saguaro -Similarly, BLM excused itself from any analysis of harms to saguaro cacti within the broader LSFO planning area by stating that vegetation analyses are conducted as part of the LHEs, which are allotment specific implementation actions. PRMP/FEIS at 6-130. However, 44 percent of the lands in the planning area are in the palo verde-mixed cacti vegetative community, which consists of extensive stands of saguaro cacti interspersed with other native cacti, shrubs, and trees. PRMP/FEIS at 3-24. The PRMP/FEIS does not contain information about whether the RHEs have been done on the LSFO allotments. PRMP/FEIS at 6-124.

Saguaros are important to lesser long-nosed bats (PRMP/FEIS at 3-56), a federally-listed species, and many other native wildlife species. Livestock adversely impact saguaro recruitment. See Hall, et al. 2005. By failing to take a hard look at the impacts of grazing on saguaros within the broader LSFO, and by failing to even provide information about when any "look" might be taken (i.e., the RHE process), neither the public nor the decision-maker can be assured that BLM knows the impacts of grazing on this keystone species of 44 percent of the lands in the project area.

BLM excused itself for its failure to adequately analyze the impacts of livestock grazing on saguaros within the SDNM by saving that the agency looked at "multiple indicators" affecting saguaro recruitment. PRMP/FEIS at 6-249. BLM does not elaborate as to what indicators it considered, and thus failed to incorporate by reference what it was relying upon. The BLM's response does not address nurse plants for saguaros or sites for recruitment, and doesn't refute the many, many references and studies that livestock grazing has an adverse impact on saguaro recruitment. See Hall et al 2006 for a summary of those studies. Instead, BLM attributes the differences in saguaro density on grazed and ungrazed parts of the monument "potentially" to precipitation patterns and ecological sites. PRMP/FEIS at F-24. BLM failed to take a hard look at whether the differences were "potentially" due to livestock use.

Protest Issue: PP-AZ-Sonoran-12-04-59 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

[Exclusion of Information] Socio-economic impacts - As noted in public comments, the agency did not provide relevant information about the socio-economic impacts of the proposed alternatives. Comment 100120-4, Comment 100136-94. Specifically, the BLM did not provide an analysis of the economic cost/benefit of maintaining livestock grazing operations in the SDNM or LSFO. Instead, the BLM included retroactive speculation about the impacts of livestock cessation on allotments south of Interstate 8, which were closed by Presidential Proclamation. PRMP/FEIS at 4-471. The BLM also added economic information about how much the permittees pay to graze on public lands versus how much they would pay to graze livestock on private lands. See, e.g. PRMP/FEIS at 4-492. No information was added to analyze how much tourism, hunting, wildlife watching or other environmental values might respond economically under the various grazing alternatives. Thus, where the BLM has provided good information about the public heavily subsidizing livestock grazing by allowing the agency to undervalue the resources, it was not the analysis the public requested nor the one required by NEPA.

Protest Issue: PP-AZ-Sonoran-12-04-60 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

[Exclusion of Information] Inclusion/Exclusion of relevant data - The BLM claims multiple times that revisions between a 2008 draft LHE and the 2011 draft LHE were due to baseline information additions between 2009 and 2010. For example, PRMP/FEIS at 6-240. These changes were "based on new information and was focused specifically to address impacts to Monument objects." Ibid. Unfortunately, the BLM never, in responses to comments or in the PRMP/FEIS, identifies what that new information was or how it differed substantially from the earlier data sets.

Western Watersheds Project had commented that the failure to include all the data from the 2009 draft LHE in the 2011 draft LHE, and the subsequent shift in agency conclusions, reflected agenda-based analyses. See, for examples, Comments #100136-51, #10036-53, etc. Hence, BLM's excuse that it added new information and therefore came to new conclusions should have been substantiated with the actual evidence of the new information, or, at the very least, some description of what the new information was. It was not. This also fails NEPA's requirement to incorporate by reference. 40 C.F.R. § 1502.21.

Without evidence of what new information was added to the record between the 2009 draft LHE and the 2011 draft LHE that would have influenced the determinations to affect the outcome in such significantly different ways (such as finding allotments suddenly in compliance with LHE objectives), the Decision, Compatibility Determination, and LHE are arbitrary and capricious.

Protest Issue: PP-AZ-Sonoran-12-04-61 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

[Exclusion of Information] Use Pattern Mapping - Western Watersheds Project commented that the underlying basis for ascribing livestock causality to failure to meet standards on the SDNM was unclear in the DRMP/DEIS. Comment #100136-22. BLM responded by revising the LHE to include a description of the methodology used to collect utilization data in Section F.6. PRMP/FEIS at 6-244. However, the revised section differs in its explanation of methods from the explanation provided to Western Watersheds Project upon special request. See Exhibit A and PRMP/FEIS at F-29. "The LHE explains that mapping utilization patterns involves traversing a management unit or pasture to obtain a general concept of these patterns. Mapping proceeds as the pasture is traversed. Utilization classes were used to determine use at each stop. When another zone is observed, the approximate boundary of the zone it recorded on the map." PRMP/FEIS at F-29.

Western Watersheds Project was provided a slightly different explanation: "In developing the map, every road and twotrack on the Monument was traversed by vehicle. The observers stopped at every onehalf to one mile interval, depending on the change in terrain and/or ecological site." This is very different from traversing every management unit or pasture, and indeed, the Use Pattern Data map shows huge portions of the Monument were unsurveyed. See Exhibit A. These areas were later inexplicable reclassified as having slight to negligible use in the Map F-5.

The PRMP/FEIS also doesn't admit that Use Pattern Mapping was conducted a single time, in 2009. This is important information for the public and the decision-maker to know: BLM is correlating a snapshot of livestock use on key perennial species with overall land health conditions that may take years to develop and change (such as composition and cover). BLM has not adequately demonstrated that livestock use of less than 40 percent on a handful of key species..., along roadways, once, is sufficient or scientific evidence on which to base the proposed action and the compatibility determination.

Summary

- I. No Hard Look at Impacts
 - a. Wildlife (12-04-41)

- The PRMP/FEIS only describes the impacts from domestic sheep and goat grazing to bighorn sheep and not the impacts of cattle... The BLM does not discuss how overlap between bighorn sheep and livestock will be managed on the SDNM or the LSFO... The (BLM) has not disclosed the livestock water sources that are proposed or exist in the SDNM or LSFO within bighorn habitat.

-The BLM does not discuss how migratory wildlife will be assured sufficient forage among movement corridors.

-The analysis of impacts of the PRMP/FEIS on wildlife is limited to an analysis of general forage availability.

b. Special Status Species (12-04-43)

-The BLM failed to analyze the effects of management on the potential reintroduction of pronghorn antelope and did not discuss the habitat needs of the Gila monster or consider the impacts of the proposed action on the species.

c. Livestock Impacts on VRM (12-04-44)

The PRMP/FEIS lacks adequate analysis of grazing impacts on visual resources.

d. Air Quality (12-04-45)

The PRMP/FEIS does not adequately analyze the impacts to air quality from livestock grazing within the planning areas.

e. Climate Change (12-04-46)

The PRMP/FEIS does not account for the impacts of livestock grazing either as emitters of Greenhouse Gas (GHGs) or for the reduced ability of the desert landscape as a carbon sink when vegetation is removed as forage.

f. Xeroriparian Areas (12-04-47)

The BLM failed to consider the PBI studies on xeroriparian areas in the compatibility determination.

- II. Inaccurate Scientific Analysis (beginning 12-04-48)
 - a. Wildlife (12-04-50)

The BLM failed to revise the analysis methods or conclusions of its insufficient land health evaluation process to adequately assess the impacts of livestock grazing on wildlife and special status animal species.

b. Soils (12-04-51)

The BLM ignored multiple years of data when reaching conclusions about soil health on the SDNM.

c. Vegetation Communities (12-04-52)

The BLM failed to summarize, consolidate, or reference the range of data the agency possessed regarding resource conditions on the SDNM.

d. Livestock Impacts (12-04-53)

The BLM ignored evidence that would support the premise that eliminating livestock grazing would reduce non-native species and fire, and failed to reference or summarize PBI studies and data relating to the impacts of livestock grazing.

e. Peer Review (12-04-53)

The BLM did not revise land health evaluation methods as a result of peer review.

- III. Exclusion of Information (beginning 12-04-54)
 - a. Livestock Grazing (12-0 4-57)

The BLM did not collect monitoring data necessary to determine the effects of livestock grazing on the environment.

b. Saguaro (12-04-58)

-The BLM failed to analyze impacts to saguaro cacti within the LSFO planning area as a result of livestock grazing.

-The PRMP/FEIS does not provide the multiple indicators the BLM considered with regards to how livestock grazing affects saguaro recruitment in the SDNM.

c. Socioeconomics (12-04-59)

The BLM failed to provide relevant information about the socio-economic impacts of the proposed alternatives.

d. Land Health Evaluations (12-04-60)

The BLM failed to describe new information and actual evidence that supported the revisions between a 2008 draft LHE and a 2011 draft LHE.

e. Use Pattern Mapping (12-04-61)

The BLM's single year of Use Pattern Mapping was insufficient scientific evidence on which to base the proposed action and the compatibility determination.

Response

I. Grazing – NEPA – No Hard Look

a. No Hard Look - Wildlife - Domestic Sheep/Goats, not cattle (WWP 12-04-41)

The PRMP/FEIS only describes the impacts from domestic sheep and goat grazing to bighorn sheep and not the impacts of cattle... The BLM does not discuss how overlap between bighorn sheep and livestock will be managed on the SDNM or the LSFO... (BLM) has not disclosed the livestock water sources that are proposed or exist in the SDNM or LSFO within bighorn habitat.

Response:

The BLM acknowledges and discloses that there is little information in scientific literature on the impacts of livestock grazing on wildlife and special status species in the Sonoran Desert ecosystem (Section 4.14.3.2, page 4-229, citing *Hall et al. 2005* and Section E.1.7.6, p. E-13). However, using the best information available, impacts of livestock grazing on Wildlife and Special Status Species (SSS), including bighorn sheep, are adequately discussed (see Sections 4.14.3, 4.14.4, 4.14.5, 4.14.6, and 4.17.7). The BLM addresses individual species grazing (i.e., sheep, goat, cattle) where their impacts differ from impacts of other livestock and considers livestock together where impacts do not differ. Therefore, the effects of cattle grazing should be assumed where "livestock grazing" is discussed unless otherwise noted.

The BLM does not specifically analyze livestock use and the potential for bighorn sheep/cattle interactions at high elevation areas, and previously addressed this at PRMP/FEIS, page 6-61: "Livestock use of the 'high country' is light to negligible because of the steep, rugged and rocky terrain. In addition, most of the 'high country' is a great distance from available water, a severe limitation to livestock use. For these reasons, impacts of social intolerance were not analyzed in the EIS because social interactions are expected to be rare." Appendix E and F also address bighorn sheep habitat and SSS habitat which informed.

On the SDNM, the Granitic Hills and Limy Upland Ecological Sites provide the predominant habitat for bighorn sheep. Based on slope, terrain, and other limiting factors, livestock do not utilize the majority of the Granitic Hills Ecological site, particularly during the warmer months. See Appendix F, p. 24. For this reason, the BLM did not provide a map of livestock waters in relation to bighorn sheep habitat. However, in Appendix F, the LHE for the SDNM, Map F-3 shows the location of bighorn sheep habitat in the Monument and Map F-4 shows the location of livestock waters.

Proposed water developments are considered implementation actions and are outside the scope of an RMP. For that reason, the location of proposed livestock water sources is also considered outside the scope of a land use planning effort. Site-specific NEPA analysis will be conducted when the plan is implemented and such projects are proposed.

No Hard Look - Wildlife - Migratory wildlife and forage among movement corridors (WWP 12-04-41)

The BLM does not discuss how migratory wildlife (such as bighorn sheep) will be assured sufficient forage among movement corridors

Response:

The BLM considered this issue when it was raised during the public comment period on the draft and provided a sufficient response to the protesters regarding the amount of forage in wildlife movement corridors at page 6-71 of the PRMP/FEIS: "[Wildlife movement corridor]. WMCs were created to allow BLM flexibility to work with partners to allow ingress and egress of species as related to human occupation and development. The WMCs are a starting point for BLM to cooperate with private, state, and other Federal agencies to facilitate movement of wildlife in a relatively safe manner. The BLM has no mechanism for designating WMCs, as there is no policy for allocation or designation. However, as part of setting the desired future condition for the wildlife program within BLM, the RMP has defined the goals, objectives, and management actions for WMCs in Chapter 2, Sections 2.10.12 (see Goal 12 and Objective 12.1 in Table 2-18 and associated management actions). Implementation of the RMP would require that activities authorized in WMCs must be in conformance with the goals and objectives of the RMP. After reviewing the comments (received on the Draft), the BLM has revised management actions to eliminate any potential conflicts between management actions of other programs on the wildlife corridor management actions."

No Hard Look – Wildlife

The analysis of impacts of the PRMP on wildlife is limited to an analysis of general forage availability.

Response:

During the land use planning process, the BLM properly focused the analysis on the lands made available for grazing and the associated forage availability for those lands, as per the direction in 43 CFR § 4130.2(a) and the BLM Land Use Planning Handbook H-1601-1, Appendix C, p. 14. Impacts due to changes in perennial or ephemeral designations, reductions in AUMs, or season of use adjustments would be considered and analyzed during the permit renewal/rangeland health evaluation process under site-specific NEPA review. (PRMP/FEIS Section 4.8.7.2).

b. No Hard Look - Special Status Species (12-04-43)

BLM failed to analyze the effects of management on the potential reintroduction of pronghorn antelope. BLM did not discuss the habitat needs of the Gila monster or consider the impacts of the proposed action on the species.

Response:

The BLM is not required to "initiate proactive measures" to recover ESA-listed species and the ecosystems on which they depend, as asserted by protesters. The BLM does implement conservation measures/actions for special status species, consistent with Manual 6840 and the BLM Land Use Planning Handbook. There is no requirement that the BLM unilaterally introduce or re-introduce threatened or endangered species onto public lands. The response to comments in the PRMP/FEIS properly states that "if the USFWS proposes reintroduction to the BLM then the BLM would comply, assist, and would manage the habitat accordingly." Because release of Sonoran pronghorn is under the jurisdiction of the FWS, and because there is no evidence when, where, and if such a release might occur, it was reasonable for the impacts analysis in the PRMP/FEIS to exclude analysis of the impacts of livestock grazing on pronghorn in the SDNM.

Gila Monsters are known to occur within the planning area, but are excluded from the alternatives and impacts analysis sections of the document due to the lack of Federal status either as threatened, endangered, candidate or BLM-sensitive species. While Gila monsters are not described by name, the management actions in Section 2.10.12 of the PRMP/FEIS are designed to be generally protective of all species in the planning area. As stated in this section, "[t]he general assumption is that if the habitat requirements for priority species are met, the habitat for most other wildlife species also is met." Therefore, even though the BLM is not required to protect the species, the management actions listed in Chapter 2 are sufficient to protect the Gila monster as well as other wildlife species.

c. No hard look – Livestock Impacts to VRM

The RMP lacks adequate analysis of grazing impacts on visual resources.

Response:

When preparing an EIS, CEQ's NEPA regulations direct that "impacts shall be discussed in proportion to their significance. There shall be only brief discussion of other than significant issues." (40 CFR § 1502.2). The impact of livestock grazing on visual resources was not identified by the BLM as an issue of potential significance. The PRMP/FEIS acknowledges that livestock grazing creates contrast with the landscape and could reduce scenic quality primarily through the removal of vegetation, soil compaction, and the installation of range developments. However, since these impacts are localized and, generally, are difficult to see from a distance, the BLM determined that impacts on the visual landscape from livestock grazing are minor. Please see Section 4.9 of the PRMP/FEIS.

The BLM considered comments submitted by the public with regards to the impacts on visual resources from livestock grazing (PRMP/FEIS, p. 6-86) and conducted a visual resource inventory for the planning area, which is summarized in Section 3.2.8 of the PRMP/FEIS. During the land use planning process, the BLM does not conduct "site-specific" analyses of impacts from actions that implement the land use plan. The BLM will conduct site-specific analysis when conducting NEPA analysis for implementation actions (e.g., permit renewals) and will utilize resource design techniques and best management practices to mitigate impacts on visual resources when necessary.

d. No Hard Look - Air Quality

The PRMP/FEIS does not adequately analyze the impacts to air quality from livestock grazing within the planning areas.

Response:

The BLM gathered the necessary data to conduct analysis of the impacts to air quality from the livestock grazing decisions in the PRMP/FEIS. The BLM's analysis is thorough and adequate to enable the decision-maker to make an informed decision. Specifically, Section 4.2 of the PRMP/FEIS discloses the potential impacts of livestock grazing on air quality, including negligible short-term, localized dust emissions from livestock movement and from surface disturbance related to rangeland improvements. The analysis states that the level of soil disturbance would be higher around livestock concentration areas: "Fugitive dust emissions would occur, to the extent that livestock grazing causes the permanent removal of vegetation through trampling and disturbance of sensitive surface cover provided by desert pavement and crypto biotic crusts. This would be particularly true around water developments and areas where livestock congregate." (PRMP/FEIS, p. 4-17).

The PRMP/FEIS also adequately analyzes wind erosion caused by livestock grazing in the SDNM as well, noting on page 4-76 that "The Land Health Evaluation for the SDNM allotments

has shown negligible to minor impacts from grazing on soil resources. (See Appendix F, Arizona Land Health Evaluation for the Sonoran Desert National Monument). Therefore, grazing impacts are expected to be minor and similar to those analyzed under Alternative A for the Lower Sonoran. Minor impacts are potentially due to the effects of grazing on the soils most sensitive to erosion." The types of soil present in the SDNM are included in the PRMP/FEIS as well (see Map F-2).

e. No Hard Look – Climate Change

The proposed plan does not account for the impacts of livestock grazing either as emitters of GHGs or for the reduced ability of the desert landscape as a carbon sink when vegetation is removed as forage.

Response:

The impact of the PRMP's livestock grazing decisions on global climate change was not identified as an issue of potential significance (40 CFR § 1502.2), and the BLM determined that "short-term direct and indirect impacts on climate from any of the alternatives would be negligible." While the BLM actions do contribute to global GHG emission levels, "overall, the contribution would be a very small portion of the total from other sources of a regional and global nature." (PRMP/FEIS, p. 4-33). The qualitative analysis provided in Section 4.3 was sufficient to support reasoned conclusions by comparing the amount and the degree of change caused by the proposed action and alternatives.

The PMRP/FEIS acknowledges that livestock grazing emits GHGs: "studies have shown that livestock emit methane, which is a GHG". (PRMP/FEIS, p. 4-34). The PRMP/FEIS also takes into account impacts to climate change in terms of carbon sequestration in the context of vegetative communities: "alternatives that create healthier vegetative communities in the long term could result in decreased GHGs emissions." (PRMP/FEIS, p. 4-33). The PMRP/FEIS states that range livestock produce fewer GHG emissions than feedlot livestock, which is based on information presented in "Environmental Protection Agency (EPA), 2009, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2007."

f. NEPA - No Hard Look – Xeroriparian

The BLM failed to consider the PBI studies on xeroriparian areas in the compatibility determination.

Response:

As noted in Section 6.3.3 of the PRMP/FEIS, the "Impacts of grazing on xeroriparian areas were discussed in detail in the compatibility study (Appendix E) and LHE (Appendix F) when analyzing Sandy Wash ecological sites. The BLM considered the Smith and Morrison report, but found it was of limited use because it did not address the intensity, frequency, timing, class of livestock, season of use, ecological sites, precipitation patterns and other variables the BLM needs to address the effects of current livestock grazing practices on the objects of the

Monument." (PRMP/FEIS, p. 6-256). The BLM's key areas do address these factors. A key area "is capable of, and likely to show, a response to management actions... Data collected at each key area include quantitative data (percent vegetative composition, relative production and dry weight rank, ground cover data, and utilization) and qualitative data (Indicators of Rangeland Health) (BLM TR 1734-6, Interpreting Indicators of Rangeland Health, 2000). See Attachment 3 [of Appendix F] for key area data." (PRMP/FEIS, pp. F-26 and F-27).

Furthermore, it should also be noted that "while the PBI data added to the BLM's baseline information, one year of PBI data, in itself, is not enough to support sound conclusions." (PRMP/FEIS, p. 6-12). On the other hand, the BLM key areas "were established by an interdisciplinary team on the SDNM allotments beginning in 2004… Key areas are established to monitor vegetative and soil conditions and trend over time." (PRMP/FEIS, pp. F-26 and F-27).

II. Inaccurate Scientific Analysis

a. Inaccurate Scientific Analysis – Wildlife

The BLM did not collect monitoring data necessary to determine the effects of livestock grazing on the environment.

Response:

The BLM has not observed adverse effects on desert tortoise from cattle grazing in the SDNM. This is mainly due to the fact that there is little overlap between tortoise habitat and areas where cattle graze. No instances of tortoises or tortoise burrows being trampled by livestock in the SDNM have been documented by BLM specialists conducting formal monitoring or field observations. Furthermore, the preference of Sonoran desert tortoise for selecting burrow locations tends to be in caliche armored side walls of desert washes, and steep, rugged, boulder-strewn landscapes that are resistant to livestock trampling and not frequently used by livestock. The BLM did review and consider the Hall report, which did not provide evidence that would change the BLM's analysis.

As adequately addressed in the comment response on PRMP/FEIS p. 6-61, "Livestock use of the 'high country' is light to negligible because of the steep, rugged and rocky terrain. In addition, most of the 'high country' is a great distance from available water, a severe limitation to livestock use. For these reasons, impacts of social intolerance [cattle vs. bighorn sheep] were not analyzed in the EIS because social interactions are expected to be rare."

Please also see the BLM's responses above regarding the use of available data in completing the LHE and the adequacy of the BLM's Use Pattern Mapping.

b. Inaccurate Scientific Analysis – Soils

The BLM ignored multiple years of data when reaching conclusions about soil health on the SDNM.

Response:

The BLM considered all relevant data in analyzing soils in the PRMP/FEIS and has acknowledged in the FEIS that additional site-specific information on sensitive soils would aid analysis of soil resources (pp. 6-72 and 73), as required at 40 CFR § 1502.22.

The BLM erred in the PRMP/FEIS response to comments, however. On page 6-72, the BLM states that the FEIS includes "additional location-specific information for sensitive soils in the planning area." The BLM intended to conduct a more detailed analysis of sensitive soils but found that the existing soil survey was insufficient to delineate with a high degree of accuracy where those sensitive soils are located. Map 3.5, Soil Erosion Potential (Wind), shows moderate and high wind erosion potential which is the best portrayal of sensitive soils available for analysis in the EIS. The PRMP/FEIS acknowledges that information on soils is limited: "…detailed site-specific soil information is lacking for much of the planning area. General impacts on sensitive soils are discussed by resource. Site-specific analysis would be conducted before on-the-ground project implementation." (PRMP/FEIS Section 4.7.1, p. 4-68). The available data sufficiently informed the decisions made at the land use planning level. Please also see the BLM's responses above regarding the use of available data in completing the LHE.

c. Inaccurate Scientific Analysis – Vegetation

The BLM failed to summarize, consolidate, or reference the range of data the agency had regarding resource conditions on the SDNM that forms the basis of the PRMP/FEIS.

Response:

As noted above, the BLM considered the PBI data, but found it was of limited use because it did not address the intensity, frequency, timing, class of livestock, season of use, ecological sites, precipitation patterns and other variables the BLM needs to address the effects of current livestock grazing practices on the objects of the Monument. The BLM's key areas do address these factors. As stated above, a key area "is capable of, and likely to show, a response to management actions... Data collected at each key area include quantitative data (percent vegetative composition, relative production and dry weight rank, ground cover data, and utilization) and qualitative data (Indicators of Rangeland Health) (BLM TR 1734-6, Interpreting Indicators of Rangeland Health, 2000). See Attachment 3 [of Appendix F] for key area data." (PRMP/FEIS, pp. F-26 and F-27).

Utilization data measure the percentage of available forage that has been consumed or destroyed in the current year (see p. F-28). As discussed in the response to issue 12.1 above, the BLM followed guidance from Utilization Studies and Residual Measurements, Interagency TR 1734-3, 1996, when conducting Use Pattern Mapping. The methodology for collecting utilization data is described in Appendix F. As stated therein, utilization was conducted: a) at key areas, b) across the Monument during Use Pattern Mapping, and c) at specific locations where rangeland degradation was apparent, but causal factors for that degradation were not apparent. Some areas that appeared to have had heavy utilization when the rapid Landscape Appearance Method was conducted during Use Pattern Mapping were later verified with the use of utilization transects. In some of those cases, livestock grazing was determined not to be the causal factor for not meeting Standards because more precise transect data showed that utilization was slight or light.

Several of the protester's comments regarding inaccurate or insufficient vegetation communities information relate to the level of NEPA analysis necessary for use authorization decisions, which are implementation-level decisions and thus, not protestable. The BLM followed agency policy and procedures in analyzing the impacts of livestock grazing on vegetation communities for planning decisions at the landscape level.

The impacts or harm to Monument objects by livestock are addressed above. Also, please see the response above relating to the BLM's methods for determining attainment of key area objectives. The BLM sufficiently examined the degree to which the failure to meet key area objectives could be attributed to livestock grazing in Sections F.10 through F.15 of the PRMP/FEIS. After conducting this analysis, the BLM determined that existing grazing management practices or levels of grazing use are factors in failing to achieve Standard 3 on 8,498 acres (within multiple polygons) of the 252,000 acres (3.4 percent) of the public lands north of I-8 (PRMP/FEIS, p. F-58) and made recommendations that informed the allocations outlined in the various alternatives of the EIS.

d. Inaccurate scientific analysis – Livestock Grazing

The BLM ignored evidence that would support the premise that eliminating livestock grazing would reduce non-native species and fire. The BLM failed to reference or summarize PBI studies and data relating to the impacts of livestock grazing.

Response:

The PRMP/FEIS acknowledges the potential impacts from nonnative species and wildland fire as a result of livestock grazing: "the potential introduction or spread of invasive weed species through livestock grazing could result in changes in vegetation communities or could increase the incidence of wildland fire in nonfire-adapted communities." (PRMP/FEIS, p. 4-103). However, the BLM does not have information to support the premise that eliminating livestock grazing would reduce nonnative species where they have already become prevalent.

As previously explained, the BLM considered the PBI reports referred to by the protester when conducting the analysis for the LHE and the compatibility analysis. However, as previously stated, the conclusions reached by PBI did not consider the variables the BLM needed to address the effects of current livestock grazing practices on the objects of the Monument.

The BLM did analyze and discuss the PBI data as they pertain to livestock grazing to the extent appropriate. The BLM utilized the PBI data extensively when conducting site-specific analyses in the LHE in Appendix F of the PRMP/FEIS. Sections 6.2.4.2 and F.6.3 of the PRMP/FEIS provide a detailed explanation of how the PBI data was used during the LHE process. While the BLM applied the concepts of the PBI data when analyzing the effects of planning-level decisions in Chapter 4 of the PRMP/FEIS, the site-specific data provided by PBI was not necessary to fully inform the decision-maker of potential impacts from planning-level decisions for grazing. For

more information regarding appropriate analysis for planning-level decisions, please see the BLM's response to the protesting party's comment on the DRMP/DEIS (PRMP/FEIS, pp. 6-245 and 246).

"A land use planning-level decision is broad in scope and, therefore, does not require an exhaustive gathering and monitoring of baseline data. Although the BLM realizes that more data could always be gathered, the baseline data provides the necessary basis to make informed land use plan-level decisions. Land use plan-level analyses are typically broad and qualitative rather than quantitative or focused on site-specific actions" (BLM Land Use Planning Handbook H-1601-1). The BLM would conduct subsequent project-specific NEPA analyses for projects proposed for implementation under the land use plan (40 CFR § 1502.20, 40 CFR § 1508.28). As required by NEPA, the public would have the opportunity to participate in the process for site-specific actions.

"Programmatic or RMP level analysis addresses impacts from RMP level decisions, which are decisions set forth to achieve the goals and objectives of a specific program area within the RMP. Analyses for these decisions are broad in scale and focus on the scope of the individual alternatives and environmental effects. Programmatic analysis is typically regional in scope and accounts for differing land use scenarios, including cumulative effects from multiple activities and future projects (of which the location and details are not yet known). Refer to Sections 4.2 through 4.24 for RMP-level impact analysis." (PRMP/FEIS, pp. 6-244 and 6-245).

e. Inaccurate scientific analysis – Peer Review

The BLM did not revise land health evaluation methods as a result of peer review.

Response:

As noted in the PRMP/FEIS, as part of the LHE process, a draft of the LHE was sent out for a technical peer review by qualified experts in the Sonoran Desert ecosystem (PRMP/FEIS, p. E-15). The BLM's NEPA Handbook outlines the role of peer review in the development of NEPA documents and states that: "You may choose to have your NEPA analysis reviewed by members of the scientific community as part of public review of the document. Such review may be desirable to improve the quality of the analysis or share information; this does not constitute formal peer-review." (BLM NEPA Handbook, p. 55). The BLM is not required to change its findings and NEPA analysis solely on account of a peer review were considered before completing the draft LHE." (PRMP/FEIS, p. E-15). In many cases, the BLM made changes to the LHE as a result of peer reviewers' comments; the BLM has noted these instances to the extent possible in the PRMP/FEIS.

III. Exclusion of Information

a. Exclusion of Information – Livestock Grazing

The BLM did not collect monitoring data necessary to determine the effects of livestock grazing on the environment.

Response:

Inventory and monitoring has been taking place on all the allotments across LSFO since the 1980s, and monitoring associated with ongoing processes for allotment-specific permit renewals has been conducted on 34 of 44 allotments since 1999. The data are available at the Lower Sonoran Field Office. The analysis conducted was sufficient to inform the landscape- and planning-level grazing decisions in the EIS. Monitoring has been and will continue to be conducted in a manner consistent with BLM policy regarding selective management criteria (Instruction Memorandum 2009-018, *Process for Setting Priorities for Issuing Grazing Permits and Leases*); this information will be used in implementing the RMP (e.g., making determinations of causality in LHEs).

Ephemeral/perennial grazing authorizations are exactly the types of decisions made during resource management planning, contrary to BLM's claims.

Response:

As stated above, during the land use planning process, the BLM properly focused the analysis on the lands made available for grazing and the associated forage availability for those lands, as per the direction in the BLM Land Use Planning Handbook H-1601-1, Appendix C, page 14. The BLM Handbook H-1601-1 is consistent with the regulations cited by protester. Impacts due to changes in perennial or ephemeral *authorizations* are appropriately considered and analyzed during the permit renewal/rangeland health evaluation process, which includes site-specific NEPA analysis for authorizations. The Proposed Alternative allows BLM to modify authorizations as needed during site-specific review and authorization for permit renewals: "Grazing allotments would be allocated as perennial, perennial/ephemeral, or ephemeral, as appropriate to allotment-specific characteristics." (PRMP/FEIS at Section 2.11.2.1).

b. Exclusion of information – Saguaro Cacti

BLM failed to analyze impacts to saguaro cacti within the LSFO planning area as a result of livestock grazing. The PRMP/FEIS does not provide the indicators the BLM considered with regards to how livestock grazing affects saguaro recruitment in the SDNM.

Response:

The BLM has analyzed impacts to saguaro cacti. In its analysis, the BLM discloses that there may be adverse impacts on vegetation, such as the saguaro cactus, from livestock grazing in the LSFO planning area: "potential impacts identified from sustained heavy livestock grazing on

vegetation include reduced plant vigor, alteration of vegetation community composition or structure, reduction in plant cover, reduction of individual plants, including desirable forage species, introduction or spread of invasive weed species, and increased soil instability, leading to erosion and soil compaction." (PRMP/FEIS, p. 4-102). Site-specific analysis regarding vegetation, including the saguaro cactus, will be conducted as part of the LHE, which are allotment specific implementation actions, as noted on page 6-130 of the PRMP/FEIS.

Section F.5.3.4 of the PRMP/FEIS discusses the multiple indicators, including raw PBI data, which the BLM considered for saguaro recruitment in the SDNM. For example, the PRMP/FEIS discusses the Barry Goldwater Reserve/Area A saguaro study, which examines how ecological sites and precipitation affects saguaro recruitment. Additionally, the PRMP/FEIS discusses factors that affect potential saguaro population, such as "elevation, aspect, precipitation, and soil type." (PRMP/FEIS, p. F-24).

c. Exclusion of information – Socioeconomics

The BLM failed to provide relevant information about the socio-economic impacts of the proposed alternatives.

Response:

The BLM gathered the necessary data to discuss and disclose the potential socio-economic impacts of the PRMP. As stated in Section 4.19 of the PRMP/FEIS, livestock grazing could have potential adverse impacts on recreation opportunities in the planning areas. In turn, the impacts of recreation opportunities on socioeconomics are analyzed in Section 4.22. The economic cost/benefit of maintaining livestock grazing operations in the planning areas is discussed in Section 4.22 of the PRMP/FEIS, which includes an estimate of the cost operators would incur in replacing forage if AUMs on BLM lands were reduced. The BLM's use of the available data led to an adequate disclosure of the potential environmental consequences of the PRMP/FEIS.

d. Exclusion of Information – Land Health Evaluations

The BLM failed to describe new information and actual evidence that supported the revisions between a 2008 preliminary draft land health evaluation and a 2011 draft land health evaluation.

Response:

As noted above, the 2008 draft LHE was a preliminary document under internal development and subject to numerous changes over time. As was previously discussed, changes were made after 2009 to incorporate additional field data and information and to address comments, suggestion, and edits during numerous internal reviews, including the 2009 peer review. When released for public review and comment in 2011, the BLM's LHE appropriately referenced and presented all relevant data. A full discussion of this issue was provided in the response to comments in the PRMP/FEIS, Section 6.3.

e. Exclusion of Information – Use Pattern Mapping

The BLM's single year of Use Pattern Mapping was insufficient scientific evidence on which to base the proposed action and the compatibility determination.

Response:

Please see the response provided above to the protester's FLPMA-related Use Pattern Mapping concerns. The PRMP/FEIS discloses that Use Pattern Mapping was conducted in a single season, as explained in the BLM's response to the protesting party's comments on the DRMP/DEIS (see pages 6-254 and 255 of the PRMP/FEIS). In response to the comments on the DRMP/FEIS, additional text was added to Section F.7.4 noting when and how the Use Pattern Mapping was conducted.

Protest Issue: PP-AZ-Sonoran-12-04-65 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

We protest the violations of the Department of Interior's [DOI] Policy for the Integrity of Scientific and Scholarly Activities (Part 305, Chapter 3 DOI Manual).

In addition to the violations of the NEPA, FLPMA, the APA, and other federal laws that are supposed to ensure agency integrity in the decision-making process, the intentional and willful omission of data and the arbitrary decision-making that skewed data is a clear violation of the Department of Interior policy on scientific and scholarly integrity.

Because the Land Health Evaluation is the basis of BLM's Compatibility Determination that proscribes the extent to which livestock grazing is allowed to continue on the SDNM, the implication of a biased or improper Land Health Evaluation is a fundamentally-flawed basis for protecting the resources of the national monument. Because the Compatibility Determination set the parameters for continued livestock grazing on the SDNM (to be excluded in areas where livestock grazing operations were determined to be failing land health standards, etc.), every grazing alternative in the Draft Resource Management Plan depends upon the integrity of these conclusions.

The deliberate act to remove information and data about the deleterious impacts of

livestock grazing influences how the BLM develops and manages livestock grazing on the SDNM. Because the Compatibility Determination is a one-time effort for this monument, the omissions and redactions in the Land Health Evaluation affect how this monument will be managed under the forthcoming and all future management plans. Because the RMP is the basis for future grazing authorizations (See 43 U.S.C. § 1732(a) and §1752(c)(1)), it is critically important that the EIS considers all of the evidence available to the BLM.

Protest Issue: PP-AZ-Sonoran-12-04-70 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

Specified Violations: Department of Interior Policy for the Integrity of Scientific and Scholarly Activities (Part 305; Chapter 3 DOI Manual): § 3.5 Definition of Scientific or Scholarly Misconduct: M.1. Fabrication, falsification or plagiarism in proposing, performing, or reviewing scientific activities, or in the products or reporting of the results of these activities.

BLM committed scientific and scholarly misconduct when it altered the Land Health Evaluation between the 2009 and 2011 drafts to create the appearance that conditions on key areas were better than they actually were. For example, the BLM lowered the cover threshold objectives for pygmy-owl habitat from 50 percent to 40 percent between drafts in order to have transect BH-8 (with 41 percent cover) meet the key area objectives. DRMP/DEIS at 1112, Draft LHE, Exhibit A at 25. This meets the definition of "falsification," which is, "Manipulating research materials, equipment, or processes or changing or omitting data or results such that the research is not accurately represented in the research record."

The complete omission of any of PBI's conclusions, findings, or observations in the DRMP/DEIS is another example. By failing to include these studies — which were specifically commissioned by the agency to better understand the impacts of livestock grazing on monument objects — in the Compatibility Determination, the BLM

misrepresented the results of the complete body of research on the monument.

BLM falsified data when it "made up" new methods midstream in response to the unsubstantiated comments of a subset of peer reviewers so that more ecological sites would meet land health objectives. BLM falsified data when it called "unsurveyed areas" areas with "slight or negligible" use in the Use Pattern mapping, giving key areas that failed to meet standards a "pass" from implicating livestock in their failures. Falsification is defined as, "Making up data or results and recording or reporting them."

Summary

During the development of the PRMP/FEIS, the BLM violated the Department of the Interior policy by committing scientific and scholarly misconduct by:

- Lowering the cover threshold objectives for pygmy-owl habitat from 50 percent to 40 percent between the preliminary draft LHE and the draft LHE;
- Omitting PBI conclusions, findings, and observations; and
- Falsifying data when it called "unsurveyed areas" areas with "slight of negligible" use in the Use Pattern Mapping.

Response

The BLM did not commit scientific and scholarly misconduct during the development of the PRMP/FEIS and the LHE. The BLM took a reasoned approach in developing and improving the analysis and has complied with DOI policies regarding scientific integrity.

As noted above (in the BLM response regarding the peer review), the 2008 preliminary draft DRMP/DEIS (including the LHE) was a preliminary draft document that was subsequently revised based upon peer review. The BLM NEPA Handbook allows agency officials to "choose to have [the agency's] NEPA analysis reviewed by members of the scientific community...such review may be desirable to improve the quality of the analysis or share information." (BLM NEPA Handbook, p. 55).

The rationale for establishing a 40 percent cover threshold objective is provided in Section F.5 of the PRMP/FEIS: "Maintaining vegetative canopy cover at 40 percent and a multi-layered structure will provide sufficient cover and structure to support Cactus ferruginous pygmy-owl based on Wilcox *et al* 1999." (PRMP/FEIS, p. F-23). The BLM objective exceeds the

recommendation of the Arizona Game and Fish Department, which recommends 35 percent ground cover for occupied habitat areas for the Cactus ferruginous pygmy-owl.

The BLM explained in detail how PBI data was considered in Sections 6.2.4.2 and 6.2.16.2 of the PRMP/FEIS. In general, "PBI's study was of limited use because it did not address the intensity, frequency, timing, class of livestock, season of use, ecological sites, precipitation patterns, and other variable the BLM needs to address the effects of current livestock grazing practices on the objects of the Monument. However, the BLM did use some of PBI's plot data (where applicable) to address vegetation attributes when defining Ecological Site and Key Area DPC objectives." (PRMP/FEIS, p. 6-80).

The BLM did not falsify data during Use Pattern Mapping. In accordance with guidance provided in TR 1743-3, the BLM considered certain factors such as topography, rockiness, size of the area, location of salt, and distance from water when conducting Use Pattern Mapping because all of these factors affect foraging habitats. (TR 1743-3, p. 23). The areas identified on the use pattern field map as unsurveyed or inaccessible to livestock reflect large areas of slight to no use due to the factors identified above.

Section 6.4 – Grazing – Administrative Procedures Act

Protest Issue: PP-AZ-Sonoran-12-04-67 **Organization:** Western Watersheds Project **Protester:** Greta Anderson

Issue Excerpt Text:

We protest the violations of the Administrative Procedures Act [APA], 5 U.S.C. § 706. The APA prohibits an agency from acting in an arbitrary and capricious fashion.

For all the reasons outlined in the sections above, the PRMP/FEIS for the SDNM is arbitrary and capricious in the standards it evaluates various land uses against, in its inclusion or exclusion of relevant data, and in its decision to ignore entirely certain geographic areas. It is arbitrary and capricious in its post hoc shifts in methodologies to use a range of values instead of an absolute number, to determine that over half the key areas per ecological site have to be failing objectives to cause the ecological site to fail the standard, and for ecological sites failing the standard to have to be within an area with a couple of key species grazed at levels greater than 40 percent in 2009 to attribute the failures to livestock. Each of these decisions, or filters, is without scientific or procedural support, and each one appears to have been conjured up so that fewer parts of the monument would fail to meet standards. BLM's primary responsibility it to protect monument resources, but the preponderance of evidence shows that livestock is causing long-term degradation to those resources.

The PRMP/FEIS for the LSFO is arbitrary and capricious because it is based on a profound lack of evidence about the current conditions, an insufficient description of the affected environment, and a failure to consider cumulative impacts. BLM's responsibilities under FLPMA to protect and preserve the natural resources cannot be fulfilled if BLM doesn't even know the current state of the public lands in question. There is insufficient evidence in the PRMP/FEIS to support the agency's conclusions, and for this reason, the decision violates the APA.

Response

During the development of the PRMP/FEIS, the BLM has observed all procedures required by law and proposes to make an agency action based on sound rationale. As detailed in the PRMP/FEIS and throughout the other chapters of this protest report, the BLM followed all requirements of FLPMA, NEPA, and other relevant statutes and associated regulations. The information contained in the administrative record provides sufficient information to make a reasoned choice. Thus, the actions proposed in the PRMP/FEIS were not made in an arbitrary and capricious manner and do not violate the Administrative Procedures Act.

Protest Issue: PP-AZ-Sonoran-12-07-03 **Protester:** Jason Keith

Issue Excerpt Text:

I believe the report to be unfair and untruthful of the condition of [the Conley] allotment. These evaluations were done in years of less than average rain fall. The area west of North Tank was not done by cattle. It was an area that was used heavily by ATV, shooters and campers before the BLM shut down this area. The BLM has a quarter mile camping law around dirt tanks but this is an area were the boy scouts have their jamborees and its only 100 yards from the tank. They can be big. In (appendix E-Map-2) there is a large area south of Hwy 238 that is to be considered not achieving standard 3, livestock is the causal factor, and actually this area was a fire caused by a train in June of 2005, not cattle.

Response

The Proposed Plan identifies the lands within the Conley allotment as unavailable for livestock grazing. This decision is based on the BLM's evaluation of the area's utilization patterns and an analysis of the compatibility grazing management with the protection of Monument objects. As previously explained, the BLM used the best tool available—the LHE process—to determine what areas were compatible with Monument objects and considered the mandates of FLPMA, the Proclamation and other laws and regulations in determining the proper management for the area of the Conley allotment.

The BLM determined that, in portions of the area's palo verde-mixed cacti vegetation community, the creosote bush-bursage community, and the desert wash community, current livestock grazing management practices and levels of use are likely factors in the area's failing to achieve the applicable health standard for the vegetation Monument objects (PRMP/FEIS, p. E-26). Further, the results of the cultural evaluation of Monument objects found that ten acres at North Tank exhibited direct effects from grazing activities that disturb the historic setting and reduce vegetation, amounting to about 1,300 linear feet of the Juan Bautista de Anza National Historic Trail corridor (PRMP/FEIS, p. E-34). As noted on page 4-102, as well, livestock gathering in the vicinity of livestock water sources, such as North Tank source, creates a major impact under current management in the allotment area.

As the protester suggests, other factors were acknowledged in the BLM's review of the allotment area as contributing to the failure to achieve the applicable health standard for vegetation Monument objects. Table E-9 shows that other contributing factors include fire, drought, and ATV use (p. E-31). As displayed in the table, these other factors also had substantial effects on the area's health standards.

The BLM weighed the multiple factors and determined that the SDNM portion of the Conley allotment should be made unavailable for livestock grazing because, as stated on page 2-126 of the PRMP/FEIS, it has the largest departure from achieving Land Health Standard 3 of all other SDNM allotments. It has the most acreage found incompatible with the Monument Proclamation, and future management options for the remaining portion would be limited due to the amount and location of pasture fencing that would be required to be placed around the non-achieving acres.

As previously stated, the BLM conducted Use Pattern Mapping in 2009, which was an average year for forage production (Section F.7.4). Additionally, the mapping was conducted at the end of the growing/grazing season to measure use on that year's forage production, not historic use. (Section F.7.4).

Section 7 – Recreation

Protest Issue: PP-AZ-Sonoran-12-06-10 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

BLM has not provided an environmental analysis of its new alternative regarding recreational target shooting.

Protest Issue: PP-AZ-Sonoran-12-06-12 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

The spectrum of alternatives including specific sites considered for suitability was analyzed at length in the "SDNM Recreational Target Shooting Analysis." Proposed RMP, Appendix G. BLM has not analyzed an alternative for impacts or compatibility that would allow recreational target shooting in the monument with additional measures for protection as it proposes in the Proposed RMP. The only statement as to potential impacts that occurs in practically every section for Alternative E in Chapter 4 of the PRMP is the following:

Since dispersed recreational target shooting throughout the Monument would continue, the impacts of target shooting under Alternative E would be the same as those described for Alternative A. However, if Management and Administrative Actions designed to change the conduct of recreational target shooters has the desired effect, impacts from recreational target shooting should be greatly decreased. If that were to happen, impacts would be negligible to minor. Proposed RMP at 4-95—4-96, 4-122, 4-129, 4-167, 4-206, 4-222, 4-253, 4299, 4-407, 4-470, 4-542.

Thus, BLM admits that if it were to keep the status quo regarding target shooting, it would have the same impacts already analyzed in the Draft RMP. BLM cannot continue to allow target shooting in the way it has due to its analysis concluding its incompatibility with protecting the monument and visitors. So, BLM is adopting a new alternative that may fewer impacts than Alternative A, but BLM has not analyzed the impacts of this new alternative. BLM has not taken the requisite hard look under NEPA at this new alternative.

Protest Issue: PP-AZ-Sonoran-12-06-4 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

BLM'S decision to allow recreational shooting throughout the monument is in violation of the law and agency policy. BLM has arbitrarily decided to continue to allow recreational target shooting in the monument in conflict with the agency's own scientific analysis.

Protest Issue: PP-AZ-Sonoran-12-06-6 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

In the Draft RMP, BLM performed a scientific analysis of recreational target shooting suitability in the Sonoran Desert National Monument. Draft RMP, Appendix G. BLM applied criteria that looked at resources and monuments objects, visitor safety and nearby uses and facilities, motor vehicle accessibility, and physical suitability of sites for target shooting. The analysis concluded that while there may be a few sites where target shooting may not be as big as a risk to monument objects and resources, the use of these areas were not safe for public visitors to the monument. Thus, based on BLM's own scientific analysis, the preferred alternative in the Draft RMP was to make the entire monument unavailable to recreational target shooting due to incompatibility of the discretionary use with the conservation and visitor safety of the monument.

In the PRMP, BLM included a virtually identical version of the analysis of recreational target shooting in Appendix G. The findings of incompatibility of target shooting with monument management and conclusions about discontinuing this use were the same as they were in the Draft RMP. See, PRMP at Appendix G. However, in the PRMP, BLM's proposed alternative allows for recreational target shooting throughout the monument with no compelling rationale given for this aboutface in the agency's decision.

Protest Issue: PP-AZ-Sonoran-12-06-8 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

BLM does not contend that the scientific analysis finding the monument unsuitable and/or unsafe for this use has changed. BLM does not contend that recreational target shooting is a monument object of interest or a recreational use that conserves, protects, and restores the natural and cultural resources of the monument. Of course, recreational target shooting is not a "valid existing right" that would otherwise be protected under the monument proclamation. Thus, even though this use is not protected by the proclamation, does not further the purposes of the monument, and has been found by BLM to be overwhelmingly incompatible with the protection of monument resources and the safety of the public, BLM has wrongly decided to allow this use throughout the entire monument because of its popularity.

BLM's decision in the proposed alternative is arbitrary and in violation of FLPMA, the Administrative Procedure Act, Proclamation 7397, Secretarial Order 3308, [Instruction Memorandum] IM 2009-215, BLM 15-Year Strategy for the National Landscape Conservation System, and the BLM Arizona State Strategy for BLM Conservation Lands. Perhaps more importantly, if BLM decides to disregard its laws, policies and science for what it views as a politically-safer decision, the agency will be moving towards a troubling precedent that puts potentially harmful uses above conservation and protection.

Summary

The BLM arbitrarily decided to continue to allow recreational target shooting in the Monument in conflict with the agency's own scientific analysis. The BLM did not analyze the impacts of this decision.

Response

The BLM has complied with NEPA, FLPMA, Proclamation No. 7397 establishing the Sonoran Desert National Monument, and all applicable policies with regard to its planning decisions on recreational target shooting. The BLM gathered the necessary data essential to make a reasoned choice among the alternatives analyzed in detail in the RMP/EIS. The BLM analyzed the available data that led to an adequate disclosure of the potential environmental consequences of each alternative. As a result, the BLM has taken a "hard look," as required by NEPA, at the environmental consequences of the alternatives to enable informed decisions by the decisionmaker.

As stated in the PRMP/FEIS, the "BLM now proposes to continue management consistent with the No Action Alternative for recreational target shooting, and keep the SDNM open to recreational target shooting." (PRMP/FEIS, pages 1-32 and 1-33; also see Table 2-32). The effects of keeping the Monument open to recreational target shooting were fully analyzed in the No-Action Alternative in the DRMP/DEIS, and in the Proposed Plan (Alternative E) and the No-Action Alternative in the PRMP/FEIS.

While the planning decision is to keep the SDNM open to recreational target shooting, the BLM will implement a comprehensive suite of administrative actions (e.g., promulgation of supplementary rules) and best management practices (BMPs) on the ground to minimize adverse impacts of recreational target shooting on Monument objects. (PRMP/FEIS, pp. 2-180 through 2-182). The administrative actions provided as examples in the PRMP/FEIS will be carried out by the BLM in the agency's day-to-day management of recreational target shooting. The BLM will conduct the appropriate environmental analysis prior to implementation of any administrative action. For more information regarding the nature of administrative actions, please see Section 2.3.3 of the PRMP/FEIS.

The BLM's decision to keep the Monument open to recreational target shooting was not arbitrary. Through the planning process, the BLM identified several planning issues, including recreational target shooting. (PRMP/FEIS, p. 1-10). Planning issues are matters of controversy or dispute over potential land and resource allocations, levels of resource use, production, and related management practices. (BLM Handbook 1601-1, p. 19).

As highlighted by the protester and as discussed in the FEIS, the current manner in which recreational target shooting is occurring causes adverse impacts on Monument objects and public safety in the SDNM. To determine how to best resolve the issue of recreational target shooting (including its associated adverse impacts), the BLM considered a range of alternatives for recreational target shooting in the SDNM. Alternatives considered in the PRMP/FEIS range from a complete closure of the entire Monument to recreational target shooting (Alternative D) to keeping the Monument open to recreational target shooting (Alternatives A and E).

The BLM determined that the Proposed Plan (Alternative E) best resolved planning issues and met the purpose and need for the RMP. As set forth in the PRMP/FEIS, the Proposed Plan will allow users to continue enjoying an important recreational activity for which demand has increased dramatically in recent years, while the BLM implements a suite of administrative actions and best management practices to minimize the adverse impacts of recreational target shooting. The tools the BLM can use to address impacts to Monument objects will be most effectively applied as administrative management actions and BMPs. The Proposed Plan provides for a working combination of efforts among law enforcement, constituent sportsmen's groups, the conservation community, and local stakeholders, to craft a more comprehensive suite of management and administrative actions that will successfully minimize the adverse impacts of recreational shooting.

Further rationale for the change in the land use plan decision for recreational target shooting can be found in Section 1.7 of the PRMP/FEIS, pp. 1-32 through 1-34.

Protest Issue: PP-AZ-Sonoran-12-06-54 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

Proclamation 7397 states that "[f]or the purpose of protecting the objects identified above, all motorized and mechanized vehicle use off road will be prohibited, except for emergency or authorized administrative purposes." As detailed below, the definition of "road" has important implications, necessitating a legal definition be used in this RMP.

Response

The PRMP/FEIS defines the term "road" for the purposes of conducting travel management planning as "a linear route declared a road by the owner, managed for used [sic] by low-clearance vehicles having four or more wheels, and maintained for regular and continuous use." (PRMP/FEIS, p. 7-35). This definition is consistent with BLM Manual Section 9100. (BLM Manual Section 9100, Appendix A, p. 12).

Protest Issue: PP-AZ-Sonoran-12-06-14 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

BLM failed to follow agency policy on managing lands with wilderness characteristics. The PRMP contains no documentation for BLM's determination of whether to manage lands for wilderness character that have been identified as possessing wilderness character.

Protest Issue: PP-AZ-Sonoran-12-06-17 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

As raised in our comments on the Draft RMP (TWS et al. Draft RMP Comments at 35), BLM has not documented the rational for its decisions regarding the management of wilderness characteristics in the RMP. Our recommendation during the comment period for the Draft RMP was that BLM allow for a supplemental comment period once it provides its rationale for these decisions before releasing the Proposed RMP/Final EIS. Id. BLM has not provided this information and has not adequately responded to our comment and request during the comment period for the Draft RMP to provide documentation on the agency's rationale for not managing lands found to have wilderness characteristics for protection of those qualities. BLM is in violation of its own policies on lands with wilderness characteristics as well as the regulations implementing NEPA regarding agency response to comments. 40 C.F.R. 1503.4.

Protest Issue: PP-AZ-Sonoran-12-06-19 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

Black Mountain: BLM found this unit to possess wilderness characteristics but does not manage to protect those wilderness characteristics. BLM has erred in not protecting these spectacular lands with wilderness characteristics for their wilderness qualities and has not documented its rationale for its determination as required under IM 2011-154 and BLM Manual 6320.

Protest Issue: PP-AZ-Sonoran-12-06-21 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

Cuerda de Lena Wash: BLM found this unit to possess wilderness characteristics but does not manage to protect those wilderness characteristics. BLM has erred in not protecting these spectacular lands with wilderness characteristics for their wilderness qualities and has not documented its rationale for its determination as required under IM 2011-154 and BLM Manual 6320.

Protest Issue: PP-AZ-Sonoran-12-06-24 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

Sentinel Plain – Northwest A and B units: Regarding the Northwest B unit, BLM states that the unit is too small and that the unit averages 1.5 miles wide between boundary roads. First, BLM Manual 6310 on Conducting Wilderness Characteristics Inventory on BLM Lands sets the size standard to "roadless acres with over 5,000 acres of contiguous BLM lands. The Northwest B unit is around 9,500 acres and are virtually roadless as shown by BLM's own road inventory.

Second, BLM Manual 6310 states that "[a] small area could also provide opportunities for solitude if, due to topography or vegetation, visitors can screen themselves from one another." Manual 6310.06(C)(2)(c)(i)(2). Also, "[a]n area can have wilderness characteristics even though every acre within the area may not meet all the criteria. The boundary should be determined largely on the basis of wilderness inventory roads and naturalness rather than being constricted on the basis of opportunity for solitude or primitive and unconfined recreation." Manual 6310.06(C)(3)(e). The narrowest section of the Northwest B unit is 2.0 miles with the average width between roads between 2.5 and 3 miles. There is no development at the edges of the entire unit but more open land with little in the way of a human footprint. The powerline along the eastern edge is a small 65kV (130kV) on wooden poles that if you are mile way with binoculars you have trouble seeing. There is a large (relatively speaking) canyon in the center of the unit that provides topographic relief and seclusion from other visitors in the area.

Finally, when the Northwest A and B units are combined the broader unit includes 8 miles of the Gila River including a "narrows" section broken only by the 65kV line on wooden poles. As BLM notes, the Northwest A unit does include a core central area of wildness.

Protest Issue: PP-AZ-Sonoran-12-06-25 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

Sentinel Plain – North: BLM found that "about 75 percent of this area possesses wilderness characteristics." PRMP at 3-44. However, Map 3-11 shows this area as inventoried but not determined to have wilderness characteristics.

Protest Issue: PP-AZ-Sonoran-12-06-26 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

In addition, BLM has erred in not protecting these spectacular lands [in Sentinel Plain -North area] with wilderness characteristics for their wilderness qualities and has not documented its rationale for its determination as required under IM 2011-154 and BLM Manual 6320.

Protest Issue: PP-AZ-Sonoran-12-06-28 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

In addition, BLM shows the Sentinel Plain—Central area as possessing wilderness characteristics on Map 3-11 of the PRMP, which contradicts its conclusions within its documented inventory. **Protest Issue:** PP-AZ-Sonoran-12-06-32 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

In addition, BLM shows the [Dixie Peak] area as possessing wilderness characteristics on Map 3-11 of the PRMP, which contradicts its conclusions within its documented inventory.

Protest Issue: PP-AZ-Sonoran-12-06-34 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

Face Mountain: BLM found this unit to possess wilderness characteristics but does not manage to protect those wilderness characteristics. BLM has erred in not protecting these spectacular lands with wilderness characteristics for their wilderness qualities and has not documented its rationale for its determination as required under IM 2011-154 and BLM Manual 6320.

Protest Issue: PP-AZ-Sonoran-12-06-38 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

Saddle Mountain: BLM found this unit to possess wilderness characteristics but does not manage to protect the entire unit for protection of those wilderness characteristics. BLM has erred in not protecting all of these spectacular lands with wilderness characteristics for their wilderness qualities and has not documented its rationale for its determination as required under IM 2011-154 and BLM Manual 6320. **Protest Issue:** PP-AZ-Sonoran-12-06-41 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:Issue Excerpt Text:

In addition, BLM shows the [Gila Bend Mountains] area as possessing wilderness characteristics on Map 3-11 of the PRMP, which contradicts its conclusions within its documented inventory.

Protest Issue: PP-AZ-Sonoran-12-06-43 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:Issue Excerpt Text:

Woolsey Peak Extension: BLM found this unit to possess wilderness characteristics but does not manage to protect those wilderness characteristics. BLM has erred in not protecting these spectacular lands with wilderness characteristics for their wilderness qualities and has not documented its rationale for its determination as required under IM 2011-154 and BLM Manual 6320.

Protest Issue: PP-AZ-Sonoran-12-06-44 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

In addition, BLM shows the [Woolsey Peak Extension] area as inventoried but not possessing wilderness characteristics on Map 3-11 of the PRMP, which contradicts its conclusions within its documented inventory.

Protest Issue: PP-AZ-Sonoran-12-06-46 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

Oatman Mountains: BLM found this unit to possess wilderness characteristics but does not manage to protect those wilderness characteristics. BLM has erred in not protecting these spectacular lands with wilderness characteristics for their wilderness qualities and has not documented its rationale for its determination as required under IM 2011-154 and BLM Manual 6320.

Protest Issue: PP-AZ-Sonoran-12-06-48 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

Margie's Peak: BLM found this unit to possess wilderness characteristics but does not manage to protect those wilderness characteristics. BLM has erred in not protecting these spectacular lands with wilderness characteristics for their wilderness qualities and has not documented its rationale for its determination as required under IM 2011-154 and BLM Manual 6320.

In fact, the report for identification of this area's wilderness characteristics states that BLM will reassess the area to complete a final determination and ascertain if conditions have modified or if motorized routes have been naturally reclaimed.

It is clear that BLM has not even given this area's wilderness characteristics due consideration, let alone document its rational for not protecting those wilderness characteristics. We recommend that BLM acknowledge the wilderness characteristics as provided in the [Arizona Wilderness Coalition] AWC proposal and protect the entire area as managed to protect wilderness characteristics.

Protest Issue: PP-AZ-Sonoran-12-06-50 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

Butterfield Stage Memorial: BLM found this unit to possess wilderness characteristics but does not manage to protect those wilderness characteristics. BLM has erred in not protecting these spectacular lands with wilderness characteristics for their wilderness qualities and has not documented its rationale for its determination as required under IM 2011-154 and BLM Manual 6320.

In fact, the report for identification of this area's wilderness characteristics states that vehicle management and target shooting issues would have to be addressed to maintain solitude and naturalness and that "on-the-ground OHV route inventories and associated travel management actions, and all other land use allocations, may have significant influence on the final determinations of lands managed, or not managed, to protect or maintain wilderness characteristics."

It is clear that BLM has not even given this area's wilderness characteristics due consideration, let alone document its rational for not protecting those wilderness characteristics. BLM states that AWC did not submit a detailed narrative that shows how information significantly differs from info in prior inventories. We respectfully disagree and refer BLM to the Sonoran Desert National Monument Wilderness Proposal originally submitted in June 2004 and resubmitted in Attachment 3 with our comments on the Draft RMP in November 2011.

Protest Issue: PP-AZ-Sonoran-12-06-52 **Organization:** The Wilderness Society et al **Protester:** Phil Hanceford et al

Issue Excerpt Text:

South Maricopa Mountains Addition: BLM found this unit to possess wilderness characteristics but does not manage to protect those wilderness characteristics. BLM has erred in not protecting these spectacular lands with wilderness characteristics for their wilderness qualities and has not documented its rationale for its determination as required under IM 2011-154 and BLM Manual 6320.

Summary

BLM failed to follow agency policy on managing lands with wilderness characteristics, as it:

- Contains no documentation of whether to manage lands for wilderness character that have been identified as possessing wilderness character
- Found units to possess wilderness characteristics but does not manage to protect those wilderness characteristics
- Relied upon a flawed inventory, particularly as relating to the Sentinel Plain Complex NW A and B units
- The inventory findings for the Sentinel Plain Complex North, Woolsey Peak Extension, Sentinel Plain – Central, Gila Bend Mountains, and Dixie Peak areas conflict with Map 3-11 of the PRMP/FEIS, displaying the areas inventoried and the areas having wilderness characteristics.

Response

Inventories for wilderness characteristics were conducted by the BLM between 2003 and 2012. The BLM assessed the planning area for wilderness characteristics as part of the land use planning process, in response to input received during scoping, and in response to public comments provided on the DRMP/DEIS (Section 3.2.11.1). The findings are summarized in Section 3.2.11.1 and individual unit assessments are available from the Phoenix District Office upon request.

No Documentation of Whether to Manage Lands for Wilderness Character/Non-Protection of Lands With Wilderness Characteristics

The BLM considered the results of the wilderness characteristics inventory in the planning process, consistent with BLM Instruction Memorandum 2011-154, and BLM Manuals 6300 and 6320. Manual 6320 states "[c]onsidering wilderness characteristics in the land use planning process may result in several outcomes, including, but not limited to: 1) emphasizing other multiple uses as a priority over protecting wilderness characteristics; 2) emphasizing other

multiple uses while applying management restrictions (conditions of use, mitigation measures) to reduce impacts to wilderness characteristics; 3) the protection of wilderness characteristics as a priority over other multiple uses." Factors to consider in whether to protect an area for its wilderness characteristics include whether it has wilderness characteristics to begin with; whether the area can be effectively managed to protect its wilderness characteristics; the extent to which other resource values and uses of lands with wilderness characteristics would be foregone or adversely affected if the wilderness characteristics are protected; and whether the area has been previously considered as a WSA.

Per this guidance, the presence of wilderness characteristics in an area is only one factor in determining whether to manage the area to protect its wilderness characteristics. The Summary of Findings subheading in Chapter 3.2.11.3 of the PRMP/FEIS describes each inventoried unit and the factors to consider when developing management direction for lands with wilderness characteristics. Furthermore, the PRMP/FEIS analyzes a reasonable range of alternatives for protection of areas with wilderness characteristics, ranging from 0 acres in Alternatives A and B to 404,800 acres in Alternative D (PRMP/FEIS Table 2-14). A visual representation of the acres of lands managed to protect wilderness characteristics can be seen on Maps 2-3c, d, and e.

Flawed Inventory

The BLM's inventory concludes that Sentinel Plain Complex Northwest Unit A lacks wilderness characteristics due to its small size, narrow width, modest terrain and limited plant mixture, and lack of distinctive landscape-related wilderness resource values. Unit B lacks wilderness characteristics because of its small size, narrow configuration, and lack of topographic relief and plant cover. The BLM acknowledged that both areas meet the size criteria to be considered for their wilderness characteristics; however, size is only one criterion to be met for an area to have wilderness characteristics. The area must also meet the criteria of naturalness, and must have outstanding opportunities for solitude or a primitive and unconfined type of recreation. Neither area contains outstanding opportunities for solitude and primitive and unconfined recreation, and therefore both areas lack wilderness characteristics. (PRMP/FEIS, Section 3.2.11.3).

The BLM acknowledges that the Arizona Wilderness Coalition (AWC) did submit a detailed narrative for several inventory units. The Sonoran Desert National Monument Wilderness Proposal was originally submitted by the AWC in June 2004 and resubmitted in Attachment 3 by the respondent in November 2011. The BLM reviewed and used the 2004 AWC report. The BLM's Citizen Proposal Evaluation Form assessment of the AWC report in 2004 stated that: "This area supports the natural conditions and opportunities for solitude and primitive recreation documented by the 2004 AWC wilderness proposal report and supported by the BLM field inventory and wilderness characteristic assessments.

Mapping Discrepancies

The exclusion of the Sentinel Plain Complex – The identified North area was a Geographic Information System mistake in Map 3-11. The BLM recognized that this area has wilderness characteristics, and Alternative D protects those lands (see PRMP/FEIS Map 2-3d). The BLM also acknowledges that the Woolsey Peak Extension was found to have wilderness

characteristics, but that Map 3-11 shows the area as not having these characteristics. Also, the 8,800-acre Sentinel Plain – Central and the 25,321-acre Gila Bend Mountains inventory units were found not to have wilderness characteristics, but are shown as having such characteristics in Map 3-11. These mapping errors and the associated GIS data have been corrected.

The BLM's inventory determined that the Dixie Peak area had wilderness characteristics, when considered in conjunction with the Yellow Medicine Butte inventory area to the west. Dixie Peak is part of the Yellow Medicine Butte inventory unit, and the BLM's inventory findings are correctly displayed on Map 3-11.

Protest Issue: PP-AZ-Sonoran-12-03-42 **Organization:** Fennemore Craig, P.C. **Protester:** Dawn Meidinger

Issue Excerpt Text:

BLM Must Properly Recognize Valid Existing Rights. Alternative E eliminates three established major utility corridors from future use. In some form or fashion, Freeport has vested rights in each of the eliminated utility corridors. The company commented on the DRMP/DEIS that the elimination of these corridors should not impact valid existing rights. BLM's response to this comment is that "where planning decisions have previously been made that still apply, those decisions would be carried forward into the RMP (see Section 1.5.1, General Planning Criteria Common to Both Decision Areas)."

A review of Section 1.5.1 reveals that BLM merely included the above referenced generic statement into the "Purpose and Need" section of the PRMP/FEIS but did not include the critical commitment into the section that will guide allowable land and realty actions in Chapter 2. See PRMP/FEIS, at 2-109 through 2-117. This critical Chapter 2 section simply identifies the three corridors as being removed but there is no reference to respecting prior existing approvals nor is any flexibility provided to the federal land manager to continue prior existing authorizations through renewal upon expiration. Freeport respectfully requests this deficiency be remedied in prior to the publication of the RMP and ROD.

... The PRMP fails to properly recognize valid existing land use authorizations (Chp.2).

Response

The BLM states in Chapter 1.5.1 of the PRMP/FEIS that "the RMP will recognize valid, existing rights" (PRMP/FEIS, p. 1-24). The removal of utility corridors relates to future decisions and applications, and does not impact the terms and conditions of existing ROW grants. Requests to renew existing authorizations will be considered on a case-specific basis pursuant to 43 CFR § 2807.22 and subject to appropriate site-specific NEPA analysis. Any new proposed minor Land Use Authorization requests would be addressed on a case-by-case basis (decisions LR-1.3.1, LR1.3.2, and LR-1.3.3). Proposals for major linear and non-linear Land Use Authorizations outside designated utility corridors could be analyzed in the future, but an RMP amendment and additional NEPA analysis would be required to grant a right-of-way.